



**DEPARTMENT OF THE ARMY
BUFFALO DISTRICT, CORPS OF ENGINEERS
1776 NIAGARA STREET
BUFFALO, NEW YORK 14207-3199**

April 16, 2021

Regulatory Branch

**SUBJECT: Preliminary Jurisdictional Determination for Department of the Army Application
No. LRB-2020-01334**

PHN Realty, LLC
2251 Front Street, Suite 202
Cuyahoga Falls, Ohio 44221

PHN Realty, LLC:

I have reviewed the wetland delineation map you submitted for your request for a wetland boundary verification, located at Parcel Number 3003001, City of Hudson, Summit County, Ohio.

I have evaluated your submitted wetland delineation map and have determined that the wetland and water boundaries shown on the map accurately represent on-site conditions (See Sheet 1). Please note that this is a Preliminary Jurisdictional Determination (JD). Preliminary JDs are non-binding written indications that there may be waters of the United States (WOUS) on your parcel and approximate locations of those waters. Preliminary JDs are advisory in nature and may not be appealed.

Pursuant to Regulatory Guidance Letter 16-01, any permit application made in reliance on this Preliminary JD will be evaluated as though all wetlands or waters on the site are regulated by the Corps. Further, all waters, including wetlands will be used for purposes of assessing the area of project related impacts and compensatory mitigation. If you require a definitive response regarding Department of the Army jurisdiction for any or all of the waters identified on the submitted drawings, you may request an approved jurisdictional determination (AJD) from this office. If an AJD is requested, please be aware that this is often a lengthy process and we may require the submittal of additional information.

I have enclosed the Preliminary JD Form with this letter. The form and attached table identifies the extent of waters on the site and specific terms and conditions of the Preliminary JD. Please sign and return a copy of this form to my attention. If you do not respond within 15 days, we will presume concurrence and no additional follow up is necessary prior to finalizing an action.

In accordance with Regulatory Guidance Letter 05-02, “Preliminary jurisdictional determinations are not definitive determinations of areas within regulatory jurisdiction and do not have expirations dates.” However, I strongly recommend that the boundaries of WOUS be re-evaluated by a qualified wetland biologist after five years of the date of this letter. This will

Regulatory Branch

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ensure that any changes are appropriately identified and you do not inadvertently incur a violation of Federal law while constructing your project or working on your project site.

Lastly, this determination has been conducted only to identify the limits of waters that may be subject to Corps Clean Water Act or Rivers and Harbors Act jurisdiction. This delineation/determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985, as amended. If you or your tenant are United States Department of Agriculture (USDA) program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resource Conservation Service prior to starting work.

Questions pertaining to this matter should be directed to me at 716-879-4117, by writing to the following address: U.S. Army Corps of Engineers, 1776 Niagara Street, Buffalo, New York 14207, or by e-mail at: douglas.j.kapusinski@usace.army.mil

Sincerely,

Douglas Kapusinski, Ph.D., PWS
Biologist

Enclosures

**NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND
REQUEST FOR APPEAL**

Applicant: PHN Realty LLC	File Number: LRB 2020-01334	Date: 16 April 2021
Attached is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
	PERMIT DENIAL	C
	APPROVED JURISDICTIONAL DETERMINATION	D
<input checked="" type="checkbox"/>	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/CECW/Pages/reg_materials.aspx or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

● **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

● **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

● **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

● **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

● **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.

● **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:

Douglas Kapusinski
U.S. Army Corps of Engineers
1776 Niagara Street
Buffalo, New York 14207
716-879-4117
Douglas.j.kapusinski@usace.army.mil

If you only have questions regarding the appeal process you may also contact:

Jacob Siegrist
Regulatory Appeals Review Officer
US Army Corps of Engineers
Great Lakes and Ohio River Division
550 Main Street, Room 10-714
Cincinnati, Ohio 45202-3222
Phone: 513-684-2699 Fax: 513-684-2460

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

Signature of appellant or agent.	Date:	Telephone number:
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ATTACHMENT

PRELIMINARY JURISDICTIONAL DETERMINATION FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PRELIMINARY JURISDICTIONAL DETERMINATION (JD): 16 April 2021

B. NAME AND ADDRESS OF PERSON REQUESTING PRELIMINARY JD:

PHN Realty LLC
2251 Front Street, Suite 202
Cuyahoga Falls, Ohio 44221

C. DISTRICT OFFICE, FILE NAME, AND NUMBER: LRB-2020-01334

**D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:
(USE THE ATTACHED TABLE TO DOCUMENT MULTIPLE WATERBODIES
AT DIFFERENT SITES)**

State: Ohio County/parish/borough: Summit City: Hudson
Center coordinates of site (lat/long in degree decimal format):

Lat. 41.2258° N Long. -81.4440° W

Universal Transverse Mercator

Name of nearest waterbody: Mud Brook to Cuyahoga River

Identify (estimate) amount of waters in the review area:

Non-wetland waters: NA linear feet: NA width (ft) and/or NA acres.

Non-wetland waters.

Stream Flow: NA

Wetlands: 1.12 acres

Cowardin Class: PEM (0.23 acre) and PFO (0.89 acre)

Name of any water bodies on the site that have been identified as Section 10 waters:

Tidal: NA

Non-Tidal: NA

E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

- Office (Desk) Determination. Date: 7 April 2021
- Field Determination. Date(s): 7 April 2021

1. The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD) for that site. Nevertheless, the permit applicant or other person who requested this

preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time.

2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring “pre-construction notification” (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following: (1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters; (2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions; (3) that the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) that the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) that undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant’s acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable.

This preliminary JD finds that there “*may be*” waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA. Data reviewed for preliminary JD (check all that apply)

- checked items should be included in case file and, where checked and requested, appropriately reference sources below):
 - Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See attached sheets.

Data sheets prepared/submitted by or on behalf of the applicant/consultant.

Office concurs with data sheets/delineation report. Office concours with the wetland boundaries delineated on the attached sheets

Office does not concur with data sheets/delineation report.

Data sheets prepared by the Corps: .

Corps navigable waters' study: .

U.S. Geological Survey Hydrologic Atlas: .

USGS NHD data.

USGS 8 and 12 digit HUC maps.

U.S. Geological Survey map(s). Cite scale & quad name: 1:24 Hudson.

USDA Natural Resources Conservation Service Soil Survey. Citation: .

National wetlands inventory map(s). Cite name: .

State/Local wetland inventory map(s): .

FEMA/FIRM maps: .

100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)

Photographs: Aerial (Name & Date): Google Earth 2006, 2012, 2015, 2016, 2020.
or Other (Name & Date): Supplied by consultant in delineation report dated 28 September 2020. Photos taken by the USACE on 7 April 2021.

Previous determination(s). File no. and date of response letter: .

Other information (please specify): .

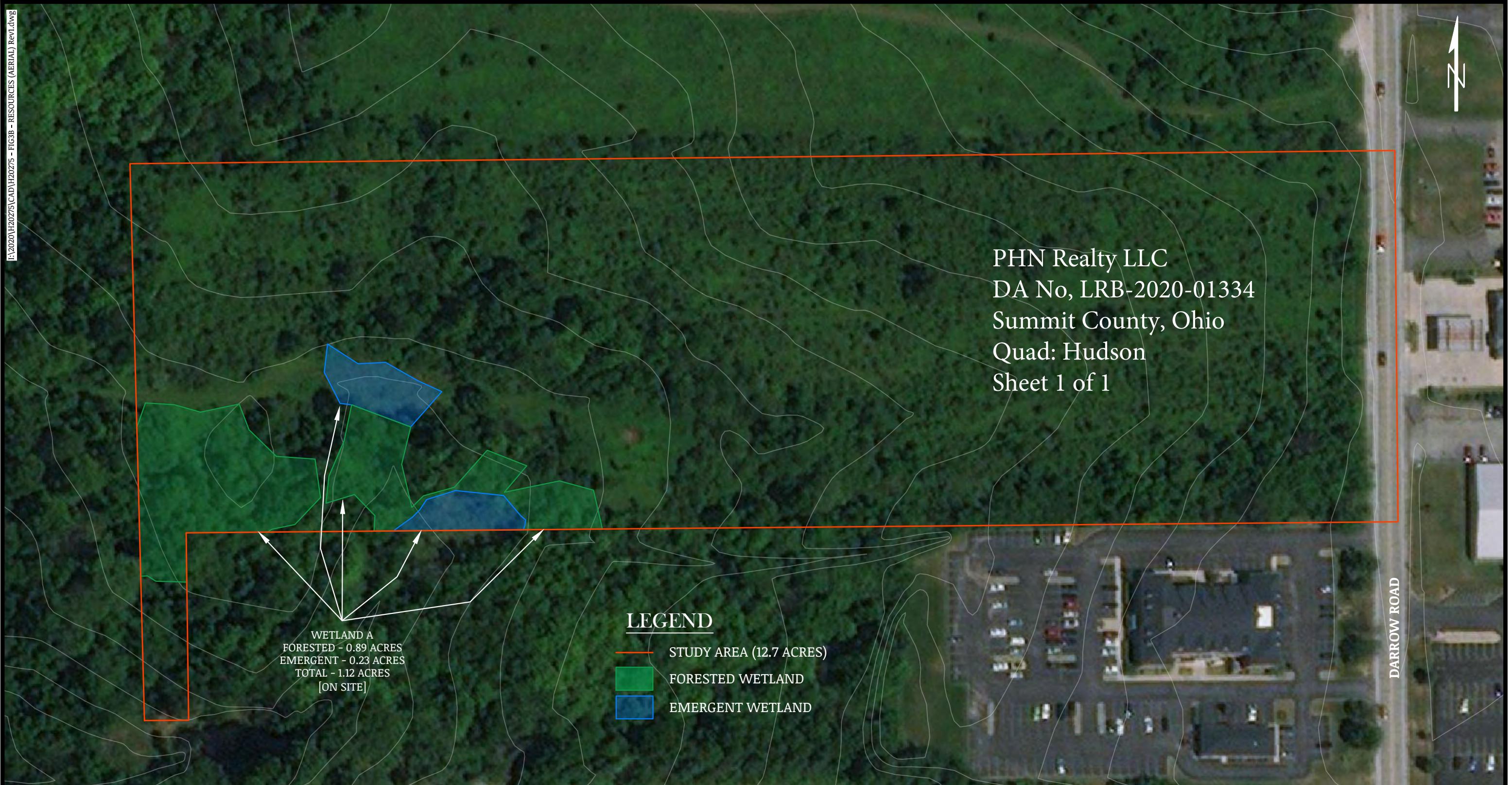
IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

Signature and date of
Regulatory Project Manager
(REQUIRED)

Signature and date of
person requesting preliminary JD
(REQUIRED, unless obtaining
the signature is impracticable)

SAMPLE

Site number	Latitude	Longitude	Cowardin Class	Estimated amount of aquatic resource in review area	Class of aquatic resource
Wetland 1	41.2258	-81.4439	PEM	0.23 acre	Section 404
Wetland 1	41.2259	-81.4444	PFO	0.89 acre	Section 404



WETLAND DELINEATION

**PARCEL NUMBER 3003001
CITY OF HUDSON, SUMMIT COUNTY
OHIO**

September 28 2020

Prepared for:
Green Forest Real Estate Development, LLC
1643 Barlow Road
Hudson, Ohio 44236

Prepared by:



**6105 Heisley Road ♦ Mentor, Ohio 44060
440-357-1260 ♦ Fax 440-357-1510**

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Table 1 – Summary of On-Site Wetlands
Table 2 – Summary of On-Site Streams

WETLAND DELINEATION

Parcel Number 3003001
City of Hudson
Summit County, Ohio (H20275)

1.0 INTRODUCTION

On August 26th, September 9th and September 11th, 2020 HZW Environmental Consultants, LLC (HZW) conducted a wetland delineation of Parcel Number 3003001, located west of Darrow Road in the City of Hudson, Summit County, Ohio (herein referred to as the “Study Area”). This study was conducted in accordance with HZW’s agreement with PHN Realty, LLC (herein referred to as the “Client”).

1.1 Purpose

The primary purpose of this wetland delineation was to identify areas within the boundaries of the Study Area that meet the three (3) criteria of a wetland: hydrophytic vegetation, hydric soils and wetland hydrology and any other areas (streams, ponds, etc.) that are considered “waters of the United States” and “waters of the State of Ohio.”

1.2 Methods of Investigation

All investigative methods and field procedures were performed in accordance with the guidelines established in the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0) (ERDC/EL TR-12-1; January 2012) and the 1987 Army Corps of Engineers (Corps) Manual, Technical Report Y-87-1, Field Guide for Wetland Delineation (1987 Manual). As required by the 1987 Manual, available reference materials were reviewed for the Study Area. These references included, but were not limited to, the 2020 Hudson, Ohio, National Wetlands Inventory (NWI) map published online by the United States Fish and Wildlife Service; the 2016 Hudson, Ohio, United States Geological Survey (USGS) 7.5 Minute Topographic Quadrangle Map; the Web Soil Survey of Summit County, Ohio (Soil Survey) issued in 2018 by the United States Department of Agriculture (USDA); and a list of hydric soils published by the Natural Resource Conservation Service (NRCS) for Summit County.

The site investigation methods followed the “Areas Equal to or Greater than 5 Acres in Size,” as described in Section D - Subsection 2 of the 1987 Manual. As a new plant community or change in hydrology was observed, a data point was established (designated “DP1” through “DP11”). At each data point, field conditions were evaluated and recorded to determine the presence or absence of hydrophytic vegetation, hydric soil conditions, and wetland hydrology. In addition, a photographic log was prepared for the Study Area during the site investigation activities. At any data point exhibiting all three (3) wetland criteria, the wetland area was assigned a letter designation (e.g., Wetland A) and the delineated boundary of the wetland area was flagged with consecutively numbered, pink and black striped field flagging. The location of each flag was mapped using a Trimble® GeoXH Global Positioning System (GPS) unit. A discussion of the three (3) evaluation criteria of a wetland is presented below.

Hydrophytic Vegetation

Hydrophytic vegetation is the community of macrophytes that occur in areas where inundation or soil saturation is either permanent or of sufficient frequency and duration to exert a controlling influence on the plant species present. Hydrophytic vegetation is present when the plant community is dominated by species that can tolerate prolonged inundation or soil saturation during the growing season. Hydrophytic vegetation is determined by the wetland indicator status (Reed, 1998, or current approved list) of species that make up the plant community. Species in the facultative categories (FACW, FAC, and FACU) are recognized as occurring in both wetlands and non-wetlands to varying degrees. In general, wetlands are dominated mainly by species rated OBL, FACW, and FAC.

The dominant vegetation, representing the major landscape or vegetation units, was determined for each of the four strata (tree, sapling/shrub, herbaceous, and vine) within one or more sampling plots established in representative locations within each unit. Plot size is determined by the type of vegetation present in accordance with the following table.

Trees	30-foot radius	Herb	5-foot radius
Saplings/shrubs	15-foot radius	Woody Vines	30-foot radius

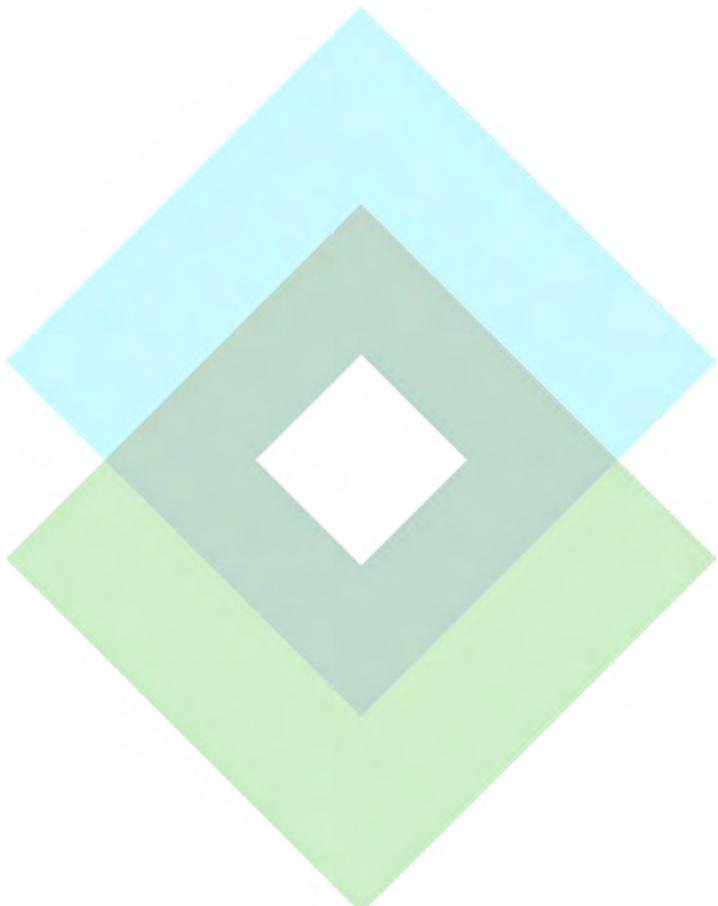
In general, percent cover for all species was estimated to determine abundance (dominance). For species determined to be dominant, the appropriate indicator status was assigned. If all dominant species across all strata were listed as OBL and/or FACW, the plot was determined to exhibit hydrophytic vegetation and a detailed comparison of all dominant species was not necessary to make this determination. If the plot is not dominated solely by OBL and FACW species across all strata, dominant species within all strata were then added to determine the percentage of wetland vegetation for each sample point. The hydrophytic vegetation criterion was determined to be met if greater than 50 percent of the dominant vegetation across all strata was indicative of hydrophytic vegetation.

Hydric Soils

Hydric soil is a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part of the soil profile. To determine the extent of hydric soils in the Study Area, soil samples were obtained at each data point or at a point proximal to a data point that best represents the estimated boundary of hydric/non-hydric soils based on other field observations. A standard Munsell soil color chart was used to determine the hue, value, and chroma of each soil sample. Soil samples were taken at a sufficient depth such that soil conditions immediately below the A horizon or at a depth of ten (10) inches, whichever is shallowest, can be observed. Criteria established by the National Technical Committee for Hydric Soils (1991 and 2006) were used to determine hydric soils. Hydric soil indicators including redox depletions (gley), low chroma colors with redox concentrations (mottles), histosols (organic matter accumulation - muck/peat), histic epipedons (organic soil over low chroma mineral soils), sulfidic odor, listing on a local hydric soils list, and listing on a national hydric soil list, are used to determine the presence of hydric soils.

Wetland Hydrology

Wetland hydrology indicators are used in combination with indicators of hydrophytic vegetation and hydric soils to determine whether an area is a wetland. Typically, vegetation and soils provide strong evidence that wetland hydrology is also present. Hydrology indicators provide evidence that the site has a *continuing* wetland hydrologic regime and confirm that an episode of inundation or soil saturation occurred recently. Hydrology indicators may provide little additional information about the timing, duration, or frequency of such events. Each data point was examined for the presence of primary and secondary hydrological indicators that indicate surface water or soil saturation, evidence of recent inundation, evidence of current or recent soil saturation, and other on-site conditions or data.



2.0 SITE DESCRIPTION

On August 26th, September 9th and September 11th, 2020, Rachel Davidson, Benjamin Latoche, Benjamin Schuplin and Christopher Biro, certified wetland delineators with HZW, conducted a field investigation of the Study Area. The Study Area consists of Parcel Number 3003001, which is approximately 12.7 acres in size and is located west of Darrow Road in the city of Hudson, Summit County, Ohio. Currently, the Study Area consists entirely of undeveloped forest and shrub land with the exception of an oil/gas well access road located in the west-central portion. The Study Area is surrounded by undeveloped forest/shrub land to the north and west, an office building and residential property to the south, and a public thoroughfare, Darrow Road, to the east. A site map depicting the location of the Study Area is included as **Figure 1 in Appendix A**.

The Study Area is located within the Cuyahoga River Watershed (HUC 8: 04110002) and is situated within the Erie/Ontario Drift and Lake Plain ecoregion.



3.0 FINDINGS

The findings of the background resources reviewed and field investigation conducted as part of the delineation activities are discussed separately.

3.1 Background Research

3.1.1 2020 Hudson, Ohio, National Wetlands Inventory (NWI) map

No aquatic features are shown within the boundaries of the Study Area on the NWI map.

3.1.2 2016 Hudson, Ohio, USGS 7.5 Minute Topographic Quadrangle Map

The Hudson, Ohio, USGS 7.5-minute topographic quadrangle map indicates that the topography of the Study Area gently slopes to the southwest with an elevation range of approximately 1,110 feet above National Geodetic Vertical Datum (NGVD) in the northeastern portion of the Study Area to 1,080 feet above NGVD in the southwestern portion of the Study Area. No aquatic features are shown within the boundaries of the Study Area on the topographic quadrangle map. This is in agreement with the NWI map. The portion of the Hudson, Ohio, topographic quadrangle map depicting the Study Area is presented as **Figure 2** in **Appendix A**.

3.1.3 2018 Soil Survey of Summit County

The Soil Survey shows that the Study Area is underlain by two (2) soil types:

MgA Mahoning silt loam, 0 to 2 percent slopes. This soil is in areas between drainageways. Included in mapping are a few spots poorly drained Trumbull soils. Runoff is slow to ponded. Permeability is slow. This soil is mapped in a small area in the south-central portion of the Study Area.

MgB Rittman silt loam, 6 to 12 percent slopes, moderately eroded. This sloping soil is on long hillside slopes and on the shorter side slopes along drainageways. Included with this soil in mapping are a few spots of severely eroded soils that typically have shallow gullies. Permeability is slow and runoff is rapid. This soil is mapped in majority of the Study Area.

No aquatic resources are depicted within the boundaries of the Study Area on the Soil Survey. This is in agreement with both the NWI and USGS topographic quadrangle maps.

3.1.4 Hydric Soils List for Summit County

According to the list of hydric soils for Summit County, the two (2) soil types depicted on the Soil Survey as underlying the Study Area, MgA and MgB, are considered non-hydric.

3.2 Field Investigation

3.2.1 Wetland Areas Delineated

Field investigation data gathered on August 26th, September 9th and September 11th, 2020 identified one (1) area within the boundaries of the Study Area that is classified as a wetland based on the presence of the three (3) wetland criteria (wetland hydrology, hydric soils, and hydrophytic vegetation). This area is designated by HZW as “Wetland A”. The location of the wetland and the location of the wetland data points (designated “DP2” and “DP4”) established during delineation activities is indicated on the aquatic resources map presented as **Figure 3A** in **Appendix A**. A map depicting the aquatic resources overlaying an aerial photograph is presented as **Figure 3B** in **Appendix A**. The photographic log prepared for the Study Area during the field investigation activities is included as **Appendix B**. The wetland determination data forms prepared for the Study Area are included as **Appendix C**. A description of the wetland area identified within the boundaries of the Study Area is provided in **Table 1**, below.

Table 1 - Summary of On-Site Wetlands

<u>Wetland</u>	<u>Type</u>	<u>Data Point</u>	<u>Photograph</u>	<u>Acres</u>
A	Forested / Emergent	DP2 / DP4	3, 4, 7, 8	0.89* / 0.23* 1.12* Total

*Represents on-site acreage



3.2.2 Streams Delineated

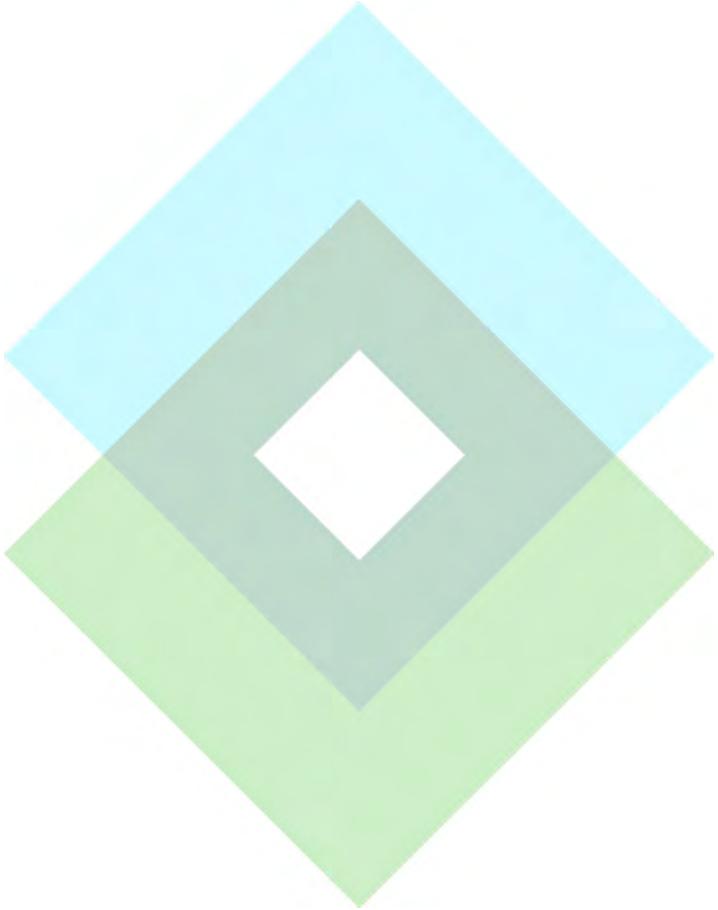
One (1) stream, designated by HZW as “Stream 1”, was identified within the boundaries of the Study Area. A description of the stream identified is presented in **Table 2**, below.

Table 2 – Summary of On-Site Streams

Stream	Photograph	Flow	Linear Feet	Acres
1	11, 12	Ephemeral	83.4	0.003

3.2.3 Non-Wetland Areas

The data collected at the remaining data points, DP1, DP3, DP5, DP6, DP7, DP8, DP9, DP10 and DP11, did not meet all of the criteria of a wetland; therefore, these areas are considered non-wetland. Refer to the aquatic resources map presented as **Figure 3A** in **Appendix A** for the location of DP1, DP3, DP5, DP6, DP7, DP8, DP9, DP10 and DP11, and the wetland determination data forms included as **Appendix C** for more detailed information regarding the hydrology, soils, and vegetation found at the non-wetland data points.



4.0 CONCLUSIONS

In summary, one (1) area within the Study Area was identified as containing hydrophytic vegetation, hydric soil, and wetland hydrology, and, therefore, is considered a wetland. In addition, one (1) stream was identified within the Study Area. Upon completion of the delineation, the location and configuration of the wetland and stream located within the Study Area were mapped using a Trimble® GeoXH GPS unit, which has an accuracy of less than one (1) meter.

The Corps will make the final determination regarding jurisdiction of the identified aquatic resources during the affirmation process.



5.0 DISCUSSION OF FUTURE PERMITTING SCENARIOS

Based on the United States Supreme Court ruling (No. 99-1178), issued on January 9, 2001, it is HZW's understanding that those wetlands that are non-navigable, isolated, and intrastate may no longer be included in the Corps' jurisdiction. In order to inform the Client of all available scenarios pertaining to the development of the Study Area, discussions presented in this report are based on the wetland delineation activities being conducted in accordance with the 1987 Manual and the Regional Supplement, which evaluate wetland characteristics irrespective of whether the wetland area is considered to be non-isolated (federally-regulated) or isolated (state-regulated). Currently, the Corps is making jurisdictional determinations.

For most Nationwide Permits (NWP), if the impacts associated with the activity/development do not exceed 300 linear feet of stream channel and 0.50 of an acre of non-isolated wetlands, coverage under an NWP is appropriate. (Note: all stream impacts must be converted to an acreage and added to the non-isolated wetland impacts; the total impact to all "waters of the U.S." must be under 0.50 of an acre to qualify for this coverage.) A pre-construction notification (NWP application) is required for coverage under most NWPs and compensatory mitigation is generally required.

If future development would impact greater than 0.50 of an acre of waters of the United States and/or exceed the 300 linear foot threshold for stream impacts, a Section 404 Individual Permit from the Corps and a Section 401 Water Quality Certification from the Ohio EPA would be required prior to initiating construction activities. The Corps and Ohio EPA will likely require mitigation for all wetland and stream impacts.

For those wetlands that are only within the jurisdiction of the Ohio EPA, regulations have been developed as House Bill 231. Currently, if less than 0.50 of an acre of isolated wetland impacts are proposed, a General Isolated Wetland Permit (Level 1 Review) will be required prior to impacting those wetlands. Isolated wetland impacts over 0.50 of an acre will require a more detailed permitting process with the Ohio EPA. Compensatory mitigation will be required for any amount of isolated wetland impact.

6.0 RECOMMENDATIONS

Based on the findings presented above, HZW presents the following recommendations for consideration at the Study Area:

1. Submit one (1) copy of this wetland delineation report to the Corps for affirmation of the boundary of the wetlands and jurisdictional determination of the aquatic resources located within the Study Area. Presently, the Corps is the agency responsible for conducting wetland affirmations and is providing written jurisdictional determinations.
2. Should impacts be anticipated to the wetlands and/or streams identified on site following a jurisdictional determination, obtain the appropriate permit from the Corps and/or Ohio EPA prior to impacting these areas.

Note: *Should the Corps desire to conduct a field affirmation, additional regulated waters may be identified within the boundaries of the Study Area based on differing field conditions than present during the time this delineation study was conducted.*



7.0 REFERENCES

A bibliography of references reviewed as part of this delineation is presented below.

7.1 Bibliography

1. Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online at <http://websoilsurvey.nrcs.usda.gov/>. Accessed [9/10/20]
2. U. S. Fish and Wildlife Service. 2020. National Wetlands Inventory website. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. <http://www.fws.gov/wetlands> [9/10/20]
3. *Topographic Map*, United States Geological Survey; 2016 Hudson, Ohio, USGS 7.5 Minute Topographic Quadrangle.
4. *Field Guide for Wetland Delineation*, United States Army Corps of Engineers, Technical Report Y-87-1, 1987.
5. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0)*, United States Army Corps of Engineers, ERDC/EL TR-12-01, 2012.
6. *List of Hydric Soils for Summit County*, Natural Resource Conservation Service.
7. *National List of Plant Species That Occur in Wetlands: Ohio*, Reed, Porter B., Jr., United States Fish and Wildlife Service, Saint Petersburg, 1988.
8. *Hydric Soils of the United States*, National Technical Committee for Hydric Soils, United States Department of Agriculture, Soil Conservation Service, Washington, 1991.

8.0 QUALIFICATIONS

This wetland delineation was conducted on August 26th, September 9th and September 11th, 2020, by HZW's certified wetland delineators, Rachel Davidson, Benjamin Latoche, Benjamin Schuplin and Christopher Biro. Data collection and report writing was completed by Benjamin Latoche and Christopher Biro. The signatures of the environmental professionals responsible for the preparation of this report are provided below.



Benjamin Latoche
Project Manager



Rachel Davidson
Project Manager



Benjamin Schuplin
Environmental Scientist



Christopher Biro
Environmental Scientist

APPENDIX A

FIGURES 1-3

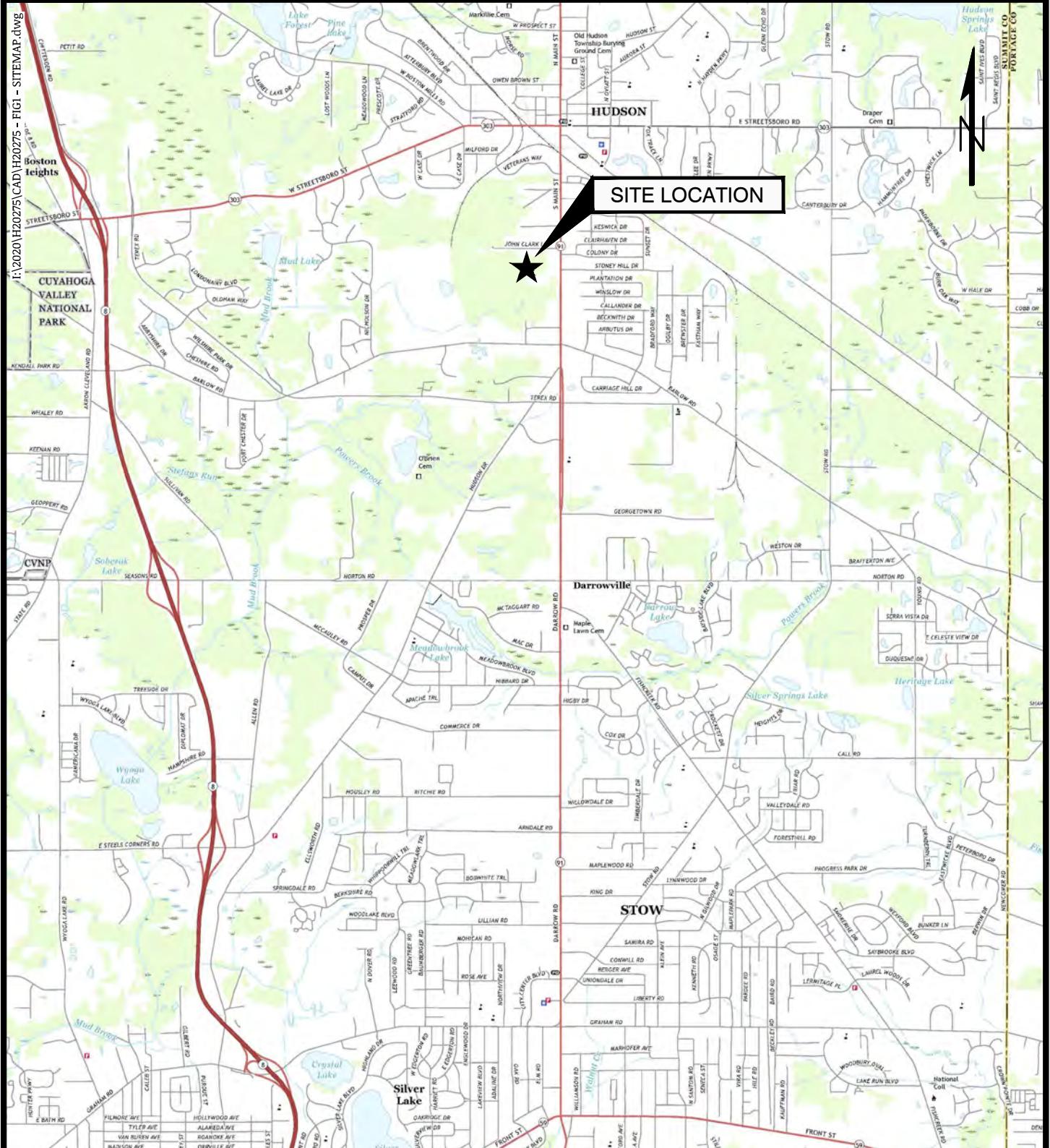
Figure 1 – Site Location Map

Figure 2 – USGS Topographic Map

Figure 3A – Aquatic Resources Map- White

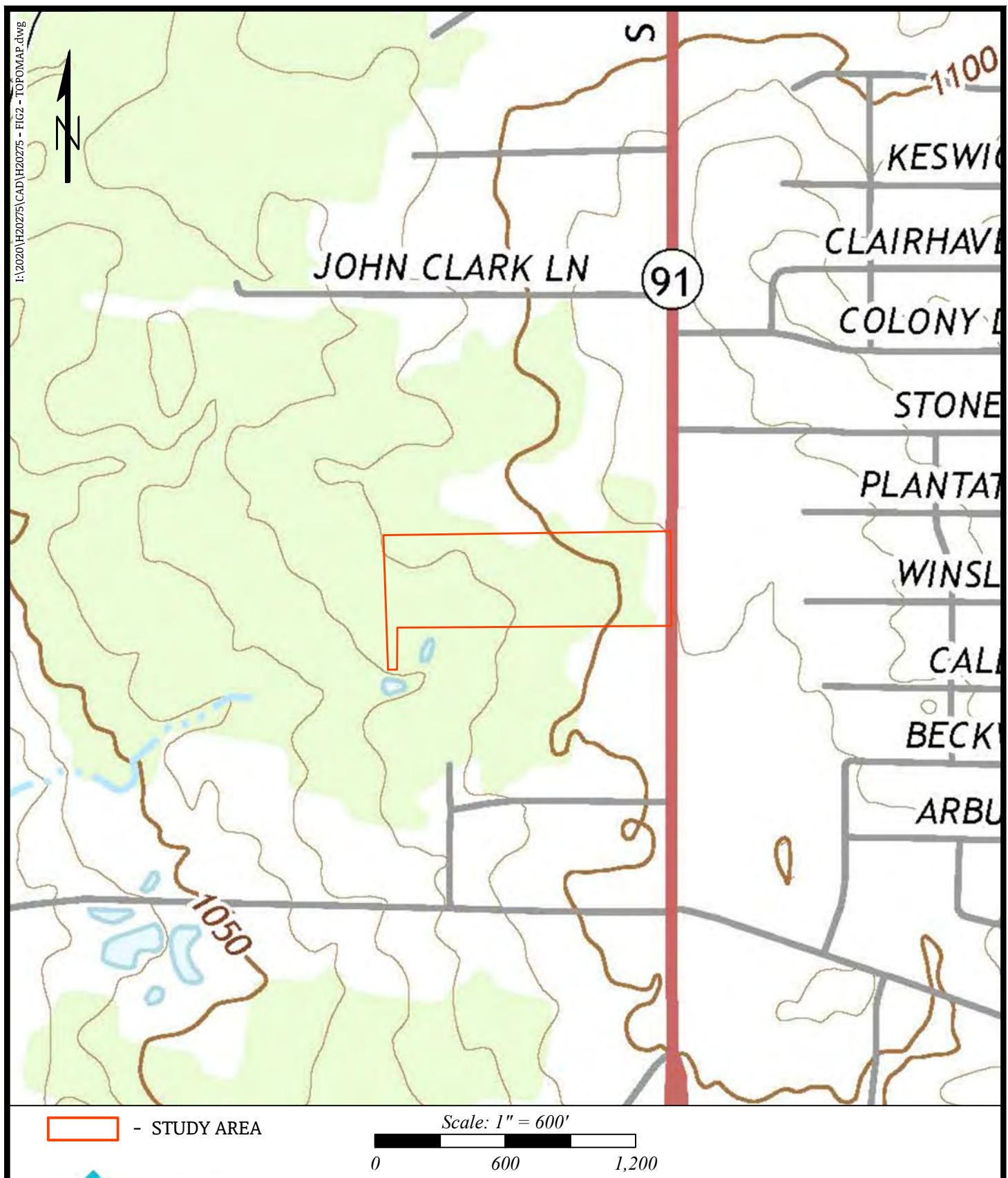
Figure 3B – Aquatic Resources Map- Aerial





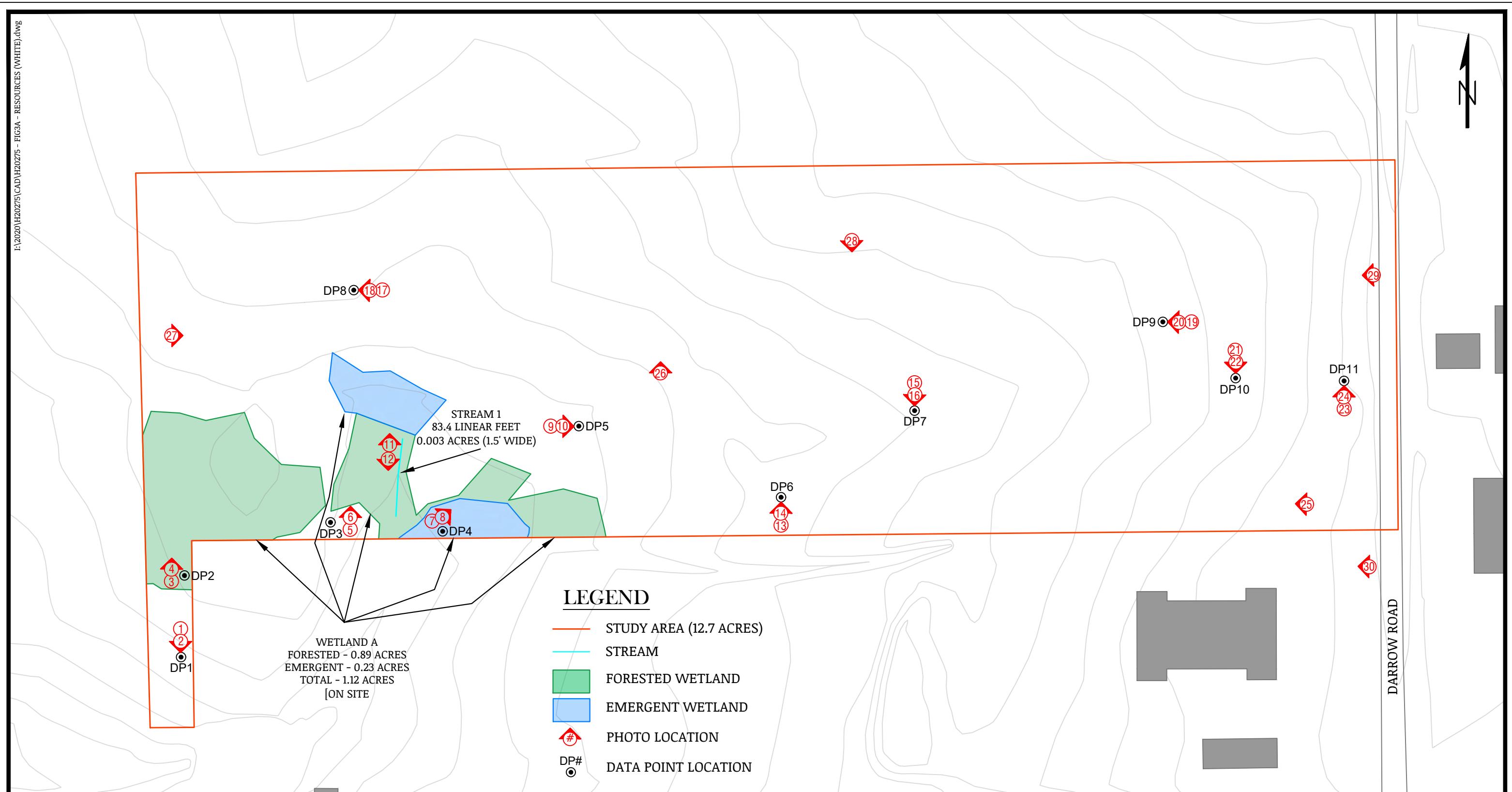
HZW Environmental
Consultants

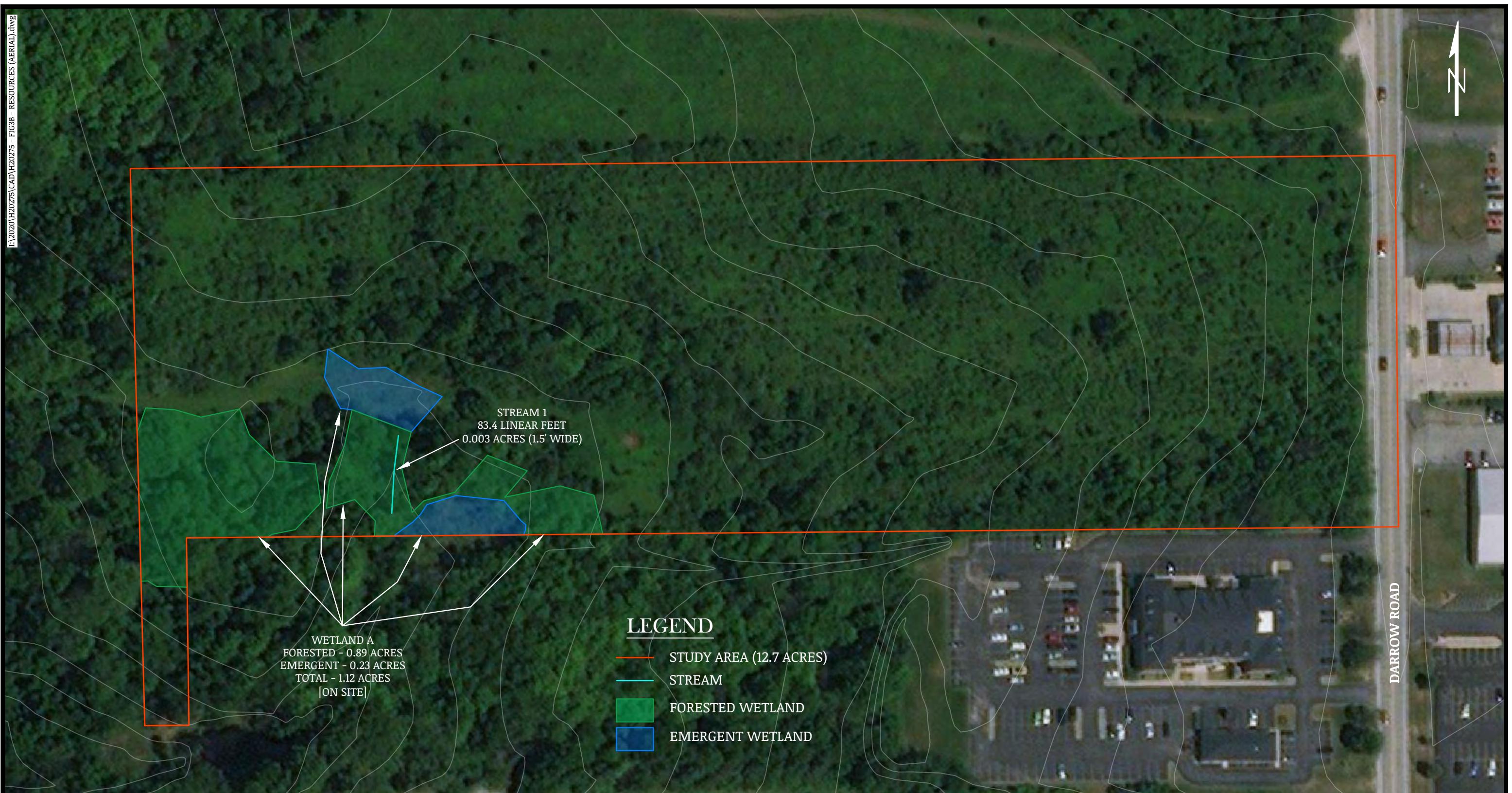
FIGURE 1
SITE LOCATION MAP
PARCEL NUMBER 3003001
CITY OF HUDSON, SUMMIT COUNTY, OHIO



HZW Environmental
Consultants

FIGURE 2
TOPOGRAPHIC MAP
PARCEL NUMBER 3003001
CITY OF HUDSON, SUMMIT COUNTY, OHIO





APPENDIX B

PHOTOGRAPHIC LOG





Photograph 1
View of soil profile at Data Point 1 (non-wetland).



Photograph 2
View facing south depicting site conditions at Data Point 1 (non-wetland).



Photograph 3
View of soil profile at Data Point 2 (Wetland A – Forested).



Photograph 4
View facing north depicting site conditions at Data Point 2 (Wetland A – Forested).



Photograph 5
View of soil profile at Data Point 3 (non-wetland).



Photograph 6
View facing north depicting site conditions at Data Point 3 (non-wetland).



Photograph 7
View of soil profile at Data Point 4 (Wetland A - Emergent).



Photograph 8
View facing northeast depicting site conditions at Data Point 4 (Wetland A - Emergent).



Photograph 9
View of soil profile at Data Point 5 (non-wetland).



Photograph 10
View facing east depicting site conditions at Data Point 5 (non-wetland).



Photograph 11
View of Stream 1 facing north (upstream).



Photograph 12
View of Stream 1 facing south (downstream).



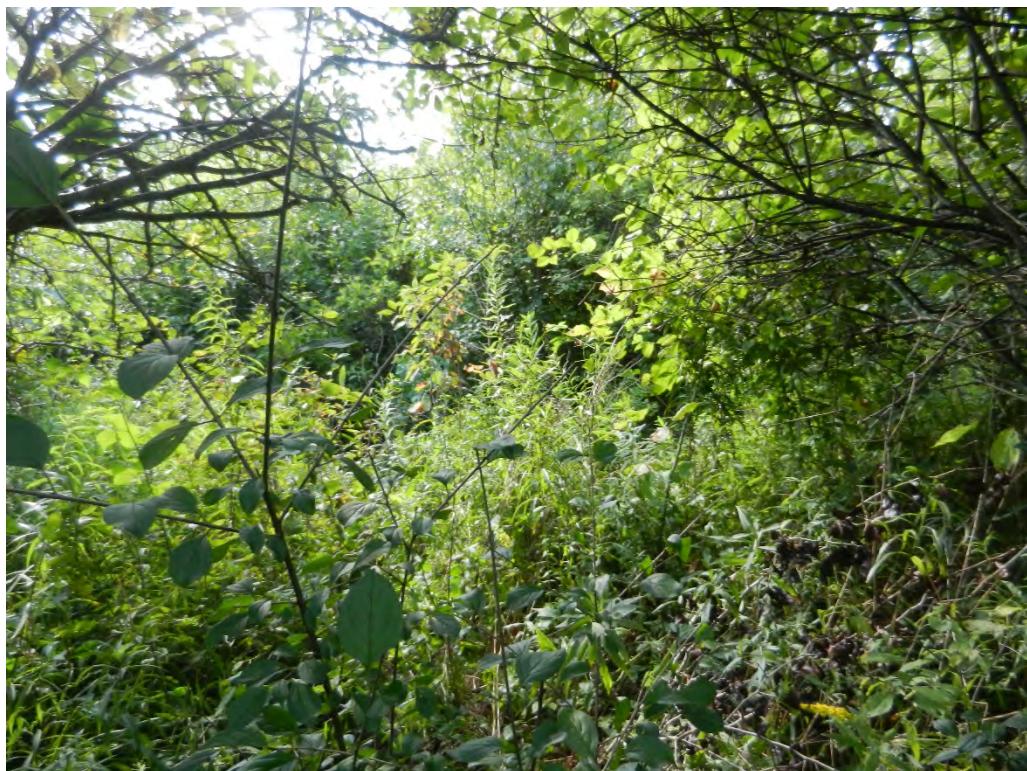
Photograph 13
View of soil profile at Data Point 6 (non-wetland).



Photograph 14
View facing north depicting site conditions at Data Point 6 (non-wetland).



Photograph 15
View of soil profile at Data Point 7 (non-wetland).



Photograph 16
View facing south depicting site conditions at Data Point 7 (non-wetland).



Photograph 17
View of soil profile at Data Point 8 (non-wetland).



Photograph 18
View facing west depicting site conditions at Data Point 8 (non-wetland).



Photograph 19
View of soil profile at Data Point 9.



Photograph 20
View of facing west depicting site conditions at Data Point 9 (non-wetland).



Photograph 21
View of soil profile at Data Point 10 (non-wetland).



Photograph 22
View facing south depicting site conditions at Data Point 10 (non-wetland).



Photograph 23
View of soil profile at Data Point 11 (non-wetland).



Photograph 24
View facing north depicting site conditions at Data Point 11 (non-wetland).



Photograph 25
View of the Study Area facing west.



Photograph 26
View of the Study Area facing north.



Photograph 27
View of the Study Area facing east.



Photograph 28
View of the Study Area facing south.



Photograph 29
View of the Study Area facing west.



Photograph 30
View of the southern Study Area boundary facing west.

APPENDIX C

WETLAND DETERMINATION DATA FORMS



WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Parcel Number 3009175 City/County: Hudson / Summit Sampling Date: 9-9-20
 Applicant/Owner: PHN Realty, LLC State: OH Sampling Point: DP1
 Investigator(s): BDL / CJB Section, Township, Range: _____
 Landform (hillside, terrace, etc.): Plain Local relief (concave, convex, none): None Slope %: _____
 Subregion (LRR or MLRA): LRR R Lat: 41.225314° Long: -81.445180° Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation No, Soil No, or Hydrology No 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> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.)	

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>
<u>Surface Water (A1)</u>	<u>Water-Stained Leaves (B9)</u>	<u>Surface Soil Cracks (B6)</u>
<u>High Water Table (A2)</u>	<u>Aquatic Fauna (B13)</u>	<u>Drainage Patterns (B10)</u>
<u>Saturation (A3)</u>	<u>Marl Deposits (B15)</u>	<u>Moss Trim Lines (B16)</u>
<u>Water Marks (B1)</u>	<u>Hydrogen Sulfide Odor (C1)</u>	<u>Dry-Season Water Table (C2)</u>
<u>Sediment Deposits (B2)</u>	<u>Oxidized Rhizospheres on Living Roots (C3)</u>	<u>Crayfish Burrows (C8)</u>
<u>Drift Deposits (B3)</u>	<u>Presence of Reduced Iron (C4)</u>	<u>Saturation Visible on Aerial Imagery (C9)</u>
<u>Algal Mat or Crust (B4)</u>	<u>Recent Iron Reduction in Tilled Soils (C6)</u>	<u>Stunted or Stressed Plants (D1)</u>
<u>Iron Deposits (B5)</u>	<u>Thin Muck Surface (C7)</u>	<u>Geomorphic Position (D2)</u>
<u>Inundation Visible on Aerial Imagery (B7)</u>	<u>Other (Explain in Remarks)</u>	<u>Shallow Aquitard (D3)</u>
<u>Sparsely Vegetated Concave Surface (B8)</u>		<u>Microtopographic Relief (D4)</u>
		<u>FAC-Neutral Test (D5)</u>

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

Remarks:	
----------	--

VEGETATION – Use scientific names of plants.

Sampling Point: DP1

Tree Stratum (Plot size: <u>30</u>)		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. <i>Acer saccharum</i>		75	Yes	FACU	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)	
2. <i>Ulmus americana</i>		10	No	FACW	Total Number of Dominant Species Across All Strata: <u>6</u> (B)	
3.					Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33.3%</u> (A/B)	
4.					Prevalence Index worksheet:	
5.					Total % Cover of:	Multiply by:
6.					OBL species <u>0</u>	x 1 = <u>0</u>
7.					FACW species <u>60</u>	x 2 = <u>120</u>
					FAC species <u>0</u>	x 3 = <u>0</u>
					FACU species <u>130</u>	x 4 = <u>520</u>
					UPL species <u>0</u>	x 5 = <u>0</u>
					Column Totals: <u>190</u> (A)	<u>640</u> (B)
					Prevalence Index = B/A = <u>3.37</u>	
Sapling/Shrub Stratum (Plot size: <u>15</u>)		85	=Total Cover		Hydrophytic Vegetation Indicators:	
1. <i>Fraxinus pennsylvanica</i>		35	Yes	FACW	1 - Rapid Test for Hydrophytic Vegetation	
2. <i>Ligustrum vulgare</i>		25	Yes	FACU	2 - Dominance Test is >50%	
3. <i>Rosa multiflora</i>		15	Yes	FACU	3 - Prevalence Index is $\leq 3.0^1$	
4.					4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
5.					Problematic Hydrophytic Vegetation ¹ (Explain)	
6.					1 ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
7.					Definitions of Vegetation Strata:	
8.					Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.	
9.					Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.	
10.					Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.	
11.					Woody vines – All woody vines greater than 3.28 ft in height.	
12.					Hydrophytic Vegetation Present? Yes <u> </u> No <u> X </u>	
Woody Vine Stratum (Plot size: <u>30</u>)		30	=Total Cover			
1.						
2.						
3.						
4.						
			=Total Cover			

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

SOIL

Sampling Point

DP1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

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)
— Depleted Below Dark Surface (A11)
— Thick Dark Surface (A12)
— Sandy Mucky Mineral (S1)
— Sandy Gleyed Matrix (S4)
— Sandy Redox (S5)
— Stripped Matrix (S6)
— Dark Surface (S7)

— Polyvalue Below Surface (S8) (LRR R, **MLRA 149B**)
— Thin Dark Surface (S9) (LRR R, **MLRA 149B**)
— High Chroma Sands (S11) (LRR K, L)
— Loamy Mucky Mineral (F1) (LRR K, L)
— Loamy Gleyed Matrix (F2)
— Depleted Matrix (F3)
— Redox Dark Surface (F6)
— Depleted Dark Surface (F7)
— Redox Depressions (F8)
— Marl (F10) (LRR K, L)

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**)
- 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 (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 Northcentral and Northeast 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)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Parcel Number 3009175 City/County: Hudson / Summit Sampling Date: 9-9-20

Applicant/Owner: PHN Realty, LLC State: OH Sampling Point: DP2

Investigator(s): BDL / CJB Section, Township, Range: _____

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope %: _____

Subregion (LRR or MLRA): LRR R Lat: 41.225565° Long: -81.445200° Datum: _____

Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No 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 _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Wetland A (PFO)</u>
Remarks: (Explain alternative procedures here or in a separate report.)	

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>	
<u>Surface Water (A1)</u>	<u>Water-Stained Leaves (B9)</u>	<u>Surface Soil Cracks (B6)</u>	<u>Drainage Patterns (B10)</u>
<u>High Water Table (A2)</u>	<u>Aquatic Fauna (B13)</u>	<u>Moss Trim Lines (B16)</u>	<u>Dry-Season Water Table (C2)</u>
<u>Saturation (A3)</u>	<u>Marl Deposits (B15)</u>	<u>Crayfish Burrows (C8)</u>	<u>Saturation Visible on Aerial Imagery (C9)</u>
<u>Water Marks (B1)</u>	<u>Hydrogen Sulfide Odor (C1)</u>	<u>Stunted or Stressed Plants (D1)</u>	<u>Geomorphic Position (D2)</u>
<u>Sediment Deposits (B2)</u>	<u>Oxidized Rhizospheres on Living Roots (C3)</u>	<u>Recent Iron Reduction in Tilled Soils (C6)</u>	<u>Shallow Aquitard (D3)</u>
<u>Drift Deposits (B3)</u>	<u>Presence of Reduced Iron (C4)</u>	<u>Other (Explain in Remarks)</u>	<u>Microtopographic Relief (D4)</u>
<u>Algal Mat or Crust (B4)</u>	<u>Recent Iron Reduction in Tilled Soils (C6)</u>		<u>X FAC-Neutral Test (D5)</u>
<u>Iron Deposits (B5)</u>	<u>Thin Muck Surface (C7)</u>		
<u>Inundation Visible on Aerial Imagery (B7)</u>	<u>Other (Explain in Remarks)</u>		
<u>Sparsely Vegetated Concave Surface (B8)</u>			

Field Observations: Surface Water Present? Yes <u>X</u> No _____ Depth (inches): _____ Water Table Present? Yes <u>X</u> No _____ Depth (inches): _____ Saturation Present? Yes <u>X</u> No _____ Depth (inches): _____ (includes capillary fringe)		Wetland Hydrology Present? Yes <u>X</u> No _____	
--	--	---	--

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

Remarks:	
----------	--

VEGETATION – Use scientific names of plants.

Sampling Point: DP2

Tree Stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Acer rubrum</i>		95	Yes	FAC
2.				
3.				
4.				
5.				
6.				
7.				
		95	=Total Cover	
Sapling/Shrub Stratum	(Plot size: <u>15</u>)			
1. <i>Rosa multiflora</i>		15	Yes	FACU
2.				
3.				
4.				
5.				
6.				
7.				
		15	=Total Cover	
Herb Stratum	(Plot size: <u>5</u>)			
1. <i>Fraxinus pennsylvanica</i>		30	Yes	FACW
2. <i>Glyceria striata</i>		20	Yes	OBL
3. <i>Solidago rugosa</i>		5	No	FAC
4. <i>Rosa multiflora</i>		5	No	FACU
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
		60	=Total Cover	
Woody Vine Stratum	(Plot size: <u>30</u>)			
1.				
2.				
3.				
4.				
			=Total Cover	

Dominance Test worksheet:Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)Total Number of Dominant Species Across All Strata: 4 (B)Percent of Dominant Species That Are OBL, FACW, or FAC: 75.0% (A/B)**Prevalence Index worksheet:**

	Total % Cover of:	Multiply by:
OBL species	20	x 1 = 20
FACW species	30	x 2 = 60
FAC species	100	x 3 = 300
FACU species	20	x 4 = 80
UPL species	0	x 5 = 0
Column Totals:	170 (A)	460 (B)
Prevalence Index = B/A =		2.71

Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is $\leq 3.0^1$ 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

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.)

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)
— Depleted Below Dark Surface (A11)
— Thick Dark Surface (A12)
— Sandy Mucky Mineral (S1)
— Sandy Gleyed Matrix (S4)
— Sandy Redox (S5)
— Stripped Matrix (S6)
— Dark Surface (S7)

— Polyvalue Below Surface (S8) (LRR R, **MLRA 149B**)
— Thin Dark Surface (S9) (LRR R, **MLRA 149B**)
— High Chroma Sands (S11) (LRR K, L)
— Loamy Mucky Mineral (F1) (LRR K, L)
— Loamy Gleyed Matrix (F2)
X Depleted Matrix (F3)
— Redox Dark Surface (F6)
— Depleted Dark Surface (F7)
— Redox Depressions (F8)
— Marl (F10) (LRR K, L)

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**)
- 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 (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 Northcentral and Northeast 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)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Parcel Number 3009175 City/County: Hudson / Summit Sampling Date: 9-9-20
 Applicant/Owner: PHN Realty, LLC State: OH Sampling Point: DP3
 Investigator(s): BDL / CJB Section, Township, Range: _____
 Landform (hillside, terrace, etc.): Plain Local relief (concave, convex, none): None Slope %: _____
 Subregion (LRR or MLRA): LRR R Lat: 41.225663° Long: -81.444479° Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No 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> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.)	

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>	
<u>Surface Water (A1)</u>	<u>Water-Stained Leaves (B9)</u>	<u>Surface Soil Cracks (B6)</u>	<u>Drainage Patterns (B10)</u>
<u>High Water Table (A2)</u>	<u>Aquatic Fauna (B13)</u>	<u>Moss Trim Lines (B16)</u>	<u>Dry-Season Water Table (C2)</u>
<u>Saturation (A3)</u>	<u>Marl Deposits (B15)</u>	<u>Crayfish Burrows (C8)</u>	<u>Saturation Visible on Aerial Imagery (C9)</u>
<u>Water Marks (B1)</u>	<u>Hydrogen Sulfide Odor (C1)</u>	<u>Stunted or Stressed Plants (D1)</u>	<u>Geomorphic Position (D2)</u>
<u>Sediment Deposits (B2)</u>	<u>Oxidized Rhizospheres on Living Roots (C3)</u>	<u>Recent Iron Reduction in Tilled Soils (C6)</u>	<u>Shallow Aquitard (D3)</u>
<u>Drift Deposits (B3)</u>	<u>Presence of Reduced Iron (C4)</u>	<u>Thin Muck Surface (C7)</u>	<u>Microtopographic Relief (D4)</u>
<u>Algal Mat or Crust (B4)</u>	<u>Recent Iron Reduction in Tilled Soils (C6)</u>	<u>Other (Explain in Remarks)</u>	<u>FAC-Neutral Test (D5)</u>
<u>Iron Deposits (B5)</u>			
<u>Inundation Visible on Aerial Imagery (B7)</u>			
<u>Sparsely Vegetated Concave Surface (B8)</u>			

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

Remarks:	
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VEGETATION – Use scientific names of plants.

Sampling Point: DP3

Tree Stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Acer saccharum</i>		45	Yes	FACU
2. <i>Prunus serotina</i>		35	Yes	FACU
3. <i>Ulmus americana</i>		15	No	FACW
4.				
5.				
6.				
7.				
		95	=Total Cover	
Sapling/Shrub Stratum (Plot size: <u>15</u>)				
1. <i>Frangula alnus</i>		15	Yes	FAC
2. <i>Lonicera morrowii</i>		10	Yes	FACU
3. <i>Fraxinus pennsylvanica</i>		5	No	FACW
4.				
5.				
6.				
7.				
		30	=Total Cover	
Herb Stratum (Plot size: <u>5</u>)				
1. <i>Fraxinus pennsylvanica</i>		15	Yes	FACW
2. <i>Lonicera morrowii</i>		10	Yes	FACU
3. <i>Frangula alnus</i>		10	Yes	FAC
4. <i>Acer saccharum</i>		5	No	FACU
5. <i>Toxicodendron radicans</i>		5	No	FAC
6. <i>Parthenocissus quinquefolia</i>		5	No	FACU
7. <i>Ulmus americana</i>		1	No	FACW
8.				
9.				
10.				
11.				
12.				
		51	=Total Cover	
Woody Vine Stratum (Plot size: <u>30</u>)				
1. <i>Vitis aestivalis</i>		25	Yes	FACU
2.				
3.				
4.				
		25	=Total Cover	
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)				
Prevalence Index worksheet:				
Total % Cover of:			Multiply by:	
OBL species	0	x 1 =	0	
FACW species	36	x 2 =	72	
FAC species	30	x 3 =	90	
FACU species	135	x 4 =	540	
UPL species	0	x 5 =	0	
Column Totals:	201	(A)	702 (B)	
Prevalence Index = B/A = <u>3.49</u>				
Hydrophytic Vegetation Indicators:				
1 - Rapid Test for Hydrophytic Vegetation				
2 - Dominance Test is >50%				
3 - Prevalence Index is $\leq 3.0^1$				
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.				
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 <u> </u> No <u> X </u>				

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.)

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)
— Depleted Below Dark Surface (A11)
— Thick Dark Surface (A12)
— Sandy Mucky Mineral (S1)
— Sandy Gleyed Matrix (S4)
— Sandy Redox (S5)
— Stripped Matrix (S6)
— Dark Surface (S7)

— Polyvalue Below Surface (S8) (LRR R, **MLRA 149B**)
— Thin Dark Surface (S9) (LRR R, **MLRA 149B**)
— High Chroma Sands (S11) (LRR K, L)
— Loamy Mucky Mineral (F1) (LRR K, L)
— Loamy Gleyed Matrix (F2)
— Depleted Matrix (F3)
— Redox Dark Surface (F6)
— Depleted Dark Surface (F7)
— Redox Depressions (F8)
— Marl (F10) (LRR K, L)

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**)
- 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 (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 Northcentral and Northeast 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)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Parcel Number 3009175 City/County: Hudson / Summit Sampling Date: 9-9-20
 Applicant/Owner: PHN Realty, LLC State: OH Sampling Point: DP4
 Investigator(s): BDL / CJB Section, Township, Range: _____
 Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope %: _____
 Subregion (LRR or MLRA): LRR R Lat: 41.225638° Long: -81.444159° Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation No, Soil No, or Hydrology No 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 _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Wetland A (PEM)</u>
Remarks: (Explain alternative procedures here or in a separate report.)	

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>	
<u>Surface Water (A1)</u>	<u>X</u> <u>Water-Stained Leaves (B9)</u>	<u>Surface Soil Cracks (B6)</u>	<u>Drainage Patterns (B10)</u>
<u>X</u> <u>High Water Table (A2)</u>	<u> </u> <u>Aquatic Fauna (B13)</u>	<u> </u> <u>Moss Trim Lines (B16)</u>	<u> </u> <u>Dry-Season Water Table (C2)</u>
<u>X</u> <u>Saturation (A3)</u>	<u> </u> <u>Marl Deposits (B15)</u>	<u> </u> <u>Crayfish Burrows (C8)</u>	<u> </u> <u>Saturation Visible on Aerial Imagery (C9)</u>
<u> </u> <u>Water Marks (B1)</u>	<u> </u> <u>X</u> <u>Hydrogen Sulfide Odor (C1)</u>	<u> </u> <u>Recent Iron Reduction in Tilled Soils (C6)</u>	<u> </u> <u>Stunted or Stressed Plants (D1)</u>
<u> </u> <u>Sediment Deposits (B2)</u>	<u> </u> <u>Oxidized Rhizospheres on Living Roots (C3)</u>	<u> </u> <u>X</u> <u>Geomorphic Position (D2)</u>	<u> </u> <u>Shallow Aquitard (D3)</u>
<u> </u> <u>Drift Deposits (B3)</u>	<u> </u> <u>Presence of Reduced Iron (C4)</u>	<u> </u> <u>Microtopographic Relief (D4)</u>	<u> </u> <u>FAC-Neutral Test (D5)</u>
<u> </u> <u>Algal Mat or Crust (B4)</u>	<u> </u> <u>Recent Iron Reduction in Tilled Soils (C6)</u>		
<u> </u> <u>Iron Deposits (B5)</u>	<u> </u> <u>Thin Muck Surface (C7)</u>		
<u> </u> <u>Inundation Visible on Aerial Imagery (B7)</u>	<u> </u> <u>Other (Explain in Remarks)</u>		
<u> </u> <u>Sparsely Vegetated Concave Surface (B8)</u>			

Field Observations: Surface Water Present? Yes <u> </u> No <u>X</u> Depth (inches): _____ Water Table Present? Yes <u>X</u> No <u>3</u> Depth (inches): _____ Saturation Present? Yes <u>X</u> No <u>0</u> Depth (inches): _____ (includes capillary fringe)		Wetland Hydrology Present? Yes <u>X</u> No _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			

Remarks:	
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VEGETATION – Use scientific names of plants.

Sampling Point: DP4

<u>Tree Stratum</u> (Plot size: <u>30</u>)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>
1.			
2.			
3.			
4.			
5.			
6.			
7.			
			=Total Cover
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15</u>)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
			=Total Cover
<u>Herb Stratum</u> (Plot size: <u>5</u>)			
1. <i>Leersia oryzoides</i>	<u>100</u>	<u>Yes</u>	<u>OBL</u>
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	<u>100</u>		=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>30</u>)			
1.			
2.			
3.			
4.			
			=Total Cover

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>100</u>	x 1 = <u>100</u>
FACW species <u>0</u>	x 2 = <u>0</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>100</u> (B)
Prevalence Index = B/A = <u>1.00</u>	

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is $\leq 3.0^1$

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

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

SOIL

Sampling Point

DP4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

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

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

Hydrogen Sulfide (A1)
Histic Epipedon (A2)
Black Histic (A3)
X Hydrogen Sulfide (A4)
Stratified Layers (A5)
Depleted Below Dark Surface (A11)
Thick Dark Surface (A12)
Sandy Mucky Mineral (S1)
Sandy Gleyed Matrix (S4)
Sandy Redox (S5)
Stripped Matrix (S6)
Dark Surface (S7)
Polyvalue Below Surface (S8) (LRR R, **MLRA 149B**)
Thin Dark Surface (S9) (LRR R, **MLRA 149B**)
High Chroma Sands (S11) (LRR K, L)
Loamy Mucky Mineral (F1) (LRR K, L)
Loamy Gleyed Matrix (F2)
Depleted Matrix (F3)
X Redox Dark Surface (F6)
Depleted Dark Surface (F7)
Redox Depressions (F8)
Marl (F10) (LRR K, L)

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**)
- 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 (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 Northcentral and Northeast 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)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Parcel Number 3009175 City/County: Hudson / Summit Sampling Date: 9-9-20
 Applicant/Owner: PHN Realty, LLC State: OH Sampling Point: DP5
 Investigator(s): BDL / CJB Section, Township, Range: _____
 Landform (hillside, terrace, etc.): Plain Local relief (concave, convex, none): None Slope %: _____
 Subregion (LRR or MLRA): LRR R Lat: 41.226031° Long: -81.443780° Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation No, Soil No, or Hydrology No 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> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.)	

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>
<u>Surface Water (A1)</u>	<u>Water-Stained Leaves (B9)</u>	<u>Surface Soil Cracks (B6)</u>
<u>High Water Table (A2)</u>	<u>Aquatic Fauna (B13)</u>	<u>Drainage Patterns (B10)</u>
<u>Saturation (A3)</u>	<u>Marl Deposits (B15)</u>	<u>Moss Trim Lines (B16)</u>
<u>Water Marks (B1)</u>	<u>Hydrogen Sulfide Odor (C1)</u>	<u>Dry-Season Water Table (C2)</u>
<u>Sediment Deposits (B2)</u>	<u>Oxidized Rhizospheres on Living Roots (C3)</u>	<u>Crayfish Burrows (C8)</u>
<u>Drift Deposits (B3)</u>	<u>Presence of Reduced Iron (C4)</u>	<u>Saturation Visible on Aerial Imagery (C9)</u>
<u>Algal Mat or Crust (B4)</u>	<u>Recent Iron Reduction in Tilled Soils (C6)</u>	<u>Stunted or Stressed Plants (D1)</u>
<u>Iron Deposits (B5)</u>	<u>Thin Muck Surface (C7)</u>	<u>Geomorphic Position (D2)</u>
<u>Inundation Visible on Aerial Imagery (B7)</u>	<u>Other (Explain in Remarks)</u>	<u>Shallow Aquitard (D3)</u>
<u>Sparsely Vegetated Concave Surface (B8)</u>		<u>Microtopographic Relief (D4)</u>
		<u>FAC-Neutral Test (D5)</u>

Field Observations: Surface Water Present? Yes <u> </u> No <u>X</u> Depth (inches): _____ Water Table Present? Yes <u> </u> No <u>X</u> Depth (inches): _____ Saturation Present? Yes <u> </u> No <u>X</u> Depth (inches): _____ (includes capillary fringe)		Wetland Hydrology Present? Yes <u> </u> No <u>X</u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
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Remarks:		
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VEGETATION – Use scientific names of plants.

 Sampling Point: DP5

Tree Stratum	(Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
5.				
6.				
7.				
				=Total Cover
Sapling/Shrub Stratum (Plot size: <u>15</u>)				
1.				
2.				
3.				
4.				
5.				
6.				
7.				
				=Total Cover
Herb Stratum (Plot size: <u>5</u>)				
1. <i>Solidago altissima</i>	<u>20</u>	Yes	FACU	
2. <i>Frangula alnus</i>	<u>5</u>	No	FAC	
3. <i>Trifolium repens</i>	<u>10</u>	Yes	FACU	
4. <i>Carex lurida</i>	<u>10</u>	Yes	OBL	
5. <i>Poa pratensis</i>	<u>20</u>	Yes	FACU	
6. <i>Carex scoparia</i>	<u>5</u>	No	FACW	
7. <i>Daucus carota</i>	<u>5</u>	No	UPL	
8. <i>Juncus effusus</i>	<u>5</u>	No	OBL	
9. <i>Fraxinus pennsylvanica</i>	<u>5</u>	No	FACW	
10. <i>Eurybia divaricata</i>	<u>5</u>	No	UPL	
11. <i>Phragmites australis</i>	<u>5</u>	No	FACW	
12. <i>Rosa multiflora</i>	<u>5</u>	No	FACU	
	<u>100</u>			=Total Cover
Woody Vine Stratum (Plot size: <u>30</u>)				
1.				
2.				
3.				
4.				
				=Total Cover

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

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 25.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	<u>15</u> x 1 = <u>15</u>
FACW species	<u>15</u> x 2 = <u>30</u>
FAC species	<u>5</u> x 3 = <u>15</u>
FACU species	<u>55</u> x 4 = <u>220</u>
UPL species	<u>10</u> x 5 = <u>50</u>
Column Totals:	<u>100</u> (A) <u>330</u> (B)
Prevalence Index = B/A =	<u>3.30</u>

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is $\leq 3.0^1$
- 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 X

SOIL

Sampling Point DP5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

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)
— Depleted Below Dark Surface (A11)
— Thick Dark Surface (A12)
— Sandy Mucky Mineral (S1)
— Sandy Gleyed Matrix (S4)
— Sandy Redox (S5)
— Stripped Matrix (S6)
— Dark Surface (S7)

— Polyvalue Below Surface (S8) (LRR R, **MLRA 149B**)
— Thin Dark Surface (S9) (LRR R, **MLRA 149B**)
— High Chroma Sands (S11) (LRR K, L)
— Loamy Mucky Mineral (F1) (LRR K, L)
— Loamy Gleyed Matrix (F2)
X Depleted Matrix (F3)
— Redox Dark Surface (F6)
— Depleted Dark Surface (F7)
— Redox Depressions (F8)
— Marl (F10) (LRR K, L)

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**)
- 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 (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

Yes No

Remarks:

This data form is revised from Northcentral and Northeast 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)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Parcel Number 3009175 City/County: Hudson / Summit Sampling Date: 9-9-20
 Applicant/Owner: PHN Realty, LLC State: OH Sampling Point: DP6
 Investigator(s): BDL / CJB Section, Township, Range: _____
 Landform (hillside, terrace, etc.): Plain Local relief (concave, convex, none): None Slope %: _____
 Subregion (LRR or MLRA): LRR R Lat: 41.225629° Long: -81.442931° Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation No, Soil No, or Hydrology No 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 _____ 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> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.)	

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>
<u>Surface Water (A1)</u>	<u>Water-Stained Leaves (B9)</u>	<u>Surface Soil Cracks (B6)</u>
<u>High Water Table (A2)</u>	<u>Aquatic Fauna (B13)</u>	<u>Drainage Patterns (B10)</u>
<u>Saturation (A3)</u>	<u>Marl Deposits (B15)</u>	<u>Moss Trim Lines (B16)</u>
<u>Water Marks (B1)</u>	<u>Hydrogen Sulfide Odor (C1)</u>	<u>Dry-Season Water Table (C2)</u>
<u>Sediment Deposits (B2)</u>	<u>Oxidized Rhizospheres on Living Roots (C3)</u>	<u>Crayfish Burrows (C8)</u>
<u>Drift Deposits (B3)</u>	<u>Presence of Reduced Iron (C4)</u>	<u>Saturation Visible on Aerial Imagery (C9)</u>
<u>Algal Mat or Crust (B4)</u>	<u>Recent Iron Reduction in Tilled Soils (C6)</u>	<u>Stunted or Stressed Plants (D1)</u>
<u>Iron Deposits (B5)</u>	<u>Thin Muck Surface (C7)</u>	<u>Geomorphic Position (D2)</u>
<u>Inundation Visible on Aerial Imagery (B7)</u>	<u>Other (Explain in Remarks)</u>	<u>Shallow Aquitard (D3)</u>
<u>Sparsely Vegetated Concave Surface (B8)</u>		<u>Microtopographic Relief (D4)</u>
		<u>X</u> <u>FAC-Neutral Test (D5)</u>

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

VEGETATION – Use scientific names of plants.

Sampling Point: DP6

<u>Tree Stratum</u> (Plot size: <u>30</u>)		<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</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>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>60.0%</u> (A/B)	
1.	<u>Malus sylvestris</u>	<u>45</u>	<u>Yes</u>	<u>UPL</u>		
2.	<u>Ulmus americana</u>	<u>25</u>	<u>Yes</u>	<u>FACW</u>		
3.	<u>Juglans nigra</u>	<u>10</u>	<u>No</u>	<u>FACU</u>		
4.	<u>Prunus serotina</u>	<u>10</u>	<u>No</u>	<u>FACU</u>		
5.						
6.						
7.						
<u>90</u> =Total Cover						
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15</u>)					Prevalence Index worksheet: Total % Cover of: <u>90</u> 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>10</u> x 3 = <u>30</u> FACU species <u>60</u> x 4 = <u>240</u> UPL species <u>55</u> x 5 = <u>275</u> Column Totals: <u>235</u> (A) <u>765</u> (B) Prevalence Index = B/A = <u>3.26</u>	
1.	<u>Fraxinus pennsylvanica</u>	<u>35</u>	<u>Yes</u>	<u>FACW</u>		
2.	<u>Malus sylvestris</u>	<u>10</u>	<u>No</u>	<u>UPL</u>		
3.	<u>Ligustrum vulgare</u>	<u>10</u>	<u>No</u>	<u>FACU</u>		
4.						
5.						
6.						
7.						
<u>55</u> =Total Cover						
<u>Herb Stratum</u> (Plot size: <u>5</u>)					Hydrophytic Vegetation Indicators: _____ 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% _____ 3 - Prevalence Index is $\leq 3.0^1$ _____ 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>Fraxinus pennsylvanica</u>	<u>40</u>	<u>Yes</u>	<u>FACW</u>		
2.	<u>Solidago caesia</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>		
3.	<u>Toxicodendron radicans</u>	<u>10</u>	<u>No</u>	<u>FAC</u>		
4.	<u>Rubus hispida</u>	<u>10</u>	<u>No</u>	<u>FACW</u>		
5.	<u>Quercus rubra</u>	<u>10</u>	<u>No</u>	<u>FACU</u>		
6.	<u>Parthenocissus quinquefolia</u>	<u>5</u>	<u>No</u>	<u>FACU</u>		
7.						
8.						
9.						
10.						
11.						
12.						
<u>90</u> =Total Cover						
<u>Woody Vine Stratum</u> (Plot size: <u>30</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.	
1.						
2.						
3.						
4.						
<u>90</u> =Total Cover						
Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____						

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

SOIL

Sampling Point

DP6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

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)
— Depleted Below Dark Surface (A11)
— Thick Dark Surface (A12)
— Sandy Mucky Mineral (S1)
— Sandy Gleyed Matrix (S4)
— Sandy Redox (S5)
— Stripped Matrix (S6)
— Dark Surface (S7)

— Polyvalue Below Surface (S8) (LRR R, **MLRA 149B**)
— Thin Dark Surface (S9) (LRR R, **MLRA 149B**)
— High Chroma Sands (S11) (LRR K, L)
— Loamy Mucky Mineral (F1) (LRR K, L)
— Loamy Gleyed Matrix (F2)
— Depleted Matrix (F3)
— Redox Dark Surface (F6)
— Depleted Dark Surface (F7)
— Redox Depressions (F8)
— Marl (F10) (LRR K, L)

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**)
- 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 (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 Northcentral and Northeast 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)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Parcel Number 3009175 City/County: Hudson / Summit Sampling Date: 9-9-20
 Applicant/Owner: PHN Realty, LLC State: OH Sampling Point: DP7
 Investigator(s): BDL / CJB Section, Township, Range: _____
 Landform (hillside, terrace, etc.): Plain Local relief (concave, convex, none): None Slope %: _____
 Subregion (LRR or MLRA): LRR R Lat: 41.225916° Long: -81.442719° Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No 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 _____ 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 _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.)	

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>	
<u>Surface Water (A1)</u>	<u>Water-Stained Leaves (B9)</u>	<u>Surface Soil Cracks (B6)</u>	<u>Drainage Patterns (B10)</u>
<u>High Water Table (A2)</u>	<u>Aquatic Fauna (B13)</u>	<u>Moss Trim Lines (B16)</u>	<u>Dry-Season Water Table (C2)</u>
<u>Saturation (A3)</u>	<u>Marl Deposits (B15)</u>	<u>Crayfish Burrows (C8)</u>	<u>Saturation Visible on Aerial Imagery (C9)</u>
<u>Water Marks (B1)</u>	<u>Hydrogen Sulfide Odor (C1)</u>	<u>Stunted or Stressed Plants (D1)</u>	<u>Geomorphic Position (D2)</u>
<u>Sediment Deposits (B2)</u>	<u>Oxidized Rhizospheres on Living Roots (C3)</u>	<u>Recent Iron Reduction in Tilled Soils (C6)</u>	<u>Shallow Aquitard (D3)</u>
<u>Drift Deposits (B3)</u>	<u>Presence of Reduced Iron (C4)</u>	<u>Thin Muck Surface (C7)</u>	<u>Microtopographic Relief (D4)</u>
<u>Algal Mat or Crust (B4)</u>	<u>Recent Iron Reduction in Tilled Soils (C6)</u>	<u>Other (Explain in Remarks)</u>	<u>FAC-Neutral Test (D5)</u>
<u>Iron Deposits (B5)</u>			
<u>Inundation Visible on Aerial Imagery (B7)</u>			
<u>Sparsely Vegetated Concave Surface (B8)</u>			

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

Remarks:

VEGETATION – Use scientific names of plants.

 Sampling Point: DP7

<u>Tree Stratum</u> (Plot size: <u>30</u>)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>		
1. <i>Malus sylvestris</i>	30	Yes	UPL		
2. <i>Ulmus americana</i>	10	Yes	FACW		
3.					
4.					
5.					
6.					
7.					
	<u>40</u>	=Total Cover			
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15</u>)					
1. <i>Viburnum dentatum</i>	40	Yes	FAC		
2. <i>Cornus amomum</i>	30	Yes	FACW		
3. <i>Frangula alnus</i>	20	Yes	FAC		
4. <i>Rosa multiflora</i>	5	No	FACU		
5. <i>Lonicera tatarica</i>	5	No	FACU		
6.					
7.					
	<u>100</u>	=Total Cover			
<u>Herb Stratum</u> (Plot size: <u>5</u>)					
1. <i>Solidago altissima</i>	30	Yes	FACU		
2. <i>Solidago caesia</i>	15	Yes	FACU		
3. <i>Toxicodendron radicans</i>	10	No	FAC		
4. <i>Sympyotrichum lateriflorum</i>	10	No	FAC		
5. <i>Parthenocissus quinquefolia</i>	10	No	FACU		
6.					
7.					
8.					
9.					
10.					
11.					
12.					
	<u>75</u>	=Total Cover			
<u>Woody Vine Stratum</u> (Plot size: <u>30</u>)					
1.					
2.					
3.					
4.					
		=Total Cover			

Dominance Test worksheet:

 Number of Dominant Species
 That Are OBL, FACW, or FAC: 4 (A)

 Total Number of Dominant
 Species Across All Strata: 7 (B)

 Percent of Dominant Species
 That Are OBL, FACW, or FAC: 57.1% (A/B)

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>80</u>	x 3 = <u>240</u>
FACU species	<u>65</u>	x 4 = <u>260</u>
UPL species	<u>30</u>	x 5 = <u>150</u>
Column Totals:	<u>215</u>	(A) <u>730</u> (B)
Prevalence Index = B/A =		<u>3.40</u>

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is $\leq 3.0^1$
- 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

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.)

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)
— Depleted Below Dark Surface (A11)
— Thick Dark Surface (A12)
— Sandy Mucky Mineral (S1)
— Sandy Gleyed Matrix (S4)
— Sandy Redox (S5)
— Stripped Matrix (S6)
— Dark Surface (S7)

— Polyvalue Below Surface (S8) (LRR R, **MLRA 149B**)
— Thin Dark Surface (S9) (LRR R, **MLRA 149B**)
— High Chroma Sands (S11) (LRR K, L)
— Loamy Mucky Mineral (F1) (LRR K, L)
— Loamy Gleyed Matrix (F2)
— Depleted Matrix (F3)
— Redox Dark Surface (F6)
— Depleted Dark Surface (F7)
— Redox Depressions (F8)
— Marl (F10) (LRR K, L)

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**)
- 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 (F22)
- Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Boots

Depth (inches): 16

Hydric Soil Present?

Remarks:

This data form is revised from Northcentral and Northeast 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)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Parcel Number 3009175 City/County: Hudson / Summit Sampling Date: 9-11-20

Applicant/Owner: PHN Realty, LLC State: OH Sampling Point: DP8

Investigator(s): BAS / CJB Section, Township, Range: _____

Landform (hillside, terrace, etc.): Plain Local relief (concave, convex, none): None Slope %: _____

Subregion (LRR or MLRA): LRR R Lat: 41.226360° Long: -81.444774° Datum: _____

Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No 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> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.)	

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>	
<u>Surface Water (A1)</u>	<u>Water-Stained Leaves (B9)</u>	<u>Surface Soil Cracks (B6)</u>	<u>Drainage Patterns (B10)</u>
<u>High Water Table (A2)</u>	<u>Aquatic Fauna (B13)</u>	<u>Moss Trim Lines (B16)</u>	<u>Dry-Season Water Table (C2)</u>
<u>Saturation (A3)</u>	<u>Marl Deposits (B15)</u>	<u>Crayfish Burrows (C8)</u>	<u>Saturation Visible on Aerial Imagery (C9)</u>
<u>Water Marks (B1)</u>	<u>Hydrogen Sulfide Odor (C1)</u>	<u>Stunted or Stressed Plants (D1)</u>	<u>Geomorphic Position (D2)</u>
<u>Sediment Deposits (B2)</u>	<u>Oxidized Rhizospheres on Living Roots (C3)</u>	<u>Recent Iron Reduction in Tilled Soils (C6)</u>	<u>Shallow Aquitard (D3)</u>
<u>Drift Deposits (B3)</u>	<u>Presence of Reduced Iron (C4)</u>	<u>Other (Explain in Remarks)</u>	<u>Microtopographic Relief (D4)</u>
<u>Algal Mat or Crust (B4)</u>	<u>Recent Iron Reduction in Tilled Soils (C6)</u>		<u>FAC-Neutral Test (D5)</u>
<u>Iron Deposits (B5)</u>	<u>Thin Muck Surface (C7)</u>		
<u>Inundation Visible on Aerial Imagery (B7)</u>	<u>Other (Explain in Remarks)</u>		
<u>Sparsely Vegetated Concave Surface (B8)</u>			

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

Remarks:	
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VEGETATION – Use scientific names of plants.

Sampling Point: DP8

Tree Stratum (Plot size: <u>30</u>)		Absolute % Cover	Dominant Species?	Indicator Status	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>8</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B)		
1. <i>Betula papyrifera</i>		<u>20</u>	Yes	FACU			
2. <i>Malus sylvestris</i>		<u>10</u>	Yes	UPL			
3.							
4.							
5.							
6.							
7.							
		<u>30</u>	=Total Cover				
Sapling/Shrub Stratum (Plot size: <u>15</u>)					Prevalence Index worksheet: Total % Cover of: <u>30</u> 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>60</u> x 3 = <u>180</u> FACU species <u>75</u> x 4 = <u>300</u> UPL species <u>10</u> x 5 = <u>50</u> Column Totals: <u>155</u> (A) <u>550</u> (B) Prevalence Index = B/A = <u>3.55</u>		
1. <i>Frangula alnus</i>		<u>50</u>	Yes	FAC			
2. <i>Lonicera morrowii</i>		<u>50</u>	Yes	FACU			
3.							
4.							
5.							
6.							
7.							
		<u>100</u>	=Total Cover				
Herb Stratum (Plot size: <u>5</u>)					Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is $\leq 3.0^1$ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)		
1. <i>Fraxinus pennsylvanica</i>		<u>10</u>	Yes	FACW			
2. <i>Geum canadense</i>		<u>5</u>	Yes	FAC			
3. <i>Toxicodendron radicans</i>		<u>5</u>	Yes	FAC			
4. <i>Fragaria virginiana</i>		<u>5</u>	Yes	FACU			
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
		<u>25</u>	=Total Cover				
Woody Vine Stratum (Plot size: <u>30</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.		
1.							
2.							
3.							
4.							
		<u>Total Cover</u>					

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

Hydrophytic Vegetation Present? Yes No X

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

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)
— Depleted Below Dark Surface (A11)
— Thick Dark Surface (A12)
— Sandy Mucky Mineral (S1)
— Sandy Gleyed Matrix (S4)
— Sandy Redox (S5)
— Stripped Matrix (S6)
— Dark Surface (S7)

— Polyvalue Below Surface (S8) (LRR R, **MLRA 149B**)
— Thin Dark Surface (S9) (LRR R, **MLRA 149B**)
— High Chroma Sands (S11) (LRR K, L)
— Loamy Mucky Mineral (F1) (LRR K, L)
— Loamy Gleyed Matrix (F2)
— Depleted Matrix (F3)
— Redox Dark Surface (F6)
— Depleted Dark Surface (F7)
— Redox Depressions (F8)
— Marl (F10) (LRR K, L)

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**)
- 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 (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 Northcentral and Northeast 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)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Parcel Number 3009175 City/County: Hudson / Summit Sampling Date: 9-11-20

Applicant/Owner: PHN Realty, LLC State: OH Sampling Point: DP9

Investigator(s): BAS / CJB Section, Township, Range: _____

Landform (hillside, terrace, etc.): Plain Local relief (concave, convex, none): None Slope %: _____

Subregion (LRR or MLRA): LRR R Lat: 41.226451° Long: -81.441612° Datum: _____

Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No 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 _____ 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> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.)	

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>	
<u>Surface Water (A1)</u>	<u>Water-Stained Leaves (B9)</u>	<u>Surface Soil Cracks (B6)</u>	<u>Drainage Patterns (B10)</u>
<u>High Water Table (A2)</u>	<u>Aquatic Fauna (B13)</u>	<u>Moss Trim Lines (B16)</u>	<u>Dry-Season Water Table (C2)</u>
<u>Saturation (A3)</u>	<u>Marl Deposits (B15)</u>	<u>Crayfish Burrows (C8)</u>	<u>Saturation Visible on Aerial Imagery (C9)</u>
<u>Water Marks (B1)</u>	<u>Hydrogen Sulfide Odor (C1)</u>	<u>Stunted or Stressed Plants (D1)</u>	<u>Geomorphic Position (D2)</u>
<u>Sediment Deposits (B2)</u>	<u>Oxidized Rhizospheres on Living Roots (C3)</u>	<u>Recent Iron Reduction in Tilled Soils (C6)</u>	<u>Shallow Aquitard (D3)</u>
<u>Drift Deposits (B3)</u>	<u>Presence of Reduced Iron (C4)</u>	<u>Other (Explain in Remarks)</u>	<u>Microtopographic Relief (D4)</u>
<u>Algal Mat or Crust (B4)</u>	<u>Recent Iron Reduction in Tilled Soils (C6)</u>		<u>FAC-Neutral Test (D5)</u>
<u>Iron Deposits (B5)</u>	<u>Thin Muck Surface (C7)</u>		
<u>Inundation Visible on Aerial Imagery (B7)</u>	<u>Other (Explain in Remarks)</u>		
<u>Sparsely Vegetated Concave Surface (B8)</u>			

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

Remarks:	
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VEGETATION – Use scientific names of plants.

Sampling Point: DP9

<u>Tree Stratum</u> (Plot size: <u>30</u>)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>		
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
				=Total Cover	
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15</u>)					
1. <i>Cornus racemosa</i>	10	Yes	FAC		
2. <i>Viburnum dentatum</i>	20	Yes	FAC		
3. <i>Frangula alnus</i>	10	Yes	FAC		
4. <i>Rosa multiflora</i>	10	Yes	FACU		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
				=Total Cover	
<u>Herb Stratum</u> (Plot size: <u>5</u>)					
1. <i>Solidago altissima</i>	65	Yes	FACU		
2. <i>Cornus racemosa</i>	10	No	FAC		
3. <i>Juncus tenuis</i>	3	No	FAC		
4. <i>Fragaria virginiana</i>	5	No	FACU		
5. <i>Poa pratensis</i>	12	No	FACU		
6. <i>Sympyotrichum lateriflorum</i>	5	No	FAC		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
12. _____	_____	_____	_____		
				=Total Cover	
<u>Woody Vine Stratum</u> (Plot size: <u>30</u>)					
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
				=Total Cover	

Dominance Test worksheet:Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)Total Number of Dominant Species Across All Strata: 5 (B)Percent of Dominant Species That Are OBL, FACW, or FAC: 60.0% (A/B)**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>58</u>	x 3 = <u>174</u>
FACU species	<u>92</u>	x 4 = <u>368</u>
UPL species	<u>0</u>	x 5 = <u>0</u>
Column Totals:	<u>150</u> (A)	<u>542</u> (B)
Prevalence Index = B/A =	<u>3.61</u>	

Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is $\leq 3.0^1$ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain)¹ Indicators 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

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.)

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)
— Depleted Below Dark Surface (A11)
— Thick Dark Surface (A12)
— Sandy Mucky Mineral (S1)
— Sandy Gleyed Matrix (S4)
— Sandy Redox (S5)
— Stripped Matrix (S6)
— Dark Surface (S7)

— Polyvalue Below Surface (S8) (LRR R, **MLRA 149B**)
— Thin Dark Surface (S9) (LRR R, **MLRA 149B**)
— High Chroma Sands (S11) (LRR K, L)
— Loamy Mucky Mineral (F1) (LRR K, L)
— Loamy Gleyed Matrix (F2)
— Depleted Matrix (F3)
— Redox Dark Surface (F6)
— Depleted Dark Surface (F7)
— Redox Depressions (F8)
— Marl (F10) (LRR K, L)

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**)
- 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 (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 Northcentral and Northeast 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)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Parcel Number 3009175 City/County: Hudson / Summit Sampling Date: 8-26-20

Applicant/Owner: PHN Realty, LLC State: OH Sampling Point: DP10

Investigator(s): RMD / CJB Section, Township, Range: _____

Landform (hillside, terrace, etc.): Plain Local relief (concave, convex, none): None Slope %: _____

Subregion (LRR or MLRA): LRR R Lat: 41.226098° Long: -81.441263° Datum: _____

Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No 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 _____ 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 _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.)	

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>
<u>Surface Water (A1)</u>	<u>Water-Stained Leaves (B9)</u>	<u>Surface Soil Cracks (B6)</u>
<u>High Water Table (A2)</u>	<u>Aquatic Fauna (B13)</u>	<u>Drainage Patterns (B10)</u>
<u>Saturation (A3)</u>	<u>Marl Deposits (B15)</u>	<u>Moss Trim Lines (B16)</u>
<u>Water Marks (B1)</u>	<u>Hydrogen Sulfide Odor (C1)</u>	<u>Dry-Season Water Table (C2)</u>
<u>Sediment Deposits (B2)</u>	<u>Oxidized Rhizospheres on Living Roots (C3)</u>	<u>Crayfish Burrows (C8)</u>
<u>Drift Deposits (B3)</u>	<u>Presence of Reduced Iron (C4)</u>	<u>Saturation Visible on Aerial Imagery (C9)</u>
<u>Algal Mat or Crust (B4)</u>	<u>Recent Iron Reduction in Tilled Soils (C6)</u>	<u>Stunted or Stressed Plants (D1)</u>
<u>Iron Deposits (B5)</u>	<u>Thin Muck Surface (C7)</u>	<u>Geomorphic Position (D2)</u>
<u>Inundation Visible on Aerial Imagery (B7)</u>	<u>Other (Explain in Remarks)</u>	<u>Shallow Aquitard (D3)</u>
<u>Sparsely Vegetated Concave Surface (B8)</u>		<u>Microtopographic Relief (D4)</u>
		<u>X</u> <u>FAC-Neutral Test (D5)</u>

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

Remarks:	
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VEGETATION – Use scientific names of plants.

 Sampling Point: DP10

<u>Tree Stratum</u> (Plot size: <u>30</u>)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>		
1. <i>Fraxinus pennsylvanica</i>	30	Yes	FACW		
2. <i>Ulmus americana</i>	35	Yes	FACW		
3. <i>Cornus amomum</i>	20	Yes	FACW		
4.					
5.					
6.					
7.					
	<u>85</u>	=Total Cover			
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15</u>)					
1. <i>Cornus amomum</i>	10	Yes	FACW		
2. <i>Fraxinus pennsylvanica</i>	10	Yes	FACW		
3.					
4.					
5.					
6.					
7.					
	<u>20</u>	=Total Cover			
<u>Herb Stratum</u> (Plot size: <u>5</u>)					
1. <i>Solidago altissima</i>	85	Yes	FACU		
2. <i>Toxicodendron radicans</i>	5	No	FAC		
3. <i>Poa pratensis</i>	5	No	FACU		
4. <i>Fraxinus pennsylvanica</i>	1	No	FACW		
5. <i>Cornus amomum</i>	1	No	FACW		
6.					
7.					
8.					
9.					
10.					
11.					
12.					
	<u>97</u>	=Total Cover			
<u>Woody Vine Stratum</u> (Plot size: <u>30</u>)					
1.					
2.					
3.					
4.					
		=Total Cover			

Dominance Test worksheet:

 Number of Dominant Species
 That Are OBL, FACW, or FAC: 5 (A)

 Total Number of Dominant
 Species Across All Strata: 6 (B)

 Percent of Dominant Species
 That Are OBL, FACW, or FAC: 83.3% (A/B)

Prevalence Index worksheet:

	Total % Cover of:	Multiply by:
OBL species	<u>0</u>	x 1 = <u>0</u>
FACW species	<u>107</u>	x 2 = <u>214</u>
FAC species	<u>5</u>	x 3 = <u>15</u>
FACU species	<u>90</u>	x 4 = <u>360</u>
UPL species	<u>0</u>	x 5 = <u>0</u>
Column Totals:	<u>202</u> (A)	<u>589</u> (B)
Prevalence Index = B/A =		<u>2.92</u>

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is $\leq 3.0^1$
- 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

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

SOIL

Sampling Point

DP10

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

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)
— Depleted Below Dark Surface (A11)
— Thick Dark Surface (A12)
— Sandy Mucky Mineral (S1)
— Sandy Gleyed Matrix (S4)
— Sandy Redox (S5)
— Stripped Matrix (S6)
— Dark Surface (S7)

— Polyvalue Below Surface (S8) (LRR R, **MLRA 149B**)
— Thin Dark Surface (S9) (LRR R, **MLRA 149B**)
— High Chroma Sands (S11) (LRR K, L)
— Loamy Mucky Mineral (F1) (LRR K, L)
— Loamy Gleyed Matrix (F2)
— Depleted Matrix (F3)
— Redox Dark Surface (F6)
— Depleted Dark Surface (F7)
— Redox Depressions (F8)
— Marl (F10) (LRR K, L)

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**)
- 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 (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 Northcentral and Northeast 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)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Parcel Number 3009175 City/County: Hudson / Summit Sampling Date: 8-26-20

Applicant/Owner: PHN Realty, LLC State: OH Sampling Point: DP11

Investigator(s): RMD / CJB Section, Township, Range: _____

Landform (hillside, terrace, etc.): Plain Local relief (concave, convex, none): None Slope %: _____

Subregion (LRR or MLRA): LRR R Lat: 41.226083° Long: -81.440647° Datum: _____

Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation No, Soil No, or Hydrology No 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 _____ 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> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.)	

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>
<u>Surface Water (A1)</u>	<u>Water-Stained Leaves (B9)</u>	<u>Surface Soil Cracks (B6)</u>
<u>High Water Table (A2)</u>	<u>Aquatic Fauna (B13)</u>	<u>Drainage Patterns (B10)</u>
<u>Saturation (A3)</u>	<u>Marl Deposits (B15)</u>	<u>Moss Trim Lines (B16)</u>
<u>Water Marks (B1)</u>	<u>Hydrogen Sulfide Odor (C1)</u>	<u>Dry-Season Water Table (C2)</u>
<u>Sediment Deposits (B2)</u>	<u>Oxidized Rhizospheres on Living Roots (C3)</u>	<u>Crayfish Burrows (C8)</u>
<u>Drift Deposits (B3)</u>	<u>Presence of Reduced Iron (C4)</u>	<u>Saturation Visible on Aerial Imagery (C9)</u>
<u>Algal Mat or Crust (B4)</u>	<u>Recent Iron Reduction in Tilled Soils (C6)</u>	<u>Stunted or Stressed Plants (D1)</u>
<u>Iron Deposits (B5)</u>	<u>Thin Muck Surface (C7)</u>	<u>Geomorphic Position (D2)</u>
<u>Inundation Visible on Aerial Imagery (B7)</u>	<u>Other (Explain in Remarks)</u>	<u>Shallow Aquitard (D3)</u>
<u>Sparsely Vegetated Concave Surface (B8)</u>		<u>Microtopographic Relief (D4)</u>
		<u>X</u> <u>FAC-Neutral Test (D5)</u>

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

Remarks:	
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VEGETATION – Use scientific names of plants.

Sampling Point: DP11

<u>Tree Stratum</u> (Plot size: <u>30</u>)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>		
1. <u>Fraxinus pennsylvanica</u>	<u>30</u>	<u>Yes</u>	<u>FACW</u>		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
				<u>30</u>	=Total Cover
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15</u>)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>		
1. <u>Viburnum dentatum</u>	<u>50</u>	<u>Yes</u>	<u>FAC</u>		
2. <u>Cornus amomum</u>	<u>20</u>	<u>Yes</u>	<u>FACW</u>		
3. <u>Cornus alba</u>	<u>15</u>	<u>No</u>	<u>FACW</u>		
4. <u>Frangula alnus</u>	<u>5</u>	<u>No</u>	<u>FAC</u>		
5. <u>Rosa multiflora</u>	<u>2</u>	<u>No</u>	<u>FACU</u>		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
				<u>92</u>	=Total Cover
<u>Herb Stratum</u> (Plot size: <u>5</u>)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>		
1. <u>Solidago altissima</u>	<u>40</u>	<u>Yes</u>	<u>FACU</u>		
2. <u>Phalaris arundinacea</u>	<u>35</u>	<u>Yes</u>	<u>FACW</u>		
3. <u>Cornus amomum</u>	<u>10</u>	<u>No</u>	<u>FACW</u>		
4. <u>Toxicodendron radicans</u>	<u>5</u>	<u>No</u>	<u>FAC</u>		
5. _____	_____	_____	_____		
6. _____	_____	_____	_____		
7. _____	_____	_____	_____		
8. _____	_____	_____	_____		
9. _____	_____	_____	_____		
10. _____	_____	_____	_____		
11. _____	_____	_____	_____		
12. _____	_____	_____	_____		
				<u>90</u>	=Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u>30</u>)	<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>		
1. _____	_____	_____	_____		
2. _____	_____	_____	_____		
3. _____	_____	_____	_____		
4. _____	_____	_____	_____		
				<u>_____</u>	=Total Cover

Dominance Test worksheet:Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)Total Number of Dominant Species Across All Strata: 5 (B)Percent of Dominant Species That Are OBL, FACW, or FAC: 80.0% (A/B)**Prevalence Index worksheet:**

	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>60</u>	x 3 = <u>180</u>
FACU species	<u>42</u>	x 4 = <u>168</u>
UPL species	<u>0</u>	x 5 = <u>0</u>
Column Totals:	<u>212</u>	(A) <u>568</u> (B)
Prevalence Index = B/A =		<u>2.68</u>

Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is $\leq 3.0^1$ 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

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

