



Land Solutions

WETLAND AND WATER RESOURCE DELINEATION REPORT

**Undeveloped 4.87-Acre (Approximate) Property
Northwest of SR 7 and Underridge Road
Conneaut, Ashtabula County, Ohio
(Parcel ID 12-316-00-026-00)**

Prepared For:

**High Point Charitable Services, Inc.
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October 7, 2022

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1.0 INTRODUCTION

This wetland and water resource delineation report provides documentation regarding the habitat characteristics and the associated locations at a 4.87-acre Property located northwest of Ohio State Route 7 (SR 7) and Underridge Road, Conneaut, Ashtabula County, Ohio (herein referred to as the “Project Area”). The study and report were completed by Land Solutions, LLC (herein referred to as “Consultant”) on behalf of High Point Charitable Services, Inc., herein referred to as the “Client”. The data collected includes non-wetland areas, as well as wetlands, streams, and open water (pond) habitats. The following information outlines the review of the background and existing resource materials, existing site conditions, and results of the field investigation.

2.0 SITE DESCRIPTION

The Project Area is undeveloped and zoned for commercial land use in Conneaut City, Ashtabula County, Ohio. The majority of the Project Area consists of very dense herbaceous and shrub habitats as well as mixed-age forest. The Project Area is a corner lot adjacent to Love’s Travel Stop to the north and surrounded by undeveloped land to the south and west. SR 7 is located along the eastern boundary of the Project Area, and Interstate 90 (I-90) is located to the north. A site location map is included in **Appendix A** as **Figure 1**.

2.1 Purpose

The purpose of this report is to present the results of a wetland and water resource delineation of areas considered “Waters of the United States (US)” or “Waters of the State of Ohio”. Qualified wetland scientists conducted a site visit in order to determine if any wetland areas were present and to mark the boundaries. Additionally, any water resources such as streams or open water areas (ponds) were identified and located.

3.0 METHODS

The on-site routine criteria were utilized as outlined in the *U.S. Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory 1987) in conjunction with the United States Army Corps of Engineers (USACE) *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0)* (April 2012). This approach recognizes the three parameters of vegetation, soils, and hydrology to identify and delineate wetlands. Data on soils, vegetation, and hydrology were collected on September 28, 2022, during an on-site investigation conducted by qualified wetland scientists. Additionally, any other water resource features such as streams and open water (pond) areas were identified.

Hydrology was considered present if a minimum of one (1) primary indicator or two (2) secondary indicators were identified. Indicators of wetland hydrology (saturated or inundated soils) along with signs of previous prolonged inundation in the upper 12 inches were measured from the ground surface. Consistent with the 1987 Manual and appropriate Regional Supplement, the primary and secondary indicators of hydrology during the growing season were also noted at each sampling location.

Dominant species were determined by visually estimating the percent cover of each species within a plot of an approximately 30-foot (ft) radius for trees, 15-ft radius for saplings/shrubs, 5-ft radius for herbs, and a 30-ft radius for woody vines. Species nomenclature and wetland indicator status follows that of the USACE *National Wetland Plant List* (November 2021). Hydrophytic species are those wetland plants with an indicator status of OBL (obligate wetland), FACW (facultative wetland), or FAC (facultative). Species listed as FACU (facultative upland) or UPL (upland) are more indicative of upland areas and generally do not occur in wetlands. All wetland and water resource habitats were classified according to definitions provided by the United States Fish and Wildlife Service (USFWS), and *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al. 1979).

Soils were examined by using a sharp-shooter shovel to excavate to a depth of approximately 12 to 20 inches or to refusal based on methods outlined in the National Technical Committee for Hydric Soils (1991). Soil colors were determined using a 2010 Munsell® Soil Color Chart and hydric soils were determined using the Hydric Soils Technical Manual Version 8.2 (2018) when soils were moist or wetted. Redoximorphic concentrations, the apparent accumulation of iron and manganese oxides within the soil profile were noted if observed. Redox depletions where Fe-Mn oxides have been stripped and consist of a low chroma of two (2) or less and a value of four (4) or higher were also noted if observed. These features are usually an indication of periodically, seasonally, or permanently saturated soil conditions (Vepraskas 2015). Indicators of hydric soils characteristics were based on the USDA textures. Hydric soils were considered present if one or more indicators were identified.

3.1 Field Practices and Global Positioning System

At each data point, data pertaining to vegetation, soils and hydrology were recorded on separate United States Army Corps of Engineers (USACE) wetland determination data forms. Data points were documented via photographs and marked in the field with flagging. If any data point met all three (3) criteria, the wetland was designated with a letter, and the boundaries were delineated using consecutively numbered flagging.

During the site visit, the upland or non-wetland data points, wetland/upland boundaries, and other features within the Project Area were geolocated using Trimble® Global Positioning System (GPS) Geo 7x receiver. GPS Pathfinder Office software was used to improve the accuracy of the collected positions via differential correction. Corrected files were obtained from a local dedicated base station. The acquired data taken with the GPS receiver and post-processed provides locations within sub-meter accuracy. AutoCAD software was used to prepare the field data mapping.

4.0 REVIEW OF BACKGROUND RESOURCES AND EXISTING DOCUMENTATION

4.1 National Wetlands Inventory Map

A review of the USFWS National Wetlands Inventory (NWI) map of Conneaut, Ohio indicates there are no wetlands or streams identified within the Project Area (**Appendix A, Figure 2**). Note that NWI maps were derived from aerial photo interpretation and are designed for general planning purposes only.

4.2 Topography and Drainage

The Project Area is comprised of a relatively flat topography that gently slopes from the southern portion to the northern portion. Review of the Conneaut, Ohio USGS 7.5-minute Topographic Quadrangle map and USGS Lidar Point Cloud data (2019) indicates that the existing topography on the site ranges between 732 to 752 feet in elevation above the National Geodetic Vertical Datum (NGVD). The portion of the USGS Topographic map showing the Project Area is included in **Appendix A** as **Figure 3**.

The majority of the surficial drainage on-site has no apparent surface water connections and is generally conveyed in a north/northwesterly direction via overland flow towards an off-site stream. This stream is an unnamed tributary of the West Branch of Conneaut Creek. Conneaut Creek drains 152 square miles of Crawford and Erie counties in Pennsylvania and Ashtabula County, Ohio. The Chautauqua-Conneaut watershed is designated with the 8-digit Hydrologic Unit Code (HUC-8) 04120101.

4.3 Soil Survey

The Soil Survey of Ashtabula County, Ohio (<http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>) and Ashtabula County GIS indicate two (2) soils mapped within the Project Area: Hornell silt loam, 0 to 2% slopes (HoA) and Udorthents (Ud). The Ashtabula County GIS Map showing the soils is provided as **Appendix A, Figure 4**. HoA is considered a somewhat poorly drained soil, and Ud does not have a drainage class. Ashtabula County Natural Resource Conservation Service (NRCS) designates HoA as non-hydric with hydric inclusions, and Ud is not designated. No water resources are indicated on the NRCS mapping.

4.4 Aerial Imagery

A review of aerial imagery from the Ohio Department of Administration (2012) and the Ashtabula County GIS (2020) shows that the Project Area has remained largely undeveloped since at least 1993. Aerial imagery prior to 1993 shows the Project Area was previously used for agriculture. A roadside ditch was created in the eastern and southeastern portion of the Project Area around 1993 and appears to have since become vegetated and have ponded water, indicating a potential wetland. The eastern portion appears to have been graded around 2004. There are no other wetlands or other water features visible from review of the aerial imagery within the Project Area. Aerial imagery from OSIP II is provided in **Appendix A** as **Figure 5**.

5.0 RESULTS AND DISCUSSION

The Project Area is located within the physiographic region of the Huron-Erie Lake Plains, Erie Lake Plain (Brockman 1998); and the Erie/Ontario Drift and Lake Plain, Erie Lake Plain Level IV Ecoregion (Woods et al. 1998). The field investigation was conducted on September 28, 2022. The weather at the time of the investigation was overcast and rainy with an average temperature of 57.5° Fahrenheit (F). There was a total of 5.82 inches of precipitation in the five days prior to the field visit.

The background resources largely did not show wetlands or water resources. However, there appears to be a vegetated ditch in the eastern portion, and the mapped soil type, HoA, is somewhat poorly drained and designated as non-hydric with hydric inclusions, a potential indicator of wetlands.

5.1 Findings of the Field Investigation

Six (6) data points (designated as “DP 1” to “DP 6”) were collected within the Project Area. The Field Data Location Map depicting the surveyed data point location and photograph locations with directions is provided in **Appendix A, Figure 6**. The data points collected within the Project Area were recorded on a Wetland Determination Data Form provided in **Appendix B**. Site photographs are located in **Appendix C**. The following descriptions provide a summary of each data point, including the location and characteristics.

Table 1. Data Point Summary					
Data Point	Hydrology	Hydrophytic Vegetation	Hydric Soils	Wetland Designation	Photo Numbers
DP 1			X		1
DP 2					2
DP 3	X	X	X	Wetland A (PEM)	3
DP 4					4
DP 5			X		5
DP 6	X	X	X	Wetland B (PEM)	6

5.2 Wetlands

Two (2) data points met all three (3) criteria of a wetland and the characteristics are discussed below.

Wetland A

Wetland A was designated as Palustrine Emergent which is consistent with the Cowardin (1979) classification of PEM. Wetland A totals 1.98 acres in size on-site and is located at DP3 in the western and northwestern portions of the Project Area. The tree stratum and shrub stratum consist of no plants. The dominant herbaceous stratum consists of *Phragmites australis* (common reed). Positive primary hydrology indicators of high water table (A2) and saturation (A3) were present. The hydric soil indicator was met as a depleted matrix (F3).

Wetland B

Wetland B was designated as Palustrine Emergent which is consistent with the Cowardin (1979) classification of PEM. Wetland B totals 0.53 acres in size on-site and is located at DP6 in the eastern and southeastern portions of the Project Area. The tree stratum consists of no plants. The shrub stratum consists of *Viburnum dentatum* (southern arrowwood) and *Cornus amomum* (silky dogwood). The dominant herbaceous stratum consists of *Phragmites australis* (common reed). Positive primary hydrology indicators of surface water (A1), high water table (A2), saturation (A3), hydrogen sulfide odor (C1), and oxidized rhizospheres along living roots (C3) were all present. The hydric soil indicator was met as a loamy gleyed matrix (F2) and depleted matrix (F3).

5.3 Uplands

Several portions of the Project Area exhibited upland characteristics. Two (2) data points lacked two of the criteria, and two (2) data points lacked all three criteria. Four (4) data points were considered non-wetlands. Note that DP 5 was collected in the previously graded area in the eastern portion of the Project Area.

5.4 Streams and Other Waters

No streams or other waters were observed within the Project Area.

6.0 CONCLUSIONS

There were a total of two (2) wetlands identified within the Project Area. The data points and delineated boundary are shown on the Field Data Location Map (**Appendix A, Figure 6**). A summary of the wetland features and the preliminary jurisdictional status is provided in **Table 2**.

Table 2. Summary of Wetlands			
Wetland Designation	Type	Jurisdictional Status	Size (Acres)
Wetland A	PEM	Jurisdictional	1.98*
Wetland B	PEM	Jurisdictional	0.53*
Total			2.51

*On-Site

Data on which this report is based are on file with the Consultant. The wetland resources may be regulated under federal or state jurisdiction. No filling or disturbance may occur in jurisdictional areas without verification by the USACE and obtaining a permit prior to activity. The USACE, Buffalo District should be contacted by either the Consultant or the Client before working in any wetlands.

Based on the findings of the field investigation, the Consultant presents the following recommendations for consideration at the Project Area.

- 1) Submit a copy of this report to the USACE, Buffalo District to have the wetland boundaries and water resources verified and to determine jurisdiction of all of the features. It should be noted that wetlands and streams can be regulated by the federal or state agencies.
- 2) If the regulated features such as wetlands or streams cannot be avoided, submit and obtain a federal and/or state permit application prior to conducting any impacts.

7.0 DISCLAIMER

The terms “wetlands” and “waters of the United States” and “waters of the State of Ohio” as used in this report are the Consultant’s interpretation of state and federal laws concerning wetlands and water resource identification.

The definition and delineation of wetlands on any specific site are subject to interpretation by various regulatory agencies. The Consultant has, to the best of its ability, accurately delineated any jurisdictional limits based on current regulations and the experience with the regulatory agencies. There is no guarantee that the regulatory agencies involved will agree with those limits. All jurisdictional boundaries are based on the accuracy of the GPS equipment that was used to collect the data.

All mention of regulations and laws are the Consultant’s interpretation of state and federal regulations and/or laws and should not be taken as legal advice.

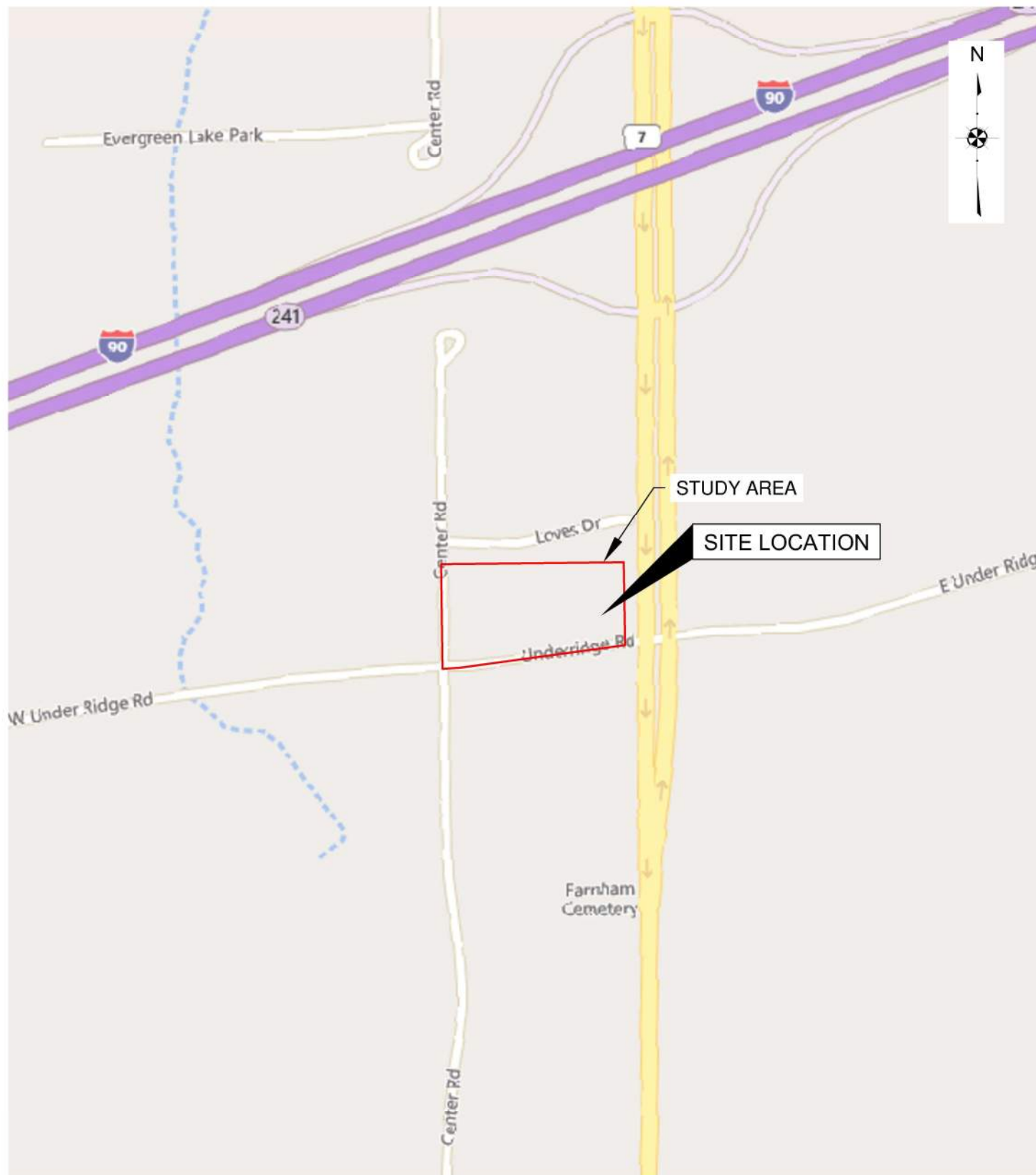
8.0 LITERATURE CITED

- Ashtabula County Geographical Information System. Viewed October 2022.
<https://parcelmap.ashtabulacounty.us/viewer/>
- Brockman, CS. 1998. *Physiographic Regions of Ohio*. Department of Natural Resources. Division of Geologic Survey, Columbus, Ohio.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. *Classification of Wetlands and Deepwater Habitats of the United States*. United States Department of Interior, Fish and Wildlife Service, Biological Services Program FWS/OBS-79/31, 103 pp.
- Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual*, Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi 39180-0631.
- Munsell Color. 2010. Munsell Color Charts. Kollmorgen Corporation, Baltimore, MD.
- National Technical Committee for Hydric Soils. 1991. *Hydric Soils of the United States*. United States Department of Agriculture. Soil Conservation Service. Washington, DC
- Ohio Department of Administrative Services. 2012 OSIP II Imagery. Columbus, Ohio: Ohio Office of Information Technology, 2022.
- United States Army Corps of Engineers. 2012. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region Version 2.0*, ed. J.F. Berkowitz, J.S. Wakeley, R. W. Lichvar, C. V. Noble. ERDC/EL TR-12-9. Vicksburg, MS: U.S. Army Engineer Research and Development Center.
- United States Army Corps of Engineers. 2021. *National Wetland Plant List*, version 3.5 <http://wetland-plants.usace.army.mil/> U.S. Army Corps of Engineer, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH
- United States Department of Agriculture, Natural Resources Conservation Service. 2018. *Field Indicators of Hydric Soils in the United States, Version 8.2*. L.M. Vasilas, G.W. Hurt, and J.F. Berkowitz (eds.). USDA, NRCS, in cooperation with the National Technical Committee for Hydric Soils.
- United States Department of Agriculture: Natural Resources Conservation Service (NRCS). *"List of Hydric Soils of Ashtabula County, Ohio."* Viewed October 2022.
<http://www.nrcs.usda.gov>
- United States Department of Agriculture: NRCS. *Web Soil Survey*. Viewed October 2022.
<http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>.

- United States Department of Interior. 2022. *National Wetland Inventory Mapper*. Conneaut, Ohio.
- United States Geologic Survey. 2022. *7.5-Minute Topographic Map*. Conneaut, Ohio Quadrangle.
- United States Geological Survey, 20220110, USGS Lidar Point Cloud OH_Statewide_Phase1_2019_B19 BN24920823: U.S. Geological Survey.
- United States Geological Survey, 20220110, USGS Lidar Point Cloud OH_Statewide_Phase1_2019_B19 BN24930823: U.S. Geological Survey.
- Vepraskas, M. J. 2015. *Redoximorphic Features for Identifying Aquic Conditions*. North Carolina Agricultural Research Service. North Carolina State University. Raleigh, North Carolina. Technical Bulletin 301. 12 pp.
- Woods A.J., Omernick JM, Brockman CS, Gerber TD, Hoster WD, and Azevedo SH. 1998. *Ecological Regions of Indiana and Ohio*. United States Geologic Survey, Denver, CO.

APPENDIX A

FIGURES



0 500
Scale 1"=500'



Land Solutions, LLC
34600 Chardon Road, Suite C
Willoughby Hills, Ohio 44094

FIGURE 1
SITE LOCATION MAP
HIGH POINT CHARITABLE SERVICES, INC.
NW OF SR 7 & UNDERRIDGE RD., CONNEAUT, ASHTABULA COUNTY, OHIO

Date: 2022-10-07
Scale: AS SHOWN
Filename: 22048
Drawn by: SRB



U.S. Fish and Wildlife Service National Wetlands Inventory



0 200
Scale 1"=200'

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

- Lake
- Other
- Riverine



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FIGURE 2
NATIONAL WETLANDS INVENTORY MAP
HIGH POINT CHARITABLE SERVICES, INC.
NW OF SR 7 & UNDERRIDGE RD., CONNEAUT, ASHTABULA COUNTY, OHIO

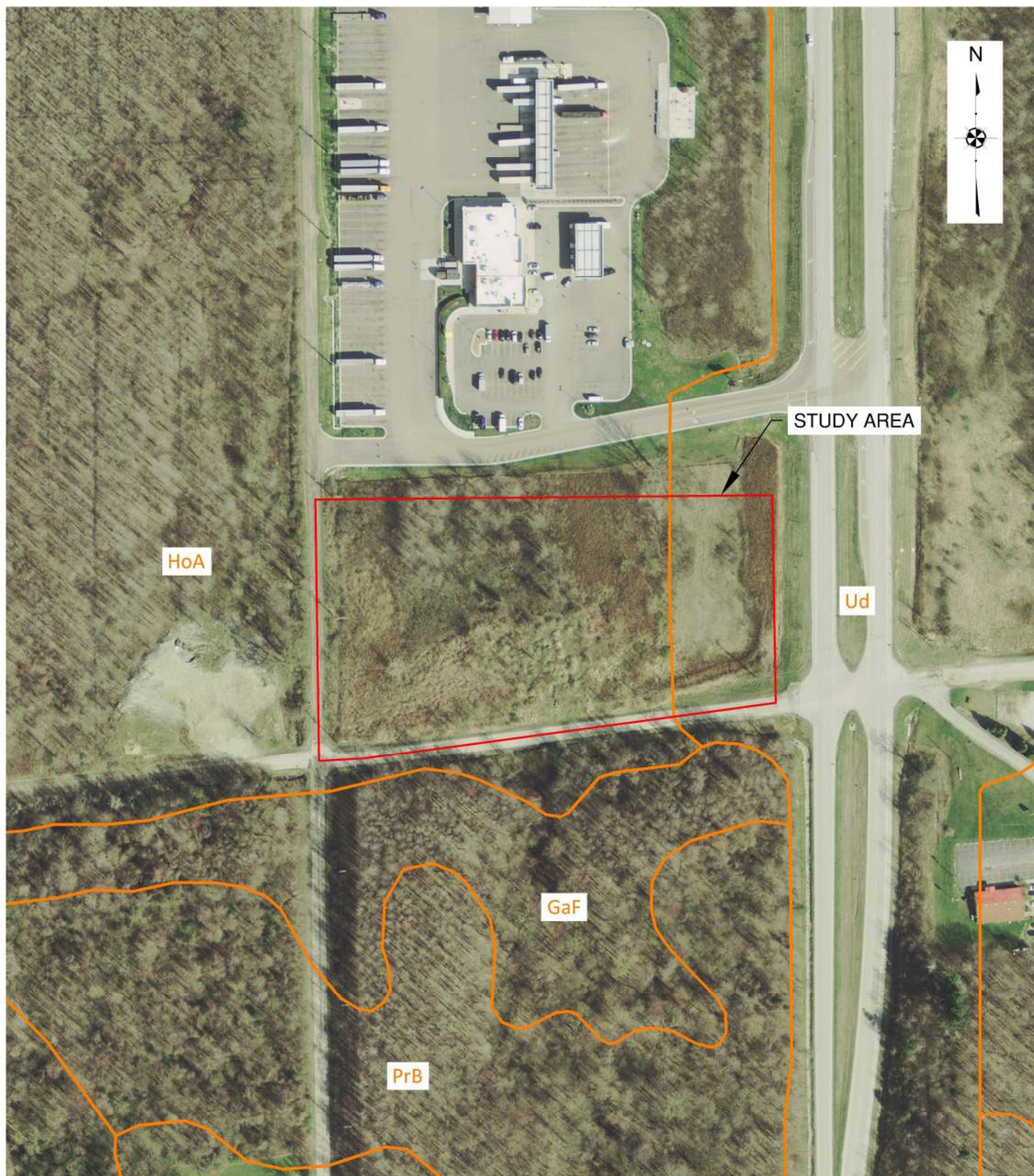
Date: 2022-10-07
Scale: AS SHOWN
Filename: 22048
Drawn by: SRB



Land Solutions, LLC
34600 Chardon Road, Suite C
Willoughby Hills, Ohio 44094

FIGURE 3
USGS TOPOGRAPHIC MAP
HIGH POINT CHARITABLE SERVICES, INC.
NW OF SR 7 & UNDERRIDGE RD., CONNEAUT, ASHTABULA COUNTY, OHIO

Date: 2022-10-07
Scale: AS SHOWN
Filename: 22048
Drawn by: SRB



0 200
Scale 1"=200'



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Willoughby Hills, Ohio 44094

FIGURE 4
NRCS SOIL SURVEY MAP
HIGH POINT CHARITABLE SERVICES, INC.
NW OF SR 7 & UNDERRIDGE RD., CONNEAUT, ASHTABULA COUNTY, OHIO

Date: 2022-10-07
Scale: AS SHOWN
Filename: 22048
Drawn by: SRB



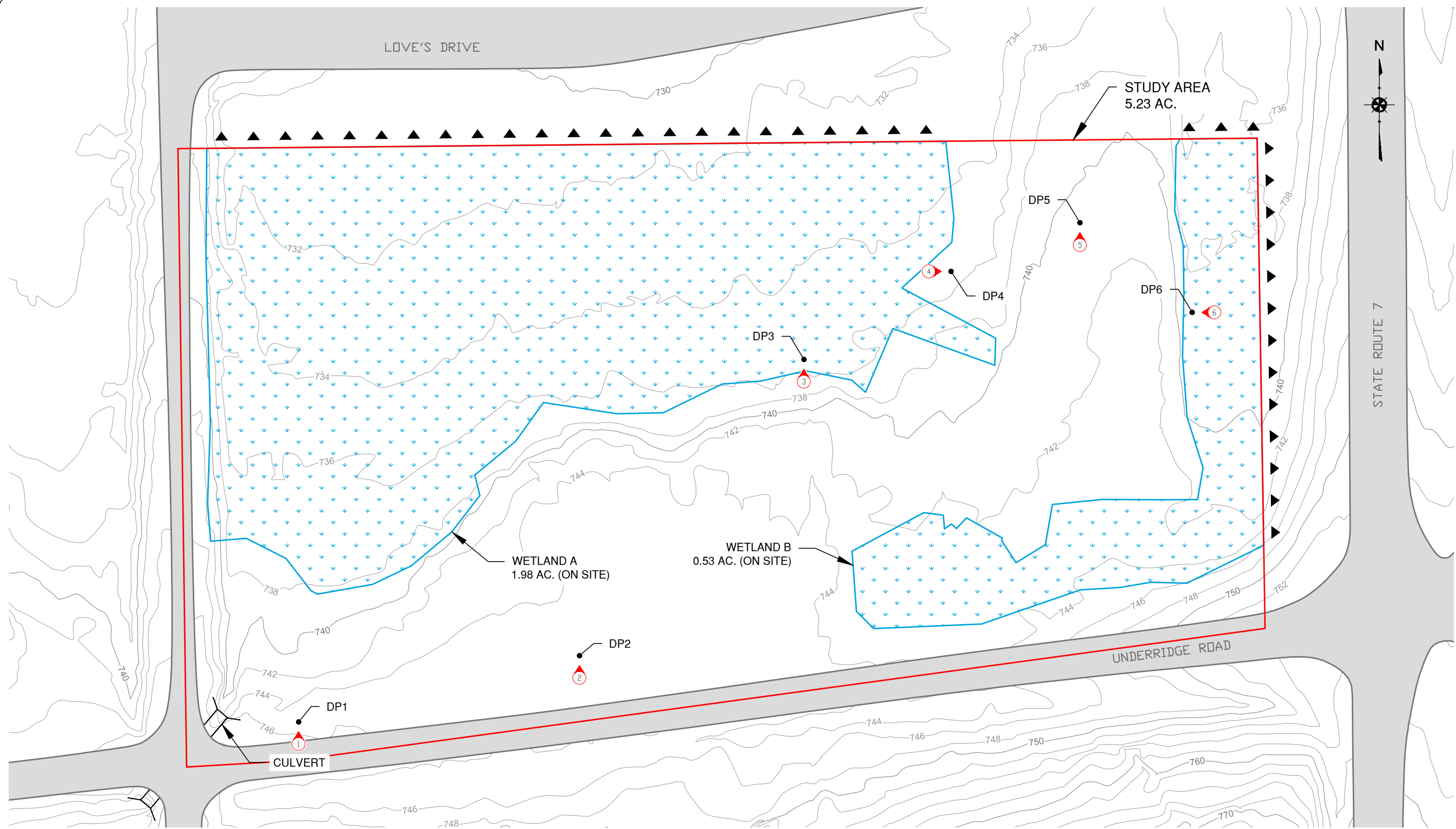
0 100
Scale 1"=100'



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Willoughby Hills, Ohio 44094

FIGURE 5
AERIAL PHOTOGRAPH MAP (2012 - OSIP II)
HIGH POINT CHARITABLE SERVICES, INC.
NW OF SR 7 & UNDERRIDGE RD., CONNEAUT, ASHTABULA COUNTY, OHIO

Date: 2022-10-07
Scale: AS SHOWN
Filename: 22048
Drawn by: SRB



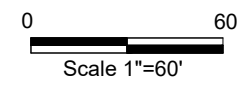
NOTE

1. PARCEL BOUNDARIES PROVIDED BY ASHTABULA COUNTY GIS

2. IN ORDER TO OBTAIN MORE DETAILED TOPOGRAPHIC CONTOURS FOR THE PROJECT AREA, CONTOURS WERE DERIVED FROM A 2019 USGS LIDAR DATASET.

WETLAND A	1.98 AC.
WETLAND B	0.53 AC.

NOTE: WETLAND AREAS BASED ON PORTIONS WITHIN THE STUDY AREA



LEGEND

- DP DATA POINT LOCATION
- PHOTOGRAPH LOCATION
- CULVERT
- CONTINUES OFF-SITE
- WETLAND



Date:	2022-10-07
Scale:	AS SHOWN
Filename:	22048
Drawn by:	SRB

FIGURE 6

FIELD DATA LOCATION MAP

HIGH POINT CHARITABLE SERVICES, INC.

NW OF SR 7 & UNDERRIDGE RD., CONNEAUT, ASHTABULA COUNTY, OHIO



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Willoughby Hills, Ohio 44094

APPENDIX B

WETLAND DETERMINATION DATA FORMS

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 22048 Conneaut City/County: Conneaut/Ashtabula Sampling Date: 2022-09-28
 Applicant/Owner: High Point Charitable Services, Inc. State: Ohio Sampling Point: DP1
 Investigator(s): Alexander Kozak; Melia DeJongh Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Base Slope Local relief (concave, convex, none): None Slope (%): _____
 Subregion (LRR or MLRA): R 139 Lat: 41.9119929 Long: -80.5713989 Datum: WGS 84
 Soil Map Unit Name: HoA - Hornell silt loam, 0 to 2 percent slopes NWI classification: _____

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 _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/> If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____	
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Remarks: (Explain alternative procedures here or in a separate report.)	
A non-wetland point located in an herbaceous habitat and near the southwestern portion of the Project Area.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ___ Surface Water (A1) ___ Water-Stained Leaves (B9) ___ High Water Table (A2) ___ Aquatic Fauna (B13) ___ Saturation (A3) ___ Marl Deposits (B15) ___ Water Marks (B1) ___ Hydrogen Sulfide Odor (C1) ___ Sediment Deposits (B2) ___ Oxidized Rhizospheres on Living Roots (C3) ___ Drift Deposits (B3) ___ Presence of Reduced Iron (C4) ___ Algal Mat or Crust (B4) ___ Recent Iron Reduction in Tilled Soils (C6) ___ Iron Deposits (B5) ___ Thin Muck Surface (C7) ___ Inundation Visible on Aerial Imagery (B7) ___ Other (Explain in Remarks) ___ Sparsely Vegetated Concave Surface (B8)		<u>Secondary Indicators (minimum of two required)</u> ___ Surface Soil Cracks (B6) ___ Drainage Patterns (B10) ___ Moss Trim Lines (B16) ___ Dry-Season Water Table (C2) ___ Crayfish Burrows (C8) ___ Saturation Visible on Aerial Imagery (C9) ___ Stunted or Stressed Plants (D1) ___ Geomorphic Position (D2) ___ Shallow Aquitard (D3) ___ Microtopographic Relief (D4) ___ 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? (includes capillary fringe) Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____		Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		
No positive indication of wetland hydrology was observed.		

VEGETATION – Use scientific names of plants.

 Sampling Point: DP1

Tree Stratum (Plot size: <u>30 ft r</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</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <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>3</u></td> <td>x 2 = <u>6</u></td> </tr> <tr> <td>FAC species <u>8</u></td> <td>x 3 = <u>24</u></td> </tr> <tr> <td>FACU species <u>95</u></td> <td>x 4 = <u>380</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>106</u> (A)</td> <td><u>410</u> (B)</td> </tr> </table> 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>3</u>	x 2 = <u>6</u>	FAC species <u>8</u>	x 3 = <u>24</u>	FACU species <u>95</u>	x 4 = <u>380</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>106</u> (A)	<u>410</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>3</u>	x 2 = <u>6</u>																	
FAC species <u>8</u>	x 3 = <u>24</u>																	
FACU species <u>95</u>	x 4 = <u>380</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>106</u> (A)	<u>410</u> (B)																	
_____ = Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Reynoutria japonica</u>	<u>90</u>	<input checked="" type="checkbox"/>	<u>FACU</u>	Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <u>Cirsium arvense</u>	<u>5</u>	<input type="checkbox"/>	<u>FACU</u>															
3. <u>Phragmites australis</u>	<u>3</u>	<input type="checkbox"/>	<u>FACW</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>98%</u> = Total Cover																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Vitis riparia</u>	<u>8</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
<u>8%</u> = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.) The hydrophytic vegetation criterion has not been met.				Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>														

SOIL

Sampling Point: DP1

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	80	10YR 4/2	20	C	M	Sandy Clay Loam	
4 - 18	10YR 4/2	100					Sandy Clay Loam	Potential fill
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

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"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) | <input checked="" type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) |
| <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) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ☐ Dark Surface (S7) (**LRR K, L**)
- ☐ Polyvalue Below Surface (S8) (**LRR K, L**)
- ☐ Thin Dark Surface (S9) (**LRR K, L**)
- ☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ 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:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 22048 Conneaut City/County: Conneaut/Ashtabula Sampling Date: 2022-09-28
 Applicant/Owner: High Point Charitable Services, Inc. State: Ohio Sampling Point: DP2
 Investigator(s): Alexander Kozak; Melia DeJongh Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Base Slope Local relief (concave, convex, none): None Slope (%): _____
 Subregion (LRR or MLRA): R 139 Lat: 41.9120942 Long: -80.5707616 Datum: WGS 84
 Soil Map Unit Name: HoA - Hornell silt loam, 0 to 2 percent slopes NWI classification: _____

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 _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/> If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Remarks: (Explain alternative procedures here or in a separate report.)	
<p>A non-wetland point located in an herbaceous habitat and near the southwestern portion of the Project Area. Potential former fill area</p>	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u>		<u>Secondary Indicators (minimum of two required)</u>
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input 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 _____ No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		
<p>No positive indication of wetland hydrology was observed.</p>		

Sampling Point: DP2

[illegible]

SOIL

Sampling Point: DP2

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 - 15	10YR 4/2	100					Silty Clay Loam	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators:**

- ☐ Histosol (A1) ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
☐ Histic Epipedon (A2) ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
☐ Black Histic (A3) ☐ Loamy Mucky Mineral (F1) (LRR K, L)
☐ Hydrogen Sulfide (A4) ☐ Loamy Gleyed Matrix (F2)
☐ Stratified Layers (A5) ☐ Depleted Matrix (F3)
☐ Depleted Below Dark Surface (A11) ☐ Redox Dark Surface (F6)
☐ Thick Dark Surface (A12) ☐ Depleted Dark Surface (F7)
☐ Sandy Mucky Mineral (S1) ☐ Redox Depressions (F8)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) (LRR R, MLRA 149B)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
☐ Coast Prairie Redox (A16) (LRR K, L, R)
☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
☐ Dark Surface (S7) (LRR K, L)
☐ Polyvalue Below Surface (S8) (LRR K, L)
☐ Thin Dark Surface (S9) (LRR K, L)
☐ Iron-Manganese Masses (F12) (LRR K, L, R)
☐ Piedmont Floodplain Soils (F19) (MLRA 149B)
☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ 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:

No positive indication of hydric soil was observed. Refusal at 15 inches from asphalt fill

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 22048 Conneaut City/County: Conneaut/Ashtabula Sampling Date: 2022-09-28
 Applicant/Owner: High Point Charitable Services, Inc. State: Ohio Sampling Point: DP3
 Investigator(s): Alexander Kozak; Melia DeJongh Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): _____
 Subregion (LRR or MLRA): R 139 Lat: 41.9125855 Long: -80.5702403 Datum: WGS 84
 Soil Map Unit Name: HoA - Hornell silt loam, 0 to 2 percent slopes NWI classification: _____

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 _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____ If yes, optional Wetland Site ID: <u>Wetland A</u>
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____	
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	
Remarks: (Explain alternative procedures here or in a separate report.)	
Wetland A, a PEM wetland, is located in the western and northwestern portions of the Project Area.	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
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 checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <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"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <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 <input checked="" type="checkbox"/> No _____ Depth (inches): <u>5</u> 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 _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		
A positive indication of wetland hydrology was observed.		

VEGETATION – Use scientific names of plants.

 Sampling Point: DP3

Tree Stratum (Plot size: <u>30 ft r</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</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <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>80</u></td> <td>x 2 = <u>160</u></td> </tr> <tr> <td>FAC species <u>10</u></td> <td>x 3 = <u>30</u></td> </tr> <tr> <td>FACU species <u>5</u></td> <td>x 4 = <u>20</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>95</u> (A)</td> <td><u>210</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.21</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>80</u>	x 2 = <u>160</u>	FAC species <u>10</u>	x 3 = <u>30</u>	FACU species <u>5</u>	x 4 = <u>20</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>95</u> (A)	<u>210</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>80</u>	x 2 = <u>160</u>																	
FAC species <u>10</u>	x 3 = <u>30</u>																	
FACU species <u>5</u>	x 4 = <u>20</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>95</u> (A)	<u>210</u> (B)																	
_____ = Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Phragmites australis</u>	<u>80</u>	<input checked="" type="checkbox"/>	<u>FACW</u>	Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <u>Parthenocissus quinquefolia</u>	<u>5</u>	_____	<u>FACU</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>85%</u> = Total Cover																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Calystegia sepium</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
<u>10%</u> = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.) The hydrophytic vegetation criterion has been met.				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____														

SOIL

Sampling Point: **DP3**

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 2/1	97	10YR 3/6	3	C	M	Clay Loam	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

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"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) | <input checked="" type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) |
| <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) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ☐ Dark Surface (S7) (**LRR K, L**)
- ☐ Polyvalue Below Surface (S8) (**LRR K, L**)
- ☐ Thin Dark Surface (S9) (**LRR K, L**)
- ☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ 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:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 22048 Conneaut City/County: Conneaut/Ashtabula Sampling Date: 2022-09-28
 Applicant/Owner: High Point Charitable Services, Inc. State: Ohio Sampling Point: DP4
 Investigator(s): Alexander Kozak; Melia DeJongh Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Head Slope Local relief (concave, convex, none): Convex Slope (%): _____
 Subregion (LRR or MLRA): R 139 Lat: 41.9127284 Long: -80.5699038 Datum: WGS 84
 Soil Map Unit Name: HoA - Hornell silt loam, 0 to 2 percent slopes NWI classification: _____

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 _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/> If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Remarks: (Explain alternative procedures here or in a separate report.)	
A non-wetland point located in an herbaceous habitat and near the northeastern portion of the Project Area.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u>		<u>Secondary Indicators (minimum of two required)</u>
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input 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? (includes capillary fringe) Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____		Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		
No positive indication of wetland hydrology was observed.		

VEGETATION – Use scientific names of plants.

 Sampling Point: **DP4**

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Juglans nigra</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FACU</u>	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>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>20%</u> = Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Lonicera tatarica</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACU</u>	Prevalence Index worksheet: <table style="width: 100%;"> <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>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>73</u></td> <td>x 4 = <u>292</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>73</u> (A)</td> <td><u>292</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>4.00</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>0</u>	x 3 = <u>0</u>	FACU species <u>73</u>	x 4 = <u>292</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>73</u> (A)	<u>292</u> (B)
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>0</u>	x 3 = <u>0</u>																	
FACU species <u>73</u>	x 4 = <u>292</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>73</u> (A)	<u>292</u> (B)																	
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>10%</u> = Total Cover																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Solidago canadensis</u>	<u>15</u>	<input checked="" type="checkbox"/>	<u>FACU</u>	Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <u>Reynoutria japonica</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACU</u>															
3. <u>Rubus allegheniensis</u>	<u>5</u>	_____	<u>FACU</u>															
4. <u>Glechoma hederacea</u>	<u>3</u>	_____	<u>FACU</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>33%</u> = Total Cover																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Vitis aestivalis</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACU</u>	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
<u>10%</u> = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.) The hydrophytic vegetation criterion has not been met.																		

SOIL

Sampling Point: DP4

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					Silty Clay Loam	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

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"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) |
| <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) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils³:

- | |
|--|
| <input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| <input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R) |
| <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| <input type="checkbox"/> Dark Surface (S7) (LRR K, L) |
| <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L) |
| <input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L) |
| <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R) |
| <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149B) |
| <input type="checkbox"/> Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| <input type="checkbox"/> Red Parent Material (F21) |
| <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <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:

No positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 22048 Conneaut City/County: Conneaut/Ashtabula Sampling Date: 2022-09-28
 Applicant/Owner: High Point Charitable Services, Inc. State: Ohio Sampling Point: DP5
 Investigator(s): Alexander Kozak; Melia DeJongh Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Low Hill Local relief (concave, convex, none): None Slope (%): _____
 Subregion (LRR or MLRA): R 139 Lat: 41.9128057 Long: -80.5696105 Datum: WGS 84
 Soil Map Unit Name: Ud - Udorthents NWI classification: _____

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 _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/> If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____	
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Remarks: (Explain alternative procedures here or in a separate report.)	
<p>A non-wetland point located in an herbaceous habitat and near the northeastern portion of the Project Area.</p>	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u>		<u>Secondary Indicators (minimum of two required)</u>
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input checked="" type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>14</u> Saturation Present? (includes capillary fringe) Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____		Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		
<p>Only one secondary indicator was present; therefore, the wetland hydrology criterion has not been met.</p>		

VEGETATION – Use scientific names of plants.

 Sampling Point: DP5

Tree Stratum (Plot size: <u>30 ft r</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>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <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>20</u></td> <td>x 2 = <u>40</u></td> </tr> <tr> <td>FAC species <u>10</u></td> <td>x 3 = <u>30</u></td> </tr> <tr> <td>FACU species <u>26</u></td> <td>x 4 = <u>104</u></td> </tr> <tr> <td>UPL species <u>4</u></td> <td>x 5 = <u>20</u></td> </tr> <tr> <td>Column Totals: <u>60</u> (A)</td> <td><u>194</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.23</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>10</u>	x 3 = <u>30</u>	FACU species <u>26</u>	x 4 = <u>104</u>	UPL species <u>4</u>	x 5 = <u>20</u>	Column Totals: <u>60</u> (A)	<u>194</u> (B)
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>10</u>	x 3 = <u>30</u>																	
FACU species <u>26</u>	x 4 = <u>104</u>																	
UPL species <u>4</u>	x 5 = <u>20</u>																	
Column Totals: <u>60</u> (A)	<u>194</u> (B)																	
_____ = Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Cornus amomum</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
2. <u>Fraxinus americana</u>	<u>7</u>	<input checked="" type="checkbox"/>	<u>FACU</u>															
3. <u>Crataegus crus-galli</u>	<u>5</u>		<u>FAC</u>															
4. <u>Malus coronaria</u>	<u>4</u>		<u>UPL</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>26%</u> = Total Cover																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Solidago canadensis</u>	<u>15</u>	<input checked="" type="checkbox"/>	<u>FACU</u>															
2. <u>Cornus amomum</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
3. <u>Viburnum dentatum</u>	<u>5</u>		<u>FAC</u>															
4. <u>Symphyotrichum pilosum</u>	<u>4</u>		<u>FACU</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>34%</u> = Total Cover																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
_____ = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.) The hydrophytic vegetation criterion has not been met.																		

Hydrophytic Vegetation Indicators:
 ___ 1 - Rapid Test for Hydrophytic Vegetation
 ___ 2 - Dominance Test is >50%
 ___ 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.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No ☒

SOIL

Sampling Point: DP5

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	98	10YR 4/6	2	C	M	Clay Loam	
4 - 18	10YR 5/2	80	10YR 6/1	10	D	M	Clay	
4 - 18			10YR 4/6	10	C	M	Clay	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

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"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) | <input checked="" type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) |
| <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) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils³:

- | |
|--|
| <input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| <input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R) |
| <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| <input type="checkbox"/> Dark Surface (S7) (LRR K, L) |
| <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L) |
| <input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L) |
| <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R) |
| <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149B) |
| <input type="checkbox"/> Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| <input type="checkbox"/> Red Parent Material (F21) |
| <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <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:

A positive indication of hydric soil was observed.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 22048 Conneaut City/County: Conneaut/Ashtabula Sampling Date: 2022-09-28
 Applicant/Owner: High Point Charitable Services, Inc. State: Ohio Sampling Point: DP6
 Investigator(s): Alexander Kozak; Melia DeJongh Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Ditch Local relief (concave, convex, none): Concave Slope (%): _____
 Subregion (LRR or MLRA): R 139 Lat: 41.9126502 Long: -80.5693616 Datum: WGS 84
 Soil Map Unit Name: Ud - Udorthents NWI classification: _____

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 _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____ If yes, optional Wetland Site ID: <u>Wetland B</u>
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____	
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	
Remarks: (Explain alternative procedures here or in a separate report.)	
Wetland B, a PEM wetland, is located in the eastern and southeastern portions of the Project Area.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u>		<u>Secondary Indicators (minimum of two required)</u>
<input checked="" type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> 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) ___ Marl Deposits (B15) <input checked="" type="checkbox"/> Hydrogen Sulfide Odor (C1) <input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) ___ Presence of Reduced Iron (C4) ___ Recent Iron Reduction in Tilled Soils (C6) ___ Thin Muck Surface (C7) ___ Other (Explain in Remarks)	___ Surface Soil Cracks (B6) ___ Drainage Patterns (B10) ___ Moss Trim Lines (B16) ___ Dry-Season Water Table (C2) ___ Crayfish Burrows (C8) ___ Saturation Visible on Aerial Imagery (C9) ___ Stunted or Stressed Plants (D1) ___ Geomorphic Position (D2) ___ Shallow Aquitard (D3) ___ Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>.5</u> Water Table Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>6</u> 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 _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		
A positive indication of wetland hydrology was observed.		

VEGETATION – Use scientific names of plants.

 Sampling Point: DP6

Tree Stratum (Plot size: <u>30 ft r</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</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <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>85</u></td> <td>x 2 = <u>170</u></td> </tr> <tr> <td>FAC species <u>10</u></td> <td>x 3 = <u>30</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>95</u> (A)</td> <td><u>200</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.11</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>85</u>	x 2 = <u>170</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>95</u> (A)	<u>200</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>85</u>	x 2 = <u>170</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>95</u> (A)	<u>200</u> (B)																	
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)																		
1. <u>Viburnum dentatum</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FAC</u>															
2. <u>Cornus amomum</u>	<u>5</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>15%</u> = Total Cover																		
Herb Stratum (Plot size: <u>5 ft r</u>)																		
1. <u>Phragmites australis</u>	<u>80</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>80%</u> = Total Cover																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
_____ = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.) The hydrophytic vegetation criterion has been met.																		

Hydrophytic Vegetation Indicators:
 ___ 1 - Rapid Test for Hydrophytic Vegetation
☒ 2 - Dominance Test is >50%
☒ 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.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ☒ No _____

SOIL

Sampling Point: DP6

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	N 5/	93	10YR 5/6	7	C	M	Clay	
6 - 18	2.5Y 5/1	90	10YR 6/4	10	C	M	Clay	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

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"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input checked="" type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) | <input checked="" type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) |
| <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) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- ☐ Coast Prairie Redox (A16) (LRR K, L, R)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- ☐ Dark Surface (S7) (LRR K, L)
- ☐ Polyvalue Below Surface (S8) (LRR K, L)
- ☐ Thin Dark Surface (S9) (LRR K, L)
- ☐ Iron-Manganese Masses (F12) (LRR K, L, R)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149B)
- ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ 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:

A positive indication of hydric soil was observed.

APPENDIX C

SITE PHOTOGRAPHS



Photograph 1

View facing north showing the herbaceous habitat at non-wetland data point DP1, located in the southwestern portion of the Project Area.



Photograph 2

View facing north showing the herbaceous habitat at non-wetland data point DP2, located in the southern portion of the Project Area.



Photograph 3

View facing north showing the emergent habitat of Wetland A at data point DP3, located in the central portion of the Project Area.



Photograph 4

View facing east showing the herbaceous habitat at non-wetland data point DP4, located in the northeastern portion of the Project Area.



Photograph 5

View facing north showing the herbaceous habitat at non-wetland data point DP5, located in the northeastern portion of the Project Area.



Photograph 6

View facing west showing the emergent habitat of Wetland B at data point DP6, located in the eastern portion of the Project Area.
