

# C.T. MALE ASSOCIATES

Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C.

50 Century Hill Drive, Latham, NY 12110  
518.786.7400 FAX 518.786.7299 www.ctmale.com



May 2, 2023

Town of Washington  
C/O Kathleen Velletri  
Highway Department  
PO Box 1404  
Millbrook, NY 12545

Re: *Wetland Delineation*  
*Killearn Road*  
*Town of Washington, Dutchess County, New York*  
*C.T. Male Project No. 23.3211*

Dear Ms. Velletri,

C.T. Male Associates Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C. (C.T. Male) has completed a delineation of wetlands and waterbodies for the project site located at Killearn Road in the Town of Washington, Dutchess County, New York. A site location map is included in **Attachment 1**.

## **Site Information**

The site consists of approximately 36± acres along the entire length (3.5± miles) of Killearn Road. The site includes a 50 foot wide area along the Killearn Road corridor composed of residential property, forested land, streams, and wetlands. Properties surrounding the site are dominated by rural residential land, agricultural land, and forested land. Topography throughout the site is mixed with rolling hills along the length of the road and moderately sloped areas from the east down to the west in the central portion. a

Existing wetland and soils information were obtained from the U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI), the NYSDEC Environmental Resource Mapper (ERM), and the U.S. Department of Agriculture (USDA) Web Soil Survey for Dutchess County, NY. Resource Maps are included in **Attachment 1**, and are summarized below:

- NWI mapping depicts a riverine system running north to south in the southern portion of the site at the intersection of Killearn Road and Chestnut Ridge Road. Several small areas of forested (PFO), scrub-shrub (PSS), emergent (PEM) wetlands, and several small (<1 acre) ponds (PUB) are depicted along Killearn Road.

# C.T. MALE ASSOCIATES

Wetland Delineation

Killearn Road

Page - 2

- ERM mapping depicts a Class C perennial stream running north to south in the southern portion of the site at the intersection of Killearn Road and Chestnut Ridge Road. ERM mapping does not depict any mapped NYSDEC Freshwater Wetlands within or adjacent to the site.
- The Dutchess County web soil survey shows a mixture of poorly to well drained silt loam soils throughout the site. None of the mapped soil units are classified as hydric.

## Wetland Delineation

C.T. Male conducted a field delineation of wetlands and waterbodies at the project site on April 4-7, 2023. Field work was done in accordance with the 1987 U.S. Army Corps of Engineers (Corps) Wetland Delineation Manual and the Northcentral and Northeast Regional Supplement, as well as the NYSDEC Freshwater Wetland Delineation Manual dated July 1995. Labeled flagging was placed in the field. Flag locations and other pertinent features were collected with a Trimble Geo7x GPS unit.

The results of the delineation are presented below. The wetland delineation map is attached to this letter report and depicts approximate wetland and waterbody boundaries. Corps data forms are included as **Attachment 2**, and photographs are included as **Attachment 3**.

Wetland Area	Covertypes	Approx. Size (Acres)*	Jurisdictional Opinion
A	PEM	±0.72	Corps Jurisdictional
B	PSS	±0.01	Corps Jurisdictional
C	PFO	±0.09	Corps Jurisdictional
D	PFO	±0.16	Corps Jurisdictional
E	PEM	±0.17	Non-jurisdictional
F	PEM	±0.23	Corps Jurisdictional
G	PSS	±0.02	Non-jurisdictional
H	PEM	±0.16	Corps Jurisdictional
Pond 1	PUB	±0.11	Corps Jurisdictional
Pond 2	PUB	±0.06	Corps Jurisdictional
Stream	Type	Status	Jurisdictional Opinion
PS-1	Perennial	Class C	NYSDEC/Corps Jurisdictional

\*Acreages represent the area of wetlands and ponds occurring within the 50 foot site boundary along Killearn Road.

## C.T. MALE ASSOCIATES

Wetland Delineation  
Killearn Road  
Page - 3

**Wetland A** is a Palustrine Emergent (PEM) wetland located in the southeastern portion of the site covering approximately 0.72 acres on the north and south side of Killearn Road. Several indicators of wetland hydrology were observed including high water table, saturation, geomorphic position, and FAC-neutral test. Wetland A is dominated by several species of hydrophytic vegetation including weeping willow (*Salix babylonica*), purple willow (*Salix purpurea*), narrow-leaf cattail (*Typha angustifolia*), and tussock sedge (*Carex stricta*). Hydric silt-loam soils were also observed.

Wetland A receives drainage offsite from a pond and a perennial stream (PS-1) and drains offsite to the same stream. Wetland A is assumed to be under the jurisdiction of the Corps due to observed surface water connections to other resources.

**Wetland B** is a Palustrine Scrub-shrub (PSS)/vernal pool wetland covering approximately 0.01 acres within the southern portion of the site. Several indicators of wetland hydrology were observed including surface water, high water table, saturation, inundation visible on aerial imagery, aquatic fauna, geomorphic position, and FAC-neutral test. Wetland B is dominated by several species of hydrophytic vegetation including speckled alder (*Alnus incana*), and tussock sedge. Hydric silt loam soils were also observed.

Wetland B receives drainage from an offsite residential pond with the majority of its area (>1 acre) occurring offsite and drains offsite to Pond 1. Faerie shrimp (*Branchinecta lynchi*), an obligate vernal pool species, were also observed. Wetland B is assumed to be under the jurisdiction of the Corps due to its overall size and likely offsite connections to other resources.

**Wetland C** is a Palustrine Forested (PFO) wetland that covers approximately 0.09 acres within the southern portion of the site along the east and west side of Killearn Road. Several indicators of wetland hydrology were observed including surface water, high water table, saturation, moss trim lines, geomorphic position, and FAC-neutral test. Wetland C is dominated by several species of hydrophytic vegetation including red maple (*Acer rubrum*), dwarf honeysuckle (*Lonicera xylosteum*), and skunk cabbage (*Symplocarpus foetidus*). Hydric muck and silt loam soils were also observed.

Wetland C receives drainage from adjacent uplands and extends offsite to the east and west. Wetland C is likely to have offsite connections to other resources and is assumed to be under the jurisdiction of the Corps.

# C.T. MALE ASSOCIATES

*Wetland Delineation  
Killearn Road  
Page - 4*

**Wetland D** is a PFO wetland that covers approximately 0.16 acres in the southern portion of the site on the west side of Killearn Road and extends offsite to the west. Several indicators of wetland hydrology were observed including surface water, high water table, saturation, moss trim lines, geomorphic position, and FAC-neutral test. Wetland D is dominated by several species of hydrophytic vegetation including red maple, dwarf honeysuckle, tussock sedge, and skink cabbage. Hydric muck and silt loam soils were also observed.

Wetland D receives drainage from adjacent uplands and extends offsite to the west. Wetland D is likely to have offsite connections to other resources and is assumed to be under the jurisdiction of the Corps.

**Wetland E** is a PEM wetland covering approximately 0.17 acres within the central portion of the site on the west side of Killearn Road. Several indicators of wetland hydrology were observed including surface water, high water table, saturation, inundation visible on aerial imagery, and geomorphic position. Wetland E is dominated by several species of hydrophytic vegetation including narrow-leaf cattail. Hydric silt-loam soils were also observed.

Wetland E receives drainage from adjacent uplands and appears to be hydrologically isolated with no observed surface water outlets. Wetland C is potentially non-jurisdictional as an isolated wetland.

**Wetland F** is a PEM wetland covering approximately 0.23 acres in the northern portion of the site on the east side of Killearn Road. Several indicators of wetland hydrology were observed including saturation, geomorphic position, and FAC-neutral test. Wetland F is dominated by several species of hydrophytic vegetation including narrow-leaf cattail and sensitive fern (*Onoclea sensibilis*). Hydric silt loam soils were also observed.

Wetland F continues offsite to the east and receives drainage from adjacent uplands and a residential pond (Pond 2) via a culvert under Killearn Road. Wetland F is assumed to be under the jurisdiction of the Corps due to surface water connections with other resources.

**Wetland G** is a PSS wetland covering approximately 0.02 acres in the northern portion of the site on the west side of Killearn Road and appears to be hydrologically isolated with no surface water connections to other resources. Several indicators of wetland hydrology were observed including surface water, saturation, geomorphic position, and FAC-

# C.T. MALE ASSOCIATES

Wetland Delineation  
Killearn Road  
Page - 5

neutral test. Wetland G is dominated by several species of hydrophytic vegetation including grey dogwood (*Cornus racemosa*). Hydric silt loam soils were also observed.

Wetland G is hydrologically isolated with no surface water connections to other resources and is assumed to be a non-jurisdictional feature.

**Wetland H** is a PEM wetland covering approximately 0.16 acres on the west side of Killearn Road. Several indicators of wetland hydrology were observed including saturation, geomorphic position, and FAC-neutral test. Wetland H is dominated by several species of hydrophytic vegetation including common reed (*Phragmites australis*) and purple loosestrife (*Lythrum salicaria*). Hydric silt-loam soils were also observed.

Wetland H drains east under Killearn Road via a culvert into a drainage ditch which in turn drains to offsite wetland areas. Wetland H is assumed to be under the jurisdiction of the Corps due to surface water connections with other resources.

**Stream PS-1** is a mapped NYSDEC Class C perennial stream located in the southeastern portion of the site adjacent to the intersection of Killearn Road and Chestnut Ridge Road. PS-1 flows north to south within the boundaries of Wetland A. Channel width is approximately three feet with an average bank height of one foot. Bed materials consist of sand, silt, and pebbles. PS-1 is assumed to be under the jurisdiction of NYSDEC and the Corps as a permanent water feature with surface water connections to other water resources.

**Pond 1** is located in the southern portion of the site along the west side of Killearn Road covering approximately 0.11 acres. Pond 1 appears to be either constructed or modified as a residential water feature which drains northeast under Killearn Road via a culvert to a constructed drainage ditch. Pond 1 receives drainage from adjacent uplands and offsite drainage from Wetland B. Pond 1 conducts water both from and to other water resources and is potentially a Corps jurisdictional feature.

**Pond 2** is located in the northern portion of the site along the west side of Killearn Road covering approximately 0.11 acres within the site. Pond 2 appears to be either constructed or modified as a residential water feature which drains northeast under Killearn Road via a culvert to Wetland F.

Pond 2 is assumed to be Corps jurisdictional due to observed surface water connections to other resources (Wetland F).

# C.T. MALE ASSOCIATES

*Wetland Delineation  
Killearn Road  
Page - 6*

## **Conclusions**

All resources observed during the field visit with the exception of Wetlands E and G are assumed to be Corps jurisdictional due known surface water connections and/or such close proximity to one another as to be considered adjacent wetlands/streams. Any proposed project activities within wetlands or streams should be coordinated with the Corps.

Respectfully Submitted,

C.T. MALE ASSOCIATES



Jorel Spain  
Wetland Scientist



Chris Koenig  
Project Manager  
Environmental Services



Killearn Road

Wetland Delineation Map 1

Town of Millbrook

Dutchess County, NY

**C.T. MALE ASSOCIATES**

Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C.

50 CENTURY HILL DRIVE, LATHAM, NY 12110

518.786.7400 \* FAX 518.786.7299

N

E

S

W

0

140

280

560

840

1,120

Feet

1 inch = 500 feet

Project Number: 23.3211

Data Source: NYSGIS Clearinghouse

Projection: State Plane NAD83 NYE (Feet)

Date: April 12, 2023

**Map Notes:**

(1) 2021 Ortho Imagery from the GIS Clearinghouse WMS Ortho Server.

**Legend**

Site Boundary

Delineated Wetlands

Offsite Wetlands

Ponds

Drainage Ditch

Stream

Culvert

Wetland Flag Point

Data Point

GPS Control Point

Photo Location

**Note:** A delineation of wetlands and waterbodies was performed by C.T. Male staff on April 4-7, 2023 in accordance with the 1987 U.S. Army Corps of Engineers (Corps) Wetland Delineation Manual and the Northcentral and Northeast Regional supplement, and the NYSDEC Freshwater Wetland Delineation Manual dated July 1995. Wetland flags were surveyed using a Trimble GEO-7X GPS unit.



**Note:** A delineation of wetlands and waterbodies was performed by C.T. Male staff on April 4-7, 2023 in accordance with the 1987 U.S. Army Corps of Engineers (Corps) Wetland Delineation Manual and the Northcentral and Northeast Regional supplement, and the NYSDEC Freshwater Wetland Delineation Manual dated July 1995. Wetland flags were surveyed using a Trimble GEO-7X GPS unit.

**Killearn Road  
Wetland Delineation Map 2**

**Town of Millbrook**

**Dutchess County, NY**

**C.T. MALE ASSOCIATES**  
Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C.  
50 CENTURY HILL DRIVE, LATHAM, NY 12110  
518.786.7400 • FAX 518.786.7299

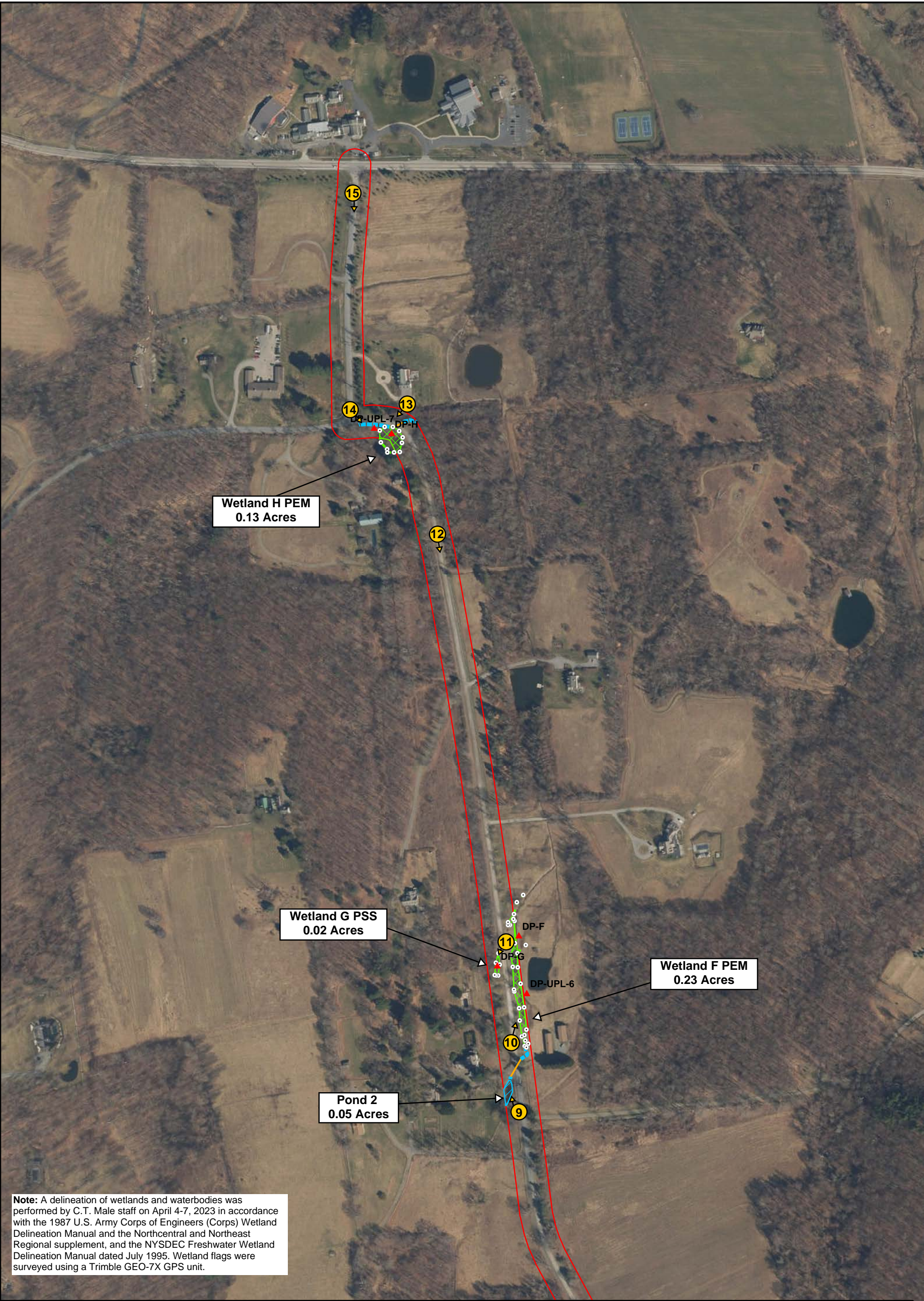


Project Number: 23.3211  
Data Source: NYSGIS Clearinghouse  
Projection: State Plane NAD83 NYE (Feet)  
Date: April 12, 2023

**Map Notes:**  
(1) 2021 Ortho Imagery from the GIS Clearinghouse WMS Ortho Server.

**Legend**

- |                     |                    |
|---------------------|--------------------|
| Site Boundary       | Culvert            |
| Delineated Wetlands | Wetland Flag Point |
| Offsite Wetlands    | Data Point         |
| Ponds               | GPS Control Point  |
| Drainage Ditch      | Photo Location     |



**Note:** A delineation of wetlands and waterbodies was performed by C.T. Male staff on April 4-7, 2023 in accordance with the 1987 U.S. Army Corps of Engineers (Corps) Wetland Delineation Manual and the Northcentral and Northeast Regional supplement, and the NYSDEC Freshwater Wetland Delineation Manual dated July 1995. Wetland flags were surveyed using a Trimble GEO-7X GPS unit.

**Killearn Road**  
**Wetland Delineation Map 3**

**Town of Millbrook**  
**Dutchess County, NY**

**C.T. MALE ASSOCIATES**  
Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C.  
50 CENTURY HILL DRIVE, LATHAM, NY 12110  
518.786.7400 • FAX 518.786.7299

0 95 190 380 570 760  
**1 inch = 350 feet**

Project Number: 23.3211  
Data Source: NYSGIS Clearinghouse  
Projection: State Plane NAD83 NYE (Feet)  
Date: April 12, 2023

**Map Notes:**  
(1) 2021 Ortho Imagery from the GIS Clearinghouse WMS Ortho Server.

**Legend**  
 Site Boundary  
 Delineated Wetlands  
 Offsite Wetlands  
 Ponds  
 Drainage Ditch  
 Culvert  
 Wetland Flag Point  
 Data Point  
 GPS Control Point  
 Photo Location



Killlearn Road

Wetland Delineation Map 4

Town of Millbrook

Dutchess County, NY

C.T. MALE ASSOCIATES

Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C.

50 CENTURY HILL DRIVE, LATHAM, NY 12110

518.786.7400 \* FAX 518.786.7299

N

E

S

W

0

280

560

1,120

1,680

2,240

Feet

1 inch = 1,000 feet

Project Number: 23.3211

Data Source: NYSGIS Clearinghouse

Projection: State Plane NAD83 NYE (Feet)

Date: April 12, 2023

Map Notes:

(1) 2021 Ortho Imagery from the GIS Clearinghouse WMS Ortho Server.

Site Boundary

Delineated Wetlands

Offsite Wetlands

Ponds

Drainage Ditch

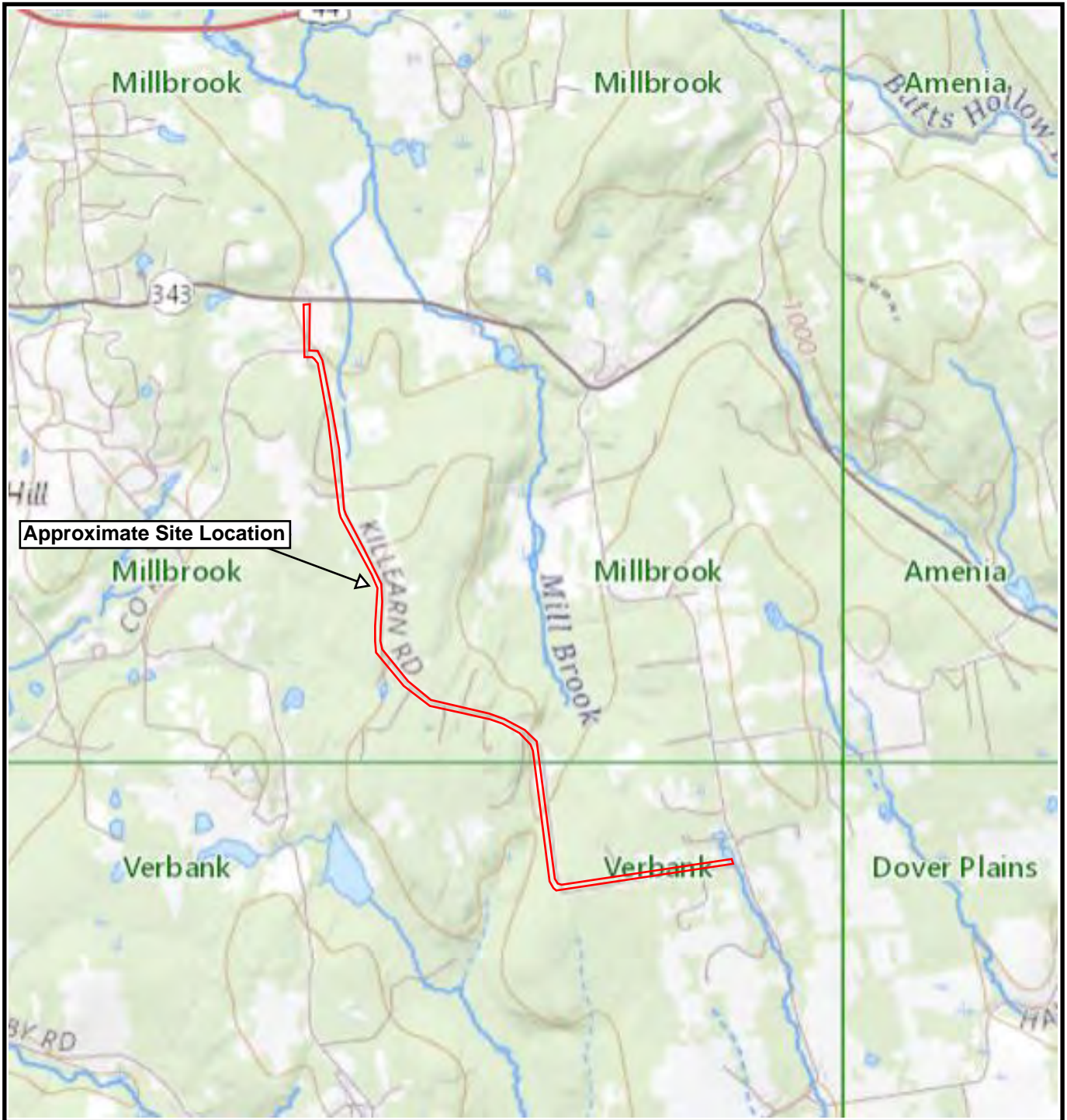
Culvert

Data Point

GPS Control Point

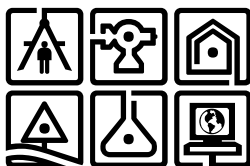
# **Attachment 1**

## **Resource Maps**



#### MAP REFERENCE

United States Geological Survey  
7.5 Minute Series Topographic Map  
Quadrangle: Milbrook/Verbank, NY  
Date: 2019



**C.T. MALE ASSOCIATES**

ENGINEERING, SURVEYING, ARCHITECTURE  
LANDSCAPE ARCHITECTURE & GEOLOGY, D.P.C.

50 CENTURY HILL DRIVE  
LATHAM, NY 12110

## **FIGURE 1 - SITE LOCATION MAP**

**TOWN OF MILBROOK**

**DUTCHESS COUNTY, NY**

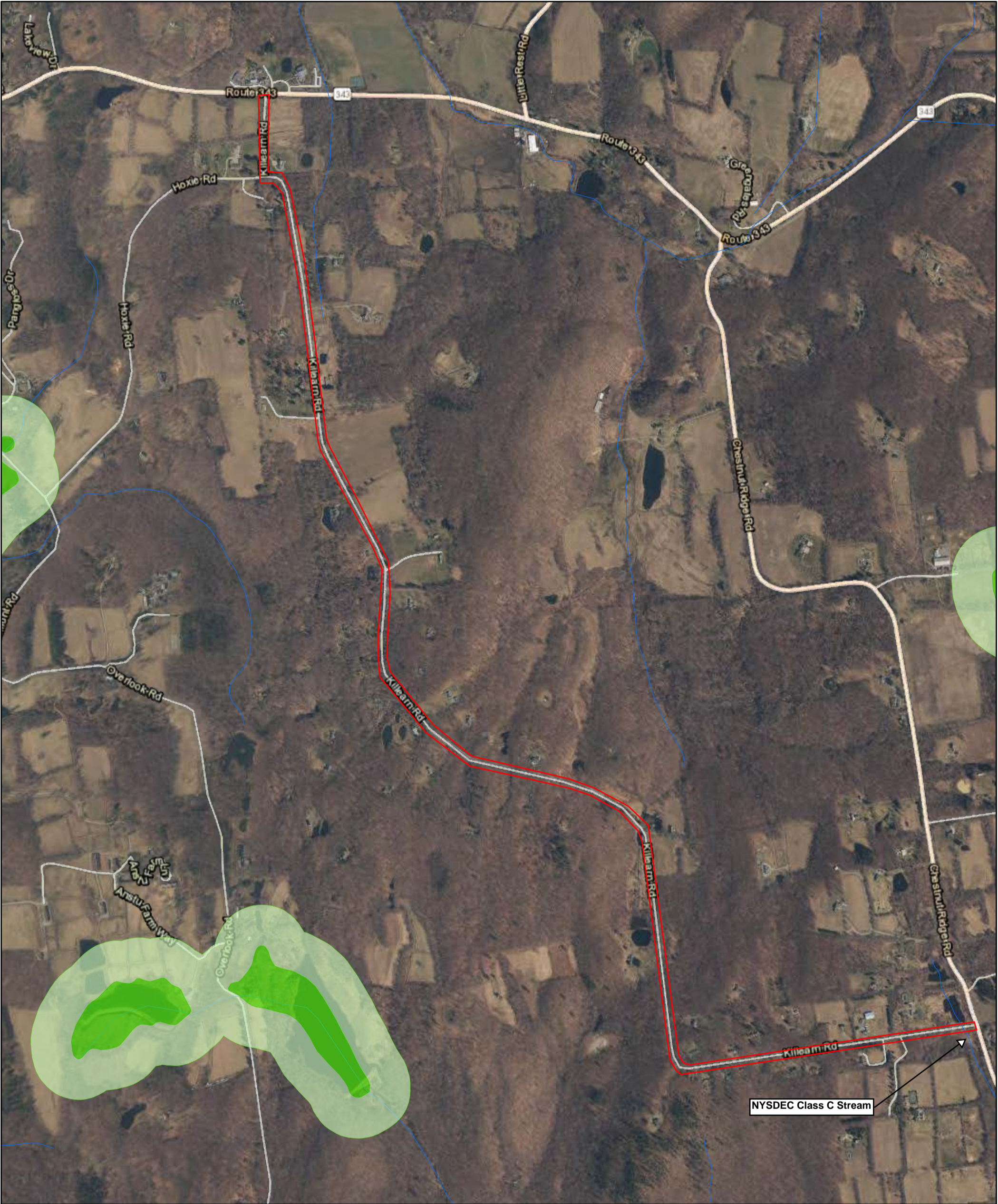
**NO SCALE**

**DRAFTER: JRS**

**PROJECT No: 23.3211**





The locations and features depicted on this map are approximate and do not represent an actual survey.

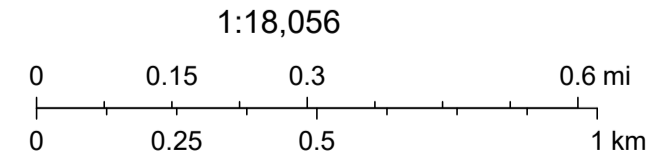
# ERM Mapper Result - Killearn Road, Milbrook NY



April 12, 2023

**LEGEND**

-  Site Boundary
-  Streams
-  NYSDC Freshwater Wetlands
-  NYSDC Freshwater Wetlands Checkzone



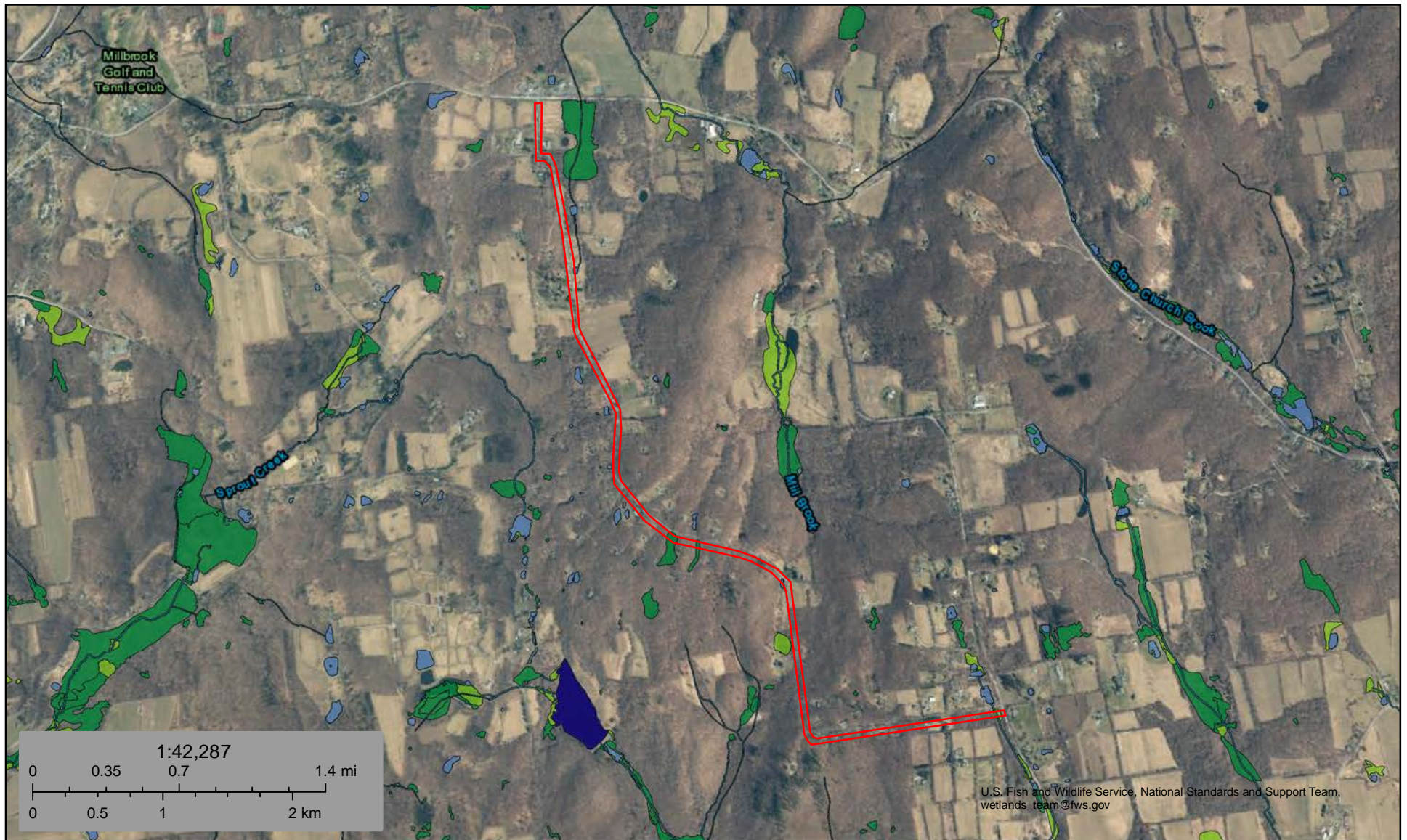
NYS ITS GIS Program Office, Westchester County GIS , Esri, HERE, Garmin, (c) OpenStreetMap contributors, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



U.S. Fish and Wildlife Service

# National Wetlands Inventory










Killearn Road, Millbrook NY



U.S. Fish and Wildlife Service, National Standards and Support Team,  
wetlands\_team@fws.gov

April 12, 2023

## Wetlands

- |  |   |  |
|--|---|--|
|  Estuarine and Marine Deepwater |  Freshwater Emergent Wetland       |  Lake     |
|  Estuarine and Marine Wetland   |  Freshwater Forested/Shrub Wetland |  Other    |
|  Subject Property               |  Freshwater Pond                   |  Riverine |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.



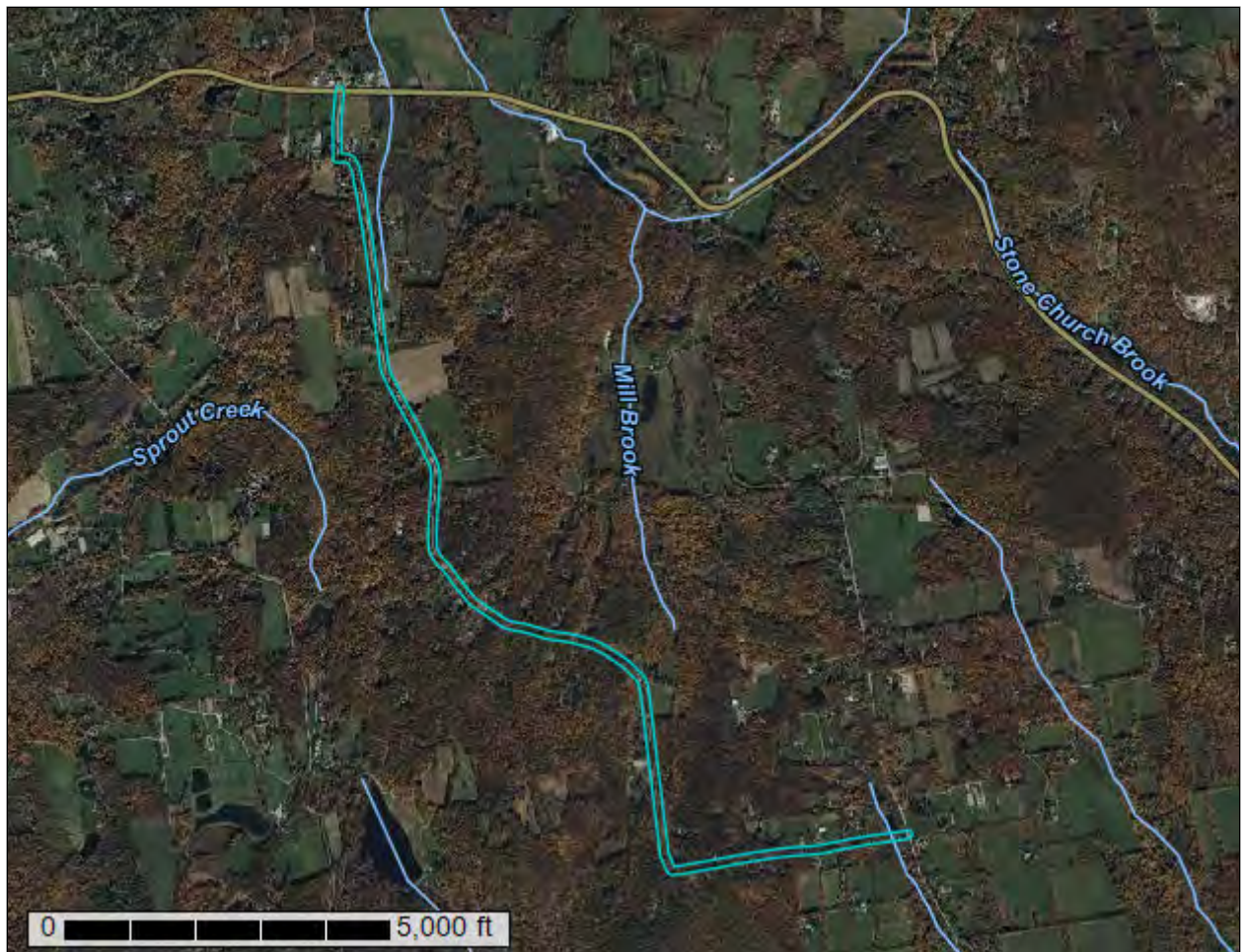
United States  
Department of  
Agriculture

**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 **Dutchess County, New York**



April 12, 2023

# 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 (<https://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](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.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

# Contents

---

<b>Preface</b> .....	2
<b>How Soil Surveys Are Made</b> .....	5
<b>Soil Map</b> .....	8
Soil Map.....	9
Legend.....	10
Map Unit Legend.....	11
Map Unit Descriptions.....	11
Dutchess County, New York.....	13
ChC—Charlton fine sandy loam, 8 to 15 percent slopes.....	13
CrB—Charlton-Chatfield complex, undulating, rocky.....	14
CrC—Charlton-Chatfield complex, rolling, rocky.....	16
DuB—Dutchess silt loam, 3 to 8 percent slopes.....	18
DuC—Dutchess silt loam, 8 to 15 percent slopes.....	20
DwB—Dutchess-Cardigan complex, undulating, rocky.....	21
DwC—Dutchess-Cardigan complex, rolling, rocky.....	23
DwD—Dutchess-Cardigan complex, hilly, rocky.....	25
GsB—Georgia silt loam, 3 to 8 percent slopes.....	27
Su—Sun silt loam.....	28
<b>Soil Information for All Uses</b> .....	31
Suitabilities and Limitations for Use.....	31
Land Classifications.....	31
Hydric Rating by Map Unit.....	31
<b>References</b> .....	36

# 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

## Custom Soil Resource Report

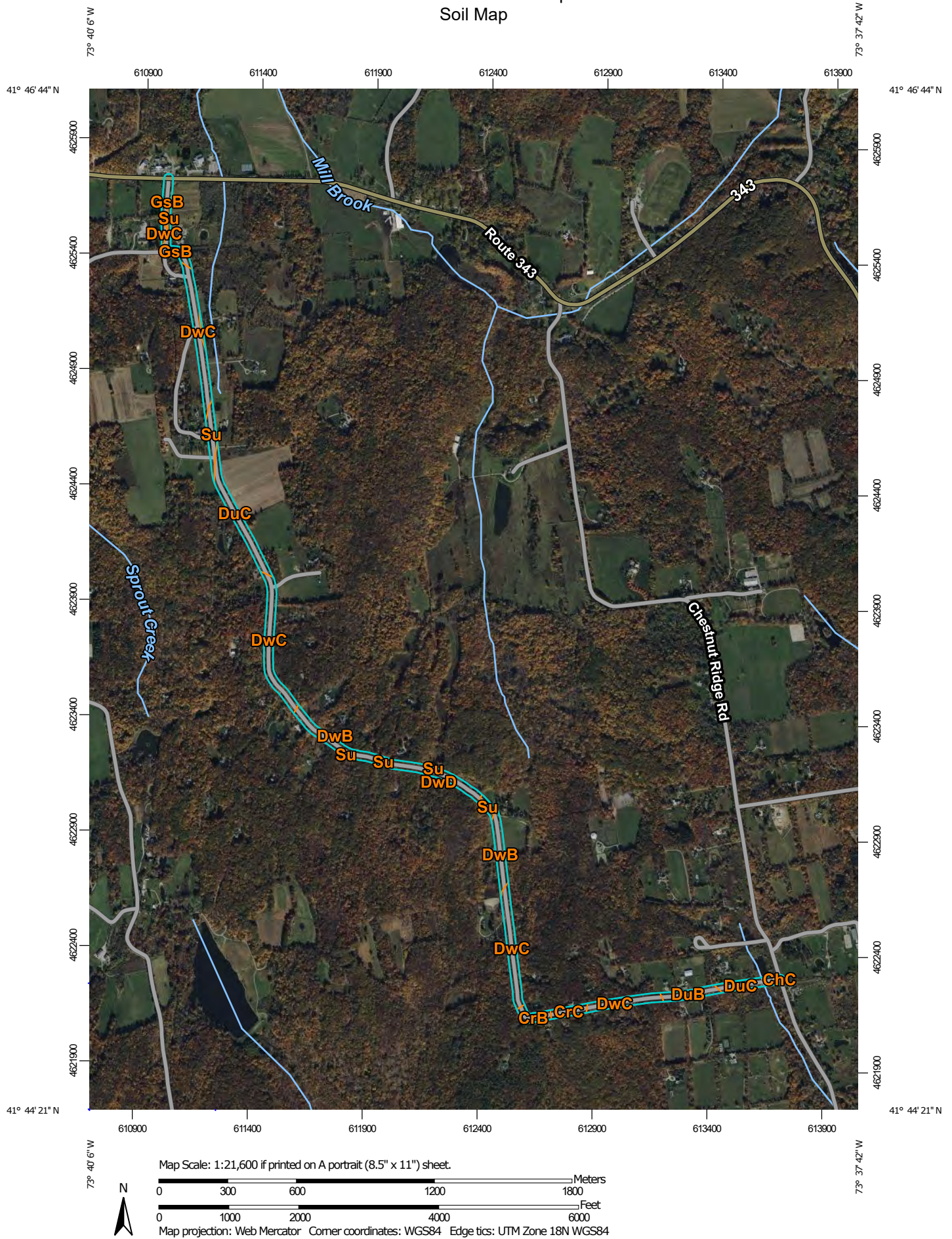
identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

# 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



## Custom Soil Resource Report


### 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 1:24,000.

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

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

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: Dutchess County, New York

Survey Area Data: Version 19, Sep 10, 2022

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

Date(s) aerial images were photographed: Oct 21, 2022—Oct 27, 2022

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

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
ChC	Charlton fine sandy loam, 8 to 15 percent slopes	0.4	0.7%
CrB	Charlton-Chatfield complex, undulating, rocky	1.6	2.9%
CrC	Charlton-Chatfield complex, rolling, rocky	1.6	2.9%
DuB	Dutchess silt loam, 3 to 8 percent slopes	2.4	4.5%
DuC	Dutchess silt loam, 8 to 15 percent slopes	7.3	13.5%
DwB	Dutchess-Cardigan complex, undulating, rocky	7.1	13.1%
DwC	Dutchess-Cardigan complex, rolling, rocky	20.9	38.5%
DwD	Dutchess-Cardigan complex, hilly, rocky	4.1	7.6%
GsB	Georgia silt loam, 3 to 8 percent slopes	3.6	6.7%
Su	Sun silt loam	5.2	9.6%
<b>Totals for Area of Interest</b>		<b>54.2</b>	<b>100.0%</b>

## 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.

## Dutchess County, New York

### ChC—Charlton fine sandy loam, 8 to 15 percent slopes

#### Map Unit Setting

*National map unit symbol:* 2wh0q

*Elevation:* 0 to 1,440 feet

*Mean annual precipitation:* 36 to 71 inches

*Mean annual air temperature:* 39 to 55 degrees F

*Frost-free period:* 140 to 240 days

*Farmland classification:* Farmland of statewide importance

#### Map Unit Composition

*Charlton and similar soils:* 85 percent

*Minor components:* 15 percent

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

#### Description of Charlton

##### Setting

*Landform:* Ridges, ground moraines, hills

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Side slope

*Down-slope shape:* Convex, linear

*Across-slope shape:* Convex

*Parent material:* Coarse-loamy melt-out till derived from granite, gneiss, and/or schist

##### Typical profile

*Ap - 0 to 7 inches:* fine sandy loam

*Bw - 7 to 22 inches:* gravelly fine sandy loam

*C - 22 to 65 inches:* gravelly fine sandy loam

##### Properties and qualities

*Slope:* 8 to 15 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Well drained

*Runoff class:* Low

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to high  
(0.14 to 14.17 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Maximum salinity:* Nonsaline (0.0 to 1.9 mmhos/cm)

*Available water supply, 0 to 60 inches:* Moderate (about 6.9 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 3e

*Hydrologic Soil Group:* B

*Ecological site:* F144AY034CT - Well Drained Till Uplands

*Hydric soil rating:* No

## Minor Components

### Paxton

*Percent of map unit:* 5 percent  
*Landform:* Ground moraines, hills, drumlins  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex, linear  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

### Sutton, fine sandy loam

*Percent of map unit:* 5 percent  
*Landform:* Ridges, hills, ground moraines  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Base slope  
*Down-slope shape:* Concave  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

### Chatfield

*Percent of map unit:* 3 percent  
*Landform:* Ridges, hills  
*Landform position (two-dimensional):* Summit, shoulder, backslope  
*Landform position (three-dimensional):* Nose slope, side slope, crest  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear, convex  
*Hydric soil rating:* No

### Canton

*Percent of map unit:* 2 percent  
*Landform:* Ridges, ground moraines, hills  
*Landform position (two-dimensional):* Summit, shoulder, backslope  
*Landform position (three-dimensional):* Nose slope, side slope, crest  
*Down-slope shape:* Convex, linear  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

## CrB—Charlton-Chatfield complex, undulating, rocky

### Map Unit Setting

*National map unit symbol:* 9rf2  
*Elevation:* 100 to 1,130 feet  
*Mean annual precipitation:* 41 to 47 inches  
*Mean annual air temperature:* 45 to 50 degrees F  
*Frost-free period:* 115 to 195 days  
*Farmland classification:* All areas are prime farmland

### Map Unit Composition

*Charlton and similar soils:* 50 percent

## Custom Soil Resource Report

*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: Till plains, ridges, hills*

*Landform position (two-dimensional): Summit*

*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 30 inches: gravelly loam*

*H3 - 30 to 72 inches: gravelly loam*

#### Properties and qualities

*Slope: 1 to 6 percent*

*Depth to restrictive feature: More than 80 inches*

*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 supply, 0 to 60 inches: Moderate (about 7.6 inches)*

#### Interpretive groups

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 2e*

*Hydrologic Soil Group: B*

*Ecological site: F144AY034CT - Well Drained Till Uplands*

*Hydric soil rating: No*

### Description of Chatfield

#### Setting

*Landform: Ridges, hills*

*Landform position (two-dimensional): Summit*

*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 9 inches: fine sandy loam*

*H2 - 9 to 30 inches: loam*

*H3 - 30 to 34 inches: unweathered bedrock*

#### Properties and qualities

*Slope: 1 to 6 percent*

*Depth to restrictive feature: 20 to 40 inches to lithic bedrock*

*Drainage class: Well drained*

*Capacity of the most limiting layer to transmit water (Ksat): Very low to high (0.00 to 5.95 in/hr)*

## Custom Soil Resource Report

*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 1 percent  
*Available water supply, 0 to 60 inches:* Low (about 4.0 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 2s  
*Hydrologic Soil Group:* B  
*Ecological site:* F144AY034CT - Well Drained Till Uplands  
*Hydric soil rating:* No

### Minor Components

#### Hollis

*Percent of map unit:* 9 percent  
*Hydric soil rating:* No

#### Georgia

*Percent of map unit:* 5 percent  
*Hydric soil rating:* No

#### Massena

*Percent of map unit:* 4 percent  
*Hydric soil rating:* No

#### Rock outcrop

*Percent of map unit:* 1 percent  
*Hydric soil rating:* Unranked

#### Sun

*Percent of map unit:* 1 percent  
*Landform:* Depressions  
*Hydric soil rating:* Yes

## CrC—Charlton-Chatfield complex, rolling, rocky

### Map Unit Setting

*National map unit symbol:* 9rf3  
*Elevation:* 100 to 1,310 feet  
*Mean annual precipitation:* 41 to 47 inches  
*Mean annual air temperature:* 45 to 50 degrees F  
*Frost-free period:* 115 to 195 days  
*Farmland classification:* Farmland of statewide importance

### 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:* Till plains, ridges, hills

*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 30 inches:* gravelly loam

*H3 - 30 to 72 inches:* gravelly loam

### Properties and qualities

*Slope:* 5 to 16 percent

*Depth to restrictive feature:* More than 80 inches

*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 supply, 0 to 60 inches:* Moderate (about 7.6 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 3e

*Hydrologic Soil Group:* B

*Ecological site:* F144AY034CT - Well Drained Till Uplands

*Hydric soil rating:* No

## 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 9 inches:* fine sandy loam

*H2 - 9 to 30 inches:* loam

*H3 - 30 to 34 inches:* unweathered bedrock

### Properties and qualities

*Slope:* 5 to 16 percent

*Depth to restrictive feature:* 20 to 40 inches to lithic bedrock

*Drainage class:* Well drained

*Capacity of the most limiting layer to transmit water (Ksat):* Very low to high (0.00  
to 5.95 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

## Custom Soil Resource Report

*Calcium carbonate, maximum content:* 1 percent

*Available water supply, 0 to 60 inches:* Low (about 4.0 inches)

### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 3e

*Hydrologic Soil Group:* B

*Ecological site:* F144AY034CT - Well Drained Till Uplands

*Hydric soil rating:* No

### **Minor Components**

#### **Hollis**

*Percent of map unit:* 9 percent

*Hydric soil rating:* No

#### **Georgia**

*Percent of map unit:* 5 percent

*Hydric soil rating:* No

#### **Massena**

*Percent of map unit:* 4 percent

*Hydric soil rating:* No

#### **Sun**

*Percent of map unit:* 1 percent

*Landform:* Depressions

*Hydric soil rating:* Yes

#### **Rock outcrop**

*Percent of map unit:* 1 percent

*Hydric soil rating:* Unranked

## **DuB—Dutchess silt loam, 3 to 8 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* 9rfk

*Elevation:* 50 to 1,000 feet

*Mean annual precipitation:* 41 to 47 inches

*Mean annual air temperature:* 45 to 50 degrees F

*Frost-free period:* 115 to 195 days

*Farmland classification:* All areas are prime farmland

### **Map Unit Composition**

*Dutchess and similar soils:* 85 percent

*Minor components:* 15 percent

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

## Description of Dutchess

### Setting

*Landform:* Ridges, hills

*Landform position (two-dimensional):* Summit

*Landform position (three-dimensional):* Crest

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Parent material:* Loamy till derived mainly from phyllite, slate, schist, and shale

### Typical profile

*H1 - 0 to 8 inches:* silt loam

*H2 - 8 to 28 inches:* silt loam

*H3 - 28 to 86 inches:* channery silt loam

### Properties and qualities

*Slope:* 3 to 8 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Well drained

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.57 to 1.98 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water supply, 0 to 60 inches:* High (about 9.6 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 2e

*Hydrologic Soil Group:* B

*Ecological site:* F144AY034CT - Well Drained Till Uplands

*Hydric soil rating:* No

## Minor Components

### Georgia

*Percent of map unit:* 5 percent

*Hydric soil rating:* No

### Massena

*Percent of map unit:* 4 percent

*Hydric soil rating:* No

### Cardigan

*Percent of map unit:* 4 percent

*Hydric soil rating:* No

### Nassau

*Percent of map unit:* 1 percent

*Hydric soil rating:* No

### Sun

*Percent of map unit:* 1 percent

*Landform:* Depressions

*Hydric soil rating:* Yes

## **DuC—Dutchess silt loam, 8 to 15 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* 9rfl  
*Elevation:* 50 to 1,000 feet  
*Mean annual precipitation:* 41 to 47 inches  
*Mean annual air temperature:* 45 to 50 degrees F  
*Frost-free period:* 115 to 195 days  
*Farmland classification:* Farmland of statewide importance

### **Map Unit Composition**

*Dutchess and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Dutchess**

#### **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 phyllite, slate, schist, and shale

#### **Typical profile**

*H1 - 0 to 8 inches:* silt loam  
*H2 - 8 to 28 inches:* silt loam  
*H3 - 28 to 86 inches:* channery silt loam

#### **Properties and qualities**

*Slope:* 8 to 15 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.57 to 1.98 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* High (about 9.6 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3e  
*Hydrologic Soil Group:* B  
*Ecological site:* F144AY034CT - Well Drained Till Uplands  
*Hydric soil rating:* No

**Minor Components**

**Georgia**

*Percent of map unit:* 5 percent  
*Hydric soil rating:* No

**Massena**

*Percent of map unit:* 4 percent  
*Hydric soil rating:* No

**Cardigan**

*Percent of map unit:* 4 percent  
*Hydric soil rating:* No

**Sun**

*Percent of map unit:* 1 percent  
*Landform:* Depressions  
*Hydric soil rating:* Yes

**Nassau**

*Percent of map unit:* 1 percent  
*Hydric soil rating:* No

**DwB—Dutchess-Cardigan complex, undulating, rocky**

**Map Unit Setting**

*National map unit symbol:* 9rfn  
*Elevation:* 0 to 1,330 feet  
*Mean annual precipitation:* 41 to 47 inches  
*Mean annual air temperature:* 45 to 50 degrees F  
*Frost-free period:* 115 to 195 days  
*Farmland classification:* All areas are prime farmland

**Map Unit Composition**

*Dutchess and similar soils:* 40 percent  
*Cardigan and similar soils:* 30 percent  
*Minor components:* 30 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Dutchess**

**Setting**

*Landform:* Ridges, hills  
*Landform position (two-dimensional):* Summit  
*Landform position (three-dimensional):* Crest  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Loamy till derived mainly from phyllite, slate, schist, and shale

**Typical profile**

*H1 - 0 to 8 inches:* silt loam

## Custom Soil Resource Report

*H2 - 8 to 28 inches: silt loam*

*H3 - 28 to 86 inches: channery silt loam*

### Properties and qualities

*Slope: 1 to 6 percent*

*Depth to restrictive feature: More than 80 inches*

*Drainage class: Well drained*

*Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high  
(0.57 to 1.98 in/hr)*

*Depth to water table: More than 80 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*Available water supply, 0 to 60 inches: High (about 9.6 inches)*

### Interpretive groups

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 2e*

*Hydrologic Soil Group: B*

*Ecological site: F144AY034CT - Well Drained Till Uplands*

*Hydric soil rating: No*

## Description of Cardigan

### Setting

*Landform: Ridges, hills*

*Landform position (two-dimensional): Summit*

*Landform position (three-dimensional): Crest*

*Down-slope shape: Convex*

*Across-slope shape: Convex*

*Parent material: Loamy till or colluvium derived from phyllite, slate, shale, and schist*

### Typical profile

*H1 - 0 to 8 inches: channery silt loam*

*H2 - 8 to 20 inches: channery loam*

*H3 - 20 to 30 inches: channery silt loam*

*H4 - 30 to 34 inches: unweathered bedrock*

### Properties and qualities

*Slope: 1 to 6 percent*

*Depth to restrictive feature: 20 to 40 inches to lithic bedrock*

*Drainage class: Well drained*

*Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low  
(0.00 to 0.06 in/hr)*

*Depth to water table: More than 80 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*Available water supply, 0 to 60 inches: Low (about 4.1 inches)*

### Interpretive groups

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 2e*

*Hydrologic Soil Group: C*

*Ecological site: F144AY034CT - Well Drained Till Uplands*

*Hydric soil rating: No*

**Minor Components**

**Georgia**

*Percent of map unit:* 10 percent  
*Hydric soil rating:* No

**Nassau**

*Percent of map unit:* 9 percent  
*Hydric soil rating:* No

**Massena**

*Percent of map unit:* 9 percent  
*Hydric soil rating:* No

**Rock outcrop**

*Percent of map unit:* 1 percent  
*Hydric soil rating:* Unranked

**Sun**

*Percent of map unit:* 1 percent  
*Landform:* Depressions  
*Hydric soil rating:* Yes

**DwC—Dutchess-Cardigan complex, rolling, rocky**

**Map Unit Setting**

*National map unit symbol:* 9rfp  
*Elevation:* 0 to 1,330 feet  
*Mean annual precipitation:* 41 to 47 inches  
*Mean annual air temperature:* 45 to 50 degrees F  
*Frost-free period:* 115 to 195 days  
*Farmland classification:* Farmland of statewide importance

**Map Unit Composition**

*Dutchess and similar soils:* 40 percent  
*Cardigan and similar soils:* 30 percent  
*Minor components:* 30 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Dutchess**

**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 phyllite, slate, schist, and shale

**Typical profile**

*H1 - 0 to 8 inches:* silt loam  
*H2 - 8 to 28 inches:* silt loam  
*H3 - 28 to 86 inches:* channery silt loam

**Properties and qualities**

*Slope:* 5 to 16 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.57 to 1.98 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* High (about 9.6 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3e  
*Hydrologic Soil Group:* B  
*Ecological site:* F144AY034CT - Well Drained Till Uplands  
*Hydric soil rating:* No

**Description of Cardigan**

**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 or colluvium derived from phyllite, slate, shale, and schist

**Typical profile**

*H1 - 0 to 8 inches:* channery silt loam  
*H2 - 8 to 20 inches:* channery loam  
*H3 - 20 to 30 inches:* channery silt loam  
*H4 - 30 to 34 inches:* unweathered bedrock

**Properties and qualities**

*Slope:* 5 to 16 percent  
*Depth to restrictive feature:* 20 to 40 inches to lithic bedrock  
*Drainage class:* Well drained  
*Capacity of the most limiting layer to transmit water (Ksat):* Low to moderately low  
(0.00 to 0.06 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Low (about 4.1 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3e  
*Hydrologic Soil Group:* C  
*Ecological site:* F144AY034CT - Well Drained Till Uplands  
*Hydric soil rating:* No

**Minor Components**

**Georgia**

*Percent of map unit:* 10 percent  
*Hydric soil rating:* No

**Massena**

*Percent of map unit:* 9 percent  
*Hydric soil rating:* No

**Nassau**

*Percent of map unit:* 9 percent  
*Hydric soil rating:* No

**Rock outcrop**

*Percent of map unit:* 1 percent  
*Hydric soil rating:* Unranked

**Sun**

*Percent of map unit:* 1 percent  
*Landform:* Depressions  
*Hydric soil rating:* Yes

**DwD—Dutchess-Cardigan complex, hilly, rocky**

**Map Unit Setting**

*National map unit symbol:* 9rfq  
*Elevation:* 20 to 1,230 feet  
*Mean annual precipitation:* 41 to 47 inches  
*Mean annual air temperature:* 45 to 50 degrees F  
*Frost-free period:* 115 to 195 days  
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Dutchess and similar soils:* 40 percent  
*Cardigan and similar soils:* 30 percent  
*Minor components:* 30 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Dutchess**

**Setting**

*Landform:* Ridges, hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Loamy till derived mainly from phyllite, slate, schist, and shale

**Typical profile**

*H1 - 0 to 8 inches:* silt loam  
*H2 - 8 to 28 inches:* silt loam  
*H3 - 28 to 86 inches:* channery silt loam

**Properties and qualities**

*Slope:* 15 to 30 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.57 to 1.98 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* High (about 9.6 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 4e  
*Hydrologic Soil Group:* B  
*Ecological site:* F144AY034CT - Well Drained Till Uplands  
*Hydric soil rating:* No

**Description of Cardigan**

**Setting**

*Landform:* Ridges, hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Loamy till or colluvium derived from phyllite, slate, shale, and schist

**Typical profile**

*H1 - 0 to 8 inches:* channery silt loam  
*H2 - 8 to 20 inches:* channery loam  
*H3 - 20 to 30 inches:* channery silt loam  
*H4 - 30 to 34 inches:* unweathered bedrock

**Properties and qualities**

*Slope:* 15 to 30 percent  
*Depth to restrictive feature:* 20 to 40 inches to lithic bedrock  
*Drainage class:* Well drained  
*Capacity of the most limiting layer to transmit water (Ksat):* Low to moderately low  
(0.00 to 0.06 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Low (about 4.1 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 4e  
*Hydrologic Soil Group:* C  
*Ecological site:* F144AY034CT - Well Drained Till Uplands  
*Hydric soil rating:* No

**Minor Components**

**Sun**

*Percent of map unit:* 10 percent

*Landform:* Depressions

*Hydric soil rating:* Yes

**Nassau**

*Percent of map unit:* 9 percent

*Hydric soil rating:* No

**Georgia**

*Percent of map unit:* 5 percent

*Hydric soil rating:* No

**Massena**

*Percent of map unit:* 5 percent

*Hydric soil rating:* No

**Rock outcrop**

*Percent of map unit:* 1 percent

*Hydric soil rating:* Unranked

**GsB—Georgia silt loam, 3 to 8 percent slopes**

**Map Unit Setting**

*National map unit symbol:* 9rg6

*Elevation:* 90 to 1,000 feet

*Mean annual precipitation:* 41 to 47 inches

*Mean annual air temperature:* 45 to 50 degrees F

*Frost-free period:* 115 to 195 days

*Farmland classification:* All areas are prime farmland

**Map Unit Composition**

*Georgia and similar soils:* 80 percent

*Minor components:* 20 percent

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

**Description of Georgia**

**Setting**

*Landform:* Till plains, hills, drumlinoid ridges

*Landform position (two-dimensional):* Summit

*Landform position (three-dimensional):* Crest

*Down-slope shape:* Concave

*Across-slope shape:* Convex

*Parent material:* Loamy till derived mainly from limestone, shale, or slate

**Typical profile**

*H1 - 0 to 8 inches:* silt loam

## Custom Soil Resource Report

*H2 - 8 to 27 inches: loam*

*H3 - 27 to 80 inches: gravelly fine sandy loam*

### Properties and qualities

*Slope: 3 to 8 percent*

*Depth to restrictive feature: More than 80 inches*

*Drainage class: Moderately well drained*

*Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)*

*Depth to water table: About 18 to 36 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*Available water supply, 0 to 60 inches: Moderate (about 8.6 inches)*

### Interpretive groups

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 2e*

*Hydrologic Soil Group: C*

*Ecological site: F144AY038NY - Semi-Rich Moist Till Uplands*

*Hydric soil rating: No*

### Minor Components

#### Charlton

*Percent of map unit: 5 percent*

*Hydric soil rating: No*

#### Stockbridge

*Percent of map unit: 5 percent*

*Hydric soil rating: No*

#### Massena

*Percent of map unit: 5 percent*

*Hydric soil rating: No*

#### Dutchess

*Percent of map unit: 3 percent*

*Hydric soil rating: No*

#### Pittstown

*Percent of map unit: 2 percent*

*Hydric soil rating: No*

## Su—Sun silt loam

### Map Unit Setting

*National map unit symbol: 9rj3*

*Elevation: 600 to 1,800 feet*

*Mean annual precipitation: 41 to 47 inches*

*Mean annual air temperature: 45 to 50 degrees F*

*Frost-free period: 115 to 195 days*

*Farmland classification: Farmland of statewide importance*

### Map Unit Composition

*Sun and similar soils:* 80 percent

*Minor components:* 20 percent

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

### Description of Sun

#### Setting

*Landform:* Depressions

*Landform position (two-dimensional):* Toeslope

*Landform position (three-dimensional):* Base slope

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Parent material:* Loamy till derived primarily from limestone and sandstone, with a component of schist, shale, or granitic rocks in some areas

#### Typical profile

*H1 - 0 to 4 inches:* silt loam

*H2 - 4 to 22 inches:* loam

*H3 - 22 to 80 inches:* gravelly loam

#### Properties and qualities

*Slope:* 0 to 3 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Poorly drained

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)

*Depth to water table:* About 0 inches

*Frequency of flooding:* None

*Frequency of ponding:* Occasional

*Calcium carbonate, maximum content:* 15 percent

*Available water supply, 0 to 60 inches:* Moderate (about 6.2 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 4w

*Hydrologic Soil Group:* C/D

*Ecological site:* F144AY039NY - Semi-Rich Wet Till Depressions

*Hydric soil rating:* Yes

### Minor Components

#### Sun, stony

*Percent of map unit:* 5 percent

*Landform:* Depressions

*Hydric soil rating:* Yes

#### Massena

*Percent of map unit:* 5 percent

*Hydric soil rating:* No

#### Canandaigua

*Percent of map unit:* 5 percent

*Landform:* Depressions

*Hydric soil rating:* Yes

## Custom Soil Resource Report

### **Palms**

*Percent of map unit:* 5 percent

*Landform:* Swamps, marshes

*Hydric soil rating:* Yes

# Soil Information for All Uses

---

## Suitabilities and Limitations for Use

The Suitabilities and Limitations for Use section includes various soil interpretations displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each interpretation.

## Land Classifications

Land Classifications are specified land use and management groupings that are assigned to soil areas because combinations of soil have similar behavior for specified practices. Most are based on soil properties and other factors that directly influence the specific use of the soil. Example classifications include ecological site classification, farmland classification, irrigated and nonirrigated land capability classification, and hydric rating.

## Hydric Rating by Map Unit

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

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

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

## Custom Soil Resource Report

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

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

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

### References:

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

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

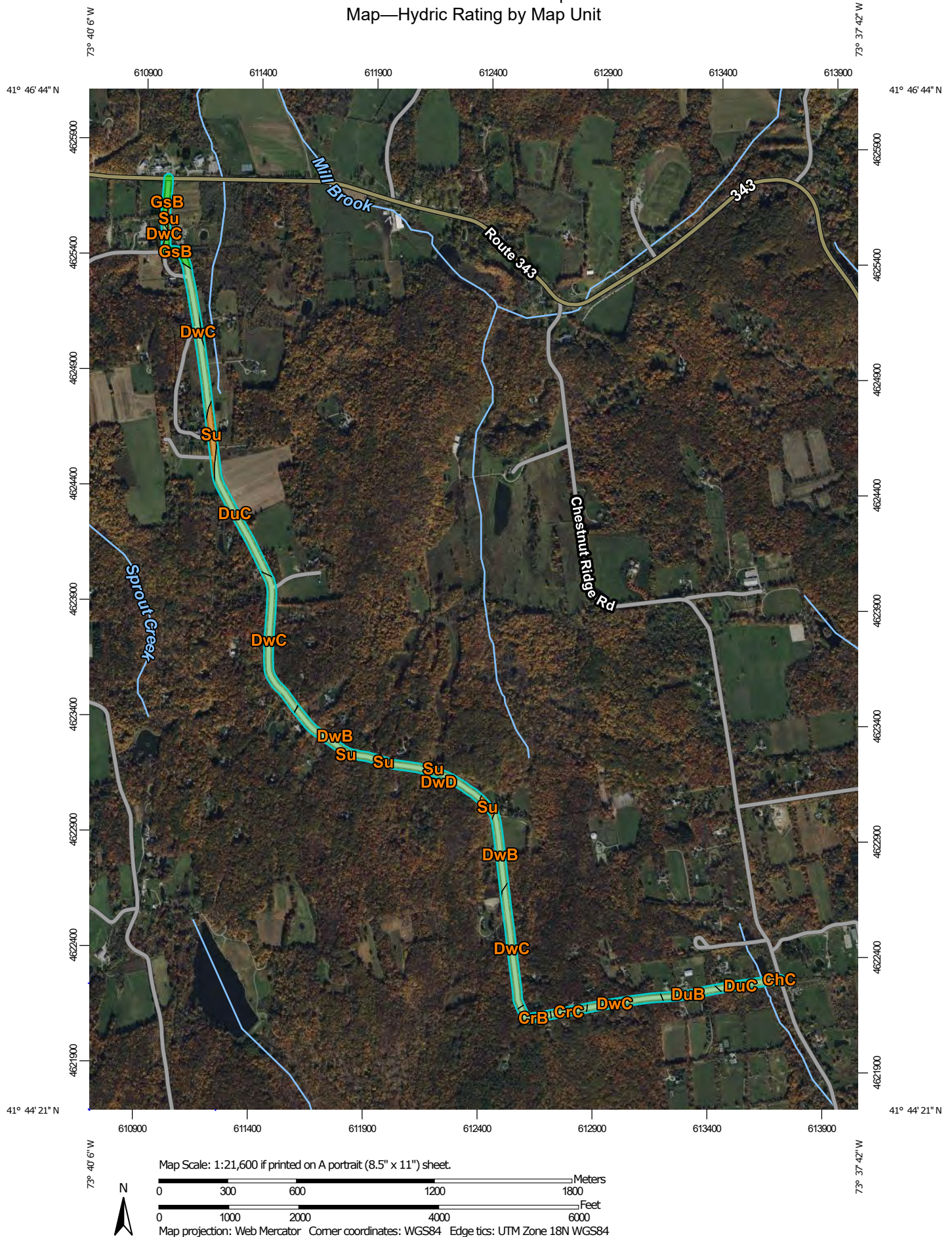
Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

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

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


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

# Custom Soil Resource Report Map—Hydric Rating by Map Unit









## MAP LEGEND

### Area of Interest (AOI)







 Area of Interest (AOI)

### Soils







#### Soil Rating Polygons

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


#### Soil Rating Lines

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






#### Soil Rating Points

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

### Water Features

 Streams and Canals

### Transportation

 Rails  
 Interstate Highways  
 US Routes  
 Major Roads  
 Local Roads

### Background

 Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

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

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL:  
 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: Dutchess County, New York  
 Survey Area Data: Version 19, Sep 10, 2022

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

Date(s) aerial images were photographed: Oct 21, 2022—Oct 27, 2022

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.

**Table—Hydric Rating by Map Unit**

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
ChC	Charlton fine sandy loam, 8 to 15 percent slopes	0	0.4	0.7%
CrB	Charlton-Chatfield complex, undulating, rocky	1	1.6	2.9%
CrC	Charlton-Chatfield complex, rolling, rocky	1	1.6	2.9%
DuB	Dutchess silt loam, 3 to 8 percent slopes	1	2.4	4.5%
DuC	Dutchess silt loam, 8 to 15 percent slopes	1	7.3	13.5%
DwB	Dutchess-Cardigan complex, undulating, rocky	1	7.1	13.1%
DwC	Dutchess-Cardigan complex, rolling, rocky	1	20.9	38.5%
DwD	Dutchess-Cardigan complex, hilly, rocky	10	4.1	7.6%
GsB	Georgia silt loam, 3 to 8 percent slopes	0	3.6	6.7%
Su	Sun silt loam	95	5.2	9.6%
<b>Totals for Area of Interest</b>			<b>54.2</b>	<b>100.0%</b>

**Rating Options—Hydric Rating by Map Unit***Aggregation Method: Percent Present**Component Percent Cutoff: None Specified**Tie-break Rule: Lower*

# References

---

- American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.
- American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.
- Federal Register. July 13, 1994. Changes in hydric soils of the United States.
- Federal Register. September 18, 2002. Hydric soils of the United States.
- Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.
- National Research Council. 1995. Wetlands: Characteristics and boundaries.
- Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_054262](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262)
- Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_053577](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577)
- Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_053580](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580)
- Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.
- United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.
- United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2\\_053374](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374)
- United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelpdb1043084>

## Custom Soil Resource Report

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2\\_054242](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242)

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_053624](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624)

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. [http://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/nrcs142p2\\_052290.pdf](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf)

**Attachment 2**  
**Corps Data Forms**

## WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 23.3211/Killearn Rd. City/County: Milbrook/Dutchess Sampling Date: Apr 4, 2023  
Applicant/Owner: Town of Washington State: NY Sampling Point: DP-A  
Investigator(s): J. Spain Section, Township, Range: \_\_\_\_\_  
Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 0  
Subregion (LRR or MLRA): LRR-R Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
Soil Map Unit Name: DuC - Dutchess silt loam NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)  
Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐  
Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	If yes, optional Wetland Site ID: <u>Wetland A</u>
Remarks: (Explain alternative procedures here or in a separate report.)          Emergent wetland area north and south side of Killearn Rd, surrounds mapped Class C stream	

### HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Microtopographic Relief (D4)
		<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b>		
Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): 9"	
Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): 6" (includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

**VEGETATION – Use scientific names of plants.**

 Sampling Point: DP-A

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Weeping Willow (<i>Salix babylonica</i>)</u>	<u>15</u>	<u>YES</u>	<u>FACW</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)  Total Number of Dominant Species Across All Strata: <u>4</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____	_____	-	-	
3. _____	_____	-	-	
4. _____	_____	-	-	
5. _____	_____	-	-	
6. _____	_____	-	-	
7. _____	_____	-	-	
		<u>15</u> = Total Cover		<b>Prevalence Index worksheet:</b> 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 = _____
Sapling/Shrub Stratum (Plot size: <u>15'</u> )				
1. <u>purple willow (<i>Salix purpurea</i>)</u>	<u>25</u>	<u>YES</u>	<u>FACW</u>	
2. _____	_____	-	-	
3. _____	_____	-	-	
4. _____	_____	-	-	
5. _____	_____	-	-	
6. _____	_____	-	-	
7. _____	_____	-	-	
		<u>25</u> = Total Cover		<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: <u>5'</u> )				
1. <u>Narrow-leaf cattail (<i>Typha angustifolia</i>)</u>	<u>20</u>	<u>YES</u>	<u>OBL</u>	
2. <u>Tussock Sedge (<i>Carex stricta</i>)</u>	<u>70</u>	<u>YES</u>	<u>OBL</u>	
3. <u>Purple loosestrife (<i>Lythrum salicaria</i>)</u>	<u>10</u>	<u>NO</u>	<u>OBL</u>	
4. _____	_____	-	-	
5. _____	_____	-	-	
6. _____	_____	-	-	
7. _____	_____	-	-	
8. _____	_____	-	-	
9. _____	_____	-	-	
10. _____	_____	-	-	
11. _____	_____	-	-	
12. _____	_____	-	-	
		<u>100</u> = Total Cover		<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.
Woody Vine Stratum (Plot size: <u>30'</u> )				
1. <u>N/A</u>	_____	-	-	
2. _____	_____	-	-	
3. _____	_____	-	-	
4. _____	_____	-	-	
		_____ = Total Cover		
Remarks: (Include photo numbers here or on a separate sheet.)          				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

## SOIL

Sampling Point: DP-A

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

Depth (inches)	Matrix		Redox Features		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-4	10YR 2/2	100			-	-	silt loam	
4-7	10YR 3/2	100			-	-	silt loam	
7-14	10YR 3/2	80	10YR 5/6	20	C	M	silt loam	
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		

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

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

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

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

<sup>3</sup>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 ☐

Remarks:

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 23.3211/Killbuck Rd. City/County: Milbrook/Dutchess Sampling Date: Apr 4, 2023  
 Applicant/Owner: Town of Washington State: NY Sampling Point: DP-UPL-1  
 Investigator(s): J. Spain Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave Slope (%): 0  
 Subregion (LRR or MLRA): LRR-R Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: DuC—Dutchess silt loam NWI classification: UPL

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)  
 Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐  
 Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Remarks: (Explain alternative procedures here or in a separate report.)  upland forested area adjacent to Wetland A	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

Sampling Point: DP-UPL-1

<b>Tree Stratum</b> (Plot size: <u>30'</u> )			Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Red Maple</u>			<u>45</u>	YES	FAC
2. <u>Red oak</u>			<u>25</u>	YES	FACU
3. <u>yellow birch</u>			<u>10</u>	NO	FAC
4. _____			_____	-	-
5. _____			_____	-	-
6. _____			_____	-	-
7. _____			_____	-	-
			<u>70</u>	= Total Cover	
<b>Sapling/Shrub Stratum</b> (Plot size: <u>15'</u> )					
1. <u>Morrow's Honeysuckle (Lonicera morrowii)</u>			<u>50</u>	YES	FACU
2. _____			_____	-	-
3. _____			_____	-	-
4. _____			_____	-	-
5. _____			_____	-	-
6. _____			_____	-	-
7. _____			_____	-	-
			<u>50</u>	= Total Cover	
<b>Herb Stratum</b> (Plot size: <u>5'</u> )					
1. <u>N/A</u>			_____	-	-
2. _____			_____	-	-
3. _____			_____	-	-
4. _____			_____	-	-
5. _____			_____	-	-
6. _____			_____	-	-
7. _____			_____	-	-
8. _____			_____	-	-
9. _____			_____	-	-
10. _____			_____	-	-
11. _____			_____	-	-
12. _____			_____	-	-
			_____	= Total Cover	
<b>Woody Vine Stratum</b> (Plot size: <u>30'</u> )					
1. <u>N/A</u>			_____	-	-
2. _____			_____	-	-
3. _____			_____	-	-
4. _____			_____	-	-
			_____	= Total Cover	
Remarks: (Include photo numbers here or on a separate sheet.)					

<b>Dominance Test worksheet:</b>	
Number of Dominant Species That Are OBL, FACW, or FAC:	<u>1</u> (A)
Total Number of Dominant Species Across All Strata:	<u>3</u> (B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>33</u> (A/B)
<b>Prevalence Index worksheet:</b>	
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 = _____	
<b>Hydrophytic Vegetation Indicators:</b>	
<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation	
<input type="checkbox"/> 2 - Dominance Test is >50%	
<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>	
<input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)	
<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
<b>Definitions of Vegetation Strata:</b>	
<b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.	
<b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.	
<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.	
<b>Woody vines</b> – All woody vines greater than 3.28 ft in height.	
<b>Hydrophytic Vegetation Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

## SOIL

Sampling Point: DP-UPL-1

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

Depth (inches)	Matrix		Redox Features		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-2	10YR 2/2	100			-	-	silt loam	
2-10	10YR 3/2	100			-	-	silt loam	
10-14	10Yr 3/3	100			-	-	silt loam	
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.<sup>2</sup>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<sup>3</sup>:**

- ☐ 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, M)  
☐ Polyvalue Below Surface (S8) (LRR K, L)  
☐ Thin Dark Surface (S9) (LRR K, L)  
☐ Iron-Manganese Masses (F12) (LRR K, L, R)  
☐ Piedmont Floodplain Soils (F19) (MLRA 149B)  
☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  
☐ Red Parent Material (F21)  
☐ Very Shallow Dark Surface (TF12)  
☐ Other (Explain in Remarks)

<sup>3</sup>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 ☒

Remarks:

## WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 23.3211/Killbuck Rd. City/County: Milbrook/Dutchess Sampling Date: Apr 4, 2023  
Applicant/Owner: Town of Washington State: NY Sampling Point: DP-B  
Investigator(s): J. Spain Section, Township, Range: \_\_\_\_\_  
Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 0  
Subregion (LRR or MLRA): LRR-R Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
Soil Map Unit Name: DwC - Dutchess-Cardigan complex NWI classification: PSS  
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)  
Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐  
Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	If yes, optional Wetland Site ID: <u>Wetland B</u>
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Remarks: (Explain alternative procedures here or in a separate report.)          PSS/Vernal pool wetland west side of road	

### HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		<input type="checkbox"/> Surface Soil Cracks (B6)
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> High Water Table (A2)	<input checked="" type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Moss Trim Lines (B16)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Microtopographic Relief (D4)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b>		
Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>6-8"</u>	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0"</u>		
Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0"</u> (includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:          Faerie Shrimp (Branchinecta lynchi) - obligate vernal pool species were observed		

**VEGETATION – Use scientific names of plants.**

 Sampling Point: DP-B

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>N/A</u>		-	-	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)  Total Number of Dominant Species Across All Strata: <u>2</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____		-	-	
3. _____		-	-	
4. _____		-	-	
5. _____		-	-	
6. _____		-	-	
7. _____		-	-	
		_____ = Total Cover		<b>Prevalence Index worksheet:</b> 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 = _____
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u> )</b>				
1. <u>Speckled alder (Alnus incana)</u>	<u>50</u>	<u>YES</u>	<u>FACW</u>	
2. _____		-	-	
3. _____		-	-	
4. _____		-	-	
5. _____		-	-	
6. _____		-	-	
7. _____		-	-	
		<u>50</u> = Total Cover		<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<b>Herb Stratum (Plot size: <u>5'</u> )</b>				
1. <u>Tussock sedge (Carex stricta)</u>	<u>70</u>	<u>YES</u>	<u>OBL</u>	
2. _____		-	-	
3. _____		-	-	
4. _____		-	-	
5. _____		-	-	
6. _____		-	-	
7. _____		-	-	
8. _____		-	-	
9. _____		-	-	
10. _____		-	-	
11. _____		-	-	
12. _____		-	-	
		<u>70</u> = Total Cover		<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.
<b>Woody Vine Stratum (Plot size: <u>30'</u> )</b>				
1. <u>N/A</u>		-	-	
2. _____		-	-	
3. _____		-	-	
4. _____		-	-	
		_____ = Total Cover		
Remarks: (Include photo numbers here or on a separate sheet.)				

**Hydrophytic Vegetation Present?**      Yes ☒      No ☐

## SOIL

Sampling Point: DP-B

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

[illegible]

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

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

### Hydric Soil Indicators:

- |                          |   |                                     |
|--------------------------|---|-------------------------------------|
| <input type="checkbox"/> | Histosol (A1)                                 | <input type="checkbox"/>            |
| <input type="checkbox"/> | Histic Epipedon (A2)                          | <input type="checkbox"/>            |
| <input type="checkbox"/> | Black Histic (A3)                             | <input type="checkbox"/>            |
| <input type="checkbox"/> | Hydrogen Sulfide (A4)                         | <input type="checkbox"/>            |
| <input type="checkbox"/> | Stratified Layers (A5)                        | <input type="checkbox"/>            |
| <input type="checkbox"/> | Depleted Below Dark Surface (A11)             | <input type="checkbox"/>            |
| <input type="checkbox"/> | Thick Dark Surface (A12)                      | <input checked="" type="checkbox"/> |
| <input type="checkbox"/> | Sandy Mucky Mineral (S1)                      | <input type="checkbox"/>            |
| <input type="checkbox"/> | Sandy Gleyed Matrix (S4)                      | <input type="checkbox"/>            |
| <input type="checkbox"/> | Sandy Redox (S5)                              | <input type="checkbox"/>            |
| <input type="checkbox"/> | Stripped Matrix (S6)                          | <input type="checkbox"/>            |
| <input type="checkbox"/> | Dark Surface (S7) ( <b>LRR R, MLRA 149B</b> ) | <input type="checkbox"/>            |

- ☐ 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<sup>3</sup>:

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

<sup>3</sup>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 ☐

Remarks:



**VEGETATION – Use scientific names of plants.**

 Sampling Point: DP-UPL-2

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Red oak (Quercus rubra)</u>	<u>60</u>	YES	FACU	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>4</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>25</u> (A/B)
2. <u>White ash (Fraxinus americana)</u>	<u>30</u>	YES	FACU	
3. _____	_____	-	-	
4. _____	_____	-	-	
5. _____	_____	-	-	
6. _____	_____	-	-	
7. _____	_____	-	-	
		<u>90</u>	= Total Cover	<b>Prevalence Index worksheet:</b> 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 = _____
Sapling/Shrub Stratum (Plot size: <u>15'</u> )				
1. <u>Staghorn sumac (Rhus typhina)</u>	<u>30</u>	YES	FACU	
2. <u>Buckthorn (Rhamnus cathartica)</u>	<u>20</u>	YES	FAC	
3. _____	_____	-	-	
4. _____	_____	-	-	
5. _____	_____	-	-	
6. _____	_____	-	-	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7. _____	_____	-	-	
		<u>50</u>	= Total Cover	
Herb Stratum (Plot size: <u>5'</u> )				
1. _____	_____	-	-	
2. _____	_____	-	-	
3. _____	_____	-	-	
4. _____	_____	-	-	
5. _____	_____	-	-	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.
6. _____	_____	-	-	
7. _____	_____	-	-	
8. _____	_____	-	-	
9. _____	_____	-	-	
10. _____	_____	-	-	
11. _____	_____	-	-	
12. _____	_____	-	-	<b>Hydrophytic Vegetation Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
		_____	= Total Cover	
Woody Vine Stratum (Plot size: <u>30'</u> )				
1. <u>N/A</u>	_____	-	-	
2. _____	_____	-	-	
3. _____	_____	-	-	
4. _____	_____	-	-	
		_____	= Total Cover	
Remarks: (Include photo numbers here or on a separate sheet.)				

## SOIL

Sampling Point: DP-UPL-2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features			Loc <sup>2</sup>	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>			
0-6	10YR 3/3	100			-	-	silt loam	
6-14	10YR 3/4	100			-	-	silt loam	
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		

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

<sup>2</sup>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<sup>3</sup>:**

☐ 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, M**)  
☐ Polyvalue Below Surface (S8) (**LRR K, L**)  
☐ Thin Dark Surface (S9) (**LRR K, L**)  
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)  
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)  
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)  
☐ Red Parent Material (F21)  
☐ Very Shallow Dark Surface (TF12)  
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed): <div>Type: _____ Depth (inches): _____</div>	Hydric Soil Present?    Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
---	---

## WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 23.3211/Killbuck Rd. City/County: Milbrook/Dutchess Sampling Date: Apr 5, 2023  
Applicant/Owner: Town of Washington State: NY Sampling Point: DP-C  
Investigator(s): J. Spain Section, Township, Range: \_\_\_\_\_  
Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 0  
Subregion (LRR or MLRA): LRR-R Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
Soil Map Unit Name: Su - Sun silt loam NWI classification: PFO

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)  
Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐  
Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	If yes, optional Wetland Site ID: <u>Wetland C</u>
Remarks: (Explain alternative procedures here or in a separate report.)          Forested/vernal pool wetland on east/west sides of road, connect via culvert	

### HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input checked="" type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Microtopographic Relief (D4)
		<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b>		
Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): 8-12"	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): 0"	
Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): 0" (includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

**VEGETATION – Use scientific names of plants.**

 Sampling Point: DP-C

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Red oak (Quercus rubra)</u>	<u>10</u>	<u>YES</u>	<u>FACU</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)  Total Number of Dominant Species Across All Strata: <u>4</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75</u> (A/B)														
2. <u>Red maple (Acer rubrum)</u>	<u>10</u>	<u>YES</u>	<u>FAC</u>															
3. _____	_____	<u>-</u>	<u>-</u>															
4. _____	_____	<u>-</u>	<u>-</u>															
5. _____	_____	<u>-</u>	<u>-</u>															
6. _____	_____	<u>-</u>	<u>-</u>															
7. _____	_____	<u>-</u>	<u>-</u>															
		<u>20</u>	= Total Cover															
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u> )</b>																		
1. <u>dwarf honeysuckle (Lonicera xylosteum)</u>	<u>30</u>	<u>YES</u>	<u>FACW</u>	<b>Prevalence Index worksheet:</b> <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species _____</td> <td>x 1 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x 2 = _____</td> </tr> <tr> <td>FAC species _____</td> <td>x 3 = _____</td> </tr> <tr> <td>FACU species _____</td> <td>x 4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x 5 = _____</td> </tr> <tr> <td>Column Totals: _____ (A)</td> <td>_____ (B)</td> </tr> </table> Prevalence Index = B/A = _____	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)
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)																	
2. _____	_____	<u>-</u>	<u>-</u>															
3. _____	_____	<u>-</u>	<u>-</u>															
4. _____	_____	<u>-</u>	<u>-</u>															
5. _____	_____	<u>-</u>	<u>-</u>															
6. _____	_____	<u>-</u>	<u>-</u>															
7. _____	_____	<u>-</u>	<u>-</u>															
		<u>30</u>	= Total Cover															
<b>Herb Stratum (Plot size: <u>5'</u> )</b>																		
1. <u>skunk cabbage (Symplocarpus foetidus)</u>	<u>20</u>	<u>YES</u>	<u>OBL</u>	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. _____	_____	<u>-</u>	<u>-</u>															
3. _____	_____	<u>-</u>	<u>-</u>															
4. _____	_____	<u>-</u>	<u>-</u>															
5. _____	_____	<u>-</u>	<u>-</u>															
6. _____	_____	<u>-</u>	<u>-</u>															
7. _____	_____	<u>-</u>	<u>-</u>															
8. _____	_____	<u>-</u>	<u>-</u>															
9. _____	_____	<u>-</u>	<u>-</u>															
10. _____	_____	<u>-</u>	<u>-</u>															
11. _____	_____	<u>-</u>	<u>-</u>															
12. _____	_____	<u>-</u>	<u>-</u>															
		<u>20</u>	= Total Cover															
<b>Woody Vine Stratum (Plot size: <u>30'</u> )</b>																		
1. <u>N/A</u>	_____	<u>-</u>	<u>-</u>	<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>														
2. _____	_____	<u>-</u>	<u>-</u>															
3. _____	_____	<u>-</u>	<u>-</u>															
4. _____	_____	<u>-</u>	<u>-</u>															
		_____	= Total Cover															
Remarks: (Include photo numbers here or on a separate sheet.)          																		

## SOIL

Sampling Point: DP-C

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

Depth (inches)	Matrix		Redox Features		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-4	10YR 2/1	100			-	-	muck	
4-9	10YR 3/2	100			-	-	silt loam	
9-16	1-YR 5/1	85	10YR 5/4	15	- C	- M	silt loam	
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

## Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils<sup>3</sup>:

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

<sup>3</sup>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 ☐

Remarks:

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 23.3211/Killbuck Rd. City/County: Milbrook/Dutchess Sampling Date: Apr 5, 2023  
 Applicant/Owner: Town of Washington State: NY Sampling Point: DP-UPL-3  
 Investigator(s): J. Spain Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave Slope (%): 5  
 Subregion (LRR or MLRA): LRR-R Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: Su—Sun silt loam NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)  
 Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐  
 Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.)   Upland hillslope adjacent to Wetland C	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

**VEGETATION – Use scientific names of plants.**

 Sampling Point: DP-UPL-3

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>N/A</u>		-	-	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)  Total Number of Dominant Species Across All Strata: <u>1</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
2. _____		-	-	
3. _____		-	-	
4. _____		-	-	
5. _____		-	-	
6. _____		-	-	
7. _____		-	-	
		_____ = Total Cover		<b>Prevalence Index worksheet:</b> <div style="display: flex; justify-content: space-between;"> <span>Total % Cover of:</span> <span>Multiply by:</span> </div> 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 = _____
Sapling/Shrub Stratum (Plot size: <u>15'</u> )				
1. <u>N/A</u>		-	-	
2. _____		-	-	
3. _____		-	-	
4. _____		-	-	
5. _____		-	-	
6. _____		-	-	
7. _____		-	-	
		_____ = Total Cover		
Herb Stratum (Plot size: <u>5'</u> )				
1. <u>upland grasses (Poa sp.)</u>	<u>80</u>	<u>YES</u>	<u>FACU</u>	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>reed canary grass (Phalaris arundinacea)</u>	<u>10</u>	<u>NO</u>	<u>FACW</u>	
3. _____		-	-	
4. _____		-	-	
5. _____		-	-	
6. _____		-	-	
7. _____		-	-	
8. _____		-	-	
9. _____		-	-	
10. _____		-	-	
11. _____		-	-	
12. _____		-	-	
		<u>90</u> = Total Cover		
Woody Vine Stratum (Plot size: <u>30'</u> )				
1. <u>N/A</u>		-	-	<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. _____		-	-	
3. _____		-	-	
4. _____		-	-	
		_____ = Total Cover		
Remarks: (Include photo numbers here or on a separate sheet.)				

## SOIL

Sampling Point: DP-UPL-3

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

[illegible]<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

### Hydric Soil Indicators:

- |                          |                                      |  |
|--------------------------|--------------------------------------|--|
| <input type="checkbox"/> | Histosol (A1)                        |  |
| <input type="checkbox"/> | Histic Epipedon (A2)                 |  |
| <input type="checkbox"/> | Black Histic (A3)                    |  |
| <input type="checkbox"/> | Hydrogen Sulfide (A4)                |  |
| <input type="checkbox"/> | Stratified Layers (A5)               |  |
| <input type="checkbox"/> | Depleted Below Dark Surface (A11)    |  |
| <input type="checkbox"/> | Thick Dark Surface (A12)             |  |
| <input type="checkbox"/> | Sandy Mucky Mineral (S1)             |  |
| <input type="checkbox"/> | Sandy Gleyed Matrix (S4)             |  |
| <input type="checkbox"/> | Sandy Redox (S5)                     |  |
| <input type="checkbox"/> | Striped Matrix (S6)                  |  |
| <input type="checkbox"/> | 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<sup>3</sup>:

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

<sup>3</sup>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 ☒

Remarks:

## WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 23.3211/Killbarn Rd. City/County: Milbrook/Dutchess Sampling Date: Apr 5, 2023  
Applicant/Owner: Town of Washington State: NY Sampling Point: DP-D  
Investigator(s): J. Spain Section, Township, Range: \_\_\_\_\_  
Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 0  
Subregion (LRR or MLRA): LRR-R Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
Soil Map Unit Name: Su - Sun silt loam NWI classification: PFO

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)  
Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐  
Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	If yes, optional Wetland Site ID: <u>Wetland D</u>
Remarks: (Explain alternative procedures here or in a separate report.)          Forested/vernal pond wetland on west side of Killbarn rd	

### HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input checked="" type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Microtopographic Relief (D4)
		<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b>		
Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>2-4"</u>	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0"</u>		
Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0"</u> (includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

**VEGETATION – Use scientific names of plants.**

 Sampling Point: DP-D

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Red maple (Acer rubrum)</u>	<u>30</u>	<u>YES</u>	<u>FAC</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)  Total Number of Dominant Species Across All Strata: <u>5</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>80%</u> (A/B)
2. <u>Red oak (Quercus rubra)</u>	<u>10</u>	<u>YES</u>	<u>FACU</u>	
3. _____	_____	<u>-</u>	<u>-</u>	
4. _____	_____	<u>-</u>	<u>-</u>	
5. _____	_____	<u>-</u>	<u>-</u>	
6. _____	_____	<u>-</u>	<u>-</u>	
7. _____	_____	<u>-</u>	<u>-</u>	
<u>40</u> = Total Cover				
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u> )</b>				
1. <u>Dwarf honeysuckle</u>	<u>50</u>	<u>YES</u>	<u>FACW</u>	<b>Prevalence Index worksheet:</b> 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 = _____
2. _____	_____	<u>-</u>	<u>-</u>	
3. _____	_____	<u>-</u>	<u>-</u>	
4. _____	_____	<u>-</u>	<u>-</u>	
5. _____	_____	<u>-</u>	<u>-</u>	
6. _____	_____	<u>-</u>	<u>-</u>	
7. _____	_____	<u>-</u>	<u>-</u>	
<u>50</u> = Total Cover				
<b>Herb Stratum (Plot size: <u>5'</u> )</b>				
1. <u>tussock sedge (Carex stricta)</u>	<u>30</u>	<u>YES</u>	<u>OBL</u>	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Skunk cabbage (Symplocarpus foetidus)</u>	<u>15</u>	<u>YES</u>	<u>OBL</u>	
3. _____	_____	<u>-</u>	<u>-</u>	
4. _____	_____	<u>-</u>	<u>-</u>	
5. _____	_____	<u>-</u>	<u>-</u>	
6. _____	_____	<u>-</u>	<u>-</u>	
7. _____	_____	<u>-</u>	<u>-</u>	
8. _____	_____	<u>-</u>	<u>-</u>	
9. _____	_____	<u>-</u>	<u>-</u>	
10. _____	_____	<u>-</u>	<u>-</u>	
11. _____	_____	<u>-</u>	<u>-</u>	
12. _____	_____	<u>-</u>	<u>-</u>	
<u>45</u> = Total Cover				
<b>Woody Vine Stratum (Plot size: <u>30'</u> )</b>				
1. <u>N/A</u>	_____	<u>-</u>	<u>-</u>	<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. _____	_____	<u>-</u>	<u>-</u>	
3. _____	_____	<u>-</u>	<u>-</u>	
4. _____	_____	<u>-</u>	<u>-</u>	
_____ = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.)				

## SOIL

Sampling Point: DP-D

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

[illegible]

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

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

### Hydric Soil Indicators:

- |                          |                                      |
|--------------------------|--------------------------------------|
| <input type="checkbox"/> | Histosol (A1)                        |
| <input type="checkbox"/> | Histic Epipedon (A2)                 |
| <input type="checkbox"/> | Black Histic (A3)                    |
| <input type="checkbox"/> | Hydrogen Sulfide (A4)                |
| <input type="checkbox"/> | Stratified Layers (A5)               |
| <input type="checkbox"/> | Depleted Below Dark Surface (A11)    |
| <input type="checkbox"/> | Thick Dark Surface (A12)             |
| <input type="checkbox"/> | Sandy Mucky Mineral (S1)             |
| <input type="checkbox"/> | Sandy Gleyed Matrix (S4)             |
| <input type="checkbox"/> | Sandy Redox (S5)                     |
| <input type="checkbox"/> | Stripped Matrix (S6)                 |
| <input type="checkbox"/> | Dark Surface (S7) (LRR R, MLRA 149B) |

- ☐ 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<sup>3</sup>:

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

<sup>3</sup>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 ☐

Remarks:

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 23.3211/Killbuck Rd. City/County: Milbrook/Dutchess Sampling Date: Apr 5, 2023  
 Applicant/Owner: Town of Washington State: NY Sampling Point: DP-UPL-4  
 Investigator(s): J. Spain Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): 0  
 Subregion (LRR or MLRA): LRR-R Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: Su—Sun silt loam NWI classification: UPL

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)  
 Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐  
 Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Remarks: (Explain alternative procedures here or in a separate report.)   Upland forested area adjacent to wetland D	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

**VEGETATION – Use scientific names of plants.**

 Sampling Point: DP-UPL-4

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Red oak (Quercus rubra)</u>	<u>50</u>	<u>YES</u>	<u>FACU</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>5</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>20</u> (A/B)
2. <u>Red maple (Acer rubrum)</u>	<u>30</u>	<u>YES</u>	<u>FAC</u>	
3. <u>White ash (Fraxinus americana)</u>	<u>20</u>	<u>YES</u>	<u>FACU</u>	
4. _____	_____	-	-	
5. _____	_____	-	-	
6. _____	_____	-	-	
7. _____	_____	-	-	
		<u>100</u>	= Total Cover	<b>Prevalence Index worksheet:</b> 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 = _____
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u> )</b>				
1. <u>Morrow's honeysuckle (Lonicera morrowii)</u>	<u>30</u>	<u>YES</u>	<u>FACU</u>	
2. <u>Red oak</u>	<u>15</u>	<u>YES</u>	<u>FACU</u>	
3. _____	_____	-	-	
4. _____	_____	-	-	
5. _____	_____	-	-	
6. _____	_____	-	-	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7. _____	_____	-	-	
		<u>45</u>	= Total Cover	
<b>Herb Stratum (Plot size: <u>5'</u> )</b>				
1. <u>N/A</u>	_____	-	-	
2. _____	_____	-	-	
3. _____	_____	-	-	
4. _____	_____	-	-	
5. _____	_____	-	-	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.
6. _____	_____	-	-	
7. _____	_____	-	-	
8. _____	_____	-	-	
9. _____	_____	-	-	
10. _____	_____	-	-	
11. _____	_____	-	-	
12. _____	_____	-	-	<b>Hydrophytic Vegetation Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
		_____	= Total Cover	
<b>Woody Vine Stratum (Plot size: <u>30'</u> )</b>				
1. <u>N/A</u>	_____	-	-	
2. _____	_____	-	-	
3. _____	_____	-	-	
4. _____	_____	-	-	
		_____	= Total Cover	
Remarks: (Include photo numbers here or on a separate sheet.)				

## SOIL

Sampling Point: DP-UPL-4

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

Depth (inches)	Matrix		Redox Features		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-3	10YR 2/2	100			-	-	silt loam	
3-8	10Yr 3/3	100			-	-	silt loam	
8-16	10YR 3/4	100			-	-	silt loam	
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.<sup>2</sup>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<sup>3</sup>:**

- ☐ 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, M)  
☐ Polyvalue Below Surface (S8) (LRR K, L)  
☐ Thin Dark Surface (S9) (LRR K, L)  
☐ Iron-Manganese Masses (F12) (LRR K, L, R)  
☐ Piedmont Floodplain Soils (F19) (MLRA 149B)  
☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  
☐ Red Parent Material (F21)  
☐ Very Shallow Dark Surface (TF12)  
☐ Other (Explain in Remarks)

<sup>3</sup>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 ☒

Remarks:

## WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 23.3211/Killbuck Rd. City/County: Milbrook/Dutchess Sampling Date: Apr 5, 2023  
Applicant/Owner: Town of Washington State: NY Sampling Point: DP-E  
Investigator(s): J. Spain Section, Township, Range: \_\_\_\_\_  
Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 0  
Subregion (LRR or MLRA): LRR-R Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
Soil Map Unit Name: DwC - Dutchess-Cardigan complex NWI classification: PEM  
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)  
Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐  
Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	If yes, optional Wetland Site ID: <u>Wetland A</u>
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Remarks: (Explain alternative procedures here or in a separate report.)          PEM cattail marsh on west side of road	

### HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		<input type="checkbox"/> Surface Soil Cracks (B6)
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Moss Trim Lines (B16)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Microtopographic Relief (D4)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b>		Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): 12"		
Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): 0"		Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:          Remarks:
Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): 0" (includes capillary fringe)		

Sampling Point: DP-E

Tree Stratum (Plot size: 30')			Absolute % Cover	Dominant Species?	Indicator Status
1.	N/A			-	-
2.				-	-
3.				-	-
4.				-	-
5.				-	-
6.				-	-
7.				-	-
			_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 15')			Absolute % Cover	Dominant Species?	Indicator Status
1.	N/A			-	-
2.				-	-
3.				-	-
4.				-	-
5.				-	-
6.				-	-
7.				-	-
			_____ = Total Cover		
Herb Stratum (Plot size: 5')			Absolute % Cover	Dominant Species?	Indicator Status
1.	Narrow leaf cattail (Typha angustifolia)		90	YES	OBL
2.				-	-
3.				-	-
4.				-	-
5.				-	-
6.				-	-
7.				-	-
8.				-	-
9.				-	-
10.				-	-
11.				-	-
12.				-	-
			90 _____ = Total Cover		
Woody Vine Stratum (Plot size: 30')			Absolute % Cover	Dominant Species?	Indicator Status
1.	N/A			-	-
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:**  
☐ 1 - Rapid Test for Hydrophytic Vegetation  
☒ 2 - Dominance Test is >50%  
☐ 3 - Prevalence Index is ≤3.0<sup>1</sup>  
☐ 4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
☐ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  
  
<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Vegetation Strata:**  
  
**Tree** – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  
  
**Sapling/shrub** – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  
  
**Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  
  
**Woody vines** – All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?** Yes ☒ No ☐

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

## SOIL

Sampling Point: DP-E

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

[illegible]<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

### Hydric Soil Indicators:

- |                                     |                                      |                                     |
|-------------------------------------|--------------------------------------|-------------------------------------|
| <input type="checkbox"/>            | Histosol (A1)                        | <input type="checkbox"/>            |
| <input type="checkbox"/>            | Histic Epipedon (A2)                 | <input type="checkbox"/>            |
| <input checked="" type="checkbox"/> | Black Histic (A3)                    | <input type="checkbox"/>            |
| <input type="checkbox"/>            | Hydrogen Sulfide (A4)                | <input type="checkbox"/>            |
| <input type="checkbox"/>            | Stratified Layers (A5)               | <input type="checkbox"/>            |
| <input type="checkbox"/>            | Depleted Below Dark Surface (A11)    | <input type="checkbox"/>            |
| <input type="checkbox"/>            | Thick Dark Surface (A12)             | <input checked="" type="checkbox"/> |
| <input type="checkbox"/>            | Sandy Mucky Mineral (S1)             | <input type="checkbox"/>            |
| <input type="checkbox"/>            | Sandy Gleyed Matrix (S4)             | <input type="checkbox"/>            |
| <input type="checkbox"/>            | Sandy Redox (S5)                     | <input type="checkbox"/>            |
| <input type="checkbox"/>            | Stripped Matrix (S6)                 | <input type="checkbox"/>            |
| <input type="checkbox"/>            | Dark Surface (S7) (LRR R, MLRA 149B) | <input type="checkbox"/>            |

- ☐ 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<sup>3</sup>:

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

<sup>3</sup>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 ☐

Remarks:

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 23.3211/Killbuck Rd. City/County: Milbrook/Dutchess Sampling Date: Apr 5, 2023  
 Applicant/Owner: Town of Washington State: NY Sampling Point: DP-UPL-5  
 Investigator(s): J. Spain Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): flat Local relief (concave, convex, none): concave Slope (%): 0  
 Subregion (LRR or MLRA): LRR-R Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: Su—Sun silt loam NWI classification: UPL

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)  
 Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐  
 Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Remarks: (Explain alternative procedures here or in a separate report.)   Upland forested area adjacent to Wetland E	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

**VEGETATION – Use scientific names of plants.**

 Sampling Point: DP-UPL-5

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Red maple (Acer rubrum)</u>	<u>50</u>	YES	FAC	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>3</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33</u> (A/B)
2. <u>Red Oak (Quercus rubrum)</u>	<u>40</u>	YES	FACU	
3. _____	_____	-	-	
4. _____	_____	-	-	
5. _____	_____	-	-	
6. _____	_____	-	-	
7. _____	_____	-	-	
		<u>90</u>	= Total Cover	<b>Prevalence Index worksheet:</b> 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 = _____
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u> )</b>				
1. <u>Morrow's Honeysuckle (Lonicera morrowii)</u>	<u>20</u>	YES	FACU	
2. _____	_____	-	-	
3. _____	_____	-	-	
4. _____	_____	-	-	
5. _____	_____	-	-	
6. _____	_____	-	-	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7. _____	_____	-	-	
		<u>20</u>	= Total Cover	
<b>Herb Stratum (Plot size: <u>5'</u> )</b>				
1. _____	_____	-	-	
2. _____	_____	-	-	
3. _____	_____	-	-	
4. _____	_____	-	-	
5. _____	_____	-	-	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.
6. _____	_____	-	-	
7. _____	_____	-	-	
8. _____	_____	-	-	
9. _____	_____	-	-	
10. _____	_____	-	-	
11. _____	_____	-	-	
12. _____	_____	-	-	<b>Hydrophytic Vegetation Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
		_____ = Total Cover		
<b>Woody Vine Stratum (Plot size: <u>30'</u> )</b>				
1. <u>N/A</u>	_____	-	-	
2. _____	_____	-	-	
3. _____	_____	-	-	
4. _____	_____	-	-	
		_____ = Total Cover		
Remarks: (Include photo numbers here or on a separate sheet.)				

## SOIL

Sampling Point: DP-UPL-5

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

[illegible]<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- |                          |                                      |                          |
|--------------------------|--------------------------------------|--------------------------|
| <input type="checkbox"/> | Histosol (A1)                        | <input type="checkbox"/> |
| <input type="checkbox"/> | Histic Epipedon (A2)                 | <input type="checkbox"/> |
| <input type="checkbox"/> | Black Histic (A3)                    | <input type="checkbox"/> |
| <input type="checkbox"/> | Hydrogen Sulfide (A4)                | <input type="checkbox"/> |
| <input type="checkbox"/> | Stratified Layers (A5)               | <input type="checkbox"/> |
| <input type="checkbox"/> | Depleted Below Dark Surface (A11)    | <input type="checkbox"/> |
| <input type="checkbox"/> | Thick Dark Surface (A12)             | <input type="checkbox"/> |
| <input type="checkbox"/> | Sandy Mucky Mineral (S1)             | <input type="checkbox"/> |
| <input type="checkbox"/> | Sandy Gleyed Matrix (S4)             | <input type="checkbox"/> |
| <input type="checkbox"/> | Sandy Redox (S5)                     | <input type="checkbox"/> |
| <input type="checkbox"/> | Striped Matrix (S6)                  | <input type="checkbox"/> |
| <input type="checkbox"/> | Dark Surface (S7) (LRR R, MLRA 149B) | <input type="checkbox"/> |

- ☐ 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<sup>3</sup>:

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

<sup>3</sup>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 ☒

Remarks:

## WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 23.3211/Killearn Rd. City/County: Milbrook/Dutchess Sampling Date: Apr 6, 2023  
Applicant/Owner: Town of Washington State: NY Sampling Point: DP-F  
Investigator(s): J. Spain Section, Township, Range: \_\_\_\_\_  
Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 0  
Subregion (LRR or MLRA): LRR-R Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
Soil Map Unit Name: DwC - Dutchess-Cardigan complex NWI classification: PSS  
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)  
Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐  
Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	If yes, optional Wetland Site ID: <u>Wetland F</u>
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

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

Emergent wetland, linear depression along east side of Killearn Rd,

### HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Microtopographic Relief (D4)
		<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b>		
Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	
Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches):	
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

**VEGETATION – Use scientific names of plants.**

 Sampling Point: DP-F

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>N/A</u>		-	-	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>1</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)														
2. _____		-	-															
3. _____		-	-															
4. _____		-	-															
5. _____		-	-															
6. _____		-	-															
7. _____		-	-															
		_____ = Total Cover		<b>Prevalence Index worksheet:</b> <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species _____</td> <td>x 1 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x 2 = _____</td> </tr> <tr> <td>FAC species _____</td> <td>x 3 = _____</td> </tr> <tr> <td>FACU species _____</td> <td>x 4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x 5 = _____</td> </tr> <tr> <td>Column Totals: _____ (A)</td> <td>_____ (B)</td> </tr> </table> Prevalence Index = B/A = _____	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)
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)																	
		_____ = Total Cover																
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u> )</b>																		
1. <u>N/A</u>		-	-															
2. _____		-	-															
3. _____		-	-															
4. _____		-	-															
5. _____		-	-															
6. _____		-	-															
7. _____		-	-															
		_____ = Total Cover																
<b>Herb Stratum (Plot size: <u>5'</u> )</b>																		
1. <u>Narrow leaf cattail (Typha angustifolia)</u>	<u>80</u>	<u>YES</u>	<u>OBL</u>															
2. <u>Sensitive fern (Onoclea sensibilis)</u>	<u>15</u>	<u>NO</u>	<u>FACW</u>															
3. _____		-	-															
4. _____		-	-															
5. _____		-	-															
6. _____		-	-															
7. _____		-	-															
8. _____		-	-															
9. _____		-	-															
10. _____		-	-															
11. _____		-	-															
12. _____		-	-															
		<u>95</u> = Total Cover																
<b>Woody Vine Stratum (Plot size: <u>30'</u> )</b>																		
1. <u>N/A</u>		-	-															
2. _____		-	-															
3. _____		-	-															
4. _____		-	-															
		_____ = Total Cover																
Remarks: (Include photo numbers here or on a separate sheet.)																		

**Hydrophytic Vegetation Indicators:**  
☐ 1 - Rapid Test for Hydrophytic Vegetation  
☒ 2 - Dominance Test is >50%  
☐ 3 - Prevalence Index is ≤3.0<sup>1</sup>  
☐ 4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
☐ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  
  
<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Vegetation Strata:**  
  
**Tree** – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  
  
**Sapling/shrub** – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  
  
**Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  
  
**Woody vines** – All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?**      Yes ☒      No ☐

## SOIL

Sampling Point: DP-F

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

Depth (inches)	Matrix		Redox Features		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-5	10YR 2/1	100			-	-	muck	
5-8	10YR 3/2	100			-	-	silt loam	
8-14	10YR 3/2	90	10YR 5/6	10	C	M	silt loam	
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		

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

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

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

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

<sup>3</sup>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 ☐

Remarks:

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 23.3211/Killbuck Rd. City/County: Milbrook/Dutchess Sampling Date: Apr 7, 2023  
 Applicant/Owner: Town of Washington State: NY Sampling Point: DP-UPL-6  
 Investigator(s): J. Spain Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 0  
 Subregion (LRR or MLRA): LRR-R Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: Su—Sun silt loam NWI classification: UPL

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)  
 Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐  
 Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.)  upland mowed area adjacent to wetland F and G	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

Sampling Point: DP-UPL-6

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>N/A</u>		-	-	
2. _____		-	-	
3. _____		-	-	
4. _____		-	-	
5. _____		-	-	
6. _____		-	-	
7. _____		-	-	
	_____ = Total Cover			
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u> )</b>				
1. <u>N/A</u>		-	-	
2. _____		-	-	
3. _____		-	-	
4. _____		-	-	
5. _____		-	-	
6. _____		-	-	
7. _____		-	-	
	_____ = Total Cover			
<b>Herb Stratum (Plot size: <u>5'</u> )</b>				
1. <u>Upland grasses (Poa sp.)</u>	<u>85</u>	<u>YES</u>	<u>FACU</u>	
2. <u>big leaf plantain (Plantago major)</u>	<u>10</u>	<u>NO</u>	<u>FACU</u>	
3. <u>red clover (Trifolium pratense)</u>	<u>5</u>	<u>NO</u>	<u>FACU</u>	
4. _____		-	-	
5. _____		-	-	
6. _____		-	-	
7. _____		-	-	
8. _____		-	-	
9. _____		-	-	
10. _____		-	-	
11. _____		-	-	
12. _____		-	-	
	<u>100</u> = Total Cover			
<b>Woody Vine Stratum (Plot size: <u>30'</u> )</b>				
1. <u>N/A</u>		-	-	
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:**

☐ 1 - Rapid Test for Hydrophytic Vegetation

☐ 2 - Dominance Test is >50%

☐ 3 - Prevalence Index is ≤3.0<sup>1</sup>

☐ 4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)

☐ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Vegetation Strata:**

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

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

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

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

**Hydrophytic Vegetation Present?** Yes ☐ No ☒

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

## SOIL

Sampling Point: DP-UPL-6

[illegible]

## WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 23.3211/Killbarn Rd. City/County: Milbrook/Dutchess Sampling Date: Apr 6, 2023  
Applicant/Owner: Town of Washington State: NY Sampling Point: DP-G  
Investigator(s): J. Spain Section, Township, Range: \_\_\_\_\_  
Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 0  
Subregion (LRR or MLRA): LRR-R Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
Soil Map Unit Name: Su—Sun silt loam NWI classification: PSS

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)  
Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐  
Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	If yes, optional Wetland Site ID: <u>Wetland G</u>
Remarks: (Explain alternative procedures here or in a separate report.)    Small (<0.10 acre) roadside wetland depression on west side of Killbarn Rd	

### HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Microtopographic Relief (D4)
		<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b>		
Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): 2"		
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches):		
Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): 3" (includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks:		

**VEGETATION – Use scientific names of plants.**

 Sampling Point: DP-G

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>N/A</u>		-	-	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>1</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)														
2. _____		-	-															
3. _____		-	-															
4. _____		-	-															
5. _____		-	-															
6. _____		-	-															
7. _____		-	-															
		_____ = Total Cover		<b>Prevalence Index worksheet:</b> <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species _____</td> <td>x 1 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x 2 = _____</td> </tr> <tr> <td>FAC species _____</td> <td>x 3 = _____</td> </tr> <tr> <td>FACU species _____</td> <td>x 4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x 5 = _____</td> </tr> <tr> <td>Column Totals: _____ (A)</td> <td>_____ (B)</td> </tr> </table> Prevalence Index = B/A = _____	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)
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)																	
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u> )</b>																		
1. <u>Grey dogwood (Cornus racemosa)</u>	<u>50</u>	<u>YES</u>	-															
2. _____		-	-															
3. _____		-	-															
4. _____		-	-															
5. _____		-	-															
6. _____		-	-															
7. _____		-	-															
		<u>50</u> = Total Cover																
<b>Herb Stratum (Plot size: <u>5'</u> )</b>																		
1. <u>N/A</u>		-	-															
2. _____		-	-															
3. _____		-	-															
4. _____		-	-															
5. _____		-	-															
6. _____		-	-															
7. _____		-	-															
8. _____		-	-															
9. _____		-	-															
10. _____		-	-															
11. _____		-	-															
12. _____		-	-															
		<u>117</u> = Total Cover																
<b>Woody Vine Stratum (Plot size: <u>30'</u> )</b>																		
1. <u>N/A</u>		-	-															
2. _____		-	-															
3. _____		-	-															
4. _____		-	-															
		_____ = Total Cover																
Remarks: (Include photo numbers here or on a separate sheet.)																		

**Hydrophytic Vegetation Indicators:**  
☐ 1 - Rapid Test for Hydrophytic Vegetation  
☒ 2 - Dominance Test is >50%  
☐ 3 - Prevalence Index is ≤3.0<sup>1</sup>  
☐ 4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  
☐ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)  
  
<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Vegetation Strata:**  
  
**Tree** – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  
  
**Sapling/shrub** – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  
  
**Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  
  
**Woody vines** – All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?**      Yes ☒      No ☐

## SOIL

Sampling Point: DP-G

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

[illegible]

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

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

### Hydric Soil Indicators:

- |                          |                                      |
|--------------------------|--------------------------------------|
| <input type="checkbox"/> | Histosol (A1)                        |
| <input type="checkbox"/> | Histic Epipedon (A2)                 |
| <input type="checkbox"/> | Black Histic (A3)                    |
| <input type="checkbox"/> | Hydrogen Sulfide (A4)                |
| <input type="checkbox"/> | Stratified Layers (A5)               |
| <input type="checkbox"/> | Depleted Below Dark Surface (A11)    |
| <input type="checkbox"/> | Thick Dark Surface (A12)             |
| <input type="checkbox"/> | Sandy Mucky Mineral (S1)             |
| <input type="checkbox"/> | Sandy Gleyed Matrix (S4)             |
| <input type="checkbox"/> | Sandy Redox (S5)                     |
| <input type="checkbox"/> | Stripped Matrix (S6)                 |
| <input type="checkbox"/> | Dark Surface (S7) (LRR R, MLRA 149B) |

- ☐ 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<sup>3</sup>:

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

<sup>3</sup>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 ☐

Remarks:

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 23.3211/Killearn Rd. City/County: Milbrook/Dutchess Sampling Date: Apr 4, 2023  
 Applicant/Owner: Town of Washington State: NY Sampling Point: DP-H  
 Investigator(s): J. Spain Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 0  
 Subregion (LRR or MLRA): LRR-R Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: GsB—Georgia silt loam NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)  
 Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐  
 Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.)   Roadside Phragmites marsh on west side of Killearn Rd. Drains east across road via culvert	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): 0" (includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

Sampling Point: DP-H

<u>Tree Stratum</u> (Plot size: <u>30'</u> )			<u>Absolute % Cover</u>	<u>Dominant Species?</u>	<u>Indicator Status</u>
1. <u>N/A</u>				-	-
2. _____				-	-
3. _____				-	-
4. _____				-	-
5. _____				-	-
6. _____				-	-
7. _____				-	-
			_____ = Total Cover		
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15'</u> )					
1. <u>N/A</u>				-	-
2. _____				-	-
3. _____				-	-
4. _____				-	-
5. _____				-	-
6. _____				-	-
7. _____				-	-
			_____ = Total Cover		
<u>Herb Stratum</u> (Plot size: <u>5'</u> )					
1. <u>Common Reed (Phragmites australis)</u>			<u>90</u>	<u>YES</u>	<u>FACW</u>
2. <u>Purple loosestrife (Lythrum salicaria)</u>			<u>15</u>	<u>NO</u>	<u>OBL</u>
3. _____				-	-
4. _____				-	-
5. _____				-	-
6. _____				-	-
7. _____				-	-
8. _____				-	-
9. _____				-	-
10. _____				-	-
11. _____				-	-
12. _____				-	-
			<u>115</u>	= Total Cover	
<u>Woody Vine Stratum</u> (Plot size: <u>30'</u> )					
1. <u>N/A</u>				-	-
2. _____				-	-
3. _____				-	-
4. _____				-	-
			_____ = Total Cover		
Remarks: (Include photo numbers here or on a separate sheet.)					

<b>Dominance Test worksheet:</b>	
Number of Dominant Species That Are OBL, FACW, or FAC:	<u>1</u> (A)
Total Number of Dominant Species Across All Strata:	<u>1</u> (B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>100</u> (A/B)
<b>Prevalence Index worksheet:</b>	
<u>Total % Cover of:</u>	<u>Multiply by:</u>
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 = _____	
<b>Hydrophytic Vegetation Indicators:</b>	
<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation	
<input checked="" type="checkbox"/> 2 - Dominance Test is >50%	
<input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup>	
<input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)	
<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
<b>Definitions of Vegetation Strata:</b>	
<b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.	
<b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.	
<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.	
<b>Woody vines</b> – All woody vines greater than 3.28 ft in height.	
<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

## SOIL

Sampling Point: DP-H

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

Depth (inches)	Matrix		Redox Features		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-6	10YR 2/1	100			-	-	muck	
6-10	10YR 3/2	90	10YR 5/4	10	C	M	silt loam	
10-16	10YR 3/1	80	10YR 5/4	20	C	M	silt loam	
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.<sup>2</sup>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<sup>3</sup>:**

- ☐ 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, M)  
☐ Polyvalue Below Surface (S8) (LRR K, L)  
☐ Thin Dark Surface (S9) (LRR K, L)  
☐ Iron-Manganese Masses (F12) (LRR K, L, R)  
☐ Piedmont Floodplain Soils (F19) (MLRA 149B)  
☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  
☐ Red Parent Material (F21)  
☐ Very Shallow Dark Surface (TF12)  
☐ Other (Explain in Remarks)

<sup>3</sup>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 ☐

Remarks:

## WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 23.3211/Killbuck Rd. City/County: Milbrook/Dutchess Sampling Date: Apr 7, 2023  
Applicant/Owner: Town of Washington State: NY Sampling Point: DP-UPL-7  
Investigator(s): J. Spain Section, Township, Range: \_\_\_\_\_  
Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 0  
Subregion (LRR or MLRA): LRR-R Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
Soil Map Unit Name: \_\_\_\_\_ NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)  
Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐  
Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

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

Upland forested area adjacent to Wetland H

### HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Microtopographic Relief (D4)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b>		
Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches):	
Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): (includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

**VEGETATION – Use scientific names of plants.**

 Sampling Point: DP-UPL-7

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Red maple (<i>Acer rubrum</i>)</u>	<u>40</u>	YES	FAC	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>3</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33</u> (A/B)
2. <u>White ash (<i>Fraxinus americana</i>)</u>	<u>10</u>	YES	FACU	
3. _____	_____	-	-	
4. _____	_____	-	-	
5. _____	_____	-	-	
6. _____	_____	-	-	
7. _____	_____	-	-	
		<u>50</u>	= Total Cover	
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u> )</b>				
1. <u>morrow's honeysuckle (<i>Lonicera morrowii</i>)</u>	<u>25</u>	YES	FACU	<b>Prevalence Index worksheet:</b> 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 = _____
2. _____	_____	-	-	
3. _____	_____	-	-	
4. _____	_____	-	-	
5. _____	_____	-	-	
6. _____	_____	-	-	
7. _____	_____	-	-	
		<u>25</u>	= Total Cover	
<b>Herb Stratum (Plot size: <u>5'</u> )</b>				
1. <u>N/A</u>	_____	-	-	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	_____	-	-	
3. _____	_____	-	-	
4. _____	_____	-	-	
5. _____	_____	-	-	
6. _____	_____	-	-	
7. _____	_____	-	-	
8. _____	_____	-	-	
9. _____	_____	-	-	
10. _____	_____	-	-	
11. _____	_____	-	-	
12. _____	_____	-	-	
		_____	= Total Cover	
<b>Woody Vine Stratum (Plot size: <u>30'</u> )</b>				
1. <u>N/A</u>	_____	-	-	<b>Hydrophytic Vegetation Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
2. _____	_____	-	-	
3. _____	_____	-	-	
4. _____	_____	-	-	
		_____	= Total Cover	
Remarks: (Include photo numbers here or on a separate sheet.)				

## SOIL

Sampling Point: DP-UPL-7

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

Depth (inches)	Matrix		Redox Features		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-3	10YR 2/2	100			-	-	silt loam	
3-7	10YR 3/2	100			-	-	silt loam	
7-15	10YR 3/3	100			-	-	silt loam	
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		
					-	-		

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.<sup>2</sup>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<sup>3</sup>:**

- ☐ 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, M)  
☐ Polyvalue Below Surface (S8) (LRR K, L)  
☐ Thin Dark Surface (S9) (LRR K, L)  
☐ Iron-Manganese Masses (F12) (LRR K, L, R)  
☐ Piedmont Floodplain Soils (F19) (MLRA 149B)  
☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  
☐ Red Parent Material (F21)  
☐ Very Shallow Dark Surface (TF12)  
☐ Other (Explain in Remarks)

<sup>3</sup>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 ☒

Remarks:

## Supplemental Form B Linear Waters of the U.S. Field Classification Form

Whenever an ephemeral stream, intermittent stream, or perennial stream is identified on a project site, use this form to document field observations in support of the field interpreted stream classification.

Stream Feature: PS-1

Watershed: \_\_\_\_\_

**Field Observations (check all that apply and describe if applicable):**

- ☒ Surface water flow within a defined channel \_\_\_\_\_
- ☒ Presence of Ordinary High Water Mark  
(If OHWM is present, place a stake to mark its location). \_\_\_\_\_
- ☐ Water seeping from banks (*or ice along banks in winter*) \_\_\_\_\_
- ☐ Channel has a floodplain or observable bankfull bench \_\_\_\_\_
- ☐ Presence of fish or macroinvertebrates \_\_\_\_\_
- ☐ Primarily erosive feature \_\_\_\_\_
- ☐ Recent sediment deposits or accumulations in channel \_\_\_\_\_
- ☐ Algae growing on bed materials \_\_\_\_\_
- ☐ Rooted plants growing in channel bed \_\_\_\_\_
- ☒ Hydric soils in sides of channel \_\_\_\_\_

**Provide a detailed description for each (use additional space in remarks section if necessary):**

Antecedent weather conditions 50° sunny

Position of channel within the drainage basin (*high, middle, low*)? low

Gradient of the channel (*steep, moderately sloping, flat*)? Flat

Channel morphology (*linear/meandering*)? linear

Width of channel? 3 ft. Height of bank? 1 ft.

Interpreted water table position above or below defined channel? At or below

Bed materials (*provide description of bed materials and indicate if different from surrounding ground surface*):  
Sand, silt, pebbles

Topographic map designation? Intermittent ☐ Perennial ☒ Not mapped ☐

**Describe off-site conditions:**

Is there development upgradient of channel? Rural residential property

Any artificial structures (i.e. culvert, detention basin) regulating the flow?  
Stream flows through culvert at Killearn Rd

**Remarks:**

NYSDEC Class C stream flows north to south across Killearn Rd within boundaries of emergent wetland (Wetland A)

**Based on observations, characterize the stream type (circle one):**

Ephemeral Stream

Intermittent Stream

Perennial Stream

Project Name: Killearn Rd

Date of Field Review: April 5, 2023

Project Number: 23.3211

Field Reviewer: J.Spain

**Attachment 3**  
**Representative Photographs**



1. Killearn Road corridor viewed west



2. Wetland A viewed south



3. Wetland B viewed northwest



4. Pond 1 viewed north



5. Wetland C viewed west



6. Killearn Road corridor viewed south



7. Wetland D viewed west



8. Wetland E viewed west



9. Pond 2 viewed northwest



10. Wetland F viewed north



11. Wetland G viewed southwest



12. Killearn Road corridor viewed south



13. Wetland H viewed southwest



14. Drainage ditch viewed southeast



15. Killearn Road Corridor viewed south