Q Requests for Jurisdictional Determination, NYSDEC and USACE

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September 4, 2018

Ref: 28677.03

VIA CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Mr. John Petronella
Region 3 Permit Administrator
New York State Department of Environmental Conservation
21 South Putt Corners Road
New Paltz, New York 12561

Re: Request for Tidal Wetlands Boundary Verification and Jurisdictional Determination
Hampshire Country Club
1025 Cove Road
Republic Airport
Village of Mamaroneck
Westchester County, New York

Dear Mr. Petronella:

VHB Engineering, Surveying, Landscape Architecture and Geology, P.C. (VHB) is serving as environmental consultant to Hampshire Country Club LLC. (HCC), which is requesting a tidal wetland boundary verification and jurisdictional determination (JD) from the New York State Department of Environmental Conservation (NYSDEC) for the 106.2-acre property located at 1025 Cove Road, in the Village of Mamaroneck, Westchester County, New York (hereinafter, the "Subject Property," see Appendix A, Figures 1 and 2).

The Subject Property is currently developed with recreational membership club facilities, including an 18-hole golf course, clubhouse, swimming pool, tennis courts, maintenance facilities, and other support uses. Two roads (Cove Road and Eagle Knolls Road) run east-west through the southern portion of the Subject Property. Additionally, the Subject Property abuts the tidal waters of Delancey Cove (a tributary to Long Island Sound), which is regulated as IM (Intertidal Marsh) and LZ (littoral zone) tidal wetlands by the NYSDEC (see Appendix A, Figure 3).

HCC is proposing to construct a Planned Residential Development (PRD) consisting of 105 residential

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units and 36 acres of common open space on portions of the Subject Property. VHB prepared a Draft Environmental Impact Statement for the PRD, which was accepted on December 13, 2017 by the Village of Mamaroneck Planning Board, which is serving as lead agency. In response to comments received regarding the DEIS, VHB is currently preparing responses to be included in the Final Environmental Impact Statement (FEIS) for the PRD. Several public comments included requests for clarification of the NYSDEC's tidal wetland jurisdiction at the Subject Property. In addition, a comment letter from NYSDEC Region 3 Division of Environmental Permits representative Sarah Pawliczak, dated February 14, 2018 (see Appendix B), include a preliminary statement regarding the extent of the NYSDEC's tidal wetland jurisdiction at the subject property:

> "*Hammocks Road, Cove Road, and Eagle Knolls Road can be considered a substantial fabricated structure limiting ·the tidal wetland adjacent area. But the area which is southeast of Eagle Knolls Road and within 300 feet of the regulated wetland, in Delancey Cove, is regulated adjacent area*."

VHB delineated the tidal wetland boundary of Delancey Cove to the south of the Subject Property on July 31, 2018 (Wetland Delineation Survey included as Appendix C). Based on field observations, in addition to the roads referenced by Ms. Pawliczak, it appears that other substantial fabricated structures, as defined in 6 NYCRR 661.4(b)(ii), occur at or just landward of the delineated wetland boundary. Specifically, a stone seawall, timber bulkhead, rip-rap gabions, concrete retaining wall and concrete tide gate structures occur along the Delancey Cove shoreline, to the south and west of Cove Road and to the southwest of Eagle Knolls Road (representative photographs included as Appendix D). Based on preliminary review, it appears that these structures may further limit the extent of the regulated tidal wetland adjacent area at the Subject Property. Accordingly, on behalf of HCC, we are respectfully requesting verification of the delineated tidal wetland boundary and a formal determination of the NYSDEC's tidal wetland jurisdiction at the Subject Property.

To assist in the processing of this request, attached please find two copies of the following:

Appendix A	Site Figures 1 through 3
Appendix B	NYSDEC correspondence, dated February 14, 2018
Appendix C	Wetland Delineation Survey
Appendix D	Photograph Location Map and representative photographs

Thank you for your cooperation in this matter. Please feel free to contact me at your earliest convenience at 631.787.3400 or at dkennedy@vhb.com to arrange for a field inspection of the Subject Property, or if you require any additional information to process this request.

Sincerely,

VHB Engineering, Surveying, Landscape Architecture and Geology, P.C.

David Kennedy
Project Scientist

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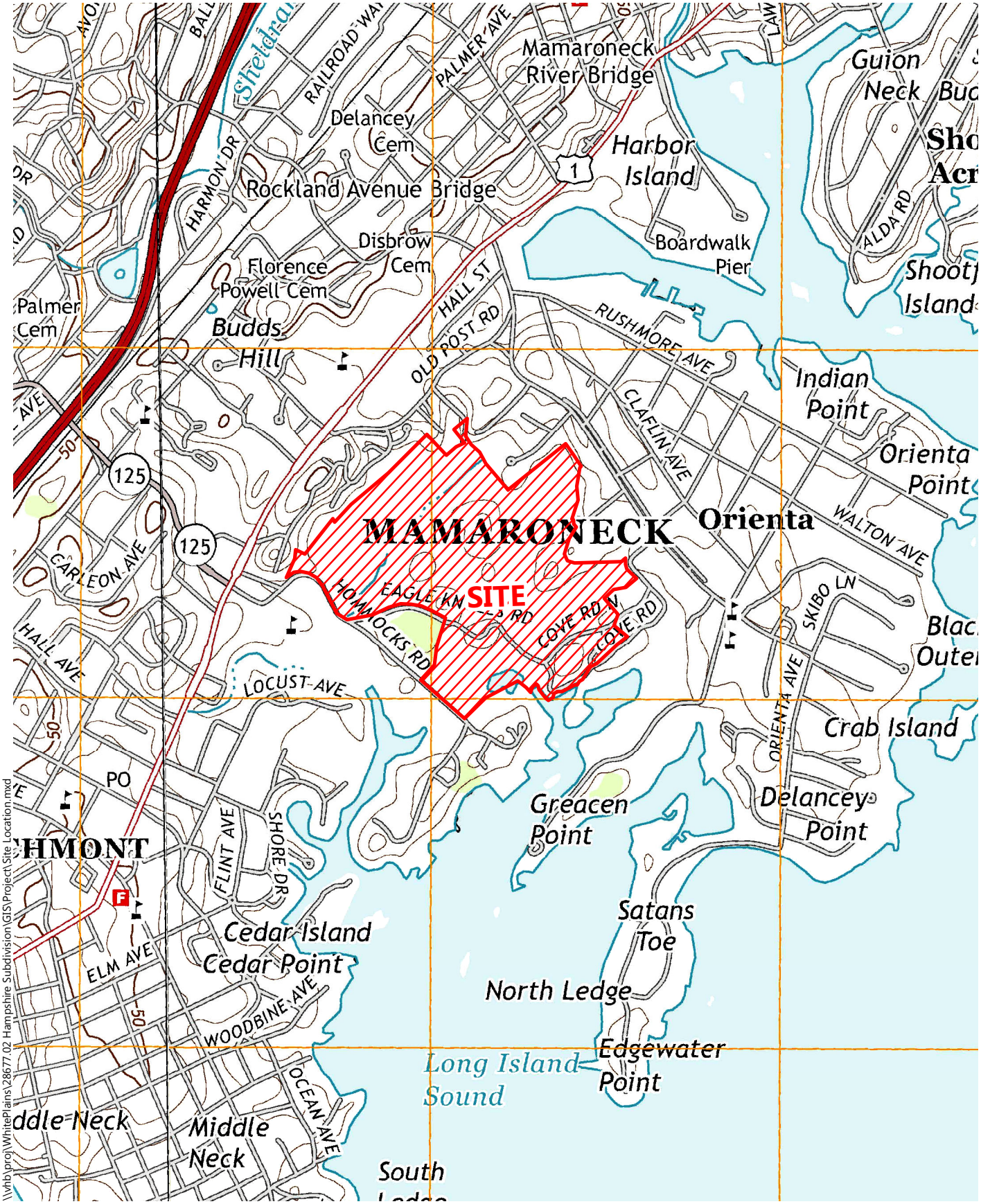
Appendix A



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0 420 840 1680 Feet

Hampshire Country Club - PRD | Village of Mamaroneck, NY

Regional Location Map

Source: USGS Mamaroneck, NY

Source: ESRI GIS

0 170 340 680 Feet

Hampshire Country Club - PRD | Village of Mamaroneck, NY

Site Aerial Photograph

\\NYWPDATA\projects\28677.02 Hampshire Subdivision\GIS\Project\Wetlands Chapter Maps\Wetlands - Freshwater and Tidal.mxd

0 175 350 700 Feet

Hampshire Country Club - PRD | Village of Mamaroneck, NY

NYSDEC Tidal Wetlands

NYSDEC Wetland Map

Source: U.S. Fish and Wildlife Service

Appendix B

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Permits, Region 3
21 South Putt Corners Road, New Paltz, NY 12561-1620
P: (845) 256-3054 I F: (845) 255-4659
www.dec.ny.gov

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NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

February 14, 2018

Ms. Betty-Ann Sherer
Land Use Coordinator
Village of Mamaroneck Planning Department
169 Mt. Pleasant Avenue
Mamaroneck, NY 10543

RE: Hampshire Country Club Planned Residential Development
Village of Mamaroneck, Westchester County
Comments on Draft Environmental Impact Statement
CH#: 7242

Dear Ms. Sherer:

Department of Environmental Conservation (DEC) staff have reviewed the Draft Environmental Impact Statement (DEIS) for Hampshire Country Club Planned Residential Development. The project consists of constructing 105 single-family units on 94.5-acres, comprising 44 single-family residences and 61 semi-detached carriage residences, reducing the existing golf course from 18-holes to 9-holes, and preserving 36 acres for open space.

DEC PERMITS AND JURISDICTION

The following comments are offered, with reference to articles of the Environmental Conservation Law.

Article 25, Tidal Wetlands

DEC regulates tidal wetlands and the adjacent area, the upland surrounding the wetlands. The extent of the tidal wetland adjacent area can be constricted by several factors:

- The seaward edge of the closest lawfully and presently existing (i.e. as of August 20, 1977), functional and substantial fabricated structure generally parallel to the wetland boundary and 100 feet of greater in length;
- The elevation contour of 10 feet above mean sea level, as shown on the most recent United States geological survey topographical map prior to the effective date of the regulations (August 20, 1977); and
- The crest of a bluff or cliff, where the 10-foot contour crosses the bluff or cliff.

Hommocks Road, Cove Road, and Eagle Knolls Road can be considered a substantial fabricated structure limiting the tidal wetland adjacent area. But the area which is southeast of Eagle Knolls Road and within 300 feet of the regulated wetland, in Delancey Cove, is regulated adjacent area.

The Grading and Utility Plan, Exhibit 3F-1, shows a "proposed 4' x 10' channel improvement" within 170 feet of the wetland with no apparent barrier. This appears to be modification of an existing structure and a regulated activity.

The tidal wetlands regulations include as a regulated activity any "new discharge of any pollutant requiring a SPDES permit." This includes new discharges under the SPDES General Permit for Stormwater Discharges from Construction Activity - GP-0-15-002. As this will proposal will include new impervious surfaces and it appears that there will be an increase in discharge, it appears that a tidal wetland permit for new discharge of stormwater is required.

However, Exhibit 2-14a shows plantings within the DEC-regulated tidal wetland adjacent area. Establishing plantings in the tidal wetlands adjacent area, is categorized as a "use not requiring a permit" pursuant to the regulations §661.5(9). Please note that DEC recommends the use of native species suitable for the area of proposed planting. The introduction of any plant listed in 6 NYCRR Part 575, Prohibited and Regulated Invasive Species, is prohibited.

Please note that the pond may be under the regulation of the Army Corps of Engineers and if excavation is required to establish wetland plantings, a Corps permit pursuant to Section 404 of the Clean Water Act may be required. If so, a Section 401 Water Quality Certification would be required from DEC.

Article 11, Title 5, Endangered and Threatened Species
Section 3.K.1.b. does not mention the SEQR Lead Agency coordination letter, CH# 5963, from DEC to the Village of Mamaroneck Planning Board, regarding State-listed threatened and endangered species. The letter notes that this project is in close proximity to occurrences of breeding marsh birds, king rail (*Rallus elegans*) and least bittern (*Ixobrychus exilis*). However, DEC has determined that this project will have no impact on these species and no further reviewing is necessary at this time.

Article 19, Air Resources
Section 3.S, Air Quality, states that some buildings "may require emergency generators, boilers, or other fuel burning sources" and that applications would be submitted for the "appropriate NYSDEC air permits under the Division of Air Resources (DAR)." Please note that applications for Air Registrations should be submitted to the NYSDEC Division of Air Resources. If the emissions exceed the registration thresholds and an Air State Facility Permit is required, the application must be submitted to the Regional Permit Administrator, not directly to DAR. Application for Air Resource permits must be made simultaneously with Tidal Wetlands application, if applicable. Please contact the Air Resource staff with questions on regulation at (845) 256-3185.

Article 15, Title 15, Water Withdrawal
According to the section H, Water Supply, the facility has two existing wells which provide irrigation water for the golf course. No information is provided on the capacity of these wells. If the total pump capacity of the wells exceeds 100,000 gallons per day, then a Water Withdrawal permit is required pursuant to Article 15, Title 15 of the Environmental Conservation Law. Please provide the pump capacity of the existing wells. Please note that this regulated is based on the physical capacity of the existing pumps, not on the amount of water actually being withdrawn nor the calculated safe yield. Please note that if these wells have sufficient capacity, submission of an application for permit should be made as soon as possible and can be independent of any applications needed for this development.

State Pollutant Discharge Elimination System (SPDES) Stormwater – Construction
DEIS Section 2.E.1.k. does not mention the need for a SPDES General Permit for Stormwater Discharges from Construction Activity.

DEIS Section 3.F.1.c. only notes the need to prepare and submit a SWPPP to the Village of Mamaroneck. However, as stated in Table 1.1, the project requires a SPDES permit from DEC. The project sponsor must submit a Notice of Intent to the DEC along with the MS4 Acceptance Form and the SWPPP.

If there are any questions, please feel free to contact me at 845-256-3050 or by email at sarah.pawliczak@dec.ny.gov.

Sincerely,

Sarah Pawliczak
Division of Environmental Permits

cc: Heather Gierloff, NYSDEC Division of Marine Resources
Katherine Pijanowski, USACE

Appendix C

Wetland Delineation Survey

Hampshire Country Club
Village of Mamaroneck, NY

Tidal wetland boundary delineated by VHB on July 31, 2018

NORTH

GRAPHIC SCALE IN FEET
0 150 300 600

Appendix D

Source: Google Earth, 2017

Hampshire Country Club - PRD | Village of Mamaroneck, NY

1 → Photograph Location

Photograph Location Map

Photograph No. 1: View of stone seawall (as indicated by the arrow) along the Delancey Cove shoreline (July 31, 2018).

Photograph No. 2: View of concrete retaining wall and tide gate structures along the Delancey Cove shoreline (July 31, 2018).

Photograph No. 3: View of concrete retaining wall along the Delancey Cove shoreline (July 31, 2018).

Photograph No. 4: View of rip-rap gabions along the Delancey Cove shoreline (July 31, 2018).

Photograph No. 5: View of rip-rap gabions landward of the shoreline area (July 31, 2018).

Photograph No. 6: View of timber bulkhead located landward of the shoreline area (July 31, 2018).

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September 4, 2018

Ref: 28677.03

VIA CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Mr. Ronald Pinzon
Chief, Eastern Permits Section
United States Army Corps of Engineers
New York District
Regulatory Branch
Jacob K. Javits Federal Building
26 Federal Plaza, Room 1937
New York, New York 10278-0090

Re: Request for Approved Jurisdictional Determination
Hampshire Country Club
1025 Cove Road
Village of Mamaroneck
Westchester County, New York

Dear Mr. Pinzon:

VHB Engineering, Surveying, Landscape Architecture and Geology, P.C. (VHB) is serving as environmental consultant to Hampshire Country Club LLC. (HCC), which is requesting an Approved Jurisdictional Determination (JD) for 106.2-acre property located at 1025 Cove Road in the Village of Mamaroneck, Westchester County, New York (hereinafter, the "Subject Property").

The Subject Property is currently developed with recreational membership club facilities, including an 18-hole golf course, clubhouse, swimming pool, tennis courts, maintenance facilities, and other support uses. Additionally, the Subject Property abuts the tidal waters of Delancey Cove (which is a tributary to Long Island Sound) and contains several ponds, drainage ditches and subgrade drainage pipes associated with the golf course drainage systems. These features were created or altered historically for drainage and irrigation and to serve as water hazards for the golf course, which has been operational since 1944. Two of the golf course drainage systems (Golf Course Drainage Systems 1 and 3) discharge to Delancey Cove

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via a series of culverts and tide gates. The third drainage system (Golf Course Drainage System 2) is self-contained and comprised of two isolated ponds (Ponds 5 and 6) that do not discharge to Delancey Cove. In addition, the Subject Property also contains an isolated emergent marsh (Wetland A). Based on the information and supporting documentation presented in the enclosed wetland delineation report, Wetland A and Ponds 5 and 6 appear to be isolated, artificially-created or altered features, with no apparent hydrological connection or other significant nexus to wetlands, streams, surface waters, drainage networks or other waters of the United States. Accordingly, on behalf of HCC, we are hereby requesting an Approved JD for the surface waters and wetlands at the Subject Property, including Wetland A, Pond 5 and Pond 6.

To assist in the processing of this request, the enclosed wetland delineation report for the Subject Property has been prepared in accordance with the United States Army Corps of Engineers (USACE) guidance document entitled "*Checklist of Information Included with Requests for Jurisdictional Determinations*." The wetland delineation report includes details regarding historical site usage, a government agency map review, and descriptions of the vegetation, soils and hydrology of the surface waters and wetlands that comprise the three golf course drainage systems. In addition, the report includes a justification for a proposed non-jurisdiction determination for Wetland A, Pond 5 and Pond 6.

For your records, contact information for the project sponsor/property owner are provided below:

Mr. Daniel Pfeffer, Managing Director
c/o Hampshire Country Club, LLC
1025 Cove Road
Mamaroneck, New York 10543
(914) 698-4610

Additionally, a letter from the property owner authorizing the USACE to inspect the Subject Property in association with this Approved JD request is included as Appendix F of the wetland delineation report.

Thank you for your cooperation in this matter. Please feel free to contact me at your earliest convenience at 631.787.3400 or at dkennedy@vhb.com to arrange for a field inspection of the subject property, or if you require any additional information to process this request.

Sincerely,

VHB Engineering, Surveying, Landscape Architecture and Geology, P.C.

David Kennedy
Project Scientist
\\vhb\proj\WhitePlains\28677.03\ProjRecords\FinalDocs\USACE JD Request\USACE Cover letter_20180904_FINAL.docx

Wetland Delineation Report

Hampshire Country Club

1025 Cove Road
Village of Mamaroneck,
Westchester County, New York

PREPARED FOR

Mr. Daniel Pfeffer, Managing Director
c/o Hampshire Country Club, LLC
1025 Cove Road
Mamaroneck, New York 10543

PREPARED BY

VHB Engineering, Surveying and Landscape Architecture and Geology, P.C.
100 Motor Parkway, Suite 135
Hauppauge, New York 11788

September 4, 2018

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List of Appendices

1.0
Introduction

This wetland delineation report has been prepared by VHB Engineering, Surveying Landscape Architecture and Geology, P.C. (VHB), for the 106.2-acre property located at 1025 Cove Road in the Village of Mamaroneck, Westchester County, New York (hereinafter, the "Subject Property," see Appendix A, Figures 1 and 2). The Subject Property is currently developed with recreational membership club facilities, including an 18-hole golf course, clubhouse, swimming pool, tennis courts, maintenance facilities, and other support uses. The Village/Town of Mamaroneck municipal boundary line passes through the Subject Property, creating a 98.9-acre portion in the Village of Mamaroneck and a smaller 7.3-acre portion within Town of Mamaroneck. The Subject Property is owned by Hampshire Country Club, LLC (HCC).

The Subject Property, which has a topographic elevation ranging from 0 to 23±-feet above mean sea level (see Appendix A, Figure 3), abuts the tidal waters of Delancey Cove (which is a tributary to Long Island Sound) to the south and contains several ponds, drainage ditches and subgrade drainage pipes associated with three golf course drainage systems (Golf Course Drainage Systems 1, 2 and 3), as well as an emergent marsh (Wetland A) (see Appendix A Figure 4). These features were created or altered historically for drainage and irrigation and to serve as water hazards for the golf course, which has been operational since 1944. Two of the golf course drainage systems (Golf Course Drainage Systems 1 and 3) discharge to Delancey Cove via a series of culverts and tide gates, while the third drainage system (Golf Course Drainage System 2) is self-contained. A summary of the three golf course drainage systems and Wetland A is provided on Table 1.

Table 1 – Wetland System Summary

Feature	Components	Discharge Point	Area (acres)
Golf Course Drainage System 1	Ponds 13 & 16, drainage ditches and sub-grade pipes	Delancey Cove	1.07
Golf Course Drainage System 2	Ponds 5 & 6, sub-grade drainage pipes	None	0.81
Golf Course Drainage System 3	Ponds 10, 11 & 18, drainage ditches and sub-grade pipes	Delancey Cove	2.28
Wetland A	Emergent Wetland	None	0.39

A wetland delineation of the Subject Property was originally performed by Nelson, Pope and Voorhis, LLC (NP&V) in 2010 and updated in 2012. The wetland boundaries were verified by VHB on July 24 and 31, 2018 (see surface water and wetlands survey in Appendix B), and updated upland and wetland data plot information was collected. To summarize these activities, this report has been prepared pursuant to the United States Army Corps of Engineers (USACE) guidance document entitled *Checklist of Information Included with Requests for Jurisdictional Determinations*.[1] The report includes a government agency map review, descriptions of the vegetation, soils and hydrology data collected in the field, and appended supporting information. Also included in this report is a justification for a proposed waters of the United States non-jurisdictional determination for Golf Course Drainage System 2 and Wetland A.

▼

[1] United States Army corps of Engineers. 2014. *Checklist of Information Included with Requests for Jurisdictional Determinations. Available online at:* http://www.nan.usace.army.mil/Portals/37/docs/regulatory/Formdoc/JD%20Checklist.pdf Accessed August 7, 2018.

2.0

Map Review and Field Data

Map Review

According to the United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) maps, there are four wetlands at the Subject Property, as shown on Figure 5 (see Appendix A) and summarized on Table 2.

Table 2 – NWI Summary

Site Feature	Cowardin Class Code	Description
Pond 10	PUBHh	Palustrine, Unconsolidated Bottom, Permanently Flooded, Diked/Impounded
Pond 13	PUBHx	Palustrine, Unconsolidated Bottom, Permanently Flooded, Excavated
Wetland A	PEM1C	Palustrine, Emergent, Persistent, Seasonally Flooded
Ditch/Culvert	R4SBC	Riverine, Intermittent, Streambed, Seasonally Flooded

As shown on Figure 6 (see Appendix A), there are no New York State Department of Environmental Conservation (NYSDEC) freshwater wetlands located at or adjacent to the subject Property. Delancey Cove, located adjacent to the south of the Subject Property, is regulated as a tidal wetland by the NYSDEC.

Review of the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey map data (see Appendix A, Figure7) indicates that five distinct soil units at the Subject Property. Two of the soil units are classified as hydric soils on the NRCS Hydric Soils List, as summarized on Table 3. A copy of the NRCS Soil Report is included as Appendix C.

Table 3 – NRCS Soil Summary

Map Unit Symbol	Map Unit Name	Acres/Percent	Hydric Rating
CrC	Charlton-Chatfield complex, rolling, very rocky	7.7/7.2	No
CtC	Chatfield-Hollis-Rock outcrop, complex, rolling	24.1/22.5	No
Uc	Udorthents, wet substratum	62.658.4	Yes
Uf	Urban Land	0.0/0.0	No
UIC	Urban land-Charlton-Chatfield complex, rolling, very rocky	11.9/11.1	Yes
W	Water	0.9/0.8	-

Field Observations and Data

As observed in the field, the vegetated upland areas of the Subject Property are comprised primarily of maintained/landscaped fairways, roughs and greens of the golf course. These habitats are representative of the Mowed Lawn and Mowed Lawn with Trees communities as described in the New York Natural Heritage Program (NYNHP) publication "*Ecological Communities of New York State*"[2] (ECNYS). The golf course ponds, emergent wetlands and drainage ditches are representative of the ECNYS Farm Pond/Artificial Pond, Common Reed Marsh and Ditch/Artificial Intermittent Stream communities.

Vegetation, soils and hydrology data were collected for wetland and upland data plots at Golf Course Drainage Systems 1, 2 and 3 and Wetland A, in accordance with the procedures set forth in the 1987 USACE Wetland Delineation Manual[3] and the 2012 USACE Regional Supplement for the Northcentral and Northeast Region.[4] The locations of the data plots are shown on Figure 4 (see Appendix A). USACE Northcentral and Northeast Region wetland delineation data forms were completed for each data plot (see Appendix D) and representative site photographs were taken (see Appendix E). A summary of observed conditions at Golf Course Drainage Systems 1, 2 and 3 and Wetland A is provided below.

▼

[2]Edinger, G.J., D.J. Evans, S. Gebauer, T.G. Howard, D.M. Hunt, and A.M. Olivero (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.

[3] Environmental Laboratory. 1987. "Corps of Engineers Wetlands Delineation Manual," Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.

[4] United States Army Corps of Engineers Engineer Research and Development Center. 2012. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0).

Golf Course Drainage System 1

Golf Course Drainage System 1 is comprised of Ponds 13 and 16, with associated drainage ditches and sub-surface drainage pipes. Two overflow outlets with gate valves located at the south side of Pond 13 are connected to culverts that travel offsite beneath Hommocks Road and the athletic fields situated to the west of the road to a subsurface vault that in turn discharges to Delancey Cove. Based on site observations, Pond 13 appears to be tidally influenced.

The wetland boundaries of the ponds and surficial drainage ditches of the drainage system are well-defined by topographic gradients that occur along the adjacent turf and rock-lined banks. The ponds and drainage ditches are generally sparsely vegetated, with wetland vegetation limited to scattered shoreline areas where broadleaf cattail (*Typha latifolia*) occurs. Wetland soils consist of loamy and sandy clays characterized by hydric soil indicator F3 (Depleted Matrix). Primary and secondary hydrology indicators along the wetland boundary include A2 (High Water Table), A3 (Saturation) and D2 (Geomorphic Position).

Golf Course Drainage System 2

Golf Course Drainage System 2 is comprised of Pond 5 (0.18 acre) and Pond 6 (0.63), with sub-surface drainage pipes. The two ponds are isolated from the other golf course drainage systems, have no outlets, and do not discharge to Delancey Cove. According to the golf course manager, Pond 5 receives stormwater runoff from the immediate surrounding area, and Pond 6 was constructed in the 1990s for irrigation of the golf course. Water sources for Pond 6 include an irrigation well located adjacent to the pond and stormwater from the neighboring residential development.

The wetland boundaries of the two ponds are well-defined by topographic gradients along the adjacent golf course fairways and greens. Observed wetland vegetation includes duckweed (*Lemna* sp.) on the pond surfaces, as well as narrow-leaved cattail (*Typha angustifolia*), (*Cyperus flavescens*), (*Persicaria amphibia*) and sensitive fern (*Onoclea sensibilis*) along the pond margins. Wetland soils consist of loamy and sandy clays with gravel components that are characterized by hydric soil indicator F3 (Depleted Matrix). Primary and secondary hydrology indicators along the wetland boundary include A2 (High Water Table), A3 (Saturation), B3 (Aquatic Fauna) and D2 (Geomorphic Position).

Golf Course Drainage System 3

Golf Course Drainage System 3 is comprised of Ponds 10, 11 and 18, and associated drainage ditches and sub-surface drainage pipes. Three tide gates at the south side of Pond 10 connect to subgrade culverts that discharge to Delancey Cove, located a short distance to the south. Based on site observations, Pond 10 appears to be tidally influenced.

The wetland boundaries of the ponds and surficial drainage ditches of the drainage system are well-defined by topographic gradients that occur along the adjacent turf and rock-lined banks. The ponds and drainage ditches are generally sparsely vegetated, with the exception of the eastern portion of Pond 10, which is

characterized by an emergent marsh with a dense growth of common reed (*Phragmites australis*). Wetland soils consist of loamy and sandy clays characterized by hydric soil indicator F3 (Depleted Matrix), as well as hydric soil indicator A2 (Histic Epipedon. Primary and secondary hydrology indicators along the wetland boundary include A2 (High Water Table), A3 (Saturation), C9 (Saturation Visible on Aerial Imagery, D1 (Stunted or Stressed Plants) and D2 (Geomorphic Position).

Wetland A

Wetland A (0.39 acre) is an isolated depressional feature that occurs along the northwestern boundary of the Subject Property and extends onto the neighboring residential properties. The wetland has no outlets and is situated within a shallow topographic low that receives surficial runoff from the immediate surrounding area, including the offsite residential properties that adjoin the wetland. Based on review of historical aerial imagery (Nationwide Environmental Title Research, available online at https://www.historicaerials.com/), it appears that Wetland A was constructed *circa* 1974.

The wetland is dominated by a dense growth of common reed (*Phragmites australis*). Other wetland indicator species include spotted jewelweed (*Impatiens capensis*), false water pepper (*Polygonum hydropiperoides*) and willows (*Salix* spp.) Subsurface conditions are characterized by organic (hemic) soils over a confining clay layer, as characterized by wetland soil indicator A2 (Histic Epipedon). Primary hydrology indicators along the wetland boundary include A2 (High Water Table) and A3 (Saturation).

3.0

Proposed Non-Jurisdictional Determination Justification

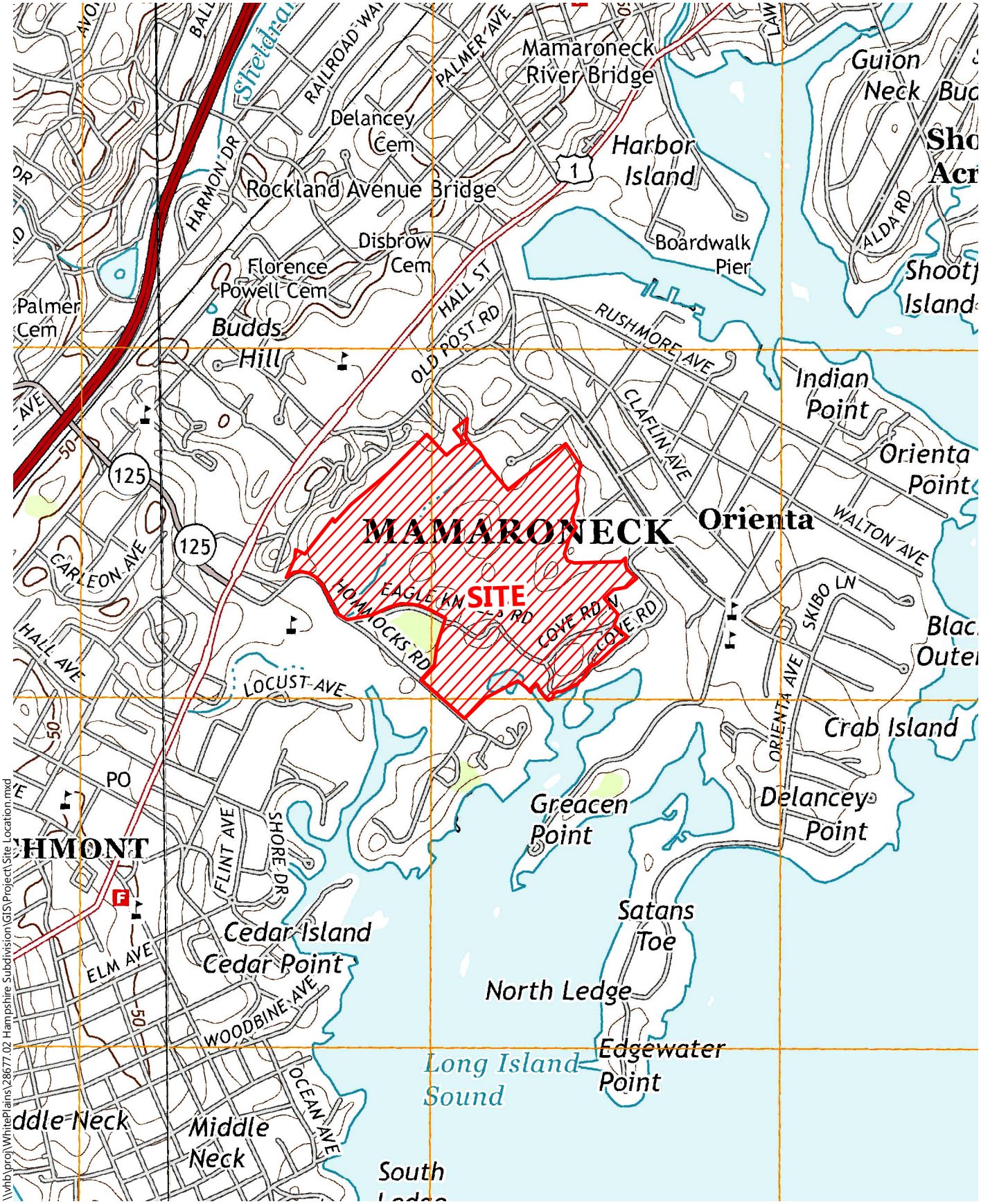
In Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers (the "SWANCC Decision," 2001), and Rapanos v. the United States (the "Rapanos Decision," 2006), the United States Supreme Court ruled that the USACE's jurisdiction over "waters of the United States" under Section 404 of the Clean Water Act (CWA) does not extend to isolated wetlands. Further, the Supreme Court ruled that waters or wetlands that do not have a "significant nexus" to a traditional navigable waterway (TNW) are isolated waters that should not be considered waters of the United States for the purposes of the CWA. Pursuant to the Rapanos Decision, a significant nexus exists when a wetland or waterbody, either by itself or in combination with other similar sites, significantly affects the physical, biological, and chemical integrity of a downstream navigable waterway. Significant nexus is further defined as "*having a significant effect on the chemical, physical or biological integrity of an interstate water, its tributaries or adjacent wetlands*."[5]

Based on the information presented in Sections 1.0 and 2.0 of this report, Golf Course Drainage Systems 1 and 3 both discharge to, and therefore are hydrologically connected with, Delancey Cove, which is a TNW. As such, it appears that Golf Course Drainage Systems 1 and 3 may be regulated "waters of the United States" under Section 404 of the Clean Water Act (CWA).

[5] United States Environmental Protection Agency and United States Army Corps of Engineers. 2008. Clean Water Act Jurisdiction Following U.S. Supreme Court's Decision in Rapanos v. United States & Carabell v. United States.

In contrast, Wetland A and the two ponds that comprise Golf Course Drainage System 2 (Ponds 5 and 6) are depressional features that were constructed or altered historically for drainage and irrigation purposes, and to serve as golf course water hazards. Wetland A and Ponds 5 and 6 do not have outlets and do not discharge to Delancey Cove. Moreover, no surficial connections or other significant nexus between these three features and Golf Course Drainage Systems 1 and 3 were observed in the field. Accordingly, based on the legal precedents of the SWANCC and Rapanos Decisions regarding isolated wetlands, it appears that Pond 5, Pond 6 and Wetland A are isolated and therefore not subject to USACE jurisdiction as waters of the United States under Section 404 of the CWA.

Appendix A



\\vhb\proj\WhitePlains\28677.02 Hampshire Subdivision\GIS\Project\Site Location.mxd

0 420 840 1680 Feet

Hampshire Country Club - PRD | Village of Mamaroneck, NY

Regional Location Map

Source: USGS Mamaroneck, NY

Source: ESRI GIS

0 170 340 680 Feet

Hampshire Country Club - PRD | Village of Mamaroneck, NY

Site Aerial Photograph

0 175 350 700 Feet

Hampshire Country Club - PRD | Village of Mamaroneck, NY

USGS Topographic Map

Source: U.S. Geological Survey

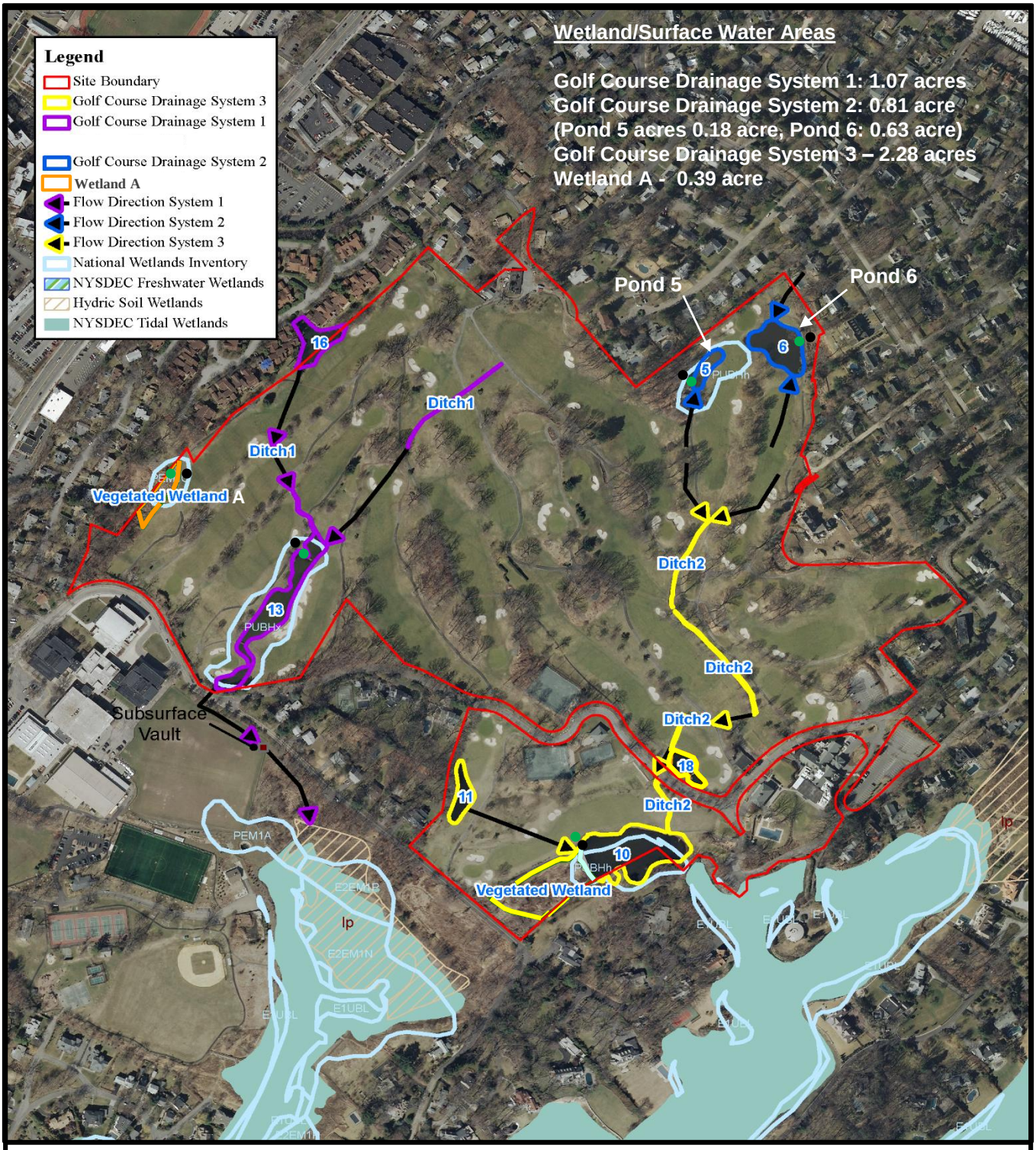


FIGURE 4 – DRAINAGE SYSTEM AND WETLAND MAP*

Hampshire Country Club, 1025 Cove Road, Village of Mamaroneck, Westchester County, New York

● Wetland Data Plot

● Upland Data Plot

N

*Based on wetland delineation conducted by Nelson, Pope and Voorhis, LLC in 2012 and verified by VHB on July 24 and 31, 2018.

\\NYWPDATA\projects\28677.02 Hampshire Subdivision\GIS\Project\Wetlands Chapter Maps\NWI.mxd

0 175 350 700 Feet

Hampshire Country Club - PRD | Village of Mamaroneck, NY

National Wetlands Inventory Map

Source: U.S. Fish and Wildlife Service

\\NYWPDATA\projects\28677.02 Hampshire Subdivision\GIS\Project\Wetlands Chapter Maps\Wetlands - Freshwater and Tidal.mxd

0 175 350 700 Feet

NYSDEC Freshwater Wetlands

NYSDEC Tidal Wetlands

Hampshire Country Club - PRD | Village of Mamaroneck, NY

NYSDEC Wetland Map

Source: U.S. Fish and Wildlife Service

Map Scale: 1:7,270 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 100 200 400 600

Feet: 0 350 700 1400 2100

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

Hampshire Country Club - PRD | Town of Harrison, New York

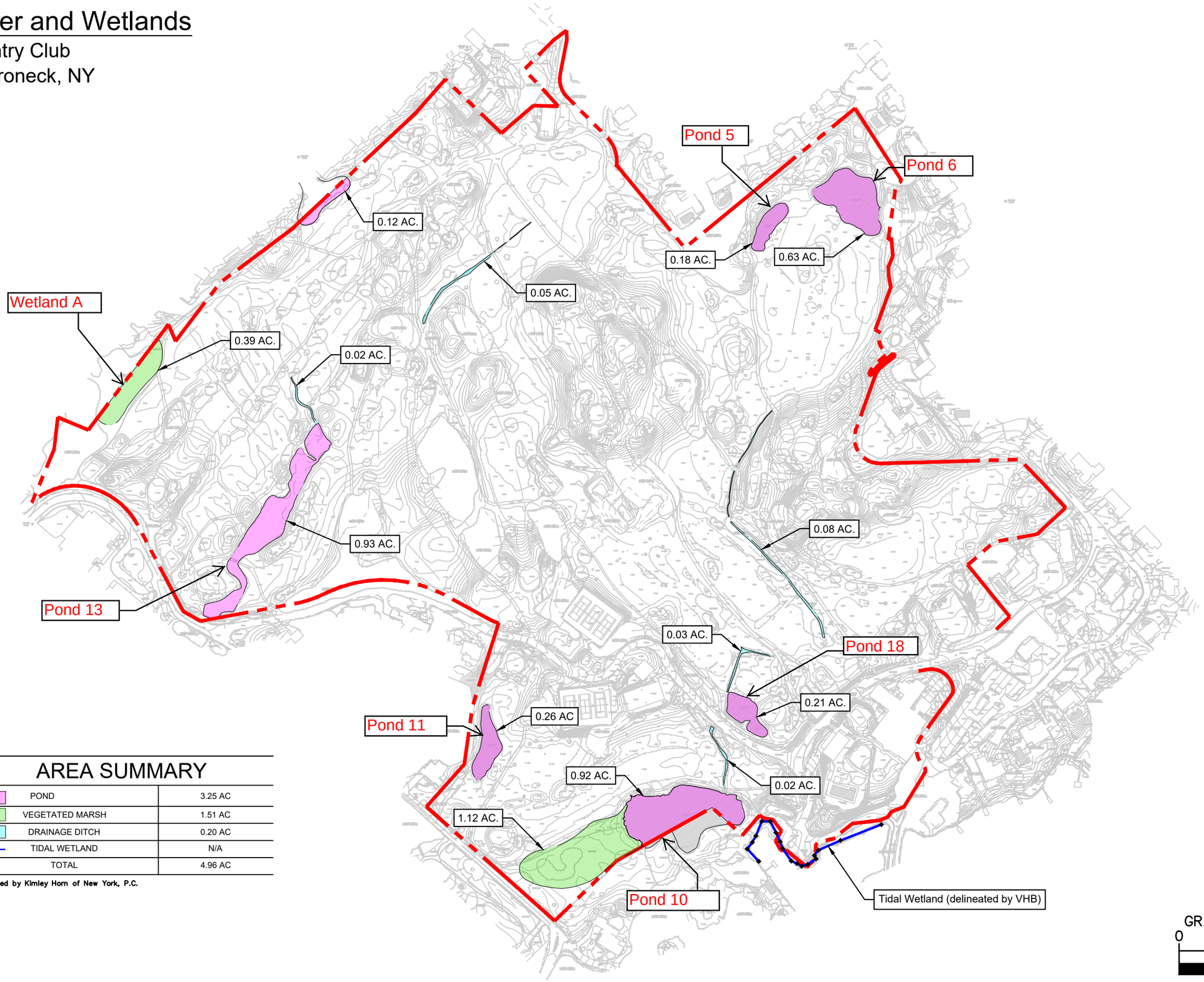
USDA NRCS Soils Map

Source: USDA Natural Resources Conservation Services

Appendix B

Surface Water and Wetlands

Hampshire Country Club
Village of Mamaroneck, NY



AREA SUMMARY

POND	3.25 AC
VEGETATED MARSH	1.51 AC
DRAINAGE DITCH	0.20 AC
TIDAL WETLAND	N/A
TOTAL	4.96 AC

*Prepared by Kimley Horn of New York, P.C.

NORTH

GRAPHIC SCALE IN FEET
0 150 300 600

Appendix C

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Westchester County, New York

Hampshire Country Club

February 25, 2016

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (http://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the

individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

Map Scale: 1:7,270 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 100 200 400 600

Feet: 0 350 700 1400 2100

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 Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

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 1:12,000.

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

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
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: Westchester County, New York
Survey Area Data: Version 11, Sep 25, 2015

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

Date(s) aerial images were photographed: Jul 21, 2014—Aug 27, 2014

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.

Map Unit Legend

Westchester County, New York (NY119)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
CrC	Charlton-Chatfield complex, rolling, very rocky	7.7	7.2%
CtC	Chatfield-Hollis-Rock outcrop complex, rolling	24.1	22.5%
Uc	Udorthents, wet substratum	62.6	58.4%
Uf	Urban land	0.0	0.0%
UlC	Urban land-Charlton-Chatfield complex, rolling, very rocky	11.9	11.1%
W	Water	0.9	0.8%
Totals for Area of Interest		**107.2**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Westchester County, New York

CrC—Charlton-Chatfield complex, rolling, very rocky

Map Unit Setting

National map unit symbol: bd8f
Elevation: 100 to 1,000 feet
Mean annual precipitation: 46 to 50 inches
Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 115 to 215 days
Farmland classification: Not prime farmland

Map Unit Composition

Charlton and similar soils: 50 percent
Chatfield and similar soils: 30 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Charlton

Setting

Landform: Ridges, hills, till plains
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Acid loamy till derived mainly from schist, gneiss, or granite

Typical profile

H1 - 0 to 8 inches: loam
H2 - 8 to 24 inches: sandy loam
H3 - 24 to 60 inches: sandy loam

Properties and qualities

Slope: 2 to 15 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Moderate (about 7.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: B

Description of Chatfield

Setting

Landform: Ridges, hills
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Crest
Down-slope shape: Convex

Across-slope shape: Convex
Parent material: Loamy till derived mainly from granite, gneiss, or schist

Typical profile
H1 - 0 to 7 inches: loam
H2 - 7 to 24 inches: flaggy silt loam
H3 - 24 to 28 inches: unweathered bedrock

Properties and qualities
Slope: 2 to 15 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to high (0.01 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 1 percent
Available water storage in profile: Low (about 3.2 inches)

Interpretive groups
Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: B

Minor Components

Hollis
Percent of map unit: 5 percent

Rock outcrop
Percent of map unit: 5 percent

Sutton
Percent of map unit: 4 percent

Sun
Percent of map unit: 2 percent
Landform: Depressions

Leicester
Percent of map unit: 2 percent

Palms
Percent of map unit: 1 percent
Landform: Marshes, swamps

Carlisle
Percent of map unit: 1 percent
Landform: Marshes, swamps

CtC—Chatfield-Hollis-Rock outcrop complex, rolling

Map Unit Setting

National map unit symbol: bd8h
Elevation: 100 to 1,000 feet
Mean annual precipitation: 46 to 50 inches
Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 115 to 215 days
Farmland classification: Not prime farmland

Map Unit Composition

Hollis and similar soils: 30 percent
Chatfield and similar soils: 30 percent
Rock outcrop: 20 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Chatfield

Setting

Landform: Ridges, hills
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy till derived mainly from granite, gneiss, or schist

Typical profile

H1 - 0 to 7 inches: loam
H2 - 7 to 24 inches: flaggy silt loam
H3 - 24 to 28 inches: unweathered bedrock

Properties and qualities

Slope: 3 to 15 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to high (0.01 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 1 percent
Available water storage in profile: Low (about 3.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: B

Description of Hollis

Setting

Landform: Ridges, hills
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: A thin mantle of loamy till derived mainly from schist, granite, and gneiss

Typical profile

H1 - 0 to 1 inches: fine sandy loam
H2 - 1 to 16 inches: fine sandy loam
H3 - 16 to 20 inches: unweathered bedrock

Properties and qualities

Slope: 3 to 15 percent
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Natural drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Very low (about 2.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: D

Description of Rock Outcrop

Properties and qualities

Slope: 3 to 15 percent
Depth to restrictive feature: 0 inches to lithic bedrock
Capacity of the most limiting layer to transmit water (Ksat): Low to very high (0.01 to 19.98 in/hr)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s

Minor Components

Charlton

Percent of map unit: 8 percent

Sutton

Percent of map unit: 5 percent

Leicester

Percent of map unit: 2 percent

Sun

Percent of map unit: 2 percent
Landform: Depressions

Unnamed soils, very shallow
Percent of map unit: 2 percent

Palms
Percent of map unit: 1 percent
Landform: Marshes, swamps

Uc—Udorthents, wet substratum

Map Unit Setting
National map unit symbol: bd7g
Elevation: 50 to 2,400 feet
Mean annual precipitation: 46 to 50 inches
Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 115 to 215 days
Farmland classification: Not prime farmland

Map Unit Composition
Udorthents, wet substratum, and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Udorthents, Wet Substratum

Typical profile
H1 - 0 to 4 inches: gravelly loam
H2 - 4 to 72 inches: very gravelly loam

Properties and qualities
Slope: 0 to 5 percent
Depth to restrictive feature: 40 to 60 inches to lithic bedrock
Natural drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.06 to 5.95 in/hr)
Depth to water table: About 6 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 15 percent
Available water storage in profile: Low (about 4.6 inches)

Minor Components

Udorthents
Percent of map unit: 5 percent

Urban land
Percent of map unit: 5 percent

Fredon
Percent of map unit: 2 percent
Landform: Depressions

Paxton
Percent of map unit: 2 percent

Ipswich
Percent of map unit: 2 percent
Landform: Tidal marshes

Raynham
Percent of map unit: 2 percent

Hinckley
Percent of map unit: 2 percent

Uf—Urban land

Map Unit Setting

National map unit symbol: bd7j
Elevation: 50 to 2,400 feet
Mean annual precipitation: 46 to 50 inches
Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 115 to 215 days
Farmland classification: Not prime farmland

Map Unit Composition

Urban land: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Minor Components

Udorthents
Percent of map unit: 5 percent

Riverhead
Percent of map unit: 2 percent

Udorthents, wet substratum
Percent of map unit: 2 percent

Unadilla
Percent of map unit: 2 percent

Chatfield
Percent of map unit: 2 percent

Sutton
Percent of map unit: 2 percent

UIC—Urban land-Charlton-Chatfield complex, rolling, very rocky

Map Unit Setting

National map unit symbol: bd7n
Elevation: 100 to 1,000 feet
Mean annual precipitation: 46 to 50 inches
Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 115 to 215 days
Farmland classification: Not prime farmland

Map Unit Composition

Urban land: 40 percent
Charlton and similar soils: 20 percent
Chatfield and similar soils: 15 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Charlton

Setting

Landform: Ridges, hills, till plains
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Acid loamy till derived mainly from schist, gneiss, or granite

Typical profile

H1 - 0 to 8 inches: loam
H2 - 8 to 24 inches: sandy loam
H3 - 24 to 60 inches: sandy loam

Properties and qualities

Slope: 2 to 15 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Moderate (about 7.5 inches)

Description of Chatfield

Setting

Landform: Ridges, hills
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Convex

Parent material: Loamy till derived mainly from granite, gneiss, or schist

Typical profile

H1 - 0 to 7 inches: loam
H2 - 7 to 24 inches: flaggy silt loam
H3 - 24 to 28 inches: unweathered bedrock

Properties and qualities

Slope: 2 to 15 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to high (0.01 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 1 percent
Available water storage in profile: Low (about 3.2 inches)

Minor Components

Leicester

Percent of map unit: 5 percent
Landform: Depressions

Sutton

Percent of map unit: 5 percent

Udorthents

Percent of map unit: 5 percent

Rock outcrop

Percent of map unit: 5 percent

Hollis

Percent of map unit: 2 percent

Sun

Percent of map unit: 2 percent
Landform: Depressions

Palms

Percent of map unit: 1 percent
Landform: Marshes, swamps

W—Water

Map Unit Setting

National map unit symbol: bd7z
Mean annual precipitation: 46 to 50 inches
Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 115 to 215 days

Farmland classification: Not prime farmland

Map Unit Composition

Water: 100 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

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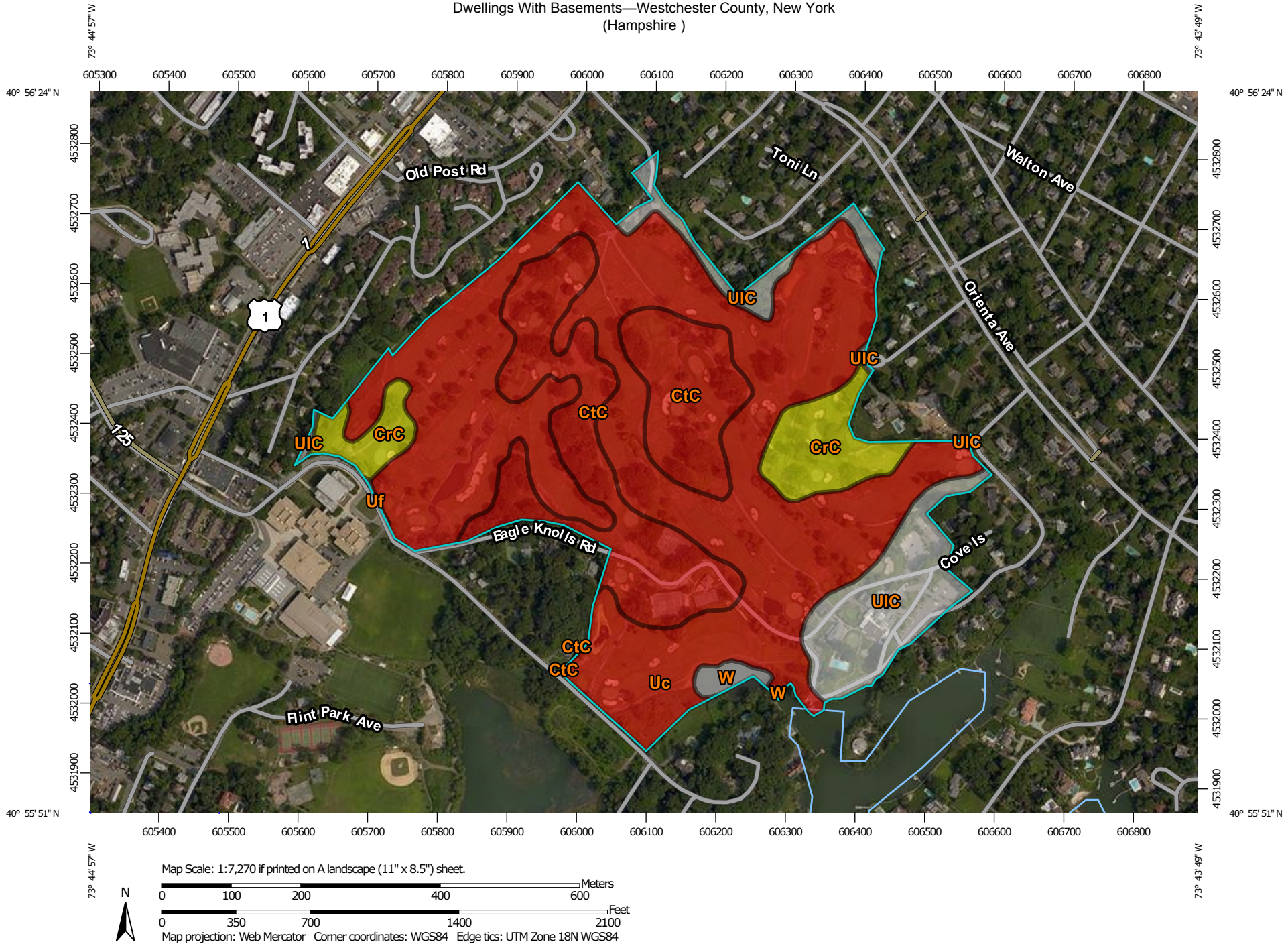
Dwellings With Basements—Westchester County, New York
(Hampshire)



Map Scale: 1:7,270 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 100 200 400 600

Feet
0 350 700 1400 2100

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
- Very limited
- Somewhat limited
- Not limited
- Not rated or not available

Soil Rating Lines
- Very limited
- Somewhat limited
- Not limited
- Not rated or not available

Soil Rating Points
- Very limited
- Somewhat limited
- Not limited
- 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 1:12,000.

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

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
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: Westchester County, New York
Survey Area Data: Version 11, Sep 25, 2015

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

Date(s) aerial images were photographed: Jul 21, 2014—Aug 27, 2014

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.

Dwellings With Basements

Dwellings With Basements— Summary by Map Unit — Westchester County, New York (NY119)						
Map unit symbol	**Map unit name**	**Rating**	**Component name (percent)**	**Rating reasons (numeric values)**	**Acres in AOI**	**Percent of AOI**
CrC	Charlton-Chatfield complex, rolling, very rocky	Somewhat limited	Charlton (50%)	Slope (0.04)	7.7	7.2%
CtC	Chatfield-Hollis-Rock outcrop complex, rolling	Very limited	Chatfield (30%)	Depth to hard bedrock (1.00)	24.1	22.5%
				Slope (0.04)		
			Hollis (30%)	Depth to hard bedrock (1.00)		
				Slope (0.04)		
Uc	Udorthents, wet substratum	Very limited	Udorthents, wet substratum (80%)	Depth to saturated zone (1.00)	62.6	58.4%
				Depth to hard bedrock (0.42)		
Uf	Urban land	Not rated	Urban land (85%)		0.0	0.0%
			Unadilla (2%)			
			Chatfield (2%)			
			Sutton (2%)			
			Riverhead (2%)			
UlC	Urban land-Charlton-Chatfield complex, rolling, very rocky	Not rated	Urban land (40%)		11.9	11.1%
			Leicester (5%)			
			Sutton (5%)			
			Udorthents (5%)			
			Rock outcrop (5%)			
			Hollis (2%)			
			Sun (2%)			
			Palms (1%)			
W	Water	Not rated	Water (100%)		0.9	0.8%
Totals for Area of Interest					**107.2**	**100.0%**

Dwellings With Basements— Summary by Rating Value		
Rating	**Acres in AOI**	**Percent of AOI**
Very limited	86.7	80.9%
Somewhat limited	7.7	7.2%

Dwellings With Basements— Summary by Rating Value		
Rating	**Acres in AOI**	**Percent of AOI**
Null or Not Rated	12.8	12.0%
Totals for Area of Interest	**107.2**	**100.0%**

Description

Dwellings are single-family houses of three stories or less. For dwellings with basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of about 7 feet.

The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification of the soil. The properties that affect the ease and amount of excavation include depth to a water table, ponding, flooding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The map unit components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as listed for the map unit. The percent composition of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.

Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Appendix D

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Hampshire Country Club City/County: Mamaroneck/Westchester Sampling Date: 7/24/18

Applicant/Owner: Hampshire Recreation, LLC State: NY Sampling Point: Wetland A-W1

Investigator(s): David Kennedy Section, Township, Range: Village of Mamaroneck

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave

Slope (%): <5 Lat: 40° 56' 12.30" N Long: 73° 44' 39.26" W Datum: WGS 84

Soil Map Unit Name: Udorthents, wet substratum (Uc) NWI classification: PEM1C

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

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

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes X	No _____	If yes, optional Wetland Site ID: Wetland A

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

Golf course irrigation pond constructed *circa* 1974. Hydrologic inputs to the artificial pond are from an adjacent groundwater well and stormwater discharge from the neighboring residential development.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- X High Water Table (A2)
- X 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)
- X 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 two required)

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

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes X	No _____	Depth (inches): 4
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches): 1

Wetland Hydrology Present? Yes X No _____

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

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: Wetland A-W1

Tree Stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Salix baylonica*	20	yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	20 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 feet)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 5 feet)			
1. *Phragmites australis*	90	yes	FACW
2. *Polygonum hydopiperoides*	10	no	OBL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: 30 feet)			
1.			
2.			
3.			
4.			
	= 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: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66 (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 =

Hydrophytic Vegetation Indicators:

___ 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. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

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

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

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

Hydrophytic Vegetation Present? Yes X No ___

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

SOIL

Sampling Point: Wetland A-W1

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 %	Type[1]	Loc[2]	Texture	Remarks
0-8	2.5YR 3/2	98	10YR 4/6	2	C	PL	hemic (mucky peat)	
8-19	5Y 2.5/1	100					hemic (mucky peat)	
19-24	5Y 3/1	100					clay	

[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)
- X 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 (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ 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: clay

Depth (inches): 19

Hydric Soil Present? Yes X No ___

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Hampshire Country Club City/County: Mamaroneck/Westchester Sampling Date: 7/24/18

Applicant/Owner: Hampshire Recreation, LLC State: NY Sampling Point: Wetland A

Investigator(s): David Kennedy Section, Township, Range: Village of Mamaroneck -U1

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): flat

Slope (%): 0 Lat: 40° 56' 12.53" N Long: 73° 44' 38.89" W Datum: WGS 84

Soil Map Unit Name: Udorthents, wet substratum(Uc) NWI classification: none

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

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

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes _____	No X	If yes, optional Wetland Site ID: _____

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 two required)

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

Field Observations:

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

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: Wetland A-U1

Tree Stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		

Sapling/Shrub Stratum (Plot size: 15 feet)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		

Herb Stratum (Plot size: 5 feet)			
1. *Poa pratensis*	45	yes	UPL
2. *Festuca rubra*	45	yes	FACU
3. *Trifolium repens*	10	no	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100 = Total Cover		

Woody Vine Stratum (Plot size: 30 feet)			
1.			
2.			
3.			
4.			
	= 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: 2 (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 =

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. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

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

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

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

Hydrophytic Vegetation Present? Yes ____ No X

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

SOIL

Sampling Point: Wetland A-U1

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 %	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 3/2	100					sandy loam	
3-16	10YR 2/2	95	10YR 4/6	5	C	PL	loamy clay	
							loamy clay	

[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)
- X 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 (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ 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: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Hampshire Country Club City/County: Mamaroneck/Westchester Sampling Date: 7/24/18

Applicant/Owner: Hampshire Recreation, LLC State: NY Sampling Point: Pond 5-W1

Investigator(s): David Kennedy Section, Township, Range: Village of Mamaroneck

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave

Slope (%): <5 Lat: 40° 56' 15.74" N Long: 73° 44' 14.50" W Datum: WGS 84

Soil Map Unit Name: Udorthents, wet substratum (Uc) NWI classification: none

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

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

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes X	No _____	If yes, optional Wetland Site ID: Pond 5

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)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- X 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 two required)

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

Field Observations:

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

Wetland Hydrology Present? Yes X No _____

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

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: Pond 5-W1

Tree Stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15 feet)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 5 feet)			
1. *Typha angustifolia*	40	yes	OBL
2. *Persicaria amphibea*	10	no	OBL
3. *Onoclea sensibilis*	10	no	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	60 = Total Cover		
Woody Vine Stratum (Plot size: 30 feet)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (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 =

Hydrophytic Vegetation Indicators:

___ 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. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

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

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

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

Hydrophytic Vegetation Present? Yes X No ___

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

SOIL

Sampling Point: Pond 5-W1

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 %	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 2/1	100					sandy clay	
8-16	10YR 4/2	95	10YR 6/6	3	C	PL	sandy clay	
			10YR 4/6	2	C	PK	sandy clay, trace gravel	

[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)
- X 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 (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ 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: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

Pond edge.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Hampshire Country Club City/County: Mamaroneck/Westchester Sampling Date: 7/24/18

Applicant/Owner: Hampshire Recreation, LLC State: NY Sampling Point: Pond 5-U1

Investigator(s): David Kennedy Section, Township, Range: Village of Mamaroneck

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): flat

Slope (%): ~2 Lat: 40° 56' 15.93" N Long: 73° 44' 14.49" W Datum: WGS 84

Soil Map Unit Name: Udorthents, wet substratum (Uc) NWI classification: none

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

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

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present?	Yes _____	No X	

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 two required)

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

Field Observations:

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

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: Pond 5-U1

Tree Stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum*	30	yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	30 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 feet)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 5 feet)			
1. *Poa pratensis*	15	yes	UPL
2. *Dactylis glomerata*	10	yes	UPL
3. *Artemesia vugaris*	10	yes	UPL
4. *Digitaria sanguinalis*	10	yes	FACU
5. *Bidens frondosa*	5	no	FACW
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	50 = Total Cover		
Woody Vine Stratum (Plot size: 30 feet)			
1. *Parthenocissus quinquefolia*	5	yes	FACU
2.			
3.			
4.			
	5 = Total Cover		

Dominance Test worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 17 (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 =

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. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

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

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

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

Hydrophytic Vegetation Present? Yes ____ No X

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

SOIL

Sampling Point: Pond 5-U1

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 %	Type[1]	Loc[2]	Texture	Remarks
06	10YR 3/3	100					sandy clay	
6-16	10YR 4/6	100					silty clay with gravel	

[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 (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ 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: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** X

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Hampshire Country Club City/County: Mamaroneck/Westchester Sampling Date: 7/24/18

Applicant/Owner: Hampshire Recreation, LLC State: NY Sampling Point: Pond 6-W1

Investigator(s): David Kennedy Section, Township, Range: Village of Mamaroneck

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave

Slope (%): <5 Lat: 40° 56' 17.69" N Long: 73° 44' 11.13" W Datum: WGS 84

Soil Map Unit Name: Udorthents, wet substratum (Uc) NWI classification: none

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

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

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes X	No _____	If yes, optional Wetland Site ID: Pond 6

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

Golf course irrigation pond constructed *circa* 1974. Hydrologic inputs to the artificial pond are from an adjacent groundwater well and stormwater discharge from the neighboring residential development.

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- X Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- X 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 two required)

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

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes X	No _____	Depth (inches): 2
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches): 1

Wetland Hydrology Present? Yes X No _____

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

Remarks:

Hydrologic inputs to the artificial pond are from an adjacent groundwater well and stormwater discharge from the neighboring residential development.

VEGETATION – Use scientific names of plants.

Sampling Point: Pond 6-W1

Tree Stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15 feet)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 5 feet)			
1. *Cyperus flavescens*	20	yes	OBL
2. *Typha angustifolia*	15	yes	OBL
3. *Polygonum amphibia*	10	yes	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	45 = Total Cover		
Woody Vine Stratum (Plot size: 30 feet)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (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 =

Hydrophytic Vegetation Indicators:

___ 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.

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

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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.)

SOIL

Sampling Point: Pond 6-W1

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
0-7	10YR 3/1	98	10YR 4/6	2	C	Ml	loamy clay	trace gravel
7-18	10YR 5/1	90	10YR 4/6	4	C	PL	sandy clay	
			Gley1 4/N	4	D	M	sandy clay	
			10YR 5/8	2	C	PL	sandy clay	

[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)
- X 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 (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ 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: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

Pond edge.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Hampshire Country Club City/County: Mamaroneck/Westchester Sampling Date: 7/24/18

Applicant/Owner: Hampshire Recreation, LLC State: NY Sampling Point: Pond 6-U1

Investigator(s): David Kennedy Section, Township, Range: Village of Mamaroneck

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): flat

Slope (%): 0 Lat: 40° 56' 17.81" N Long: 73° 44' 11.03" W Datum: WGS 84

Soil Map Unit Name: Udorthents, wet substratum(Uc) NWI classification: none

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

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

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present?	Yes _____	No X	

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 two required)

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

Field Observations:

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

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: Pond 6-U1

Tree Stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15 feet)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 5 feet)			
1. *Poa pratensis*	80	yes	UPL
2. *Festuca rubra*	18	no	FACU
3. *Plantago major*	2	no	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: 30 feet)			
1.			
2.			
3.			
4.			
	= 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 = _____

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. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

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

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

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

Hydrophytic Vegetation Present? Yes _____ No X

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

SOIL

Sampling Point: Pond 6-U1

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 %	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR 3/3	100					silty clay	
7-16	10YR 4/4	100					silty clay with gravel	

[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 (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ 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: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Gravel refusal at 16 inches.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Hampshire Country Club City/County: Mamaroneck/Westchester Sampling Date: 7/24/18

Applicant/Owner: Hampshire Recreation, LLC State: NY Sampling Point: GCDS 1-W1

Investigator(s): David Kennedy Section, Township, Range: Village of Mamaroneck

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave

Slope (%): <5 Lat: 40° 56' 09.09" N Long: 73° 44' 33.15" W Datum: WGS 84

Soil Map Unit Name: Udorthents, wet substratum (Uc) NWI classification: PUBHx

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

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

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes X	No _____	If yes, optional Wetland Site ID: Pond 13

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

Golf Course Drainage System 1 (data plot adjacent to Pond 13)

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- X High Water Table (A2)
- X 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 two required)

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

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes X	No _____	Depth (inches): 3
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches): 1

Wetland Hydrology Present? Yes X No _____

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

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: GCDS 1-W1

Tree Stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15 feet)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 5 feet)			
1. *Typha latifolia*	65	yes	OBL
2. *Rumex crispus*	20	yes	FAC
3. *Plantago major*	50	no	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	135 = Total Cover		
Woody Vine Stratum (Plot size: 30 feet)			
1.			
2.			
3.			
4.			
	= 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: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 67 (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 = _____

Hydrophytic Vegetation Indicators:

___ 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. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

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

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

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

Hydrophytic Vegetation Present? Yes X No _____

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

SOIL

Sampling Point: GCDS 1-W1

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
0-6	10YR 3/1	95	10YR 4/6	5	C	PL	loamy clay	
6-18	10YR 4/1	90	10YR 4/6	5	C	PL	sandy clay	
			10YR 6/6	5	C	PK	sandy clay	

[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)
- X 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 (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ 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: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

Pond edge.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Hampshire Country Club City/County: Mamaroneck/Westchester Sampling Date: 7/24/18

Applicant/Owner: Hampshire Recreation, LLC State: NY Sampling Point: GCDS 1-U1

Investigator(s): David Kennedy Section, Township, Range: Village of Mamaroneck

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave

Slope (%): <5 Lat: 40° 56' 09.07" N Long: 73° 44' 33.19" W Datum: WGS 84

Soil Map Unit Name: Udorthents, wet substratum (Uc) NWI classification: none

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

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

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	If yes, optional Wetland Site ID: _____

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

Golf Course Drainage System 1 (data plot adjacent to Pond 13)

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 two required)

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

Field Observations:

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

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: GCDS 1-U1

Tree Stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15 feet)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 5 feet)			
1. *Artemesia vulgaris*	20	yes	UPL
2. *Trifolium repens*	20	yes	FACU
3. *Plantago lanceolata*	20	yes	FACU
4. *Digitaria sanguinalis*	10	no	FACU
5. *Rumex crispus*	10	no	FAC
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	80 = Total Cover		
Woody Vine Stratum (Plot size: 30 feet)			
1.			
2.			
3.			
4.			
	= 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 = _____

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. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

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

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

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

Hydrophytic Vegetation Present? Yes _____ No X

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

SOIL

Sampling Point: GCDS 1-U1

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 %	Type[1]	Loc[2]	Texture	Remarks
0-9	10YR 4/3	100					sandy loam	
9-18	10YR 3/3	100					sandy 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 (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ 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: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** X

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Hampshire Country Club City/County: Mamaroneck/Westchester Sampling Date: 7/24/18

Applicant/Owner: Hampshire Recreation, LLC State: NY Sampling Point: GCDS 3-W1

Investigator(s): David Kennedy Section, Township, Range: Village of Mamaroneck

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none

Slope (%): 0 Lat: 40° 55' 57.40" N Long: 73° 44' 20.42" W Datum: WGS 84

Soil Map Unit Name: Udorthents, wet substratum (Uc) NWI classification: PUBHh

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

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

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes X	No _____	If yes, optional Wetland Site ID: Pond 10

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

Golf Course Drainage System 3 (Sample plot adjacent to Pond 10).

HYDROLOGY

Wetland Hydrology Indicators:

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

- ___ Surface Water (A1)
- X High Water Table (A2)
- X 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 two required)

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

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes X	No _____	Depth (inches): 2
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches): 1

Wetland Hydrology Present? Yes X No _____

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

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: GCDS 3-W1

Tree Stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	20 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 feet)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 5 feet)			
1. *Phragmites australis*	40	yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	40 = Total Cover		
Woody Vine Stratum (Plot size: 30 feet)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (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 = _____

Hydrophytic Vegetation Indicators:

___ 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. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

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

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

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

Hydrophytic Vegetation Present? Yes X No _____

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

SOIL

Sampling Point: GCDS 3-W1

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 %	Type[1]	Loc[2]	Texture	Remarks
0-9	105YR 2/1	1008					hemic (mucky peat)	
9-18	10YR 3/2	100					clay (trace gravel)	

[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)
- X 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 (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ 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: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Hampshire Country Club City/County: Mamaroneck/Westchester Sampling Date: 7/24/18

Applicant/Owner: Hampshire Recreation, LLC State: NY Sampling Point: GCDS 3-U1

Investigator(s): David Kennedy Section, Township, Range: Village of Mamaroneck

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none

Slope (%): <5 Lat: 40° 55' 57.47" N Long: 73° 44' 20.64" W Datum: WGS 84

Soil Map Unit Name: Udorthents, wet substratum (Uc) NWI classification: none

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

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

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	If yes, optional Wetland Site ID: _____

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

Golf Course Drainage System 3 (data plot adjacent to Pond 10)

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 two required)

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

Field Observations:

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

Wetland Hydrology Present? Yes _____ No X

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

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: GCDS 3-U1

Tree Stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		

Sapling/Shrub Stratum (Plot size: 15 feet)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		

Herb Stratum (Plot size: 5 feet)			
1. *Festuca rubra*	80	yes	FACUL
2. *Trifolium repens*	10	no	FACU
3. *Plantago major*	10	no	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100 = Total Cover		

Woody Vine Stratum (Plot size: 30 feet)			
1.			
2.			
3.			
4.			
	= 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: 1 (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 = _____

Hydrophytic Vegetation Indicators:

___ Rapid Test for Hydrophytic Vegetation

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

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

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

Hydrophytic Vegetation Present? Yes _____ No X

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

SOIL

Sampling Point: GCDS 3-U1

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 %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 4/3	100					sandy loam	
6-18	10YR 3/3	100					sandy loam, trace gravel	

[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)
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- ___ Black Histic (A3)
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- ___ 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 (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ 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: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** X

Remarks:

Appendix E

Photograph No. 1: View of Pond 5 (Golf Course Drainage System 2), facing north (July 24, 2018).

Photograph No. 2: View of Pond 6 (Golf Course Drainage System 2), facing east (July 24, 2018).

Photograph No. 3: View of wetland soil boring at the Pond 6 data plot (July 24, 2018).

Photograph No. 4: View of Wetland A, facing southwest.

Photograph No. 5: View of wetland and upland data plot locations for Pond 13 (Golf Course Drainage System 1), facing southeast (July 24, 2018).

Photograph No. 6: View of wetland data plot location for Pond 10 (Golf Course Drainage System 3), facing east (July 24, 2018).

Photograph No. 6: View of tide gate openings at the eastern terminus of Pond 10 (Golf Course Drainage System 3), facing southeast (July 24, 2018).

Photograph No. 7: View of tide gate openings along the northern shoreline of Delancey Cove, facing north (July 24, 2018). The tide gates regulate flow through culverts connecting Delancey Cove to Pond 10.

Appendix F

HAMPSHIRE RECREATION, LLC
1025 Cove Road
Mamaroneck, New York 10543

August 14, 2018

Mr. Ronald Pinzon
Chief, Eastern Permits Section
United States Army Corps of Engineers
New York District
Regulatory Branch
Jacob K. Javits Federal Building
26 Federal Plaza, Room 1937
New York, New York 10278-0090

Re: Request for Jurisdictional Determination for the Hampshire Country Club Property
1025 Cove Road
Village of Mamaroneck
Westchester County, New York

Dear Mr. Pinzon:

As owner of the above-referenced property, please accept this letter as authorization for the U.S. Army Corps of Engineers to perform a site inspection in association with the wetland jurisdictional determination (JD) request for the property.

Sincerely,

Susan L. Goldberger

Susan L. Goldberger
Authorized Representative