

WETLAND DELINEATION AND WATERS REPORT

CLINTON STREET ROADWAY IMPROVEMENT PROJECT
FORT WAYNE, ALLEN COUNTY, INDIANA
41.164306, -85.102170



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1.0 Introduction

American Structurepoint, Inc. was contracted by the City of Fort Wayne and Allen County Highway Department to perform a wetland delineation and waters investigation for the Clinton Street Roadway Improvement Project in Fort Wayne, Allen County, Indiana.

Date of Field Reconnaissance: September 20, 2022 and September 27, 2022

Project Location:

Latitude/Longitude	41.164306, -85.102170	
Cedarville, Indiana 7.5 Minute Quadrangles		
Section	Township	Range
4, 5, 7, 8, 18	31 North	13 East

Project Description:

The proposed project would consist of the reconstruction of Clinton Street, widening sections of the roadway to 5 lanes with a center island wherever possible, adding sidewalks and a multi-use path, and installing new curbs, gutters, and storm sewers throughout the project area. The project would also realign the intersection of Clinton Street and Wallen Road and add a new traffic signal. New bridges and small structures would be constructed along Clinton Street as needed.

The investigated area encompasses approximately 98 acres located along North Clinton Street in Fort Wayne, Allen County, Indiana. The project area begins at the intersection of North Clinton Street and Auburn Road and extends northeast approximately 3.1 miles to the intersection of North Clinton Street and Mayhew Road. The location and approximate boundaries of the investigated area can be seen in the attached maps and aerial photographs (Appendix D).

The proposed project is located in Land Resource Region (LRR) M, as recognized by the US Department of Agriculture. As such, this wetland delineation was conducted in accordance with the *Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory, 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region* (U.S. Army Corps of Engineers, 2010).

Twenty-five (25) wetlands (Wetland 1 through 6, 7-A, 7-B, 8 through 10, 11-A, 11-B, 12, 13-A, 13-B, 14-A, 14-B, and 15 through 21) totaling 1.572 acres; 8 streams (Unnamed Tributary [UNT] 1 through UNT 3 to Beckett's Run, Beckett's Run, Swift Ditch, UNT 1 to St. Joseph River, Martin Ditch, and UNT 1 to Martin Ditch) totaling 1,736 linear feet (0.448 acre); and one pond (Pond 1) totaling 0.30 acre, were delineated within the investigated area. All delineated features were found to drain to the St. Joseph River, a Traditional Navigable Waterway (TNW). Therefore, it is anticipated that all delineated resources would be considered jurisdictional Waters of the U.S.

2.0 Definitions

2.1 “Waters of the US”

“Waters of the US” are within the jurisdiction of the US Department of the Army Corps of Engineers (USACE) under the Clean Water Act of 1972, Section 404. “Waters of the US” is a broad term that describes all interstate waters and any water that affects interstate traffic or commerce. Included are wetlands and tributaries adjacent to navigable “waters of the US” and other waters where degradation or destruction could affect interstate or foreign commerce. This includes rivers, streams, wetlands, and many ditches where permits are required for the discharge of dredged or fill material pursuant to Section 404 of the Clean Water Act.

2.2 “Waters of the State” and Isolated Wetlands

“Waters of the State” include all intrastate waters and wetlands that are not hydrologically connected or adjacent to interstate waters. “Waters of the State” include isolated wetlands determined not to be “waters of the US” or jurisdictional wetlands under the January 9, 2001, US Supreme Court ruling [see *Solid Waste Agency of Northern Cook County (SWANCC) v. US Army Corps of Engineers*]. Isolated wetlands refer to those non-tidal “waters of the US” that are not part of a surface tributary in interstate/navigable waters and are not adjacent to such tributary water bodies.

2.3 Wetlands

Wetlands are “waters of the US” or “waters of the State”. Section 404 of the Clean Water Act defines wetlands as those areas inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal conditions do support a prevalence of vegetation typically adapted for life in saturated soil conditions.

2.4 Regulatory Authority and Requirements

The USACE regulates the nation's waters for navigation and the full public interest for both the protection and utilization of water resources. The regulatory authorities and responsibilities of the USACE are based on the following laws:

- Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) prohibits the obstruction or alteration of navigable waters of the United States without a permit from the USACE.
- Section 404 of the Clean Water Act (33 U.S.C. 1344). Section 301 of this Act prohibits the discharge of dredged or fill material into “waters of the US” without a permit from the USACE.
- Section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972, as amended (33 U.S.C. 1413) authorizes the USACE to issue permits for the transportation of dredged material for the purpose of dumping it into ocean waters.

If filling or dredging operations are proposed to occur with the boundary of a “waters of the US” a Section 404 permit must be obtained from USACE before those activities are conducted. Three types of permits are issued by USACE within the State of Indiana: nationwide permits, the Regional General Permit for Indiana, and Individual Permits. Nationwide permits have been developed for projects meeting specific criteria and have a minimal impact to the regulated resources. Minimal impacts are generally classified as less than 0.5 acre of permanent impacts or temporary impacts depending on the activity to be undertaken. The Regional General Permit (RGP) for Indiana has been developed for projects meeting specific criteria and has

a minimal impact to the regulated resources within the State of Indiana. The RGP authorizes activities associated with any construction activities impacting less than one acre of wetlands or less than 1,500 linear feet of regulated waterway. Individual Section 404 Permits (site specific permits) are required for any construction activities impacting greater than one acre of regulated resources.

All activities that require a Section 404 Permit from USACE will also require a Section 401 Water Quality Certification (or a waiver) from the Indiana Department of Environmental Management (IDEM). On December 12, 2014 IDEM issued a Water Quality Certification for projects meeting specific criteria and conditions for the Indiana RGP and on March 15, 2017 IDEM issued a Water Quality Certification for projects meeting specific criteria and conditions for multiple Nationwide Permits. The specific conditions limit these Water Quality Certifications to projects with less than 0.1 acre and 300 linear feet of impacts to wetlands and waterways. An Individual Section 401 Water Quality Certification is required for projects impacting greater than 0.1 acre or 300 linear feet of wetlands or waterways.

Under the 2001 US Supreme Court Ruling (SWANCC), filling or dredging of isolated wetlands does not require notification of USACE. However, it is necessary to notify the IDEM for such projects and obtain a permit from the agency under State Wetland Law. All activities affecting “waters of the State” that are not considered to be “waters of the US” will require a State Wetland Permit under IC 13-18.

3.0 Methodology

The study area was analyzed using methods outlined in the Routine Determination, On-site Inspection Necessary procedure in the *Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory, 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region* (U.S. Army Corps of Engineers, 2010). The 1987 USACE Manual and the Regional Supplemental Documents require wetland boundaries to be delineated using a 3-parameter approach: hydrophytic vegetation, hydric soils, and wetland hydrology.

3.1 Hydrophytic Vegetation

Hydrophytic vegetation criteria are met by the rapid test for hydrophytic vegetation, the dominance test, the prevalence index, or morphological adaptations.

The rapid test for hydrophytic vegetation is met if all dominated species across all strata are rated as obligate (OBL), or facultative wetland (FACW), or a combination based on a visual assessment.

The indicator status of plant species is based on the estimated probabilities of that species occurring in wetland conditions. The indicator status categories are defined as follows.

PLANT INDICATOR STATUS CATEGORIES
(Environmental Laboratory, 1987)

<u>INDICATOR CATEGORY</u>	<u>INDICATOR SYMBOL</u>	<u>DEFINITION</u>
Obligate Wetland Plants	OBL	Plants that occur almost always (probability >99 percent) in wetland under natural conditions. Species rarely occur in non-wetland (probability <1 percent).
Facultative Wetlands Plants	FACW	Plants that usually occur in wetland (probability 67 to 99 percent) may also occur in non-wetland (probability 1 to 33 percent).
Facultative Plants	FAC	Plants that are equally likely to occur in wetland or non-wetland (probability 33 to 67 percent).
Facultative Upland Plants	FACU	Plants that sometimes occur in wetland (probability 1 to 33 percent) but occur more often in non-wetland (probability 67 to 99 percent).
Upland Plants	UPL	Plants that occur almost always (probability >99 percent) in non-wetland under natural conditions. Species rarely occur in wetland (probability <1 percent).

The dominance test for hydrophytic vegetation is met if more than 50 percent of the dominant plants species across all strata are rated OBL, FACW, or FAC.

If a community fails the Rapid Test and the Dominance Test, and both hydric soils and hydrology are present, then two additional wetland vegetation indicators should be assessed. These are the prevalence index and morphological adaptations. If either a prevalence of species noted in the sampling plot are hydrophytic or if morphological indicators are present, then the area is considered to have hydrophytic vegetation.

3.2 Hydric Soils

Hydric soils criteria are met with the presence of soils flooded for a long duration or very long duration during the growing season. Hydric soil indicators are formed predominately by the accumulation or loss of iron, manganese, sulfur, or carbon compounds in saturated and anaerobic conditions. Anaerobic conditions created by repeated or prolonged saturation or flooding result in permanent changes in soil color and chemistry, which are used to determine the presence of hydric soils.

Soils on a particular site are analyzed to determine whether they meet the hydric criteria. In the absence of groundwater, this analysis is performed by looking for acceptable indicators that suggest the soil is saturated, flooded, or ponded for a duration long enough to support anaerobic conditions near the surface. Field indicators of hydric soils, such as gleyed matrix, depleted matrix, redox dark surface or depressions, or depleted dark surface, are common hydric soil indicators in Indiana.

3.3 Wetland Hydrology

Wetland hydrology criteria is met or assumed by the presence of soils inundated or saturated under normal circumstances for periods long enough to support a prevalence of wetland vegetation. Hydrology is

controlled by such factors as rainfall patterns, local geology and topography, soil type, local water table, and drainage. Primary indicators of wetland hydrology include inundation, soil saturation, watermarks, sediment deposits, sparse vegetation, and inundation visible on the aerial photography. Secondary indicators include cracked soils, drainage patterns, and FAC-neutral vegetation. A single primary indicator or two secondary indicators are necessary to determine the presence of wetland hydrology.

All three parameters must be present for a site to be considered “waters of the State” or “waters of the US.”

3.4 Stream Habitat

The Qualitative Habitat Evaluation Index (QHEI) is used to determine existing stream impairments and aid in mitigating future impacts. The QHEI is composed of six metrics; substrate, in-stream cover, channel morphology, riparian zone and bank erosion, pool/glide and riffle run quality, and map gradient. Each metric is scored individually and then summed, resulting in a total QHEI score for the targeted reach of stream.

The primary Headwater Habitat Evaluation Index (HHEI) is used to determine existing impairments and aid in mitigating future impacts to primary headwater habitat streams. A primary headwater habitat stream is described as a jurisdictional surface water that has a defined bed and bank, with either continuous or periodical flowing water, with a watershed area less than or equal to one square mile, and maximum depth of water pools equal to or less than 40 cm. The HHEI is composed of three metrics: substrate, maximum pool depth, and bank full width. Each metric is scored individually, and then summed, resulting in a total HHEI score for the targeted reach of headwater stream.

Methodology described in the *Methods for Assessing Habitat in Flowing Waters: Using the Qualitative Habitat Evaluation Index* (QHEI) manual (OhioEPA, Division of Surface Water, 2006) was used for assessing streams. Additional methodology described in the *Field Evaluation Manual for Ohio’s Primary Headwater Habitat Streams* (Ohio EPA, Division of Surface Water, 2012) was used in assessing primary headwaters.

4.0 Site Characterization – Records Review

4.1 USGS Topographic Mapping

The 1:24,000-scale Topographic Quadrangle Map is the primary scale of topographic data produced by the United States Geological Survey (USGS). Since the late 19th century, the USGS has been producing topographic quadrangle maps that show shape and elevation of the land, transportation networks, drainage patterns, vegetation, and buildings. These maps are used for a variety of purposes, including industrial site selection, highway planning, and recreation, and they are also a valuable source for local history. Features such as vegetation (green), water (blue) and densely built-up areas (gray or red) are shown as shaded areas on the map. Many features are shown by lines that may be straight, curved, solid, dashed, dotted, or in any combination. Colors of the lines usually indicate similar classes of information: topographic contours (brown); lakes, streams, irrigation ditches, and other hydrographic features (blue); land grids and important roads (red); and other roads and trails, railroads, boundaries, and other cultural features (black). Various point symbols are used to depict features such as buildings, campgrounds, springs, water tanks, mines, survey control points, and wells. Names of places and features are shown in a color corresponding to the type of feature.

The investigated area is located on the Cedarville USGS 7.5 Minute Topographic Quadrangle map in Sections 4, 5, 7, 8, and 18, Township 31 North, Range 13 East. The map depicts the investigated area as mostly cleared land (white shading) with forested areas (green shading) near the northern and southern termini of the investigated area and south of the intersection of North Clinton Street and Wallen Road. Beckett's Run is depicted as a perennial stream (solid blue line) flowing west to east across the investigated area north of the intersection of Jacobs Creek Run. Swift Ditch is depicted as an intermittent stream (dashed blue line) flowing south across the investigated area beneath Wallen Road and Clinton Street. Martin Ditch is also depicted as an intermittent stream flowing southeast across the project area west of the intersection of Mayhew Road. Beckett's Run, Swift Ditch, and Martin Ditch were field verified during the site visits on September 20, 2022 and September 27, 2022.

4.2 National Wetlands Inventory (NWI) Mapping

For 25 years, the US Fish and Wildlife Service (USFWS) has provided federal and state agencies, the private sector, and citizens with scientific data on wetland location, extent, status, and trends. The USFWS's National Wetlands Inventory (NWI) program works to complete baseline wetland mapping in the lower 48 states and Alaska. Most NWI maps were produced using photography from the 1980s. Maps for less than five percent of the nation were made using 1990s or more recent photography. Most NWI map products have not been field verified and are subject to regulatory review. However, these maps serve as a planning tool for service and non-profit wetland acquisition programs, fishery restoration, floodplain and watershed planning, endangered species recovery efforts, and to plan for energy resource and infrastructure development.

The NWI Mapping was reviewed for the investigated area. Two mapped wetlands are located within the investigated area. One NWI Wetland is located within the investigated area in the southeast quadrant of the intersection of North Clinton Street and Riveroak Drive and is characterized as Palustrine, Unconsolidated Bottom, Intermittently Exposed, Excavated (PUBGx) under the Cowardin Classification System. This wetland was field verified as Pond 1 during the field investigation on September 20, 2022. A second NWI Wetland is located within the investigated area in the northwest quadrant of the intersection of Wallen Road and North

Clinton Street and is characterized as Palustrine, Unconsolidated Bottom, Intermittently Exposed (PUBG) under the Cowardin Classification System. This wetland was field verified as Wetland 13-A and Wetland 13-B during the field investigation on September 20, 2022.

4.3 County Soil Survey

The Natural Resource Conservation Services (NRCS) has prepared soil survey and mapping for each county. Soil surveys furnish soil maps and interpretations necessary to provide technical assistance to farmers and ranchers to be utilized in planning and land management. Soil surveys generally contain mapping of unique or potential areas of concern such as areas of peat or muck, steep slopes, wetlands, and drainage lines. In addition to the published soils surveys, information, spatial data, and mapping of soils is available through the NRCS Soil Data Mart, which provides the most current data about the soils. Spatial data available through the Soil Data Mart often does not contain information regarding areas of concern. As such, both the published soil survey and the up-to-date data available from the Soil Data Mart are included for reference.

The *NRCS Soil Survey Geographic Database (SSURGO)* was reviewed to determine soil classification within the investigated area. Soil types mapped within the investigated area include:

Soil Map Unit Summary		
Map Unit Name	Map Unit Symbol	SSURGO Hydric Rating by Map Unit
Blount loam, interlobate moraines, 0 to 2 percent slopes	BmA	5
Blount silt loam, 2 to 6 percent slopes	BmB	10
Eel silt loam, 0 to 2 percent slopes, frequently flooded	Es	4
Glynwood silt loam, 2 to 6 percent slopes	MrB	4
Glynwood silt loam, 2 to 6 percent slopes, eroded	MrB2	4
Morley silt loam, 6 to 12 percent slopes, eroded	MrC3	3
Morley silty clay loam, 6 to 12 percent slopes, severely eroded	MSc3	0
Pewamo silty clay loam, 0 to 1 percent slopes	Pe	91

4.4 Aerial Photography

The Indiana Geographic Information Council (IGIC), in partnership with state and local agencies, sponsored a program that created high-resolution orthophotography for counties on a statewide basis to support homeland security, emergency management, and other business and government applications. Digital orthophotography provides all of the visual content of a photograph, while being as accurate as a map for measurements. These qualities allow for accurate distance measurements, area calculations, determination of feature shape, direction calculations, and determination of coordinates at a given location. Orthophotography provides a base map in a geographic information system (GIS) for emergency response planning and modeling, law enforcement, public health agencies, property management, census, tax assessment, flood mapping, planning, and economic development.

Aerial photography from 2022 (NearMap) was reviewed for the project area. The 2022 aerial photography depicts the investigated area primarily as developed residential and commercial land. Forested areas and agricultural fields are also visible at various locations along the corridor. The three streams noted on the USGS Topo Quad are visible in the same areas on the aerial. Additionally, UNT 1 to Martin Ditch is visible flowing north to south beneath Clinton Street approximately 0.24 mile southwest of the intersection of Clinton Street and Mayhew Road. The NWI wetlands noted above are visible as areas of dark soil or inundation. Dark soils, associated with Wetland 14-A, are also visible on the north side of Clinton Street, northeast of the intersection of Clinton Street and Wallen Road. An area with standing water, associated with Wetland 20, is visible in a forested area on the south side of Clinton Street, southwest of the intersection of Bethel Creek Blvd. The 2022 NearMap aerial is representative of the site during the September 20, 2022 and September 27, 2022 field investigations, except that construction has currently begun on two new stormwater features in the northwest quadrant of the intersection of Clinton Street and Mayhew Road.

4.5 Floodways and Floodplains

A "Regulatory Floodway" is the channel of a river or other watercourse and the adjacent land that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height. The Indiana Department of Natural Resources Division of Water regulates these floodways within the state. Mapping of the regulated floodway and the floodplain, if a floodway had not been designated was completed by the Federal Emergency Management Agency (FEMA).

The FEMA designated floodway associated with Beckett's Run crosses the project area approximately 0.04 mile north of the intersection of Clinton Street and Jacobs Creek Run. At its widest point within the investigated area, the floodplain is 761 feet wide. The FEMA designated floodway associated with Swift Ditch crosses the project area approximately 0.08 mile east of the intersection of Clinton Street and Wallen Road. At its widest point within the investigated area, the floodplain is 347 feet wide. Additionally, the FEMA designated floodway associated with Martin Ditch and a floodplain associated with an unnamed tributary, identified as UNT 1 to Martin Ditch during the field investigation on September 27, 2022, cross the project area approximately 0.24 mile southwest of the intersection of Clinton Street and Mayhew Road. At their widest points within the investigated area, the floodway is approximately 131 feet wide and the floodplain is approximately 884 feet wide.

4.6 National Hydrography Dataset Flow Lines

The USGS National Hydrography Dataset (NHD) Local Resolution and Unclassified Flowlines were reviewed for the investigated area. Nine (9) USGS National Hydrography Dataset (NHD) flow lines are present in the investigated area.

NHD Summary		
NHD Flow line Name	Location	Field Verified
Canal/Ditch	Southwest and northwest quadrants of the intersection of Clinton Street and Auburn Road	Yes, Wetland 1 was identified within this feature in the SW quadrant
Pipeline	Northwest and northeast quadrants of the intersection of Clinton Street and Auburn Road	Yes, a stormwater drainage inlet was observed at this location
Canal/Ditch	Northeast quadrant of the intersection of Clinton Street and Jacobs Creek Run	Yes, identified as UNT 1 to Becketts Run and UNT 3 to Beckett's Run
Pipeline	Northeast and southeast quadrants of the intersection of Clinton Street and Jacobs Creek Run	Yes, a pipe was observed conveying drainage beneath Jacobs Creek Run
Beckett's Run	Approximately 0.13 mile north of the intersection of Clinton Street and Jacobs Creek Run	Yes, identified as Beckett's Run
Swift Ditch	Approximately 0.9 mile west of the intersection of Clinton Street and Wallen Road	Yes, identified as Swift Ditch
Martin Ditch	Approximately 0.15 mile southwest of the intersection of Clinton Street and Bent Creek Boulevard	Yes, identified as Martin Ditch
Canal/Ditch	Southeast and southwest quadrants of the intersection of Clinton Street and Bent Creek Boulevard	Yes, Wetland 21 was identified within this feature
Pipeline	Southwest quadrant of the intersection of Clinton Street and Mayhew Road	Yes, this appears to be associated with a stormwater pipe which conveys drainage to Wetland 21

4.7 Legal Drain

Some waterways in which the function of the channel is considered necessary to drain the landscape to protect the livelihood and safety of the general public are considered to be "legal drains." These waterways often include a system of pipes and open ditches and are generally under the jurisdiction of the County Surveyor who is responsible for their continued maintenance and function. Funding for maintenance of legal drains is typically provided by assessments to the adjoining property owners.

The Allen County GIS Engineering Viewer (<http://www.acimap.us/engineering.html>) was accessed on October 10, 2022 by American Structurepoint, Inc. staff to determine if any legal drains are located within the investigated area. The website indicated that Swift Ditch, which crosses the intersection of Clinton Street and Wallen Road, is an Allen County Legal Drain.

4.8 12-Digit Hydrologic Unit Code

The USGS 12-Digit Hydrologic Unit Code (HUC) mapping was reviewed for the investigated area. The investigated area is located within both the Ely Run-St. Joseph River 12-digit HUC (041000030806) and the Beckett's Run-St. Joseph River 12-digit HUC (041000050102).

5.0 Field Reconnaissance

The Clinton Street Roadway Improvement Project was examined for the presence of wetlands and waters of the U.S. on the site on September 20, 2022 and September 27, 2022. Data points were strategically placed to identify appropriate boundaries of delineated wetlands and to determine the presence or absence of jurisdictional wetlands and waters of the U.S. Twenty-five (25) wetlands (Wetland 1 through 6, 7-A, 7-B, 8 through 10, 11-A, 11-B, 12, 13-A, 13-B, 14-A, 14-B, and 15 through 21) totaling 1.572 acres; 8 streams (UNT 1 through UNT 3 to Beckett's Run, Beckett's Run, Swift Ditch, UNT 1 to St. Joseph River, Martin Ditch, and UNT 1 to Martin Ditch) totaling 1,736 linear feet (0.448 acre); and one pond (Pond 1) totaling 0.30 acre, were delineated within the investigated area. Data sheets and a map indicating the location of data points documenting the field investigation are included in the appendix.

5.1 Wetlands

5.1.1 Wetland 1

Wetland 1 is an emergent wetland located in the southwest quadrant of the intersection of Auburn Road and Clinton Street. Wetland 1 was delineated for 0.051 acre and extends west beyond the investigated area. Wetland 1 is located within a constructed ditch and receives drainage from the roadway and surrounding landscape. Wetland 1 is located within a roadside drainage system which drains generally southeast to an unnamed tributary, locally known as Fox Chase Run, which drains to the St. Joseph River, a TNW. Therefore, it is anticipated that Wetland 1 would be considered a jurisdictional Waters of the U.S.

The dominant vegetation within Wetland 1 consisted of narrow-leaf cattail (*Typha angustifolia*) within the herbaceous stratum. Hydric soil indicators included Depleted Matrix (F3). Hydrologic indicators included Water Stained Leaves (B9), Geomorphic Position (D2), and FAC Neutral Test (D5). Wetland 1 would be considered a Palustrine, Emergent, Persistent, Temporarily Flooded, Partly Drained/Ditched (PEM1Ad) under the Cowardin Classification System. Wetland 1 would be considered a poor quality wetland due to the dominance of non-native vegetation. A continuous defined bed and bank or ordinary highwater mark was not observed during the site reconnaissance. For reference to field data collected for this wetland, see DP 1 in Appendix B. DP 2, included in Appendix B, is representative of the upland area surrounding Wetland 1. DP 2 lacked the hydrophytic vegetation, hydric soils, and hydrology necessary to be considered a wetland.

5.1.2 Wetland 2

Wetland 2 is a forested wetland located to the west of Clinton Street, approximately 238 feet north of the intersection of Clinton Street and Jacobs Creek Run. Wetland 2 was delineated for approximately 0.018 acre

and extends west beyond the investigated area. Wetland 2 is located in a low lying area within the floodplain of Becketts Run. The wetland appears to receive drainage from the surrounding forested landscape and is located within the active floodplain of Becketts Run. Wetland 2 drains north along topographic contours through Wetlands 3 and 4 to Becketts Run, which drains east to the St. Joseph River, a TNW. Therefore, it is anticipated that Wetland 2 would be considered a jurisdictional Waters of the U.S.

The dominant vegetation within Wetland 2 consisted of American elm (*Ulmus Americana*) and sycamore (*Platanus occidentalis*) within the tree stratum, as well as paw paw (*Asimina triloba*) and spicebush (*Lindera benzoin*) within the sapling/shrub stratum. There were no dominant species within the herb or woody vine strata. Hydric soil indicators included Depleted Below Dark Surface (A11) and Depleted Matrix (F3). Hydrologic indicators included Sparsely Vegetated Concave Surface (B8), Geomorphic Position (D2), and FAC Neutral Test (D5). Wetland 2 would be considered Palustrine, Forested, Broad-Leaved Deciduous, Temporarily Flooded (PFO1A) under the Cowardin Classification System. The wetland is of average quality due to presence of native species, but is limited due to its proximity to both Clinton Street and residential development. For reference to field data collected of this this wetland, see DP4 in Appendix B. DP5, included in Appendix B, is representative of the upland area surrounding Wetland 2. DP5 possessed hydrophytic vegetation, but lacked the hydric soils and hydrology necessary to be considered a wetland.

5.1.3 Wetland 3

Wetland 3 is a forested wetland located to the west of Clinton Street, approximately 0.047 mile north of the intersection of Clinton Street and Jacobs Creek Run. Wetland 3 was delineated for approximately 0.034 acre and is wholly contained within the investigated area. Wetland 3 is located in a low lying area within the floodplain of Becketts Run. The wetland appears to receive drainage from the surrounding forested landscape and is located within the active floodplain of Becketts Run. Wetland 3 drains north along topographic contours through Wetland 4 to Becketts Run, which drains east to the St. Joseph River, a TNW. Therefore, it is anticipated that Wetland 3 would be considered a jurisdictional Waters of the U.S.

The dominant vegetation within Wetland 3 consisted of American elm (*Ulmus Americana*) and eastern cottonwood (*Populus deltoides*) within the tree stratum; green ash (*Fraxinus pensylvanica*) and spicebush (*Lindera benzoin*) within the sapling/shrub stratum; and poison ivy (*Toxicodendron radicans*) and giant goldenrod (*Solidago gigantea*) within the herbaceous stratum. Hydric soil indicators included Depleted Below Dark Surface (A11) and Depleted Matrix (F3). Hydrologic indicators included Drift Deposits (B3), Sparsely Vegetated Concave Surface (B8), Geomorphic Position (D2), and FAC Neutral Test (D5). Wetland 3 would be considered a PFO1A under the Cowardin Classification System. The wetland is of average quality due to presence of native species, but is limited due to its proximity to both Clinton Street and residential development. For reference to field data collected for this wetland, see DP 6 in Appendix B. DP5, included in Appendix B, is representative of the upland area surrounding Wetland 3. DP5 possessed hydrophytic vegetation, but lacked the hydric soils and hydrology necessary to be considered a wetland.

5.1.4 Wetland 4

Wetland 4 is an emergent wetland located to the west of Clinton Street, approximately 0.072 mile north of the intersection of Clinton Street and Jacobs Creek Run. Wetland 4 was delineated for approximately 0.058 acre and is wholly contained within the investigated area. Wetland 4 is located in a low lying area within the floodplain of Becketts Run. The wetland appears to receive drainage from the surrounding forested landscape and is located within the active floodplain of Becketts Run. Wetland 4 drains north along

topographic contours to Becketts Run, which drains east to the St. Joseph River, a TNW. Therefore, it is anticipated that Wetland 4 would be considered a jurisdictional Waters of the U.S.

The dominant vegetation within Wetland 4 consisted of green ash (*Fraxinus pennsylvanica*) within the tree stratum and creeping jenny (*Lysimachia nummularia*) within the herbaceous stratum. Although the wetland included trees this was not a dominant component of the absolute cover of the wetland. Hydric soil indicators included Depleted Below Dark Surface (A11), Depleted Matrix (F3), and Redox Dark Surface (F6). Hydrologic indicators included Drift Deposits (B3), Sparsely Vegetated Concave Surface (B8), Water-stained Leaves (B9), Geomorphic Position (D2), and FAC Neutral Test (D5). Wetland 4 would be considered Palustrine, Emergent, Persistent, Temporarily Flooded (PEM1A) under the Cowardin Classification System. The wetland is of average quality due to presence of native species, but is limited due to its proximity to both Clinton Street and residential development. The wetland is of average quality due to the dominant native vegetation but is limited due to its location and surrounding development. For reference to field data collected for this wetland, see DP 7 in Appendix B. DP 8, included in Appendix B, is representative of the upland area surrounding Wetland 4. DP 8 possessed hydrophytic vegetation, but lacked the hydric soil and hydrology necessary to be considered a wetland.

5.1.5 Wetland 5

Wetland 5 is an emergent wetland located on the east side of Clinton Street, approximately 0.054 mile north of the intersection of Clinton Street and Jacobs Creek Run. Wetland 5 was delineated for approximately 0.211 acre and is wholly contained within the investigated area. Wetland 5 is located in a low lying area where multiple streams lose definition and converge. The wetland appears to receive drainage from two ephemeral streams, UNT 1 to Becketts Run and UNT 2 to Becketts Run, which flow into the wetland and lose defined bed and bank. Wetland 5 is drained to the north by UNT 3 to Becketts Run, which drains to Becketts Run, which drains to the St. Joseph River, a TNW. Therefore, it is anticipated that Wetland 5 would be considered a Jurisdictional Waters of the U.S.

The dominant vegetation within Wetland 5 consisted of witchgrass (*Panicum capillare*) and dotted smartweed (*Persicaria punctata*) within the herbaceous stratum. Hydric soil indicators included Depleted Matrix (F3). Hydrologic indicators included Saturation at the surface (A3), Algal Mat (B4), Drainage Patterns (B10), Geomorphic Position (D2), and FAC Neutral Test (D5). Wetland 5 would be considered a PEM1A under the Cowardin Classification System. The wetland is of poor quality due to its location in a utility easement and regular disturbance by mowing. For reference to field data collected for this wetland, see DP 9 in Appendix B. DP 10, included in Appendix B, is representative of the upland area surrounding Wetland 5. DP 10 possessed hydric soils, but lacked the hydrophytic vegetation and hydrology necessary to be considered a wetland.

5.1.6 Wetland 6

Wetland 6 is a forested wetland located to the west of Clinton Street, approximately 0.13 mile north of the intersection of Clinton Street and Jacobs Creek Run. Wetland 6 was delineated for approximately 0.042 acre and is wholly contained within the investigated area. Wetland 6 is located in a low lying area within the floodplain of Becketts Run. The wetland appears to receive drainage from the surrounding forested landscape and is located within the active floodplain of Becketts Run. Wetland 6 drains south along topographic contours to Becketts Run, which drains east to the St. Joseph River, a TNW. Therefore, it is anticipated that Wetland 4 would be considered a jurisdictional Waters of the U.S.

The dominant vegetation within Wetland 6 consisted of green ash (*Fraxinus pennsylvanica*), American elm (*Ulmus Americana*), and eastern cottonwood (*Populus deltoides*) within the tree stratum; green ash (*Fraxinus pennsylvanica*) within the sapling/shrub stratum; as well as creeping jenny (*Lysimachia nummularia*) and fowl manna grass (*Glyceria striata*) within the herbaceous stratum. Hydric soil indicators included Depleted Matrix (F3). Hydrologic indicators included Drift Deposits (B3), Sparsely Vegetated Concave Surface (B8), Water Stained Leaves (B9), Geomorphic Position (D2), and FAC Neutral Test (D5). Wetland 6 would be considered a PFO1A under the Cowardin Classification System. The wetland is of average quality due to the presence of native vegetation but is limited due to its location and surrounding development. For reference to field data collected for this wetland, see DP 11 in Appendix B. DP 12, included in Appendix B, is representative of the upland area surrounding Wetland 6. DP 12 did not possess the hydrophytic vegetation, hydric soil indicators, or hydrology indicators to be considered a wetland.

5.1.7 Wetland 7-A

Wetland 7-A is an emergent wetland located on the west side of Clinton Street, approximately 0.11 mile south of the intersection of Clinton Street and Riveroak Drive. Wetland 7-A was delineated for approximately 0.097 acre and is wholly contained within the investigated area. Wetland 7-A is directly connected to Wetland 7-B (described below). Wetland 7-A is located within a constructed ditch and receives drainage from the roadway and surrounding landscape. Wetland 7-A drains north to Wetland 7-B which drains north through a drainage structure to Wetland 8, which is located within a roadside drainage system that drains north to Swift Ditch, which drains to St. Joseph River, a TNW. Therefore, it is anticipated that Wetland 7-A would be considered a jurisdictional Waters of the U.S.

The dominant vegetation within Wetland 7-A consisted of black willow (*Salix nigra*) within the sapling/shrub stratum and rice cutgrass (*Leersia oryzoides*) within the herbaceous stratum. Although the wetland included saplings/shrubs this was not a dominant component of the absolute cover of the wetland. Hydric soil indicators included Depleted Matrix (F3). Hydrologic indicators included Surface Water at 2 inches (A1), High Water Table at the surface (A2), Saturation at the surface (A3), Geomorphic Position (D2), and FAC Neutral Test (D5). Wetland 7-A would be considered a PEM1Ad under the Cowardin Classification System. Wetland 7-A would be considered poor quality wetland due to its location in a roadside ditch and surrounding commercial development. A continuous defined bed and bank or ordinary highwater mark was not observed during the site reconnaissance. For reference to field data collected for this wetland, see DP 13 in Appendix B. DP 15, included in Appendix B, is representative of the upland area surrounding Wetland 7-A. DP 15 did not possess the hydrophytic vegetation, hydric soil indicators, or hydrology indicators to be considered a wetland.

5.1.8 Wetland 7-B

Wetland 7-B is a scrub-shrub wetland located on the west side of Clinton Street, approximately 0.1 mile south of the intersection of Clinton Street and Riveroak Drive. Wetland 7-B was delineated for approximately 0.030 acre and is wholly contained within the investigated area. Wetland 7-B is directly connected to Wetland 7-A and is representative of the scrub shrub portion of the wetland. Wetland 7-B is located within a constructed ditch and receives drainage from the roadway and surrounding landscape. Wetland 7-B drains north, through a drainage structure, to Wetland 8, which is located within a roadside drainage system that drains north to Swift Ditch, which drains to St. Joseph River, a TNW. Therefore, it is anticipated that Wetland 7-B would be considered a jurisdictional Waters of the U.S.

The dominant vegetation within Wetland 7-B consisted of black willow (*Salix nigra*) within the sapling/shrub stratum and rice cut grass (*Leersia oryzoides*) as well as marsh seed box (*Ludwigia palustris*) within the herbaceous stratum. Hydric soil indicators included Depleted Matrix (F3). Hydrologic indicators included Surface Water at 3 inches (A1), High Water Table at the surface (A2), Saturation at the surface (A3), Geomorphic Position (D2), and FAC Neutral Test (D2). Wetland 7-B would be considered Palustrine, Scrub Shrub, Broad Leaved Deciduous, Temporarily Flooded, Partly Drained/Ditched (PSS1Ad) under the Cowardin Classification System. Wetland 7-B would be considered poor quality wetland due to its location in a roadside ditch and surrounding commercial development. A continuous defined bed and bank or ordinary highwater mark was not observed during the site reconnaissance. For reference to field data collected for this wetland, see DP 14 in Appendix B. DP 15, included in Appendix B, is representative of the upland area surrounding Wetland 7-B. DP 15 did not possess the hydrophytic vegetation, hydric soil indicators, or hydrology indicators to be considered a wetland.

5.1.9 Wetland 8

Wetland 8 is an emergent wetland located on the west side of Clinton Street, approximately 0.09 south of the intersection of Clinton Street and Riveroak Drive. Wetland 8 was delineated for approximately 0.013 acre and is wholly contained within the investigated area. Wetland 8 is located within a constructed roadside ditch and receives drainage from the roadway and surrounding landscape. Wetland 8 drains north through a roadside drainage system which drains to Swift Ditch, which drains to St. Joseph River, a TNW. Therefore, it is anticipated that Wetland 8 would be considered a jurisdictional Waters of the U.S.

The dominant vegetation within Wetland 8 consisted of narrow-leaf cattail (*Typha angustifolia*) and Kentucky Bluegrass (*Poa pratensis*) within the herbaceous stratum. Hydric soil indicators included Redox Dark Surface (F6). Hydrologic indicators included Surface Water at 1 inch (A1), High Water Table at the surface (A2), Saturation at the surface (A3), Geomorphic Position (D2), and FAC Neutral Test (D5). Wetland 8 would be considered a PEM1Ad under the Cowardin Classification System. Wetland 8 would be considered a poor quality wetland due to the dominance of non-native vegetation. A continuous defined bed and bank or ordinary highwater mark was not observed during the site reconnaissance. For reference to field data collected for this wetland, see DP 16 in Appendix B. DP 15, included in Appendix B, is representative of the upland area surrounding Wetland 8. DP 15 did not possess the hydrophytic vegetation, hydric soil indicators, or hydrology indicators to be considered a wetland.

5.1.10 Wetland 9

Wetland 9 is an emergent wetland located in the southwest quadrant of the intersection of Clinton Street and Riveroak Drive. Wetland 9 was delineated for approximately 0.030 acre and is wholly contained within the investigated area. Wetland 9 is located within a constructed roadside ditch and receives drainage from the roadway and surrounding landscape. Wetland 9 drains north through a roadside drainage system which drains to Swift Ditch, which drains to St. Joseph River, a TNW. Therefore, it is anticipated that Wetland 9 would be considered a jurisdictional Waters of the U.S.

The dominant vegetation within Wetland 9 consisted of witchgrass (*Panicum capillare*) and common spike rush (*Eleocharis palustris*) within the herbaceous stratum. Hydric soil indicators included Depleted Below Dark Surface (A11) and Depleted Matrix (F3). Hydrology indicators included Standing Water at 1 inch (A1), High Water Table at the surface (A2), Saturation at the surface (A3), Geomorphic Position (D2), and FAC Neutral Test (D5). Wetland 9 would be considered PEM1Ad under the Cowardin Classification System.

Wetland 9 would be considered a poor quality wetland due to the regular disturbance of vegetation from mowing. A continuous defined bed and bank or ordinary highwater mark was not observed during the site reconnaissance. For reference to field data collected for this wetland, see DP 17 in Appendix B. DP 18, included in Appendix B, is representative of the upland area surrounding Wetland 9. DP 18 possessed hydric soils, but lacked the hydrophytic vegetation and hydrology indicators necessary to be considered a wetland.

5.1.11 Wetland 10

Wetland 10 is an emergent wetland located on the east side of Clinton Street, approximately 0.03 mile north of the intersection of Clinton Street and Riveroak Drive. Wetland 10 was delineated for approximately 0.043 acre and is wholly contained within the investigated area. Wetland 10 is located within a constructed roadside ditch and receives drainage from the roadway and surrounding landscape. Wetland 10 drains north through a roadside drainage system which drains to Swift Ditch, which drains to St. Joseph River, a TNW. Therefore, it is anticipated that Wetland 10 would be considered a jurisdictional Waters of the U.S.

Dominant vegetation within Wetland 10 consisted of barnyard grass (*Echinochloa crus-galli*) and Kentucky bluegrass (*Poa pratensis*) within the herbaceous stratum. Hydric soil indicators included Depleted Below Dark Surface (A11) and Depleted Matrix (F3). Hydrology indicators included Standing Water at 0.5 inch (A1), High Water Table at the surface (A2), Saturation at the surface (A3), Geomorphic Position (D2), and FAC Neutral Test (D5). Wetland 10 would be considered a PEM1Ad under the Cowardin Classification System. Wetland 10 would be considered a poor quality wetland due to the regular disturbance of vegetation from mowing. A continuous defined bed and bank or ordinary highwater mark was not observed during the site reconnaissance. For reference to field data collected for this wetland, see DP 19 in Appendix B. DP 20, included in Appendix B, is representative of the upland area surrounding Wetland 10. DP 20 possessed hydric soils, but lacked the hydrophytic vegetation and hydrology indicators necessary to be considered a wetland.

5.1.12 Wetland 11-A

Wetland 11-A is a scrub shrub wetland located on the east side of Clinton Street, approximately 0.12 mile southwest of the intersection of Clinton Street and Wallen Road. Wetland 11-A was delineated for approximately 0.034 acre and is wholly contained within the investigated area. Wetland 11-A is directly connected to Wetland 11-B (described below). Wetland 11-A is located in a low lying area within the floodplain of Swift Ditch. Wetland 11-A receives drainage from the surrounding forested landscape and is located within the active floodway of Swift Ditch. Wetland 11-A drains northeast through an erosional feature to Swift Ditch, which drains to St. Joseph River, a TNW. Therefore, it is anticipated that Wetland 11-A would be considered a jurisdictional Waters of the U.S.

Dominant vegetation within Wetland 11-A consisted of gray dogwood (*Cornus racemosa*) and green ash (*Fraxinus pennsylvanica*) within the sapling/shrub stratum, and purple loosestrife (*Lythrum salicaria*) and narrow-leaf cattail (*Typha angustifolia*) within the herbaceous stratum. Hydric soil indicators included Depleted Matrix (F3). Hydrology indicators included Algal Mat (B4), Geomorphic Position (D2), and FAC Neutral Test (D5). Wetland 11-A would be considered Palustrine, Scrub-Shrub, Broad-leaved Deciduous, Temporarily Flooded (PSS1A) under the Cowardin Classification System. The wetland is of poor quality due to the proximity of the roadway and presence of dominant non-native vegetation. For reference to field data collected for this wetland, see DP 21 in Appendix B. DP 22, included in Appendix B, is representative of the upland area surrounding Wetland 11-A. DP 22 did not possess the hydrophytic vegetation, hydric soil indicators, or hydrology indicators to be considered a wetland.

5.1.13 Wetland 11-B

Wetland 11-B is an emergent wetland located on the east side of Clinton Street, approximately 0.1 mile southwest of the intersection of Clinton Street and Wallen Road. Wetland 11-B was delineated for approximately 0.026 acre and is wholly contained within the investigated area. Wetland 11-B is directly connected to Wetland 11-A and is representative of the emergent portion of the wetland. Wetland 11-B is located in a low lying area within the floodplain of Swift Ditch. Wetland 11-B receives drainage from the surrounding grassy and forested landscapes and is inundated in a typical year by Swift Ditch. Wetland 11-B drains east to Wetland 11-A, which drains northeast through an erosional feature to Swift Ditch, which drains to St. Joseph River, a TNW. Therefore, it is anticipated that Wetland 11-B would be considered a jurisdictional Waters of the U.S.

Dominant vegetation within Wetland 11-A consisted of barnyard grass (*Echinochloa crus-galli*) and narrow-leaf cattail (*Typha angustifolia*) within the herbaceous stratum. Hydric soil indicators included Depleted Matrix (F3). Hydrology indicators included Algal Mat (B4), Geomorphic Position (D2), and FAC Neutral Test (D5). Wetland 11-B would be considered PEM1A under the Cowardin Classification System. The wetland is of poor quality due to dominant non-native vegetation and regular disturbance from mowing. For reference to field data collected for this wetland, see DP 23 in Appendix B. DP 22, included in Appendix B, is representative of the upland area surrounding Wetland 11-B. DP 22 did not possess the hydrophytic vegetation, hydric soil indicators, or hydrology indicators to be considered a wetland.

5.1.14 Wetland 12

Wetland 12 is an emergent wetland located on the west side of Clinton Street, approximately 0.13 mile southwest of the intersection of Clinton Street and Wallen Road. Wetland 12 was delineated for approximately 0.003 acre and is wholly contained within the investigated area. Wetland 12 is located within a constructed roadside ditch and receives drainage from the roadway and surrounding landscape. Wetland 12 drains north, through a roadside drainage system, to Swift Ditch, which drains to St. Joseph River, a TNW. Therefore, it is anticipated that Wetland 12 would be considered a jurisdictional Waters of the U.S.

Dominant vegetation within Wetland 12 consisted of narrow-leaf cattail (*Typha angustifolia*) within the herbaceous stratum. Hydric soil indicators included Depleted Matrix (F3). Hydrology indicators included Surface Water at 1 inch (A1), High Water Table at the surface (A2), Saturation at the surface (A3), Geomorphic Position (D2), and FAC Neutral Test (D5). Wetland 12 would be considered a PEM1Ad under the Cowardin Classification System. Wetland 12 would be considered a poor quality wetland due to the dominance of non-native vegetation. A continuous defined bed and bank or ordinary highwater mark was not observed during the site reconnaissance. For reference to field data collected for this wetland, see DP 24 in Appendix B. DP 25, included in Appendix B, is representative of the upland area surrounding Wetland 12. DP 25 possessed hydrophytic vegetation, but lacked the hydric soil indicators and hydrology indicators necessary to be considered a wetland.

5.1.15 Wetland 13-A

Wetland 13-A is a scrub shrub wetland located to the north of Wallen Road, approximately 0.09 mile north west of the intersection of Clinton Street and Wallen Road. Wetland 13-A was delineated for approximately 0.022 acre and extends north beyond the investigated area. Wetland 13-A is directly connected to Wetland 13-B (described below). Wetland 13-A is located in a low lying area within the floodplain of Swift Ditch. Wetland 13-A receives drainage from the surrounding landscape and is located within the active floodplain

of Swift Ditch. Wetland 13-A drains south to Swift Ditch, which drains to St. Joseph River, a TNW. Therefore, it is anticipated that Wetland 13-A would be considered a jurisdictional Waters of the U.S.

Dominant vegetation within Wetland 13-A consisted of eastern cottonwood (*Populus deltoides*) and black willow (*Salix nigra*) within the tree stratum; sandbar willow (*Salix interior*) within the sapling/shrub stratum; and narrow-leaf cattail (*Typha angustifolia*) and purple loosestrife (*Lythrum salicaria*) within the herbaceous stratum. Hydric soil indicators included Depleted Below Dark Surface (A11), Depleted Matrix (F3), and Redox Dark Surface (F6). Hydrologic indicators included Water Marks (B1), Algal Mat (B4), Water Stained Leaves (B9), True Aquatic Plants (B14), Geomorphic Position (D2), and FAC Neutral Test (D5). Wetland 13-A would be considered a PSS1Ad under the Cowardin Classification System. The wetland is of poor quality as it exists in an excavated ditch and is dominated by invasive vegetation. For reference to field data collected for this wetland, see DP 26 in Appendix B. DP 27, included in Appendix B, is representative of the upland area surrounding Wetland 13-A. DP 27 possessed hydric soils, but lacked the hydrophytic vegetation and hydrology indicators to be considered a wetland.

5.1.16 Wetland 13-B

Wetland 13-B is an emergent wetland located to the north of Wallen Road, approximately 0.09 mile northwest of the intersection of Clinton Street and Wallen Road. Wetland 13-B was delineated for approximately 0.107 acre and extends north beyond the investigated area. Wetland 13-B is directly connected to Wetland 13-A and is representative of the emergent portion of the wetland. Wetland 13-B is located in a low lying area within the floodplain of Swift Ditch. Wetland 13-B receives drainage from the surrounding landscape and is inundated in a typical year by Swift Ditch. Wetland 13-B drains west to Wetland 13-A, which drains to Swift Ditch, which drains to St. Joseph River, a TNW. Therefore, it is anticipated that Wetland 13-B would be considered a jurisdictional Waters of the U.S.

Dominant vegetation within Wetland 13-B consisted of black willow (*Salix nigra*) and eastern cottonwood (*Populus deltoides*) within the tree stratum, sandbar willow (*Salix interior*) and eastern cottonwood (*Populus deltoides*) within the sapling/shrub stratum, and purple loosestrife (*Lythrum salicaria*) within the herbaceous stratum. Although the wetland included trees and saplings/shrubs this was not a dominant component of the absolute cover of the wetland. Hydric soil indicators included Redox Dark Surface (F6). Hydrology indicators included Saturation Visible on 2022 Aerial Photography (C9), Geomorphic Position (D2), and FAC Neutral Test (D5). Wetland 13-B would be considered PEM1A under the Cowardin Classification System. The wetland is of poor quality as it is dominated by invasive species. For reference to field data collected for this wetland, see DP 28 in Appendix B. DP 29, included in Appendix B, is representative of the upland area surrounding Wetland 13-B. DP 29 did not possess the hydrophytic vegetation, hydric soil indicators, or hydrology indicators to be considered a wetland.

5.1.17 Wetland 14-A

Wetland 14-A is an emergent wetland located to the north of Clinton Street, approximately 0.18 mile northeast of the intersection of Clinton Street and Wallen Road. Wetland 14-A consists of two emergent wetlands connected by a culvert beneath the gravel entrance to a utility station. Wetland 14-A is directly connected to Wetland 14-B (described below). Wetland 14-A was delineated for approximately 0.156 acre and is wholly contained within the investigated area. Wetland 14-A is located within a constructed roadside ditch, connected by a driveway culvert, and surrounding low-lying area and receives drainage from the roadway and surrounding landscape. Wetland 14-A drains northwest along topographic contours to Swift

Ditch, which drains to St. Joseph River, a TNW. Therefore, it is anticipated that Wetland 14-A would be considered a jurisdictional Waters of the U.S.

Dominant vegetation within Wetland 14-A included American elm (*Ulmus Americana*) within the sapling/shrub stratum and narrow-leaf cattail (*Typha angustifolia*) within the herbaceous stratum. Although the wetland included saplings/shrubs this was not a dominant component of the absolute cover of the wetland. Hydric soil indicators included Depleted Below Dark Surface (A11) and Depleted Matrix (F3). Hydrologic indicators included Water Stained Leaves (B9), Geomorphic Position (D2), and FAC Neutral Test (D5). Wetland 14-A would be considered a PEM1Ad under the Cowardin Classification System. Wetland 14-A would be considered a poor quality wetland due to the dominance of non-native vegetation within the herbaceous stratum. A continuous defined bed and bank or ordinary highwater mark was not observed during the site reconnaissance. For reference to field data collected for this wetland, see DP 30 within Appendix B. DP 31, included in Appendix B, is representative of the upland area surrounding Wetland 14-A. DP 31 did not possess the hydrophytic vegetation, hydric soil indicators, or hydrology indicators to be considered a wetland.

5.1.18 Wetland 14-B

Wetland 14-B is a forested wetland located to the north of Clinton Street, approximately 0.2 mile northeast of the intersection of Clinton Street and Wallen Road. Wetland 14-B is directly connected to Wetland 14-A, and is representative of the forested portion of the wetland. Wetland 14-B was delineated for approximately 0.045 acre and is wholly contained within the investigated area. Wetland 14-B is located within a low lying forested area and receives drainage from the surrounding landscape. Wetland 14-B drains south to Wetland 14-A, which drains northwest along topographic contours to Swift Ditch, which drains to St. Joseph River, a TNW. Therefore, it is anticipated that Wetland 14-A would be considered a jurisdictional Waters of the U.S.

Dominant vegetation within Wetland 14-B consisted of American elm (*Ulmus Americana*) and eastern cottonwood (*Populus deltoides*) within the tree stratum, gray dogwood (*Cornus racemose*) within the sapling/shrub stratum, reed canary grass (*Phalaris arundinacea*) within the herbaceous stratum, and fox grape (*Vitis labrusca*) within the vine stratum. Hydric soil indicators included Depleted Matrix (F3). Hydrologic indicators included Water Stained Leaves (B9), Geomorphic Position (D2), and FAC Neutral Test (D5). Wetland 14-B would be considered a PFO1A under the Cowardin Classification System. The wetland is of poor quality due to the dominance of invasive species. For reference to field data collected for this wetland, see DP 32 within Appendix B. DP 31, included in Appendix B, is representative of the upland area surrounding Wetland 14-B. DP 31 did not possess the hydrophytic vegetation, hydric soil indicators, or hydrology indicators to be considered a wetland.

5.1.19 Wetland 15

Wetland 15 is an emergent wetland located in the southwest quadrant of the crossing of Clinton Street and I-469. Wetland 15 was delineated for approximately 0.051 acre and extends west beyond the investigated area. Wetland 15 is located within a constructed roadside ditch and receives drainage from the roadway and surrounding landscape. Wetland 15 drains west through a roadside drainage system, along the south side of I-469, that drains to Swift Ditch, which drains to St. Joseph River, a TNW. Therefore, it is anticipated that Wetland 15 would be considered a jurisdictional Waters of the U.S.

Dominant vegetation within Wetland 15 consisted of barnyard grass (*Echinochloa crus-galli*) and narrow-leaf cattail (*Typha angustifolia*) within the herbaceous stratum. Hydric soil indicators included Depleted Matrix (F3). Hydrology indicators included Algal Mat (B4), Geomorphic Position (D2), and FAC Neutral Test (D5). Wetland 15 would be considered PEM1Ad under the Cowardin Classification System. Wetland 15 would be considered a poor quality wetland due to the regular disturbance of vegetation from mowing. A continuous defined bed and bank or ordinary highwater mark was not observed during the site reconnaissance. For reference to field data collected for this wetland, see DP 33 in Appendix B. DP 34, included in Appendix B, is representative of the upland area surrounding Wetland 15. DP 34 did not possess the hydrophytic vegetation, hydric soil indicators, or hydrology indicators to be considered a wetland.

5.1.20 Wetland 16

Wetland 16 is an emergent wetland located along the east side of Clinton Street at the crossing of Clinton Street by I-469. Wetland 16 was delineated for approximately 0.140 acre and is wholly contained within the investigated area. Wetland 16 is located within a constructed roadside ditch and receives drainage from the roadway and surrounding landscape. Wetland 16 drains east through a roadside drainage system, along the south side of I-469, which drains to Martin Ditch, which drains to St. Joseph River, a TNW. Therefore, it is anticipated that Wetland 16 would be considered a jurisdictional Waters of the U.S.

Dominant vegetation within Wetland 16 consisted of barnyard grass (*Echinochloa crus-galli*) and narrow-leaf cattail (*Typha angustifolia*) within the herbaceous stratum. Hydric soil indicators included Depleted Below Dark Surface (A11) and Depleted Matrix (F3). Hydrology indicators included Algal Mat (B4), Geomorphic Position (D2), and FAC Neutral Test (D5). Wetland 16 would be considered PEM1Ad under the Cowardin Classification System. Wetland 16 would be considered a poor quality wetland due to the presence of a dominant non-native vegetation population and due to its position beneath an overpass which inhibits vegetation growth. A continuous defined bed and bank or ordinary highwater mark was not observed during the site reconnaissance. For reference to field data collected for this wetland, see DP 35 in Appendix B. DP 36, included in Appendix B, is representative of the upland area surrounding Wetland 16. DP 36 possessed hydric soils, but lacked the hydrophytic vegetation and hydrology necessary to be considered a wetland.

5.1.21 Wetland 17

Wetland 17 is an emergent wetland located on the east side of Clinton Street, approximately 0.11 mile northeast of the crossing of Clinton Street by I-469. Wetland 17 was delineated for approximately 0.108 acre and is wholly contained within the investigated area. Wetland 17 is located in a constructed roadside ditch and surrounding low lying grassy area and receives drainage from the roadway and surrounding landscape. Wetland 17 drains southwest through a roadside drainage system which drains to Wetland 16, which drains east through a roadside drainage system to Martin Ditch, which drains to St. Joseph River, a TNW. Therefore, it is anticipated that Wetland 17 would be considered a jurisdictional Waters of the U.S.

Dominant vegetation within Wetland 17 consisted of eastern cottonwood (*Populus deltoides*) and black willow (*salix nigra*) within the sapling/shrub stratum and barnyard grass (*Echinochloa crus-galli*), fall panicum (*Panicum dichotomiflorum*), Devil's beggarticks (*Bidens frondosa*), common rush (*Juncus effuses*), and red clover (*Trifolium pratense*) within the herbaceous stratum. Hydric soil indicators included Redox Dark Surface (F6). Hydrologic indicators included Algal Mat (B4), Surface Soil Cracks (B6), Geomorphic Position (D2), and FAC Neutral Test (D5). Wetland 17 would be considered a PEM1Ad under the Cowardin Classification System. Wetland 17 would be considered an average quality wetland due to the dominance of

native vegetation. A continuous defined bed and bank or ordinary highwater mark was not observed during the site reconnaissance. For reference to field data collected for this wetland, see DP 37 in Appendix B. DP 38, included in Appendix B, is representative of the upland area surrounding Wetland 17. DP 38 possessed hydrophytic vegetation and hydric soils, but lacked the hydrology indicators necessary to be considered a wetland.

5.1.22 Wetland 18

Wetland 18 is an emergent wetland located on the south side of Clinton Street, approximately 0.09 mile northeast of the intersection of Clinton Street and Brooks Road. Wetland 18 was delineated for approximately 0.038 acre and is wholly contained within the investigated area. Wetland 18 is located in a low-lying area within an agricultural field and receives drainage from the adjacent roadway and agricultural landscape. Wetland also receives drainage from Wetland 19 (described below), which drains south to Wetland 18 through a small structure beneath Clinton Street. Wetland 18 drains generally east along topographic contours to Martin Ditch, which drains to St. Joseph River, a TNW. Therefore, it is anticipated that Wetland 18 would be considered a jurisdictional Waters of the U.S.

Dominant vegetation within Wetland 18 consisted of barnyard grass (*Echinochloa crus-galli*) and soybean (*Glycine max*) within the herbaceous stratum. Hydric soil indicators included Depleted Below Dark Surface (A11), Depleted Matrix (F3), and Redox Dark Surface (F6). Hydrologic indicators included Surface Soil Cracks (B6), Stunted or Stressed Plants (D1), Geomorphic Position (D2), and FAC Neutral Test (D5). Wetland 18 would be considered Palustrine, Emergent, Persistent, Temporarily Flooded, Farmed (PEM1Af) under the Cowardin Classification System. Wetland 18 would be considered a poor quality wetland due to regular disturbance from farming practices. For reference to field data collected for this wetland, see DP 39 in Appendix B. DP 40, included in Appendix B, is representative of the upland area surrounding Wetland 18. DP 40 possessed hydric soils, but lacked the hydrophytic vegetation and hydrology indicators necessary to be considered a wetland.

5.1.23 Wetland 19

Wetland 19 is an emergent wetland located on the north side of Clinton Street, approximately 0.09 mile northeast of the intersection of Clinton Street and Brooks Road. Wetland 19 was delineated for approximately 0.010 acre and is wholly contained within the investigated area. Wetland 19 is located within a constructed roadside ditch and receives drainage from the roadway and surrounding landscape. Wetland 19 drains south, to Wetland 18 through a small structure beneath Clinton Street. Wetland 18 drains generally east along topographic contours to Martin Ditch, which drains to St. Joseph River, a TNW. Therefore, it is anticipated that Wetland 19 would be considered a jurisdictional Waters of the U.S.

Dominant vegetation within Wetland 19 consisted of barnyard grass (*Echinochloa crus-galli*) and tall fescue (*Schedonorus arundinaceus*) within the herbaceous stratum. Hydric soil indicators included Redox Dark Surface (F6). Hydrology indicators included Water Stained Leaves (B9) and Geomorphic Position (D2). Wetland 19 would be considered PEM1Ad under the Cowardin Classification System. Wetland 19 would be considered a poor quality wetland due to the regular disturbance of vegetation from mowing. A continuous defined bed and bank or ordinary highwater mark was not observed during the site reconnaissance. For reference to field data collected for this wetland, see DP 41 in Appendix B. DP 42, included in Appendix B, is representative of the upland area surrounding Wetland 19. DP 42 did not possess the hydrophytic vegetation, hydric soil indicators, or hydrology indicators to be considered a wetland.

5.1.24 Wetland 20

Wetland 20 is a forested wetland located on the south side of Clinton Street, approximately 0.28 mile northeast of the intersection of Clinton Street and Brooks Road. Wetland 20 was delineated for approximately 0.176 acre and extends southeast beyond the investigated area. Wetland 20 is located in a low-lying forested area and receives drainage from the surrounding forested landscape. Wetland 20 drains generally east along topographic contours to Martin Ditch, which drains to St. Joseph River, a TNW. Therefore, it is anticipated that Wetland 20 would be considered a jurisdictional Waters of the U.S.

Dominant vegetation within Wetland 20 consisted of silver maple (*Acer saccharinum*) within the tree stratum, gray dogwood (*Cornus racemosa*), rough dogwood (*Cornus drummondii*), slippery elm (*Ulmus rubra*), and pin cherry (*Prunus pensylvanica*) within the sapling/shrub stratum, lance leaf aster (*Symphotrichum lanceolatum*) within the herbaceous stratum, and poison ivy (*Toxicodendron radicans*) within the vine stratum. Hydric soil indicators consisted of Redox Dark Surface (F6). Hydrology indicators included Water Marks (B1), Inundation Visible on 2022 Aerial Imagery (B7), Water Stained Leaves (B9), Geomorphic Position (D2), and FAC Neutral Test (D5). Wetland 20 would be considered a PFO1A under the Cowardin Classification System. The wetland is of average quality due to dominant native vegetation but is limited by past disturbance (likely from farming). For reference to field data collected for this wetland, see DP 43 in Appendix B. DP 44, included in Appendix B, is representative of the upland area surrounding Wetland 20. DP 44 possessed hydric soils, but lacked the hydrophytic vegetation and hydrology indicators necessary to be considered a wetland.

5.1.25 Wetland 21

Wetland 21 is an emergent wetland located on the south side of Clinton Street, approximately 0.1 mile southwest of the intersection of Clinton Street and Mayhew Road. Wetland 21 was delineated for approximately 0.029 acre and is wholly contained within the investigated area. Wetland 21 is located within a constructed roadside ditch and receives drainage from the roadway and surrounding landscape. Wetland 21 drains southwest through a roadside drainage system to UNT 1 to Martin Ditch, which drains to Martin Ditch, which drains to St. Joseph River, a TNW. Therefore, it is anticipated that Wetland 21 would be considered a jurisdictional Waters of the U.S.

Dominant vegetation within Wetland 21 consisted of barnyard grass (*Echinochloa crus-galli*), shallow sedge (*Carex lurida*), and reed canary grass (*Phalaris arundinacea*) within the herbaceous stratum. Hydric soil indicators included Depleted Below Dark Surface (A11) and Depleted Matrix (F3). Hydrologic indicators included Surface Water at 1 inch (A1), High Water Table at the surface (A2), Saturation at the surface (A3), Geomorphic Position (D2), and FAC Neutral Test (D5). Wetland 21 would be considered a PEM1Ad under the Cowardin Classification System. Wetland 21 would be considered a poor quality wetland due to the presence of a dominant invasive vegetation. A continuous defined bed and bank or ordinary highwater mark was not observed during the site reconnaissance. For reference to field data collected for this wetland, see DP 45 in Appendix B. DP 46, included in Appendix B, is representative of the upland area surrounding Wetland 19. DP 46 did not possess the hydrophytic vegetation, hydric soil indicators, or hydrology indicators to be considered a wetland.

5.2 Drainage Features, Streams, and Other Potential “Waters of the U.S.”

5.2.1 UNT 1 to Beckett’s Run

UNT 1 to Beckett’s Run begins within the project area approximately 0.03 mile northeast of the intersection of Clinton Street and Jacob’s Creek Run. The stream flows north along a steep gradient for 159 feet before losing defined bed and bank and flowing into Wetland 5. The stream is not depicted on the Cedarville USGS 7.5 Minute Topographic Map. Stream Stats (<https://water.usgs.gov/osw/streamstats/>) does not depict UNT 1 to Beckett’s Run, however, it was determined that the upstream drainage area of the stream was approximately 0.01 square mile. The stream is not a County Legal Drain. UNT 1 to Beckett’s Run was not flowing during field investigation on September 20, 2022 and stream flow appears to be ephemeral. UNT 1 to Beckett’s Run derives water from roadway drainage. UNT 1 drains to Wetland 5, which drains to UNT 3, which drains to Beckett’s Run, which drains to St. Joseph River, a TNW. Therefore, it is anticipated UNT 1 to Beckett’s Run would be considered a jurisdictional waters of the U.S.

UNT 1 to Beckett’s Run flows north into Wetland 5 and is not crossed within the project area. A stream assessment was completed for the channel. The stream substrate was primarily sand with large amounts of gravel and silt. Minimal overhanging vegetation and in-stream cover was observed. The ordinary high water mark (OHWM) of UNT 1 to Beckett’s Run at the assessment location was 4 feet wide by 0.4 feet deep. No water was observed within the stream bed during field reconnaissance. UNT 1 to Beckett’s Run would be considered a poor quality stream due to minimal in-stream cover and a high channelization. UNT 1 to Beckett’s Run would be classified as a Riverine, Streambed, Sand (RSB4) using the Cowardin Classification System. The Cowardin Classification System does not include a subsystem for ephemeral flow regimes.

A Headwater Habitat Evaluation (HHEI) was conducted for UNT 1 to Beckett’s Run. The overall score for the 159 linear foot sampled reach was 33. The stream scored highest for substrate (18/40) and bank full width (15/30). The stream scored lowest for pool depth (0/30). UNT 1 to Beckett’s Run would be considered a poor quality stream due to minimal in-stream cover and a high channelization. Please refer to HHEI 1 in Appendix C for more information regarding UNT 1 to Beckett’s Run.

5.2.2 UNT 2 to Beckett’s Run

UNT 2 to Beckett’s Run enters the project area, approximately 0.07 mile northeast of the intersection of Clinton Street and Jacob’s Creek Run. The stream flows west along a steep gradient for 78 feet before losing defined bed and bank and flowing into Wetland 5. The stream is not depicted on the Cedarville USGS 7.5 Minute Topographic Map. Stream Stats (<https://water.usgs.gov/osw/streamstats/>) does not depict UNT 2 to Beckett’s Run, however, it was determined that the upstream drainage area of the stream was approximately 0.01 square mile. The stream is not a County Legal Drain. UNT 2 to Beckett’s Run was not flowing during field investigation on September 20, 2022 and stream flow appears to be ephemeral. UNT 2 to Beckett’s Run derives water from drainage from the surrounding forested and residential landscapes. UNT 2 drains to Wetland 5, which drains to UNT 3, which drains to Beckett’s Run, which drains to St. Joseph River, a TNW. Therefore, it is anticipated UNT 2 to Beckett’s Run would be considered a jurisdictional waters of the U.S.

UNT 2 to Beckett’s Run flows west into Wetland 5 and is not crossed within the project area. A stream assessment was completed for the channel. The stream substrate consisted of only silt. Minimal overhanging vegetation and in-stream cover was observed. The OHWM of UNT 2 to Beckett’s Run at the assessment

location was 1.5 feet wide by 0.4 feet deep. No water was observed within the stream bed during field reconnaissance. UNT 2 to Beckett's Run would be classified as a Riverine, Streambed, Mud (RSB5) using the Cowardin Classification System. The Cowardin Classification System does not include a subsystem for ephemeral flow regimes.

A Headwater Habitat Evaluation (HHEI) was conducted for UNT 2 to Beckett's Run. The overall score for the 78 linear foot sampled reach was 12. The stream scored highest for substrate (7/40) and bank full width (5/30). The stream scored lowest for pool depth (0/30). UNT 2 to Beckett's Run would be considered a very poor quality stream due to a poor substrate and lack of in-stream cover. Please refer to HHEI 2 in Appendix C for more information regarding UNT 2 to Beckett's Run.

5.2.3 UNT 3 to Beckett's Run

UNT 3 to Beckett's Run begins within the project area, approximately 0.09 mile northeast of the intersection of Clinton Street and Jacob's Creek Run, at the northern end of Wetland 5 where the gradient begins to steepen. The stream flows north along a steep gradient for 210 feet before converging with Beckett's Run. The stream is not depicted on the Cedarville USGS 7.5 Minute Topographic Map. Stream Stats (<https://water.usgs.gov/osw/streamstats/>) does not depict UNT 3 to Beckett's Run, however, it was determined that the upstream drainage area of the stream was approximately 0.02 square mile. The stream is not a County Legal Drain. UNT 3 to Beckett's Run was not flowing during field investigation on September 20, 2022 and stream flow appears to be ephemeral. UNT 3 to Beckett's Run derives water from drainage from UNT 1, UNT 2, and Wetland 5. UNT 3 drains to Beckett's Run, which drains to St. Joseph River, a TNW. Therefore, it is anticipated UNT 3 to Beckett's Run would be considered a jurisdictional waters of the U.S.

UNT 3 to Beckett's Run flows north into Beckett's Run and is not crossed within the project area. A stream assessment was completed for the channel. The stream substrate was primarily gravel and sand with small amounts of boulder, cobble, and silt. Minimal overhanging vegetation and in-stream cover was observed. The OHWM of UNT 3 to Beckett's Run at the assessment location was 4 feet wide by 0.4 feet deep. No water was observed within the stream bed during field reconnaissance. UNT 3 to Beckett's Run would be classified as a Riverine, Streambed, Cobble-Gravel (RSB3) using the Cowardin Classification System. The Cowardin Classification System does not include a subsystem for ephemeral flow regimes.

A Headwater Habitat Evaluation (HHEI) was conducted for UNT 3 to Beckett's Run. The overall score for the 200 linear foot sampled reach was 35. The stream scored highest for substrate (20/40) and bank full width (15/30). The stream scored lowest for pool depth (0/30). UNT 3 to Beckett's Run would be considered a poor quality stream due to lack of in-stream cover. Please refer to HHEI 3 in Appendix C for more information regarding UNT 3 to Beckett's Run.

5.2.4 Beckett's Run

Beckett's Run enters the investigated area approximately 0.11 mile north of the intersection of Clinton Street and Jacob's Creek Run. The stream flows east for approximately 345 feet before exiting the investigated area. The stream is depicted on the Cedarville USGS 7.5 Minute topographic quadrangle as a perennial stream (solid blue line). Stream Stats (<https://water.usgs.gov/osw/streamstats/>) reports the upstream drainage area of Beckett's Run is approximately 9.121 square miles. The stream is not a County Legal Drain. The stream was flowing during the September 20, 2022 site investigation and stream flow

appears to be perennial. Beckett's Run flows east out of the investigated and drains to the St. Joseph River, a TNW. Therefore, it is anticipated that Beckett's Run would be considered a jurisdictional Waters of the U.S.

Beckett's Run flows east under Clinton Street and is conveyed by National Bridge Inventory (NBI) No. 0200073. A stream assessment was completed outside of the zone of influence of the bridge. The stream substrate was primarily sand and silt with small amounts of boulder, cobble, and gravel. Macroinvertebrates and minnows were observed within the stream along with sparse amounts of overhanging vegetation and in-stream cover. The OHWM at the assessment location was 26.5 feet wide by 1.7 feet deep. Water depth was approximately 12 inches during the field investigation on September 20, 2022. Beckett's Run would be considered Riverine, Upper Perennial, Unconsolidated Bottom, Sand (R3UB2) using the Cowardin Classification System.

A Qualitative Habitat Evaluation (QHEI) was conducted for Beckett's Run. The overall score for the 200 linear foot sampled reach was 57. This is a Good narrative rating in the manual. The stream scored highest for substrate (11/20) and channel morphology (14/20). The stream scored lowest for pool quality (3/12) and riffle/run (5/8). The lack of instream cover and riffle/run/pool development within the investigated area limited the rating of the stream. Please refer to QHEI 1 in Appendix C for more information regarding Beckett's Run.

5.2.5 UNT 1 to St. Joseph River

UNT 1 to St. Joseph River begins within the project area at the outlet of a small structure that conveys drainage from west to east under Clinton Street, approximately 0.15 mile northeast of the intersection of Clinton Street and Swift Drive. The stream flows east for 87 feet before exiting the investigated area. The stream is not depicted on the Cedarville USGS 7.5 Minute Topographic Map. Stream Stats (<https://water.usgs.gov/osw/streamstats/>) does not depict UNT 1 to St. Joseph River, however, it was determined that the upstream drainage area of the stream was approximately 0.08 square mile. The stream is not a County Legal Drain. UNT 1 to St. Joseph River was flowing during field investigation on September 20, 2022 and stream flow appears to be intermittent. UNT 1 to St. Joseph River derives water from drainage from Clinton Street, conveyed by the unnumbered small structure. UNT 1 drains to St. Joseph River, a TNW. Therefore, it is anticipated UNT 1 to St. Joseph River would be considered a jurisdictional waters of the U.S.

UNT 1 to St. Joseph River flows east towards the St. Joseph River and is not crossed within the project area. A stream assessment was completed for the channel. The stream substrate was primarily gravel, silt, and sand with small amounts of cobble. Sparse overhanging vegetation and in-stream cover was observed. The OHWM of UNT 1 to St. Joseph River at the assessment location was 3.4 feet wide by 0.4 feet deep. Water depth was approximately 3 inches during the field investigation on September 20, 2022. UNT 1 to St Joseph River would be classified as a Riverine, Intermittent, Streambed, Cobble-Gravel (R4SB3) using the Cowardin Classification System.

A Headwater Habitat Evaluation (HHEI) was conducted for UNT 1 to St. Joseph River. The overall score for the 200 linear foot sampled reach was 59. The stream scored highest for substrate (19/40) and pool depth (25/30). The stream scored lowest for bank full width (15/30). UNT 1 to St. Joseph River would be considered a fair quality stream due to good riffle/run/pool development and a diverse substrate, but is limited by a lack of in-stream cover. Please refer to HHEI 4 in Appendix C for more information regarding UNT 1 to St. Joseph River.

5.2.6 Swift Ditch

Swift Ditch enters the project area approximately 0.12 mile northwest of the intersection of Clinton Street and Wallen Road. The stream flows southeast for approximately 466 feet before exiting the investigated area. Swift Ditch re-enters the investigated area approximately 0.09 mile southwest of the intersection of Clinton Street and Wallen Road and flows southeast for approximately 372 feet before exiting the investigated area. The stream is depicted on the Cedarville USGS 7.5 Minute topographic quadrangle as an intermittent stream (dashed blue line). Stream Stats (<https://water.usgs.gov/osw/streamstats/>) reports the upstream drainage area of Swift Ditch is approximately 1.269 square miles. The stream is listed as a County Legal Drain. The stream was flowing during the September 20, 2022 site investigation and stream flow appears to be intermittent. Swift Ditch flows southeast out of the investigated and drains to the St. Joseph River, a TNW. Therefore, it is anticipated that Swift Ditch would be considered a jurisdictional Waters of the U.S.

Swift Ditch flows south under Wallen Road and southeast under Clinton Street via two unnumbered structures. A stream assessment was completed outside of the zone of influence of the small structure. The stream substrate was primarily gravel with small amounts of sand and artificial substrate. Frogs were observed within the stream along with sparse amounts of overhanging vegetation and in-stream cover. The OHWM at the assessment location was 10.4 feet wide by 1.7 feet deep. Water depth was approximately 10 inches during the field investigation on September 20, 2022. Swift Ditch would be considered Riverine, Intermittent, Stream Bed, Cobble-Gravel (R4SB3) using the Cowardin Classification System.

A Qualitative Habitat Evaluation (QHEI) was conducted for Swift Ditch. The overall score for the 200 linear foot sampled reach was 50.5. This is a Fair narrative rating in the manual. The stream scored highest for substrate (15/20) and channel morphology (12/20). The stream scored lowest for pool quality (1/12) and riffle/run (5/8). High rates of erosion and the lack of riffle/run/pool development within the investigated area limited the rating of the stream. Please refer to QHEI 2 in Appendix C for more information regarding Swift Ditch.

5.2.7 Martin Ditch

Martin Ditch enters the project area approximately 0.34 mile southwest of the intersection of Clinton Street and Mayhew Road. The stream flows southeast for approximately 200 feet before exiting the investigated area. The stream is depicted on the Cedarville USGS 7.5 Minute topographic quadrangle as an intermittent stream (dashed blue line). Stream Stats (<https://water.usgs.gov/osw/streamstats/>) reports the upstream drainage area of Martin Ditch is approximately 1.09 square miles. The stream is not a County Legal Drain. The stream was flowing during the September 27, 2022 site investigation and stream flow appears to be intermittent. Martin Ditch flows southeast out of the investigated and drains to the St. Joseph River, a TNW. Therefore, it is anticipated that Martin Ditch would be considered a jurisdictional Waters of the U.S.

Martin Ditch flows southeast under Clinton Street and is conveyed by an unnumbered small structure. A stream assessment was completed outside of the zone of influence of the small structure. The stream substrate was primarily sand and muck with small amounts of gravel, cobble, and artificial substrate. Sparse amounts of overhanging vegetation and in-stream cover were observed. The OHWM at the assessment location was 12.3 feet wide by 1.2 feet deep. Water depth was approximately 11 inches during the field investigation on September 27, 2022. Martin Ditch would be considered Riverine, Intermittent, Stream Bed, Sand (R4SB4) using the Cowardin Classification System.

A Qualitative Habitat Evaluation (QHEI) was conducted for Martin Ditch. The overall score for the 200 linear foot sampled reach was 44. This is a Fair narrative rating in the manual. The stream scored highest for channel morphology (11/20) and substrate (9/20). The stream scored lowest for pool quality (1/12) and riffle/run (4/8). Sparse in-stream cover and the lack of riffle/run/pool development within the investigated area limited the rating of the stream. Please refer to QHEI 3 in Appendix C for more information regarding Martin Ditch.

5.2.8 UNT 1 to Martin Ditch

UNT 1 to Martin Ditch enters the project area, approximately 0.25 mile southwest of the intersection of Clinton Street and Mayhew Road. The stream flows south for approximately 191 feet before exiting the project area. The stream is not depicted on the Cedarville USGS 7.5 Minute Topographic Map. Stream Stats (<https://water.usgs.gov/osw/streamstats/>) reports the upstream drainage area of the stream was approximately 0.52 square mile. The stream is not a County Legal Drain. UNT 1 to Martin Ditch was flowing during field investigation on September 27, 2022 and stream flow appears to be intermittent. UNT 1 to Martin Ditch drains south to Martin Ditch, which drains to St. Joseph River, a TNW. Therefore, it is anticipated UNT 1 to Martin Ditch would be considered a jurisdictional waters of the U.S.

UNT 1 to Martin Ditch flows south under Clinton Street and is conveyed beneath the road via an unnumbered small structure. A stream assessment was completed outside of the zone of influence of the small structure. The stream substrate consisted of primarily sand and silt with small amounts of gravel, cobble, and boulder. Minimal overhanging vegetation and in-stream cover was observed. Aquatic macroinvertebrates were observed within the stream. The OHWM of UNT 1 to Martin Ditch at the assessment location was 6.6 feet wide by 0.9 feet deep. Water depth was approximately 10 inches during field reconnaissance. UNT 1 to Martin Ditch would be classified as a Riverine, Intermittent, Streambed, Sand (R4SB4) using the Cowardin Classification System.

A Headwater Habitat Evaluation (HHEI) was conducted for UNT 1 to Martin Ditch. The overall score for the 191 linear foot sampled reach was 60. The stream scored highest for bank full width (20/30) and pool depth (25/30). The stream scored lowest for substrate (15/40). UNT 1 to Martin Ditch would be considered a poor quality stream due to channelization and trash throughout the stream channel. Please refer to HHEI 5 in Appendix C for more information regarding UNT 1 to Martin Ditch.

5.2.9 Pond 1

Pond 1 is located approximately 0.05 mile south of the intersection of Clinton Street and Riveroak Drive. Pond 1 is approximately 0.30 acre and extends east beyond the investigated area. Pond 1 is drained to the south by a pipeline, which drains to an unnamed tributary (visible on aerial photography) which drains to the St. Joseph River, a TNW. Therefore, it is anticipated that Pond 1 would be considered a jurisdictional Waters of the U.S.

5.3 Other Features

Drainage along Clinton Street is conveyed by a network of roadside ditches. Unless otherwise noted, these roadside ditches were inspected and determined to lack defined bed and bank and continuous OHWM. Low points in this drainage system where water is subject to ponding were identified and delineated as wetlands (see section 5.1 above). Outside of the features identified in this report, these roadside drainage ditches are not presumed to be jurisdictional Waters of the U.S.

One erosional feature, Erosional Feature (EF) 1, was mapped at the western end of Wetland 11-A. EF 1 drains Wetland 11-A northeast for approximately 67 feet to Swift Ditch. This feature appeared to be formed as the gradient within a forested area increased towards Swift Ditch, causing drainage from Wetland 11-A to cut an erosional path to the stream. EF 1 lacked a defined bed and bank and continuous OHWM. Therefore, this feature is not presumed to be a jurisdictional water of the U.S.

5.4 Non-Wetland Data Points

DP 3 is a non-wetland data point taken due to the presence of hydrophytic vegetation within a roadside ditch. DP 3 possessed hydric soils, but lacked the dominant hydrophytic vegetation and hydrology indicators to be determined a wetland. For reference to field data collected for DP 3, see Appendix B.


6.0 Conclusions

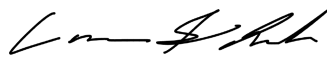
Twenty-five (25) wetlands (Wetland 1 through 6, 7-A, 7-B, 8 through 10, 11-A, 11-B, 12, 13-A, 13-B, 14-A, 14-B, and 15 through 21) totaling 1.572 acres; 8 streams (Unnamed Tributary [UNT 1] through UNT 3 to Beckett's Run, Beckett's Run, Swift Ditch, UNT 1 to St. Joseph River, Martin Ditch, and UNT 1 to Martin Ditch) totaling 1,736 linear feet (0.448 acre); and one pond (Pond 1) totaling 0.30 acre, were delineated within the investigated area. All delineated features were found to drain to the St. Joseph River, a Traditional Navigable Waterway (TNW). Therefore, it is anticipated that all delineated resources would be considered jurisdictional Waters of the U.S.

All jurisdictional waters of the U.S. are under the regulatory authority of the USACE under Section 404 of the Clean Water Act. Every effort should be taken to avoid and minimize impacts to the waterway and wetlands. If impacts are necessary, then mitigation may be required. The final determination of jurisdictional waters is ultimately made by the USACE. This report is our best judgment based on the guidelines set forth by the USACE.

7.0 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.

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Appendix A - Aquatic Resource Summary Tables

Table 1 – Data Points Summary

Data Points Summary							
Data Point	Photos	Lat/ Long	Water Resource	Hydrophytic Vegetation	Hydric Soils	Wetland Hydrology	Within a Wetland
1	5-7	41.145631, -85.114637	Wetland 1	Yes	Yes	Yes	Yes
2	2-4	41.145614, -85.114649	Upland of Wetland 1	No	No	No	No
3	17-19	41.148174, -85.112960	Non- wetland DP	No	Yes	No	No
4	27-29	41.150569, -85.111878	Wetland 2	Yes	Yes	Yes	Yes
5	30-32	41.150616, -85.111774	Upland of Wetland 2 and Wetland 3	Yes	No	No	No
6	33-35	41.150587, -85.111688	Wetland 3	Yes	Yes	Yes	Yes
7	36-38	41.151143, -85.111439	Wetland 4	Yes	Yes	Yes	Yes
8	39-41	41.151133, -85.111345	Upland of Wetland 4	Yes	No	No	No
9	226- 228	41.150992, -85.110857	Wetland 5	Yes	Yes	Yes	Yes
10	223- 225	41.151084, -85.110853	Upland of Wetland 5	No	Yes	No	No
11	45-47	41.151774, -85.111096	Wetland 6	Yes	Yes	Yes	Yes
12	48-50	41.151803, -85.110927	Upland of Wetland 6	No	Yes	No	No
13	58-60	41.159389, -85.106565	Wetland 7- A	Yes	Yes	Yes	Yes
14	61-63	41.159621, -85.106426	Wetland 7- B	Yes	Yes	Yes	Yes

Data Point	Photos	Lat/ Long	Water Resource	Hydrophytic Vegetation	Hydric Soils	Wetland Hydrology	Within a Wetland
15	64-66	41.159679, -85.106278	Upland of Wetland 7-A, Wetland 7-B, and Wetland 8	No	No	No	No
16	67, 68	41.159708, -85.106191	Wetland 8	Yes	Yes	Yes	Yes
17	73-75	41.160518, -85.105740	Wetland 9	Yes	Yes	Yes	Yes
18	70-72	41.160495, -85.105766	Upland of Wetland 9	No	Yes	No	No
19	207-209	41.161441, -85.104959	Wetland 10	Yes	Yes	Yes	Yes
20	204-206	41.161485, -85.104980	Upland of Wetland 10	No	Yes	No	No
21	198-200	41.162889, -85.103942	Wetland 11-A	Yes	Yes	Yes	Yes
22	195-197	41.162902, -85.103999	Upland of Wetland 11-A and Wetland 11-B	No	No	No	No
23	192-194	41.163019, -85.104004	Wetland 11-B	Yes	Yes	Yes	Yes
24	80-82	41.163120, -85.104295	Wetland 12	Yes	Yes	Yes	Yes
25	77-79	41.163091, -85.104325	Upland of Wetland 12	Yes	No	No	No
26	87-89	41.165107, -85.104219	Wetland 13-A	Yes	Yes	Yes	Yes
27	90-92	41.165099, -85.104159	Upland of 13-A	No	Yes	No	No
28	94-96	41.165099, -85.103410	Wetland 13-B	Yes	Yes	Yes	Yes

Data Point	Photos	Lat/ Long	Water Resource	Hydrophytic Vegetation	Hydric Soils	Wetland Hydrology	Within a Wetland
29	97-99	41.165042, -85.103419	Upland of Wetland 13-B	No	No	No	No
30	105, 106	41.166006, -85.099754	Wetland 14-A	Yes	Yes	Yes	Yes
31	102- 104	41.165980, -85.099783	Upland of 14-A and Wetland 14-B	No	No	No	No
32	108- 110	41.166396, -85.099361	Wetland 14-B	Yes	Yes	Yes	Yes
33	115- 117	41.167722, -85.096445	Wetland 15	Yes	Yes	Yes	Yes
34	112- 114	41.167731, -85.096503	Upland of Wetland 15	No	No	No	No
35	180- 182	41.167820, -85.095853	Wetland 16	Yes	Yes	Yes	Yes
36	183, 184	41.167833, -85.095863	Upland of Wetland 16	No	Yes	No	No
37	175- 177	41.169196, -85.093173	Wetland 17	Yes	Yes	Yes	Yes
38	172- 174	41.169139, -85.093108	Upland of Wetland 17	Yes	Yes	No	No
39	165- 167	41.172257, -85.087207	Wetland 18	Yes	Yes	Yes	Yes
40	168, 169	41.172418, -85.087003	Upland of Wetland 18	No	Yes	No	No
41	124- 126	41.172620, -85.086968	Wetland 19	Yes	Yes	Yes	Yes
42	237- 239	41.172632, -85.086993	Upland of Wetland 19	No	No	No	No
43	157- 159	41.173806, -85.083933	Wetland 20	Yes	Yes	Yes	Yes
44	160- 162	41.173751, -85.084039	Upland of Wetland 20	No	Yes	No	No

Data Point	Photos	Lat/ Long	Water Resource	Hydrophytic Vegetation	Hydric Soils	Wetland Hydrology	Within a Wetland
45	141-143	41.177067, -85.077828	Wetland 21	Yes	Yes	Yes	Yes
46	144, 145	41.177048, -85,077820	Upland of Wetland 21	No	No	No	No

Table 2 – Aquatic Resources Summary

Aquatic Resources Summary: Wetlands						
Delineated Resource	Photos	Lat/ Long	Type	Quality	Likely Jurisdiction	Total Acreage
Wetland 1	5, 7	41.145631, -85.114637	Emergent	Poor	Waters of the U.S.	0.051
Wetland 2	27, 29	41.150569, -85.111878	Forested	Average	Waters of the U.S.	0.018
Wetland 3	33, 35	41.150587, -85.111688	Forested	Average	Waters of the U.S.	0.034
Wetland 4	36, 38	41.151143, -85.111439	Emergent	Average	Waters of the U.S.	0.058
Wetland 5	226, 228-229	41.150992, -85.110857	Emergent	Poor	Waters of the U.S.	0.211
Wetland 6	45, 47	41.151774, -85.111096	Forested	Average	Waters of the U.S.	0.042
Wetland 7-A	58, 60	41.159389, -85.106565	Emergent	Poor	Waters of the U.S.	0.097
Wetland 7-B	61, 63	41.159621, -85.106426	Scrub Shrub	Poor	Waters of the U.S.	0.030
Wetland 8	68-69	41.159708, -85.106191	Emergent	Poor	Waters of the U.S.	0.013
Wetland 9	73, 75	41.160518, -85.105740	Emergent	Poor	Waters of the U.S.	0.030
Wetland 10	207, 209	41.161441, -85.104959	Emergent	Poor	Waters of the U.S.	0.043
Wetland 11-A	199-200	41.162889, -85.103942	Scrub Shrub	Poor	Waters of the U.S.	0.034

Delineated Resource	Photos	Lat/ Long	Type	Quality	Likely Jurisdiction	Total Acreage
Wetland 11-B	193-194	41.163019, -85.104004	Emergent	Poor	Waters of the U.S.	0.026
Wetland 12	80, 82	41.163120, -85.104295	Emergent	Poor	Waters of the U.S.	0.003
Wetland 13-A	87, 89	41.165107, -85.104219	Scrub Shrub	Poor	Waters of the U.S.	0.022
Wetland 13-B	93-94, 96	41.165099, -85.103410	Emergent	Poor	Waters of the U.S.	0.107
Wetland 14-A	106-107	41.166006, -85.099754	Emergent	Poor	Waters of the U.S.	0.156
Wetland 14-B	108, 110	41.166396, -85.099361	Forested	Poor	Waters of the U.S.	0.045
Wetland 15	115, 117	41.167722, -85.096445	Emergent	Poor	Waters of the U.S.	0.051
Wetland 16	178-179, 181-182	41.167820, -85.095853	Emergent	Poor	Waters of the U.S.	0.140
Wetland 17	175, 177	41.169196, -85.093173	Emergent	Average	Waters of the U.S.	0.108
Wetland 18	165, 167	41.172257, -85.087207	Emergent	Poor	Waters of the U.S.	0.038
Wetland 19	123-124, 126	41.172620, -85.086968	Emergent	Poor	Waters of the U.S.	0.010
Wetland 20	157, 159	41.173806, -85.083933	Forested	Average	Waters of the U.S.	0.176
Wetland 21	141, 143	41.177067, -85.077828	Emergent	Poor	Waters of the U.S.	0.029
Total						1.572 acre

Aquatic Resources Summary: Streams

Delineated Resource	Photos	Lat/ Long	USGS Blue Line & Type	OHWWM Width	OHWWM Depth	Flow Regime	Quality	Riffle/Run Presence	Substrate	Jurisdiction	Total Linear Feet	Total Acres
UNT 1 to Beckett's Run	231	41.150283, -85.11117	N/A	4	0.4	Eph	Poor	No	Sand	Waters of the U.S.	159	0.014
UNT 2 to Beckett's Run	230	41.150591, -85.110770	N/A	1.5	0.4	Eph	Very Poor	No	Mud	Waters of the U.S.	78	0.002
UNT 3 to Beckett's Run	220-221	41.151427, -85.110665	N/A	4	0.4	Eph	Poor	No	Cobble/Gravel	Waters of the U.S.	210	0.019
Beckett's Run	43-44, 219	41.151494, -85.110955	Solid Blue (Per.)	26.5	1.7	Per	Good	Yes	Sand	Waters of the U.S.	345	0.21
Swift Ditch	83, 85-86 190-191	41.164697, -85.104717	Dashed Blue (Int.)	10.4	1.7	Int	Fair	Yes	Cobble / Gravel	Waters of the U.S.	466	0.007
UNT 1 to St. Joseph River	212-213	41.157859, -85.106770	N/A	3.4	0.4	Int	Fair	Yes	Cobble / Gravel	Waters of the U.S.	87	0.111

Delineated Resource	Photos	Lat/ Long	USGS Blue Line & Type	OHWM Width	OHWM Depth	Flow Regime	Quality	Riffle/Run Presence	Substrate	Jurisdiction	Total Linear Feet	Total Acres
Martin Ditch	131, 151-152	41.175204, -85.081486	Dashed Blue (Int.)	12.3	1.2	Int	Fair	Yes	Sand	Waters of the U.S.	200	0.056
UNT 1 to Martin Ditch	147-148	41.175789, -85.079988	N/A	6.6	0.9	Int	Poor	Yes	Sand	Waters of the U.S.	191	0.029
Total											1736 lft	0.448 acre

Aquatic Resources Summary: Ponds

Delineated Resource	Photos	Lat/ Long	Type	Quality	Likely Jurisdiction	Total Acreage
Pond 1	111	41.159744, -85.105731	PUBHx	Average	Waters of the U.S.	0.300
Total						0.300 acre

Aquatic Resources Summary

Resource	Wetlands	Streams	Ponds
Grand Total	1.572 acre	1736 lft	0.300 acre



Appendix B - Routine Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/20/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 1
 Investigator(s): Josh Iddings and Alyssa Damiano Section, Township, Range: Section 18, Township 31 N, Range 13 E
 Landform (hillside, terrace, etc.): Ditch Local relief (concave, convex, none): Concave
 Slope (%): 0.5 Lat: 41.145631 Long: -85.114637 Datum: WGS_1984
 Soil Map Unit Name: Glynwood silt loam, 2 to 6 percent slopes, eroded (MrB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Remarks: DP 1 is representative of Wetland 1.	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1.					Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
2.					
3.					
4.					
5.					
		=Total Cover			
Sapling/Shrub Stratum	(Plot size: <u>15 ft</u>)				
1.					Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>75</u> x 1 = <u>75</u> FACW species <u>10</u> x 2 = <u>20</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>15</u> x 4 = <u>60</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>100</u> (A) <u>155</u> (B) Prevalence Index = B/A = <u>1.55</u>
2.					
3.					
4.					
5.					
		=Total Cover			
Herb Stratum	(Plot size: <u>5 ft</u>)				
1.	<u>Typha angustifolia</u>	<u>75</u>	<u>Yes</u>	<u>OBL</u>	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2.	<u>Schedonorus arundinaceus</u>	<u>15</u>	<u>No</u>	<u>FACU</u>	
3.	<u>Echinochloa crus-galli</u>	<u>5</u>	<u>No</u>	<u>FACW</u>	
4.	<u>Carex vulpinoidea</u>	<u>5</u>	<u>No</u>	<u>FACW</u>	
5.					
6.					
7.					
8.					
9.					
10.					
		100 =Total Cover			
Woody Vine Stratum	(Plot size: <u>30 ft</u>)				
1.					Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
2.					
		=Total Cover			

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

SOIL

Sampling Point: DP 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 ¹	Loc ²		
0-10	10YR 4/2	98	10YR 4/4	2	C	M	Loamy/Clayey	Distinct redox concentrations
10-18	10YR 4/1	97	10YR 4/6	3	C	M	Loamy/Clayey	

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

²Location: 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)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators 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:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? Yes No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/20/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 2
 Investigator(s): Josh Iddings and Alyssa Damiano Section, Township, Range: Section 18, Township 31 N, Range 13 E
 Landform (hillside, terrace, etc.): Tillplain Local relief (concave, convex, none): Convex
 Slope (%): 3 Lat: 41.145614 Long: -85.114649 Datum: WGS_1984
 Soil Map Unit Name: Glynwood silt loam, 2 to 6 percent slopes, eroded (MrB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u> </u> No <u>X</u> Hydric Soil Present? Yes <u> </u> No <u>X</u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Remarks: DP 2 is representative of the upland area surrounding Wetland 1.	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1.					Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B)																																
2.																																					
3.																																					
4.																																					
5.																																					
		=Total Cover																																			
Sapling/Shrub Stratum	(Plot size: <u>15 ft</u>)				Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td><td align="center"><u>0</u></td> <td>x 1 =</td><td align="center"><u>0</u></td> </tr> <tr> <td>FACW species</td><td align="center"><u>0</u></td> <td>x 2 =</td><td align="center"><u>0</u></td> </tr> <tr> <td>FAC species</td><td align="center"><u>40</u></td> <td>x 3 =</td><td align="center"><u>120</u></td> </tr> <tr> <td>FACU species</td><td align="center"><u>60</u></td> <td>x 4 =</td><td align="center"><u>240</u></td> </tr> <tr> <td>UPL species</td><td align="center"><u>0</u></td> <td>x 5 =</td><td align="center"><u>0</u></td> </tr> <tr> <td>Column Totals:</td><td align="center"><u>100</u> (A)</td> <td></td><td align="center"><u>360</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A =</td> <td></td><td align="center"><u>3.60</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>0</u>	x 1 =	<u>0</u>	FACW species	<u>0</u>	x 2 =	<u>0</u>	FAC species	<u>40</u>	x 3 =	<u>120</u>	FACU species	<u>60</u>	x 4 =	<u>240</u>	UPL species	<u>0</u>	x 5 =	<u>0</u>	Column Totals:	<u>100</u> (A)		<u>360</u> (B)	Prevalence Index = B/A =			<u>3.60</u>
Total % Cover of:		Multiply by:																																			
OBL species	<u>0</u>	x 1 =	<u>0</u>																																		
FACW species	<u>0</u>	x 2 =	<u>0</u>																																		
FAC species	<u>40</u>	x 3 =	<u>120</u>																																		
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Column Totals:	<u>100</u> (A)		<u>360</u> (B)																																		
Prevalence Index = B/A =			<u>3.60</u>																																		
1.																																					
2.																																					
3.																																					
4.																																					
5.																																					
		=Total Cover																																			
Herb Stratum	(Plot size: <u>5 ft</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																
1.	<u>Schedonorus arundinaceus</u>	<u>50</u>	<u>Yes</u>	<u>FACU</u>																																	
2.	<u>Poa pratensis</u>	<u>40</u>	<u>Yes</u>	<u>FAC</u>																																	
3.	<u>Trifolium repens</u>	<u>8</u>	<u>No</u>	<u>FACU</u>																																	
4.	<u>Taraxacum officinale</u>	<u>2</u>	<u>No</u>	<u>FACU</u>																																	
5.																																					
6.																																					
7.																																					
8.																																					
9.																																					
10.																																					
		<u>100</u> =Total Cover																																			
Woody Vine Stratum	(Plot size: <u>30 ft</u>)				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>																																
1.																																					
2.																																					
		=Total Cover																																			

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

SOIL

Sampling Point: DP 2

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 ¹	Loc ²		
0-8	10YR 4/2	100					Loamy/Clayey	
8-10	10YR 4/4	90	10YR 4/1	10	D	M	Loamy/Clayey	

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

²Location: 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)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators 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 X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
 Water Table Present? Yes _____ No X Depth (inches): _____
 Saturation Present? Yes _____ No X Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/20/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 3
 Investigator(s): Josh Iddings and Alyssa Damiano Section, Township, Range: Section 18, Township 31 N, Range 13 E
 Landform (hillside, terrace, etc.): Tillplain Local relief (concave, convex, none): Concave
 Slope (%): 0.5 Lat: 41.148174 Long: -85.112960 Datum: WGS_1984
 Soil Map Unit Name: Glynwood silt loam, 2 to 6 percent slopes, eroded (MrB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u> </u> No <u>X</u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Remarks: DP 3 was taken due to the precense of hydrophytic vegetation within a roadside ditch.	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1.					Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B)
2.					
3.					
4.					
5.					
				=Total Cover	
Sapling/Shrub Stratum	(Plot size: <u>15 ft</u>)				Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>36</u> x 1 = <u>36</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>4</u> x 3 = <u>12</u> FACU species <u>60</u> x 4 = <u>240</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>100</u> (A) <u>288</u> (B) Prevalence Index = B/A = <u>2.88</u>
1.					
2.					
3.					
4.					
5.					
				=Total Cover	
Herb Stratum	(Plot size: <u>5 ft</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1.	<u>Schedonorus arundinaceus</u>	60	Yes	FACU	
2.	<u>Scirpus pendulus</u>	36	Yes	OBL	
3.	<u>Rumex crispus</u>	2	No	FAC	
4.	<u>Vernonia gigantea</u>	2	No	FAC	
5.					
6.					
7.					
8.					
9.					
10.					
				100 =Total Cover	
Woody Vine Stratum	(Plot size: <u>30 ft</u>)				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
1.					
2.					
				=Total Cover	

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

SOIL

Sampling Point: DP 3

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 ¹	Loc ²		
0-6	10YR 3/2	100					Loamy/Clayey	
6-18	10YR 5/1	95	10YR 5/6	5	D	M	Loamy/Clayey	

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

²Location: 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)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators 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:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? Yes No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/20/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 4
 Investigator(s): Leigh Stevenson and Cameron Schuler Section, Township, Range: Section 07, Township 31 N, Range 13 E
 Landform (hillside, terrace, etc.): Tillplain Local relief (concave, convex, none): Concave
 Slope (%): 0 Lat: 41.150569 Long: -85.111878 Datum: WGS_1984
 Soil Map Unit Name: Morley silty clay loam, 6 to 12 percent slopes, severely eroded (MsC3) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Remarks: DP 4 is representative of Wetland 2.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <u><i>Ulmus americana</i></u>	<u>30</u>	Yes	FACW	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																																
2. <u><i>Platanus occidentalis</i></u>	<u>30</u>	Yes	FACW																																	
3. _____	_____	_____	_____																																	
4. _____	_____	_____	_____																																	
5. _____	_____	_____	_____																																	
<u>60</u> =Total Cover				Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td align="center"><u>0</u></td> <td>x 1 =</td> <td align="center"><u>0</u></td> </tr> <tr> <td>FACW species</td> <td align="center"><u>65</u></td> <td>x 2 =</td> <td align="center"><u>130</u></td> </tr> <tr> <td>FAC species</td> <td align="center"><u>6</u></td> <td>x 3 =</td> <td align="center"><u>18</u></td> </tr> <tr> <td>FACU species</td> <td align="center"><u>2</u></td> <td>x 4 =</td> <td align="center"><u>8</u></td> </tr> <tr> <td>UPL species</td> <td align="center"><u>0</u></td> <td>x 5 =</td> <td align="center"><u>0</u></td> </tr> <tr> <td>Column Totals:</td> <td align="center"><u>73</u> (A)</td> <td></td> <td align="center"><u>156</u> (B)</td> </tr> <tr> <td align="right" colspan="4">Prevalence Index = B/A = <u>2.14</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>0</u>	x 1 =	<u>0</u>	FACW species	<u>65</u>	x 2 =	<u>130</u>	FAC species	<u>6</u>	x 3 =	<u>18</u>	FACU species	<u>2</u>	x 4 =	<u>8</u>	UPL species	<u>0</u>	x 5 =	<u>0</u>	Column Totals:	<u>73</u> (A)		<u>156</u> (B)	Prevalence Index = B/A = <u>2.14</u>			
Total % Cover of:		Multiply by:																																		
OBL species	<u>0</u>	x 1 =	<u>0</u>																																	
FACW species	<u>65</u>	x 2 =	<u>130</u>																																	
FAC species	<u>6</u>	x 3 =	<u>18</u>																																	
FACU species	<u>2</u>	x 4 =	<u>8</u>																																	
UPL species	<u>0</u>	x 5 =	<u>0</u>																																	
Column Totals:	<u>73</u> (A)		<u>156</u> (B)																																	
Prevalence Index = B/A = <u>2.14</u>																																				
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)																																				
1. <u><i>Asimina triloba</i></u>	<u>5</u>	Yes	FAC																																	
2. <u><i>Lindera benzoin</i></u>	<u>3</u>	Yes	FACW																																	
3. _____	_____	_____	_____																																	
4. _____	_____	_____	_____																																	
5. _____	_____	_____	_____																																	
<u>8</u> =Total Cover																																				
Herb Stratum (Plot size: <u>5 ft</u>)																																				
1. <u><i>Fraxinus pennsylvanica</i></u>	<u>2</u>	No	FACW																																	
2. <u><i>Persicaria virginiana</i></u>	<u>1</u>	No	FAC																																	
3. _____	_____	_____	_____																																	
4. _____	_____	_____	_____																																	
5. _____	_____	_____	_____																																	
6. _____	_____	_____	_____																																	
7. _____	_____	_____	_____																																	
8. _____	_____	_____	_____																																	
9. _____	_____	_____	_____																																	
10. _____	_____	_____	_____																																	
<u>3</u> =Total Cover																																				
Woody Vine Stratum (Plot size: <u>30 ft</u>)																																				
1. <u><i>Vitis labrusca</i></u>	<u>2</u>	No	FACU																																	
2. _____	_____	_____	_____																																	
<u>2</u> =Total Cover																																				

Hydrophytic Vegetation Indicators:
 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0¹
 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No

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

SOIL

Sampling Point: DP 4

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 ¹	Loc ²		
0-3	10YR 2/1	100					Loamy/Clayey	
3-10	10YR 4/1	95	10YR 4/4	5	C	M	Loamy/Clayey	
10-18	10YR 4/1	90	10YR 4/6	10	C	M	Loamy/Clayey	

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

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Gleyed Matrix (S4) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Dark Surface (S7) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Mucky Mineral (F1) |
| <input type="checkbox"/> 2 cm Muck (A10) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input checked="" type="checkbox"/> Depleted Below Dark Surface (A11) | <input checked="" type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) | <input type="checkbox"/> Redox Depressions (F8) |

Indicators for Problematic Hydric Soils³:

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators 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:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

Secondary Indicators (minimum of two required)

- | | | |
|---|---|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Surface Soil Cracks (B6) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Aquatic Fauna (B13) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> True Aquatic Plants (B14) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Stunted or Stressed Plants (D1) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input checked="" type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Thin Muck Surface (C7) | <input checked="" type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Gauge or Well Data (D9) | |
| <input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | <input type="checkbox"/> Other (Explain in Remarks) | |

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? Yes No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/20/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 5
 Investigator(s): Leigh Stevenson and Cameron Schuler Section, Township, Range: Section 07, Township 31 N, Range 13 E
 Landform (hillside, terrace, etc.): Tillplain Local relief (concave, convex, none): Convex
 Slope (%): 0.5 Lat: 41.150616 Long: -85.111774 Datum: WGS_1984
 Soil Map Unit Name: Morley silty clay loam, 6 to 12 percent slopes, severely eroded (MsC3) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present? Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	

Remarks:
 DP 5 is representative of the upland area surrounding Wetland 2 and Wetland 3.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>8</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>62.5%</u> (A/B)
1. <u>Populus deltoides</u>	<u>25</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Ulmus americana</u>	<u>20</u>	<u>Yes</u>	<u>FACW</u>	
3. <u>Acer saccharum</u>	<u>10</u>	<u>No</u>	<u>FACU</u>	
4. <u>Cercis canadensis</u>	<u>5</u>	<u>No</u>	<u>FACU</u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
	<u>60</u> =Total Cover			
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>31</u> x 2 = <u>62</u> FAC species <u>70</u> x 3 = <u>210</u> FACU species <u>66</u> x 4 = <u>264</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>167</u> (A) <u>536</u> (B) Prevalence Index = B/A = <u>3.21</u>
1. <u>Asimina triloba</u>	<u>30</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Cercis canadensis</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>	
3. <u>Lonicera tatarica</u>	<u>5</u>	<u>No</u>	<u>FACU</u>	
4. <u>Lindera benzoin</u>	<u>5</u>	<u>No</u>	<u>FACW</u>	
5. <u>Fraxinus pennsylvanica</u>	<u>2</u>	<u>No</u>	<u>FACW</u>	
	<u>57</u> =Total Cover			
Herb Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Asarum canadense</u>	<u>25</u>	<u>Yes</u>	<u>FACU</u>	
2. <u>Sanicula odorata</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>	
3. <u>Fraxinus pennsylvanica</u>	<u>2</u>	<u>No</u>	<u>FACW</u>	
4. <u>Verbesina alternifolia</u>	<u>1</u>	<u>No</u>	<u>FACW</u>	
5. <u>Symphotrichum lateriflorum</u>	<u>1</u>	<u>No</u>	<u>FACW</u>	
6. <u>Polygonatum biflorum</u>	<u>1</u>	<u>No</u>	<u>FACU</u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
	<u>40</u> =Total Cover			
Woody Vine Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u>Toxicodendron radicans</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Parthenocissus quinquefolia</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>	
	<u>10</u> =Total Cover			

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

SOIL

Sampling Point: DP 5

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 ¹	Loc ²		
0-5	10YR 3/1	100					Loamy/Clayey	
5-18	10YR 5/3	95	10YR 5/6	5	C	M	Loamy/Clayey	

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

²Location: 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)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators 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 X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
 Water Table Present? Yes _____ No X Depth (inches): _____
 Saturation Present? Yes _____ No X Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/20/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 6
 Investigator(s): Leigh Stevenson and Cameron Schuler Section, Township, Range: Section 07, Township 31 N, Range 13 E
 Landform (hillside, terrace, etc.): Tillplain Local relief (concave, convex, none): Concave
 Slope (%): 0.5 Lat: 41.150587 Long: -85.111688 Datum: WGS_1984
 Soil Map Unit Name: Morley silty clay loam, 6 to 12 percent slopes, severely eroded (MsC3) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Remarks: DP 6 is representative of Wetland 3.	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <u>Ulmus americana</u>		<u>20</u>	Yes	FACW	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																																
2. <u>Populus deltoides</u>		<u>15</u>	Yes	FAC																																	
3. _____																																					
4. _____																																					
5. _____																																					
		<u>35</u>	=Total Cover																																		
Sapling/Shrub Stratum	(Plot size: <u>15 ft</u>)																																				
1. <u>Fraxinus pennsylvanica</u>		<u>10</u>	Yes	FACW	Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td align="right" colspan="2">Total % Cover of:</td> <td align="right" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td align="center"><u>0</u></td> <td>x 1 =</td> <td align="center"><u>0</u></td> </tr> <tr> <td>FACW species</td> <td align="center"><u>36</u></td> <td>x 2 =</td> <td align="center"><u>72</u></td> </tr> <tr> <td>FAC species</td> <td align="center"><u>20</u></td> <td>x 3 =</td> <td align="center"><u>60</u></td> </tr> <tr> <td>FACU species</td> <td align="center"><u>0</u></td> <td>x 4 =</td> <td align="center"><u>0</u></td> </tr> <tr> <td>UPL species</td> <td align="center"><u>1</u></td> <td>x 5 =</td> <td align="center"><u>5</u></td> </tr> <tr> <td>Column Totals:</td> <td align="center"><u>57</u> (A)</td> <td></td> <td align="center"><u>137</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A =</td> <td align="center" colspan="2"><u>2.40</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>0</u>	x 1 =	<u>0</u>	FACW species	<u>36</u>	x 2 =	<u>72</u>	FAC species	<u>20</u>	x 3 =	<u>60</u>	FACU species	<u>0</u>	x 4 =	<u>0</u>	UPL species	<u>1</u>	x 5 =	<u>5</u>	Column Totals:	<u>57</u> (A)		<u>137</u> (B)	Prevalence Index = B/A =		<u>2.40</u>	
Total % Cover of:		Multiply by:																																			
OBL species	<u>0</u>	x 1 =	<u>0</u>																																		
FACW species	<u>36</u>	x 2 =	<u>72</u>																																		
FAC species	<u>20</u>	x 3 =	<u>60</u>																																		
FACU species	<u>0</u>	x 4 =	<u>0</u>																																		
UPL species	<u>1</u>	x 5 =	<u>5</u>																																		
Column Totals:	<u>57</u> (A)		<u>137</u> (B)																																		
Prevalence Index = B/A =		<u>2.40</u>																																			
2. <u>Lindera benzoin</u>		<u>3</u>	Yes	FACW																																	
3. <u>Ulmus americana</u>		<u>1</u>	No	FACW																																	
4. <u>Viburnum acerifolium</u>		<u>1</u>	No	UPL																																	
5. _____																																					
		<u>15</u>	=Total Cover																																		
Herb Stratum	(Plot size: <u>5 ft</u>)																																				
1. <u>Toxicodendron radicans</u>		<u>5</u>	Yes	FAC	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																
2. <u>Solidago gigantea</u>		<u>2</u>	Yes	FACW																																	
3. _____																																					
4. _____																																					
5. _____																																					
6. _____																																					
7. _____																																					
8. _____																																					
9. _____																																					
10. _____																																					
		<u>7</u>	=Total Cover																																		
Woody Vine Stratum	(Plot size: <u>30 ft</u>)																																				
1. _____					Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																																
2. _____																																					
		=Total Cover																																			

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

SOIL

Sampling Point: DP 6

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 ¹	Loc ²		
0-6	10YR 3/1	100					Loamy/Clayey	
6-18	10YR 4/1	95	10YR 4/6	5	C	M	Loamy/Clayey	

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

²Location: 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)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators 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:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? Yes No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/20/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 7
 Investigator(s): Leigh Stevenson and Cameron Schuler Section, Township, Range: Section 07, Township 31 N, Range 13 E
 Landform (hillside, terrace, etc.): Tillplain Local relief (concave, convex, none): Concave
 Slope (%): 0 Lat: 41.151143 Long: -85.111439 Datum: WGS_1984
 Soil Map Unit Name: Eel silt loam, 0 to 2 percent slopes, frequently flooded (Es) NWI classification: N/A

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"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: DP 7 is representative of Wetland 4.	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <u>Fraxinus pennsylvanica</u>	<u>5</u>	Yes	FACW	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																																
2. _____	_____	_____	_____																																	
3. _____	_____	_____	_____																																	
4. _____	_____	_____	_____																																	
5. _____	_____	_____	_____																																	
<u>5</u> =Total Cover				Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td><td align="center"><u>0</u></td> <td>x 1 =</td><td align="center"><u>0</u></td> </tr> <tr> <td>FACW species</td><td align="center"><u>10</u></td> <td>x 2 =</td><td align="center"><u>20</u></td> </tr> <tr> <td>FAC species</td><td align="center"><u>1</u></td> <td>x 3 =</td><td align="center"><u>3</u></td> </tr> <tr> <td>FACU species</td><td align="center"><u>0</u></td> <td>x 4 =</td><td align="center"><u>0</u></td> </tr> <tr> <td>UPL species</td><td align="center"><u>0</u></td> <td>x 5 =</td><td align="center"><u>0</u></td> </tr> <tr> <td>Column Totals:</td><td align="center"><u>11</u> (A)</td> <td></td><td align="center"><u>23</u> (B)</td> </tr> <tr> <td align="right" colspan="4">Prevalence Index = B/A = <u>2.09</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>0</u>	x 1 =	<u>0</u>	FACW species	<u>10</u>	x 2 =	<u>20</u>	FAC species	<u>1</u>	x 3 =	<u>3</u>	FACU species	<u>0</u>	x 4 =	<u>0</u>	UPL species	<u>0</u>	x 5 =	<u>0</u>	Column Totals:	<u>11</u> (A)		<u>23</u> (B)	Prevalence Index = B/A = <u>2.09</u>			
Total % Cover of:		Multiply by:																																		
OBL species	<u>0</u>	x 1 =	<u>0</u>																																	
FACW species	<u>10</u>	x 2 =	<u>20</u>																																	
FAC species	<u>1</u>	x 3 =	<u>3</u>																																	
FACU species	<u>0</u>	x 4 =	<u>0</u>																																	
UPL species	<u>0</u>	x 5 =	<u>0</u>																																	
Column Totals:	<u>11</u> (A)		<u>23</u> (B)																																	
Prevalence Index = B/A = <u>2.09</u>																																				
_____	_____	_____	_____																																	
_____	_____	_____	_____																																	
_____	_____	_____	_____																																	
_____	_____	_____	_____																																	
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> <u>2</u> - Dominance Test is >50% <input checked="" type="checkbox"/> <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																
2. _____	_____	_____	_____																																	
3. _____	_____	_____	_____																																	
4. _____	_____	_____	_____																																	
5. _____	_____	_____	_____																																	
_____ =Total Cover				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>																																
_____	_____	_____	_____																																	
_____	_____	_____	_____																																	
_____	_____	_____	_____																																	
_____	_____	_____	_____																																	
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <u>Lysimachia nummularia</u>	<u>5</u>	Yes	FACW	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>																																
2. <u>Toxicodendron radicans</u>	<u>1</u>	No	FAC																																	
3. _____	_____	_____	_____																																	
4. _____	_____	_____	_____																																	
5. _____	_____	_____	_____																																	
6. _____	_____	_____	_____																																	
7. _____	_____	_____	_____																																	
8. _____	_____	_____	_____																																	
9. _____	_____	_____	_____																																	
10. _____	_____	_____	_____																																	
<u>6</u> =Total Cover																																				
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>																																
2. _____	_____	_____	_____																																	
_____ =Total Cover																																				

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

SOIL

Sampling Point: DP 7

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 ¹	Loc ²		
0-5	10YR 3/2	95	10YR 4/6	5	C	M	Loamy/Clayey	Prominent redox concentrations
5-16	10YR 4/1	90	10YR 4/6	10	C	M	Loamy/Clayey	
16-18	10YR 5/1	95	10YR 4/6	5	C	M	Loamy/Clayey	

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

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Gleyed Matrix (S4) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Dark Surface (S7) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Mucky Mineral (F1) |
| <input type="checkbox"/> 2 cm Muck (A10) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input checked="" type="checkbox"/> Depleted Below Dark Surface (A11) | <input checked="" type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input checked="" type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) | <input type="checkbox"/> Redox Depressions (F8) |

Indicators for Problematic Hydric Soils³:

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators 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:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? Yes No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/20/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 8
 Investigator(s): Leigh Stevenson and Cameron Schuler Section, Township, Range: Section 07, Township 31 N, Range 13 E
 Landform (hillside, terrace, etc.): Tillplain Local relief (concave, convex, none): Convex
 Slope (%): 1 Lat: 41.151133 Long: -85.111345 Datum: WGS_1984
 Soil Map Unit Name: Eel silt loam, 0 to 2 percent slopes, frequently flooded (Es) NWI classification: N/A

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"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: DP 8 is representative of the upland area surrounding Wetland 4.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <u>Platanus occidentalis</u>	<u>20</u>	Yes	FACW	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>7</u> (A) Total Number of Dominant Species Across All Strata: <u>8</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>87.5%</u> (A/B)																																
2. <u>Populus deltoides</u>	<u>15</u>	Yes	FAC																																	
3. <u>Juglans nigra</u>	<u>10</u>	No	FACU																																	
4. <u>Fraxinus pennsylvanica</u>	<u>5</u>	No	FACW																																	
5. <u>Asimina triloba</u>	<u>5</u>	No	FAC																																	
	<u>55</u>	=Total Cover																																		
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)																																				
1. <u>Lonicera tatarica</u>	<u>40</u>	Yes	FACU	Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td align="center"><u>0</u></td> <td>x 1 =</td> <td align="center"><u>0</u></td> </tr> <tr> <td>FACW species</td> <td align="center"><u>70</u></td> <td>x 2 =</td> <td align="center"><u>140</u></td> </tr> <tr> <td>FAC species</td> <td align="center"><u>72</u></td> <td>x 3 =</td> <td align="center"><u>216</u></td> </tr> <tr> <td>FACU species</td> <td align="center"><u>50</u></td> <td>x 4 =</td> <td align="center"><u>200</u></td> </tr> <tr> <td>UPL species</td> <td align="center"><u>0</u></td> <td>x 5 =</td> <td align="center"><u>0</u></td> </tr> <tr> <td>Column Totals:</td> <td align="center"><u>192</u> (A)</td> <td></td> <td align="center"><u>556</u> (B)</td> </tr> <tr> <td></td> <td align="center" colspan="3">Prevalence Index = B/A = <u>2.90</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>0</u>	x 1 =	<u>0</u>	FACW species	<u>70</u>	x 2 =	<u>140</u>	FAC species	<u>72</u>	x 3 =	<u>216</u>	FACU species	<u>50</u>	x 4 =	<u>200</u>	UPL species	<u>0</u>	x 5 =	<u>0</u>	Column Totals:	<u>192</u> (A)		<u>556</u> (B)		Prevalence Index = B/A = <u>2.90</u>		
Total % Cover of:		Multiply by:																																		
OBL species	<u>0</u>	x 1 =	<u>0</u>																																	
FACW species	<u>70</u>	x 2 =	<u>140</u>																																	
FAC species	<u>72</u>	x 3 =	<u>216</u>																																	
FACU species	<u>50</u>	x 4 =	<u>200</u>																																	
UPL species	<u>0</u>	x 5 =	<u>0</u>																																	
Column Totals:	<u>192</u> (A)		<u>556</u> (B)																																	
	Prevalence Index = B/A = <u>2.90</u>																																			
2. <u>Asimina triloba</u>	<u>30</u>	Yes	FAC																																	
3. <u>Ulmus americana</u>	<u>5</u>	No	FACW																																	
4. _____																																				
5. _____																																				
	<u>75</u>	=Total Cover																																		
Herb Stratum (Plot size: <u>5 ft</u>)																																				
1. <u>Laportea canadensis</u>	<u>20</u>	Yes	FACW	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																
2. <u>Sanicula odorata</u>	<u>10</u>	Yes	FAC																																	
3. <u>Carex blanda</u>	<u>7</u>	Yes	FAC																																	
4. <u>Geum aleppicum</u>	<u>7</u>	Yes	FACW																																	
5. <u>Lysimachia nummularia</u>	<u>5</u>	No	FACW																																	
6. <u>Persicaria virginiana</u>	<u>5</u>	No	FAC																																	
7. <u>Symphotrichum lateriflorum</u>	<u>5</u>	No	FACW																																	
8. <u>Cinna latifolia</u>	<u>3</u>	No	FACW																																	
9. _____																																				
10. _____																																				
	<u>62</u>	=Total Cover																																		
Woody Vine Stratum (Plot size: <u>30 ft</u>)																																				
1. _____				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>																																
2. _____																																				

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

SOIL

Sampling Point: DP 8

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 ¹	Loc ²		
0-6	10YR 4/3	98	10YR 6/6	2	C	M	Loamy/Clayey	Distinct redox concentrations
6-18	10YR 4/1	90	10YR 4/6	10	C	M	Loamy/Clayey	

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

²Location: 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)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators 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 X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
 Water Table Present? Yes _____ No X Depth (inches): _____
 Saturation Present? Yes _____ No X Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/20/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 9
 Investigator(s): Leigh Stevenson and Cameron Schuler Section, Township, Range: N/A
 Landform (hillside, terrace, etc.): Tillplain Local relief (concave, convex, none): Concave
 Slope (%): 0.5 Lat: 41.150992 Long: -85.110857 Datum: WGS_1984
 Soil Map Unit Name: Morley silty clay loam, 6 to 12 percent slopes, severely eroded (MsC3) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Remarks: DP 9 is representative of Wetland 5.	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1.					Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
2.					
3.					
4.					
5.					
		=Total Cover			
Sapling/Shrub Stratum	(Plot size: <u>15 ft</u>)				Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>17</u> x 1 = <u>17</u> FACW species <u>37</u> x 2 = <u>74</u> FAC species <u>46</u> x 3 = <u>138</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>100</u> (A) <u>229</u> (B) Prevalence Index = B/A = <u>2.29</u>
1.					
2.					
3.					
4.					
5.					
		=Total Cover			
Herb Stratum	(Plot size: <u>5 ft</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1.	<u>Panicum capillare</u>	40	Yes	FAC	
2.	<u>Persicaria punctata</u>	15	Yes	OBL	
3.	<u>Echinochloa crus-galli</u>	10	No	FACW	
4.	<u>Phalaris arundinacea</u>	10	No	FACW	
5.	<u>Cyperus esculentus</u>	10	No	FACW	
6.	<u>Lysimachia nummularia</u>	5	No	FACW	
7.	<u>Rumex crispus</u>	4	No	FAC	
8.	<u>Eupatorium serotinum</u>	2	No	FAC	
9.	<u>Persicaria maculosa</u>	2	No	FACW	
10.	<u>Scirpus atrovirens</u>	2	No	OBL	
		100 =Total Cover			
Woody Vine Stratum	(Plot size: <u>30 ft</u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1.					
2.					
		=Total Cover			

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

SOIL

Sampling Point: DP 9

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 ¹	Loc ²		
0-12	10YR 4/1	90	10YR 4/6	10	C	M	Loamy/Clayey	Prominent redox concentrations
12-18	10YR 5/1	93	10YR 4/6	7	C	M	Loamy/Clayey	

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

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input checked="" type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

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

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____
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Remarks:
 This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:	Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input checked="" type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)	

Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>0</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/20/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 10
 Investigator(s): Leigh Stevenson and Cameron Schuler Section, Township, Range: N/A
 Landform (hillside, terrace, etc.): Tillplain Local relief (concave, convex, none): Convex
 Slope (%): 1 Lat: 41.151084 Long: -85.110853 Datum: WGS_1984
 Soil Map Unit Name: Eel silt loam, 0 to 2 percent slopes, frequently flooded (Es) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u> </u> No <u>X</u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Remarks: DP 10 is representative of the upland area surrounding Wetland 5.	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1.					Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B)
2.					
3.					
4.					
5.					
=Total Cover					
Sapling/Shrub Stratum	(Plot size: <u>15 ft</u>)				Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>20</u> x 2 = <u>40</u> FAC species <u>35</u> x 3 = <u>105</u> FACU species <u>45</u> x 4 = <u>180</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>100</u> (A) <u>325</u> (B) Prevalence Index = B/A = <u>3.25</u>
1.					
2.					
3.					
4.					
5.					
=Total Cover					
Herb Stratum	(Plot size: <u>5 ft</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1.	<u>Schedonorus arundinaceus</u>	<u>40</u>	<u>Yes</u>	<u>FACU</u>	
2.	<u>Panicum capillare</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>	
3.	<u>Lysimachia nummularia</u>	<u>10</u>	<u>No</u>	<u>FACW</u>	
4.	<u>Poa pratensis</u>	<u>10</u>	<u>No</u>	<u>FAC</u>	
5.	<u>Eupatorium serotinum</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	
6.	<u>Oxalis stricta</u>	<u>5</u>	<u>No</u>	<u>FACU</u>	
7.	<u>Verbena hastata</u>	<u>5</u>	<u>No</u>	<u>FACW</u>	
8.	<u>Anemone canadensis</u>	<u>5</u>	<u>No</u>	<u>FACW</u>	
9.					
10.					
=Total Cover					
Woody Vine Stratum	(Plot size: <u>30 ft</u>)				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
1.					
2.					
=Total Cover					

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

SOIL

Sampling Point: DP 10

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 ¹	Loc ²		
0-6	10YR 3/2	100					Loamy/Clayey	
6-13	10YR 4/1	95	10YR 4/6	5	C	M	Sandy	
13-18	10YR 5/1	95	10YR 4/6	5	C	M	Sandy	

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

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Gleyed Matrix (S4) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input checked="" type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Dark Surface (S7) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Mucky Mineral (F1) |
| <input type="checkbox"/> 2 cm Muck (A10) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input checked="" type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) | <input type="checkbox"/> Redox Depressions (F8) |

Indicators for Problematic Hydric Soils³:

- | |
|--|
| <input type="checkbox"/> Coast Prairie Redox (A16) |
| <input type="checkbox"/> Iron-Manganese Masses (F12) |
| <input type="checkbox"/> Red Parent Material (F21) |
| <input type="checkbox"/> Very Shallow Dark Surface (F22) |
| <input type="checkbox"/> Other (Explain in Remarks) |

³Indicators 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:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

Secondary Indicators (minimum of two required)

- | | | |
|--|---|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Surface Soil Cracks (B6) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Aquatic Fauna (B13) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> True Aquatic Plants (B14) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Stunted or Stressed Plants (D1) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Thin Muck Surface (C7) | <input type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Gauge or Well Data (D9) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | <input type="checkbox"/> Other (Explain in Remarks) | |

Field Observations:

Surface Water Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): _____
Water Table Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): _____
Saturation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): _____

(includes capillary fringe)

Wetland Hydrology Present? Yes No

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/20/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 11
 Investigator(s): Leigh Stevenson and Cameron Schuler Section, Township, Range: Section 07, Township 31 N, Range 13 E
 Landform (hillside, terrace, etc.): Tillplain Local relief (concave, convex, none): Convex
 Slope (%): 0.5 Lat: 41.151774 Long: -85.111096 Datum: WGS_1984
 Soil Map Unit Name: Eel silt loam, 0 to 2 percent slopes, frequently flooded (Es) NWI classification: N/A

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"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: DP 11 is representative of Wetland 6.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <u>Fraxinus pennsylvanica</u>	<u>15</u>	Yes	FACW	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																																
2. <u>Ulmus americana</u>	<u>10</u>	Yes	FACW																																	
3. <u>Populus deltoides</u>	<u>10</u>	Yes	FAC																																	
4. _____																																				
5. _____																																				
	<u>35</u>	=Total Cover																																		
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)																																				
1. <u>Fraxinus pennsylvanica</u>	<u>15</u>	Yes	FACW	Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td align="center"><u>2</u></td> <td>x 1 =</td> <td align="center"><u>2</u></td> </tr> <tr> <td>FACW species</td> <td align="center"><u>44</u></td> <td>x 2 =</td> <td align="center"><u>88</u></td> </tr> <tr> <td>FAC species</td> <td align="center"><u>10</u></td> <td>x 3 =</td> <td align="center"><u>30</u></td> </tr> <tr> <td>FACU species</td> <td align="center"><u>0</u></td> <td>x 4 =</td> <td align="center"><u>0</u></td> </tr> <tr> <td>UPL species</td> <td align="center"><u>0</u></td> <td>x 5 =</td> <td align="center"><u>0</u></td> </tr> <tr> <td>Column Totals:</td> <td align="center"><u>56</u> (A)</td> <td></td> <td align="center"><u>120</u> (B)</td> </tr> <tr> <td colspan="4">Prevalence Index = B/A = <u>2.14</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>2</u>	x 1 =	<u>2</u>	FACW species	<u>44</u>	x 2 =	<u>88</u>	FAC species	<u>10</u>	x 3 =	<u>30</u>	FACU species	<u>0</u>	x 4 =	<u>0</u>	UPL species	<u>0</u>	x 5 =	<u>0</u>	Column Totals:	<u>56</u> (A)		<u>120</u> (B)	Prevalence Index = B/A = <u>2.14</u>			
Total % Cover of:		Multiply by:																																		
OBL species	<u>2</u>	x 1 =	<u>2</u>																																	
FACW species	<u>44</u>	x 2 =	<u>88</u>																																	
FAC species	<u>10</u>	x 3 =	<u>30</u>																																	
FACU species	<u>0</u>	x 4 =	<u>0</u>																																	
UPL species	<u>0</u>	x 5 =	<u>0</u>																																	
Column Totals:	<u>56</u> (A)		<u>120</u> (B)																																	
Prevalence Index = B/A = <u>2.14</u>																																				
2. _____																																				
3. _____																																				
4. _____																																				
5. _____																																				
	<u>15</u>	=Total Cover																																		
Herb Stratum (Plot size: <u>5 ft</u>)																																				
1. <u>Lysimachia nummularia</u>	<u>3</u>	Yes	FACW	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> <u>2</u> - Dominance Test is >50% <input checked="" type="checkbox"/> <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																
2. <u>Glyceria striata</u>	<u>2</u>	Yes	OBL																																	
3. <u>Symphotrichum lateriflorum</u>	<u>1</u>	No	FACW																																	
4. _____																																				
5. _____																																				
6. _____																																				
7. _____																																				
8. _____																																				
9. _____																																				
10. _____																																				
	<u>6</u>	=Total Cover																																		
Woody Vine Stratum (Plot size: <u>30 ft</u>)																																				
1. _____				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>																																
2. _____																																				

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

SOIL

Sampling Point: DP 11

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 ¹	Loc ²		
0-14	10YR 4/2	93	10YR 4/6	7	C	M	Loamy/Clayey	Prominent redox concentrations
14-18	10YR 4/1	80	10YR 4/6	10	C	M	Loamy/Clayey	
			10YR 6/1	10	D	M		

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

²Location: 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)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators 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:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? Yes No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/20/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 12
 Investigator(s): Leigh Stevenson and Cameron Schuler Section, Township, Range: Section 07, Township 31 N, Range 13 E
 Landform (hillside, terrace, etc.): Tillplain Local relief (concave, convex, none): Convex
 Slope (%): 1 Lat: 41.151803 Long: -85.110927 Datum: WGS_1984
 Soil Map Unit Name: Eel silt loam, 0 to 2 percent slopes, frequently flooded (Es) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u> </u> No <u>X</u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Remarks: DP 12 is representative of the upland area surrounding Wetland 6.	

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <u>Platanus occidentalis</u>	<u>25</u>	<u>Yes</u>	<u>FACW</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>8</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>37.5%</u> (A/B)																																
2. <u>Populus deltoides</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>																																	
3. <u>Acer saccharum</u>	<u>20</u>	<u>Yes</u>	<u>FACU</u>																																	
4. <u>Juglans nigra</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																																	
5. <u>Cercis canadensis</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																																	
	<u>85</u>	<u>=Total Cover</u>																																		
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15 ft</u>)																																				
1. <u>Lonicera tatarica</u>	<u>25</u>	<u>Yes</u>	<u>FACU</u>	Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td align="center"><u>0</u></td> <td>x 1 =</td> <td align="center"><u>0</u></td> </tr> <tr> <td>FACW species</td> <td align="center"><u>35</u></td> <td>x 2 =</td> <td align="center"><u>70</u></td> </tr> <tr> <td>FAC species</td> <td align="center"><u>22</u></td> <td>x 3 =</td> <td align="center"><u>66</u></td> </tr> <tr> <td>FACU species</td> <td align="center"><u>90</u></td> <td>x 4 =</td> <td align="center"><u>360</u></td> </tr> <tr> <td>UPL species</td> <td align="center"><u>0</u></td> <td>x 5 =</td> <td align="center"><u>0</u></td> </tr> <tr> <td>Column Totals:</td> <td align="center"><u>147</u></td> <td>(A)</td> <td align="center"><u>496</u></td> </tr> <tr> <td></td> <td align="center" colspan="3">Prevalence Index = B/A = <u>3.37</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>0</u>	x 1 =	<u>0</u>	FACW species	<u>35</u>	x 2 =	<u>70</u>	FAC species	<u>22</u>	x 3 =	<u>66</u>	FACU species	<u>90</u>	x 4 =	<u>360</u>	UPL species	<u>0</u>	x 5 =	<u>0</u>	Column Totals:	<u>147</u>	(A)	<u>496</u>		Prevalence Index = B/A = <u>3.37</u>		
Total % Cover of:		Multiply by:																																		
OBL species	<u>0</u>	x 1 =	<u>0</u>																																	
FACW species	<u>35</u>	x 2 =	<u>70</u>																																	
FAC species	<u>22</u>	x 3 =	<u>66</u>																																	
FACU species	<u>90</u>	x 4 =	<u>360</u>																																	
UPL species	<u>0</u>	x 5 =	<u>0</u>																																	
Column Totals:	<u>147</u>	(A)	<u>496</u>																																	
	Prevalence Index = B/A = <u>3.37</u>																																			
2. <u>Cercis canadensis</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>																																	
3. <u>Fraxinus pennsylvanica</u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>																																	
4. <u>Acer saccharum</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																																	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																	
	<u>50</u>	<u>=Total Cover</u>																																		
<u>Herb Stratum</u> (Plot size: <u>5 ft</u>)																																				
1. <u>Lonicera tatarica</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																
2. <u>Rosa multiflora</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>																																	
3. <u>Toxicodendron radicans</u>	<u>2</u>	<u>No</u>	<u>FAC</u>																																	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																	
	<u>12</u>	<u>=Total Cover</u>																																		
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft</u>)																																				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>																																
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																	
	<u> </u>	<u>=Total Cover</u>																																		

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

SOIL

Sampling Point: DP 12

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 ¹	Loc ²		
0-10	10YR 3/2	100					Loamy/Clayey	
10-18	10YR 4/2	93	10YR 5/6	7	C	M	Loamy/Clayey	

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

²Location: 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)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators 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:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? Yes No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/20/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 13
 Investigator(s): Leigh Stevenson and Cameron Schuler Section, Township, Range: Section 07, Township 31 N, Range 13 East
 Landform (hillside, terrace, etc.): Tillplain Local relief (concave, convex, none): Cocave
 Slope (%): 0 Lat: 41.159389 Long: -85.106565 Datum: WGS_1984
 Soil Map Unit Name: Blount loam, interlobate moraines, 0 to 2 percent slopes (BmA NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Remarks: DP 13 is representative Wetland 7-A.	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1.					Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																																
2.																																					
3.																																					
4.																																					
5.																																					
		=Total Cover																																			
Sapling/Shrub Stratum	(Plot size: <u>15 ft</u>)				Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td><td align="center"><u>103</u></td> <td>x 1 =</td><td align="center"><u>103</u></td> </tr> <tr> <td>FACW species</td><td align="center"><u>7</u></td> <td>x 2 =</td><td align="center"><u>14</u></td> </tr> <tr> <td>FAC species</td><td align="center"><u>2</u></td> <td>x 3 =</td><td align="center"><u>6</u></td> </tr> <tr> <td>FACU species</td><td align="center"><u>0</u></td> <td>x 4 =</td><td align="center"><u>0</u></td> </tr> <tr> <td>UPL species</td><td align="center"><u>0</u></td> <td>x 5 =</td><td align="center"><u>0</u></td> </tr> <tr> <td>Column Totals:</td><td align="center"><u>112</u> (A)</td> <td></td><td align="center"><u>123</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A =</td> <td></td><td align="center"><u>1.10</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>103</u>	x 1 =	<u>103</u>	FACW species	<u>7</u>	x 2 =	<u>14</u>	FAC species	<u>2</u>	x 3 =	<u>6</u>	FACU species	<u>0</u>	x 4 =	<u>0</u>	UPL species	<u>0</u>	x 5 =	<u>0</u>	Column Totals:	<u>112</u> (A)		<u>123</u> (B)	Prevalence Index = B/A =			<u>1.10</u>
Total % Cover of:		Multiply by:																																			
OBL species	<u>103</u>	x 1 =	<u>103</u>																																		
FACW species	<u>7</u>	x 2 =	<u>14</u>																																		
FAC species	<u>2</u>	x 3 =	<u>6</u>																																		
FACU species	<u>0</u>	x 4 =	<u>0</u>																																		
UPL species	<u>0</u>	x 5 =	<u>0</u>																																		
Column Totals:	<u>112</u> (A)		<u>123</u> (B)																																		
Prevalence Index = B/A =			<u>1.10</u>																																		
1.	<u>Salix nigra</u>	<u>10</u>	Yes	OBL																																	
2.	<u>Populus deltoides</u>	<u>2</u>	No	FAC																																	
3.																																					
4.																																					
5.																																					
		=Total Cover																																			
Herb Stratum	(Plot size: <u>5 ft</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																
1.	<u>Leersia oryzoides</u>	<u>60</u>	Yes	OBL																																	
2.	<u>Typha angustifolia</u>	<u>15</u>	No	OBL																																	
3.	<u>Scirpus cyperinus</u>	<u>15</u>	No	OBL																																	
4.	<u>Symphotrichum lateriflorum</u>	<u>7</u>	No	FACW																																	
5.	<u>Scirpus atrovirens</u>	<u>3</u>	No	OBL																																	
6.																																					
7.																																					
8.																																					
9.																																					
10.																																					
		=Total Cover																																			
Woody Vine Stratum	(Plot size: <u>30 ft</u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																																
1.																																					
2.																																					
		=Total Cover																																			

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

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 ¹	Loc ²		
0-6	10YR 4/2	95	10YR 4/6	5	C	M	Loamy/Clayey	Prominent redox concentrations
6-18	10YR 4/1	85	10YR 5/6	10	C	M	Loamy/Clayey	
			10YR 5/1	5	D	M		

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

²Location: 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)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators 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:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

Secondary Indicators (minimum of two required)

- | | | |
|--|---|--|
| <input checked="" type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Surface Soil Cracks (B6) |
| <input checked="" type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Aquatic Fauna (B13) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input checked="" type="checkbox"/> Saturation (A3) | <input type="checkbox"/> True Aquatic Plants (B14) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Stunted or Stressed Plants (D1) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Thin Muck Surface (C7) | <input checked="" type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Gauge or Well Data (D9) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | <input type="checkbox"/> Other (Explain in Remarks) | |

Field Observations:

Surface Water Present? Yes No Depth (inches): 2
 Water Table Present? Yes No Depth (inches): 0
 Saturation Present? Yes No Depth (inches): 0
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/20/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 14
 Investigator(s): Leigh Stevenson and Cameron Schuler Section, Township, Range: Section 07, Township 31 N, Range 13 East
 Landform (hillside, terrace, etc.): Tillplain Local relief (concave, convex, none): Cocave
 Slope (%): 0 Lat: 41.159621 Long: -85.106426 Datum: WGS_1984
 Soil Map Unit Name: Blount loam, interlobate moraines, 0 to 2 percent slopes (BmA) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Remarks: DP 14 is representative Wetland 7-B.	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1.					Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
2.					
3.					
4.					
5.					
		=Total Cover			
Sapling/Shrub Stratum	(Plot size: <u>15 ft</u>)				Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>135</u> x 1 = <u>135</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>12</u> x 3 = <u>36</u> FACU species <u>5</u> x 4 = <u>20</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>152</u> (A) <u>191</u> (B) Prevalence Index = B/A = <u>1.26</u>
1.	<u>Salix nigra</u>	<u>40</u>	Yes	OBL	
2.	<u>Populus deltoides</u>	<u>10</u>	No	FAC	
3.	<u>Morus alba</u>	<u>2</u>	No	FAC	
4.					
		=Total Cover			
Herb Stratum	(Plot size: <u>5 ft</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1.	<u>Leersia oryzoides</u>	<u>35</u>	Yes	OBL	
2.	<u>Ludwigia palustris</u>	<u>30</u>	Yes	OBL	
3.	<u>Scirpus cyperinus</u>	<u>15</u>	No	OBL	
4.	<u>Carex frankii</u>	<u>10</u>	No	OBL	
5.	<u>Alisma subcordatum</u>	<u>5</u>	No	OBL	
6.	<u>Symphyotrichum ericoides</u>	<u>5</u>	No	FACU	
7.					
8.					
9.					
		=Total Cover			
Woody Vine Stratum	(Plot size: <u>30 ft</u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1.					
2.					
		=Total Cover			

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

SOIL

Sampling Point: DP 14

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 ¹	Loc ²		
0-4	10YR 4/1	95	10YR 4/6	5	C	M	Loamy/Clayey	Prominent redox concentrations
4-18	10YR 4/1	100					Sandy	

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

²Location: 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)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators 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:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

Secondary Indicators (minimum of two required)

- | | | |
|--|---|--|
| <input checked="" type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Surface Soil Cracks (B6) |
| <input checked="" type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Aquatic Fauna (B13) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input checked="" type="checkbox"/> Saturation (A3) | <input type="checkbox"/> True Aquatic Plants (B14) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Stunted or Stressed Plants (D1) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Thin Muck Surface (C7) | <input checked="" type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Gauge or Well Data (D9) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | <input type="checkbox"/> Other (Explain in Remarks) | |

Field Observations:

Surface Water Present? Yes No Depth (inches): 3
 Water Table Present? Yes No Depth (inches): 0
 Saturation Present? Yes No Depth (inches): 0
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/20/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 15
 Investigator(s): Leigh Stevenson and Cameron Schuler Section, Township, Range: Section 07, Township 31 N, Range 13 East
 Landform (hillside, terrace, etc.): Tillplain Local relief (concave, convex, none): Convex
 Slope (%): 0.5 Lat: 41.159679 Long: -85.106278 Datum: WGS_1984
 Soil Map Unit Name: Blount loam, interlobate moraines, 0 to 2 percent slopes (BmA) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u> </u> No <u>X</u> Hydric Soil Present? Yes <u> </u> No <u>X</u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Remarks: DP 15 is representative of the upland area surrounding Wetland 7-A, Wetland 7-B, and Wetland 8.	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1.					Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B)
2.					
3.					
4.					
5.					
				=Total Cover	
Sapling/Shrub Stratum	(Plot size: <u>15 ft</u>)				Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>2</u> x 2 = <u>4</u> FAC species <u>40</u> x 3 = <u>120</u> FACU species <u>58</u> x 4 = <u>232</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>100</u> (A) <u>356</u> (B) Prevalence Index = B/A = <u>3.56</u>
1.					
2.					
3.					
4.					
5.					
				=Total Cover	
Herb Stratum	(Plot size: <u>5 ft</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1.	<u>Schedonorus arundinaceus</u>	50	Yes	FACU	
2.	<u>Poa pratensis</u>	40	Yes	FAC	
3.	<u>Cirsium discolor</u>	8	No	FACU	
4.	<u>Carex annectens</u>	2	No	FACW	
5.					
6.					
7.					
8.					
9.					
10.					
				100 =Total Cover	
Woody Vine Stratum	(Plot size: <u>30 ft</u>)				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
1.					
2.					
				=Total Cover	

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

SOIL

Sampling Point: DP 15

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 ¹	Loc ²		
0-8	10YR 3/2	100					Loamy/Clayey	
8-14	10YR 3/2	90	10YR 5/3	10	C	M	Loamy/Clayey	
14-18	10YR 4/1	85	10YR 6/1	10	D	M	Loamy/Clayey	
			10YR 6/6	5	C	M		Prominent redox concentrations

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

²Location: 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)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators 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 X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
 Water Table Present? Yes _____ No X Depth (inches): _____
 Saturation Present? Yes _____ No X Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/20/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 16
 Investigator(s): Leigh Stevenson and Cameron Schuler Section, Township, Range: Section 07, Township 31 N, Range 13 East
 Landform (hillside, terrace, etc.): Tillplain Local relief (concave, convex, none): Concave
 Slope (%): 0 Lat: 41.159708 Long: -85.106191 Datum: WGS_1984
 Soil Map Unit Name: Blount loam, interlobate moraines, 0 to 2 percent slopes (BmA) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Remarks: DP 16 is representative of Wetland 8.	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1.					Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																																
2.																																					
3.																																					
4.																																					
5.																																					
		<u> </u>	=Total Cover																																		
Sapling/Shrub Stratum	(Plot size: <u>15 ft</u>)				Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td><td align="center"><u>73</u></td> <td>x 1 =</td><td align="center"><u>73</u></td> </tr> <tr> <td>FACW species</td><td align="center"><u>0</u></td> <td>x 2 =</td><td align="center"><u>0</u></td> </tr> <tr> <td>FAC species</td><td align="center"><u>30</u></td> <td>x 3 =</td><td align="center"><u>90</u></td> </tr> <tr> <td>FACU species</td><td align="center"><u>0</u></td> <td>x 4 =</td><td align="center"><u>0</u></td> </tr> <tr> <td>UPL species</td><td align="center"><u>0</u></td> <td>x 5 =</td><td align="center"><u>0</u></td> </tr> <tr> <td>Column Totals:</td><td align="center"><u>103</u> (A)</td> <td></td><td align="center"><u>163</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A =</td> <td></td><td align="center"><u>1.58</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>73</u>	x 1 =	<u>73</u>	FACW species	<u>0</u>	x 2 =	<u>0</u>	FAC species	<u>30</u>	x 3 =	<u>90</u>	FACU species	<u>0</u>	x 4 =	<u>0</u>	UPL species	<u>0</u>	x 5 =	<u>0</u>	Column Totals:	<u>103</u> (A)		<u>163</u> (B)	Prevalence Index = B/A =			<u>1.58</u>
Total % Cover of:		Multiply by:																																			
OBL species	<u>73</u>	x 1 =	<u>73</u>																																		
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FAC species	<u>30</u>	x 3 =	<u>90</u>																																		
FACU species	<u>0</u>	x 4 =	<u>0</u>																																		
UPL species	<u>0</u>	x 5 =	<u>0</u>																																		
Column Totals:	<u>103</u> (A)		<u>163</u> (B)																																		
Prevalence Index = B/A =			<u>1.58</u>																																		
1.	<u>Salix nigra</u>	<u>3</u>	No	OBL																																	
2.																																					
3.																																					
4.																																					
5.																																					
		<u>3</u>	=Total Cover																																		
Herb Stratum	(Plot size: <u>5 ft</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																
1.	<u>Typha angustifolia</u>	<u>60</u>	Yes	OBL																																	
2.	<u>Poa pratensis</u>	<u>30</u>	Yes	FAC																																	
3.	<u>Carex frankii</u>	<u>5</u>	No	OBL																																	
4.	<u>Epilobium coloratum</u>	<u>5</u>	No	OBL																																	
5.																																					
6.																																					
7.																																					
8.																																					
9.																																					
10.																																					
		<u>100</u>	=Total Cover																																		
Woody Vine Stratum	(Plot size: <u>30 ft</u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																																
1.																																					
2.																																					
		<u> </u>	=Total Cover																																		

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

SOIL

Sampling Point: DP 16

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 ¹	Loc ²		
0-6	10YR 3/2	100					Loamy/Clayey	
6-13	10YR 3/1	93	10YR 4/6	7	C	M	Loamy/Clayey	
13-18	10YR 5/1	90	10YR 5/6	10	C	M	Loamy/Clayey	

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

²Location: 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)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators 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:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): 1
 Water Table Present? Yes No Depth (inches): 0
 Saturation Present? Yes No Depth (inches): 0
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/20/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 17
 Investigator(s): Leigh Stevenson and Cameron Schuler Section, Township, Range: Section 07, Township 31 N, Range 13 East
 Landform (hillside, terrace, etc.): Tillplain Local relief (concave, convex, none): Concave
 Slope (%): 0 Lat: 41.160518 Long: -85.105740 Datum: WGS_1984
 Soil Map Unit Name: Glynwood silt loam, 2 to 6 percent slopes, eroded (MrB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Remarks: DP 17 is representative of Wetland 9.	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1.					Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																																
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Sapling/Shrub Stratum	(Plot size: <u>15 ft</u>)																																				
1.		<u>3</u>	<u>No</u>		Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td align="right" colspan="2">Total % Cover of:</td> <td align="right" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td><td align="center"><u>25</u></td> <td>x 1 =</td><td align="center"><u>25</u></td> </tr> <tr> <td>FACW species</td><td align="center"><u>5</u></td> <td>x 2 =</td><td align="center"><u>10</u></td> </tr> <tr> <td>FAC species</td><td align="center"><u>50</u></td> <td>x 3 =</td><td align="center"><u>150</u></td> </tr> <tr> <td>FACU species</td><td align="center"><u>0</u></td> <td>x 4 =</td><td align="center"><u>0</u></td> </tr> <tr> <td>UPL species</td><td align="center"><u>0</u></td> <td>x 5 =</td><td align="center"><u>0</u></td> </tr> <tr> <td>Column Totals:</td><td align="center"><u>80</u> (A)</td> <td></td><td align="center"><u>185</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A =</td> <td align="center" colspan="2"><u>2.31</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>25</u>	x 1 =	<u>25</u>	FACW species	<u>5</u>	x 2 =	<u>10</u>	FAC species	<u>50</u>	x 3 =	<u>150</u>	FACU species	<u>0</u>	x 4 =	<u>0</u>	UPL species	<u>0</u>	x 5 =	<u>0</u>	Column Totals:	<u>80</u> (A)		<u>185</u> (B)	Prevalence Index = B/A =		<u>2.31</u>	
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		<u>3</u>	=Total Cover																																		
Herb Stratum	(Plot size: <u>5 ft</u>)																																				
1.		<u>40</u>	<u>Yes</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																
2.		<u>25</u>	<u>Yes</u>	<u>OBL</u>																																	
3.		<u>10</u>	<u>No</u>	<u>FAC</u>																																	
4.		<u>5</u>	<u>No</u>	<u>FACW</u>																																	
5.																																					
6.																																					
7.																																					
8.																																					
9.																																					
10.																																					
		<u>80</u>	=Total Cover																																		
Woody Vine Stratum	(Plot size: <u>30 ft</u>)																																				
1.					Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																																
2.																																					
		<u> </u>	=Total Cover																																		

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

SOIL

Sampling Point: DP 17

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 ¹	Loc ²		
0-4	10YR 4/1	100					Loamy/Clayey	
4-13	10YR 4/1	93	10YR 5/6	7	C	M	Loamy/Clayey	
13-18	10YR 5/1	92	10YR 5/6	8	C	M	Loamy/Clayey	

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

²Location: 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)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators 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:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): 1
 Water Table Present? Yes No Depth (inches): 0
 Saturation Present? Yes No Depth (inches): 0
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/20/2022
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 Landform (hillside, terrace, etc.): Hill Local relief (concave, convex, none): Convex
 Slope (%): 1 Lat: 41.160495 Long: -85.105766 Datum: WGS_1984
 Soil Map Unit Name: Glynwood silt loam, 2 to 6 percent slopes, eroded (MrB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u> </u> No <u>X</u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Remarks: DP 18 is representative of the upland area surrounding Wetland 9.	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1.					Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B)
2.					
3.					
4.					
5.					
		=Total Cover			
Sapling/Shrub Stratum	(Plot size: <u>15 ft</u>)				
1.					Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>40</u> x 3 = <u>120</u> FACU species <u>60</u> x 4 = <u>240</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>100</u> (A) <u>360</u> (B) Prevalence Index = B/A = <u>3.60</u>
2.					
3.					
4.					
5.					
		=Total Cover			
Herb Stratum	(Plot size: <u>5 ft</u>)				
1.	<u>Schedonorus arundinaceus</u>	<u>60</u>	<u>Yes</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2.	<u>Poa pratensis</u>	<u>40</u>	<u>Yes</u>	<u>FAC</u>	
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
		100 =Total Cover			
Woody Vine Stratum	(Plot size: <u>30 ft</u>)				
1.					Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
2.					
		=Total Cover			

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

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 ¹	Loc ²		
0-8	10YR 4/2	100					Loamy/Clayey	
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¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

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- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
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- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators 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:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

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Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? Yes No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/20/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 19
 Investigator(s): Leigh Stevenson and Cameron Schuler Section, Township, Range: Section 07, Township 31 N, Range 13 E
 Landform (hillside, terrace, etc.): Tillplain Local relief (concave, convex, none): Concave
 Slope (%): 0 Lat: 41.161441 Long: -85.104959 Datum: WGS_1984
 Soil Map Unit Name: Glynwood silt loam, 2 to 6 percent slopes, eroded (MrB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Remarks: DP 19 is representative of Wetland 10.	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1.					Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
2.					
3.					
4.					
5.					
		=Total Cover			
Sapling/Shrub Stratum	(Plot size: <u>15 ft</u>)				
1.					Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>50</u> x 2 = <u>100</u> FAC species <u>50</u> x 3 = <u>150</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>100</u> (A) <u>250</u> (B) Prevalence Index = B/A = <u>2.50</u>
2.					
3.					
4.					
5.					
		=Total Cover			
Herb Stratum	(Plot size: <u>5 ft</u>)				
1.	<u>Echinochloa crus-galli</u>	<u>50</u>	<u>Yes</u>	<u>FACW</u>	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2.	<u>Poa pratensis</u>	<u>50</u>	<u>Yes</u>	<u>FAC</u>	
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
		<u>100</u> =Total Cover			
Woody Vine Stratum	(Plot size: <u>30 ft</u>)				
1.					Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
2.					
		=Total Cover			

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

SOIL

Sampling Point: DP 19

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 ¹	Loc ²		
0-7	10YR 3/1	100					Loamy/Clayey	
7-18	10YR 5/1	95	10YR 5/6	5	C	M	Loamy/Clayey	

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

²Location: 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)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators 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:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): 0.5
 Water Table Present? Yes No Depth (inches): 0
 Saturation Present? Yes No Depth (inches): 0
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/20/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 20
 Investigator(s): Leigh Stevenson and Cameron Schuler Section, Township, Range: Section 07, Township 31 N, Range 13 E
 Landform (hillside, terrace, etc.): Tillplain Local relief (concave, convex, none): Convex
 Slope (%): 0.5 Lat: 41.161485 Long: -85.104980 Datum: WGS_1984
 Soil Map Unit Name: Glynwood silt loam, 2 to 6 percent slopes, eroded (MrB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u> </u> No <u>X</u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Remarks: DP 20 is representative of the upland area surrounding Wetland 10.	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1.					Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B)																																
2.																																					
3.																																					
4.																																					
5.																																					
		=Total Cover																																			
Sapling/Shrub Stratum	(Plot size: <u>15 ft</u>)				Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td><td align="center"><u>0</u></td> <td>x 1 =</td><td align="center"><u>0</u></td> </tr> <tr> <td>FACW species</td><td align="center"><u>0</u></td> <td>x 2 =</td><td align="center"><u>0</u></td> </tr> <tr> <td>FAC species</td><td align="center"><u>40</u></td> <td>x 3 =</td><td align="center"><u>120</u></td> </tr> <tr> <td>FACU species</td><td align="center"><u>60</u></td> <td>x 4 =</td><td align="center"><u>240</u></td> </tr> <tr> <td>UPL species</td><td align="center"><u>0</u></td> <td>x 5 =</td><td align="center"><u>0</u></td> </tr> <tr> <td>Column Totals:</td><td align="center"><u>100</u> (A)</td> <td></td><td align="center"><u>360</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A =</td> <td></td><td align="center"><u>3.60</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>0</u>	x 1 =	<u>0</u>	FACW species	<u>0</u>	x 2 =	<u>0</u>	FAC species	<u>40</u>	x 3 =	<u>120</u>	FACU species	<u>60</u>	x 4 =	<u>240</u>	UPL species	<u>0</u>	x 5 =	<u>0</u>	Column Totals:	<u>100</u> (A)		<u>360</u> (B)	Prevalence Index = B/A =			<u>3.60</u>
Total % Cover of:		Multiply by:																																			
OBL species	<u>0</u>	x 1 =	<u>0</u>																																		
FACW species	<u>0</u>	x 2 =	<u>0</u>																																		
FAC species	<u>40</u>	x 3 =	<u>120</u>																																		
FACU species	<u>60</u>	x 4 =	<u>240</u>																																		
UPL species	<u>0</u>	x 5 =	<u>0</u>																																		
Column Totals:	<u>100</u> (A)		<u>360</u> (B)																																		
Prevalence Index = B/A =			<u>3.60</u>																																		
1.																																					
2.																																					
3.																																					
4.																																					
5.																																					
		=Total Cover																																			
Herb Stratum	(Plot size: <u>5 ft</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																
1.	<u>Schedonorus arundinaceus</u>	<u>60</u>	<u>Yes</u>	<u>FACU</u>																																	
2.	<u>Poa pratensis</u>	<u>40</u>	<u>Yes</u>	<u>FAC</u>																																	
3.																																					
4.																																					
5.																																					
6.																																					
7.																																					
8.																																					
9.																																					
10.																																					
		<u>100</u> =Total Cover																																			
Woody Vine Stratum	(Plot size: <u>30 ft</u>)				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>																																
1.																																					
2.																																					
		=Total Cover																																			

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

SOIL

Sampling Point: DP 20

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 ¹	Loc ²		
0-11	10YR 4/2	95	10YR 4/4	5	C	M	Loamy/Clayey	Distinct redox concentrations
11-18	10YR 4/1	90	10YR 5/4	10	C	M	Loamy/Clayey	

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

²Location: 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)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators 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:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? Yes No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/20/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 21
 Investigator(s): Leigh Stevenson and Cameron Schuler Section, Township, Range: Section 07, Township 31 N, Range 13 E
 Landform (hillside, terrace, etc.): Tillplain Local relief (concave, convex, none): Concave
 Slope (%): 1 Lat: 41.162889 Long: -85.103942 Datum: WGS_1984
 Soil Map Unit Name: Eel silt loam, 0 to 2 percent slopes, frequently flooded (Es) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Remarks: DP 21 is representative of Wetland 11-A.	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____					Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
2. _____																					
3. _____																					
4. _____																					
5. _____																					
=Total Cover																					
Sapling/Shrub Stratum	(Plot size: <u>15 ft</u>)				Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;">Total % Cover of:</td> <td style="width:50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>35</u></td> <td>x 1 = <u>35</u></td> </tr> <tr> <td>FACW species <u>22</u></td> <td>x 2 = <u>44</u></td> </tr> <tr> <td>FAC species <u>27</u></td> <td>x 3 = <u>81</u></td> </tr> <tr> <td>FACU species <u>9</u></td> <td>x 4 = <u>36</u></td> </tr> <tr> <td>UPL species <u>3</u></td> <td>x 5 = <u>15</u></td> </tr> <tr> <td>Column Totals: <u>96</u> (A)</td> <td><u>211</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.20</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>35</u>	x 1 = <u>35</u>	FACW species <u>22</u>	x 2 = <u>44</u>	FAC species <u>27</u>	x 3 = <u>81</u>	FACU species <u>9</u>	x 4 = <u>36</u>	UPL species <u>3</u>	x 5 = <u>15</u>	Column Totals: <u>96</u> (A)	<u>211</u> (B)	Prevalence Index = B/A = <u>2.20</u>	
Total % Cover of:	Multiply by:																				
OBL species <u>35</u>	x 1 = <u>35</u>																				
FACW species <u>22</u>	x 2 = <u>44</u>																				
FAC species <u>27</u>	x 3 = <u>81</u>																				
FACU species <u>9</u>	x 4 = <u>36</u>																				
UPL species <u>3</u>	x 5 = <u>15</u>																				
Column Totals: <u>96</u> (A)	<u>211</u> (B)																				
Prevalence Index = B/A = <u>2.20</u>																					
1. <u>Cornus racemosa</u>		<u>10</u>	Yes	FAC																	
2. <u>Fraxinus pennsylvanica</u>		<u>10</u>	Yes	FACW																	
3. <u>Ribes americanum</u>		<u>7</u>	No	FACW																	
4. <u>Populus deltoides</u>		<u>5</u>	No	FAC																	
5. <u>Acer negundo</u>		<u>5</u>	No	FAC																	
=Total Cover																					
Herb Stratum	(Plot size: <u>5 ft</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. <u>Lythrum salicaria</u>		<u>20</u>	Yes	OBL																	
2. <u>Typha angustifolia</u>		<u>15</u>	Yes	OBL																	
3. <u>Rosa multiflora</u>		<u>7</u>	No	FACU																	
4. <u>Euthamia graminifolia</u>		<u>5</u>	No	FACW																	
5. <u>Verbena urticifolia</u>		<u>5</u>	No	FAC																	
6. <u>Triosteum aurantiacum</u>		<u>3</u>	No	UPL																	
7. <u>Geum canadense</u>		<u>2</u>	No	FAC																	
8. <u>Parthenocissus quinquefolia</u>		<u>2</u>	No	FACU																	
9. _____																					
10. _____																					
=Total Cover																					
Woody Vine Stratum	(Plot size: <u>30 ft</u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																
1. _____																					
2. _____																					
=Total Cover																					

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

SOIL

Sampling Point: DP 21

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 ¹	Loc ²		
0-1	10YR 4/2	100					Loamy/Clayey	
1-3	10YR 6/1	95	10YR 5/6	5	C	M	Sandy	
3-18	10YR 4/1	95	10YR 4/6	5	C	M	Sandy	

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

²Location: 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)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators 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:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

Secondary Indicators (minimum of two required)

- | | | |
|--|---|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Surface Soil Cracks (B6) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Aquatic Fauna (B13) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> True Aquatic Plants (B14) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Stunted or Stressed Plants (D1) |
| <input checked="" type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input checked="" type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Thin Muck Surface (C7) | <input checked="" type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Gauge or Well Data (D9) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | <input type="checkbox"/> Other (Explain in Remarks) | |

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? Yes No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/20/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 22
 Investigator(s): Leigh Stevenson and Cameron Schuler Section, Township, Range: Section 07, Township 31 N, Range 13 E
 Landform (hillside, terrace, etc.): Tillplain Local relief (concave, convex, none): Flat
 Slope (%): 1 Lat: 41.162902 Long: -85.103999 Datum: WGS_1984
 Soil Map Unit Name: Eel silt loam, 0 to 2 percent slopes, frequently flooded (Es) NWI classification: N/A

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 type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: DP 22 is representative of of the upland area surrounding Wetland 11-A and Wetland 11-B.	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1.					Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>25.0%</u> (A/B)																																
2.																																					
3.																																					
4.																																					
5.																																					
		=Total Cover																																			
Sapling/Shrub Stratum	(Plot size: <u>15 ft</u>)				Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td><td align="center"><u>0</u></td> <td>x 1 =</td><td align="center"><u>0</u></td> </tr> <tr> <td>FACW species</td><td align="center"><u>0</u></td> <td>x 2 =</td><td align="center"><u>0</u></td> </tr> <tr> <td>FAC species</td><td align="center"><u>10</u></td> <td>x 3 =</td><td align="center"><u>30</u></td> </tr> <tr> <td>FACU species</td><td align="center"><u>94</u></td> <td>x 4 =</td><td align="center"><u>376</u></td> </tr> <tr> <td>UPL species</td><td align="center"><u>16</u></td> <td>x 5 =</td><td align="center"><u>80</u></td> </tr> <tr> <td>Column Totals:</td><td align="center"><u>120</u> (A)</td> <td></td><td align="center"><u>486</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A =</td> <td></td><td align="center"><u>4.05</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>0</u>	x 1 =	<u>0</u>	FACW species	<u>0</u>	x 2 =	<u>0</u>	FAC species	<u>10</u>	x 3 =	<u>30</u>	FACU species	<u>94</u>	x 4 =	<u>376</u>	UPL species	<u>16</u>	x 5 =	<u>80</u>	Column Totals:	<u>120</u> (A)		<u>486</u> (B)	Prevalence Index = B/A =			<u>4.05</u>
Total % Cover of:		Multiply by:																																			
OBL species	<u>0</u>	x 1 =	<u>0</u>																																		
FACW species	<u>0</u>	x 2 =	<u>0</u>																																		
FAC species	<u>10</u>	x 3 =	<u>30</u>																																		
FACU species	<u>94</u>	x 4 =	<u>376</u>																																		
UPL species	<u>16</u>	x 5 =	<u>80</u>																																		
Column Totals:	<u>120</u> (A)		<u>486</u> (B)																																		
Prevalence Index = B/A =			<u>4.05</u>																																		
1.	<u><i>Pyrus calleryana</i></u>	<u>10</u>	Yes	UPL																																	
2.	<u><i>Cornus drummondii</i></u>	<u>5</u>	Yes	FAC																																	
3.	<u><i>Elaeagnus umbellata</i></u>	<u>5</u>	Yes	UPL																																	
4.																																					
5.																																					
		=Total Cover																																			
Herb Stratum	(Plot size: <u>5 ft</u>)				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																
1.	<u><i>Dipsacus fullonum</i></u>	<u>85</u>	Yes	FACU																																	
2.	<u><i>Schedonorus arundinaceus</i></u>	<u>9</u>	No	FACU																																	
3.	<u><i>Setaria pumila</i></u>	<u>5</u>	No	FAC																																	
4.	<u><i>Setaria viridis</i></u>	<u>1</u>	No	UPL																																	
5.																																					
6.																																					
7.																																					
8.																																					
9.																																					
10.																																					
		=Total Cover																																			
Woody Vine Stratum	(Plot size: <u>30 ft</u>)				Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>																																
1.																																					
2.																																					
		=Total Cover																																			

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

SOIL

Sampling Point: DP 22

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 ¹	Loc ²		
0-3	10YR 3/2	100					Loamy/Clayey	
3-18	10YR 4/2	100					Loamy/Clayey	

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

²Location: 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)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators 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 X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
 Water Table Present? Yes _____ No X Depth (inches): _____
 Saturation Present? Yes _____ No X Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/20/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 23
 Investigator(s): Leigh Stevenson and Cameron Schuler Section, Township, Range: Section 07, Township 31 N, Range 13 E
 Landform (hillside, terrace, etc.): Tillplain Local relief (concave, convex, none): Concave
 Slope (%): 0.5 Lat: 41.163019 Long: -85.104004 Datum: WGS_1984
 Soil Map Unit Name: Eel silt loam, 0 to 2 percent slopes, frequently flooded (Es) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Remarks: DP 23 is representative of Wetland 11-B.	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1.					Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
2.					
3.					
4.					
5.					
		=Total Cover			
Sapling/Shrub Stratum	(Plot size: <u>15 ft</u>)				
1.					Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>70</u> x 1 = <u>70</u> FACW species <u>20</u> x 2 = <u>40</u> FAC species <u>5</u> x 3 = <u>15</u> FACU species <u>3</u> x 4 = <u>12</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>98</u> (A) <u>137</u> (B) Prevalence Index = B/A = <u>1.40</u>
2.					
3.					
4.					
5.					
		=Total Cover			
Herb Stratum	(Plot size: <u>5 ft</u>)				
1.	<u>Typha angustifolia</u>	<u>55</u>	<u>Yes</u>	<u>OBL</u>	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2.	<u>Persicaria maculosa</u>	<u>15</u>	<u>No</u>	<u>FACW</u>	
3.	<u>Lythrum salicaria</u>	<u>15</u>	<u>No</u>	<u>OBL</u>	
4.	<u>Solanum dulcamara</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	
5.	<u>Cyperus esculentus</u>	<u>5</u>	<u>No</u>	<u>FACW</u>	
6.	<u>Cirsium discolor</u>	<u>3</u>	<u>No</u>	<u>FACU</u>	
7.					
8.					
9.					
10.					
		<u>98</u> =Total Cover			
Woody Vine Stratum	(Plot size: <u>30 ft</u>)				
1.					Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
2.					
		=Total Cover			

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

SOIL

Sampling Point: DP 23

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 ¹	Loc ²		
0-3	10YR 3/2	100					Loamy/Clayey	
3-5	10YR 5/1	93	10YR 4/6	7	C	M	Sandy	
5-11	10YR 4/1	70	2.5YR 4/6	30	C	M	Sandy	
11-18	10YR 4/1	90	10YR 4/6	10	C	M	Sandy	Prominent redox concentrations

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

²Location: 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)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators 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:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? Yes No Depth (inches): 0
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/20/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 24
 Investigator(s): Leigh Stevenson and Cameron Schuler Section, Township, Range: Section 07, Township 31 N, Range 13 E
 Landform (hillside, terrace, etc.): Tillplain Local relief (concave, convex, none): Concave
 Slope (%): 0 Lat: 41.163120 Long: -85.104295 Datum: WGS_1984
 Soil Map Unit Name: Glynwood silt loam, 2 to 6 percent slopes, eroded (MrB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Remarks: DP 24 is representative of Wetland 12.	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1.					Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
2.					
3.					
4.					
5.					
		=Total Cover			Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>44</u> x 1 = <u>44</u> FACW species <u>2</u> x 2 = <u>4</u> FAC species <u>2</u> x 3 = <u>6</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>48</u> (A) <u>54</u> (B) Prevalence Index = B/A = <u>1.13</u>
Sapling/Shrub Stratum	(Plot size: <u>15 ft</u>)				
1.					
2.					
3.					
4.					
5.					
		=Total Cover			
Herb Stratum	(Plot size: <u>5 ft</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1.	<u><i>Typha angustifolia</i></u>	<u>40</u>	<u>Yes</u>	<u>OBL</u>	
2.	<u><i>Epilobium strictum</i></u>	<u>3</u>	<u>No</u>	<u>OBL</u>	
3.	<u><i>Solidago gigantea</i></u>	<u>2</u>	<u>No</u>	<u>FACW</u>	
4.	<u><i>Toxicodendron radicans</i></u>	<u>2</u>	<u>No</u>	<u>FAC</u>	
5.	<u><i>Lycopus americanus</i></u>	<u>1</u>	<u>No</u>	<u>OBL</u>	
6.					
7.					
8.					
9.					
10.					
		<u>48</u> =Total Cover			
Woody Vine Stratum	(Plot size: <u>30 ft</u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1.					
2.					
		=Total Cover			

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

SOIL

Sampling Point: DP 24

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 ¹	Loc ²		
0-10	10YR 4/2	95	10YR 6/6	5	C	M	Loamy/Clayey	Prominent redox concentrations
10-18	10YR 4/2	90	10YR 4/6	10	C	M	Loamy/Clayey	

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

²Location: 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)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators 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:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

Secondary Indicators (minimum of two required)

- | | | |
|--|---|--|
| <input checked="" type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Surface Soil Cracks (B6) |
| <input checked="" type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Aquatic Fauna (B13) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input checked="" type="checkbox"/> Saturation (A3) | <input type="checkbox"/> True Aquatic Plants (B14) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Stunted or Stressed Plants (D1) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input checked="" type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Thin Muck Surface (C7) | <input checked="" type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Gauge or Well Data (D9) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | <input type="checkbox"/> Other (Explain in Remarks) | |

Field Observations:

Surface Water Present? Yes No Depth (inches): 1
 Water Table Present? Yes No Depth (inches): 0
 Saturation Present? Yes No Depth (inches): 0
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/20/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 25
 Investigator(s): Leigh Stevenson and Cameron Schuler Section, Township, Range: Section 07, Township 31 N, Range 13 E
 Landform (hillside, terrace, etc.): Tillplain Local relief (concave, convex, none): Convex
 Slope (%): 0.5 Lat: 41.163091 Long: -85.104325 Datum: WGS_1984
 Soil Map Unit Name: Glynwood silt loam, 2 to 6 percent slopes, eroded (MrB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u> No <u> </u> Hydric Soil Present? Yes <u> </u> No <u>X</u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Remarks: DP 25 is representative of the upland area surrounding Wetland 12.	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1.					Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																																
2.																																					
3.																																					
4.																																					
5.																																					
		=Total Cover																																			
Sapling/Shrub Stratum	(Plot size: <u>15 ft</u>)																																				
1.					Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td align="right" colspan="2">Total % Cover of:</td> <td align="right" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td><td align="center"><u>0</u></td> <td>x 1 =</td><td align="center"><u>0</u></td> </tr> <tr> <td>FACW species</td><td align="center"><u>20</u></td> <td>x 2 =</td><td align="center"><u>40</u></td> </tr> <tr> <td>FAC species</td><td align="center"><u>60</u></td> <td>x 3 =</td><td align="center"><u>180</u></td> </tr> <tr> <td>FACU species</td><td align="center"><u>20</u></td> <td>x 4 =</td><td align="center"><u>80</u></td> </tr> <tr> <td>UPL species</td><td align="center"><u>0</u></td> <td>x 5 =</td><td align="center"><u>0</u></td> </tr> <tr> <td>Column Totals:</td><td align="center"><u>100</u> (A)</td> <td></td><td align="center"><u>300</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A =</td> <td></td><td align="center"><u>3.00</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>0</u>	x 1 =	<u>0</u>	FACW species	<u>20</u>	x 2 =	<u>40</u>	FAC species	<u>60</u>	x 3 =	<u>180</u>	FACU species	<u>20</u>	x 4 =	<u>80</u>	UPL species	<u>0</u>	x 5 =	<u>0</u>	Column Totals:	<u>100</u> (A)		<u>300</u> (B)	Prevalence Index = B/A =			<u>3.00</u>
Total % Cover of:		Multiply by:																																			
OBL species	<u>0</u>	x 1 =	<u>0</u>																																		
FACW species	<u>20</u>	x 2 =	<u>40</u>																																		
FAC species	<u>60</u>	x 3 =	<u>180</u>																																		
FACU species	<u>20</u>	x 4 =	<u>80</u>																																		
UPL species	<u>0</u>	x 5 =	<u>0</u>																																		
Column Totals:	<u>100</u> (A)		<u>300</u> (B)																																		
Prevalence Index = B/A =			<u>3.00</u>																																		
2.																																					
3.																																					
4.																																					
5.																																					
		=Total Cover																																			
Herb Stratum	(Plot size: <u>5 ft</u>)																																				
1.	<u>Toxicodendron radicans</u>	<u>30</u>	<u>Yes</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																
2.	<u>Poa pratensis</u>	<u>30</u>	<u>Yes</u>	<u>FAC</u>																																	
3.	<u>Solidago gigantea</u>	<u>20</u>	<u>Yes</u>	<u>FACW</u>																																	
4.	<u>Schedonorus arundinaceus</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																																	
5.	<u>Cirsium discolor</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																																	
6.																																					
7.																																					
8.																																					
9.																																					
10.																																					
		<u>100</u> =Total Cover																																			
Woody Vine Stratum	(Plot size: <u>30 ft</u>)																																				
1.					Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																																
2.																																					
		=Total Cover																																			

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

SOIL

Sampling Point: DP 25

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 ¹	Loc ²		
0-18	10YR 4/2	100					Loamy/Clayey	

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

²Location: 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)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators 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 X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
 Water Table Present? Yes _____ No X Depth (inches): _____
 Saturation Present? Yes _____ No X Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/20/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 26
 Investigator(s): Josh Iddings and Alyssa Damiano Section, Township, Range: Section 06, Township 31 N, Range 13 E
 Landform (hillside, terrace, etc.): Tillplain Local relief (concave, convex, none): Concave
 Slope (%): 0 Lat: 41.165107 Long: -85.104219 Datum: WGS_1984
 Soil Map Unit Name: Eel silt loam, 0 to 2 percent slopes, frequently flooded (Es) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Remarks: DP 26 is representative Wetland 13-A.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <u>Populus deltoides</u>	<u>5</u>	Yes	FAC	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																																
2. <u>Salix nigra</u>	<u>3</u>	Yes	OBL																																	
3. <u> </u>																																				
4. <u> </u>																																				
5. <u> </u>																																				
<u>8</u> =Total Cover																																				
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <u>Salix interior</u>	<u>35</u>	Yes	FACW	Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td align="center"><u>71</u></td> <td>x 1 =</td> <td align="center"><u>71</u></td> </tr> <tr> <td>FACW species</td> <td align="center"><u>35</u></td> <td>x 2 =</td> <td align="center"><u>70</u></td> </tr> <tr> <td>FAC species</td> <td align="center"><u>6</u></td> <td>x 3 =</td> <td align="center"><u>18</u></td> </tr> <tr> <td>FACU species</td> <td align="center"><u>0</u></td> <td>x 4 =</td> <td align="center"><u>0</u></td> </tr> <tr> <td>UPL species</td> <td align="center"><u>0</u></td> <td>x 5 =</td> <td align="center"><u>0</u></td> </tr> <tr> <td>Column Totals:</td> <td align="center"><u>112</u> (A)</td> <td></td> <td align="center"><u>159</u> (B)</td> </tr> <tr> <td align="center" colspan="4">Prevalence Index = B/A = <u>1.42</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>71</u>	x 1 =	<u>71</u>	FACW species	<u>35</u>	x 2 =	<u>70</u>	FAC species	<u>6</u>	x 3 =	<u>18</u>	FACU species	<u>0</u>	x 4 =	<u>0</u>	UPL species	<u>0</u>	x 5 =	<u>0</u>	Column Totals:	<u>112</u> (A)		<u>159</u> (B)	Prevalence Index = B/A = <u>1.42</u>			
Total % Cover of:		Multiply by:																																		
OBL species	<u>71</u>	x 1 =	<u>71</u>																																	
FACW species	<u>35</u>	x 2 =	<u>70</u>																																	
FAC species	<u>6</u>	x 3 =	<u>18</u>																																	
FACU species	<u>0</u>	x 4 =	<u>0</u>																																	
UPL species	<u>0</u>	x 5 =	<u>0</u>																																	
Column Totals:	<u>112</u> (A)		<u>159</u> (B)																																	
Prevalence Index = B/A = <u>1.42</u>																																				
2. <u>Salix nigra</u>	<u>5</u>	No	OBL																																	
3. <u>Populus deltoides</u>	<u>1</u>	No	FAC																																	
4. <u> </u>																																				
5. <u> </u>																																				
<u>41</u> =Total Cover																																				
Herb Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <u>Typha angustifolia</u>	<u>25</u>	Yes	OBL	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																
2. <u>Lythrum salicaria</u>	<u>25</u>	Yes	OBL																																	
3. <u>Ludwigia palustris</u>	<u>10</u>	No	OBL																																	
4. <u>Lemna minor</u>	<u>2</u>	No	OBL																																	
5. <u>Alisma subcordatum</u>	<u>1</u>	No	OBL																																	
6. <u> </u>																																				
7. <u> </u>																																				
8. <u> </u>																																				
9. <u> </u>																																				
10. <u> </u>																																				
<u>63</u> =Total Cover																																				
Woody Vine Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <u> </u>				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																																
2. <u> </u>																																				
<u> </u> =Total Cover																																				

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

SOIL

Sampling Point: DP 26

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 ¹	Loc ²		
0-10	10YR 3/1	95	10YR 3/6	5	C	M	Loamy/Clayey	Prominent redox concentrations
10-18	10YR 5/2	90	10YR 5/6	10	C	M	Loamy/Clayey	

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

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Gleyed Matrix (S4) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Dark Surface (S7) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Mucky Mineral (F1) |
| <input type="checkbox"/> 2 cm Muck (A10) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input checked="" type="checkbox"/> Depleted Below Dark Surface (A11) | <input checked="" type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input checked="" type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) | <input type="checkbox"/> Redox Depressions (F8) |

Indicators for Problematic Hydric Soils³:

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators 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:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

Secondary Indicators (minimum of two required)

- | | | |
|--|---|--|
| <input type="checkbox"/> Surface Water (A1) | <input checked="" type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Surface Soil Cracks (B6) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Aquatic Fauna (B13) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Saturation (A3) | <input checked="" type="checkbox"/> True Aquatic Plants (B14) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input checked="" type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Stunted or Stressed Plants (D1) |
| <input checked="" type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input checked="" type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Thin Muck Surface (C7) | <input checked="" type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Gauge or Well Data (D9) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | <input type="checkbox"/> Other (Explain in Remarks) | |

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? Yes No Depth (inches): 14
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/20/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 27
 Investigator(s): Josh Iddings and Alyssa Damiano Section, Township, Range: Section 06, Township 31 N, Range 13 E
 Landform (hillside, terrace, etc.): Floodplain Local relief (concave, convex, none): Convex
 Slope (%): 2 Lat: 41.165099 Long: -85.104159 Datum: WGS_1984
 Soil Map Unit Name: Eel silt loam, 0 to 2 percent slopes, frequently flooded (Es) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u> </u> No <u>X</u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Remarks: DP 27 is representative of the upland area surrounding Wetland 13-A.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <u>Populus deltoides</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B)																																
2. <u>Salix nigra</u>	<u>3</u>	<u>Yes</u>	<u>OBL</u>																																	
3. <u> </u>																																				
4. <u> </u>																																				
5. <u> </u>																																				
<u>8</u> =Total Cover																																				
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <u>Pyrus calleryana</u>	<u>5</u>	<u>Yes</u>	<u>UPL</u>	Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td align="center"><u>13</u></td> <td>x 1 =</td> <td align="center"><u>13</u></td> </tr> <tr> <td>FACW species</td> <td align="center"><u>3</u></td> <td>x 2 =</td> <td align="center"><u>6</u></td> </tr> <tr> <td>FAC species</td> <td align="center"><u>6</u></td> <td>x 3 =</td> <td align="center"><u>18</u></td> </tr> <tr> <td>FACU species</td> <td align="center"><u>64</u></td> <td>x 4 =</td> <td align="center"><u>256</u></td> </tr> <tr> <td>UPL species</td> <td align="center"><u>30</u></td> <td>x 5 =</td> <td align="center"><u>150</u></td> </tr> <tr> <td>Column Totals:</td> <td align="center"><u>116</u> (A)</td> <td></td> <td align="center"><u>443</u> (B)</td> </tr> <tr> <td align="center" colspan="4">Prevalence Index = B/A = <u>3.82</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>13</u>	x 1 =	<u>13</u>	FACW species	<u>3</u>	x 2 =	<u>6</u>	FAC species	<u>6</u>	x 3 =	<u>18</u>	FACU species	<u>64</u>	x 4 =	<u>256</u>	UPL species	<u>30</u>	x 5 =	<u>150</u>	Column Totals:	<u>116</u> (A)		<u>443</u> (B)	Prevalence Index = B/A = <u>3.82</u>			
Total % Cover of:		Multiply by:																																		
OBL species	<u>13</u>	x 1 =	<u>13</u>																																	
FACW species	<u>3</u>	x 2 =	<u>6</u>																																	
FAC species	<u>6</u>	x 3 =	<u>18</u>																																	
FACU species	<u>64</u>	x 4 =	<u>256</u>																																	
UPL species	<u>30</u>	x 5 =	<u>150</u>																																	
Column Totals:	<u>116</u> (A)		<u>443</u> (B)																																	
Prevalence Index = B/A = <u>3.82</u>																																				
2. <u>Salix interior</u>	<u>3</u>	<u>Yes</u>	<u>FACW</u>																																	
3. <u> </u>																																				
4. <u> </u>																																				
5. <u> </u>																																				
<u>8</u> =Total Cover																																				
Herb Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <u>Solidago altissima</u>	<u>53</u>	<u>Yes</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																
2. <u>Securigera varia</u>	<u>25</u>	<u>Yes</u>	<u>UPL</u>																																	
3. <u>Lythrum salicaria</u>	<u>10</u>	<u>No</u>	<u>OBL</u>																																	
4. <u>Dipsacus fullonum</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																																	
5. <u>Symphotrichum pilosum</u>	<u>1</u>	<u>No</u>	<u>FACU</u>																																	
6. <u>Geum canadense</u>	<u>1</u>	<u>No</u>	<u>FAC</u>																																	
7. <u> </u>																																				
8. <u> </u>																																				
9. <u> </u>																																				
10. <u> </u>																																				
<u>100</u> =Total Cover																																				
Woody Vine Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <u> </u>				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>																																
2. <u> </u>																																				
<u> </u> =Total Cover																																				

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

SOIL

Sampling Point: DP 27

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 ¹	Loc ²		
0-18	10YR 3/2	95	10YR 5/6	5	C	M	Loamy/Clayey	Prominent redox concentrations

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

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Gleyed Matrix (S4) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Dark Surface (S7) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Mucky Mineral (F1) |
| <input type="checkbox"/> 2 cm Muck (A10) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input checked="" type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) | <input type="checkbox"/> Redox Depressions (F8) |

Indicators for Problematic Hydric Soils³:

- | |
|--|
| <input type="checkbox"/> Coast Prairie Redox (A16) |
| <input type="checkbox"/> Iron-Manganese Masses (F12) |
| <input type="checkbox"/> Red Parent Material (F21) |
| <input type="checkbox"/> Very Shallow Dark Surface (F22) |
| <input type="checkbox"/> Other (Explain in Remarks) |

³Indicators 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:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

Secondary Indicators (minimum of two required)

- | | | |
|--|---|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Surface Soil Cracks (B6) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Aquatic Fauna (B13) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> True Aquatic Plants (B14) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Stunted or Stressed Plants (D1) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Thin Muck Surface (C7) | <input type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Gauge or Well Data (D9) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | <input type="checkbox"/> Other (Explain in Remarks) | |

Field Observations:

Surface Water Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): _____
Water Table Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): _____
Saturation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): _____

(includes capillary fringe)

Wetland Hydrology Present? Yes No

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/20/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 28
 Investigator(s): Josh Iddings and Alyssa Damiano Section, Township, Range: Section 05, Township 31 N, Range 13 E
 Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave
 Slope (%): 0.5 Lat: 41.165099 Long: -85.103410 Datum: WGS_1984
 Soil Map Unit Name: Glynwood silt loam, 2 to 6 percent slopes, eroded (MrB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Remarks: DP 28 is representative of Wetland 13-B.	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <u>Salix nigra</u>		<u>5</u>	Yes	OBL	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																																
2. <u>Populus deltoides</u>		<u>2</u>	Yes	FAC																																	
3. _____																																					
4. _____																																					
5. _____																																					
		<u>7</u> =Total Cover																																			
Sapling/Shrub Stratum	(Plot size: <u>15 ft</u>)																																				
1. <u>Salix interior</u>		<u>5</u>	Yes	FACW	Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td align="center"><u>65</u></td> <td>x 1 =</td> <td align="center"><u>65</u></td> </tr> <tr> <td>FACW species</td> <td align="center"><u>12</u></td> <td>x 2 =</td> <td align="center"><u>24</u></td> </tr> <tr> <td>FAC species</td> <td align="center"><u>14</u></td> <td>x 3 =</td> <td align="center"><u>42</u></td> </tr> <tr> <td>FACU species</td> <td align="center"><u>20</u></td> <td>x 4 =</td> <td align="center"><u>80</u></td> </tr> <tr> <td>UPL species</td> <td align="center"><u>3</u></td> <td>x 5 =</td> <td align="center"><u>15</u></td> </tr> <tr> <td>Column Totals:</td> <td align="center"><u>114</u> (A)</td> <td></td> <td align="center"><u>226</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A =</td> <td align="center" colspan="2"><u>1.98</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>65</u>	x 1 =	<u>65</u>	FACW species	<u>12</u>	x 2 =	<u>24</u>	FAC species	<u>14</u>	x 3 =	<u>42</u>	FACU species	<u>20</u>	x 4 =	<u>80</u>	UPL species	<u>3</u>	x 5 =	<u>15</u>	Column Totals:	<u>114</u> (A)		<u>226</u> (B)	Prevalence Index = B/A =		<u>1.98</u>	
Total % Cover of:		Multiply by:																																			
OBL species	<u>65</u>	x 1 =	<u>65</u>																																		
FACW species	<u>12</u>	x 2 =	<u>24</u>																																		
FAC species	<u>14</u>	x 3 =	<u>42</u>																																		
FACU species	<u>20</u>	x 4 =	<u>80</u>																																		
UPL species	<u>3</u>	x 5 =	<u>15</u>																																		
Column Totals:	<u>114</u> (A)		<u>226</u> (B)																																		
Prevalence Index = B/A =		<u>1.98</u>																																			
2. <u>Populus deltoides</u>		<u>2</u>	Yes	FAC																																	
3. _____																																					
4. _____																																					
5. _____																																					
		<u>7</u> =Total Cover																																			
Herb Stratum	(Plot size: <u>5 ft</u>)																																				
1. <u>Lythrum salicaria</u>		<u>60</u>	Yes	OBL	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																
2. <u>Equisetum arvense</u>		<u>10</u>	No	FAC																																	
3. <u>Solidago altissima</u>		<u>10</u>	No	FACU																																	
4. <u>Dipsacus fullonum</u>		<u>10</u>	No	FACU																																	
5. <u>Phragmites australis</u>		<u>5</u>	No	FACW																																	
6. <u>Securigera varia</u>		<u>3</u>	No	UPL																																	
7. <u>Equisetum hyemale</u>		<u>2</u>	No	FACW																																	
8. _____																																					
9. _____																																					
10. _____																																					
		<u>100</u> =Total Cover																																			
Woody Vine Stratum	(Plot size: <u>30 ft</u>)																																				
1. _____					Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																																
2. _____																																					
		=Total Cover																																			

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

SOIL

Sampling Point: DP 28

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 ¹	Loc ²		
0-18	10YR 3/1	97	10YR 3/6	3	C	M	Loamy/Clayey	Prominent redox concentrations

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

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Coast Prairie Redox (A16)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Redox Depressions (F8)	

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

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____
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Remarks:
 This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Surface Soil Cracks (B6)
	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Stunted or Stressed Plants (D1)
	<input checked="" type="checkbox"/> Geomorphic Position (D2)
	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)

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

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
 Saturation was visible on 2022 NearMap aerial photography.

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/20/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 29
 Investigator(s): Josh Iddings and Alyssa Damiano Section, Township, Range: Section 05, Township 31 N, Range 13 E
 Landform (hillside, terrace, etc.): Floodplain Local relief (concave, convex, none): Convex
 Slope (%): 0.5 Lat: 41.165042 Long: -85.103419 Datum: WGS_1984
 Soil Map Unit Name: Glynwood silt loam, 2 to 6 percent slopes, eroded (MrB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u> </u> No <u>X</u> Hydric Soil Present? Yes <u> </u> No <u>X</u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Remarks: DP 29 is representative of the upland area surrounding Wetland 13-B.	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1.					Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>20.0%</u> (A/B)																																
2.																																					
3.																																					
4.																																					
5.																																					
		=Total Cover																																			
Sapling/Shrub Stratum	(Plot size: <u>15 ft</u>)				Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td><td align="center"><u>0</u></td> <td>x 1 =</td><td align="center"><u>0</u></td> </tr> <tr> <td>FACW species</td><td align="center"><u>7</u></td> <td>x 2 =</td><td align="center"><u>14</u></td> </tr> <tr> <td>FAC species</td><td align="center"><u>0</u></td> <td>x 3 =</td><td align="center"><u>0</u></td> </tr> <tr> <td>FACU species</td><td align="center"><u>57</u></td> <td>x 4 =</td><td align="center"><u>228</u></td> </tr> <tr> <td>UPL species</td><td align="center"><u>51</u></td> <td>x 5 =</td><td align="center"><u>255</u></td> </tr> <tr> <td>Column Totals:</td><td align="center"><u>115</u> (A)</td> <td></td><td align="center"><u>497</u> (B)</td> </tr> <tr> <td align="center" colspan="4">Prevalence Index = B/A = <u>4.32</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>0</u>	x 1 =	<u>0</u>	FACW species	<u>7</u>	x 2 =	<u>14</u>	FAC species	<u>0</u>	x 3 =	<u>0</u>	FACU species	<u>57</u>	x 4 =	<u>228</u>	UPL species	<u>51</u>	x 5 =	<u>255</u>	Column Totals:	<u>115</u> (A)		<u>497</u> (B)	Prevalence Index = B/A = <u>4.32</u>			
Total % Cover of:		Multiply by:																																			
OBL species	<u>0</u>	x 1 =	<u>0</u>																																		
FACW species	<u>7</u>	x 2 =	<u>14</u>																																		
FAC species	<u>0</u>	x 3 =	<u>0</u>																																		
FACU species	<u>57</u>	x 4 =	<u>228</u>																																		
UPL species	<u>51</u>	x 5 =	<u>255</u>																																		
Column Totals:	<u>115</u> (A)		<u>497</u> (B)																																		
Prevalence Index = B/A = <u>4.32</u>																																					
1.	<u><i>Pyrus calleryana</i></u>	<u>10</u>	<u>Yes</u>	<u>UPL</u>																																	
2.	<u><i>Salix interior</i></u>	<u>5</u>	<u>Yes</u>	<u>FACW</u>																																	
3.																																					
4.																																					
5.																																					
		=Total Cover																																			
Herb Stratum	(Plot size: <u>5 ft</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																
1.	<u><i>Solidago altissima</i></u>	<u>25</u>	<u>Yes</u>	<u>FACU</u>																																	
2.	<u><i>Dipsacus fullonum</i></u>	<u>25</u>	<u>Yes</u>	<u>FACU</u>																																	
3.	<u><i>Securigera varia</i></u>	<u>25</u>	<u>Yes</u>	<u>UPL</u>																																	
4.	<u><i>Eupatorium altissimum</i></u>	<u>15</u>	<u>No</u>	<u>UPL</u>																																	
5.	<u><i>Plantago lanceolata</i></u>	<u>5</u>	<u>No</u>	<u>FACU</u>																																	
6.	<u><i>Euthamia graminifolia</i></u>	<u>2</u>	<u>No</u>	<u>FACW</u>																																	
7.	<u><i>Symphytotrichum pilosum</i></u>	<u>1</u>	<u>No</u>	<u>FACU</u>																																	
8.	<u><i>Daucus carota</i></u>	<u>1</u>	<u>No</u>	<u>UPL</u>																																	
9.	<u><i>Monarda fistulosa</i></u>	<u>1</u>	<u>No</u>	<u>FACU</u>																																	
10.																																					
		=Total Cover																																			
Woody Vine Stratum	(Plot size: <u>30 ft</u>)				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>																																
1.																																					
2.																																					
		=Total Cover																																			

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

SOIL

Sampling Point: DP 29

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 ¹	Loc ²		
0-10	10YR 4/3	100						

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

²Location: 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)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Gravel
 Depth (inches): 10

Hydric Soil Present? Yes No

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? Yes No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/20/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 30
 Investigator(s): Josh Iddings and Alyssa Damiano Section, Township, Range: Section 05, Township 31 N, Range 13 E
 Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave
 Slope (%): 0 Lat: 41.166006 Long: -85.099754 Datum: WGS_1984
 Soil Map Unit Name: Glynwood silt loam, 2 to 6 percent slopes, eroded (MrB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Remarks: DP 30 is representative of Wetland 14-A.	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____					Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
2. _____																					
3. _____																					
4. _____																					
5. _____																					
=Total Cover																					
Sapling/Shrub Stratum	(Plot size: <u>15 ft</u>)				Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;">Total % Cover of:</td> <td style="width:50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>95</u></td> <td>x 1 = <u>95</u></td> </tr> <tr> <td>FACW species <u>5</u></td> <td>x 2 = <u>10</u></td> </tr> <tr> <td>FAC species <u>4</u></td> <td>x 3 = <u>12</u></td> </tr> <tr> <td>FACU species <u>3</u></td> <td>x 4 = <u>12</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>107</u> (A)</td> <td><u>129</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>1.21</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>95</u>	x 1 = <u>95</u>	FACW species <u>5</u>	x 2 = <u>10</u>	FAC species <u>4</u>	x 3 = <u>12</u>	FACU species <u>3</u>	x 4 = <u>12</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>107</u> (A)	<u>129</u> (B)	Prevalence Index = B/A = <u>1.21</u>	
Total % Cover of:	Multiply by:																				
OBL species <u>95</u>	x 1 = <u>95</u>																				
FACW species <u>5</u>	x 2 = <u>10</u>																				
FAC species <u>4</u>	x 3 = <u>12</u>																				
FACU species <u>3</u>	x 4 = <u>12</u>																				
UPL species <u>0</u>	x 5 = <u>0</u>																				
Column Totals: <u>107</u> (A)	<u>129</u> (B)																				
Prevalence Index = B/A = <u>1.21</u>																					
1. <u>Ulmus americana</u>		<u>5</u>	Yes	FACW																	
2. <u>Cornus drummondii</u>		<u>1</u>	No	FAC																	
3. <u>Rhamnus cathartica</u>		<u>1</u>	No	FAC																	
4. _____																					
5. _____																					
=Total Cover																					
Herb Stratum	(Plot size: <u>5 ft</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. <u>Typha angustifolia</u>		<u>95</u>	Yes	OBL																	
2. <u>Dipsacus fullonum</u>		<u>3</u>	No	FACU																	
3. <u>Apocynum cannabinum</u>		<u>2</u>	No	FAC																	
4. _____																					
5. _____																					
6. _____																					
7. _____																					
8. _____																					
9. _____																					
10. _____																					
=Total Cover																					
Woody Vine Stratum	(Plot size: <u>30 ft</u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																
1. _____																					
2. _____																					
=Total Cover																					

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

SOIL

Sampling Point: DP 30

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 ¹	Loc ²		
0-6	10YR 3/2	97	10YR 4/6	3	C	M	Loamy/Clayey	Prominent redox concentrations
6-18	10YR 4/2	95	10YR 4/6	5	C	M	Loamy/Clayey	

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

²Location: 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)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators 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:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? Yes No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/20/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 31
 Investigator(s): Josh Iddings and Alyssa Damiano Section, Township, Range: Section 05, Township 31 N, Range 13 E
 Landform (hillside, terrace, etc.): Tillplain Local relief (concave, convex, none): Convex
 Slope (%): 1 Lat: 41.165980 Long: -85.099783 Datum: WGS_1984
 Soil Map Unit Name: Glynwood silt loam, 2 to 6 percent slopes, eroded (MrB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydic Soil Present? Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	

Remarks:
 DP 31 is representative of the upland area surrounding Wetland 14-A and Wetland 14-B.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. <u>Ulmus americana</u>	<u>5</u>	Yes	FACW		Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B)
2. <u>Juniperus virginiana</u>	<u>5</u>	Yes	FACU		
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>		
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>		
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>		
<u>10</u> =Total Cover				Prevalence Index worksheet:	
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status		Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>20</u> x 2 = <u>40</u> FAC species <u>7</u> x 3 = <u>21</u> FACU species <u>87</u> x 4 = <u>348</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>114</u> (A) <u>409</u> (B) Prevalence Index = B/A = <u>3.59</u>
1. <u>Cornus drummondii</u>	<u>5</u>	Yes	FAC		
2. <u>Rhamnus cathartica</u>	<u>2</u>	Yes	FAC		
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>		
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>		
<u>7</u> =Total Cover				Hydrophytic Vegetation Indicators:	
Herb Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status		___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Dipsacus fullonum</u>	<u>40</u>	Yes	FACU		
2. <u>Schedonorus arundinaceus</u>	<u>25</u>	Yes	FACU		
3. <u>Solidago altissima</u>	<u>15</u>	No	FACU		
4. <u>Euthamia graminifolia</u>	<u>10</u>	No	FACW		
5. <u>Agrostis gigantea</u>	<u>5</u>	No	FACW		
6. <u>Symphotrichum pilosum</u>	<u>2</u>	No	FACU		
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>		
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>		
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>		
<u>97</u> =Total Cover				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>	
Woody Vine Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status		
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>		
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>		
<u> </u> =Total Cover					

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

SOIL

Sampling Point: DP 31

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 ¹	Loc ²		
0-5	10YR 3/2	100					Loamy/Clayey	
5-18	10YR 4/2	100					Loamy/Clayey	

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

²Location: 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)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators 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 X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
 Water Table Present? Yes _____ No X Depth (inches): _____
 Saturation Present? Yes _____ No X Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/20/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 32
 Investigator(s): Josh Iddings and Alyssa Damiano Section, Township, Range: Section 05, Township 31 N, Range 13 E
 Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave
 Slope (%): 0 Lat: 41.166396 Long: -85.099361 Datum: WGS_1984
 Soil Map Unit Name: Pewamo silty clay loam, 0 to 1 percent slopes (Pe) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Remarks: DP 32 is representative of Wetland 14-B.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <u>Ulmus americana</u>	<u>30</u>	Yes	FACW	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>80.0%</u> (A/B)																																
2. <u>Populus deltoides</u>	<u>20</u>	Yes	FAC																																	
3. _____	_____	_____	_____																																	
4. _____	_____	_____	_____																																	
5. _____	_____	_____	_____																																	
<u>50</u> =Total Cover				Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td align="center"><u>0</u></td> <td>x 1 =</td> <td align="center"><u>0</u></td> </tr> <tr> <td>FACW species</td> <td align="center"><u>110</u></td> <td>x 2 =</td> <td align="center"><u>220</u></td> </tr> <tr> <td>FAC species</td> <td align="center"><u>51</u></td> <td>x 3 =</td> <td align="center"><u>153</u></td> </tr> <tr> <td>FACU species</td> <td align="center"><u>5</u></td> <td>x 4 =</td> <td align="center"><u>20</u></td> </tr> <tr> <td>UPL species</td> <td align="center"><u>0</u></td> <td>x 5 =</td> <td align="center"><u>0</u></td> </tr> <tr> <td>Column Totals:</td> <td align="center"><u>166</u> (A)</td> <td></td> <td align="center"><u>393</u> (B)</td> </tr> <tr> <td align="center" colspan="4">Prevalence Index = B/A = <u>2.37</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>0</u>	x 1 =	<u>0</u>	FACW species	<u>110</u>	x 2 =	<u>220</u>	FAC species	<u>51</u>	x 3 =	<u>153</u>	FACU species	<u>5</u>	x 4 =	<u>20</u>	UPL species	<u>0</u>	x 5 =	<u>0</u>	Column Totals:	<u>166</u> (A)		<u>393</u> (B)	Prevalence Index = B/A = <u>2.37</u>			
Total % Cover of:		Multiply by:																																		
OBL species	<u>0</u>	x 1 =	<u>0</u>																																	
FACW species	<u>110</u>	x 2 =	<u>220</u>																																	
FAC species	<u>51</u>	x 3 =	<u>153</u>																																	
FACU species	<u>5</u>	x 4 =	<u>20</u>																																	
UPL species	<u>0</u>	x 5 =	<u>0</u>																																	
Column Totals:	<u>166</u> (A)		<u>393</u> (B)																																	
Prevalence Index = B/A = <u>2.37</u>																																				
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)																																				
1. <u>Cornus racemosa</u>	<u>30</u>	Yes	FAC																																	
2. _____	_____	_____	_____																																	
3. _____	_____	_____	_____																																	
4. _____	_____	_____	_____																																	
5. _____	_____	_____	_____																																	
<u>30</u> =Total Cover																																				
Herb Stratum (Plot size: <u>5 ft</u>)																																				
1. <u>Phalaris arundinacea</u>	<u>75</u>	Yes	FACW																																	
2. <u>Carex vulpinoidea</u>	<u>5</u>	No	FACW																																	
3. <u>Symphyotrichum lanceolatum</u>	<u>1</u>	No	FAC																																	
4. _____	_____	_____	_____																																	
5. _____	_____	_____	_____																																	
6. _____	_____	_____	_____																																	
7. _____	_____	_____	_____																																	
8. _____	_____	_____	_____																																	
9. _____	_____	_____	_____																																	
10. _____	_____	_____	_____																																	
<u>81</u> =Total Cover																																				
Woody Vine Stratum (Plot size: <u>30 ft</u>)																																				
1. <u>Vitis labrusca</u>	<u>5</u>	Yes	FACU																																	
2. _____	_____	_____	_____																																	
<u>5</u> =Total Cover																																				

Hydrophytic Vegetation Indicators:
 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0¹
 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No

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

SOIL

Sampling Point: DP 32

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 ¹	Loc ²		
0-18	10YR 4/2	97	10YR 4/6	3	C	M	Loamy/Clayey	Prominent redox concentrations

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

²Location: PL=Pore Lining, M=Matrix.

<p>Hydric Soil Indicators:</p> <p><input type="checkbox"/> Histosol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5)</p> <p><input type="checkbox"/> 2 cm Muck (A10)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)</p> <p><input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)</p>	<p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p> <p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Dark Surface (S7)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input checked="" type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p>	<p>Indicators for Problematic Hydric Soils³:</p> <p><input type="checkbox"/> Coast Prairie Redox (A16)</p> <p><input type="checkbox"/> Iron-Manganese Masses (F12)</p> <p><input type="checkbox"/> Red Parent Material (F21)</p> <p><input type="checkbox"/> Very Shallow Dark Surface (F22)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>
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³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<p>Restrictive Layer (if observed):</p> <p>Type: _____</p> <p>Depth (inches): _____</p>	<p>Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
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Remarks:
 This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

<p>Wetland Hydrology Indicators:</p> <p><u>Primary Indicators (minimum of one is required; check all that apply)</u></p> <p><input type="checkbox"/> Surface Water (A1)</p> <p><input type="checkbox"/> High Water Table (A2)</p> <p><input type="checkbox"/> Saturation (A3)</p> <p><input type="checkbox"/> Water Marks (B1)</p> <p><input type="checkbox"/> Sediment Deposits (B2)</p> <p><input type="checkbox"/> Drift Deposits (B3)</p> <p><input type="checkbox"/> Algal Mat or Crust (B4)</p> <p><input type="checkbox"/> Iron Deposits (B5)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</p> <p><input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)</p>	<p><u>Secondary Indicators (minimum of two required)</u></p> <p><input checked="" type="checkbox"/> Water-Stained Leaves (B9)</p> <p><input type="checkbox"/> Aquatic Fauna (B13)</p> <p><input type="checkbox"/> True Aquatic Plants (B14)</p> <p><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)</p> <p><input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Thin Muck Surface (C7)</p> <p><input type="checkbox"/> Gauge or Well Data (D9)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>
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<p>Field Observations:</p> <p>Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____</p> <p>(includes capillary fringe)</p>	<p>Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/20/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 33
 Investigator(s): Josh Iddings and Alyssa Damiano Section, Township, Range: Section 05, Township 31 N, Range 13 E
 Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave
 Slope (%): 0 Lat: 41.167722 Long: -85.096445 Datum: WGS_1984
 Soil Map Unit Name: Blount loam, interlobate moraines, 0 to 2 percent slopes (BmA) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Remarks: DP 33 is representative of Wetland 15.	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1.					Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.7%</u> (A/B)
2.					
3.					
4.					
5.					
		=Total Cover			
Sapling/Shrub Stratum	(Plot size: <u>15 ft</u>)				Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>30</u> x 1 = <u>30</u> FACW species <u>60</u> x 2 = <u>120</u> FAC species <u>4</u> x 3 = <u>12</u> FACU species <u>11</u> x 4 = <u>44</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>105</u> (A) <u>206</u> (B) Prevalence Index = B/A = <u>1.96</u>
1.					
2.					
3.					
4.					
5.					
		=Total Cover			
Herb Stratum	(Plot size: <u>5 ft</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1.	<u>Echinochloa crus-galli</u>	<u>60</u>	<u>Yes</u>	<u>FACW</u>	
2.	<u>Typha angustifolia</u>	<u>30</u>	<u>Yes</u>	<u>OBL</u>	
3.	<u>Schedonorus arundinaceus</u>	<u>6</u>	<u>No</u>	<u>FACU</u>	
4.	<u>Juncus tenuis</u>	<u>4</u>	<u>No</u>	<u>FAC</u>	
5.					
6.					
7.					
8.					
9.					
10.					
		<u>100</u> =Total Cover			
Woody Vine Stratum	(Plot size: <u>30 ft</u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1.	<u>Vitis labrusca</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>	
2.					
		<u>5</u> =Total Cover			

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

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 ¹	Loc ²		
0-4	10YR 4/2	95	10YR 3/6	5	C	M	Loamy/Clayey	Prominent redox concentrations
4-18	10YR 4/2	90	10YR 5/6	10	C	M	Loamy/Clayey	

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

²Location: 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)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators 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:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

Secondary Indicators (minimum of two required)

- | | | |
|--|---|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Surface Soil Cracks (B6) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Aquatic Fauna (B13) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> True Aquatic Plants (B14) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Stunted or Stressed Plants (D1) |
| <input checked="" type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input checked="" type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Thin Muck Surface (C7) | <input checked="" type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Gauge or Well Data (D9) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | <input type="checkbox"/> Other (Explain in Remarks) | |

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? Yes No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/20/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 34
 Investigator(s): Josh Iddings and Alyssa Damiano Section, Township, Range: Section 05, Township 31 N, Range 13 E
 Landform (hillside, terrace, etc.): Tillplain Local relief (concave, convex, none): Convex
 Slope (%): 1 Lat: 41.167731 Long: -85.096503 Datum: WGS_1984
 Soil Map Unit Name: Blount loam, interlobate moraines, 0 to 2 percent slopes (BmA) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u> </u> No <u>X</u> Hydric Soil Present? Yes <u> </u> No <u>X</u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Remarks: DP 34 is representative of of the upland area surrounding Wetland 15.	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____					Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>25.0%</u> (A/B)																
2. _____																					
3. _____																					
4. _____																					
5. _____																					
=Total Cover																					
Sapling/Shrub Stratum	(Plot size: <u>15 ft</u>)				Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;">Total % Cover of:</td> <td style="width:50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>10</u></td> <td>x 3 = <u>30</u></td> </tr> <tr> <td>FACU species <u>94</u></td> <td>x 4 = <u>376</u></td> </tr> <tr> <td>UPL species <u>16</u></td> <td>x 5 = <u>80</u></td> </tr> <tr> <td>Column Totals: <u>120</u> (A)</td> <td><u>486</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>4.05</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>10</u>	x 3 = <u>30</u>	FACU species <u>94</u>	x 4 = <u>376</u>	UPL species <u>16</u>	x 5 = <u>80</u>	Column Totals: <u>120</u> (A)	<u>486</u> (B)	Prevalence Index = B/A = <u>4.05</u>	
Total % Cover of:	Multiply by:																				
OBL species <u>0</u>	x 1 = <u>0</u>																				
FACW species <u>0</u>	x 2 = <u>0</u>																				
FAC species <u>10</u>	x 3 = <u>30</u>																				
FACU species <u>94</u>	x 4 = <u>376</u>																				
UPL species <u>16</u>	x 5 = <u>80</u>																				
Column Totals: <u>120</u> (A)	<u>486</u> (B)																				
Prevalence Index = B/A = <u>4.05</u>																					
1. <u><i>Pyrus calleryana</i></u>		<u>10</u>	<u>Yes</u>	<u>UPL</u>																	
2. <u><i>Elaeagnus umbellata</i></u>		<u>5</u>	<u>Yes</u>	<u>UPL</u>																	
3. <u><i>Cornus drummondii</i></u>		<u>5</u>	<u>Yes</u>	<u>FAC</u>																	
4. _____																					
5. _____																					
=Total Cover																					
Herb Stratum	(Plot size: <u>5 ft</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. <u><i>Dipsacus fullonum</i></u>		<u>85</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u><i>Schedonorus arundinaceus</i></u>		<u>9</u>	<u>No</u>	<u>FACU</u>																	
3. <u><i>Setaria pumila</i></u>		<u>5</u>	<u>No</u>	<u>FAC</u>																	
4. <u><i>Setaria viridis</i></u>		<u>1</u>	<u>No</u>	<u>UPL</u>																	
5. _____																					
6. _____																					
7. _____																					
8. _____																					
9. _____																					
10. _____																					
=Total Cover																					
Woody Vine Stratum	(Plot size: <u>30 ft</u>)				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>																
1. _____																					
2. _____																					
=Total Cover																					

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

SOIL

Sampling Point: DP 34

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 ¹	Loc ²		
0-3	10YR 3/2	100					Loamy/Clayey	
3-18	10YR 4/2	100					Loamy/Clayey	

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

²Location: 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)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators 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 X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
 Water Table Present? Yes _____ No X Depth (inches): _____
 Saturation Present? Yes _____ No X Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/20/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 35
 Investigator(s): Leigh Stevenson and Cameron Schuler Section, Township, Range: Section 05, Township 31 N, Range 13 E
 Landform (hillside, terrace, etc.): Tillplain Local relief (concave, convex, none): Concave
 Slope (%): 1 Lat: 41.167820 Long: -85.095853 Datum: WGS_1984
 Soil Map Unit Name: Blount loam, interlobate moraines, 0 to 2 percent slopes (BmA) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Remarks: DP 35 is representative of Wetland 16.	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1.	_____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																																
2.	_____	_____	_____	_____																																	
3.	_____	_____	_____	_____																																	
4.	_____	_____	_____	_____																																	
5.	_____	_____	_____	_____																																	
		=Total Cover																																			
Sapling/Shrub Stratum	(Plot size: <u>15 ft</u>)																																				
1.	_____	_____	_____	_____	Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td><td align="center"><u>10</u></td> <td>x 1 =</td><td align="center"><u>10</u></td> </tr> <tr> <td>FACW species</td><td align="center"><u>30</u></td> <td>x 2 =</td><td align="center"><u>60</u></td> </tr> <tr> <td>FAC species</td><td align="center"><u>0</u></td> <td>x 3 =</td><td align="center"><u>0</u></td> </tr> <tr> <td>FACU species</td><td align="center"><u>0</u></td> <td>x 4 =</td><td align="center"><u>0</u></td> </tr> <tr> <td>UPL species</td><td align="center"><u>0</u></td> <td>x 5 =</td><td align="center"><u>0</u></td> </tr> <tr> <td>Column Totals:</td><td align="center"><u>40</u> (A)</td> <td></td><td align="center"><u>70</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A =</td> <td></td><td align="center"><u>1.75</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>10</u>	x 1 =	<u>10</u>	FACW species	<u>30</u>	x 2 =	<u>60</u>	FAC species	<u>0</u>	x 3 =	<u>0</u>	FACU species	<u>0</u>	x 4 =	<u>0</u>	UPL species	<u>0</u>	x 5 =	<u>0</u>	Column Totals:	<u>40</u> (A)		<u>70</u> (B)	Prevalence Index = B/A =			<u>1.75</u>
Total % Cover of:		Multiply by:																																			
OBL species	<u>10</u>	x 1 =	<u>10</u>																																		
FACW species	<u>30</u>	x 2 =	<u>60</u>																																		
FAC species	<u>0</u>	x 3 =	<u>0</u>																																		
FACU species	<u>0</u>	x 4 =	<u>0</u>																																		
UPL species	<u>0</u>	x 5 =	<u>0</u>																																		
Column Totals:	<u>40</u> (A)		<u>70</u> (B)																																		
Prevalence Index = B/A =			<u>1.75</u>																																		
2.	_____	_____	_____	_____																																	
3.	_____	_____	_____	_____																																	
4.	_____	_____	_____	_____																																	
5.	_____	_____	_____	_____																																	
		=Total Cover																																			
Herb Stratum	(Plot size: <u>5 ft</u>)																																				
1.	<u>Echinochloa crus-galli</u>	<u>25</u>	Yes	FACW	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																
2.	<u>Typha angustifolia</u>	<u>10</u>	Yes	OBL																																	
3.	<u>Cyperus esculentus</u>	<u>5</u>	No	FACW																																	
4.	_____	_____	_____	_____																																	
5.	_____	_____	_____	_____																																	
6.	_____	_____	_____	_____																																	
7.	_____	_____	_____	_____																																	
8.	_____	_____	_____	_____																																	
9.	_____	_____	_____	_____																																	
10.	_____	_____	_____	_____																																	
		<u>40</u> =Total Cover																																			
Woody Vine Stratum	(Plot size: <u>30 ft</u>)																																				
1.	_____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																																
2.	_____	_____	_____	_____																																	
		=Total Cover																																			

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

SOIL

Sampling Point: DP 35

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 ¹	Loc ²		
0-3	10YR 3/2	100					Loamy/Clayey	
3-9	10YR 5/1	95	10YR 5/6	5	C	M	Loamy/Clayey	
9-18	10YR 5/1	80	10YR 5/4	20	C	M	Loamy/Clayey	

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

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:			Indicators for Problematic Hydric Soils ³ :		
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Coast Prairie Redox (A16)			
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Iron-Manganese Masses (F12)			
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (F21)			
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Dark Surface (S7)	<input type="checkbox"/> Very Shallow Dark Surface (F22)			
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Other (Explain in Remarks)			
<input type="checkbox"/> 2 cm Muck (A10)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)				
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)				
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)				
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)				
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	<input type="checkbox"/> Redox Depressions (F8)				

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

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____
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Remarks:
 This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input checked="" type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)	

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

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/20/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 36
 Investigator(s): Leigh Stevenson and Cameron Schuler Section, Township, Range: Section 05, Township 31 N, Range 13 E
 Landform (hillside, terrace, etc.): Tillplain Local relief (concave, convex, none): Convex
 Slope (%): 1 Lat: 41.167833 Long: -85.095863 Datum: WGS_1984
 Soil Map Unit Name: Blount loam, interlobate moraines, 0 to 2 percent slopes (BmA) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u> </u> No <u>X</u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Remarks: DP 36 is representative of the upland area surrounding Wetland 16.	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1.	_____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B)																
2.	_____	_____	_____	_____																	
3.	_____	_____	_____	_____																	
4.	_____	_____	_____	_____																	
5.	_____	_____	_____	_____																	
=Total Cover					Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;">Total % Cover of:</td> <td style="width:50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>10</u></td> <td>x 2 = <u>20</u></td> </tr> <tr> <td>FAC species <u>36</u></td> <td>x 3 = <u>108</u></td> </tr> <tr> <td>FACU species <u>50</u></td> <td>x 4 = <u>200</u></td> </tr> <tr> <td>UPL species <u>4</u></td> <td>x 5 = <u>20</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>348</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.48</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>10</u>	x 2 = <u>20</u>	FAC species <u>36</u>	x 3 = <u>108</u>	FACU species <u>50</u>	x 4 = <u>200</u>	UPL species <u>4</u>	x 5 = <u>20</u>	Column Totals: <u>100</u> (A)	<u>348</u> (B)	Prevalence Index = B/A = <u>3.48</u>	
Total % Cover of:	Multiply by:																				
OBL species <u>0</u>	x 1 = <u>0</u>																				
FACW species <u>10</u>	x 2 = <u>20</u>																				
FAC species <u>36</u>	x 3 = <u>108</u>																				
FACU species <u>50</u>	x 4 = <u>200</u>																				
UPL species <u>4</u>	x 5 = <u>20</u>																				
Column Totals: <u>100</u> (A)	<u>348</u> (B)																				
Prevalence Index = B/A = <u>3.48</u>																					
=Total Cover																					
Sapling/Shrub Stratum	(Plot size: <u>15 ft</u>)																				
1.	_____	_____	_____	_____																	
2.	_____	_____	_____	_____																	
3.	_____	_____	_____	_____																	
4.	_____	_____	_____	_____																	
5.	_____	_____	_____	_____																	
=Total Cover																					
Herb Stratum	(Plot size: <u>5 ft</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1.	<u>Poa pratensis</u>	<u>36</u>	<u>Yes</u>	<u>FAC</u>																	
2.	<u>Dipsacus fullonum</u>	<u>25</u>	<u>Yes</u>	<u>FACU</u>																	
3.	<u>Solidago altissima</u>	<u>15</u>	<u>No</u>	<u>FACU</u>																	
4.	<u>Asclepias verticillata</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
5.	<u>Symphotrichum novae-angliae</u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
6.	<u>Euthamia graminifolia</u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
7.	<u>Daucus carota</u>	<u>2</u>	<u>No</u>	<u>UPL</u>																	
8.	<u>Symphotrichum oolentangiense</u>	<u>2</u>	<u>No</u>	<u>UPL</u>																	
9.	_____	_____	_____	_____																	
10.	_____	_____	_____	_____																	
=Total Cover																					
Woody Vine Stratum	(Plot size: <u>30 ft</u>)				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>																
1.	_____	_____	_____	_____																	
2.	_____	_____	_____	_____																	
=Total Cover																					

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

SOIL

Sampling Point: DP 36

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 ¹	Loc ²		
0-5	10YR 3/2	100					Loamy/Clayey	
5-18	10YR 5/1	90	10YR 5/6	10	C	M	Loamy/Clayey	

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

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Gleyed Matrix (S4) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Dark Surface (S7) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Mucky Mineral (F1) |
| <input type="checkbox"/> 2 cm Muck (A10) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input checked="" type="checkbox"/> Depleted Below Dark Surface (A11) | <input checked="" type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) | <input type="checkbox"/> Redox Depressions (F8) |

Indicators for Problematic Hydric Soils³:

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators 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:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

Secondary Indicators (minimum of two required)

- | | | |
|--|---|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Surface Soil Cracks (B6) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Aquatic Fauna (B13) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> True Aquatic Plants (B14) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Stunted or Stressed Plants (D1) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Thin Muck Surface (C7) | <input type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Gauge or Well Data (D9) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | <input type="checkbox"/> Other (Explain in Remarks) | |

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? Yes No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/20/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 37
 Investigator(s): Leigh Stevenson and Cameron Schuler Section, Township, Range: Section 05, Township 31 N, Range 13 E
 Landform (hillside, terrace, etc.): Tillplain Local relief (concave, convex, none): Concave
 Slope (%): 0 Lat: 41.169196 Long: -85.093173 Datum: WGS_1984
 Soil Map Unit Name: Blount loam, interlobate moraines, 0 to 2 percent slopes (BmA) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Remarks: DP 37 is representative of Wetland 17.	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1.					Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>85.7%</u> (A/B)																
2.																					
3.																					
4.																					
5.																					
=Total Cover					Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;">Total % Cover of:</td> <td style="width:50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>15</u></td> <td>x 1 = <u>15</u></td> </tr> <tr> <td>FACW species <u>45</u></td> <td>x 2 = <u>90</u></td> </tr> <tr> <td>FAC species <u>5</u></td> <td>x 3 = <u>15</u></td> </tr> <tr> <td>FACU species <u>12</u></td> <td>x 4 = <u>48</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>77</u> (A)</td> <td><u>168</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.18</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>15</u>	x 1 = <u>15</u>	FACW species <u>45</u>	x 2 = <u>90</u>	FAC species <u>5</u>	x 3 = <u>15</u>	FACU species <u>12</u>	x 4 = <u>48</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>77</u> (A)	<u>168</u> (B)	Prevalence Index = B/A = <u>2.18</u>	
Total % Cover of:	Multiply by:																				
OBL species <u>15</u>	x 1 = <u>15</u>																				
FACW species <u>45</u>	x 2 = <u>90</u>																				
FAC species <u>5</u>	x 3 = <u>15</u>																				
FACU species <u>12</u>	x 4 = <u>48</u>																				
UPL species <u>0</u>	x 5 = <u>0</u>																				
Column Totals: <u>77</u> (A)	<u>168</u> (B)																				
Prevalence Index = B/A = <u>2.18</u>																					
=Total Cover																					
Sapling/Shrub Stratum	(Plot size: <u>15 ft</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1.	<u>Populus deltoides</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>																	
2.	<u>Salix nigra</u>	<u>2</u>	<u>Yes</u>	<u>OBL</u>																	
3.																					
4.																					
=Total Cover																					
=Total Cover																					
Herb Stratum	(Plot size: <u>5 ft</u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																
1.	<u>Echinochloa crus-galli</u>	<u>25</u>	<u>Yes</u>	<u>FACW</u>																	
2.	<u>Panicum dichotomiflorum</u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>																	
3.	<u>Bidens frondosa</u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>																	
4.	<u>Juncus effusus</u>	<u>10</u>	<u>Yes</u>	<u>OBL</u>																	
5.	<u>Trifolium pratense</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>																	
6.	<u>Typha angustifolia</u>	<u>3</u>	<u>No</u>	<u>OBL</u>																	
7.	<u>Dipsacus fullonum</u>	<u>2</u>	<u>No</u>	<u>FACU</u>																	
8.																					
9.																					
=Total Cover																					
=Total Cover																					
Woody Vine Stratum	(Plot size: <u>30 ft</u>)																				
1.																					
2.																					
=Total Cover																					

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

SOIL

Sampling Point: DP 37

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 ¹	Loc ²		
0-18	10YR 3/1	97	10YR 3/6	3	C	M	Loamy/Clayey	Prominent redox concentrations

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

²Location: 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)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators 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:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? Yes No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/20/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 38
 Investigator(s): Leigh Stevenson and Cameron Schuler Section, Township, Range: Section 05, Township 31 N, Range 13 E
 Landform (hillside, terrace, etc.): Tillplain Local relief (concave, convex, none): Flat
 Slope (%): 0 Lat: 41.169139 Long: -85.093108 Datum: WGS_1984
 Soil Map Unit Name: Blount loam, interlobate moraines, 0 to 2 percent slopes (BmA) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Remarks: DP 38 is representative of the upland area surrounding Wetland 17.	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____					Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>71.4%</u> (A/B)																
2. _____																					
3. _____																					
4. _____																					
5. _____																					
=Total Cover																					
Sapling/Shrub Stratum	(Plot size: <u>15 ft</u>)				Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;">Total % Cover of:</td> <td style="width:50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>17</u></td> <td>x 2 = <u>34</u></td> </tr> <tr> <td>FAC species <u>40</u></td> <td>x 3 = <u>120</u></td> </tr> <tr> <td>FACU species <u>35</u></td> <td>x 4 = <u>140</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>92</u> (A)</td> <td><u>294</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.20</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>17</u>	x 2 = <u>34</u>	FAC species <u>40</u>	x 3 = <u>120</u>	FACU species <u>35</u>	x 4 = <u>140</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>92</u> (A)	<u>294</u> (B)	Prevalence Index = B/A = <u>3.20</u>	
Total % Cover of:	Multiply by:																				
OBL species <u>0</u>	x 1 = <u>0</u>																				
FACW species <u>17</u>	x 2 = <u>34</u>																				
FAC species <u>40</u>	x 3 = <u>120</u>																				
FACU species <u>35</u>	x 4 = <u>140</u>																				
UPL species <u>0</u>	x 5 = <u>0</u>																				
Column Totals: <u>92</u> (A)	<u>294</u> (B)																				
Prevalence Index = B/A = <u>3.20</u>																					
1. <u>Populus deltoides</u>		<u>5</u>	<u>Yes</u>	<u>FAC</u>																	
2. <u>Salix interior</u>		<u>2</u>	<u>Yes</u>	<u>FACW</u>																	
3. _____																					
4. _____																					
5. _____																					
=Total Cover																					
Herb Stratum	(Plot size: <u>5 ft</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. <u>Setaria pumila</u>		<u>25</u>	<u>Yes</u>	<u>FAC</u>																	
2. <u>Trifolium pratense</u>		<u>15</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Ambrosia artemisiifolia</u>		<u>10</u>	<u>Yes</u>	<u>FACU</u>																	
4. <u>Echinochloa crus-galli</u>		<u>10</u>	<u>Yes</u>	<u>FACW</u>																	
5. <u>Poa pratensis</u>		<u>10</u>	<u>Yes</u>	<u>FAC</u>																	
6. <u>Solidago altissima</u>		<u>5</u>	<u>No</u>	<u>FACU</u>																	
7. <u>Symphotrichum novae-angliae</u>		<u>5</u>	<u>No</u>	<u>FACW</u>																	
8. <u>Dipsacus fullonum</u>		<u>3</u>	<u>No</u>	<u>FACU</u>																	
9. <u>Setaria faberi</u>		<u>2</u>	<u>No</u>	<u>FACU</u>																	
10. _____																					
=Total Cover																					
Woody Vine Stratum	(Plot size: <u>30 ft</u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																
1. _____																					
2. _____																					
=Total Cover																					

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

SOIL

Sampling Point: DP 38

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 ¹	Loc ²		
0-14	10YR 4/2	95	10YR 5/4	5	C	M	Loamy/Clayey	Distinct redox concentrations
14-18	10YR 4/1	90	10YR 4/6	10	C	M	Loamy/Clayey	

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

²Location: 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)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators 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:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? Yes No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/27/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 39
 Investigator(s): Josh Iddings, Cameron Schuler, and Alyssa Damiano Section, Township, Range: Section 05, Township 31 N, Range 13 E
 Landform (hillside, terrace, etc.): Tillplain Local relief (concave, convex, none): Concave
 Slope (%): 0.5 Lat: 41.172257 Long: -85.087207 Datum: WGS_1984
 Soil Map Unit Name: Glynwood silt loam, 2 to 6 percent slopes, eroded (MrB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Remarks: DP 39 is representative of Wetland 18.	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1.					Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B)
2.					
3.					
4.					
5.					
		=Total Cover			
Sapling/Shrub Stratum	(Plot size: <u>15 ft</u>)				Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>56</u> x 2 = <u>112</u> FAC species <u>5</u> x 3 = <u>15</u> FACU species <u>2</u> x 4 = <u>8</u> UPL species <u>25</u> x 5 = <u>125</u> Column Totals: <u>88</u> (A) <u>260</u> (B) Prevalence Index = B/A = <u>2.95</u>
1.					
2.					
3.					
4.					
		=Total Cover			
Herb Stratum	(Plot size: <u>5 ft</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1.	<u>Echinochloa crus-galli</u>	<u>35</u>	<u>Yes</u>	<u>FACW</u>	
2.	<u>Glycine max</u>	<u>25</u>	<u>Yes</u>	<u>UPL</u>	
3.	<u>Panicum dichotomiflorum</u>	<u>15</u>	<u>No</u>	<u>FACW</u>	
4.	<u>Panicum capillare</u>	<u>5</u>	<u>No</u>	<u>FAC</u>	
5.	<u>Cyperus esculentus</u>	<u>5</u>	<u>No</u>	<u>FACW</u>	
6.	<u>Schedonorus arundinaceus</u>	<u>2</u>	<u>No</u>	<u>FACU</u>	
7.	<u>Persicaria maculosa</u>	<u>1</u>	<u>No</u>	<u>FACW</u>	
8.					
9.					
		<u>88</u> =Total Cover			
Woody Vine Stratum	(Plot size: <u>30 ft</u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1.					
2.					
		=Total Cover			

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

SOIL

Sampling Point: DP 39

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 ¹	Loc ²		
0-4	10YR 3/2	100					Loamy/Clayey	
4-10	10YR 3/1	98	10YR 4/4	2	C	M	Loamy/Clayey	
10-18	10YR 4/1	90	10YR 5/6	10	C	M	Loamy/Clayey	

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

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Gleyed Matrix (S4) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Dark Surface (S7) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Mucky Mineral (F1) |
| <input type="checkbox"/> 2 cm Muck (A10) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input checked="" type="checkbox"/> Depleted Below Dark Surface (A11) | <input checked="" type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input checked="" type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) | <input type="checkbox"/> Redox Depressions (F8) |

Indicators for Problematic Hydric Soils³:

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators 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:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Aquatic Fauna (B13) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> True Aquatic Plants (B14) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Thin Muck Surface (C7) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Gauge or Well Data (D9) |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | <input type="checkbox"/> Other (Explain in Remarks) |

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): _____
Water Table Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): _____
Saturation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): _____

(includes capillary fringe)

Wetland Hydrology Present? Yes No

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/20/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 40
 Investigator(s): Josh Iddings, Cameron Schuler, and Alyssa Damiano Section, Township, Range: Section 05, Township 31 N, Range 13 E
 Landform (hillside, terrace, etc.): Tillplain Local relief (concave, convex, none): Convex
 Slope (%): 2 Lat: 41.172418 Long: -85.087003 Datum: WGS_1984
 Soil Map Unit Name: Glynwood silt loam, 2 to 6 percent slopes (MrB) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u> </u> No <u>X</u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Remarks: DP 40 is representative of the upland area surrounding Wetland 18.	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1.					Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)																																
2.																																					
3.																																					
4.																																					
5.																																					
		=Total Cover																																			
Sapling/Shrub Stratum	(Plot size: <u>15 ft</u>)																																				
1.	<u>Cornus drummondii</u>	<u>2</u>	<u>No</u>	<u>FAC</u>	Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td align="right" colspan="2">Total % Cover of:</td> <td align="right" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td><td align="center"><u>0</u></td> <td>x 1 =</td><td align="center"><u>0</u></td> </tr> <tr> <td>FACW species</td><td align="center"><u>4</u></td> <td>x 2 =</td><td align="center"><u>8</u></td> </tr> <tr> <td>FAC species</td><td align="center"><u>5</u></td> <td>x 3 =</td><td align="center"><u>15</u></td> </tr> <tr> <td>FACU species</td><td align="center"><u>79</u></td> <td>x 4 =</td><td align="center"><u>316</u></td> </tr> <tr> <td>UPL species</td><td align="center"><u>1</u></td> <td>x 5 =</td><td align="center"><u>5</u></td> </tr> <tr> <td>Column Totals:</td><td align="center"><u>89</u> (A)</td> <td></td><td align="center"><u>344</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A =</td><td align="center" colspan="2"><u>3.87</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>0</u>	x 1 =	<u>0</u>	FACW species	<u>4</u>	x 2 =	<u>8</u>	FAC species	<u>5</u>	x 3 =	<u>15</u>	FACU species	<u>79</u>	x 4 =	<u>316</u>	UPL species	<u>1</u>	x 5 =	<u>5</u>	Column Totals:	<u>89</u> (A)		<u>344</u> (B)	Prevalence Index = B/A =		<u>3.87</u>	
Total % Cover of:		Multiply by:																																			
OBL species	<u>0</u>	x 1 =	<u>0</u>																																		
FACW species	<u>4</u>	x 2 =	<u>8</u>																																		
FAC species	<u>5</u>	x 3 =	<u>15</u>																																		
FACU species	<u>79</u>	x 4 =	<u>316</u>																																		
UPL species	<u>1</u>	x 5 =	<u>5</u>																																		
Column Totals:	<u>89</u> (A)		<u>344</u> (B)																																		
Prevalence Index = B/A =		<u>3.87</u>																																			
2.																																					
3.																																					
4.																																					
5.																																					
		=Total Cover																																			
Herb Stratum	(Plot size: <u>5 ft</u>)																																				
1.	<u>Dipsacus fullonum</u>	<u>65</u>	<u>Yes</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																
2.	<u>Schedonorus arundinaceus</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																																	
3.	<u>Solidago altissima</u>	<u>3</u>	<u>No</u>	<u>FACU</u>																																	
4.	<u>Bidens frondosa</u>	<u>3</u>	<u>No</u>	<u>FACW</u>																																	
5.	<u>Setaria pumila</u>	<u>2</u>	<u>No</u>	<u>FAC</u>																																	
6.	<u>Setaria viridis</u>	<u>1</u>	<u>No</u>	<u>UPL</u>																																	
7.	<u>Symphytotrichum lateriflorum</u>	<u>1</u>	<u>No</u>	<u>FACW</u>																																	
8.	<u>Panicum capillare</u>	<u>1</u>	<u>No</u>	<u>FAC</u>																																	
9.	<u>Ambrosia artemisiifolia</u>	<u>1</u>	<u>No</u>	<u>FACU</u>																																	
10.																																					
		=Total Cover																																			
Woody Vine Stratum	(Plot size: <u>30 ft</u>)																																				
1.					Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>																																
2.																																					
		=Total Cover																																			

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

SOIL

Sampling Point: DP 40

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 ¹	Loc ²		
0-5	10YR 3/2	98	10YR 4/3	2	C	M	Loamy/Clayey	Faint redox concentrations
5-18	10YR 4/1	97	10YR 5/4	3	C	M	Loamy/Clayey	

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

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Gleyed Matrix (S4) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Dark Surface (S7) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Mucky Mineral (F1) |
| <input type="checkbox"/> 2 cm Muck (A10) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input checked="" type="checkbox"/> Depleted Below Dark Surface (A11) | <input checked="" type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) | <input type="checkbox"/> Redox Depressions (F8) |

Indicators for Problematic Hydric Soils³:

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators 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:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Aquatic Fauna (B13) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> True Aquatic Plants (B14) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Thin Muck Surface (C7) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Gauge or Well Data (D9) |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | <input type="checkbox"/> Other (Explain in Remarks) |

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): _____
Water Table Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): _____
Saturation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): _____

(includes capillary fringe)

Wetland Hydrology Present? Yes No

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/27/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 41
 Investigator(s): Josh Iddings, Cameron Schuler, and Alyssa Damiano Section, Township, Range: Section 05, Township 31 N, Range 13 E
 Landform (hillside, terrace, etc.): Tillplain Local relief (concave, convex, none): Concave
 Slope (%): 0.5 Lat: 41.172620 Long: -85.086968 Datum: WGS_1984
 Soil Map Unit Name: Glynwood silt loam, 2 to 6 percent slopes (MrB) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Remarks: DP 41 is representative of Wetland 19.	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1.					Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B)
2.					
3.					
4.					
5.					
		=Total Cover			
Sapling/Shrub Stratum	(Plot size: <u>15 ft</u>)				
1.					Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>40</u> x 2 = <u>80</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>20</u> x 4 = <u>80</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>60</u> (A) <u>160</u> (B) Prevalence Index = B/A = <u>2.67</u>
2.					
3.					
4.					
5.					
		=Total Cover			
Herb Stratum	(Plot size: <u>5 ft</u>)				
1.	<u>Echinochloa crus-galli</u>	<u>40</u>	<u>Yes</u>	<u>FACW</u>	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2.	<u>Schedonorus arundinaceus</u>	<u>20</u>	<u>Yes</u>	<u>FACU</u>	
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
		<u>60</u> =Total Cover			
Woody Vine Stratum	(Plot size: <u>30 ft</u>)				
1.					Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
2.					
		=Total Cover			

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

SOIL

Sampling Point: DP 41

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 ¹	Loc ²		
0-4	10YR 3/1	98	10YR 3/4	2	C	M	Loamy/Clayey	Distinct redox concentrations
4-6	10YR 4/4	97	10YR 4/1	3	D	M	Loamy/Clayey	
6-18	10YR 4/4	90	10YR 5/1	10	D	M	Loamy/Clayey	

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

²Location: 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)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators 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:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? Yes No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/27/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 42
 Investigator(s): Josh Iddings, Cameron Schuler, and Alyssa Damiano Section, Township, Range: Section 05, Township 31 N, Range 13 E
 Landform (hillside, terrace, etc.): Tillplain Local relief (concave, convex, none): Convex
 Slope (%): 0.5 Lat: 41.172632 Long: -85.086993 Datum: WGS_1984
 Soil Map Unit Name: Glynwood silt loam, 2 to 6 percent slopes (MrB) NWI classification: N/A

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 type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: DP 42 is representative of the upland area surrounding Wetland 19.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <u>Ulmus americana</u>	<u>5</u>	Yes	FACW	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>40.0%</u> (A/B)																																
2. <u>Picea abies</u>	<u>3</u>	Yes	UPL																																	
3. <u>Pinus resinosa</u>	<u>2</u>	Yes	FACU																																	
4. _____																																				
5. _____																																				
	<u>10</u>	=Total Cover																																		
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)																																				
1. _____				Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td align="center"><u>0</u></td> <td>x 1 =</td> <td align="center"><u>0</u></td> </tr> <tr> <td>FACW species</td> <td align="center"><u>5</u></td> <td>x 2 =</td> <td align="center"><u>10</u></td> </tr> <tr> <td>FAC species</td> <td align="center"><u>65</u></td> <td>x 3 =</td> <td align="center"><u>195</u></td> </tr> <tr> <td>FACU species</td> <td align="center"><u>39</u></td> <td>x 4 =</td> <td align="center"><u>156</u></td> </tr> <tr> <td>UPL species</td> <td align="center"><u>3</u></td> <td>x 5 =</td> <td align="center"><u>15</u></td> </tr> <tr> <td>Column Totals:</td> <td align="center"><u>112</u> (A)</td> <td></td> <td align="center"><u>376</u> (B)</td> </tr> <tr> <td colspan="4">Prevalence Index = B/A = <u>3.36</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>0</u>	x 1 =	<u>0</u>	FACW species	<u>5</u>	x 2 =	<u>10</u>	FAC species	<u>65</u>	x 3 =	<u>195</u>	FACU species	<u>39</u>	x 4 =	<u>156</u>	UPL species	<u>3</u>	x 5 =	<u>15</u>	Column Totals:	<u>112</u> (A)		<u>376</u> (B)	Prevalence Index = B/A = <u>3.36</u>			
Total % Cover of:		Multiply by:																																		
OBL species	<u>0</u>	x 1 =	<u>0</u>																																	
FACW species	<u>5</u>	x 2 =	<u>10</u>																																	
FAC species	<u>65</u>	x 3 =	<u>195</u>																																	
FACU species	<u>39</u>	x 4 =	<u>156</u>																																	
UPL species	<u>3</u>	x 5 =	<u>15</u>																																	
Column Totals:	<u>112</u> (A)		<u>376</u> (B)																																	
Prevalence Index = B/A = <u>3.36</u>																																				
2. _____																																				
3. _____																																				
4. _____																																				
5. _____																																				
Herb Stratum (Plot size: <u>5 ft</u>)																																				
1. <u>Poa pratensis</u>	<u>60</u>	Yes	FAC	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																
2. <u>Trifolium repens</u>	<u>20</u>	Yes	FACU																																	
3. <u>Schedonorus arundinaceus</u>	<u>10</u>	No	FACU																																	
4. <u>Plantago lanceolata</u>	<u>4</u>	No	FACU																																	
5. <u>Plantago major</u>	<u>3</u>	No	FAC																																	
6. <u>Taraxacum officinale</u>	<u>3</u>	No	FACU																																	
7. _____																																				
8. _____																																				
9. _____																																				
10. _____																																				
	<u>100</u>	=Total Cover																																		
Woody Vine Stratum (Plot size: <u>30 ft</u>)																																				
1. <u>Toxicodendron radicans</u>	<u>2</u>	No	FAC	Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>																																
2. _____																																				
	<u>2</u>	=Total Cover																																		

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

SOIL

Sampling Point: DP 42

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 ¹	Loc ²		
0-4	10YR 3/2	100					Loamy/Clayey	
4-18	10YR 4/2	100					Loamy/Clayey	

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

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Gleyed Matrix (S4) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Dark Surface (S7) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Mucky Mineral (F1) |
| <input type="checkbox"/> 2 cm Muck (A10) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) | <input type="checkbox"/> Redox Depressions (F8) |

Indicators for Problematic Hydric Soils³:

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators 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 X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

Secondary Indicators (minimum of two required)

- | | | |
|--|---|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Surface Soil Cracks (B6) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Aquatic Fauna (B13) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> True Aquatic Plants (B14) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Stunted or Stressed Plants (D1) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Thin Muck Surface (C7) | <input type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Gauge or Well Data (D9) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | <input type="checkbox"/> Other (Explain in Remarks) | |

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
 Water Table Present? Yes _____ No X Depth (inches): _____
 Saturation Present? Yes _____ No X Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/27/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 43
 Investigator(s): Josh Iddings, Cameron Schuler, and Alyssa Damiano Section, Township, Range: Section 04, Township 31 N, Range 13 E
 Landform (hillside, terrace, etc.): Tillplain Local relief (concave, convex, none): Concave
 Slope (%): 0 Lat: 41.173806 Long: -85.083933 Datum: WGS_1984
 Soil Map Unit Name: Morley silty clay loam, 6 to 12 percent slopes, severely eroded (MsC3) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Remarks: DP 43 is representative of Wetland 20.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <u>Acer saccharinum</u>	<u>85</u>	<u>Yes</u>	<u>FACW</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>85.7%</u> (A/B)																																
2. <u>Populus deltoides</u>	<u>10</u>	<u>No</u>	<u>FAC</u>																																	
3. <u>Salix nigra</u>	<u>5</u>	<u>No</u>	<u>OBL</u>																																	
4. <u> </u>																																				
5. <u> </u>																																				
<u>100</u> =Total Cover				Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td align="center"><u>5</u></td> <td>x 1 =</td> <td align="center"><u>5</u></td> </tr> <tr> <td>FACW species</td> <td align="center"><u>85</u></td> <td>x 2 =</td> <td align="center"><u>170</u></td> </tr> <tr> <td>FAC species</td> <td align="center"><u>40</u></td> <td>x 3 =</td> <td align="center"><u>120</u></td> </tr> <tr> <td>FACU species</td> <td align="center"><u>1</u></td> <td>x 4 =</td> <td align="center"><u>4</u></td> </tr> <tr> <td>UPL species</td> <td align="center"><u>0</u></td> <td>x 5 =</td> <td align="center"><u>0</u></td> </tr> <tr> <td>Column Totals:</td> <td align="center"><u>131</u> (A)</td> <td></td> <td align="center"><u>299</u> (B)</td> </tr> <tr> <td align="center" colspan="4">Prevalence Index = B/A = <u>2.28</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>5</u>	x 1 =	<u>5</u>	FACW species	<u>85</u>	x 2 =	<u>170</u>	FAC species	<u>40</u>	x 3 =	<u>120</u>	FACU species	<u>1</u>	x 4 =	<u>4</u>	UPL species	<u>0</u>	x 5 =	<u>0</u>	Column Totals:	<u>131</u> (A)		<u>299</u> (B)	Prevalence Index = B/A = <u>2.28</u>			
Total % Cover of:		Multiply by:																																		
OBL species	<u>5</u>	x 1 =	<u>5</u>																																	
FACW species	<u>85</u>	x 2 =	<u>170</u>																																	
FAC species	<u>40</u>	x 3 =	<u>120</u>																																	
FACU species	<u>1</u>	x 4 =	<u>4</u>																																	
UPL species	<u>0</u>	x 5 =	<u>0</u>																																	
Column Totals:	<u>131</u> (A)		<u>299</u> (B)																																	
Prevalence Index = B/A = <u>2.28</u>																																				
<u> </u>																																				
<u> </u>																																				
<u> </u>																																				
<u> </u>																																				
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)																																				
1. <u>Cornus racemosa</u>	<u>3</u>	<u>Yes</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																
2. <u>Cornus drummondii</u>	<u>1</u>	<u>Yes</u>	<u>FAC</u>																																	
3. <u>Ulmus rubra</u>	<u>1</u>	<u>Yes</u>	<u>FAC</u>																																	
4. <u>Prunus pensylvanica</u>	<u>1</u>	<u>Yes</u>	<u>FACU</u>																																	
5. <u> </u>																																				
<u>6</u> =Total Cover				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																																
<u> </u>																																				
<u> </u>																																				
<u> </u>																																				
<u> </u>																																				
Herb Stratum (Plot size: <u>5 ft</u>)																																				
1. <u>Symphytotrichum lanceolatum</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>	Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																																
2. <u> </u>																																				
3. <u> </u>																																				
4. <u> </u>																																				
5. <u> </u>																																				
<u>5</u> =Total Cover				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																																
<u> </u>																																				
<u> </u>																																				
<u> </u>																																				
<u> </u>																																				
Woody Vine Stratum (Plot size: <u>30 ft</u>)																																				
1. <u>Toxicodendron radicans</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>	Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																																
2. <u> </u>																																				
3. <u> </u>																																				
4. <u> </u>																																				
<u>20</u> =Total Cover																																				

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

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 ¹	Loc ²		
0-3	10YR 3/2	98	10YR 4/4	2	C	M	Loamy/Clayey	Distinct redox concentrations
3-18	10YR 3/1	95	10YR 4/4	5	C	M	Loamy/Clayey	

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

²Location: 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)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators 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:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? Yes No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

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

Inundation was visible in this area on 2022 NearMap aerial photography.

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/27/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 44
 Investigator(s): Josh Iddings, Cameron Schuler, and Alyssa Damiano Section, Township, Range: Section 04, Township 31 N, Range 13 E
 Landform (hillside, terrace, etc.): Tillplain Local relief (concave, convex, none): Flat
 Slope (%): 2 Lat: 41.173751 Long: -85.084039 Datum: WGS_1984
 Soil Map Unit Name: Morley silty clay loam, 6 to 12 percent slopes, severely eroded (MsC3) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u> </u> No <u>X</u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Remarks: DP 44 is representative of the upland area surrounding Wetland 20.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B)																
1. <u>Acer saccharinum</u>	<u>75</u>	Yes	FACW																	
2. <u>Prunus serotina</u>	<u>10</u>	No	FACU																	
3. <u>Acer negundo</u>	<u>10</u>	No	FAC																	
4. <u>Fraxinus pennsylvanica</u>	<u>5</u>	No	FACW																	
5. _____	<u> </u>																			
	<u>100</u> =Total Cover																			
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet: <table style="width: 100%; border: none;"> <tr> <td style="text-align: right;">Total % Cover of:</td> <td style="text-align: center;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>82</u></td> <td>x 2 = <u>164</u></td> </tr> <tr> <td>FAC species <u>31</u></td> <td>x 3 = <u>93</u></td> </tr> <tr> <td>FACU species <u>44</u></td> <td>x 4 = <u>176</u></td> </tr> <tr> <td>UPL species <u>2</u></td> <td>x 5 = <u>10</u></td> </tr> <tr> <td>Column Totals: <u>159</u> (A)</td> <td><u>443</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>2.79</u></td> </tr> </table>	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>31</u>	x 3 = <u>93</u>	FACU species <u>44</u>	x 4 = <u>176</u>	UPL species <u>2</u>	x 5 = <u>10</u>	Column Totals: <u>159</u> (A)	<u>443</u> (B)	Prevalence Index = B/A = <u>2.79</u>	
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>31</u>	x 3 = <u>93</u>																			
FACU species <u>44</u>	x 4 = <u>176</u>																			
UPL species <u>2</u>	x 5 = <u>10</u>																			
Column Totals: <u>159</u> (A)	<u>443</u> (B)																			
Prevalence Index = B/A = <u>2.79</u>																				
1. <u>Lonicera tatarica</u>	<u>25</u>	Yes	FACU																	
2. <u>Cornus drummondii</u>	<u>5</u>	No	FAC																	
3. <u>Elaeagnus umbellata</u>	<u>2</u>	No	UPL																	
4. _____	<u> </u>																			
5. _____	<u> </u>																			
	<u>32</u> =Total Cover																			
Herb Stratum (Plot size: <u>5 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. <u>Geum canadense</u>	<u>15</u>	Yes	FAC																	
2. <u>Symphotrichum lateriflorum</u>	<u>2</u>	No	FACW																	
3. <u>Sanicula odorata</u>	<u>1</u>	No	FAC																	
4. <u>Dipsacus fullonum</u>	<u>1</u>	No	FACU																	
5. _____	<u> </u>																			
6. _____	<u> </u>																			
7. _____	<u> </u>																			
8. _____	<u> </u>																			
9. _____	<u> </u>																			
10. _____	<u> </u>																			
	<u>19</u> =Total Cover																			
Woody Vine Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>																
1. <u>Vitis labrusca</u>	<u>8</u>	Yes	FACU																	
2. _____	<u> </u>																			
	<u>8</u> =Total Cover																			

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

SOIL

Sampling Point: DP 44

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 ¹	Loc ²		
0-5	10YR 3/2	97	10YR 4/1	3	D	M	Loamy/Clayey	
5-12	10YR 4/2	98	10YR 5/4	2	C	M	Loamy/Clayey	
12-18	10YR 5/2	95	10YR 4/6	5	C	M	Loamy/Clayey	

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

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Gleyed Matrix (S4) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Dark Surface (S7) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Mucky Mineral (F1) |
| <input type="checkbox"/> 2 cm Muck (A10) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input checked="" type="checkbox"/> Depleted Below Dark Surface (A11) | <input checked="" type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) | <input type="checkbox"/> Redox Depressions (F8) |

Indicators for Problematic Hydric Soils³:

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators 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:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Aquatic Fauna (B13) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> True Aquatic Plants (B14) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Thin Muck Surface (C7) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Gauge or Well Data (D9) |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | <input type="checkbox"/> Other (Explain in Remarks) |

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): _____
Water Table Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): _____
Saturation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches): _____

(includes capillary fringe)

Wetland Hydrology Present? Yes No

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/27/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 45
 Investigator(s): Josh Iddings, Cameron Schuler, and Alyssa Damiano Section, Township, Range: Section 04, Township 31 N, Range 13 E
 Landform (hillside, terrace, etc.): Tillplain Local relief (concave, convex, none): Concave
 Slope (%): 0.5 Lat: 41.177067 Long: -85.077828 Datum: WGS_1984
 Soil Map Unit Name: Glynwood silt loam, 2 to 6 percent slopes, eroded (MrB2) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Remarks: DP 45 is representative of Wetland 21.	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1.					Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																																
2.																																					
3.																																					
4.																																					
5.																																					
		=Total Cover																																			
Sapling/Shrub Stratum	(Plot size: <u>15 ft</u>)																																				
1.					Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td><td align="center"><u>30</u></td> <td>x 1 =</td><td align="center"><u>30</u></td> </tr> <tr> <td>FACW species</td><td align="center"><u>70</u></td> <td>x 2 =</td><td align="center"><u>140</u></td> </tr> <tr> <td>FAC species</td><td align="center"><u>0</u></td> <td>x 3 =</td><td align="center"><u>0</u></td> </tr> <tr> <td>FACU species</td><td align="center"><u>0</u></td> <td>x 4 =</td><td align="center"><u>0</u></td> </tr> <tr> <td>UPL species</td><td align="center"><u>0</u></td> <td>x 5 =</td><td align="center"><u>0</u></td> </tr> <tr> <td>Column Totals:</td><td align="center"><u>100</u> (A)</td> <td></td><td align="center"><u>170</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A =</td> <td></td><td align="center"><u>1.70</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>30</u>	x 1 =	<u>30</u>	FACW species	<u>70</u>	x 2 =	<u>140</u>	FAC species	<u>0</u>	x 3 =	<u>0</u>	FACU species	<u>0</u>	x 4 =	<u>0</u>	UPL species	<u>0</u>	x 5 =	<u>0</u>	Column Totals:	<u>100</u> (A)		<u>170</u> (B)	Prevalence Index = B/A =			<u>1.70</u>
Total % Cover of:		Multiply by:																																			
OBL species	<u>30</u>	x 1 =	<u>30</u>																																		
FACW species	<u>70</u>	x 2 =	<u>140</u>																																		
FAC species	<u>0</u>	x 3 =	<u>0</u>																																		
FACU species	<u>0</u>	x 4 =	<u>0</u>																																		
UPL species	<u>0</u>	x 5 =	<u>0</u>																																		
Column Totals:	<u>100</u> (A)		<u>170</u> (B)																																		
Prevalence Index = B/A =			<u>1.70</u>																																		
2.																																					
3.																																					
4.																																					
5.																																					
		=Total Cover																																			
Herb Stratum	(Plot size: <u>5 ft</u>)																																				
1.	<u>Echinochloa crus-galli</u>	<u>35</u>	Yes	FACW	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																
2.	<u>Carex lurida</u>	<u>25</u>	Yes	OBL																																	
3.	<u>Phalaris arundinacea</u>	<u>20</u>	Yes	FACW																																	
4.	<u>Persicaria maculosa</u>	<u>10</u>	No	FACW																																	
5.	<u>Bidens frondosa</u>	<u>5</u>	No	FACW																																	
6.	<u>Leersia oryzoides</u>	<u>5</u>	No	OBL																																	
7.																																					
8.																																					
9.																																					
10.																																					
		100 =Total Cover																																			
Woody Vine Stratum	(Plot size: <u>30 ft</u>)																																				
1.					Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																																
2.																																					
		=Total Cover																																			

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

SOIL

Sampling Point: DP 45

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 ¹	Loc ²		
0-10	10YR 2/1	100					Loamy/Clayey	
10-18	10YR 4/1	90	10YR 4/4	10	C	M	Loamy/Clayey	

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

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Gleyed Matrix (S4) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Dark Surface (S7) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Mucky Mineral (F1) |
| <input type="checkbox"/> 2 cm Muck (A10) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input checked="" type="checkbox"/> Depleted Below Dark Surface (A11) | <input checked="" type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) | <input type="checkbox"/> Redox Depressions (F8) |

Indicators for Problematic Hydric Soils³:

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators 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:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- | | |
|--|---|
| <input checked="" type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) |
| <input checked="" type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Aquatic Fauna (B13) |
| <input checked="" type="checkbox"/> Saturation (A3) | <input type="checkbox"/> True Aquatic Plants (B14) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Thin Muck Surface (C7) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Gauge or Well Data (D9) |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | <input type="checkbox"/> Other (Explain in Remarks) |

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Depth (inches): <u>1</u>
Water Table Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Depth (inches): <u>9</u>
Saturation Present? (includes capillary fringe)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Depth (inches): <u>0</u>

Wetland Hydrology Present? Yes No

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

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Clinton Street Roadway Improvement Project City/County: Fort Wayne/Allen Sampling Date: 9/27/2022
 Applicant/Owner: City of Fort Wayne and Allen Co. Highway Department State: IN Sampling Point: DP 46
 Investigator(s): Josh Iddings, Cameron Schuler, and Alyssa Damiano Section, Township, Range: Section 04, Township 31 N, Range 13 E
 Landform (hillside, terrace, etc.): Tillplain Local relief (concave, convex, none): Flat
 Slope (%): 1 Lat: 41.177048 Long: -85.077820 Datum: WGS_1984
 Soil Map Unit Name: Glynwood silt loam, 2 to 6 percent slopes, eroded (MrB2) NWI classification: N/A

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 type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: DP 46 is representative of the upland area surrounding Wetland 21.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <u>Acer saccharinum</u>	<u>20</u>	Yes	FACW	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>40.0%</u> (A/B)																																
2. <u>Picea abies</u>	<u>10</u>	Yes	UPL																																	
3. <u>Acer negundo</u>	<u>5</u>	No	FAC																																	
4. _____																																				
5. _____																																				
<u>35</u> =Total Cover				Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td align="center" colspan="2">Total % Cover of:</td> <td align="center" colspan="2">Multiply by:</td> </tr> <tr> <td>OBL species</td> <td align="center"><u>0</u></td> <td>x 1 =</td> <td align="center"><u>0</u></td> </tr> <tr> <td>FACW species</td> <td align="center"><u>20</u></td> <td>x 2 =</td> <td align="center"><u>40</u></td> </tr> <tr> <td>FAC species</td> <td align="center"><u>20</u></td> <td>x 3 =</td> <td align="center"><u>60</u></td> </tr> <tr> <td>FACU species</td> <td align="center"><u>107</u></td> <td>x 4 =</td> <td align="center"><u>428</u></td> </tr> <tr> <td>UPL species</td> <td align="center"><u>10</u></td> <td>x 5 =</td> <td align="center"><u>50</u></td> </tr> <tr> <td>Column Totals:</td> <td align="center"><u>157</u> (A)</td> <td></td> <td align="center"><u>578</u> (B)</td> </tr> <tr> <td align="center" colspan="4">Prevalence Index = B/A = <u>3.68</u></td> </tr> </table>	Total % Cover of:		Multiply by:		OBL species	<u>0</u>	x 1 =	<u>0</u>	FACW species	<u>20</u>	x 2 =	<u>40</u>	FAC species	<u>20</u>	x 3 =	<u>60</u>	FACU species	<u>107</u>	x 4 =	<u>428</u>	UPL species	<u>10</u>	x 5 =	<u>50</u>	Column Totals:	<u>157</u> (A)		<u>578</u> (B)	Prevalence Index = B/A = <u>3.68</u>			
Total % Cover of:		Multiply by:																																		
OBL species	<u>0</u>	x 1 =	<u>0</u>																																	
FACW species	<u>20</u>	x 2 =	<u>40</u>																																	
FAC species	<u>20</u>	x 3 =	<u>60</u>																																	
FACU species	<u>107</u>	x 4 =	<u>428</u>																																	
UPL species	<u>10</u>	x 5 =	<u>50</u>																																	
Column Totals:	<u>157</u> (A)		<u>578</u> (B)																																	
Prevalence Index = B/A = <u>3.68</u>																																				
Sapling/Shrub Stratum (Plot size: <u>15 ft</u>)																																				
1. <u>Lonicera tatarica</u>	<u>10</u>	Yes	FACU																																	
2. _____																																				
3. _____																																				
4. _____																																				
5. _____																																				
<u>10</u> =Total Cover																																				
Herb Stratum (Plot size: <u>5 ft</u>)																																				
1. <u>Dipsacus fullonum</u>	<u>90</u>	Yes	FACU	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																
2. <u>Cirsium discolor</u>	<u>5</u>	No	FACU																																	
3. <u>Setaria pumila</u>	<u>5</u>	No	FAC																																	
4. _____																																				
5. _____																																				
6. _____																																				
7. _____																																				
8. _____																																				
9. _____																																				
10. _____																																				
<u>100</u> =Total Cover																																				
Woody Vine Stratum (Plot size: <u>30 ft</u>)																																				
1. <u>Toxicodendron radicans</u>	<u>10</u>	Yes	FAC																																	
2. <u>Vitis labrusca</u>	<u>2</u>	No	FACU																																	
<u>12</u> =Total Cover																																				

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

SOIL

Sampling Point: DP 46

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 ¹	Loc ²		
0-7	10YR 3/2	100					Loamy/Clayey	
7-18	10YR 4/4	97	10YR 5/6	3	C	M	Loamy/Clayey	

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

²Location: 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)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- 5 cm Mucky Peat or Peat (S3)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- Coast Prairie Redox (A16)
- Iron-Manganese Masses (F12)
- Red Parent Material (F21)
- Very Shallow Dark Surface (F22)
- Other (Explain in Remarks)

³Indicators 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 X

Remarks:

This data form is revised from Midwest Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Gauge or Well Data (D9)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
 Water Table Present? Yes _____ No X Depth (inches): _____
 Saturation Present? Yes _____ No X Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

Appendix C - Quality Assessment Forms

QHEI

HHEI



Primary Headwater Habitat Evaluation Form

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HHEI Score (sum of metrics 1, 2, 3) :

SITE NAME/LOCATION **UNT 1 to Beckett's Run/Fort Wayne, Allen County, Indiana**

SITE NUMBER RIVER BASIN **St Joseph River** DRAINAGE AREA (mi²) **0.01**

LENGTH OF STREAM REACH (ft) **159** LAT. **41.15028** LONG. **-85.111173** RIVER CODE RIVER MILE

DATE **09/20/22** SCORER **C. Schuler** COMMENTS **Ephemeral**

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE	PERCENT	TYPE	PERCENT
<input type="checkbox"/> <input type="checkbox"/> BLDR SLABS [16 pts]	<input type="text"/> 0%	<input type="checkbox"/> <input type="checkbox"/> SILT [3 pt]	<input type="text"/> 30%
<input type="checkbox"/> <input type="checkbox"/> BOULDER (>256 mm) [16 pts]	<input type="text"/> 0%	<input type="checkbox"/> <input type="checkbox"/> LEAF PACK/WOODY DEBRIS [3 pts]	<input type="text"/> 0%
<input type="checkbox"/> <input type="checkbox"/> BEDROCK [16 pt]	<input type="text"/> 0%	<input type="checkbox"/> <input type="checkbox"/> FINE DETRITUS [3 pts]	<input type="text"/> 0%
<input type="checkbox"/> <input type="checkbox"/> COBBLE (65-256 mm) [12 pts]	<input type="text"/> 0%	<input type="checkbox"/> <input type="checkbox"/> CLAY or HARDPAN [0 pt]	<input type="text"/> 0%
<input type="checkbox"/> <input checked="" type="checkbox"/> GRAVEL (2-64 mm) [9 pts]	<input type="text"/> 30%	<input type="checkbox"/> <input type="checkbox"/> MUCK [0 pts]	<input type="text"/> 0%
<input checked="" type="checkbox"/> <input type="checkbox"/> SAND (<2 mm) [6 pts]	<input type="text"/> 40%	<input type="checkbox"/> <input type="checkbox"/> ARTIFICIAL [3 pts]	<input type="text"/> 0%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock **0.00%** (A) **100%** (B)

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: **15** TOTAL NUMBER OF SUBSTRATE TYPES: **3**

HHEI Metric Points

Substrate Max = 40

18

A + B

2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box):

<input type="checkbox"/> > 30 centimeters [20 pts]	<input type="checkbox"/> > 5 cm - 10 cm [15 pts]
<input type="checkbox"/> > 22.5 - 30 cm [30 pts]	<input type="checkbox"/> < 5 cm [5 pts]
<input type="checkbox"/> > 10 - 22.5 cm [25 pts]	<input checked="" type="checkbox"/> NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS **No flowing water** MAXIMUM POOL DEPTH (centimeters): **0**

Pool Depth Max = 30

0

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box):

<input type="checkbox"/> > 4.0 meters (> 13') [30 pts]	<input checked="" type="checkbox"/> > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
<input type="checkbox"/> > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	<input type="checkbox"/> ≤ 1.0 m (≤ 3' 3") [5 pts]
<input type="checkbox"/> > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	

COMMENTS AVERAGE BANKFULL WIDTH (meters): **1.22**

Bankfull Width Max=30

15

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH

L	R	(Per Bank)
<input type="checkbox"/>	<input type="checkbox"/>	Wide >10m
<input type="checkbox"/>	<input type="checkbox"/>	Moderate 5-10m
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Narrow <5m
<input type="checkbox"/>	<input type="checkbox"/>	None

FLOODPLAIN QUALITY

L	R	(Most Predominant per Bank)
<input type="checkbox"/>	<input type="checkbox"/>	Mature Forest, Wetland
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Immature Forest, Shrub or Old Field
<input type="checkbox"/>	<input type="checkbox"/>	Residential, Park, New Field
<input type="checkbox"/>	<input type="checkbox"/>	Fenced Pasture

L	R	
<input type="checkbox"/>	<input type="checkbox"/>	Conservation Tillage
<input type="checkbox"/>	<input type="checkbox"/>	Urban or Industrial
<input type="checkbox"/>	<input type="checkbox"/>	Open Pasture, Row Crop
<input type="checkbox"/>	<input type="checkbox"/>	Mining or Construction

COMMENTS **Grassy ROW and immature forest**

FLOW REGIME (At Time of Evaluation) (Check ONLY one box):

<input type="checkbox"/> Stream Flowing	<input type="checkbox"/> Moist Channel, isolated pools, no flow (Intermittent)
<input type="checkbox"/> Subsurface flow with isolated pools (Interstitial)	<input checked="" type="checkbox"/> Dry channel, no water (Ephemeral)

COMMENTS

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box):

<input type="checkbox"/> None	<input type="checkbox"/> 1.0	<input type="checkbox"/> 2.0	<input checked="" type="checkbox"/> 3.0
<input type="checkbox"/> 0.5	<input type="checkbox"/> 1.5	<input type="checkbox"/> 2.5	<input type="checkbox"/> >3

STREAM GRADIENT ESTIMATE

Flat (0.5 ft/100 ft) Flat to Moderate Moderate (2 ft/100 ft) Moderate to Severe Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - Yes No QHEI Score (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

<input type="checkbox"/> WWH Name:	<input type="text"/>	Distance from Evaluated Stream	<input type="text"/>
<input type="checkbox"/> CWH Name:	<input type="text"/>	Distance from Evaluated Stream	<input type="text"/>
<input type="checkbox"/> EWH Name:	<input type="text"/>	Distance from Evaluated Stream	<input type="text"/>

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: NRCS Soil Map Page: NRCS Soil Map Stream Order
County: Township / City:

MISCELLANEOUS

Base Flow Conditions? (Y/N): Date of last precipitation: Quantity:
Photograph Information:
Elevated Turbidity? (Y/N): Canopy (% open):
Were samples collected for water chemistry? (Y/N): (Note lab sample no. or id. and attach results) Lab Number:
Field Measures: Temp (°C) Dissolved Oxygen (mg/l) pH (S.U.) Conductivity (µmhos/cm)
Is the sampling reach representative of the stream (Y/N) If not, please explain:

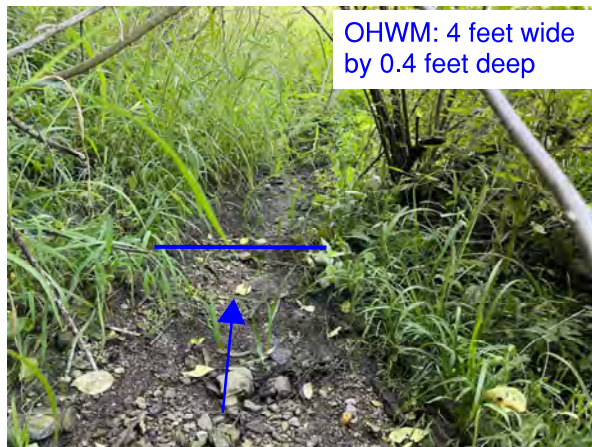
Additional comments/description of pollution impacts:

BIOTIC EVALUATION

Performed? (Y/N): (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)
Fish Observed? (Y/N) Voucher? (Y/N) Salamanders Observed? (Y/N) Voucher? (Y/N)
Frogs or Tadpoles Observed? (Y/N) Voucher? (Y/N) Aquatic Macroinvertebrates Observed? (Y/N) Voucher? (Y/N)
Comments Regarding Biology:

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location





Primary Headwater Habitat Evaluation Form

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HHEI Score (sum of metrics 1, 2, 3) :

SITE NAME/LOCATION **UNT 2 to Beckett's Run/Fort Wayne, Allen County, Indiana**

SITE NUMBER RIVER BASIN **St Joseph River** DRAINAGE AREA (mi²) **0.01**

LENGTH OF STREAM REACH (ft) **78** LAT. **41.15059** LONG. **-85.110770** RIVER CODE RIVER MILE

DATE **09/20/22** SCORER **C. Schuler** COMMENTS **Ephemeral**

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE	PERCENT	TYPE	PERCENT
<input type="checkbox"/> <input type="checkbox"/> BLDR SLABS [16 pts]	<input type="text"/> 0%	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> SILT [3 pt]	<input type="text"/> 100%
<input type="checkbox"/> <input type="checkbox"/> BOULDER (>256 mm) [16 pts]	<input type="text"/> 0%	<input type="checkbox"/> <input type="checkbox"/> LEAF PACK/WOODY DEBRIS [3 pts]	<input type="text"/> 0%
<input type="checkbox"/> <input type="checkbox"/> BEDROCK [16 pt]	<input type="text"/> 0%	<input type="checkbox"/> <input type="checkbox"/> FINE DETRITUS [3 pts]	<input type="text"/> 0%
<input type="checkbox"/> <input type="checkbox"/> COBBLE (65-256 mm) [12 pts]	<input type="text"/> 0%	<input type="checkbox"/> <input type="checkbox"/> CLAY or HARDPAN [0 pt]	<input type="text"/> 0%
<input type="checkbox"/> <input type="checkbox"/> GRAVEL (2-64 mm) [9 pts]	<input type="text"/> 0%	<input type="checkbox"/> <input type="checkbox"/> MUCK [0 pts]	<input type="text"/> 0%
<input type="checkbox"/> <input type="checkbox"/> SAND (<2 mm) [6 pts]	<input type="text"/> 0%	<input type="checkbox"/> <input type="checkbox"/> ARTIFICIAL [3 pts]	<input type="text"/> 0%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock **0.00%** (A)

Substrate Percentage Check **100%** (B)

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: **6**

TOTAL NUMBER OF SUBSTRATE TYPES: **1**

HHEI Metric Points

Substrate Max = 40

7

A + B

Pool Depth Max = 30

0

Bankfull Width Max=30

5

2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box):

<input type="checkbox"/> > 30 centimeters [20 pts]	<input type="checkbox"/> > 5 cm - 10 cm [15 pts]
<input type="checkbox"/> > 22.5 - 30 cm [30 pts]	<input type="checkbox"/> < 5 cm [5 pts]
<input type="checkbox"/> > 10 - 22.5 cm [25 pts]	<input checked="" type="checkbox"/> NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS **No flowing water**

MAXIMUM POOL DEPTH (centimeters): **0**

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box):

<input type="checkbox"/> > 4.0 meters (> 13') [30 pts]	<input type="checkbox"/> > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
<input type="checkbox"/> > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	<input checked="" type="checkbox"/> ≤ 1.0 m (≤ 3' 3") [5 pts]
<input type="checkbox"/> > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	

COMMENTS

AVERAGE BANKFULL WIDTH (meters): **0.45**

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream ☆

RIPARIAN WIDTH

FLOODPLAIN QUALITY

L	R	(Per Bank)	L	R	(Most Predominant per Bank)	L	R	
<input type="checkbox"/>	<input type="checkbox"/>	Wide >10m	<input type="checkbox"/>	<input type="checkbox"/>	Mature Forest, Wetland	<input type="checkbox"/>	<input type="checkbox"/>	Conservation Tillage
<input type="checkbox"/>	<input type="checkbox"/>	Moderate 5-10m	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Immature Forest, Shrub or Old Field	<input type="checkbox"/>	<input type="checkbox"/>	Urban or Industrial
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Narrow <5m	<input type="checkbox"/>	<input type="checkbox"/>	Residential, Park, New Field	<input type="checkbox"/>	<input type="checkbox"/>	Open Pasture, Row Crop
<input type="checkbox"/>	<input type="checkbox"/>	None	<input type="checkbox"/>	<input type="checkbox"/>	Fenced Pasture	<input type="checkbox"/>	<input type="checkbox"/>	Mining or Construction

COMMENTS **Immature forest**

FLOW REGIME (At Time of Evaluation) (Check ONLY one box):

<input type="checkbox"/> Stream Flowing	<input type="checkbox"/> Moist Channel, isolated pools, no flow (Intermittent)
<input type="checkbox"/> Subsurface flow with isolated pools (Interstitial)	<input checked="" type="checkbox"/> Dry channel, no water (Ephemeral)

COMMENTS

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box):

<input type="checkbox"/> None	<input checked="" type="checkbox"/> 1.0	<input type="checkbox"/> 2.0	<input type="checkbox"/> 3.0
<input type="checkbox"/> 0.5	<input type="checkbox"/> 1.5	<input type="checkbox"/> 2.5	<input type="checkbox"/> >3

STREAM GRADIENT ESTIMATE

Flat (0.5 ft/100 ft) Flat to Moderate Moderate (2 ft/100 ft) Moderate to Severe Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - Yes No QHEI Score (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

<input type="checkbox"/> WWH Name:	<input type="text"/>	Distance from Evaluated Stream	<input type="text"/>
<input type="checkbox"/> CWH Name:	<input type="text"/>	Distance from Evaluated Stream	<input type="text"/>
<input type="checkbox"/> EWH Name:	<input type="text"/>	Distance from Evaluated Stream	<input type="text"/>

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: NRCS Soil Map Page: NRCS Soil Map Stream Order
County: Township / City:

MISCELLANEOUS

Base Flow Conditions? (Y/N): Date of last precipitation: Quantity:
Photograph Information:
Elevated Turbidity? (Y/N): Canopy (% open):
Were samples collected for water chemistry? (Y/N): (Note lab sample no. or id. and attach results) Lab Number:
Field Measures: Temp (°C) Dissolved Oxygen (mg/l) pH (S.U.) Conductivity (µmhos/cm)
Is the sampling reach representative of the stream (Y/N) If not, please explain:

Additional comments/description of pollution impacts:

BIOTIC EVALUATION

Performed? (Y/N): (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)
Fish Observed? (Y/N) Voucher? (Y/N) Salamanders Observed? (Y/N) Voucher? (Y/N)
Frogs or Tadpoles Observed? (Y/N) Voucher? (Y/N) Aquatic Macroinvertebrates Observed? (Y/N) Voucher? (Y/N)
Comments Regarding Biology:

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location





Primary Headwater Habitat Evaluation Form

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HHEI Score (sum of metrics 1, 2, 3) :

SITE NAME/LOCATION **UNT 3 to Beckett's Run/Fort Wayne, Allen County, Indiana**

SITE NUMBER RIVER BASIN **St Joseph River** DRAINAGE AREA (mi²) **0.02**

LENGTH OF STREAM REACH (ft) **200** LAT. **41.15143** LONG. **-85.110667** RIVER CODE RIVER MILE

DATE **09/20/22** SCORER **C. Schuler** COMMENTS **Ephemeral**

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE	PERCENT	TYPE	PERCENT
<input type="checkbox"/> <input type="checkbox"/> BLDR SLABS [16 pts]	<input type="text"/> 0%	<input type="checkbox"/> <input type="checkbox"/> SILT [3 pt]	<input type="text"/> 8%
<input type="checkbox"/> <input type="checkbox"/> BOULDER (>256 mm) [16 pts]	<input type="text"/> 2%	<input type="checkbox"/> <input type="checkbox"/> LEAF PACK/WOODY DEBRIS [3 pts]	<input type="text"/> 0%
<input type="checkbox"/> <input type="checkbox"/> BEDROCK [16 pt]	<input type="text"/> 0%	<input type="checkbox"/> <input type="checkbox"/> FINE DETRITUS [3 pts]	<input type="text"/> 0%
<input type="checkbox"/> <input type="checkbox"/> COBBLE (65-256 mm) [12 pts]	<input type="text"/> 20%	<input type="checkbox"/> <input type="checkbox"/> CLAY or HARDPAN [0 pt]	<input type="text"/> 0%
<input checked="" type="checkbox"/> <input type="checkbox"/> GRAVEL (2-64 mm) [9 pts]	<input type="text"/> 40%	<input type="checkbox"/> <input type="checkbox"/> MUCK [0 pts]	<input type="text"/> 0%
<input type="checkbox"/> <input checked="" type="checkbox"/> SAND (<2 mm) [6 pts]	<input type="text"/> 30%	<input type="checkbox"/> <input type="checkbox"/> ARTIFICIAL [3 pts]	<input type="text"/> 0%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock **22.00%** (A)

Substrate Percentage Check **100%** (B)

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: **15**

TOTAL NUMBER OF SUBSTRATE TYPES: **5**

HHEI Metric Points

Substrate Max = 40

20

A + B

2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box):

<input type="checkbox"/> > 30 centimeters [20 pts]	<input type="checkbox"/> > 5 cm - 10 cm [15 pts]
<input type="checkbox"/> > 22.5 - 30 cm [30 pts]	<input type="checkbox"/> < 5 cm [5 pts]
<input type="checkbox"/> > 10 - 22.5 cm [25 pts]	<input checked="" type="checkbox"/> NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS **No flowing water**

MAXIMUM POOL DEPTH (centimeters): **0**

Pool Depth Max = 30

0

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box):

<input type="checkbox"/> > 4.0 meters (> 13') [30 pts]	<input checked="" type="checkbox"/> > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
<input type="checkbox"/> > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	<input type="checkbox"/> ≤ 1.0 m (≤ 3' 3") [5 pts]
<input type="checkbox"/> > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	

COMMENTS

AVERAGE BANKFULL WIDTH (meters): **1.22**

Bankfull Width Max=30

15

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream☆

RIPARIAN WIDTH

L	R	(Per Bank)
<input type="checkbox"/>	<input type="checkbox"/>	Wide >10m
<input type="checkbox"/>	<input type="checkbox"/>	Moderate 5-10m
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Narrow <5m
<input type="checkbox"/>	<input type="checkbox"/>	None

FLOODPLAIN QUALITY

L	R	(Most Predominant per Bank)
<input type="checkbox"/>	<input type="checkbox"/>	Mature Forest, Wetland
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Immature Forest, Shrub or Old Field
<input type="checkbox"/>	<input type="checkbox"/>	Residential, Park, New Field
<input type="checkbox"/>	<input type="checkbox"/>	Fenced Pasture

L	R	
<input type="checkbox"/>	<input type="checkbox"/>	Conservation Tillage
<input type="checkbox"/>	<input type="checkbox"/>	Urban or Industrial
<input type="checkbox"/>	<input type="checkbox"/>	Open Pasture, Row Crop
<input type="checkbox"/>	<input type="checkbox"/>	Mining or Construction

COMMENTS **Grassy ROW and immature forest**

FLOW REGIME (At Time of Evaluation) (Check ONLY one box):

<input type="checkbox"/> Stream Flowing	<input type="checkbox"/> Moist Channel, isolated pools, no flow (Intermittent)
<input type="checkbox"/> Subsurface flow with isolated pools (Interstitial)	<input checked="" type="checkbox"/> Dry channel, no water (Ephemeral)

COMMENTS

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box):

<input checked="" type="checkbox"/> None	<input type="checkbox"/> 1.0	<input type="checkbox"/> 2.0	<input type="checkbox"/> 3.0
<input type="checkbox"/> 0.5	<input type="checkbox"/> 1.5	<input type="checkbox"/> 2.5	<input type="checkbox"/> >3

STREAM GRADIENT ESTIMATE

Flat (0.5 ft/100 ft) Flat to Moderate Moderate (2 ft/100 ft) Moderate to Severe Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - Yes No QHEI Score (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

<input type="checkbox"/> WWH Name:	<input type="text"/>	Distance from Evaluated Stream	<input type="text"/>
<input type="checkbox"/> CWH Name:	<input type="text"/>	Distance from Evaluated Stream	<input type="text"/>
<input type="checkbox"/> EWH Name:	<input type="text"/>	Distance from Evaluated Stream	<input type="text"/>

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: NRCS Soil Map Page: NRCS Soil Map Stream Order
County: Township / City:

MISCELLANEOUS

Base Flow Conditions? (Y/N): Date of last precipitation: Quantity:
Photograph Information:
Elevated Turbidity? (Y/N): Canopy (% open):
Were samples collected for water chemistry? (Y/N): (Note lab sample no. or id. and attach results) Lab Number:
Field Measures: Temp (°C) Dissolved Oxygen (mg/l) pH (S.U.) Conductivity (µmhos/cm)
Is the sampling reach representative of the stream (Y/N) If not, please explain:

Additional comments/description of pollution impacts:

BIOTIC EVALUATION

Performed? (Y/N): (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)
Fish Observed? (Y/N) Voucher? (Y/N) Salamanders Observed? (Y/N) Voucher? (Y/N)
Frogs or Tadpoles Observed? (Y/N) Voucher? (Y/N) Aquatic Macroinvertebrates Observed? (Y/N) Voucher? (Y/N)
Comments Regarding Biology:

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location



Stream & Location: Beckett's Run RM: Date: 09/20/22

Leigh Stevenson and Cameron Schuler Scorers Full Name & Affiliation: American Structurepoint, Inc.

River Code: STORET #: Lat./ Long.: 41.151488 / 85.110954 Office verified location

1] SUBSTRATE Check ONLY Two substrate TYPE BOXES; estimate % or note every type present. Check ONE (Or 2 & average). BEST TYPES: BLDR /SLABS [10], BOULDER [9], COBBLE [8], GRAVEL [7], SAND [6], BEDROCK [5]. OTHER TYPES: HARDPAN [4], DETRITUS [3], MUCK [2], SILT [2], ARTIFICIAL [0]. ORIGIN: LIMESTONE [1], TILLS [1], WETLANDS [0], HARDPAN [0], SANDSTONE [0], RIP/RAP [0], LACUSTURINE [0], SHALE [-1], COAL FINES [-2]. QUALITY: HEAVY [-2], MODERATE [-1], NORMAL [0], FREE [1], EXTENSIVE [-2], MODERATE [-1], NORMAL [0], NONE [1]. Substrate 11 Maximum 20

2] INSTREAM COVER Indicate presence 0 to 3: 0-Absent; 1-Very small amounts or if more common of marginal quality; 2-Moderate amounts, but not of highest quality or in small amounts of highest quality; 3-Highest quality in moderate or greater amounts. AMOUNT: Check ONE (Or 2 & average). EXTENSIVE >75% [11], MODERATE 25-75% [7], SPARSE 5-<25% [3], NEARLY ABSENT <5% [1]. Cover 8 Maximum 20

3] CHANNEL MORPHOLOGY Check ONE in each category (Or 2 & average). SINUOSITY: HIGH [4], MODERATE [3], LOW [2], NONE [1]. DEVELOPMENT: EXCELLENT [7], GOOD [5], FAIR [3], POOR [1]. CHANNELIZATION: NONE [6], RECOVERED [4], RECOVERING [3], RECENT OR NO RECOVERY [1]. STABILITY: HIGH [3], MODERATE [2], LOW [1]. Channel 14 Maximum 20

4] BANK EROSION AND RIPARIAN ZONE Check ONE in each category for EACH BANK (Or 2 per bank & average). RIVER RIGHT LOOKING DOWNSTREAM. EROSION: NONE / LITTLE [3], MODERATE [2], HEAVY / SEVERE [1]. RIPARIAN WIDTH: WIDE > 50m [4], MODERATE 10-50m [3], NARROW 5-10m [2], VERY NARROW < 5m [1], NONE [0]. FLOOD PLAIN QUALITY: FOREST, SWAMP [3], SHRUB OR OLD FIELD [2], RESIDENTIAL, PARK, NEW FIELD [1], FENCED PASTURE [1], OPEN PASTURE, ROWCROP [0]. CONSERVATION TILLAGE [1], URBAN OR INDUSTRIAL [0], MINING / CONSTRUCTION [0]. Riparian 8 Maximum 10

5] POOL / GLIDE AND RIFFLE / RUN QUALITY MAXIMUM DEPTH: > 1m [6], 0.7-<1m [4], 0.4-<0.7m [2], 0.2-<0.4m [1], < 0.2m [0]. CHANNEL WIDTH: POOL WIDTH > RIFFLE WIDTH [2], POOL WIDTH = RIFFLE WIDTH [1], POOL WIDTH < RIFFLE WIDTH [0]. CURRENT VELOCITY: TORRENTIAL [-1], VERY FAST [1], FAST [1], MODERATE [1], SLOW [1], INTERSTITIAL [-1], INTERMITTENT [-2], EDDIES [1]. Recreation Potential Primary Contact Secondary Contact Pool / Current 3 Maximum 12

Indicate for functional riffles; Best areas must be large enough to support a population of riffle-obligate species: Check ONE (Or 2 & average). NO RIFFLE [metric=0]. RIFFLE DEPTH: BEST AREAS > 10cm [2], BEST AREAS 5-10cm [1], BEST AREAS < 5cm [metric=0]. RUN DEPTH: MAXIMUM > 50cm [2], MAXIMUM < 50cm [1]. RIFFLE / RUN SUBSTRATE: STABLE (e.g., Cobble, Boulder) [2], MOD. STABLE (e.g., Large Gravel) [1], UNSTABLE (e.g., Fine Gravel, Sand) [0]. RIFFLE / RUN EMBEDDEDNESS: NONE [2], LOW [1], MODERATE [0], EXTENSIVE [-1]. Riffle / Run 5 Maximum 8

6] GRADIENT (14.7 ft/mi) DRAINAGE AREA (9.121 mi^2) VERY LOW - LOW [2-4], MODERATE [6-10], HIGH - VERY HIGH [10-6]. %POOL: 15 %GLIDE: 50 %RUN: 15 %RIFFLE: 20 Gradient 8 Maximum 10

AJ SAMPLED REACH

Check ALL that apply

Comment RE: Reach consistency/ Is reach typical of stream?, Recreation/ Observed - Inferred, Other/ Sampling observations, Concerns, Access directions, etc.

OHWM: 26.5 feet x 1.7 feet

METHOD STAGE

- 1st -sample pass- 2nd
- BOAT
 - WADE
 - L. LINE
 - OTHER
- HIGH
 - UP
 - NORMAL
 - LOW
 - DRY

Aquatic macro-invertebrates and minnows were observed within the stream

DISTANCE

- 0.5 Km
- 0.2 Km
- 0.15 Km
- 0.12 Km
- OTHER

CLARITY

- 1st --sample pass-- 2nd
- < 20 cm
 - 20-<40 cm
 - 40-70 cm
 - > 70 cm/ CTB
 - SECCHI DEPTH

BJ AESTHETICS

- NUISANCE ALGAE
- INVASIVE MACROPHYTES
- EXCESS TURBIDITY
- DISCOLORATION
- FOAM / SCUM
- OIL SHEEN
- TRASH / LITTER
- NUISANCE ODOR
- SLUDGE DEPOSITS
- CSOs/SSOs/OUTFALLS

DJ MAINTENANCE

- PUBLIC / PRIVATE / BOTH / NA
- ACTIVE / HISTORIC / BOTH / NA
- YOUNG-SUCCESSION-OLD
- SPRAY / SNAG / REMOVED
- MODIFIED / DIPPED OUT / NA
- LEVEED / ONE SIDED
- RELOCATED / CUTOFFS
- MOVING-BEDLOAD-STABLE
- ARMORED / SLUMPS
- ISLANDS / SCoured
- IMPOUNDED / DESICCATED
- FLOOD CONTROL / DRAINAGE

Circle some & COMMENT

EJ ISSUES

- WWTP / CSO / NPDES / INDUSTRY
- HARDENED / URBAN / DIRT&GRIME
- CONTAMINATED / LANDFILL
- BMPs-CONSTRUCTION-SEDIMENT
- LOGGING / IRRIGATION / COOLING
- BANK / EROSION / SURFACE
- FALSE BANK / MANURE / LAGOON
- WASH H₂O / TILE / H₂O TABLE
- ACID / MINE / QUARRY / FLOW
- NATURAL / WETLAND / STAGNANT
- PARK / GOLF / LAWN / HOME
- ATMOSPHERE / DATA PAUCITY

FJ MEASUREMENTS

- \bar{x} width 26.5 ft
- \bar{x} depth 1.7 ft
- max. depth
- \bar{x} bankfull width 30 ft
- bankfull \bar{x} depth 2.5 ft
- W/D ratio
- bankfull max. depth
- floodprone x² width
- entrench. ratio

Legacy Tree:

CANOPY

- > 85%- OPEN
- 55%-<85%
- 30%-<55%
- 10%-<30%
- <10%- CLOSED

CJ RECREATION

- AREA DEPTH
- POOL: >100ft² >3ft

Stream Drawing:





Primary Headwater Habitat Evaluation Form

59

HHEI Score (sum of metrics 1, 2, 3) :

SITE NAME/LOCATION **UNT 1 to St. Joseph River/Fort Wayne, Allen County, Indiana**

SITE NUMBER RIVER BASIN **St Joseph River** DRAINAGE AREA (mi²) **0.01**

LENGTH OF STREAM REACH (ft) **87** LAT. **41.15786** LONG. **-85.106767** RIVER CODE RIVER MILE

DATE **09/20/22** SCORER **C. Schuler** COMMENTS **Intermittent**

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE	PERCENT	TYPE	PERCENT
<input type="checkbox"/> <input type="checkbox"/> BLDR SLABS [16 pts]	<input type="text"/> 0%	<input type="checkbox"/> <input type="checkbox"/> SILT [3 pt]	<input type="text"/> 30%
<input type="checkbox"/> <input type="checkbox"/> BOULDER (>256 mm) [16 pts]	<input type="text"/> 0%	<input type="checkbox"/> <input type="checkbox"/> LEAF PACK/WOODY DEBRIS [3 pts]	<input type="text"/> 0%
<input type="checkbox"/> <input type="checkbox"/> BEDROCK [16 pt]	<input type="text"/> 0%	<input type="checkbox"/> <input type="checkbox"/> FINE DETRITUS [3 pts]	<input type="text"/> 0%
<input type="checkbox"/> <input type="checkbox"/> COBBLE (65-256 mm) [12 pts]	<input type="text"/> 10%	<input type="checkbox"/> <input type="checkbox"/> CLAY or HARDPAN [0 pt]	<input type="text"/> 0%
<input checked="" type="checkbox"/> <input type="checkbox"/> GRAVEL (2-64 mm) [9 pts]	<input type="text"/> 30%	<input type="checkbox"/> <input type="checkbox"/> MUCK [0 pts]	<input type="text"/> 0%
<input type="checkbox"/> <input checked="" type="checkbox"/> SAND (<2 mm) [6 pts]	<input type="text"/> 30%	<input type="checkbox"/> <input type="checkbox"/> ARTIFICIAL [3 pts]	<input type="text"/> 0%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock **10.00%** (A)

Substrate Percentage Check **100%** (B)

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: **15**

TOTAL NUMBER OF SUBSTRATE TYPES: **4**

HHEI Metric Points

Substrate Max = 40

19

A + B

2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box):

<input type="checkbox"/> > 30 centimeters [20 pts]	<input type="checkbox"/> > 5 cm - 10 cm [15 pts]
<input type="checkbox"/> > 22.5 - 30 cm [30 pts]	<input type="checkbox"/> < 5 cm [5 pts]
<input checked="" type="checkbox"/> > 10 - 22.5 cm [25 pts]	<input type="checkbox"/> NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS MAXIMUM POOL DEPTH (centimeters): **0**

Pool Depth Max = 30

25

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box):

<input type="checkbox"/> > 4.0 meters (> 13') [30 pts]	<input checked="" type="checkbox"/> > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
<input type="checkbox"/> > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	<input type="checkbox"/> ≤ 1.0 m (≤ 3' 3") [5 pts]
<input type="checkbox"/> > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	

COMMENTS AVERAGE BANKFULL WIDTH (meters): **1.04**

Bankfull Width Max=30

15

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream ☆

RIPARIAN WIDTH		FLOODPLAIN QUALITY	
L	R	L	R
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(Per Bank)		(Most Predominant per Bank)	
Wide >10m		Mature Forest, Wetland	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Immature Forest, Shrub or Old Field	<input type="checkbox"/>
Moderate 5-10m		Residential, Park, New Field	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Fenced Pasture	<input type="checkbox"/>
Narrow <5m		Conservation Tillage	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Urban or Industrial	<input type="checkbox"/>
None		Open Pasture, Row Crop	<input type="checkbox"/>
		Mining or Construction	<input type="checkbox"/>

COMMENTS **Grassy ROW and immature forest**

FLOW REGIME (At Time of Evaluation) (Check ONLY one box):

<input checked="" type="checkbox"/> Stream Flowing	<input type="checkbox"/> Moist Channel, isolated pools, no flow (Intermittent)
<input type="checkbox"/> Subsurface flow with isolated pools (Interstitial)	<input type="checkbox"/> Dry channel, no water (Ephemeral)

COMMENTS

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box):

<input type="checkbox"/> None	<input type="checkbox"/> 1.0	<input checked="" type="checkbox"/> 2.0	<input type="checkbox"/> 3.0
<input type="checkbox"/> 0.5	<input type="checkbox"/> 1.5	<input type="checkbox"/> 2.5	<input type="checkbox"/> >3

STREAM GRADIENT ESTIMATE

Flat (0.5 ft/100 ft) Flat to Moderate Moderate (2 ft/100 ft) Moderate to Severe Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - Yes No QHEI Score (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

<input type="checkbox"/> WWH Name:	<input type="text"/>	Distance from Evaluated Stream	<input type="text"/>
<input type="checkbox"/> CWH Name:	<input type="text"/>	Distance from Evaluated Stream	<input type="text"/>
<input type="checkbox"/> EWH Name:	<input type="text"/>	Distance from Evaluated Stream	<input type="text"/>

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: NRCS Soil Map Page: NRCS Soil Map Stream Order
County: Township / City:

MISCELLANEOUS

Base Flow Conditions? (Y/N): Date of last precipitation: Quantity:
Photograph Information:
Elevated Turbidity? (Y/N): Canopy (% open):
Were samples collected for water chemistry? (Y/N): (Note lab sample no. or id. and attach results) Lab Number:
Field Measures: Temp (°C) Dissolved Oxygen (mg/l) pH (S.U.) Conductivity (µmhos/cm)
Is the sampling reach representative of the stream (Y/N) If not, please explain:

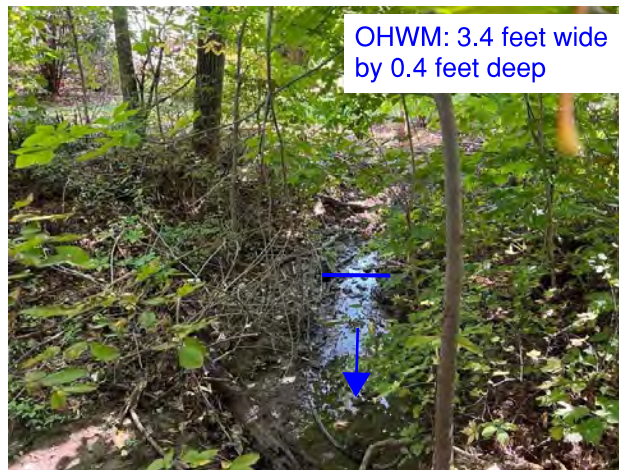
Additional comments/description of pollution impacts:

BIOTIC EVALUATION

Performed? (Y/N): (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)
Fish Observed? (Y/N) Voucher? (Y/N) Salamanders Observed? (Y/N) Voucher? (Y/N)
Frogs or Tadpoles Observed? (Y/N) Voucher? (Y/N) Aquatic Macroinvertebrates Observed? (Y/N) Voucher? (Y/N)
Comments Regarding Biology:

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location



Stream & Location: Swift Ditch RM: ___ Date: 09/20/22

Josh Iddings and Alyssa Damiano Scorers Full Name & Affiliation: American Structurepoint, Inc.

River Code: - STORET #: Lat./ Long.: 41.164688 / 85.104731 Office verified location

1] SUBSTRATE Check ONLY Two substrate TYPE BOXES; estimate % or note every type present. Check ONE (Or 2 & average). BEST TYPES: BLDR / SLABS [10], BOULDER [9], COBBLE [8], GRAVEL [7], SAND [6], BEDROCK [5]. OTHER TYPES: HARDPAN [4], DETRITUS [3], MUCK [2], SILT [2], ARTIFICIAL [0]. ORIGIN: LIMESTONE [1], TILLS [1], WETLANDS [0], HARDPAN [0], SANDSTONE [0], RIP/RAP [0], LACUSTURINE [0], SHALE [-1], COAL FINES [-2]. QUALITY: HEAVY [-2], MODERATE [-1], NORMAL [0], FREE [1], EXTENSIVE [-2], MODERATE [-1], NORMAL [0], NONE [1]. Substrate 15 Maximum 20.

2] INSTREAM COVER Indicate presence 0 to 3: 0-Absent; 1-Very small amounts or if more common of marginal quality; 2-Moderate amounts, but not of highest quality or in small amounts of highest quality; 3-Highest quality in moderate or greater amounts. AMOUNT: Check ONE (Or 2 & average). UNDERCUT BANKS [1], OVERHANGING VEGETATION [1], SHALLOWS (IN SLOW WATER) [1], ROOTMATS [1]. POOLS > 70cm [2], ROOTWADS [1], BOULDERS [1]. OXBOWS, BACKWATERS [1], AQUATIC MACROPHYTES [1], LOGS OR WOODY DEBRIS [1]. EXTENSIVE >75% [1], MODERATE 25-75% [7], SPARSE 5-<25% [3], NEARLY ABSENT <5% [1]. Cover 6 Maximum 20.

3] CHANNEL MORPHOLOGY Check ONE in each category (Or 2 & average). SINUOSITY: HIGH [4], MODERATE [3], LOW [2], NONE [1]. DEVELOPMENT: EXCELLENT [7], GOOD [5], FAIR [3], POOR [1]. CHANNELIZATION: NONE [6], RECOVERED [4], RECOVERING [3], RECENT OR NO RECOVERY [1]. STABILITY: HIGH [3], MODERATE [2], LOW [1]. Channel 12 Maximum 20.

4] BANK EROSION AND RIPARIAN ZONE Check ONE in each category for EACH BANK (Or 2 per bank & average). River right looking downstream. EROSION: NONE / LITTLE [3], MODERATE [2], HEAVY / SEVERE [1]. RIPARIAN WIDTH: WIDE > 50m [4], MODERATE 10-50m [3], NARROW 5-10m [2], VERY NARROW < 5m [1], NONE [0]. FLOOD PLAIN QUALITY: FOREST, SWAMP [3], SHRUB OR OLD FIELD [2], RESIDENTIAL, PARK, NEW FIELD [1], FENCED PASTURE [1], OPEN PASTURE, ROWCROP [0]. CONSERVATION TILLAGE [1], URBAN OR INDUSTRIAL [0], MINING / CONSTRUCTION [0]. Riparian 5.5 Maximum 10.

5] POOL / GLIDE AND RIFFLE / RUN QUALITY MAXIMUM DEPTH: Check ONE (ONLY!). > 1m [6], 0.7-<1m [4], 0.4-<0.7m [2], 0.2-<0.4m [1], < 0.2m [0]. CHANNEL WIDTH: Check ONE (Or 2 & average). POOL WIDTH > RIFFLE WIDTH [2], POOL WIDTH = RIFFLE WIDTH [1], POOL WIDTH < RIFFLE WIDTH [0]. CURRENT VELOCITY: Check ALL that apply. TORRENTIAL [-1], VERY FAST [1], FAST [1], MODERATE [1], SLOW [1], INTERSTITIAL [-1], INTERMITTENT [-2], EDDIES [1]. Recreation Potential Primary Contact Secondary Contact. Pool / Current 1 Maximum 12.

Indicate for functional riffles; Best areas must be large enough to support a population of riffle-obligate species: Check ONE (Or 2 & average). NO RIFFLE [metric=0]. RIFFLE DEPTH: BEST AREAS > 10cm [2], BEST AREAS 5-10cm [1], BEST AREAS < 5cm [metric=0]. RUN DEPTH: MAXIMUM > 50cm [2], MAXIMUM < 50cm [1]. RIFFLE / RUN SUBSTRATE: STABLE (e.g., Cobble, Boulder) [2], MOD. STABLE (e.g., Large Gravel) [1], UNSTABLE (e.g., Fine Gravel, Sand) [0]. RIFFLE / RUN EMBEDDEDNESS: NONE [2], LOW [1], MODERATE [0], EXTENSIVE [-1]. Riffle / Run 5 Maximum 8.

6] GRADIENT (24.8 ft/mi) DRAINAGE AREA (1,269 mi^2). VERY LOW - LOW [2-4], MODERATE [6-10], HIGH - VERY HIGH [10-6]. %POOL: 0 %GLIDE: 95 %RUN: 0 %RIFFLE: 5 Gradient 6 Maximum 10.

AJ SAMPLED REACH

Check ALL that apply

Comment RE: Reach consistency/ Is reach typical of stream?, Recreation/ Observed - Inferred, Other/ Sampling observations, Concerns, Access directions, etc.

OHWM: 10.4 feet x 1.7 feet

METHOD **STAGE**

- BOAT 1st--sample pass-- 2nd
 WADE HIGH
 L. LINE UP
 OTHER NORMAL
 LOW
 DRY

Frogs were observed within the stream

DISTANCE

- 0.5 Km
 0.2 Km
 0.15 Km
 0.12 Km
 OTHER

CLARITY

- 1st --sample pass-- 2nd
 < 20 cm
 20-<40 cm
 40-70 cm
 > 70 cm/ CTB
 SECCHI DEPTH

BJ AESTHETICS

- NUISANCE ALGAE
 INVASIVE MACROPHYTES
 EXCESS TURBIDITY
 DISCOLORATION
 FOAM / SCUM
 OIL SHEEN
 TRASH / LITTER
 NUISANCE ODOR
 SLUDGE DEPOSITS
 CSOs/SSOs/OUTFALLS

DJ MAINTENANCE

- PUBLIC / PRIVATE / BOTH / NA
 ACTIVE / HISTORIC / BOTH / NA
 YOUNG-SUCCESSION-OLD
 SPRAY / SNAG / REMOVED
 MODIFIED / DIPPED OUT / NA
 LEVEED / ONE SIDED
 RELOCATED / CUTOFFS
 MOVING-BEDLOAD-STABLE
 ARMORED / SLUMPS
 ISLANDS / SCoured
 IMPOUNDED / DESICCATED
 FLOOD CONTROL / DRAINAGE

Circle some & COMMENT

EJ ISSUES

- WWTP / CSO / NPDES / INDUSTRY
 HARDENED / URBAN / DIRT&GRIME
 CONTAMINATED / LANDFILL
 BMPs-CONSTRUCTION-SEDIMENT
 LOGGING / IRRIGATION / COOLING
 BANK / EROSION / SURFACE
 FALSE BANK / MANURE / LAGOON
 WASH H₂O / TILE / H₂O TABLE
 ACID / MINE / QUARRY / FLOW
 NATURAL / WETLAND / STAGNANT
 PARK / GOLF / LAWN / HOME
 ATMOSPHERE / DATA PAUCITY

FJ MEASUREMENTS

- \bar{x} width 10.4 ft
 \bar{x} depth 1.7 ft
 max. depth
 \bar{x} bankfull width
 bankfull \bar{x} depth
 W/D ratio
 bankfull max. depth
 floodprone x² width
 entrench. ratio

Legacy Tree:

CANOPY

- > 85%- OPEN
 55%-<85%
 30%-<55%
 10%-<30%
 <10%- CLOSED

- 1st _____ cm
 pass
 2nd _____ cm

CJ RECREATION

- AREA DEPTH
 POOL: >100ft² >3ft

Stream Drawing:



Stream & Location: Martin Ditch RM: Date: 09/27/22

J. Iddings, C. Schuler, and A. Damiano Scorers Full Name & Affiliation: American Structurepoint, Inc.

River Code: STORET #: Lat./ Long.: 41.175208, 85.081472 Office verified location

1] SUBSTRATE Check ONLY Two substrate TYPE BOXES; estimate % or note every type present. Check ONE (Or 2 & average). BEST TYPES: BLDR /SLABS [10], BOULDER [9], COBBLE [8], GRAVEL [7], SAND [6], BEDROCK [5]. OTHER TYPES: HARDPAN [4], DETRITUS [3], MUCK [2], SILT [2], ARTIFICIAL [0]. ORIGIN: LIMESTONE [1], TILLS [1], WETLANDS [0], HARDPAN [0], SANDSTONE [0], RIP/RAP [0], LACUSTURINE [0], SHALE [-1], COAL FINES [-2]. QUALITY: HEAVY [-2], MODERATE [-1], NORMAL [0], FREE [1], EXTENSIVE [-2], MODERATE [-1], NORMAL [0], NONE [1]. Substrate Maximum 20: 9

2] INSTREAM COVER Indicate presence 0 to 3: 0-Absent; 1-Very small amounts or if more common of marginal quality; 2-Moderate amounts, but not of highest quality or in small amounts of highest quality; 3-Highest quality in moderate or greater amounts. AMOUNT: Check ONE (Or 2 & average). UNDERCUT BANKS [1], OVERHANGING VEGETATION [1], SHALLOWS (IN SLOW WATER) [1], ROOTMATS [1]. POOLS > 70cm [2], ROOTWADS [1], BOULDERS [1]. OXBOWS, BACKWATERS [1], AQUATIC MACROPHYTES [1], LOGS OR WOODY DEBRIS [1]. EXTENSIVE >75% [1], MODERATE 25-75% [7], SPARSE 5-<25% [3], NEARLY ABSENT <5% [1]. Cover Maximum 20: 6

3] CHANNEL MORPHOLOGY Check ONE in each category (Or 2 & average). SINUOSITY: HIGH [4], MODERATE [3], LOW [2], NONE [1]. DEVELOPMENT: EXCELLENT [7], GOOD [5], FAIR [3], POOR [1]. CHANNELIZATION: NONE [6], RECOVERED [4], RECOVERING [3], RECENT OR NO RECOVERY [1]. STABILITY: HIGH [3], MODERATE [2], LOW [1]. Channel Maximum 20: 11

4] BANK EROSION AND RIPARIAN ZONE Check ONE in each category for EACH BANK (Or 2 per bank & average). River right looking downstream. EROSION: NONE / LITTLE [3], MODERATE [2], HEAVY / SEVERE [1]. RIPARIAN WIDTH: WIDE > 50m [4], MODERATE 10-50m [3], NARROW 5-10m [2], VERY NARROW < 5m [1], NONE [0]. FLOOD PLAIN QUALITY: FOREST, SWAMP [3], SHRUB OR OLD FIELD [2], RESIDENTIAL, PARK, NEW FIELD [1], FENCED PASTURE [1], OPEN PASTURE, ROWCROP [0]. CONSERVATION TILLAGE [1], URBAN OR INDUSTRIAL [0], MINING / CONSTRUCTION [0]. Riparian Maximum 10: 7

5] POOL / GLIDE AND RIFFLE / RUN QUALITY MAXIMUM DEPTH: > 1m [6], 0.7-<1m [4], 0.4-<0.7m [2], 0.2-<0.4m [1], < 0.2m [0]. CHANNEL WIDTH: POOL WIDTH > RIFFLE WIDTH [2], POOL WIDTH = RIFFLE WIDTH [1], POOL WIDTH < RIFFLE WIDTH [0]. CURRENT VELOCITY: TORRENTIAL [-1], VERY FAST [1], FAST [1], MODERATE [1], SLOW [1], INTERSTITIAL [-1], INTERMITTENT [-2], EDDIES [1]. Recreation Potential Primary Contact Secondary Contact. Pool / Current Maximum 12: 1

Indicate for functional riffles; Best areas must be large enough to support a population of riffle-obligate species: Check ONE (Or 2 & average). NO RIFFLE [metric=0]. RIFFLE DEPTH: BEST AREAS > 10cm [2], BEST AREAS 5-10cm [1], BEST AREAS < 5cm [metric=0]. RUN DEPTH: MAXIMUM > 50cm [2], MAXIMUM < 50cm [1]. RIFFLE / RUN SUBSTRATE: STABLE (e.g., Cobble, Boulder) [2], MOD. STABLE (e.g., Large Gravel) [1], UNSTABLE (e.g., Fine Gravel, Sand) [0]. RIFFLE / RUN EMBEDDEDNESS: NONE [2], LOW [1], MODERATE [0], EXTENSIVE [-1]. Riffle / Run Maximum 8: 4

6] GRADIENT (21.7 ft/mi) DRAINAGE AREA (1.09 mi^2) VERY LOW - LOW [2-4], MODERATE [6-10], HIGH - VERY HIGH [10-6]. %POOL: 0, %GLIDE: 90, %RUN: 0, %RIFFLE: 10. Gradient Maximum 10: 6

AJ SAMPLED REACH

Check ALL that apply

Comment RE: Reach consistency/ Is reach typical of stream?, Recreation/ Observed - Inferred, Other/ Sampling observations, Concerns, Access directions, etc.

OHWM: 12.3 feet x 1.2 feet

METHOD STAGE

- BOAT
 WADE
 L. LINE
 OTHER
- 1st--sample pass-- 2nd
 HIGH
 UP
 NORMAL
 LOW
 DRY

DISTANCE

- 0.5 Km
 0.2 Km
 0.15 Km
 0.12 Km
 OTHER

CLARITY

- 1st pass _____ cm
 2nd pass _____ cm
- < 20 cm
 20-<40 cm
 40-70 cm
 > 70 cm/ CTB
 SECCHI DEPTH

meters

CANOPY

- > 85%- OPEN
 55%-<85%
 30%-<55%
 10%-<30%
 <10%- CLOSED

CJ RECREATION

AREA DEPTH
 POOL: >100ft² >3ft

BJ AESTHETICS

- NUISANCE ALGAE
 INVASIVE MACROPHYTES
 EXCESS TURBIDITY
 DISCOLORATION
 FOAM / SCUM
 OIL SHEEN
 TRASH / LITTER
 NUISANCE ODOR
 SLUDGE DEPOSITS
 CSOs/SSOs/OUTFALLS

DJ MAINTENANCE

- PUBLIC / PRIVATE / BOTH / NA
 ACTIVE / HISTORIC / BOTH / NA
 YOUNG-SUCCESSION-OLD
 SPRAY / SNAG / REMOVED
 MODIFIED / DIPPED OUT / NA
 LEVEED / ONE SIDED
 RELOCATED / CUTOFFS
 MOVING-BEDLOAD-STABLE
 ARMORED / SLUMPS
 ISLANDS / SCoured
 IMPOUNDED / DESICCATED
 FLOOD CONTROL / DRAINAGE

Circle some & COMMENT

EJ ISSUES

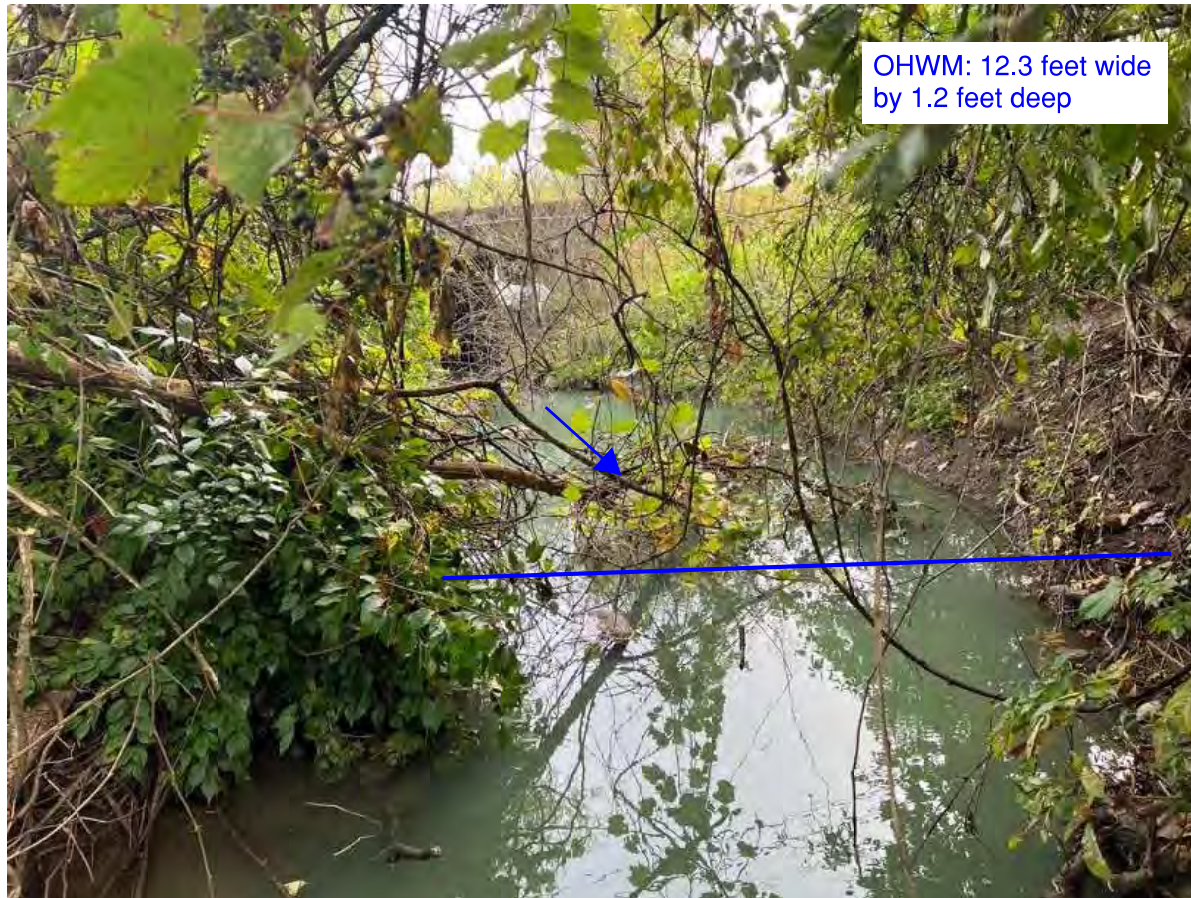
- WWTP / CSO / NPDES / INDUSTRY
 HARDENED / URBAN / DIRT&GRIME
 CONTAMINATED / LANDFILL
 BMPs-CONSTRUCTION-SEDIMENT
 LOGGING / IRRIGATION / COOLING
 BANK / EROSION / SURFACE
 FALSE BANK / MANURE / LAGOON
 WASH H₂O / TILE / H₂O TABLE
 ACID / MINE / QUARRY / FLOW
 NATURAL / WETLAND / STAGNANT
 PARK / GOLF / LAWN / HOME
 ATMOSPHERE / DATA PAUCITY

FJ MEASUREMENTS

- \bar{x} width 12.3 ft
 \bar{x} depth 1.2 ft
 max. depth
 \bar{x} bankfull width
 bankfull \bar{x} depth
 W/D ratio
 bankfull max. depth
 floodprone x² width
 entrench. ratio

Legacy Tree:

Stream Drawing:





Primary Headwater Habitat Evaluation Form

60

HHEI Score (sum of metrics 1, 2, 3) :

SITE NAME/LOCATION **UNT 1 to Martin Ditch/Fort Wayne, Allen County, Indiana**

SITE NUMBER RIVER BASIN **St Joseph River** DRAINAGE AREA (mi²) **0.01**

LENGTH OF STREAM REACH (ft) **191** LAT. **41.17580** LONG. **-85.079992** RIVER CODE RIVER MILE

DATE **09/27/22** SCORER **C. Schuler** COMMENTS **Intermittent**

NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instructions

STREAM CHANNEL MODIFICATIONS: NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR NO RECOVERY

1. SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.

TYPE	PERCENT	TYPE	PERCENT
<input type="checkbox"/> <input type="checkbox"/> BLDR SLABS [16 pts]	<input type="text"/> 0%	<input type="checkbox"/> <input checked="" type="checkbox"/> SILT [3 pt]	<input type="text"/> 30%
<input type="checkbox"/> <input type="checkbox"/> BOULDER (>256 mm) [16 pts]	<input type="text"/> 0%	<input type="checkbox"/> <input type="checkbox"/> LEAF PACK/WOODY DEBRIS [3 pts]	<input type="text"/> 0%
<input type="checkbox"/> <input type="checkbox"/> BEDROCK [16 pt]	<input type="text"/> 2%	<input type="checkbox"/> <input type="checkbox"/> FINE DETRITUS [3 pts]	<input type="text"/> 0%
<input type="checkbox"/> <input type="checkbox"/> COBBLE (65-256 mm) [12 pts]	<input type="text"/> 3%	<input type="checkbox"/> <input type="checkbox"/> CLAY or HARDPAN [0 pt]	<input type="text"/> 0%
<input type="checkbox"/> <input type="checkbox"/> GRAVEL (2-64 mm) [9 pts]	<input type="text"/> 5%	<input type="checkbox"/> <input type="checkbox"/> MUCK [0 pts]	<input type="text"/> 0%
<input checked="" type="checkbox"/> <input type="checkbox"/> SAND (<2 mm) [6 pts]	<input type="text"/> 40%	<input type="checkbox"/> <input type="checkbox"/> ARTIFICIAL [3 pts]	<input type="text"/> 20%

Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock **5.00%** (A)

Substrate Percentage Check **100%** (B)

SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: **9**

TOTAL NUMBER OF SUBSTRATE TYPES: **6**

HHEI Metric Points

Substrate Max = 40

15

A + B

Pool Depth Max = 30

2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box):

<input type="checkbox"/> > 30 centimeters [20 pts]	<input type="checkbox"/> > 5 cm - 10 cm [15 pts]
<input type="checkbox"/> > 22.5 - 30 cm [30 pts]	<input type="checkbox"/> < 5 cm [5 pts]
<input checked="" type="checkbox"/> > 10 - 22.5 cm [25 pts]	<input type="checkbox"/> NO WATER OR MOIST CHANNEL [0 pts]

COMMENTS MAXIMUM POOL DEPTH (centimeters): **23**

25

3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box):

<input type="checkbox"/> > 4.0 meters (> 13') [30 pts]	<input type="checkbox"/> > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]
<input type="checkbox"/> > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	<input type="checkbox"/> ≤ 1.0 m (≤ 3' 3") [5 pts]
<input checked="" type="checkbox"/> > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts]	

COMMENTS AVERAGE BANKFULL WIDTH (meters): **2.01**

Bankfull Width Max=30

20

This information must also be completed

RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream ☆

RIPARIAN WIDTH

L	R	(Per Bank)
<input type="checkbox"/>	<input type="checkbox"/>	Wide >10m
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Moderate 5-10m
<input type="checkbox"/>	<input type="checkbox"/>	Narrow <5m
<input type="checkbox"/>	<input type="checkbox"/>	None

FLOODPLAIN QUALITY

L	R	(Most Predominant per Bank)
<input type="checkbox"/>	<input type="checkbox"/>	Mature Forest, Wetland
<input type="checkbox"/>	<input type="checkbox"/>	Immature Forest, Shrub or Old Field
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Residential, Park, New Field
<input type="checkbox"/>	<input type="checkbox"/>	Fenced Pasture

L	R	
<input type="checkbox"/>	<input type="checkbox"/>	Conservation Tillage
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Urban or Industrial
<input type="checkbox"/>	<input type="checkbox"/>	Open Pasture, Row Crop
<input type="checkbox"/>	<input type="checkbox"/>	Mining or Construction

COMMENTS **Forested corridor**

FLOW REGIME (At Time of Evaluation) (Check ONLY one box):

<input checked="" type="checkbox"/> Stream Flowing	<input type="checkbox"/> Moist Channel, isolated pools, no flow (Intermittent)
<input type="checkbox"/> Subsurface flow with isolated pools (Interstitial)	<input type="checkbox"/> Dry channel, no water (Ephemeral)

COMMENTS

SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box):

<input checked="" type="checkbox"/> None	<input type="checkbox"/> 1.0	<input type="checkbox"/> 2.0	<input type="checkbox"/> 3.0
<input type="checkbox"/> 0.5	<input type="checkbox"/> 1.5	<input type="checkbox"/> 2.5	<input type="checkbox"/> >3

STREAM GRADIENT ESTIMATE

Flat (0.5 ft/100 ft) Flat to Moderate Moderate (2 ft/100 ft) Moderate to Severe Severe (10 ft/100 ft)

ADDITIONAL STREAM INFORMATION (This Information Must Also be Completed):

QHEI PERFORMED? - Yes No QHEI Score (If Yes, Attach Completed QHEI Form)

DOWNSTREAM DESIGNATED USE(S)

<input type="checkbox"/> WWH Name:	<input type="text"/>	Distance from Evaluated Stream	<input type="text"/>
<input type="checkbox"/> CWH Name:	<input type="text"/>	Distance from Evaluated Stream	<input type="text"/>
<input type="checkbox"/> EWH Name:	<input type="text"/>	Distance from Evaluated Stream	<input type="text"/>

MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION

USGS Quadrangle Name: NRCS Soil Map Page: NRCS Soil Map Stream Order
County: Township / City:

MISCELLANEOUS

Base Flow Conditions? (Y/N): Date of last precipitation: Quantity:
Photograph Information:
Elevated Turbidity? (Y/N): Canopy (% open):
Were samples collected for water chemistry? (Y/N): (Note lab sample no. or id. and attach results) Lab Number:
Field Measures: Temp (°C) Dissolved Oxygen (mg/l) pH (S.U.) Conductivity (µmhos/cm)
Is the sampling reach representative of the stream (Y/N) If not, please explain:

Additional comments/description of pollution impacts:

BIOTIC EVALUATION

Performed? (Y/N): (If Yes, Record all observations. Voucher collections optional. NOTE: all voucher samples must be labeled with the site ID number. Include appropriate field data sheets from the Primary Headwater Habitat Assessment Manual)
Fish Observed? (Y/N) Voucher? (Y/N) Salamanders Observed? (Y/N) Voucher? (Y/N)
Frogs or Tadpoles Observed? (Y/N) Voucher? (Y/N) Aquatic Macroinvertebrates Observed? (Y/N) Voucher? (Y/N)
Comments Regarding Biology:

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed):

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location



Appendix D - Mapping

Figure 1 – State Location Map

Figure 2 – USGS Topographic Map

Figure 3 – Allen County Mapped Soils - SSURGO

Figure 4 – : NWI, NHD Flowline, and FEMA 100-year Floodplain Map

Figure 5 – 12-Digit HUC Map

Figure 6 – 2012 Aerial Photography Map

Figure 7 – Field Investigation and Photo Location Map

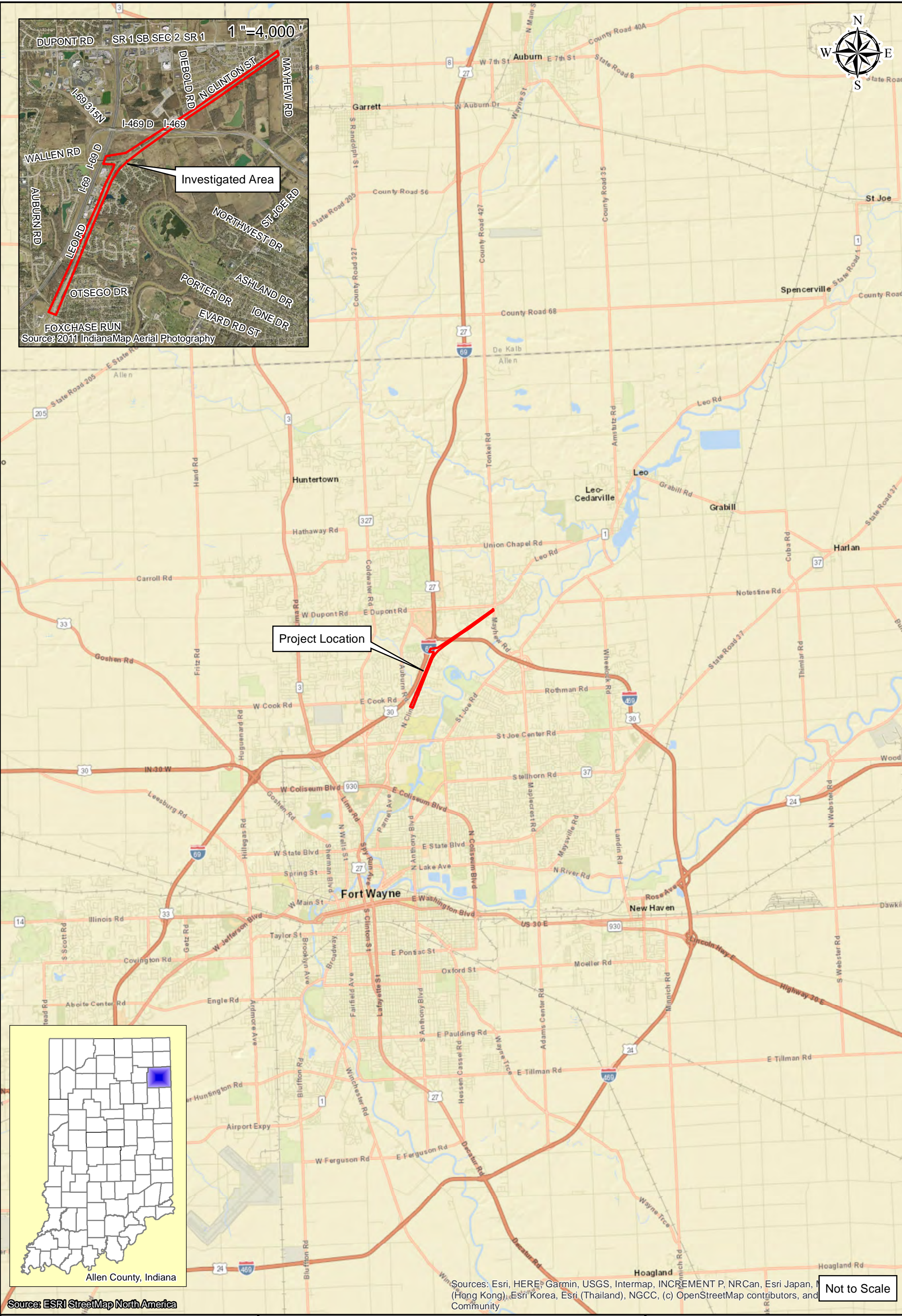


Figure 1: State Location Map

Clinton Street Roadway Improvement Project

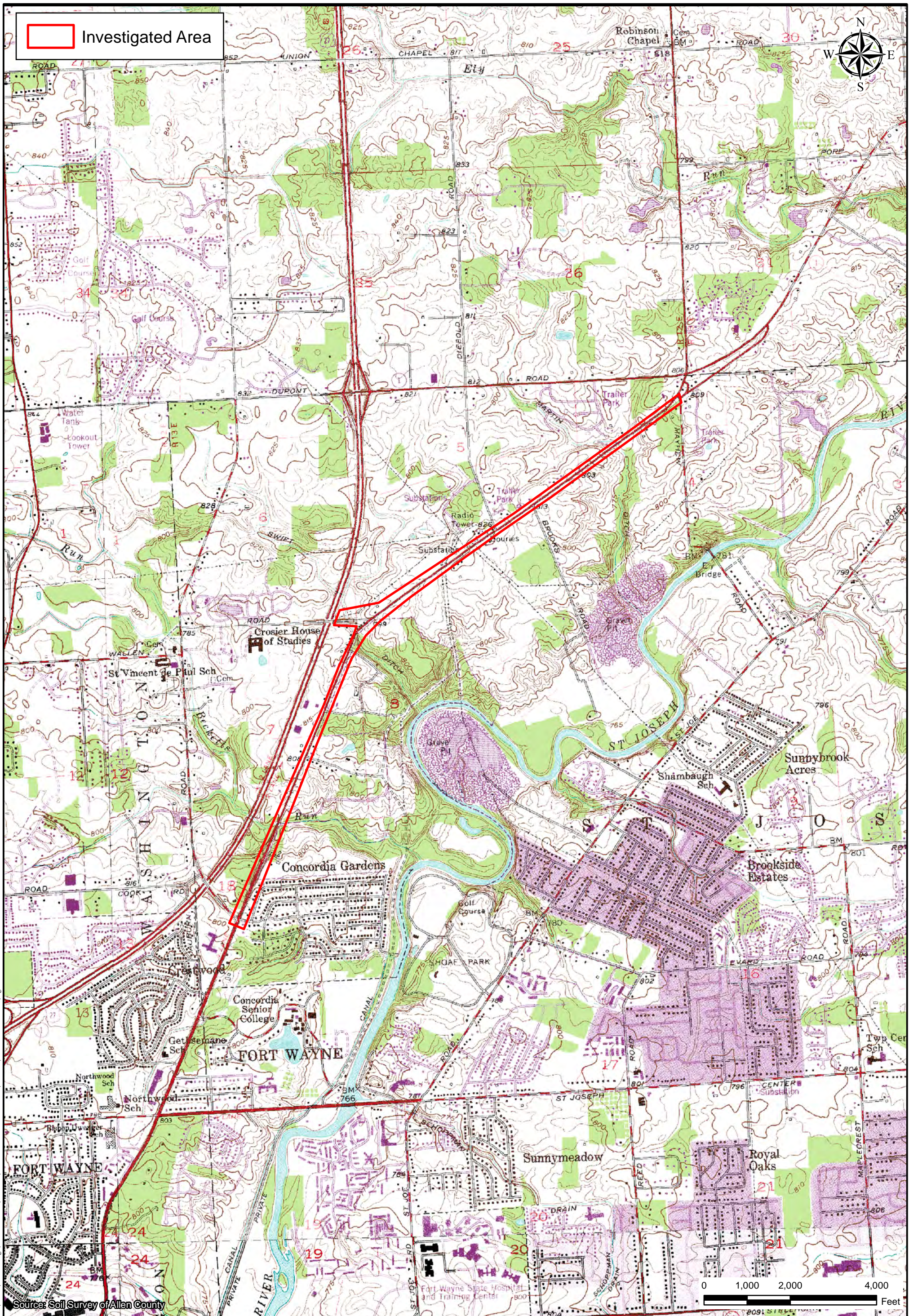
City of Fort Wayne
Citizens Square
200 East Berry Street, Suite 425
Fort Wayne, Indiana 46802

Allen County Highway Department
Citizen Square
200 East Berry St. Ste. 280
Fort Wayne, IN 46802

Location: Fort Wayne
Township: St. Joseph
County: Allen
State: Indiana

Date: 10/13/2022





Source: Soil Survey of Allen County



Figure 2: USGS Topographic Map

City of Fort Wayne
Citizens Square
200 East Berry Street, Suite 425
Fort Wayne, Indiana 46802

Allen County Highway Department
Citizens Square
200 East Berry Street, Suite 425
Fort Wayne, Indiana 46802

Clinton Street Roadway Improvement Project

Location: Fort Wayne
Township: St. Joseph
County: St. Allen
State: Indiana

Date: 10/13/2022



Figure 3: Allen County Mapped Soils - SSURGO
1 of 2

Clinton Street Roadway Improvement Project



City of Fort Wayne
Citizens Square
200 East Berry Street, Suite 425
Fort Wayne, Indiana 46802

Allen County Highway Department
Citizens Square
200 East Berry Street, Suite 425
Fort Wayne, Indiana 46802

Location: Fort Wayne
Township: St. Joseph
County: Allen
State: Indiana

Date: 09/20/2022

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Figure 3: Allen County Mapped Soils - SSURGO
2 of 2

Clinton Street Roadway Improvement Project

City of Fort Wayne
Citizens Square
200 East Berry Street, Suite 425
Fort Wayne, Indiana 46802

Allen County Highway Department
Citizens Square
200 East Berry Street, Suite 425
Fort Wayne, Indiana 46802

Location: Fort Wayne
Township: St. Joseph
County: Allen
State: Indiana

Date: 09/20/2022





Path: P:\2020\03437\Drawings\Environmental\ArcView\Clinton Street Reconstruction\Exhibits\Wetland Delineation\Figure4_NWI\FEMA.1_of_2.mxd Date: 11/3/2022 User:rschuler

Investigated Area

NWI Mapped Wetlands

FEMA Floodplains and Floodways

NHD Local Resolution Flowlines

- Connector
- Canal/Ditch
- Underground Conduit
- Pipeline
- Stream/River
- Artificial Path
- Coastline

Figure 4: NWI, NHD Flowlines, and FEMA 100-year Floodplain Map - 1 of 2

City of Fort Wayne
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Fort Wayne, Indiana 46802

Allen County Highway Department
Citizens Square
200 East Berry Street, Suite 425
Fort Wayne, Indiana 46802

Clinton Street Roadway Improvement Project

Location: Fort Wayne
Township: St. Joseph
County: Allen
State: Indiana

Date: 09/20/2022





Path: P:\2020\03\437\Drawings\Environmental\ArcView\Clinton Street Reconstruction\Exhibits\Wetland Delineation\Figure4_NWI\FEMA.2of2.mxd Date: 11/3/2022 User:rschuler



Figure 4: NWI, NHD Flowlines, and FEMA 100-year Floodplain Map - 2 of 2

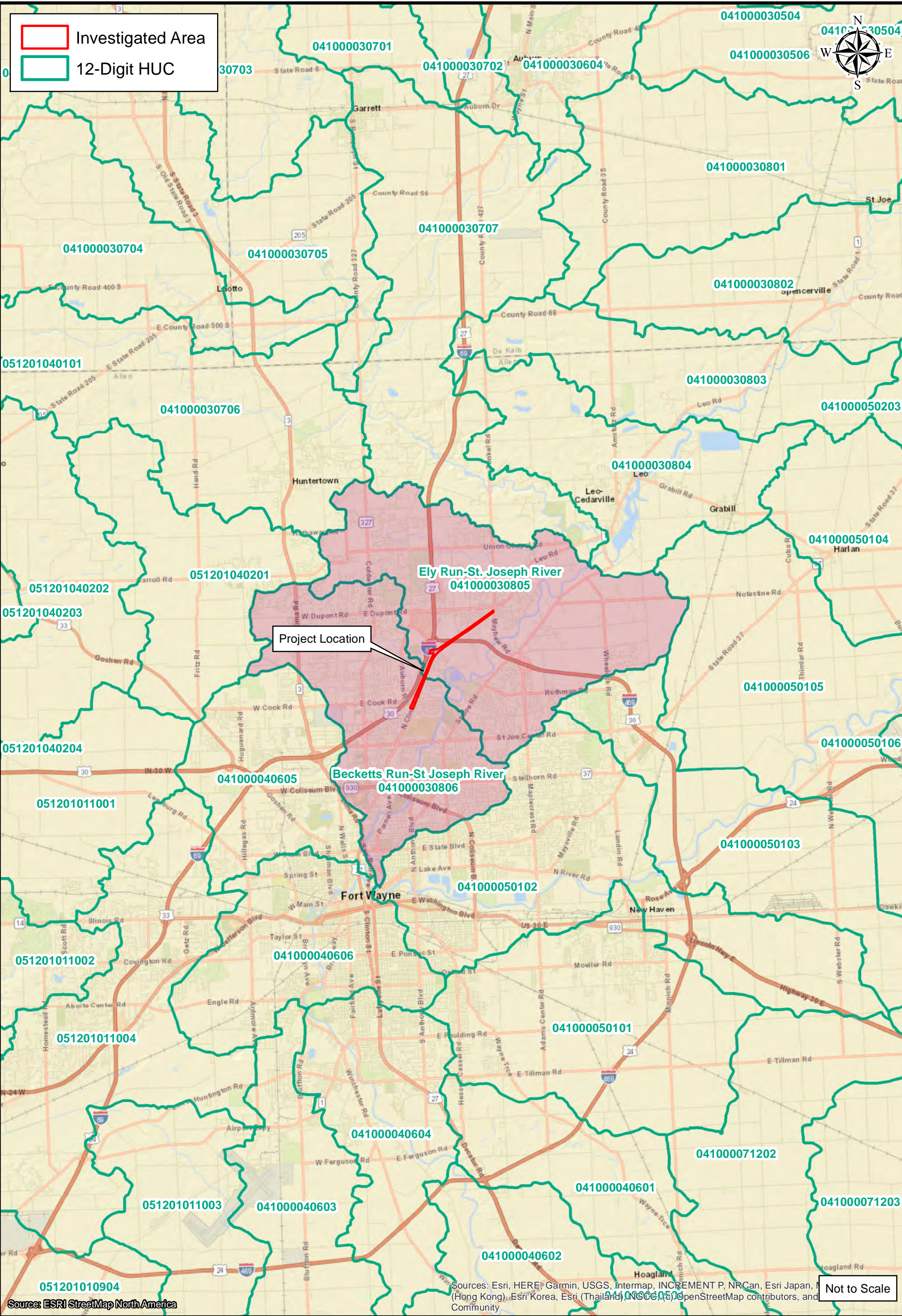
City of Fort Wayne
Citizens Square
200 East Berry Street, Suite 425
Fort Wayne, Indiana 46802

Allen County Highway Department
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200 East Berry Street, Suite 425
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Clinton Street Roadway Improvement Project

Location: Fort Wayne
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Date: 09/20/2022



Path: \\indy.san\p\Projects\2020\03437.D - Drawings\Environmental\ArcView\Clinton Street Reconstruction\Exhibits\Wetland Delineation\Figure5.HUC.mxd Date: 11/1/2022 User:scschuler

**AMERICAN
STRUCTUREPOINT
INC.**

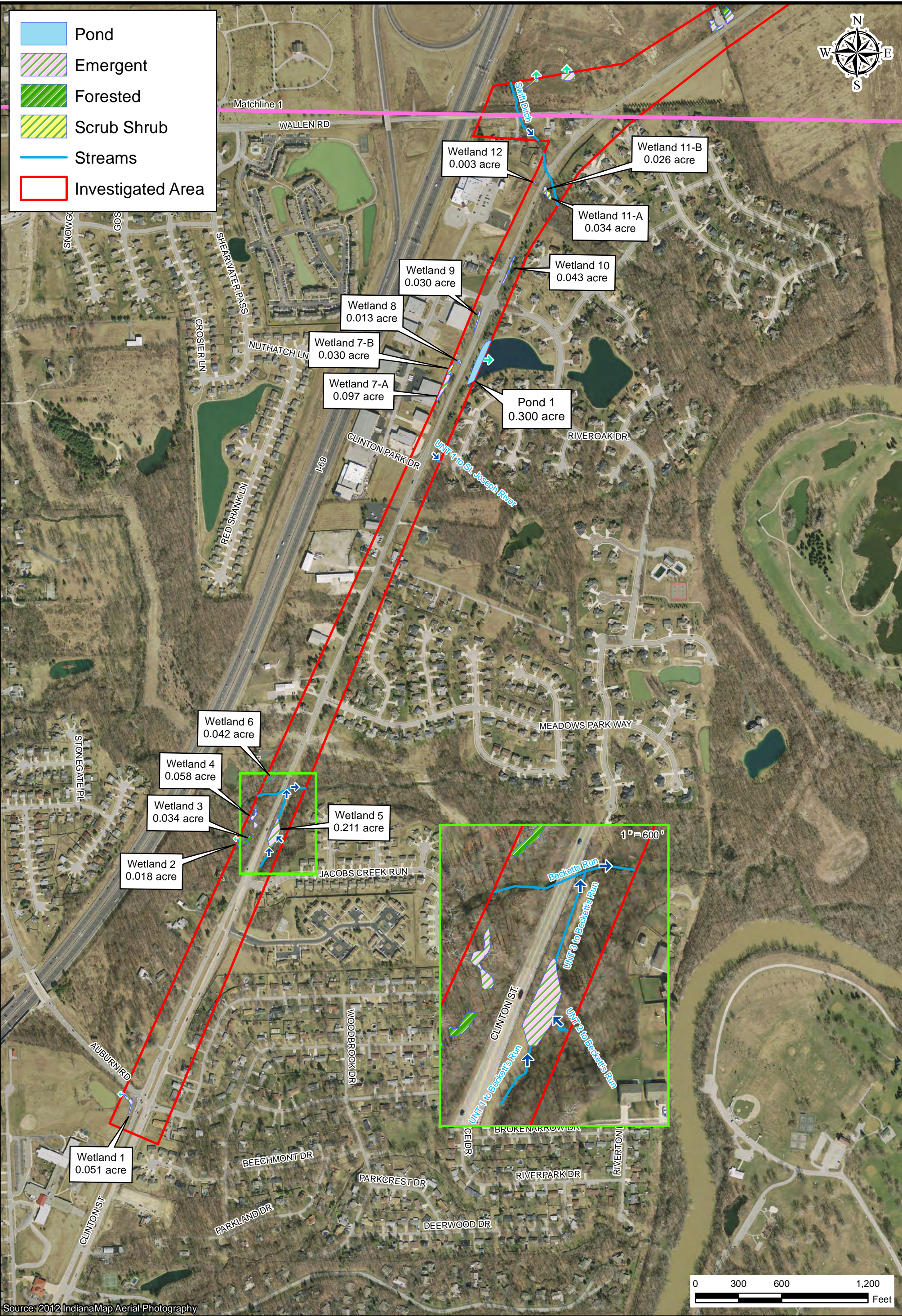
Figure 5: 12-Digit HUC Map

City of Fort Wayne Citizens Square 200 East Berry Street, Suite 425 Fort Wayne, Indiana 46802	Allen County Highway Department Citizens Square 200 East Berry Street, Suite 425 Fort Wayne, Indiana 46802
--	---

Clinton Street Roadway Improvement Project

 Location: Fort Wayne
 Township: St. Joseph
 County: Allen
 State: Indiana

 Date: 10/13/2022



Source: 2012 IndianaMap Aerial Photography



Figure 6: 2012 Aerial Photography Map
1 of 2

City of Fort Wayne
Citizens Square
200 East Berry Street, Suite 425
Fort Wayne, Indiana 46802





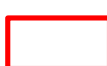
Allen County Highway Department
Citizens Square
200 East Berry Street, Suite 425
Fort Wayne, Indiana 46802

Clinton Street Roadway Improvement Project

Location: Fort Wayne
Township: St. Joseph
County: Allen
State: Indiana

Date: 10/13/2022

Path: P:\2020\03437.D - Drawings\Environmental\ArcView\Clinton Street Reconstruction\Exhibits\Wetland Delineation\Figure6_Aerial_1of2.mxd Date: 11/3/2022 User: reschuler

 Emergent
 Forested
 Scrub Shrub
 Streams
 Investigated Area



Path: P:\2020\03437\Drawings\Environmental\ArcView\Clinton Street Reconstruction\Exhibits\Wetland Delineation\Figure6_Aerial2of2.mxd Date: 11/3/2022 User: reschuler

Source: 2012 IndianaMap Aerial Photography

Figure 6: 2012 Aerial Photography Map
2 of 2

Clinton Street Roadway Improvement Project



City of Fort Wayne
 Citizens Square
 200 East Berry Street, Suite 425
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 Citizens Square
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 Fort Wayne, Indiana 46802

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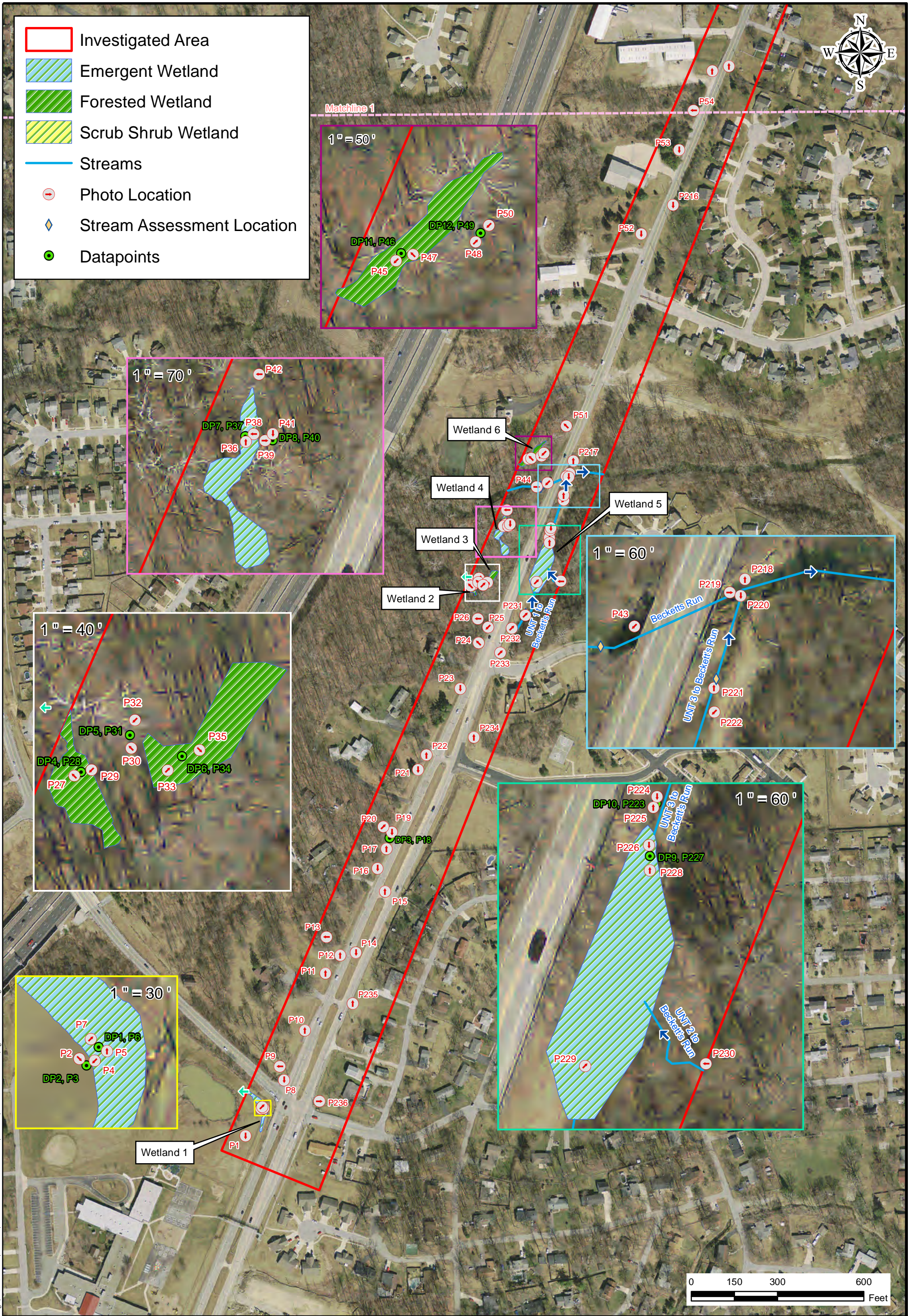


Figure 7: Field Investigation and Photo Location Map
1 of 4



City of Fort Wayne
Citizens Square
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Fort Wayne, Indiana 46802

Allen County Highway Department
Citizens Square
200 East Berry Street, Suite 425
Fort Wayne, Indiana 46802

Clinton Street Roadway Improvement Project

Location: Fort Wayne
Township: St. Joseph
County: Allen
State: Indiana

Date: 09/20/2022

Path: P:\2020\03\437\Drawings\Environmental\ArcView\Clinton Street Reconstruction\Exhibits\Wetland Delineation\Figure7_FieldInvestigation_1of4.mxd Date: 1/3/2022 User: cschuler

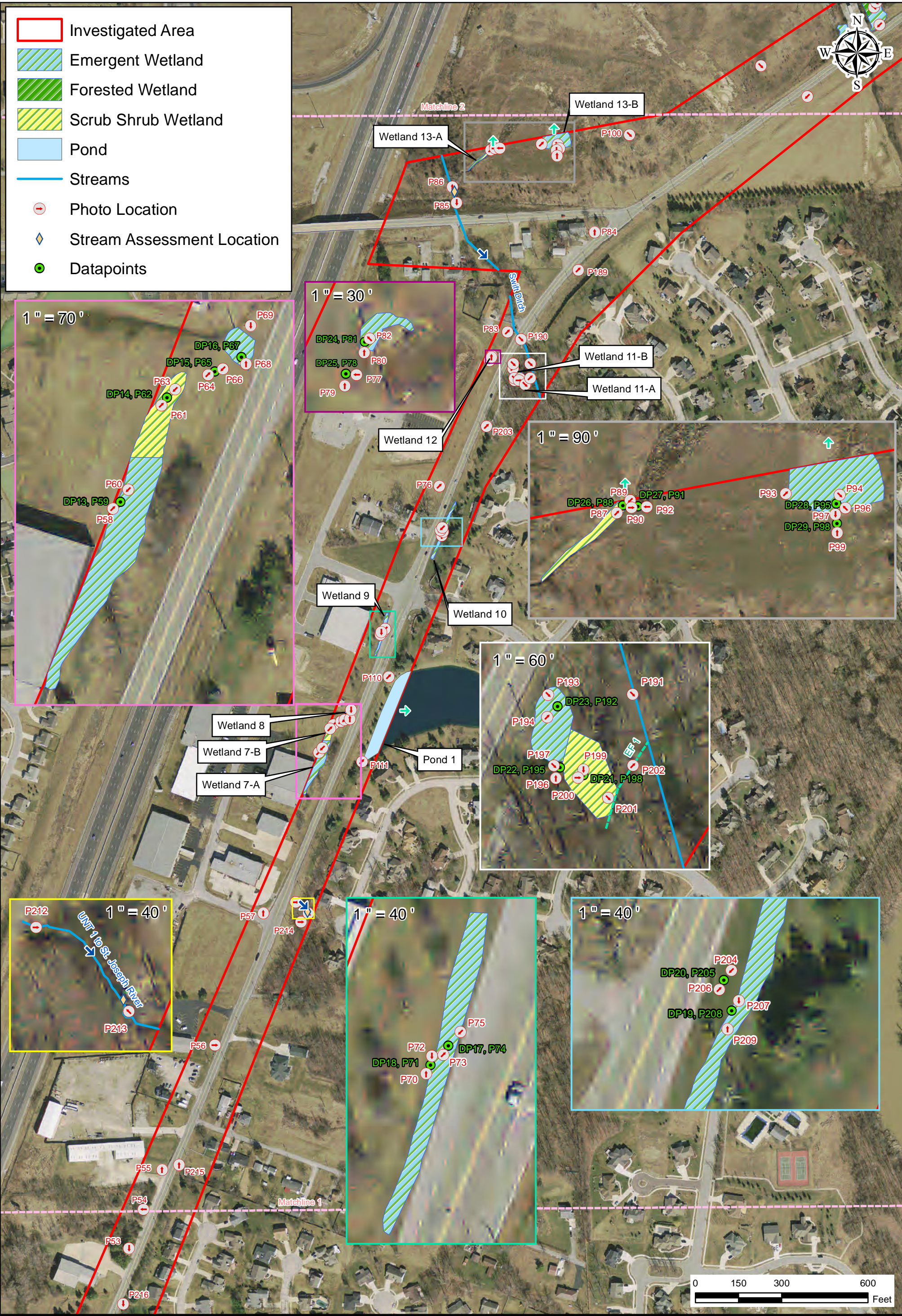


Figure 7: Field Investigation and Photo Location Map
2 of 4

Clinton Street Roadway Improvement Project



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200 East Berry Street, Suite 425
Fort Wayne, Indiana 46802

Location: Fort Wayne
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County: Allen
State: Indiana

Date: 09/20/2022

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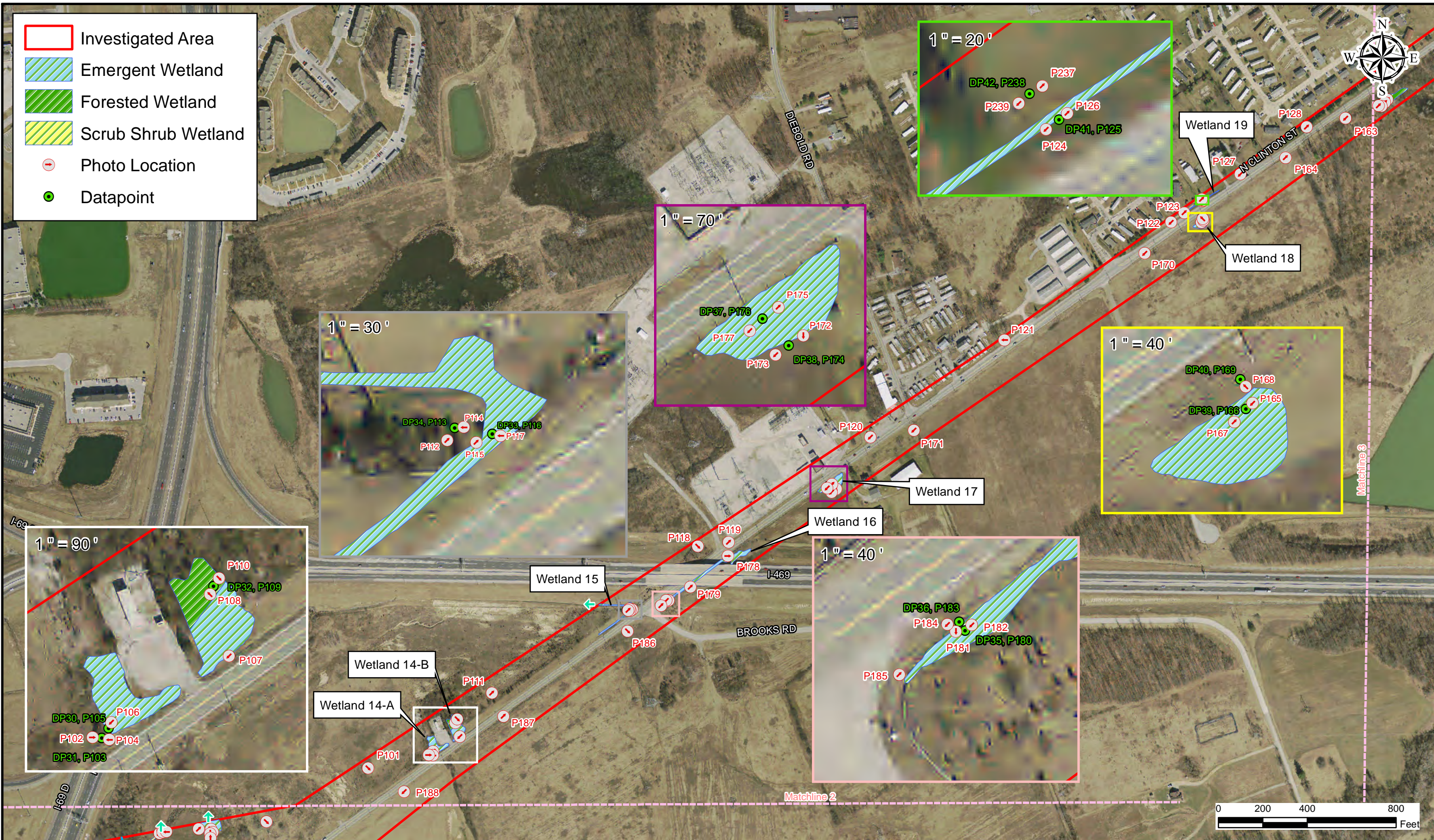


Figure 7: Field Investigation and Photo Location Map
3 of 4



City of Fort Wayne
Citizens Square
200 East Berry Street, Suite 425
Fort Wayne, Indiana 46802

Allen County Highway Department
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200 East Berry Street, Suite 425
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Clinton Street Roadway Improvement Project

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Path: P:\2020\03437\Drawings\Environmental\ArcView\Clinton Street Reconstruction\Exhibits\Wetland Delineation\Figure7_FieldInvestigation_4of4.mxd Date: 11/3/2022 User: schuler



Wetland 19

Wetland 20

Wetland 21

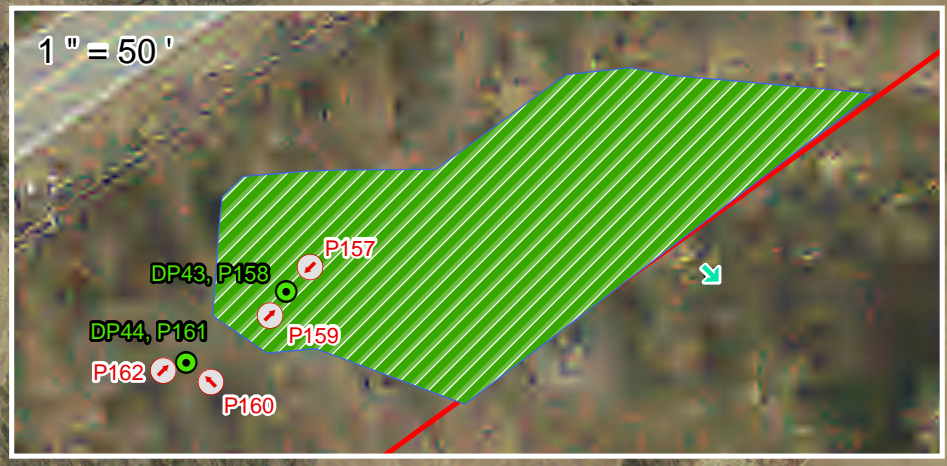


Figure 7: Field Investigation and Photo Location Map
4 of 4



City of Fort Wayne
Citizens Square
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Fort Wayne, Indiana 46802

Allen County Highway Department
Citizens Square
200 East Berry Street, Suite 425
Fort Wayne, Indiana 46802

Clinton Street Roadway Improvement Project

Location: Fort Wayne
Township: St. Joseph
County: Allen
State: Indiana

Date: 09/20/2022



Appendix E - Photographs



Photo 1. Looking south at roadside culvert inlet and beyond the southern investigated area extent.



Photo 2. Looking southeast at DP 2 and the upland area surrounding Wetland 1.



Photo 3. Looking at the DP 2 soil profile representative of the upland area surrounding Wetland 1.



Photo 4. Looking southwest at DP 2 and the upland area surrounding Wetland 1.



Photo 5. Looking north at DP 1 and Wetland 1.



Photo 6. Looking at the DP 1 soil profile representative of Wetland 1.



Photo 7. Looking northeast from DP 1 at Wetland 1.



Photo 8. Looking south at roadside culvert inlet and herbaceous vegetation along the west side of North Clinton Street.



Photo 9. Looking west at grassy ROW and residential yard.



Photo 10. Looking north at a roadside ditch and grassy ROW.



Photo 11. Looking north at culvert outlet and maintained grassy ROW.



Photo 12. Looking north at beginning of forested area and herbaceous vegetation along grassy ROW.



Photo 13. Looking west at a forested area.



Photo 14. Looking south at herbaceous vegetation within a median.



Photo 15. Looking north at herbaceous vegetation within a median.



Photo 16. Looking south at maintained grassy ROW along the west side of North Clinton Street.



Photo 17. Looking north at non-wetland DP 3 herbaceous vegetation.



Photo 18. Looking at the DP 3 and the soil profile taken within a non-wetland area.



Photo 19. Looking south at non-wetland DP 3 herbaceous vegetation.



Photo 20. Looking northeast at forested area along the west side of North Clinton Street.



Photo 21. Looking south at roadside ditch and maintained grassy ROW.



Photo 22. Looking north at culvert outlet and maintained grassy ROW.



Photo 23. Looking south at a roadside ditch and maintained grassy ROW along the west side of North Clinton Street.



Photo 24. Looking northwest at concrete lined roadside ditch and herbaceous vegetation along the west side of North Clinton Street.



Photo 25. Looking southwest at maintained grassy ROW and along a forested area on the west side of North Clinton Street.



Photo 26. Looking west into forested area along the west side on North Clinton Street.



Photo 27. Looking northwest from DP 4 at Wetland 2.



Photo 28. Looking at the DP 4 soil profile representative of Wetland 2.



Photo 29. Looking southwest from DP 4 at Wetland 2.



Photo 30. Looking northwest from DP 5 at upland area surrounding Wetland 2 and 3.



Photo 31. Looking at the DP 5 soil profile representative of the upland area surrounding Wetland 2 and Wetland 3.



Photo 32. Looking southwest from DP 5 at upland area surrounding Wetland 2 and 3.



Photo 33. Looking northeast from DP 6 at Wetland 3.



Photo 34. Looking at the DP 6 soil profile representative of Wetland 3.



Photo 35. Looking southeast from DP 6 at Wetland 3.



Photo 36. Looking north from DP 7 at Wetland 4.



Photo 37. Looking at the DP 7 soil profile representative of Wetland 4.



Photo 38. Looking west from DP 7 at Wetland 4.



Photo 39. Looking east from DP 8 at upland area surrounding Wetland 4.



Photo 40. Looking at the DP 8 soil profile representative of the upland area surrounding Wetland 4.



Photo 41. Looking south from DP 8 at upland area surrounding Wetland 4.



Photo 42. Looking west into forested area along the west side of North Clinton Street.



Photo 43. Looking southwest at Beckett's Run and Stream Assessment 4.

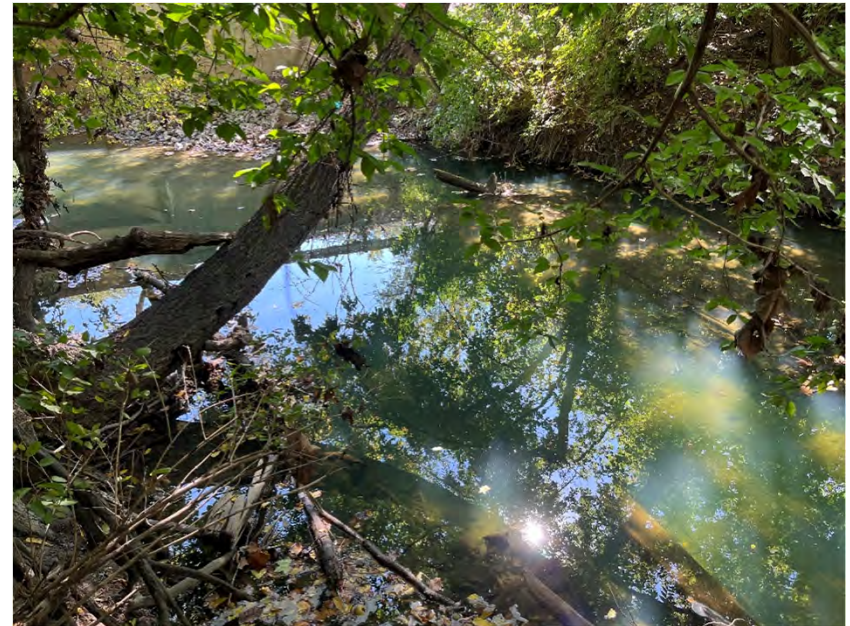


Photo 44. Looking east at Beckett's Run from Stream Assessment 4.



Photo 45. Looking southwest from DP 11 at Wetland 6 herbaceous vegetation.



Photo 46. Looking at the DP 11 soil profile representative of Wetland 6.



Photo 47. Looking northwest from DP 11 at Wetland 6.



Photo 48. Looking northeast from DP 12 at upland area surrounding Wetland 6.



Photo 49. Looking at the DP 12 soil profile representative of the upland area surrounding Wetland 6.



Photo 50. Looking southwest from DP 12 at upland area surrounding Wetland 6.



Photo 51. Looking northwest at a forested area along the west side of North Clinton Street.



Photo 52. Looking south at maintained grassy ROW along the west side of North Clinton Street.



Photo 53. Looking south at a roadside ditch and driveway culvert inlet.



Photo 54. Looking west at herbaceous vegetation in a forested area.



Photo 55. Looking north at a small erosional feature and grassy ROW.



Photo 56. Looking east at small structure inlet with riprap and maintained grassy ROW.



Photo 57. Looking north at a riprap lined roadside ditch.



Photo 58. Looking northeast from DP 13 at Wetland 7-A.



Photo 59. Looking at the DP 13 soil profile representative of Wetland 7-A.



Photo 60. Looking southwest from DP 13 at Wetland 7-A.



Photo 61. Looking northeast from DP 14 at Wetland 7-B.



Photo 62. Looking at the DP 14 soil profile representative of Wetland 7-B.



Photo 63. Looking southwest from DP 14 at Wetland 7-B.



Photo 64. Looking northeast from DP 15 at upland area surrounding Wetlands 7-A, 7-B, and 8.



Photo 65. Looking at the DP 15 soil profile representative of the upland area surrounding Wetland 7-A, Wetland 7-B, and Wetland 8.



Photo 66. Looking southwest from DP 15 at upland area surrounding Wetlands 7-A, 7-B and 8.



Photo 67. Looking at DP 16 and soil profile within Wetland 8.



Photo 68. Looking northwest from DP 16 at Wetland 8.



Photo 69. Looking west at Wetland 8.



Photo 70. Looking north at DP 18 and upland area surrounding Wetland 9.



Photo 71. Looking at the DP 18 soil profile representative of the upland area surrounding Wetland 9.



Photo 72. Looking south at DP 18 and the upland area surrounding Wetland 9.



Photo 73. Looking northeast at DP 17 and Wetland 9.



Photo 74. Looking at the DP 17 soil profile representative of Wetland 9.



Photo 75. Looking southwest at DP 17 and Wetland 9 vegetation.



Photo 76. Looking northeast at maintained grassy ROW along the west side of North Clinton Street.



Photo 77. Looking west at DP 25 and the upland area surrounding Wetland 12.



Photo 78. Looking at the DP 25 soil profile representative of the upland area surrounding Wetland 12.



Photo 79. Looking north at DP 25 and the upland area surrounding Wetland 12.



Photo 80. Looking north from DP 24 at Wetland 12.



Photo 81. Looking at the DP 24 soil profile representative of Wetland 12.



Photo 82. Looking northwest from DP 24 at Wetland 12.



Photo 83. Looking northeast at the small structure that conveys Swift Ditch under Clinton Street.



Photo 84. Looking north across a maintained residential lawn towards the intersection of Clinton Street and Wallen Road.



Photo 85. Looking downstream (south) at Swift Ditch and the small structure that conveys the stream under Wallen Road.



Photo 86. Looking upstream (north) from Stream Assessment 6 at Swift Ditch.



Photo 87. Looking northeast from DP 26 at Wetland 13-A.



Photo 88. Looking at the DP 26 soil profile representative of Wetland 13-A.



Photo 89. Looking southwest from DP 26 at Wetland 13-A.



Photo 90. Looking east at DP 27 at upland area surrounding Wetland 13-A.



Photo 91. Looking at the DP 27 soil profile representative of the upland area surrounding Wetland 13-A.



Photo 92. Looking west from DP 27 at upland area surrounding Wetland 13-A.



Photo 93. Looking northeast at the edge of Wetland 13-B.



Photo 94. Looking southeast from DP 28 at Wetland 13-B.



Photo 95. Looking at the DP 28 soil profile representative of Wetland 13-B.



Photo 96. Looking northwest from DP 28 at Wetland 13-B.



Photo 97. Looking south from DP 29 at the upland area surrounding Wetland 13-B.



Photo 98. Looking at the DP 29 soil profile representative of the upland area surrounding Wetland 13-B.



Photo 99. Looking north from DP 29 at the upland area surrounding Wetland 13-B.



Photo 100. Looking southeast towards a forested area along the west side of North Clinton Street.



Photo 101. Looking southeast at a forested area along the west side of North Clinton Street.



Photo 102. Looking east from DP 31 at the upland area surrounding Wetland 14-A.



Photo 103. Looking at the DP 31 soil profile representative of the upland area surrounding Wetland 14-A.



Photo 104. Looking west from DP 31 at the upland area surrounding Wetland 14-A.



Photo 105. Looking at the DP 30 soil profile representative of Wetland 14-A.



Photo 106. Looking southwest from DP 30 at Wetland 14-A.



Photo 107. Looking southwest at Wetland 14-A.



Photo 108. Looking northwest from DP 32 at Wetland 14-B.



Photo 109. Looking at the DP 32 soil profile representative of Wetland 14-B.



Photo 110. Looking southeast from DP 32 at Wetland 14-B



Photo 111. Looking northeast at a forested area on the west side of North Clinton Street.



Photo 112. Looking northeast from DP 34 at the upland area surrounding Wetland 15.



Photo 113. Looking at the DP 34 soil profile representative of the upland area surrounding Wetland 15.



Photo 114. Looking west from DP 34 at the upland area surrounding Wetland 15.



Photo 115. Looking northeast from DP 33 at Wetland 15.



Photo 116. Looking at the DP 33 the soil profile representative of Wetland 15.



Photo 117. Looking west from DP 33 at Wetland 15.



Photo 118. Looking southeast at a forested area on the west side of North Clinton Street.



Photo 119. Looking northeast at maintained grassy ROW along the west side of North Clinton Street.



Photo 120. Looking southwest at maintained grassy ROW.



Photo 121. Looking west at a forested area along the west side of North Clinton Street.



Photo 122. Looking southwest at a roadside ditch and maintained grassy ROW.



Photo 123. Looking northeast at Wetland 19.



Photo 124. Looking southwest from DP 41 at Wetland 19.



Photo 125. Looking at the DP 41 soil profile representative of Wetland 19.



Photo 126. Looking northeast from DP 41 at Wetland 19.



Photo 127. Looking southwest at maintained grassy ROW along the west side of North Clinton Street.



Photo 128. Looking northeast at maintained grassy ROW.



Photo 129. Looking northeast at maintained grassy ROW along the west side of North Clinton Street.



Photo 130. Looking northeast at maintained grassy ROW along the west side of North Clinton Street.



Photo 131. Looking southeast at Martin Ditch and the small structure that conveys the stream under Clinton Street.



Photo 132. Looking northeast at maintained grassy ROW and residential area along the west side of North Clinton Street.



Photo 133. Looking north at UNT 1 to Martin Ditch.



Photo 134. Looking northeast at maintained grassy ROW and bare ground along the west side of North Clinton Street.



Photo 135. Looking northwest at a dry bottom retention pond currently under construction.



Photo 136. Looking northwest at a dry bottom retention pond currently under construction.



Photo 137. Looking southwest at bare ground under construction and a dry bottom retention pond.



Photo 138. Looking northeast at maintained grassy ROW towards the northern extent of the project area.



Photo 139. Looking south at maintained grassy ROW.



Photo 140. Looking southeast at a forested area along the east side of North Clinton Street.



Photo 141. Looking southwest from DP 45 at Wetland 21.



Photo 142. Looking at the DP 45 soil profile representative of Wetland 21.



Photo 143. Looking northeast from DP 45 at Wetland 21.



Photo 144. Looking at the DP 46 soil profile representative of the upland area surrounding Wetland 21.



Photo 145. Looking north towards DP 46 and the upland area surrounding Wetland 21.



Photo 146. Looking northeast at maintained grassy ROW and bare ground.



Photo 147. Looking southeast at UNT 1 to Martin Ditch.



Photo 148. Looking upstream at UNT 1 to Martin Ditch from the Stream Assessment Location.



Photo 149. Looking southwest at maintained grassy ROW along the east side of North Clinton Street.



Photo 150. Looking northeast at herbaceous grassy ROW.



Photo 151. Looking southeast at Martin Ditch.



Photo 152. Looking upstream at Martin Ditch from the Stream Assessment Location.



Photo 153. Looking east into a floodplain associated with Martin Ditch.



Photo 154. Looking southeast into herbaceous vegetated investigated area along the east side of North Clinton Street.



Photo 155. Looking northeast at herbaceous grassy ROW.



Photo 156. Looking southeast into forested area along the east side of North Clinton Street.



Photo 157. Looking southwest at DP 43 and Wetland 20.



Photo 158. Looking at the DP 43 soil profile representative of Wetland 20.



Photo 159. Looking northeast at DP 43 and Wetland 20.



Photo 160. Looking northwest at DP 44 and the upland area surrounding Wetland 20.



Photo 161. Looking at DP 44 and soil profile representative of the upland area surrounding Wetland 20.



Photo 162. Looking northeast at DP 44 and upland vegetation surrounding Wetland 20.



Photo 163. Looking southwest at maintained grassy ROW and forested area.



Photo 164. Looking northeast at herbaceous grassy ROW.



Photo 165. Looking southwest at DP 39 and Wetland 18.



Photo 166. Looking at the DP 39 soil profile representative of Wetland 18.



Photo 167. Looking northeast at DP 39 and Wetland 18.



Photo 168. Looking northwest at DP 40 and upland area surrounding Wetland 18.



Photo 169. Looking at the DP 40 soil profile representative of the upland area surrounding Wetland 18.



Photo 170. Looking southwest at maintained grassy ROW.



Photo 171. Looking southwest at maintained grassy ROW.



Photo 172. Looking south from DP 38 at a gravel drive.



Photo 173. Looking southwest from DP 38 at the edge of Wetland 17 and the surrounding upland area.



Photo 174. Looking at the DP 38 soil profile representative of the upland area surrounding Wetland 17.



Photo 175. Looking northeast from DP 37 at Wetland 17.



Photo 176. Looking at the DP 37 soil profile representative of Wetland 17.



Photo 177. Looking southwest from DP 37 at Wetland 17.



Photo 178. Looking east at Wetland 16.



Photo 179. Looking northeast at Wetland 16.



Photo 180. Looking at the DP 35 soil profile representative of Wetland 16.



Photo 181. Looking south from DP 35 at Wetland 16.



Photo 182. Looking southwest from DP 35 at Wetland 16.



Photo 183. Looking at the DP 36 soil profile representative of the upland area surrounding Wetland 16.



Photo 184. Looking southwest from DP 36 at the upland area surrounding Wetland 16.



Photo 185. Looking northeast at the upland area surrounding Wetland 16.



Photo 186. Looking southeast at grassy ROW.



Photo 187. Looking northeast at maintained grassy ROW.



Photo 188. Looking southwest at maintained grassy ROW.



Photo 189. Looking northeast at maintained grassy ROW.



Photo 190. Looking southeast at Swift Ditch.



Photo 191. Looking southeast at Swift Ditch.



Photo 192. Looking at the DP 23 soil profile representative of Wetland 11-B.



Photo 193. Looking southeast from DP23 at Wetland 11-B.



Photo 194. Looking northeast from DP 23 at Wetland 11-B.



Photo 195. Looking at the DP 22 soil profile representative of the upland area surrounding Wetland 11-A and 11-B.



Photo 196. Looking north at DP 22 and the upland area surrounding Wetland 11-A and 11-B.



Photo 197. Looking southeast from DP 22 at the upland area surrounding Wetland 11-A and 11-B.



Photo 198. Looking at the DP 21 soil profile representative of Wetland 11-A.



Photo 199. Looking south from DP 21 at Wetland 11-A.



Photo 200. Looking east from DP 21 at Wetland 11-A.



Photo 201. Looking southeast at Erosional Feature 1 which drains Wetland 11-A.



Photo 202. Looking north at Erosional Feature 1 which drains Wetland 11-A.



Photo 203. Looking northeast at a riprap chute which drains to Swift Ditch.



Photo 204. Looking southwest from DP 20 at the upland area surrounding Wetland 10.



Photo 205. Looking at the DP 20 soil profile representative of the upland area surrounding Wetland 10.



Photo 206. Looking northeast from DP 20 at the upland area surrounding Wetland 10.



Photo 207. Looking south from DP 19 at Wetland 10.



Photo 208. Looking at the DP 19 soil profile representative of Wetland 10.



Photo 209. Looking north from DP 19 at Wetland 10.



Photo 210. Looking northeast at maintained grassy ROW.



Photo 211. Looking northeast at Pond 1.



Photo 212. Looking east at UNT 1 to St. Joseph River and herbaceous vegetation.



Photo 213. Looking northwest at UNT 1 to St. Joseph River from the Stream Assessment Point.



Photo 214. Looking east into a forested area.



Photo 215. Looking north at herbaceous ROW along the east side of North Clinton Street.



Photo 216. Looking south at maintained grassy ROW.



Photo 217. Looking north at grassy ROW.



Photo 218. Looking north at a riprap chute which drains into Beckett's Run.



Photo 219. Looking east at Beckett's Run.



Photo 220. Looking south at UNT 3 to Beckett's Run.



Photo 221. Looking north at UNT 3 to Beckett's Run from the Stream Assessment Location.



Photo 222. Looking southeast at a forested area along the east side of North Clinton Street.



Photo 223. Looking at the DP 10 soil profile representative of the upland area surrounding Wetland 5.



Photo 224. Looking south from DP 10 at the upland area surrounding Wetland 5.



Photo 225. Looking north from DP 10 at the upland area surrounding Wetland 5.



Photo 226. Looking south from DP 9 at Wetland 5.



Photo 227. Looking at the DP 9 soil profile representative of Wetland 5.



Photo 228. Looking north from DP 9 at Wetland 5.



Photo 229. Looking northeast at Wetland 5.



Photo 230. Looking northwest along UNT 2 to Beckett's Run from the Stream Assessment Location.



Photo 231. Looking northeast at UNT 1 to Beckett's Run from the Stream Assessment Location.



Photo 232. Looking northeast along a forested area and maintained grassy ROW.



Photo 233. Looking northeast at maintained grassy ROW.



Photo 234. Looking north at maintained grassy ROW.



Photo 235. Looking north at maintained grassy ROW.



Photo 236. Looking east at maintained grassy ROW.



Photo 237. Looking northeast from DP 42 at upland area surrounding Wetland 19.



Photo 238. Looking at the DP 42 soil profile representative of the upland area surrounding Wetland 19.



Photo 239. Looking southwest from DP 42 at upland area surrounding Wetland 19.