Wetland Delineation Report

Lincoln Park Grid Support Center

State Route 32

Town of Ulster
Ulster County, New York

March 25, 2019

THE Chazen COMPANIES®
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Prepared by:

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Chazen Engineering, Land Surveying & Landscape Architecture Co., D.P.C. (New York)
Chazen Engineering Consultants, LLC (Tennessee)

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LIMITATIONS: Only the U.S. Army Corps of Engineers and/or New York State Department of Environmental Conservation (NYSDEC) can legally make a determination of the extent of regulated aquatic resources on any property. This wetland delineation report represents the professional opinion of The Chazen Companies regarding the extent and jurisdiction of aquatic resources on the Site and is non-binding on the Corps of Engineers or NYSDEC. Opinions presented in this report also apply to Site conditions and regulations existing only at the time of Chazen's delineation and may not necessarily apply to future Site conditions and/or regulations, which may change over time. Reliance on this report without validation or approval by the Corps of Engineers and/or the NYSDEC is solely at the risk of the Client.

1. CONTEXT OF THE SITE

The Project Site is being reviewed to construct a battery array to provide capacity and ancillary services to the regional electric grid, and this is a Wetland Delineation Report in support of that project, known as the Lincoln Park Grid Support Center (LPGSC) (also "the Project."). Appendix A, Figure 1 shows the location of the Project on the Kingston east, NY USGS topographic quadrangle. The Project is located on an 10.42 acre portion of a 41.2-acre parcel identified as Tax Parcel 48.12-1-20, located in Town of Ulster, Ulster County, New York. See Appendix A, Figure 2, "Tax Orthophoto Map."

The wetland delineation was completed within a Jurisdictional Determination limit of 8.167 acres. See Appendix B, Wetland and Stream Delineation Map, and the map provided titled "Lands Now or Formerly Of Kingston Landing Development LLC, Existing Conditions."

The Jurisdictional Delineation Area is mostly occupied by upland forest and wetlands.

On December 11, 2018, Chazen environmental scientist David MacDougall delineated the boundaries of wetlands in the 8.167-acre Jurisdictional Determination Area. The flags used to mark the location of the boundaries were located and mapped by Chazen land surveyors on January 25, 2019. That map is presented in Appendix B.

2. MAPPED RESOURCES

2.1 Topography

Figure 1 is a topographic map of the section of the Town of Ulster where the Jurisdictional Determination Area is located. The site lies within an area of rolling topography. There is approximately 30 feet of relief within the Jurisdictional Determination Area. The Jurisdictional Determination Area lies within the watershed of the Hudson River.

2.2 Soils

According to the soil survey map of the USDA Natural Resources Conservation Service, there are three soil mapping unit types mapped within the Jurisdictional Determination Area. These soils are described[1] and their approximate locations[2] shown in Appendix C, "Soils Report."

- Bath-Nassau-Rock outcrop complex, Hilly (BOD). This map unit consists of a deep, well drained Bath soil and a shallow, somewhat excessively drained Nassau soil and small areas of exposed bedrock. The soils formed in glacial till. Areas are mainly on a series of ridges that are cored by folded, shale, slate, siltstone and sandstone bedrock. These ridges are generally oriented in a northeast-southwest direction. Relief is very irregular. The Bath soil is in the convex inter-ridge areas where runoff does not accumulate, and the Nassau soil is on the ridge sideslopes and is intermingled with rock outcrops on ridgetops. Relief is irregular. Slopes are short and generally complex. They are mainly 10 to 25 percent, but range from 10 to 30 percent. Areas very in size and shape. The unit is made up of 40 percent Bath gravely silt loam, about 25 percent Nassau

[11] Tornes, Lawrence A. et. al. 1979. Soil Survey of Ulster County, New York. United States Department of Agriculture Soil Conservation Service in cooperation with Cornell University Agricultural Experiment Station. See www.nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/.../ulsterNY1979/ulster.pdf.

[2] The original soil data were mapped at a scale of 1:24,000, and so the soil unit boundaries shown in Appendix C, which is at a scale of 1:9,410, are not likely to be accurate.

shaly silt loam, about 15 percent Rock outcrop and about 20 percent other soils. These soils and Rock outcrop area in such an intricate pattern that they are not shown separately on the soil map. The Bath soil may have a perched water table from 2 to 4 feet below the grade from November to March, with the Nassau soil having a high-water table of greater than 6 feet. Bedrock is 40 inches below grade in the Bath soils, and 10 to 20 inches below grade in the Nassau soils. The bedrock is hard in the Bath soil and rippable in the Nassau soil. The Bath soil is a coarse-loamy mixed mesic Typic Fragiochrepts, while the Nassau soil is a loamy-skeletal, mixed, mesic Lithic Dystrochrept. This mapping unit has a 0% hydric soil rating.

- Nassau-Bath-Rock outcrop complex, very steep (NBF). This map unit consists of shallow, somewhat excessively drained Nassau soils; deep well drained Bath soils; and Rock outcrop or bedrock exposures that are intermingled mainly with the Nassau soils. These soils formed in glacial till. The Nassau soil general is on the upper one-half to two-thirds of the slope, and the Bath soil is on the lower art. Rock outcrop is on the hillsides, valleysides, and mountains. Slope ranges from 35 to 65 percent. Most areas are long and narrow in shape and are 10 to 100 acres in size. This unit is made up of about 40 percent Nassau shaly silt loam and very shaly silt loam, 25 percent Bath gravelly silt loam and gravelly loam, 20 percent Rock outcrop, and 15 percent other soils. These sols and the Rock outcrop form such an intricate pattern that they are not shown separately on the soil map. The Bath soil may have a perched water table from 2 to 4 feet below the grade from November to March, with the Nassau soil having a high-water table of greater than 6 feet. Bedrock is 40 inches below grade in the Bath soils, and 10 to 20 inches below grade in the Nassau soils. The bedrock is hard in the Bath soil and rippable in the Nassau soil. The Bath soil is a coarse-loamy mixed mesic Typic Fragiochrepts, while the Nassau soil is a loamy-skeletal, mixed, mesic Lithic Dystrochrept. This mapping unit has a 0% hydric soil rating.

- Volusia channery silt loam, 0 to 8 percent slopes, very stony (VSB). These deep, very stony, somewhat poorly drained soils formed in glacial till. They are on foot slopes and on undulating hilltops and plains. Slopes are concave and uniform. They range from 3 to 8 percent. Areas are long and narrow or irregular in shape and are 10 to 150 acres in size. This soil has a perched water table at a depth of 0.5 to 1.5 inches below grade from December to May. The depth to bedrock is greater than 60 inches. This soil is a fine-loamy mixed mesic Aeric Fragiaquept. This soil has a hydric soil rating of 5%.

One soil mapped in the Jurisdictional Determination Area has a hydric soil rating of greater than 0 percent. Volusia channery silt loam has a hydric soil rating of 5%. This rating indicates the percentage of the soils in a map unit that is likely to be hydric. Palms soil lie at the bottom of a steep slope off-site.

Table 1: Summary of Soils Mapped within Area of Review

Map Unit Symbol	Map Unit Name	Hydric Soil Rating	Depth to Water Table	Natural Drainage Class
BoD	Bath-Nassau-Rock outcrop complex, Hilly	0	Bath – 2 to 4 feet Nassau - >6 feet	Well Drained Somewhat Excessively Drained
NBF	Nassau-Bath-Rock outcrop complex, very steep	0	Bath – 2 to 4 feet Nassau - >6 feet	Well Drained Somewhat Excessively Drained
VSB	Volusia channery silt loam, 0 to 8 percent slopes, very stony	5	0.5 to 1.5 feet	Somewhat Poorly Drained

2.3 Wetlands and Streams

There are two NYSDEC Wetland mapped in the vicinity of the Jurisdictional Determination Area.

NYSDEC wetland, KE-3, Class 2 is located north of the Project parcel; the NYSDEC maps this as 65.3-acre wetland.

NYSDEC wetland, KE-7, Class 2 is located southeast of the Project parcel; the NYSDEC maps this as 28.9-acre wetland.

The National Wetland Inventory (NWI[3]) does not identify any wetlands or streams mapped within the 10.45 sub-parcel or the 8.167 acre Jurisdictional Determination Area. A stream is shown off-parcel to the east, with the NYSDEC wetland KE-3 to the north. The NWI mapping is not a regulatory map but rather a tool for identifying the location of the potential wetlands in the field. See Figure 3 "National Wetlands Inventory and NYSDEC Wetlands and Streams Map."

3. ECOLOGICAL COMMUNITIES

A list of the plant species identified during the wetland delineation work is provided in Appendix D. Following are descriptions of the plant communities found in the Jurisdictional Determination Area, as defined according to the ecological community classification system used by the New York Natural Heritage Program (Edinger et al. 2014).

- Appalachian Oak-hickory forest: The majority of this site is forested and includes rolling topography. Shallow bedrock was encountered throughout the Jurisdictional Determination Area and the trees are likely old growth with moderate size due to the root restriction. The forest on-site is dominated by mature trees including chestnut oak, red oak, white oak, shagbark hickory, sugar maple, and black cherry. A sparse herbaceous layer included wintergreen, spotted wintergreen, and Christmas fern. This community is throughout the Jurisdictional Determination Area. See Appendix D, Photo 3, 4, 7, 8, 11, 12, 15 and 16.

- Red Maple-hardwood swamp: Several of the wetland systems found on-site can be categorized as red maple hardwood swamps, including Wetland A, B, C, and D. These wetlands lie within depressions and one (Wetland C) is associated with an off-site stream. The wetlands are dominated by red maple, American hornbeam, and sensitive fern. highbush blueberry, and spicebush were the main shrubs identified in these wetlands. See Appendix D, Photos 1, 2, 5, 6, 9, and 13.

- Shrub swamp: One of the wetland systems found on-site can be categorized as a shrub swamp, Wetland E. This wetland lies within a depression. The wetland is dominated by spicebush, highbush blueberry, and sensitive fern. Highbush blueberry and spicebush were the main shrubs identified.

[3] USFWS. 2018. National Wetlands Inventory surface waters and wetlands. https://www.fws.gov/wetlands/data/Mapper.htm. Reviewed August 9, 2018.

4. WETLAND DELINEATION

The identification of wetlands and delineation of their boundaries was carried out according to the methods in the Corps of Engineers delineation manual (Environmental Laboratory, 1987) and the regional supplement to that manual (USACOE, 2011). On December 11, 2018 Chazen environmental scientist David MacDougall delineated the boundaries of wetlands in the Jurisdictional Determination Area. The flags used to mark the location of the boundaries were located and mapped by Chazen land surveyors on January 25, 2019. That map is presented in Appendix B.

Points on the wetland boundaries were marked using pieces of vinyl flagging tape tied to trees and shrubs, each of which was given an ID number consisting of a letter identifying the line plus a sequential number. During the field work, photographs of the upland and wetland boundary and other general site conditions were taken as provided in Appendix E. Data points were taken on the wetland and upland side of each boundary line, with the location specified by the wetland flag number. This data included details of vegetative strata, hydrology and soils, which is provided on the datasheets in Appendix F.

5. DESCRIPTION OF WETLANDS AND STREAMS

Following are brief description of the wetlands delineated in the Jurisdictional Determination Area. The Jurisdictional Determination Area is approximately 8.167-acres in size, with a centroid at 41°57’51.20’’ and -73°58’30.59’’. Table 2 lists the wetland identification, area in the Jurisdictional Determination Area, centroid coordinates (WGS84 datum), and Cowardin Class. The area of wetlands provided below are from the surveyed wetland map in Appendix B.

Wetland A is to the east of Frank Sottile Boulevard. The wetland was mostly inundated at the time of the delineation. This wetland contains open water and forested habitats.

Wetland B is to the east of Frank Sottile Boulevard. The wetland was partially inundated at the time of the delineation. This wetland contains forested habitat.

Wetland C is to the east of Frank Sottile Boulevard. The wetland was partially inundated at the time of the delineation. This wetland contains open water and forested habitats. This wetland flows into a stream channel north of the Jurisdictional Determination Area outside of the Project parcel.

Wetland D is to the east of Frank Sottile Boulevard. The wetland was partially inundated at the time of the delineation. This wetland contains forested habitat.

Wetland E is to the east of Frank Sottile Boulevard. The wetland was not inundated at the time of the delineation. This wetland contains scrub shrub habitat.

Table 2. Wetland Information

Wetland or Stream	On-site area (acres) or length (l.f.)	Centroid (on or adjacent to Project Site)		Cowardin Class	Stream Type
		Latitude	Longitude		
Wetland A	0.37	41°57'34.78''	-73°58'53.34''	PFO/PUB	N/A
Wetland B	0.06	41°57'34.31''	-73°58'50.48''	PFO	N/A
Wetland C	0.24	41°57'49.10''	-73°58'32.84''	PFO	N/A
Wetland D	0.19	41°57'51.20''	-73°58'30.59''	PFO	N/A
Wetland E	0.04	41°57'49.88''	-73°58'25.83''	PSS	N/A

6. JURISDICTION OVER WETLANDS ON THE PROJECT SITE

The following identifies the jurisdiction over wetlands by the federal, state and local government.

New York State Department of Environmental Conservation (NYSDEC): There are no streams mapped by the NYSDEC within the Jurisdictional Determination Area.

There are two NYSDEC mapped wetland on or in the immediate vicinity to the site, See Figure 3 in Appendix A. Both wetlands are Class 2. NYSDEC wetland KE-3 is located near the northeast corner of the property, and NYSDEC Wetland KE-7 is east of the southeast corner of the site.

Wetland C is within the 500 foot checkzone of NYSDEC Wetland KE-3. However, the NYSDEC wetland is at the toe of a steep slope off-site, whereas Wetland C on-site is at a higher elevation on the property. There is a small stream channel that flows out of Wetland C off-site and downslope to the DEC wetland. The two wetlands are separated both by several hundred feet of distance, and a steep slope, and so it is Chazen's professional opinion that the NYSDEC will not assert jurisdiction over Wetland C due to the physical separation from NYSDEC Wetland KE-3.

Wetland E appears to be within the 500-foot checkzone of NYSDEC wetland KE-7. Wetland E is a potentially non-jurisdictional federal wetland as it has no inlet or outlet and the wetland lays within a depression. NYSDEC Wetland KE-7 appears to be on the east side of an off-site stream corridor located at the bottom of a steep slope located off-site. Wetland E is separated from NYSDEC Wetland KE-7 by several hundred feet and a steep slope. It is Chazen's professional opinion that the NYSDEC will not assert jurisdiction over Wetland E due to the physical separation from NYSDEC Wetland KE-7.

A NYSDEC Section 401 Water Quality Certificate is required if applying for a Corps permit.

Corps of Engineers: Under Section 404 of the Clean Water Act, the Corps regulates any waters or wetlands with a significant nexus to traditionally navigable waters (i.e., "Waters of the United States" or WOTUS). Generally, streams that flow off a site and the wetlands adjacent to such streams are likely to have such a nexus. Under Section 404 of the Clean Water Act, the Corps regulates the discharge of

dredge or fill material into Waters and Wetlands. Nationwide permits are available for impacts less than 0.5 acre with compensatory mitigation required for impacts greater than 0.1 acre. An individual permit is required for impacts greater than 0.5 acre.

The federal definition of WOTUS, and the regulations and guidelines for determining what aquatic resources are subject to regulation under WOTUS has been in flux since 2001. The ruling in Solid Waste Authority of Northern Cook County (SWANCC) found that otherwise non-jurisdictional wetlands that were only regulated under the Migratory Bird Act did not have a significant nexus under the US Constitution's Commerce Clause for federal regulation. There have been numerous federal court cases regarding this regulation, including the US Supreme Court decision in Rapanos and Carabell, which ruled that a water of the United States needed a Significant Nexus to be regulated. Recently the WOTUS Definition was changed under a 2015 regulation that went into effect in New York Stat in August/September 2018. Attachment G provides a "2015 Clean Water Rule Cheat Sheet." Under the 2015 WOTUS definition, it is Chazen's professional opinion that the Corps will use the following thresholds:

- Waters and wetlands are **automatically regulated** under Section 404 of the Clean Water Act if they are "adjacent" or "neighboring" a tributary to a navigable water. This includes waters or wetlands identified as (a)(1) through (a)(6) on the Cheat Sheet that are:
    - A tributary (a)(5) and/or abutting or separated by a barrier from a tributary (a)(6).
    - Within 100 feet of an ordinary high water mark of a tributary (a)(6).
    - Within a 100-year floodplain and within 1,500 of the ordinary high water mark of a tributary (a)(6).
- Under (a)(8) all waters or wetlands that are more than 100 feet but less than 4,000 feet from a tributary are regulated when they are determined on a case-specific basis to have a significant nexus to a tidal or navigable water, an interstate water or the territorial sea. The significant nexus determines whether there is a more than inconsequential or insignificant physical, chemical, hydrological or biological significant nexus. This is a new regulatory process that is currently in initial stages and being developed.

Table 3 below summarizes likely jurisdiction for these wetlands. It is Chazen's professional opinion that Wetlands B and C are regulated under Section 404 of the Clean Water Act by law, and that Wetlands A, D and E requires a Corps of Engineer's significant nexus determination to be regulated under Section 404 of the Clean Water Act.

Table 3: Summary of Likely Jurisdiction

Wetland ID	Watercourses in wetland?	Flow out of wetland?	Wetland w/in 100 feet of a Tributary?	LIKELY REGULATORY STATUS
Wetland A	NO	NO	NO	(a)(8) Requires significant nexus determination
Wetland B	NO	NO	YES	(a)(6). Regulated by law. Wetland adjacent to Intermittent Stream
Wetland C	NO	YES	YES	(a)(6). Regulated by law. Wetland adjacent to Intermittent Stream
Wetland D	NO	NO	NO	(a)(8) Requires significant nexus determination
Wetland E	NO	NO	NO	(a)(8) Requires significant nexus determination

7. LITERATURE CITED

Edinger, G. J., Evans, D.J., Gebauer, S., Howard, T.G., Hunt, D.M., & Olivero, A.M. (editors). 2014. Ecological Communities of New York State. Second Edition. A revised and expanded edition of Carol Reschke's Ecological Communities of New York State. New York Natural Heritage Program, New York State Department of Environmental Conservation, Albany, NY, 160p.

Environmental Laboratory. 1987. *Corps of Engineers wetlands delineation manual*. Technical Report Y-87-1. Vicksburg, MS: U.S. Army Engineer Waterways Experiment Station. (http://el.erdc.usace.army.mil/wetlands/pdfs/wlman87.pdf)

U.S. Army Corps of Engineers. 2011. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0)*, ed. J. S. Wakeley, R. W. Lichvar, C. V. Noble, and J. F. Berkowitz. ERDC/EL TR-12-1. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

U.S. Army Corps of Engineers 2016. National Wetland Plant List, version 3.3. U.S. Army Corps of Engineers Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH. (http://wetland_plants.usace.army.mil/)

United States Department of Agriculture, Natural Resources Conservation Service. 2017. *Field Indicators of Hydric Soils in the United States*, Version 8.1. L.M. Vasilas, G.W. Hurt, and J.F. Berkowitz (eds.). USDA, NRCS, in cooperation with the National Technical Committee for Hydric Soils.

Weldy, Troy, David Werier, and Andrew Nelson. 2018. New York Flora Atlas. [S. M. Landry and K. N. Campbell (original application development), USF Water Institute. University of South Florida.] New York Flora Association, Albany, New York. (http://www.newyork.plantatlas.usf.edu/).

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Version saved 3/25/2019 11:00:00 AM

APPENDIX A

Figures

Figure 1 Site Location Map

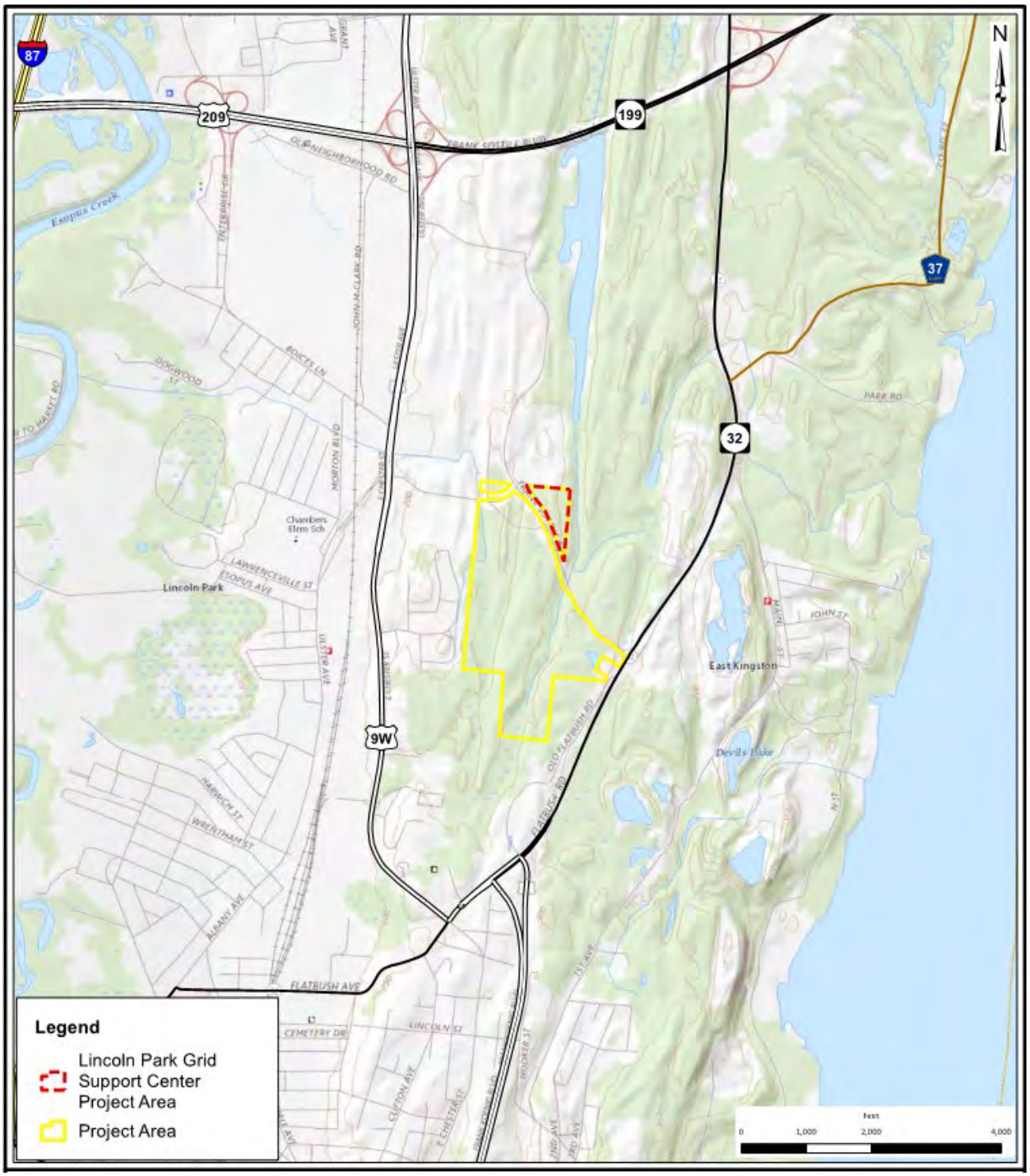
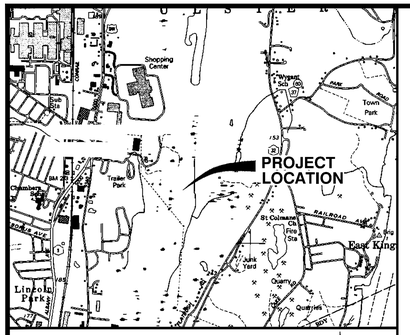


Figure 2 Orthophoto of the Project Area

Figure 3 National Wetlands Inventory and NYSDEC Wetlands and Streams Map

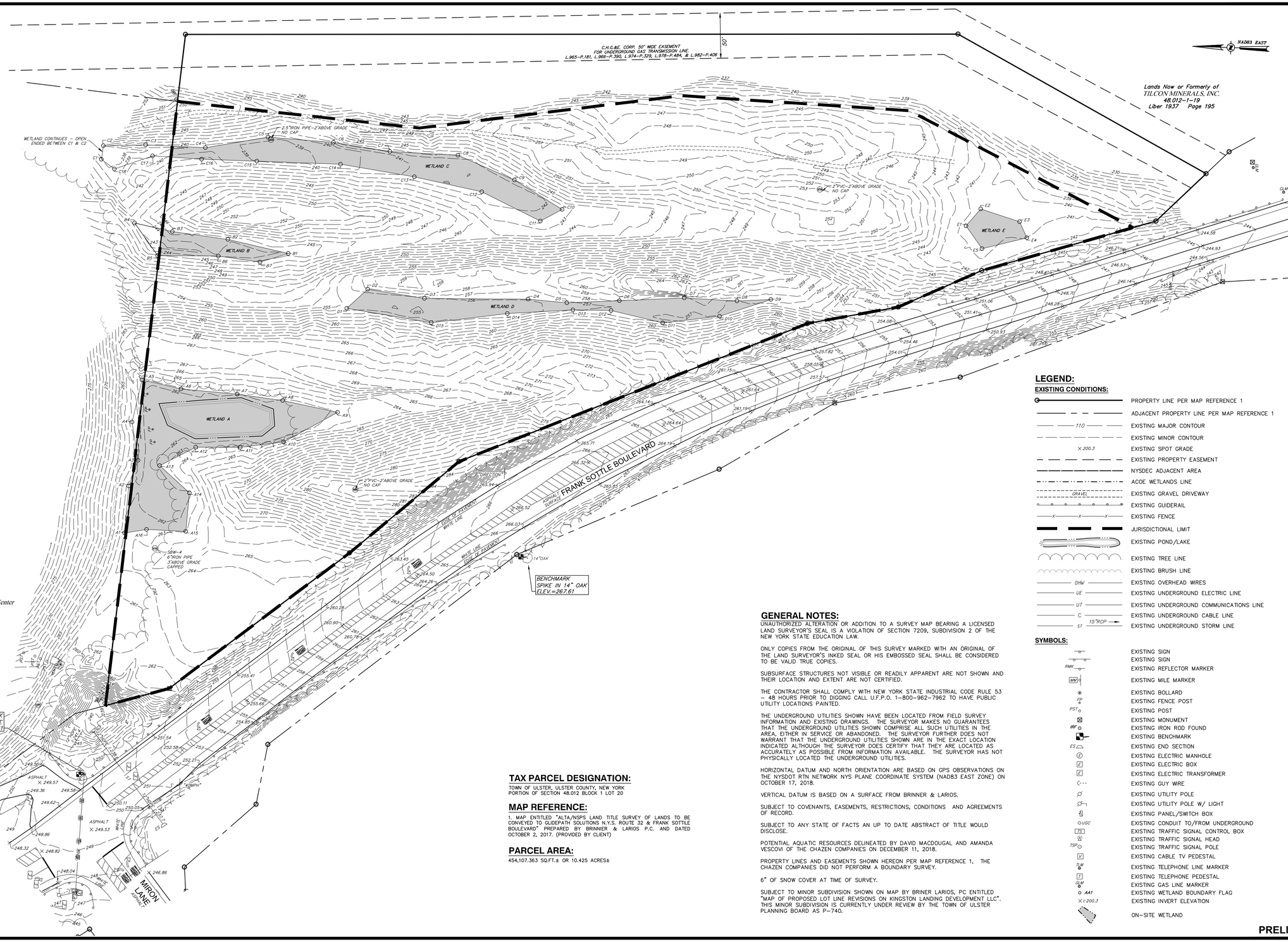
APPENDIX B

Wetland Delineation Map



SITE LOCATION PLAN: 1"=2000'

WETLAND/STREAM TABLE	
WETLAND OR STREAM	ON-SITE AREA (acres)
Wetland A	0.368 acres
Wetland B	0.061 acres
Wetland C	0.238 acres
Wetland D	0.186 acres
Wetland E	0.041 acres
JURISDICTIONAL AREA	8.167 acres



TAX PARCEL DESIGNATION:

TOWN OF ULSTER, ULSTER COUNTY, NEW YORK
PORTION OF SECTION 48.012 BLOCK 1 LOT 20

MAP REFERENCE:

1. MAP ENTITLED "ALTA/NSPS LAND TITLE SURVEY OF LANDS TO BE CONVEYED TO GLIDEPATH SOLUTIONS N.Y.S. ROUTE 32 & FRANK SOTTILE BOULEVARD" PREPARED BY BRINNER & LARIOS P.C. AND DATED OCTOBER 2, 2017. (PROVIDED BY CLIENT)

PARCEL AREA:

454,107.363 SQ.FT.± OR 10.425 ACRES±

GENERAL NOTES:

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL IS A VIOLATION OF SECTION 7209, SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

ONLY COPIES FROM THE ORIGINAL OF THIS SURVEY MARKED WITH AN ORIGINAL OF THE LAND SURVEYOR'S INKED SEAL OR HIS EMBOSSED SEAL SHALL BE CONSIDERED TO BE VALID TRUE COPIES.

SUBSURFACE STRUCTURES NOT VISIBLE OR READILY APPARENT ARE NOT SHOWN AND THEIR LOCATION AND EXTENT ARE NOT CERTIFIED.

THE CONTRACTOR SHALL COMPLY WITH NEW YORK STATE INDUSTRIAL CODE RULE 53 – 48 HOURS PRIOR TO DIGGING CALL U.F.P.O. 1-800-962-7962 TO HAVE PUBLIC UTILITY LOCATIONS PAINTED.

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

HORIZONTAL DATUM AND NORTH ORIENTATION ARE BASED ON GPS OBSERVATIONS ON THE NYSDOT RTN NETWORK NYS PLANE COORDINATE SYSTEM (NAD83 EAST ZONE) ON OCTOBER 17, 2018.

VERTICAL DATUM IS BASED ON A SURFACE FROM BRINNER & LARIOS.

SUBJECT TO COVENANTS, EASEMENTS, RESTRICTIONS, CONDITIONS AND AGREEMENTS OF RECORD.

SUBJECT TO ANY STATE OF FACTS AN UP TO DATE ABSTRACT OF TITLE WOULD DISCLOSE.

POTENTIAL AQUATIC RESOURCES DELINEATED BY DAVID MACDOUGAL AND AMANDA VESCOVI OF THE CHAZEN COMPANIES ON DECEMBER 11, 2018.

PROPERTY LINES AND EASEMENTS SHOWN HEREON PER MAP REFERENCE 1, THE CHAZEN COMPANIES DID NOT PERFORM A BOUNDARY SURVEY.

6" OF SNOW COVER AT TIME OF SURVEY.

SUBJECT TO MINOR SUBDIVISION SHOWN ON MAP BY BRINER LARIOS, PC ENTITLED "MAP OF PROPOSED LOT LINE REVISIONS ON KINGSTON LANDING DEVELOPMENT LLC". THIS MINOR SUBDIVISION IS CURRENTLY UNDER REVIEW BY THE TOWN OF ULSTER PLANNING BOARD AS P-740.

LEGEND:

EXISTING CONDITIONS:

- PROPERTY LINE PER MAP REFERENCE 1
- ADJACENT PROPERTY LINE PER MAP REFERENCE 1
- 110 — EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- X 200.3 — EXISTING SPOT GRADE
- EXISTING PROPERTY EASEMENT
- NYSDEC ADJACENT AREA
- ACOE WETLANDS LINE
- GRAVEL — EXISTING GRAVEL DRIVEWAY
- EXISTING GUIDERAIL
- X X X — EXISTING FENCE
- JURISDICTIONAL LIMIT
- EXISTING POND/LAKE
- EXISTING TREE LINE
- EXISTING BRUSH LINE
- OHW — EXISTING OVERHEAD WIRES
- UE — EXISTING UNDERGROUND ELECTRIC LINE
- UT — EXISTING UNDERGROUND COMMUNICATIONS LINE
- C — EXISTING UNDERGROUND CABLE LINE
- ST 15"RCP — EXISTING UNDERGROUND STORM LINE

SYMBOLS:

- EXISTING SIGN
- EXISTING SIGN
- RMK — EXISTING REFLECTOR MARKER
- MM — EXISTING MILE MARKER
- EXISTING BOLLARD
- FP — EXISTING FENCE POST
- PST — EXISTING POST
- EXISTING MONUMENT
- IRF — EXISTING IRON ROD FOUND
- EXISTING BENCHMARK
- ES — EXISTING END SECTION
- EXISTING ELECTRIC MANHOLE
- E — EXISTING ELECTRIC BOX
- E — EXISTING ELECTRIC TRANSFORMER
- C — EXISTING GUY WIRE
- EXISTING UTILITY POLE
- EXISTING UTILITY POLE W/ LIGHT
- EXISTING PANEL/SWITCH BOX
- OUGC — EXISTING CONDUIT TO/FROM UNDERGROUND
- TS — EXISTING TRAFFIC SIGNAL CONTROL BOX
- EXISTING TRAFFIC SIGNAL HEAD
- TSP — EXISTING TRAFFIC SIGNAL POLE
- V — EXISTING CABLE TV PEDESTAL
- TLM — EXISTING TELEPHONE LINE MARKER
- T — EXISTING TELEPHONE PEDESTAL
- GLM — EXISTING GAS LINE MARKER
- A1 — EXISTING WETLAND BOUNDARY FLAG
- X 200.3 — EXISTING INVERT ELEVATION
- ON-SITE WETLAND

PRELIM

I HEREBY CERTIFY THAT THIS SURVEY MAP IS BASED ON AN ACTUAL FIELD SURVEY COMPLETED ON JANUARY 25, 2019. THAT THIS SURVEY MAP WAS MADE BY ME OR UNDER MY DIRECTION, AND CONFORMS WITH THE MINIMUM STANDARD OF PRACTICE ADOPTED BY THE NEW YORK STATE ASSOCIATION OF PROFESSIONAL LAND SURVEYORS.

JASON M. GRIMES, L.L.S.S. #99985

0 1 2 3
ORIGINAL SCALE IN INCHES

CHAZEN ENGINEERING, LAND SURVEYING & LANDSCAPE ARCHITECTURE, CO., D.P.C.

THE Chazen COMPANIES — Proud to be Employee Owned

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Land Surveyors
Planners
Environmental & Safety Professionals
Landscape Architects
Transportation Planners & Engineers

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☐ Westchester NY Office: 1 North Broadway, Suite 803, White Plains, New York 10601, Phone: (914) 997-8510

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Chattanooga Tennessee Office: 427 E. 5TH ST. (Suite 201), Chattanooga, Tennessee 37403, Phone: (423) 241-6575

rev.	date	description

LINCOLN PARK GRID SUPPORT CENTER, GLIDEPATH ULSTER - EAST SIDE

LANDS NOW OR FORMERLY OF KINGSTON LANDING DEVELOPMENT LLC EXISTING CONDITIONS

TOWN OF ULSTER, ULSTER COUNTY, NEW YORK

designed	checked
DML	JMT
date	scale
03/04/19	1"=50'
project no.	
31788.05	
sheet no.	
SV100	

Drawing Name: Z:\projects\31700-31799\31788.05 Glidepath Ulster East Site\SVY\dwg\05_SVY_31788-05_EXIST.dwg
Xrefs Attached: XBASE_SVY_31788-05
Date Printed: Mar 22, 2019, 10:13am

APPENDIX C

Soils Report

Map Scale: 1:2,060 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 30 60 120 180

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

Soil Rating Polygons

- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Soil Rating Lines

- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Soil Rating Points

- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Ulster County, New York
Survey Area Data: Version 17, Sep 3, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Oct 7, 2013—Sep 3, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BOD	Bath-Nassau-Rock outcrop complex, hilly	0	4.1	38.9%
ML	Made land	5	0.0	0.1%
NBF	Nassau-Bath-Rock outcrop complex, very steep	0	3.5	32.9%
Pa	Palms muck	100	1.6	15.2%
VSB	Volusia channery silt loam, 0 to 8 percent slopes, very stony	5	1.4	12.9%
Totals for Area of Interest			**10.5**	**100.0%**

Description

This rating indicates the percentage of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is rated based on its respective components and the percentage of each component within the map unit.

The thematic map is color coded based on the composition of hydric components. The five color classes are separated as 100 percent hydric components, 66 to 99 percent hydric components, 33 to 65 percent hydric components, 1 to 32 percent hydric components, and less than one percent hydric components.

In Web Soil Survey, the Summary by Map Unit table that is displayed below the map pane contains a column named 'Rating'. In this column the percentage of each map unit that is classified as hydric is displayed.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

References:

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.

Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.

Rating Options

Aggregation Method: Percent Present

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

APPENDIX D

Plant Table

Table 1. Plants Identified Growing on the Project Site

Scientific Name*	Common Name	Wetland indicator†
Trees		
Acer pensylvanicum	Striped Maple	FACU
Acer rubrum	Red Maple	FAC
Acer saccharum	Sugar Maple	FACU
Betula alleghaniensis	Yellow Birch	FAC
Betula lenta	Sweet Birch	FACU
Betula populifolia	Gray Birch	FAC
Carpinus caroliniana	American Hornbeam	FAC
Carya glabra	Pignut Hickory	FACU
Carya ovata	Shag-Bark Hickory	FACU
Fagus grandifolia	American Beech	FACU
Fraxinus pennsylvanica	Green Ash	FACW
Ostrya virginiana	Eastern Hop-Hornbeam	FACU
Pinus strobus	Eastern White Pine	FACU
Populus deltoides	Eastern Cottonwood	FAC
Populus tremuloides	Quaking Aspen	FACU
Prunus pensylvanica	Fire Cherry	FACU
Prunus serotina	Black Cherry	FACU
Quercus alba	Northern White Oak	FACU
Quercus montana	Chestnut Oak	UPL
Quercus rubra	Northern Red Oak	FACU
Quercus velutina	Black Oak	NL
Robinia pseudoacacia	Black Locust	FACU
Salix nigra	Black willow	OBL
Tsuga canadensis	Eastern Hemlock	FACU
Shrubs		
Berberis thunbergii	Japanese Barberry	FACU
Cornus amomum	Silky Dogwood	FACW
Cornus racemosa	Gray dogwood	FAC
Hamamelis virginiana	American Witch-Hazel	FACU
Ilex verticillata	Winterberry	FACW
Lindera benzoin	Northern Spicebush	FACW
Lonicera morrowii	Morrow's Honeysuckle	FACU
Prunus virginiana	Choke Cherry	FACU
Rosa multiflora	Rambler Rose	FACU
Rubus allegheniensis	Allegheny Blackberry	FACU
Spiraea alba	Meadowsweet	FACW
Vaccinium angustifolium	Lowbush Blueberry	FACU

Scientific Name*	Common Name	Wetland indicator†
Vaccinium corymbosum	Highbush Blueberry	FACW
Viburnum dentatum	Southern Arrow-Wood	FAC
Woody Vines		
Celastrus orbiculatus	Asian Bittersweet	UPL
Clematis virginiana	Devil's-Darning-Needles	FAC
Parthenocissus quinquefolia	Virginia-Creeper	FACU
Toxicodendron radicans	Eastern Poison Ivy	FAC
Vitis sp.	grape	unknown
Herbaceous Plants		
Alliaria petiolata	Garlic-Mustard	FACU
Allium schoenoprasum	Wild Chives	FACU
Anthoxanthum odoratum	Large Sweet Vernal Grass	FACU
Apocynum sp.	Dogbane	unknown
Aquilegia canadensis	Red Columbine	FACU
Aralia nudicaulis	Wild Sarsaparilla	FACU
Artemisia vulgaris	Common Wormwood	UPL
Asplenium platyneuron	Ebony Spleenwort	FACU
Asplenium rhizophyllum	walking fern	NL
Barbarea vulgaris	Garden Yellow-Rocket	FAC
Carex albursina	White Bear Sedge	NL
Carex pensylvanica	Pennsylvania sedge	NL
Carex stricta	Uptight Sedge	OBL
Centaurea stoebe	Spotted Knapweed	NL
Chimaphila maculata	Spotted-Wintergreen	NL
Chrysosplenium americanum	American Golden-Saxifrage	OBL
Danthonia spicata	Poverty Grass	NL
Daucus carota	Queen Anne's-Lace	UPL
Dendrolycopodium obscurum	Princess-Pine	FACU
Dennstaedtia punctilobula	Hay-Scented Fern	UPL
Dichanthelium clandestinum	Deer-Tongue Rosette Grass	FACW
Equisetum arvense	Field Horsetail	FAC
Eurybia divaricata	White Wood-Aster	NL
Fragaria virginiana	Virginia Strawberry	FACU
Galium mollugo	White Bedstraw	FACU
Geum canadense	White Avens	FAC
Glyceria striata	Fowl mana grass	OBL
Impatiens sp.	Touch-me-not	FACW
Lotus corniculatus	Garden Bird's-Foot-Trefoil	FACU
Lysimachia ciliata	Fringed Yellow-Loosestrife	FACW
Lythrum salicaria	Purple Loosestrife	OBL

Scientific Name*	Common Name	Wetland indicator†
Maianthemum canadense	False Lily-of-the-Valley	FACU
Micranthes virginiensis	Early Pseudosaxifrage	FACU
Microstegium vimineum	Japanese Stilt Grass	FAC
Mitchella repens	Partridge-Berry	FACU
Onoclea sensibilis	Sensitive Fern	FACW
Osmundastrum cinnamomeum	Cinnamon Fern	FACW
Parathelypteris noveboracensis	New York Fern	FAC
Pedicularis canadensis	Canadian Lousewort	FACU
Phragmites australis	Common Reed	FACW
Polypodium virginianum	Rock Polypody	NL
Polystichum acrostichoides	Christmas Fern	FACU
Potentilla canadensis	Dwarf Cinquefoil	NL
Pteridium aquilinum	Northern Bracken Fern	FACU
Pyrola americana	American Wintergreen	FAC
Ranunculus acris	Tall Buttercup	FAC
Rubus hispidus	Bristly Dewberry	FACW
Schizachyrium scoparium	Little False Bluestem	FACU
Solidago gigantea	Late Goldenrod	FACW
Solidago juncea	Early Goldenrod	NL
Solidago rugosa	Wrinkle-Leaf Goldenrod	FAC
Stachys byzantina	Lambs ear	FACU
Symplocarpus foetidus	Skunk-Cabbage	OBL
Taraxacum officinale	Common Dandelion	FACU
Thalictrum thalictroides	Rue-Anemone	FACU
Trifolium pratense	Red Clover	FACU
Trifolium repens	White Clover	FACU
Uvularia sessilifolia	Sessile-Leaf Bellwort	FACU
Veratrum viride	American False Hellebore	FACW
Verbascum thapsus	Great Mullein	UPL

*Scientific names, common names, and wetland indicators are obtained from the National Wetland Plant List (US Army Corps of Engineers, 2016). For plants not on the list (i.e. having an "NL" wetland indicator), scientific and common names are taken from Weldy et al. (2018).

†The Wetland Indicator refers to the affinity of the plant for wetland environments:
Obligate Wetland (OBL) = Almost always occur in wetlands
Facultative Wetland (FACW) = Usually occur in wetlands, but may occur in non-wetlands
Facultative (FAC) = Occur in wetlands or non-wetlands
Facultative Upland (FACU) = Usually occur in non-wetlands, but may occur in wetlands
Obligate Upland (UPL) = Almost never occur in wetlands
Plants not on the list (NL) are considered to be the same as UPL for delineation purposes.

APPENDIX E

Photographs of the Project Site

Photo #1
Description: View north of Wetland A. This wetland contains forested and ponded habitat.

Photo #2
Description: View east of Wetland A.

Photo #3
Description: View south of the upland forest adjacent to Wetland A.

Photo #4
Description: View west of the upland forest adjacent to Wetland A.

Photo #5
Description: View north of Wetland B a forested wetland.

Photo #6
Description: View south of Wetland B.

Photo #7
Description: View west of the upland forest adjacent to Wetland B.

a

Photo #8
Description: View north of the upland forest adjacent to Wetland B.

Photo #9
Description: View south of a portion of Wetland C.

a

Photo #10
Description: View east of the off-site stream that is partially fed by Wetland C.

Photo #11
Description: View east of the upland forest adjacent to Wetland C.

a

Photo #12
Description: View west of the upland forest adjacent to Wetland C.

Photo #13
Description: View north of Wetland D a forested wetland between rock outcrops.

a

Photo #14
Description: View south of the southern tip of Wetland D.

Photo #15
Description: View north of the forested upland between Wetlands D and E.

a

Photo #16
Description: View south of the forested upland between Wetlands D and E.

APPENDIX F

Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Lincoln Park Grid Support Center | City/County: Town of Ulster, Ulster County | Sampling Date: 12/11/2018

Applicant/Owner: Lincoln Park DG, LLC | State: NY | Sampling Point: A-15-W

Investigator(s): David MacDougall | Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): depression | Local Relief (concave, convex, none): concave | Slope %: 1

Subregion (LRR or MLRA): LRR R | Latitude: 41 57'34.78'' ° N | Longitude: -73 58'53.34'' ° W | Datum: WGS 84

Soil Map Unit Name: Volusia channery silt loam, 0 to 8 percent slopes (VsB) | NWI Classification: PFO

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

Are Vegetation ☐, Soil ☐, or hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☑ No ☐

Are Vegetation ☐, Soil ☐, or hydrology ☐ naturally problematic? (If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☑ No ☐

Hydric Soil Present? Yes ☑ No ☐

Wetland Hydrology Present? Yes ☑ No ☐

Is the Sampled Area within a Wetland? Yes ☑ No ☐

If yes, optional Wetland Site ID: A

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☑ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☑ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☑ No ☐ Depth (inches): 10

Water Table Present? Yes ☑ No ☐ Depth (inches): 0

Saturation Present? Yes ☑ No ☐ Depth (inches): 0

(includes capillary fringe)

Wetland Hydrology Present? Yes ☑ No ☐

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

Water was frozen at the surface, ice 2-3 inches thick

Remarks:

VEGETATION - Use Scientific Names of Plants.

Tree Stratum (Plot size: 20' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1 *Populus deltoides*	8	No	FAC
2 *Fraxinus pensylvanica*	15	Yes	FACW
3 *Salix nigra*	30	Yes	OBL
4			
5			
6			
7			
(50%/20% = 27 / 11)	53	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15' radius)			
1 *Fraxinus pensylvanica*	20	Yes	FACW
2			
3			
4			
5			
6			
7			
(50%/20% = 10 / 4)	20	= 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: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1
FACW species	x 2
FAC species	x 3
FACU species	x 4
UPL Species	x 5
Column Totals: (A)	(B)

Prevalence Index = B/A =

Vegetation (continued)

Herb Stratum (Plot size: 5' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1 *Phragmites australis*	30	Yes	FACW
2 *Solidago gigantea*	5	No	FACW
3 *Cornus racemosa*	5	No	FAC
4			
5			
6			
7			
(50%/20% = 20 / 8)	40	= Total Cover	
Woody Vine Stratum (Plot size: 5' radius)			
1 *NONE*			
2			
3			
4			
5			
6			
7			
(50%/20% = 0 / 0)	0	= Total Cover	

Hydrophytic Vegetation Indicators:

- [x] Rapid Test for Hydrophytic Vegetation
- [x] Dominance test is >50%
- [ ] Prevalence Index is ≤3.0[1]
- [ ] 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. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub: Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) 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 [x] No [ ]

Remarks: (Include photo numbers here or on a separate sheet.)
Herbaceous vegetation was sparse
FAC Neutral: Yes.

SOIL

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
								Not collected

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: 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) **(LRR R, MLRA 149B)**
- [ ] Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- [ ] Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- [ ] 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)

Indicators for Problematic Hydric Soils[3]:

- [ ] 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- [ ] Coast Prairie Redox (A16) **(LRR K, L, R)**
- [ ] 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- [ ] Dark Surface (S7) **(LRR K, L)**
- [ ] Polyvalue Below Surface (S8) **(LRR K, L)**
- [ ] Thin Dark Surface (S9) **(LRR K, L)**
- [ ] Iron-Manganese Masses (F12) **(LRR K, L, R)**
- [ ] Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- [ ] Mesic Spodic (TX6) **(MLRA 144A, 145, 149B)**
- [ ] Red Parent Material (F21)
- [ ] Very Shallow Dark Surface (TF12)
- [x] Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: N/A
Depth (inches):

Hydric Soil Present? Yes [x] No [ ]

Remarks:
Soils were not collected due to the wetland being ponded. Several feet of water was observed in some areas.

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Lincoln Park Grid Support Center | City/County: Town of Ulster, Ulster County | Sampling Date: 12/11/2018

Applicant/Owner: Lincoln Park DG, LLC | State: NY | Sampling Point: A-15-W

Investigator(s): David MacDougall | Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): hill slope | Local Relief (concave, convex, none): none | Slope %: 3

Subregion (LRR or MLRA): LRR R | Latitude: 41 ° N | Longitude: -73. ° W | Datum: WGS 84

Soil Map Unit Name: Volusia channery silt loam, 0 to 8 percent slopes (VsB) | NWI Classification: None

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

Are Vegetation ☐, Soil ☐, or hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☑ No ☐

Are Vegetation ☐, Soil ☐, or hydrology ☐ naturally problematic? (If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☐ No ☑

Hydric Soil Present? Yes ☐ No ☑

Wetland Hydrology Present? Yes ☐ No ☑

Is the Sampled Area within a Wetland? Yes ☐ No ☑

If yes, optional Wetland Site ID:

Remarks: (Explain alternative procedures here or in a separate report.)
Upland area adjacent to Wetland A.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☑ Depth (inches):

Water Table Present? Yes ☐ No ☑ Depth (inches):

Saturation Present? Yes ☐ No ☑ Depth (inches):
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☑

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

Remarks:

VEGETATION - Use Scientific Names of Plants.

Tree Stratum (Plot size: 20' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1 *Pinus strobus*	10	No	FACU
2 *Quercus rubra*	30	Yes	FACU
3 *Tsuga canadensis*	40	Yes	FACU
4			
5			
6			
7			
(50%/20% = 40 / 16)	80	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15' radius)			
1 *Quercus rubra*	2	Yes	FACU
2 *Pinus strobus*	2	Yes	FACU
3 *Vaccinium angustifolium*	1	Yes	FACU
4			
5			
6			
7			
(50%/20% = 2.5 / 1)	5	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1
FACW species	x 2
FAC species	x 3
FACU species	x 4
UPL Species	x 5
Column Totals: (A)	(B)

Prevalence Index = B/A =

Vegetation (continued)

Herb Stratum (Plot size: 5' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1 *Stachys byzantina*	2	No	FACU
2			
3			
4			
5			
6			
7			
(50%/20% = 1 / 0.4)	2	= Total Cover	
Woody Vine Stratum (Plot size: 5' radius)			
1 *NONE*			
2			
3			
4			
5			
6			
7			
(50%/20% = 0 / 0)	0	= Total Cover	

Hydrophytic Vegetation Indicators:

- ☐ Rapid Test for Hydrophytic Vegetation
- ☐ Dominance test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ 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. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub: Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) 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.)
Herbaceous layer is mostly absent
FAC Neutral: No.
A stratum with less than 5 percent total cover is not considered in the dominance test, unless it is the only stratum present.

SOIL

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0 - 8	10YR 5/4	100					Silt loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: 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) **(LRR R, MLRA 149B)**
- ☐ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ☐ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ☐ 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)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ☐ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ☐ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ☐ Dark Surface (S7) **(LRR K, L)**
- ☐ Polyvalue Below Surface (S8) **(LRR K, L)**
- ☐ Thin Dark Surface (S9) **(LRR K, L)**
- ☐ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ☐ Mesic Spodic (TX6) **(MLRA 144A, 145, 149B)**
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: rock gravel
Depth (inches): 8

Hydric Soil Present? Yes ☐ No ☑

Remarks:

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Lincoln Park Grid Support Center | City/County: Town of Ulster, Ulster County | Sampling Date: 12/11/2018

Applicant/Owner: Lincoln Park DG, LLC | State: NY | Sampling Point: B-7-W

Investigator(s): David MacDougall | Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): depression | Local Relief (concave, convex, none): concave | Slope %: 0

Subregion (LRR or MLRA): LRR R | Latitude: 41 57'34.31'' ° N | Longitude: -73 58'50.48'' ° W | Datum: WGS 84

Soil Map Unit Name: Nassau Bath Rock Outcrop Complex, very steep (NBF) | NWI Classification: PFO

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

Are Vegetation ☐, Soil ☐, or hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☑ No ☐

Are Vegetation ☐, Soil ☐, or hydrology ☐ naturally problematic? (If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☑ No ☐ **Is the Sampled Area within a Wetland? Yes ☑ No ☐**

Hydric Soil Present? Yes ☑ No ☐

Wetland Hydrology Present? Yes ☑ No ☐ If yes, optional Wetland Site ID: B

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☑ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☑ Depth (inches):

Water Table Present? Yes ☑ No ☐ Depth (inches): 1

Saturation Present? Yes ☑ No ☐ Depth (inches): 1

(includes capillary fringe)

Wetland Hydrology Present? Yes ☑ No ☐

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

Remarks:

VEGETATION - Use Scientific Names of Plants.

Tree Stratum (Plot size: 20' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1 *Acer rubrum*	30	Yes	FAC
2 *Quercus rubra*	5	No	FACU
3			
4			
5			
6			
7			
(50%/20% = 18 / 7)	35	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15' radius)			
1 *Acer rubrum*	5	Yes	FAC
2 *Carpinus caroliniana*	5	Yes	FAC
3 *Lindera benzoin*	10	Yes	FACW
4 *Cornus racemosa*	2	No	FAC
5			
6			
7			
(50%/20% = 11 / 4.4)	22	= 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: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1
FACW species	x 2
FAC species	x 3
FACU species	x 4
UPL Species	x 5
Column Totals: (A)	(B)

Prevalence Index = B/A =

Vegetation (continued)

Herb Stratum (Plot size: 5' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1 *NONE*			
2			
3			
4			
5			
6			
7			
(50%/20% = 0 / 0)	0	= Total Cover	
Woody Vine Stratum (Plot size: 5' radius)			
1 *NONE*			
2			
3			
4			
5			
6			
7			
(50%/20% = 0 / 0)	0	= Total Cover	

Hydrophytic Vegetation Indicators:

- ☐ Rapid Test for Hydrophytic Vegetation
- ☑ Dominance test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ 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. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub: Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) 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.)

FAC Neutral: Yes

SOIL

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10 YR 3/2	100					Silt loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: 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) **(LRR R, MLRA 149B)**
- ☐ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ☐ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ☐ 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)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ☐ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ☐ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ☐ Dark Surface (S7) **(LRR K, L)**
- ☐ Polyvalue Below Surface (S8) **(LRR K, L)**
- ☐ Thin Dark Surface (S9) **(LRR K, L)**
- ☐ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ☐ Mesic Spodic (TX6) **(MLRA 144A, 145, 149B)**
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches):

Hydric Soil Present? Yes ☑ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Lincoln Park Grid Support Center | City/County: Town of Ulster, Ulster County | Sampling Date: 12/11/2018

Applicant/Owner: Lincoln Park DG, LLC | State: NY | Sampling Point: B-7-Up

Investigator(s): David MacDougall | Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): hillslope | Local Relief (concave, convex, none): none | Slope %: 3

Subregion (LRR or MLRA): LRR R | Latitude: 41 ° N | Longitude: -73. ° W | Datum: WGS 84

Soil Map Unit Name: Nassau Bath Rock Outcrop Complex, very steep (NBF) | NWI Classification: None

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

Are Vegetation ☐, Soil ☐, or hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☑ No ☐

Are Vegetation ☐, Soil ☐, or hydrology ☐ naturally problematic? (If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☐ No ☑

Hydric Soil Present? Yes ☐ No ☑

Wetland Hydrology Present? Yes ☐ No ☑

Is the Sampled Area within a Wetland? Yes ☐ No ☑

If yes, optional Wetland Site ID:

Remarks: (Explain alternative procedures here or in a separate report.)
Upland area adjacent to Wetland B.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☑ Depth (inches):

Water Table Present? Yes ☐ No ☑ Depth (inches):

Saturation Present? Yes ☐ No ☑ Depth (inches):
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☑

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

Remarks:

VEGETATION - Use Scientific Names of Plants.

Tree Stratum (Plot size: 20' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1 *Quercus rubra*	50	Yes	FACU
2 *Tsuga canadensis*	10	No	FACU
3 *Acer rubrum*	8	No	FAC
4 *Quercus alba*	5	No	FACU
5			
6			
7			
(50%/20% = 37 / 15)	73	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15' radius)			
1 *Pinus strobus*	2	No	FACU
2			
3			
4			
5			
6			
7			
(50%/20% = 1 / 0.4)	2	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1
FACW species	x 2
FAC species	x 3
FACU species	x 4
UPL Species	x 5
Column Totals: (A)	(B)

Prevalence Index = B/A =

Vegetation (continued)

Herb Stratum (Plot size: 5' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1 *Vaccinium angustifolium*	3	Yes	FACU
2 *Polystichum acrostichoides*	2	Yes	FACU
3			
4			
5			
6			
7			
(50%/20% = 2.5 / 1)	5	= Total Cover	
Woody Vine Stratum (Plot size: 5' radius)			
1 *NONE*			
2			
3			
4			
5			
6			
7			
(50%/20% = 0 / 0)	0	= Total Cover	

Hydrophytic Vegetation Indicators:

- ☐ Rapid Test for Hydrophytic Vegetation
- ☐ Dominance test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ 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. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub: Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) 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.)

FAC Neutral: No.

A stratum with less than 5 percent total cover is not considered in the dominance test, unless it is the only stratum present.

SOIL

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 8	10YR 5/4	100					Silt loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: 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) **(LRR R, MLRA 149B)**
- ☐ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ☐ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ☐ 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)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ☐ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ☐ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ☐ Dark Surface (S7) **(LRR K, L)**
- ☐ Polyvalue Below Surface (S8) **(LRR K, L)**
- ☐ Thin Dark Surface (S9) **(LRR K, L)**
- ☐ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ☐ Mesic Spodic (TX6) **(MLRA 144A, 145, 149B)**
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: rock gravel

Depth (inches): 0

Hydric Soil Present? Yes ☐ No ☑

Remarks:

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Lincoln Park Grid Support Center | City/County: Town of Ulster, Ulster County | Sampling Date: 12/11/2018

Applicant/Owner: Lincoln Park DG, LLC | State: NY | Sampling Point: C-16-W

Investigator(s): David MacDougall | Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): | Local Relief (concave, convex, none): concave | Slope %: 1

Subregion (LRR or MLRA): LRR R | Latitude: 41 57'49.10'' ° N | Longitude: -73 58'32.84'' ° W | Datum: WGS 84

Soil Map Unit Name: Nassau Bath Rock Outcrop Complex, very steep (NBF) | NWI Classification: PFO

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

Are Vegetation ☐, Soil ☐, or hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☑ No ☐

Are Vegetation ☐, Soil ☐, or hydrology ☐ naturally problematic? (If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☑ No ☐ **Is the Sampled Area within a Wetland? Yes ☑ No ☐**

Hydric Soil Present? Yes ☑ No ☐

Wetland Hydrology Present? Yes ☑ No ☐ If yes, optional Wetland Site ID: C

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☑ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☑ Sparsely Vegetated Concave Surface (B8)
- ☑ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☑ No ☐ Depth (inches): <1

Water Table Present? Yes ☑ No ☐ Depth (inches): 0

Saturation Present? Yes ☑ No ☐ Depth (inches): 0

(includes capillary fringe)

Wetland Hydrology Present? Yes ☑ No ☐

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

Remarks:

VEGETATION - Use Scientific Names of Plants.

Tree Stratum (Plot size: 20' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1 *Acer rubrum*	30	Yes	FAC
2 *Quercus rubra*	10	Yes	FACU
3			
4			
5			
6			
7			
(50%/20% = 20 / 8)	40	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15' radius)			
1 *Carpinus caroliniana*	10	Yes	FAC
2			
3			
4			
5			
6			
7			
(50%/20% = 5 / 2)	10	= 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% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1
FACW species	x 2
FAC species	x 3
FACU species	x 4
UPL Species	x 5
Column Totals: (A)	(B)

Prevalence Index = B/A =

Vegetation (continued)

Herb Stratum (Plot size: 5' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1 *Glyceria striata*	10	Yes	OBL
2			
3			
4			
5			
6			
7			
(50%/20% = 5 / 2)	10	= Total Cover	
Woody Vine Stratum (Plot size: 5' radius)			
1 *NONE*			
2			
3			
4			
5			
6			
7			
(50%/20% = 0 / 0)	0	= Total Cover	

Hydrophytic Vegetation Indicators:

- ☐ Rapid Test for Hydrophytic Vegetation
- ☑ Dominance test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ 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. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub: Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) 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.)

FAC Neutral: Yes.

SOIL

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: 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) **(LRR R, MLRA 149B)**
- ☐ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ☐ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ☐ 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)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ☐ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ☐ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ☐ Dark Surface (S7) **(LRR K, L)**
- ☐ Polyvalue Below Surface (S8) **(LRR K, L)**
- ☐ Thin Dark Surface (S9) **(LRR K, L)**
- ☐ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ☐ Mesic Spodic (TX6) **(MLRA 144A, 145, 149B)**
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☑ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: NONE

Depth (inches):

Hydric Soil Present? Yes ☑ No ☐

Remarks:

Soils were frozen, a large portion of this wetland was inundated to a depth of several inches. Hydric soils can be assumed to be present.

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Lincoln Park Grid Support Center | City/County: Town of Ulster, Ulster County | Sampling Date: 12/11/2018

Applicant/Owner: Lincoln Park DG, LLC | State: NY | Sampling Point: C-16-Up

Investigator(s): David MacDougall | Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): hillslope | Local Relief (concave, convex, none): none | Slope %: 3

Subregion (LRR or MLRA): LRR R | Latitude: 41 ° N | Longitude: -73. ° W | Datum: WGS 84

Soil Map Unit Name: Nassau Bath Rock Outcrop Complex, very steep (NBF) | NWI Classification: None

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

Are Vegetation ☐, Soil ☐, or hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☑ No ☐

Are Vegetation ☐, Soil ☐, or hydrology ☐ naturally problematic? (If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☐ No ☑

Hydric Soil Present? Yes ☐ No ☑

Wetland Hydrology Present? Yes ☐ No ☑

Is the Sampled Area within a Wetland? Yes ☐ No ☑

If yes, optional Wetland Site ID:

Remarks: (Explain alternative procedures here or in a separate report.)
Upland area adjacent to Wetland C.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☑ Depth (inches):

Water Table Present? Yes ☐ No ☑ Depth (inches):

Saturation Present? Yes ☐ No ☑ Depth (inches):
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☑

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

Remarks:

VEGETATION - Use Scientific Names of Plants.

Tree Stratum (Plot size: 20' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1 *Quercus rubra*	50	Yes	FACU
2 *Tsuga canadensis*	10	No	FACU
3 *Acer rubrum*	8	No	FAC
4 *Quercus alba*	5	No	FACU
5			
6			
7			
(50%/20% = 37 / 15)	73	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15' radius)			
1 *Pinus strobus*	2	No	FACU
2			
3			
4			
5			
6			
7			
(50%/20% = 1 / 0.4)	2	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1
FACW species	x 2
FAC species	x 3
FACU species	x 4
UPL Species	x 5
Column Totals: (A)	(B)

Prevalence Index = B/A =

Vegetation (continued)

Herb Stratum (Plot size: 5' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1 *Vaccinium angustifolium*	3	Yes	FACU
2 *Polystichum acrostichoides*	2	Yes	FACU
3			
4			
5			
6			
7			
(50%/20% = 2.5 / 1)	5	= Total Cover	
Woody Vine Stratum (Plot size: 5' radius)			
1 *NONE*			
2			
3			
4			
5			
6			
7			
(50%/20% = 0 / 0)	0	= Total Cover	

Hydrophytic Vegetation Indicators:

- ☐ Rapid Test for Hydrophytic Vegetation
- ☐ Dominance test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ 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. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub: Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) 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.)

FAC Neutral: No.

A stratum with less than 5 percent total cover is not considered in the dominance test, unless it is the only stratum present.

SOIL

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 8	10YR 5/4	100					Silt loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: 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) **(LRR R, MLRA 149B)**
- ☐ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ☐ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ☐ 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)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ☐ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ☐ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ☐ Dark Surface (S7) **(LRR K, L)**
- ☐ Polyvalue Below Surface (S8) **(LRR K, L)**
- ☐ Thin Dark Surface (S9) **(LRR K, L)**
- ☐ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ☐ Mesic Spodic (TX6) **(MLRA 144A, 145, 149B)**
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: rock gravel

Depth (inches): 0

Hydric Soil Present? Yes ☐ No ☑

Remarks:

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Lincoln Park Grid Support Center | City/County: Town of Ulster, Ulster County | Sampling Date: 12/11/2018

Applicant/Owner: Lincoln Park DG, LLC | State: NY | Sampling Point: D-14-W

Investigator(s): David MacDougall | Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): depression | Local Relief (concave, convex, none): concave | Slope %: 2

Subregion (LRR or MLRA): LRR R | Latitude: 41 57'51.20'' ° N | Longitude: -73 58'30.59'' ° W | Datum: WGS 84

Soil Map Unit Name: Bath Nassau Rock Outcrop (BOD) | NWI Classification: PFO

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

Are Vegetation ☐, Soil ☐, or hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☑ No ☐

Are Vegetation ☐, Soil ☐, or hydrology ☐ naturally problematic? (If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☑ No ☐ **Is the Sampled Area within a Wetland? Yes ☑ No ☐**

Hydric Soil Present? Yes ☑ No ☐

Wetland Hydrology Present? Yes ☑ No ☐ If yes, optional Wetland Site ID: D

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☑ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☑ Depth (inches):

Water Table Present? Yes ☑ No ☐ Depth (inches): 1

Saturation Present? Yes ☑ No ☐ Depth (inches): 1

(includes capillary fringe)

Wetland Hydrology Present? Yes ☑ No ☐

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

Remarks:

VEGETATION - Use Scientific Names of Plants.

Tree Stratum (Plot size: 20' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1 *Acer rubrum*	20	Yes	FAC
2 *Fraxinus pennsylvanica*	10	Yes	FACW
3			
4			
5			
6			
7			
(50%/20% = 15 / 6)	30	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15' radius)			
1 *Carpinus caroliniana*	30	Yes	FAC
2 *Acer rubrum*	5	No	FAC
3			
4			
5			
6			
7			
(50%/20% = 18 / 7)	35	= 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: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1
FACW species	x 2
FAC species	x 3
FACU species	x 4
UPL Species	x 5
Column Totals: (A)	(B)

Prevalence Index = B/A =

Vegetation (continued)

Herb Stratum (Plot size: 5' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1 *Spiraea alba*	20	Yes	FACW
2 *Onoclea sensibilis*	5	No	FACW
3 *Cornus amomum*	10	Yes	FACW
4			
5			
6			
7			
(50%/20% = 18 / 7)	35	= Total Cover	
Woody Vine Stratum (Plot size: 5' radius)			
1 *None*			
2			
3			
4			
5			
6			
7			
(50%/20% = 0 / 0)	0	= Total Cover	

Hydrophytic Vegetation Indicators:

- ☐ Rapid Test for Hydrophytic Vegetation
- ☑ Dominance test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ 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. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub: Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) 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.)

FAC Neutral: Yes.

SOIL

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10 YR 4/1	95	10 YR 4/6	5	C	M	Silty clay loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: 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) **(LRR R, MLRA 149B)**
- ☐ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ☐ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ☐ 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)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ☐ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ☐ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ☐ Dark Surface (S7) **(LRR K, L)**
- ☐ Polyvalue Below Surface (S8) **(LRR K, L)**
- ☐ Thin Dark Surface (S9) **(LRR K, L)**
- ☐ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ☐ Mesic Spodic (TX6) **(MLRA 144A, 145, 149B)**
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: N/A

Depth (inches):

Hydric Soil Present? Yes ☑ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Lincoln Park Grid Support Center | City/County: Town of Ulster, Ulster County | Sampling Date: 12/11/2018

Applicant/Owner: Lincoln Park DG, LLC | State: NY | Sampling Point: D-9-Up

Investigator(s): David MacDougall | Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): terrace | Local Relief (concave, convex, none): none | Slope %: 5

Subregion (LRR or MLRA): LRR R | Latitude: 41 ° N | Longitude: -73. ° W | Datum: WGS 84

Soil Map Unit Name: Bath Nassau Rock Outcrop (BOD) | NWI Classification: None

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

Are Vegetation ☐, Soil ☐, or hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☑ No ☐

Are Vegetation ☐, Soil ☐, or hydrology ☐ naturally problematic? (If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☐ No ☑

Hydric Soil Present? Yes ☐ No ☑

Wetland Hydrology Present? Yes ☐ No ☑

Is the Sampled Area within a Wetland? Yes ☐ No ☑

If yes, optional Wetland Site ID:

Remarks: (Explain alternative procedures here or in a separate report.)
Upland area between Wetlands D and E.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☑ Depth (inches):

Water Table Present? Yes ☐ No ☑ Depth (inches):

Saturation Present? Yes ☐ No ☑ Depth (inches):
(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☑

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

Remarks:

VEGETATION - Use Scientific Names of Plants.

Tree Stratum (Plot size: 20' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1 *Pinus strobus*	8	Yes	FACU
2 *Acer saccharum*	25	Yes	FACU
3 *Tsuga canadensis*	8	No	FACU
4			
5			
6			
7			
(50%/20% = 21 / 8.2)	41	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15' radius)			
1 *Pinus strobus*	5	Yes	FACU
2			
3			
4			
5			
6			
7			
(50%/20% = 2.5 / 1)	5	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1
FACW species	x 2
FAC species	x 3
FACU species	x 4
UPL Species	x 5
Column Totals: (A)	(B)

Prevalence Index = B/A =

Vegetation (continued)

Herb Stratum (Plot size: 5' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1 *NONE*			
2			
3			
4			
5			
6			
7			
(50%/20% = 0 / 0)	0	= Total Cover	
Woody Vine Stratum (Plot size: 5' radius)			
1 *NONE*			
2			
3			
4			
5			
6			
7			
(50%/20% = 0 / 0)	0	= Total Cover	

Hydrophytic Vegetation Indicators:

- ☐ Rapid Test for Hydrophytic Vegetation
- ☐ Dominance test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ 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. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub: Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) 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.)
A herbaceous layer is absent in this area.
FAC Neutral: No.

SOIL

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10 YR 5/4	100					Silt loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: 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) **(LRR R, MLRA 149B)**
- ☐ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ☐ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ☐ 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)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ☐ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ☐ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ☐ Dark Surface (S7) **(LRR K, L)**
- ☐ Polyvalue Below Surface (S8) **(LRR K, L)**
- ☐ Thin Dark Surface (S9) **(LRR K, L)**
- ☐ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ☐ Mesic Spodic (TX6) **(MLRA 144A, 145, 149B)**
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: N/A
Depth (inches):

Hydric Soil Present? Yes ☐ No ☑

Remarks:

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Lincoln Park Grid Support Center | City/County: Town of Ulster, Ulster County | Sampling Date: 12/11/2018

Applicant/Owner: Lincoln Park DG, LLC | State: NY | Sampling Point: E-2-W

Investigator(s): David MacDougall | Section, Township, Range: N/A

Landform (hillslope, terrace, etc.): depression | Local Relief (concave, convex, none): concave | Slope %: 1

Subregion (LRR or MLRA): LRR R | Latitude: 41 57'49.88'' ° N | Longitude: -73 58'25.83'' ° W | Datum: WGS 84

Soil Map Unit Name: Bath Nassau Rock Outcrop (BOD) | NWI Classification: PSS

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

Are Vegetation ☐, Soil ☐, or hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☑ No ☐

Are Vegetation ☐, Soil ☐, or hydrology ☐ naturally problematic? (If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☑ No ☐

Hydric Soil Present? Yes ☑ No ☐

Wetland Hydrology Present? Yes ☑ No ☐

Is the Sampled Area within a Wetland? Yes ☑ No ☐

If yes, optional Wetland Site ID: E

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

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

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☑ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☑ Depth (inches):

Water Table Present? Yes ☐ No ☑ Depth (inches):

Saturation Present? Yes ☑ No ☐ Depth (inches): 8

(includes capillary fringe)

Wetland Hydrology Present? Yes ☑ No ☐

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

Remarks:

VEGETATION - Use Scientific Names of Plants.

Tree Stratum (Plot size: 20' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1 *Acer rubrum*	15	Yes	FAC
2			
3			
4			
5			
6			
7			
(50%/20% = 7.5 / 3)	15	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15' radius)			
1 *Lindera benzoin*	60	Yes	FACW
2 *Ilex verticillata*	5	No	FACW
3			
4			
5			
6			
7			
(50%/20% = 33 / 13)	65	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1
FACW species	x 2
FAC species	x 3
FACU species	x 4
UPL Species	x 5
Column Totals: (A)	(B)

Prevalence Index = B/A =

Vegetation (continued)

Herb Stratum (Plot size: 5' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1 *NONE*			
2			
3			
4			
5			
6			
7			
(50%/20% = 0 / 0)	0	= Total Cover	
Woody Vine Stratum (Plot size: 5' radius)			
1 *NONE*			
2			
3			
4			
5			
6			
7			
(50%/20% = 0 / 0)	0	= Total Cover	

Hydrophytic Vegetation Indicators:

- ☐ Rapid Test for Hydrophytic Vegetation
- ☑ Dominance test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ 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. (7.6cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub: Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) 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.)
A herbaceous layer was absent.
FAC Neutral: Yes.

SOIL

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10 YR 3/2	100					Silt loam	
4-12	10 YR 7/2	95	10 YR 4/6	5	C	M	Silt loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: 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) **(LRR R, MLRA 149B)**
- ☐ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ☐ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ☐ 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)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ☐ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ☐ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ☐ Dark Surface (S7) **(LRR K, L)**
- ☐ Polyvalue Below Surface (S8) **(LRR K, L)**
- ☐ Thin Dark Surface (S9) **(LRR K, L)**
- ☐ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ☐ Mesic Spodic (TX6) **(MLRA 144A, 145, 149B)**
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: N/A
Depth (inches):

Hydric Soil Present? Yes ☑ No ☐

Remarks:

APPENDIX G

2015 WOTUS

2015 Clean Water Rule Cheat Sheet

WATERS OF THE U.S.: The term "waters of the United States" means:

(a)(1) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

(a)(2) All interstate waters, including interstate wetlands;

(a)(3) The territorial seas;

(a)(4) All impoundments of waters otherwise identified as waters of the United States under this section;

(a)(5) All tributaries, as defined in paragraph (c)(3) of this section, of waters identified in paragraphs (a)(1) through (3) of this section;

(c)(3) Tributary and tributaries. The terms tributary and tributaries each mean a water that contributes flow, either directly or through another water (including an impoundment identified in paragraph (a)(4) of this section), to a water identified in paragraphs (a)(1) through (3) of this section that is characterized by the presence of the physical indicators of a bed and banks and an ordinary high water mark.

(a)(6) All waters adjacent to a water identified in paragraphs (a)(1) through (5) of this section, including wetlands, ponds, lakes, oxbows, impoundments, and similar waters;

(c)(1) Adjacent. The term adjacent means bordering, contiguous, or neighboring a water identified in paragraphs (a)(1) through (5) of this definition, including waters separated by constructed dikes or barriers, natural river berms, beach dunes, and the like.

(c)(2) Neighboring. The term neighboring means:

(c)(2)(i) All waters located within 100 feet of the ordinary high water mark of a water identified in paragraphs (a)(1) through (5) of this section. The entire water is neighboring if a portion is located within 100 feet of the ordinary high water mark;

(c)(2)(ii) All waters located within the 100-year floodplain of a water identified in paragraphs (a)(1) through (5) of this section and not more than 1,500 feet from the ordinary high water mark of such water. The entire water is neighboring if a portion is located within 1,500 feet of the ordinary high water mark and within the 100-year floodplain;

(c)(2)(iii) All waters located within 1,500 feet of the high tide line of a water identified in paragraphs (a)(1) or (a)(3) of this section, and all waters within 1,500 feet of the ordinary high water mark of the Great Lakes. The entire water is neighboring if a portion is located within 1,500 feet of the high tide line or within 1,500 feet of the ordinary high water mark of the Great Lakes.

(a)(7) All waters in paragraphs (a)(7)(i) through (v) of this section where they are determined, on a case-specific basis, to have a significant nexus to a water identified in paragraphs (a)(1) through (3) of this section.

(a)(7)(i) Prairie potholes.

(a)(7)(ii) Carolina bays and Delmarva bays.

(a)(7)(iii) Pocosins.

(a)(7)(iv) Western vernal pools.

(a)(7)(v) Texas coastal prairie wetlands.

(a)(8) All waters located within the 100- year floodplain of a water identified in paragraphs (a)(1) through (3) of this section and all waters located within 4,000 feet of the high tide line or ordinary high water mark of a water identified in paragraphs (a)(1) through (5) of this section where they are determined on a case-specific basis to have a significant nexus to a water identified in paragraphs (a)(1) through (3) of this section.

Not an official document; refer to 33CFR328.3 for official information.

2015 Clean Water Rule Cheat Sheet

EXCLUSIONS: 33CFR328.3(b) The following are not "waters of the United States" even where they otherwise meet the terms of paragraphs (a)(4) through (8) of this section.

(b)(1) Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act.

(b)(2) Prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

(b)(3) The following ditches:

- **(b)(3)(i)** Ditches with ephemeral flow that are not a relocated tributary or excavated in a tributary.
- **(b)(3)(ii)** Ditches with intermittent flow that are not a relocated tributary, excavated in a tributary, or drain wetlands.
- **(b)(3)(iii)** Ditches that do not flow, either directly or through another water, into a water identified in paragraphs (a)(1) through (3) of this section.

(b)(4) The following features:

- **(b)(4)(i)** Artificially irrigated areas that would revert to dry land should application of water to that area cease;
- **(b)(4)(ii)** Artificial, constructed lakes and ponds created in dry land such as farm and stock watering ponds, irrigation ponds, settling basins, fields flooded for rice growing, log cleaning ponds, or cooling ponds;
- **(b)(4)(iii)** Artificial reflecting pools or swimming pools created in dry land;
- **(b)(4)(iv)** Small ornamental waters created in dry land;
- **(b)(4)(v)** Water-filled depressions created in dry land incidental to mining or construction activity, including pits excavated for obtaining fill, sand, or gravel that fill with water;
- **(b)(4)(vi)** Erosional features, including gullies, rills, and other ephemeral features that do not meet the definition of tributary, non-wetland swales, and lawfully constructed grassed waterways; and
- **(b)(4)(vii)** Puddles.

(b)(5) Groundwater, including groundwater drained through subsurface drainage systems.

(b)(6) Stormwater control features constructed to convey, treat, or store stormwater that are created in dry land.

(b)(7) Wastewater recycling structures constructed in dry land; detention and retention basins built for wastewater recycling; groundwater recharge basins; percolation ponds built for wastewater recycling; and water distributary structures built for wastewater recycling.

APPENDIX H

Landowner Forms

PRELIMINARY JURISDICTIONAL DETERMINATION FORM

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:

District Office: New York - NY | File/ORM #: | PJD Date: Feb 8, 2019

State: NY | City/County: Town of Ulster / Ulster County

Nearest Waterbody: Esopus Creek

Location: TRS, LatLong or UTM: 41o57'51.20'' and -73o58'30.59

Name/ Address of Person Requesting PJD:
Lincoln Park DG, LLC
132 N, York Street, Suite 3L
Elmhurst, IL 60126
Consultant:
The Chazen Companies, Attn: Barbara Beall
20 Elm St - Suite 110, Glens Falls NY 12801

Identify (Estimate) Amount of Waters in the Review Area:

Non-Wetland Waters: x linear ft | x width | x.xx acres | Stream Flow: N/A

Wetlands: 0.9 acre(s) | Cowardin Class: Palustrine, forested

Name of Any Water Bodies on the Site Identified as Section 10 Waters: Tidal: none | Non-Tidal: none

☐ Office (Desk) Determination
☐ Field Determination: Date of Field Trip:

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:
- ☑ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
  - ☐ Office concurs with data sheets/delineation report.
  - ☐ 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 quad name: USGS National Map Kingston East
- ☑ USDA Natural Resources Conservation Service Soil Survey. Citation: Soil Survey of Ulster County 1979
- ☑ National wetlands inventory map(s). Cite name: USFWS GIS Data
- ☑ State/Local wetland inventory map(s): NYSDEC GIS Data
- ☐ FEMA/FIRM maps: FIRM 36111C0480E
- ☐ 100-year Floodplain Elevation is:
- ☑ Photographs: ☑ Aerial (Name & Date): Esri, DigitalGlobe, GeoEye, Earthstar Geographic
  - ☑ Other (Name & Date): Site Photos taken December 14, 2018
- ☐ 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)

EXPLANATION OF PRELIMINARY AND APPROVED JURISDICTIONAL DETERMINATIONS:

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 "preconstruction 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.

CONSENT OF PROPERTY OWNER(S)

DATE: _____

Property: State Route 32, Ulster, NY
Tax Map Number: 48.12-1-20

Lincoln Park DG, LLC is the owner of the above noted property. I certify that I am authorized to grant the US Army Corps of Engineers (ACOE) access to the above noted property for the purpose of determining the limits of federal jurisdictional wetlands and other waters of the United States on said property.

Signed: _____

Printed: _____

Title: _____