ATTACHMENT H

WETLAND DELINEATION REPORT

Updated August 2014

CONSTITUTION PIPELINE

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WETLAND DELINEATION REPORT

Broome, Chenango, Delaware, Otsego and Schoharie Counties, New York

Submittal No. 3

Wetlands & Waterbodies field-delineated between September 6, 2013 and June 3, 2014

Submitted by:

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August 2014

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1.0 Introduction

Constitution Pipeline Company, LLC (Constitution) is proposing the Constitution Pipeline (Project) to provide 650,000 dekatherms per day (Dth/d) of new firm natural gas transportation capacity from three receipt points in Susquehanna County, Pennsylvania, to a proposed interconnection at with Iroquois Gas Transmission System, L.P.'s (Iroquois) at an existing transfer compressor station located in Wright, New York, and through a capacity lease on Iroquois to delivery points on the existing Iroquois and Tennessee Gas Pipeline Company, LLC (Tennessee) systems in Schoharie County, New York. The proposed interconnection with Iroquois and the delivery points into Iroquois and Tennessee will all be located within Iroquois' existing Wright Compressor Station property in Schoharie County, New York. The Project consists of approximately 125 miles of new 30-inch diameter pipeline, two meter stations with interconnecting piping, and additional ancillary facilities, such as main line valves, cathodic protection, and temporary and permanent access roads.

Field work for the Project began in June 2012 and will continue through 2014, as survey access permission is obtained. **This wetland delineation report (WDR) contains data processed between mileposts (MPs) 25.26 and 124.46 in Broome, Chenango, Delaware, and Schoharie Counties, New York from September 6, 2013 to June 3, 2014**. Because survey access permission is pending on some remaining parcels, Constitution anticipates one final submission that covers survey of outstanding parcels to complete the USACE Preliminary Jurisdictional Determination (PJD) process.

Each wetland and waterbody was given a unique alphanumeric designation to assist in field survey location and documentation. An example of the unique identifier being used is "BR-1I-W001," using the feature identification nomenclature in Table 1.0-1 (county, team, feature, and feature number). **Organization of the data sheets in Attachments 2 and 3 is separated by feature category (Wetland vs Waterbody) and further organized in alphabetical order by county, then team number, and finally numerical order by feature number and corresponds to the order of features discussed within the summary tables in Section 4.0.**

Table 1.0-1. Feature Identification Nomenclature

County	Team	Feature	Feature Number
BR – Broome CH – Chenango DE – Delaware OT – Otsego SC – Schoharie	1A through 1Z	W – Wetland S – Waterbody	001, 002, 003, etc.

2.0 Study Area

This WDR describes areas surrounding the current proposed Project Primary Route located in the following counties and townships in the State of New York:

- Delaware County - Masonville, Sidney, Franklin, Davenport, and Harpersfield Townships
- Broome County - Sanford Township

- Chenango County - Afton Township and Bainbridge Township
- Otsego County - Maryland Township
- Schoharie County - Summit, Jefferson, Richmondville, Cobleskill, Middleburg, Schoharie, and Wright Townships

Identification of regulated wetland and waterbody boundaries occurred within a 600-foot-wide survey corridor centered over the proposed pipeline (300 feet either side of the pipe centerline) from June 2012 through December 2013. In 2013, the survey corridor was adjusted to 300 feet centered over the proposed pipeline (150 feet either side of the pipe centerline). The boundary making up the 2012-600 foot corridor and the 2013- 300 corridor, constitute the Study Area. Only land parcels where survey access permission was granted by landowners were surveyed. Therefore, some wetlands identified within the Study Area are incomplete and end at no-access parcel boundaries.

For the purposes of this state specific WDR, all the features identified within the Study Area have been further refined to only those features falling within the limits of the Constitution Pipeline workspace. In addition, NYDEC regulated wetlands were included if they are outside of the workspace, but have 100 foot adjacent area buffer impacts. Lastly, wetlands and waterbodies that were outside of the workspace but immediately adjacent (within five feet) to the workspace limits of disturbance for access roads and proposed contractor yards were also included.

This WDR details survey of temporary and permanent access roads and ancillary facilities. Table 2.0-1 lists the current survey status of proposed ancillary facilities. Once these areas are identified, access permission is granted, and the sites are surveyed, they will be listed and described in the final report.

Table 2.0-1 Survey Status of Proposed Ancillary Facilities

Facility ID[a]	Approximate Location	Township	Surveyed As of 06/03/2014
MLV #3 Vale Rd	MP 26.80	Sanford	Yes
MLV #4 Obrien Rd	MP 40.94	Sanford	Yes
MLV #5 Access Rd/Town Rd	MP 52.23	Masonville	Yes
MLV #6 Stewart Rd	MP 65.94	Franklin	Yes
MLV #7 County Road 10	MP 80.39	Davenport	Yes
MLV #8 Clapper Hollow Road	MP 95.05	Summit	Yes
MLV #9 Access Rd/Dodge Lodge Road	MP 107.26	Richmondville	Yes
MLV #10 Smith Rd	MP 119.51	Schoharie	Yes
Westfall Road M&R Delivery Station (includes Pig Receiver & MLV Terminus)	MP 124.46	Wright	Yes
Contractor Yard 3A / Construction Spread 3	8702' north of MP 53.51	Sidney	Yes
Contractor Yard 4A / Construction Spread 4	16,176' north of MP 77.36	Oneonta	Yes
Contractor Yard 4D / Construction Spread 4	6,920' northwest of MP 86.88	Maryland	Yes
Contractor Yard 5 / Construction Spread 5	7,610' northwest MP 107.15	Richmondville	Yes

3.0 Wetland and Waterbody Delineation Methodology

This section references and describes the regulatory manuals, definitions, and methodologies used to field delineate wetlands and waterbody features within the Study Area. This WDR submission (No. 2) describes field surveys conducted within the Study Area between June 4, 2012 (Survey Week 1) and September 6, 2013 (Survey Week 66) on land parcels with survey access permission. General reconnaissance of the Study Area was conducted to assess the presence of wetland and waterbody features. Where potential wetland indicators were observed, data were collected at sample plot locations to determine if a dominance of hydrophytic vegetation indicators, hydric soil indicators, and hydrology indicators were present. If each of the three criteria was present within the sample plot, a wetland boundary and upland and wetland data plot locations were established.

3.1 Preliminary Information Review

Prior to the commencement of field surveys, AECOM reviewed the following information to determine the potential extent of wetlands and waterbodies within the Study Area:

1. USGS topographic quadrangles;
2. National Wetland Inventory (NWI) mapping;
3. Natural Resource Conservation Service – Web Soils Survey Data;
4. Aerial photography; and,
5. NYSDEC freshwater wetland mapping.

3.2 General Field Methodology

Wetland and waterbody boundaries were marked with survey flagging. Wetlands were marked with blue survey flagging, and waterbodies were marked with pink and black striped survey flagging. Each wetland and waterbody was given a unique alphanumeric designation to assist in field survey location and documentation. An example of the unique identifier being used is "BR-1I-W001-101," using the feature identification nomenclature from Table 1.0-1 (county, team, feature, and feature number) and including the flag number based on the boundary line.

Table 3.2-1. Feature Identification Nomenclature with Flag Number

County	Team	Feature	Feature Number	Boundary Line	Flag Number
BR – Broome CH – Chenango DE – Delaware OT – Otsego SC – Schoharie	1A – 1Z	W – Wetland S – Waterbody	001, 002, 003, etc.	100, 200, 300., etc.	101, 102, 103, etc. 201, 202, 203, etc.

Flag positions and data plot locations were field located by AECOM biologists using a Global Positioning System (GPS) handheld Trimble® Yuma® tablet computer unit coupled with AECOM's proprietary mobile Geographic Information Systems (GIS) field application software, Environmental Mobile Application for Projects (EMAP).

3.2.1 Wetland Delineations

The wetland delineation methodologies outlined in the 1987 Corps of Engineers Wetland Delineation Manual (1987 Corps Manual) (Environmental Laboratory 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, Version 2.0 (Regional Supplement) (USACE 2011) were used to identify and delineate wetlands.

According to the 1987 Corps Manual and the Regional Supplement, three distinct characteristics must be exhibited for an area to be considered wetlands:

1. The prevalent vegetation must consist of plants adapted to life in hydric soil conditions. These species, due to morphological, physiological, and/or reproductive adaptations, can and do persist in anaerobic soil conditions;
2. Soils must be classified as hydric, or they must possess characteristics that are associated with reducing soil conditions; and
3. The area must be inundated either permanently or periodically at mean water depths less than 6.6 feet (2 meters) or the soil saturated at the surface for some time during the growing season of the prevalent vegetation.

The specific methods used for characterizing and evaluating vegetation, hydrology, and soils were:

Vegetation

Species abundance in both upland and wetland communities was visually estimated by percent cover within each vegetation stratum. Dominant trees/vines and shrubs/saplings and herbaceous plants were recorded within sample plots of 30-foot, 15-foot, and 5-foot radius, respectively. AECOM identified plant species using botanical references for the region. The hydrophytic indicator status of each species was identified using the North American Digital Flora: National Wetland Plant List (Lichvar and Kartesz, 2009). Indicators of hydrophytic vegetation are satisfied if the results of the rapid assessment include all species rated as OBL or FACW (Indicator 1), the dominance test is greater than 50% (Indicator 2), or the prevalence index is less than or equal to 3.0 (Indicator 3). The wetland classification system developed by Cowardin et al. (1979) was utilized to classify delineated wetland vegetated community cover type as palustrine forested (PFO), palustrine scrub-shrub (PSS), palustrine emergent (PEM), or palustrine open water (POW). Vegetation community type names described by Edinger et al. (2002) were used to further classify each wetland community type, based upon the vegetation present.

Soils

For each observation plot, AECOM characterized the soil profile to determine the presence or absence of hydric soil indicators. Soil borings were taken with a hand-held auger to depths of approximately 18-24 inches to observe the soil profile and evaluate redoximorphic features, if present. Information collected for each soil profile included horizon depth, texture, color, and the presence or absence of redoximorphic features. Colors of the soil matrix and redoximorphic features were identified using Munsell® colors (Gretag/Macbeth 2000). AECOM based all hydric soil determinations on criteria established in the 1987 Corps Manual and the Regional Supplement, as well as Field Indicators of Hydric Soils in the United States, Version 7.0 (USDA NRCS 2010). Table 3.2-2 contains a list of primary and secondary wetland soil indicators.

Table 3.2-2. Wetland Soil Indicators for the Northcentral and Northeast Region.

Hydric Soil Indicators		Indicators for Problematic Hydric Soils
Histosol (A1)	Dark Surface (S7)(LRR R, MLRA 149B)	2cm Muck (A10)(LRR K, L, MLRA 149B)
Histic Epipedon (A2)	Thin Dark Surface (S9)(LRR R, MLRA 149B)	Coast Prairie Redox (A16)(LRR K, L, R)
Black Histic (A3)	Loamy Mucky Mineral (F1)(LRR K, L)	5cm Mucky Peat or Peat (S3) (LRR K, L, R)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Dark Surface (S7)(LRR K, L, M)
Stratified Layers (A5)	Depleted Matrix (F3)	Polyvalue Below Surface (S8)(LRR K, L)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	Thin Dark Surface (S9)(LRR K, L, R)
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Iron-Mg Masses (F12)(LRR K, L, R)
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	Piedmont Floodplain Soils (F19)(MLRA 149B)
Sandy Gleyed Matrix (S4)		Mesic Spodic (TA6)(MLRA 144A, 145, 149B)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)

Hydrology

Indicators of wetland hydrology were evaluated by determining the presence of primary indictors, noting whether the soil at the surface was inundated or contained free water or saturation within the upper 12 inches of the soil profile. If primary indicators were not observed, the presence of secondary indicators was investigated. If two or more secondary indicators were observed, the area was determined to contain wetland hydrology. Table 3.2-3 contains a list of primary and secondary wetland hydrology indicators. Additionally, AECOM noted the presence of any saturation and/or standing water encountered within the soil profile.

Table 3.2-3. Wetland Hydrology Indicators for the Northcentral and Northeast Region.

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

3.2.2 Waterbody Delineations

Waterbodies were grouped into watercourse, ponds, lakes, and other (i.e. springs). Waterbody boundaries were established using guidelines presented in 33 CFR 328.4(c), which states, “the limits of federal

jurisdiction for non-tidal waters of the United States in the absence of adjacent wetlands is the ordinary high water mark" (OHWM). The OHWM is established by observations of water fluctuation, physical characteristics, such as a clear natural line impressed on the bank, shelving, changes in the soil character, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas" (33 CFR 328.3(e)).

Waterbody types were classified as perennial, seasonal, intermittent, or ephemeral. Perennial waterbodies were categorized as those that flow throughout the year and are supplied by ground water. Seasonal waterbodies were categorized as those that have continuous flow for three or more months out of the year. Intermittent watercourses were categorized as waterbodies that carry water during portions of the year and may be supplied by ground water part of the year. During other portions of the year, intermittent streams do not contain any water flow. Ephemeral waterbodies were categorized as those that flow only during or subsequent to a rain event.

4.0 Results

During the previously described field investigations, AECOM scientists delineated an additional 53 wetlands and 30 waterbodies within the proposed Project workspace.

4.1 Wetlands

Table 4.1-1 contains for each wetland the wetland identification, wetland indicators, wetland vegetative community description, and a brief function and value description, among other information. **The attached Wetland Datasheets and Photographs (Attachment 2) are organized in alphabetical order by county, then team number, and finally numerical order by feature number (i.e., feature BR-1A-W001 datasheet is first, followed by BR-1A-W002, etc.).** Site Specific Drawings (Attachment 4) depict detailed information of the wetlands crossed by the Project.

4.2 Waterbodies

Table 4.2-1 contains for each waterbody the waterbody identification, name, type, and a brief description, among other information. **The attached Waterbody Datasheets and Photographs (Attachment 3) are organized in alphabetical order by county, then team number, and finally numerical order by feature number (i.e., feature BR-1A-S001 datasheet is first, followed by BR-1A-S002, etc.).** Site Specific Drawings (Attachment 4) depict detailed information of the waterbodies crossed by the Project.

Table 4.1-1. Wetlands Delineated within the Study Area on Accessible Land Parcels from September 6, 2013 to June 3, 2014.

Wetland ID	Latitude Longitude[a]	Township County	USGS Quad[b]	Class[c]	Wetland Hydrology Indicator		Hydrophytic Vegetation Indicator	Hydric Soil Indicator	Wetland Description, Vegetative Community Type
					Primary	Secondary			
BR-1C-W260	42.011112 -75.52618	Sanford Broome	Gulf Summit	PFO	A2, A3, C3	B10	2, 3	F3	Mixed forb wet meadow with maple canopy.
BR-1C-W261	42.137884 -75.45602	Sanford Broome	North Sanford	PEM	C3		2, 3	F3	Monotypic wet meadow.
BR-1C-W263	42.020800 -75.52560	Sanford Broome	Gulf Summit	PEM PSS	A2, A3, C3 A3	B10 B10	2, 3 2, 3	F3 F3	Reed canarygrass dominant wet meadow and willow dominant scrub-shrub.
BR-1C-W268	42.056956 -75.50678	Sanford Broome	Gulf Summit	PFO	A1, A2, A3		2	A11	Hemlock-northern hardwood palustrine forest.
DE-1A-W125A*	42.416668 -75.04953	Franklin Delaware	Oneonta	PFO	A3, B9	B10	2, 3	F3	Mixed hardwood forested wetland.
DE-1A-W125B*	42.41698 -75.04896	Franklin Delaware	Oneonta	PFO	A3, B9	B10	2, 3	F3	Hemlock-northern hardwood swamp.
DE-1A-W248A	42.423188 -74.96092	Davenport Delaware	West Davenport	PSS	A3, C3	B10	3	F6	Shrub swamp dominated by multiflora rose.
DE-1A-W361#	42.390766 -75.09577	Franklin Delaware	Oneonta	PFO	A2, A3	B10	2, 3	F3	Red maple-hardwood swamp-swale.
DE-1A-W362	42.390692 -75.09610	Franklin Delaware	Oneonta	PEM	A3	B10	2, 3	A12, F21	Mixed forb wet meadow swale.
DE-1A-W373	42.383361 -75.12731	Franklin Delaware	Otego	PFO	A2, A3, B9	B10	3	F3	Hemlock-northern hardwood depression.
DE-1A-W374	42.383574 -75.12766	Franklin Delaware	Otego	PFO	A2, A3, B9	B10	2, 3	F3	Hemlock-northern hardwood swale.
DE-1A-W463	42.35369 -75.20527	Sidney Delaware	Franklin	PFO	A3, B9	B10	2, 3	F3	Red maple-northern hardwood palustrine forest.
DE-1A-W467#	42.354288 -75.20456	Sidney Delaware	Franklin	PFO	A2, A3	B10	2, 3	F3	Red maple - white pine palustrine forest.

Table 4.1-1. Wetlands Delineated within the Study Area on Accessible Land Parcels from September 6, 2013 to June 3, 2014.

Wetland ID	Latitude Longitude[a]	Township County	USGS Quad[b]	Class[c]	Wetland Hydrology Indicator		Hydrophytic Vegetation Indicator	Hydric Soil Indicator	Wetland Description, Vegetative Community Type
					Primary	Secondary			
DE-1A-W468#	42.353818 -75.20373	Sidney Delaware	Franklin	PEM PFO	A3, B9 A2, A3, B9	B10 B10	2, 3 2, 3	F3 F3	Mixed forb wet meadow with adjacennt mixed hardwood palustrine forest.
DE-1A-W469#	42.354021 -75.20320	Sidney Delaware	Franklin	PFO	A3, B9		2, 3	F3	Northern hardwood palustrine forest.
DE-1A-W472	42.428184 -74.91310	Davenport Delaware	West Davenport	PFO	A3, B9	B10, D4	2, 3	F3	Red maple - northern hardwood palustrine forest.
DE-1A-W473	42.355436 -75.22986	Sidney Delaware	Franklin	PFO	A2, A3, B9	B10	2, 3	F3	Red maple palustrine forest.
DE-1A-W475	42.354899 -75.23146	Sidney Delaware	Franklin	PFO	A3, B9	B10, C9	2, 3	F3	Red maple-mixed hardwood palustrine forest.
DE-1A-W476	42.354429 -75.23145	Sidney Delaware	Franklin	PFO	A2, B9		2, 3	F3	Hemlock-northern hardwood depression.
DE-1A-W478	42.352037 -75.24240	Sidney Delaware	Franklin	PFO PEM	A2, A3 A3, C3	B10 B10	2, 3 2, 3	F3 F3	Red maple - northern hardwood palustrine forest with wet meadow opening.
DE-1B-W270*	42.419889 -75.06151	Franklin Delaware	Oneonta	PFO	A1, A3	B10, D4	Problematic	F3	Riparian wetland fringe.
DE-1C-W158B#	42.288747 -75.35494	Sidney Delaware	Unadilla	PEM	A3, C3		2, 3	F3	Mixed forb wet meadow.
DE-1C-W158A	42.289866 -75.35009	Sidney Delaware	Unadilla	PEM	A2, A3		2, 3	F2	Mixed forb wet meadow seep.
DE-1C-W158C	42.288843 -75.35472	Sidney Delaware	Unadilla	PEM	A2, A3, C3		2, 3	F3	Mixed forb wet meadow swale.
DE-1C-W329	42.404053 -75.09146	Franklin Delaware	Oneonta	PEM	A2, A3, C3	B10	2, 3	F3	Mixed forb wet meadow.
DE-1C-W338	42.286111 -75.35850	Sidney Delaware	Unadilla	PEM	A3, C3		2, 3	F3	Mixed forb wet meadow swale.

Table 4.1-1. Wetlands Delineated within the Study Area on Accessible Land Parcels from September 6, 2013 to June 3, 2014.

Wetland ID	Latitude Longitude[a]	Township County	USGS Quad[b]	Class[c]	Wetland Hydrology Indicator		Hydrophytic Vegetation Indicator	Hydric Soil Indicator	Wetland Description, Vegetative Community Type
					Primary	Secondary			
DE-1C-W344	42.503553 -74.72519	Harpersfield Delaware	Charlotteville	PFO	A2, A3, B9, C3	B10	2, 3	F3	Mixed hardwood palustrine swale.
DE-1C-W345	42.434399 -74.90266	Davenport Delaware	West Davenport	PSS	B9	B10	2, 3	Other	Mixed hardwood shrub swamp.
DE-1C-W346	42.446034 -74.86777	Davenport Delaware	Davenport	PEM	A3, B9, C3		2, 3	F3	Mixed graminoid-forb wet meadow clearing.
DE-1C-W350	42.434861 -74.90090	Davenport Delaware	West Davenport	PEM	A3, C3		2, 3	F3	Mixed graminoid, open field, wet meadow.
DE-1C-W351	42.434721 -74.90107	Davenport Delaware	West Davenport	PEM	C3		2, 3	F3	Mixed graminoid, open field, wet meadow.
DE-1C-W353	42.435130 -74.90158	Davenport Delaware	West Davenport	PEM	A3, C3		2, 3	F3	Disturbed wet meadow.
DE-1C-W354	42.433864 -74.90432	Davenport Delaware	West Davenport	PFO	A3	B10	2, 3	F2	Mixed hardwood palustrine slope-seep.
DE-1C-W363	42.375772 -75.14748	Franklin Delaware	Franklin	PSS PEM	A2, A3, C3 A2, A3, C3	B10, D2	2, 3 2, 3	F3 F3	Mixed shrub-shrub swamp and mixed forb wet meadow.
DE-1C-W364	42.374271 -75.15453	Franklin Delaware	Franklin	PEM	A2, A3	D2	2, 3	F1	Toe of slope wet meadow swale.
DE-1C-W371	42.41949 -75.00725	Davenport Delaware	Oneonta	PSS	A2, A3	B10	2, 3	F3	Willow thicket.
DE-1C-W375A	42.423173 -74.98797	Davenport Delaware	West Davenport	PFO	A2, A3	B10	2, 3	F3, F21	Red maple - white pine palustrine forest.
DE-1C-W376	42.422456 -74.99003	Davenport Delaware	West Davenport	PFO	A3, B9	B10	Problematic	F3, F21	Red maple - northern hardwood palustrine forest.
DE-1C-W377	42.424606 -74.98844	Davenport Delaware	West Davenport	PSS	A1, A2, A3	B10	2, 3	F3, F21	Meadowsweet - mixed forb wet meadow.

Table 4.1-1. Wetlands Delineated within the Study Area on Accessible Land Parcels from September 6, 2013 to June 3, 2014.

Wetland ID	Latitude Longitude[a]	Township County	USGS Quad[b]	Class[c]	Wetland Hydrology Indicator		Hydrophytic Vegetation Indicator	Hydric Soil Indicator	Wetland Description, Vegetative Community Type
					Primary	Secondary			
DE-1G-W011*	42.454819 -74.83290	Davenport Delaware	Davenport	PFO	A3, B9	B10, D4	2	F3	Hemlock-northern hardwood swamp/depression.
DE-1H-W268*	42.424090 -75.07132	Franklin Delaware	Oneonta	PSS PEM	A1, A2, A3, C3 A1, A2, A3, C3	B10 B10	1, 2, 3 1, 2, 3	F3 F3	Mixed shrub-scrub and wet meadow created by beaver dammed stream.
DE-1H-W268A*	42.424090 -75.07132	Franklin Delaware	Oneonta	PSS	A1, A2, A3, C3	B10	1, 2, 3	F3	Mixed shrub-scrub created by beaver dammed stream. **Same datasheet as DE-1H-W268-WET1.**
DE-1N-W005*	42.449344 -74.86295	Davenport Delaware	Davenport	PFO	B9	D4	2, 3	F3	Red maple-hardwood swamp.
DE-1N-W156A*	42.456441 -74.82791	Davenport Delaware	Davenport	PFO	A1, A2, A3, B9 C1	B10	2, 3	A2	Hemlock-northern hardwood swamp.
DE-1P-W128A*	42.490226 -74.76086	Harpersfield Delaware	Davenport	PSS	A1, A3		3	F3	Willow thicket.
DE-1W-W127*	42.42360 -75.02015	Davenport Delaware	Oneonta	PEM	A3, C3	D2	2, 3	F21	Open field wet meadow.
DE-1A-W484	42.455944 -74.89801	Davenport Delaware	West Davenport	PEM	A1, A3, C3,	C9	2, 3	F3	Open field wet meadow.
DE-1A-W485	42.456383 -74.89792	Davenport Delaware	West Davenport	PEM	A1, C3,	C9	2, 3	F3	Open field wet meadow.
DE-1A-W486	42.456334 -74.89874	Davenport Delaware	West Davenport	PEM	A1, A3, B7, C3		2, 3	F3	Open field wet meadow.
DE-1A-W487	42.455926 -74.89839	Davenport Delaware	West Davenport	PEM	A2, A3, B7, C3		2, 3	F3	Open field wet meadow.
DE-1A-W	42.456724 -74.89960	Davenport Delaware	West Davenport	PEM	A2, A3, B7, C3	B10	2, 3	F3	Open field wet meadow.
DE-1W-W129*	42.496621 -74.74874	Harpersfield Delaware	Harpersfield	PFO	A3	B10, D4	Problematic	F21	Hemlock-hardwood swamp clearing.

Table 4.1-1. Wetlands Delineated within the Study Area on Accessible Land Parcels from September 6, 2013 to June 3, 2014.

Wetland ID	Latitude Longitude[a]	Township County	USGS Quad[b]	Class[c]	Wetland Hydrology Indicator		Hydrophytic Vegetation Indicator	Hydric Soil Indicator	Wetland Description, Vegetative Community Type
					Primary	Secondary			
OT-1C-W001	42.472838 -74.98855	Otsego	West Davenport	PEM	A1, C3,	D2	2, 3	F3	Open field wet meadow.
SC-1A-W160A	42.708696 -74.29724	Schoharie Schoharie	Schoharie	PFO	A3, B9	B10	2, 3	F3	Pine-hardwood swamp-swale.
SC-1A-W459	42.704264 -74.31089	Schoharie Schoharie	Schoharie	PEM	A2, A3	B10	2, 3	F3	Mixed forb wet meadow swale.
SC-1A-W460	42.537409 -74.63937	Jefforson Schoharie	Charlotteville	PFO PEM	A3 A2, A3, C3	B10 B10	2, 3 2, 3	F3 F3	Hemlock - northern hardwood palustrine forest and adjacent wet meadow.
SC-1A-W464	42.591322 -74.56547	Summit Schoharie	Summit	PSS	A3	B10	2, 3	F3	Meadowsweet thicket.
SC-1C-W172A	42.703371 -74.26672	Schoharie Schoharie	Schoharie	PEM PSS	C3 C3		2, 3 2, 3	F3 F3	Dogwood dominant shrub-swamp with adjacent monotypic wet meadow.
SC-1C-W459	42.553950 -74.61856	Summit Schoharie	Summit	PFO	A2, A3, C3		2, 3	F3	Red maple-hardwood swamp depression.
SC-1Q-W425	42.642552 -74.53235	Richmondville Schoharie	Richmondville	PFO PEM	A1, A2, A3, C1, A1, A2, A3, C1,	B10, D2 B10, D2	2, 3 2, 3	A4, F3 F3	Hardwood swamp depression. Open field wet meadow.
SC-1Q-W426	42.644338 -74.53190	Richmondville Schoharie	Richmondville	PEM	A2, A3, C3	B10, D4,	3	F3	Open field wet meadow.

a: Coordinates of latitude and longitude based on UTM Zone 18 decimal degrees.

b: USGS 7.5-Minute Topographic Quadrangle Maps (1:24000).

c: Cowardin et al (1979) wetland classifications: PEM = Palustrine Emergent Wetland; PSS = Palustrine Scrub-Shrub Wetland; PFO = Palustrine Forested Wetland.

* NYDEC regulated wetlands outside of workspace but have 100' adjacent area buffer impacts.

Wetland outside of, but immediately adjacent (within 5') to workspace limits of disturbance for an access road or contractor yard.

Table 4.2-1. Waterbodies Delineated within the Study Area on Accessible Land Parcels from September 6, 2013 to June 3, 2014.

Waterbody ID	Name[a]	Latitude Longitude[b]	Township County	USGS Quad[c]	Type[d]	Waterbody Description[e]
BR-1C-S210	Fly Creek	42.020878 -75.52564	Sanford Broome	Gulf Summit	I	Moderate quality tributary associated with wetland BR-1C-W263.
BR-1C-S211	UNT Fly Creek	42.020431 -75.52584	Sanford Broome	Gulf Summit	P	Moderate quality tributary associaeted with wetland BR-1C-W263.
BR-1C-S230	UNT Cascade Creek	42.009816 -75.52627	Sanford Broome	Gulf Summit	E	Moderate quality stream.
BR-1C-S230A	UNT Cascade Creek	42.009838 -75.52623	Sanford Broome	Gulf Summit	E	Moderate quality tributary to BR-1C-S230.
BR-1S-S207C	UNT Cascade Creek	42.011192 -75.52571	Sanford Broome	Gulf Summit	P	Moderate quality, natural tributary to BR-1S-S207.
BR-1S-S207D	UNT Cascade Creek	42.011114 -75.52587	Sanford Broome	Gulf Summit	E	Moderate quality tributary to BR-1S-S207 associated with wetland BR-1C-W260.
BR-1S-S207E	UNT Cascade Creek	42.011207 -75.52590	Sanford Broome	Gulf Summit	E	Moderate quality tributary to BR-1S-S207 associated with wetland BR-1C-W260.
CH-1C-S010F	UNT Bennettsville Creek	42.261584 -75.46229	Bainbridge Chenango	Sidney	E	Floodplain oxbow.
DE-1A-S297	UNT Ouleout Creek	42.353352 -75.20543	Sidney Delaware	Franklin	I	Low quality, manipulated drainage ditch associated with wetland DE-1A-W463.
DE-1A-S301	UNT Susquehanna River	42.354578 -75.23166	Davenport Delaware	Franklin	I	Low quality, diffuse tributary associated with wetlands DE-1A-W473; W474; W475.
DE-1B-S263A	UNT Charlotte Creek	42.423880 -74.96536	Davenport Delaware	West Davenport	I	High quality intermittent tributary associated with wetland DE-1B-W327.
DE-1B-S263B	UNT Charlotte Creek	42.423842 -74.96527	Davenport Delaware	West Davenport	I	High quality intermittent tributary associated with wetland DE-1B-W327.
DE-1C-S273A	UNT Ouleout Creek	42.374895 -75.15183	Franklin Delaware	Franklin	P	Moderate quality tributary associated with wetland DE-1C-W363.
DE-1C-S274	UNT Ouleout Creek	42.403596 -75.09168	Franklin Delaware	Oneonta	I	Moderate quality tributary associated with wetland DE-1C-W339.

Table 4.2-1. Waterbodies Delineated within the Study Area on Accessible Land Parcels from September 6, 2013 to June 3, 2014.

Waterbody ID	Name[a]	Latitude Longitude[b]	Township County	USGS Quad[c]	Type[d]	Waterbody Description[e]
DE-1C-S275	UNT Ouleout Creek	42.403065 -75.09219	Franklin Delaware	Oneonta	I	Moderate quality tributary associated with wetland DE-1C-W329.
DE-1C-S283	UNT Masonville Creek	42.286057 -75.35866	Sidney Delaware	Unadilla	E	Moderate quality stream associated with wetland DE-1C-W338.
DE-1C-S284	UNT Masonville Creek	42.286176 -75.35776	Sidney Delaware	Unadilla	P	Moderate quality, natural stream.
DE-1C-S287	UNT Ouleout Creek	42.362419 -75.18722	Franklin Delaware	Franklin	E	Moderate quality, braided stream channel associated with wetland DE-1D-W281.
DE-1C-S289	UNT Ouleout Creek	42.422618 -74.98903	Davenport Delaware	West Davenport	I	Low quality drainage swale in old logging road associated with DE-1M-W154.
DE-1C-S290	UNT Ouleout Creek	42.422111 -74.99008	Davenport Delaware	West Davenport	E	Low quality erosional rill associated with wetland DE-1C-W376.
DE-1C-S303	UNT Ouleout Creek	42.350208 -75.24490	Sidney Delaware	Franklin	I	Manmade roadside ditch.
DE-1G-S005	UNT Charlotte Creek	42.504018 -74.72490	Harpersfield Delaware	Unadilla	I	Moderate quality tributary to DE-1G-S005.
DE-1G-S201A	UNT Kortright Creek	42.434071 -74.90186	Davenport Delaware	West Davenport	I	Moderate quality seep associated with wetland DE-1I-W245.
DE-1I-S201	Kortright Creek	42.433911 -74.90211	Davenport Delaware	West Davenport	P	High quality, naturally cobbled stream.
DE-1L-S210B	UNT Charlotte Creek	42.423257 -74.96110	Davenport Delaware	West Davenport	E	Low quality ephemeral drainage swale.
DE-1L-S210C	UNT Charlotte Creek	42.423212 -74.96095	Davenport Delaware	West Davenport	I	Moderate quality tributary associated with wetland DE-1A-W248A.
SC-1A-S366#	UNT Schoharie Creek	043 72	Schoharie Schoharie	Schoharie	E	Low quality excavated ditch conveys drainage from SC-1A-W292K to SC-1A-W459.
SC-1A-S370	UNT Clapper Hollow Creek	42.537442 -74.63928	Jefferson Delaware	Charlotteville	P	Moderate quality, natural tributary associated with wetland SC-1A-W460.

Table 4.2-1. Waterbodies Delineated within the Study Area on Accessible Land Parcels from September 6, 2013 to June 3, 2014.

Waterbody ID	Name[a]	Latitude Longitude[b]	Township County	USGS Quad[c]	Type[d]	Waterbody Description[e]
SC-1A-S370C	UNT Clapper Hollow Creek	42.537409 -74.63954	Jefferson Delaware	Charlotteville	I	Moderate quality, natural tributary associated with wetland SC-1A-W460.
SC-1A-S370F	UNT Clapper Hollow Creek	42.537389 -74.63919	Jefferson Delaware	Charlotteville	I	Moderate quality, natural tributary associated with wetland SC-1A-W460.

a: Waterbody names are derived from USGS 7.5-Minute Topographic Quadrangle Maps (1:24000). An unnamed (UNT) USGS tributary may be supplemented by other local, state, or federal topographic sources. If the waterbody name is not designated by other sources, it will be given the designation of the waterbody to which it flows.

b: Coordinates of latitude and longitude based on UTM Zone 18 decimal degrees.

c: USGS 7.5-Minute Topographic Quadrangle Maps (1:24000).

d: P = perennial; S = seasonal; I = intermittent; POW = open water; E = Ephemeral.

e: Waterbody Description based on physical attributes observed during desk top review and field observations.

Waterbody outside of, but immediately adjacent (within 5') to workspace limits of disturbance for an access road or contractor yard.

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WETLAND DELINEATION REPORT

SUBMITTAL NO. 3

ATTACHMENT 1

CONSTITUTION PIPELINE

USGS SITE LOCUS MAPS

(REFER TO ATTACHMENT B, FIGURE 2)

WETLAND DELINEATION REPORT

SUBMITTAL NO. 3

ATTACHMENT 2

CONSTITUTION PIPELINE

WETLAND DATA SHEETS AND PHOTOGRAPHS

BROOME COUNTY

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 26.38 City/County: Broome Sampling Date: 2013/10/09

Applicant/Owner: Williams State: NY Sampling Point: BR-1C-W260-WET1

Investigator(s): RR PL USGS Quad: Gulf Summit Section, Township, Range: Sanford

Landform: Drainageway Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 3

Subregion: Middle Atlantic Latitude: 42.011112 Longitude: -75.52618 Datum: NAD 1983

Soil Map Unit Name: Cattaraugus channery silt loam, 5 to 15 percent slopes NWI Classification: Not Mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks:

Field Wetland Classification: PFO

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☑ Yes ☐ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer rubrum	25	YES	FAC
Acer saccharum	20	YES	FACU
Total Cover:	45		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Carex crinita	30	YES	OBL
Impatiens capensis	20	YES	FACW
Glyceria striata	10	NO	OBL
Persicaria sagittata	10	NO	OBL
Symphyotrichum novi-belgii	15	NO	FACW
Rumex obtusifolius	5	NO	FAC
Epilobium coloratum	5	NO	OBL
Carex scoparia	5	NO	FACW
Total Cover:	100		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	4	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	75	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	55	x 1 =	55	
FACW Species:	40	x 2 =	80	
FAC Species:	30	x 3 =	90	
FACU Species:	20	x 4 =	80	
UPL Species:	0	x 5 =	0	
Column Totals:	145	(A)	305	(B)
		Prevalence Index = B/A =	2.10	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth (in.)	Matrix Color (Moist)	Matrix %	Redox Features Color (Moist)	Redox %	Type [1]	Loc [2]	Texture	Remarks
0-3	10YR 4/2	100					FINE SANDY LOAM	
3-14	10YR 4/1	97	7.5YR 4/4	3	C	PL	LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

Photo Name: BR1CW260_100913_WET1E.jpg Note: BR-1C-W260-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 26.37 City/County: Broome Sampling Date: 2013/10/09

Applicant/Owner: Williams State: NY Sampling Point: BR-1C-W260-UPL1

Investigator(s): RR PL USGS Quad: Gulf Summit Section, Township, Range: Sanford

Landform: Side slope Local Relief: ☐ Concave ☑ Convex ☐ None Slope (%): 5

Subregion: Middle Atlantic Latitude: 42.010971 Longitude: -75.52597 Datum: NAD 1983

Soil Map Unit Name: Cattaraugus channery silt loam, 5 to 15 percent slopes NWI Classification: Not Mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks: Upland plot

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☐ Yes ☑ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer saccharum	50	YES	FACU
Prunus serotina	10	NO	FACU
Fagus grandifolia	10	NO	FACU
Acer rubrum	5	NO	FAC
Total Cover:	75		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer saccharum	5	YES	FACU
Acer pensylvanicum	5	YES	FACU
Total Cover:	10		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Dryopteris intermedia	20	YES	FAC
Rubus idaeus	3	NO	FACU
Dennstaedtia punctillobula	15	YES	UPL
Total Cover:	38		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
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:	5	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	20	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	0	x 2 =	0	
FAC Species:	25	x 3 =	75	
FACU Species:	83	x 4 =	332	
UPL Species:	15	x 5 =	75	
Column Totals:	123	(A)	482	(B)
		Prevalence Index = B/A =	3.92	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-2	10YR 2/1	100					SILT LOAM	
2-14	7.5YR 2.5/3	100					SILT LOAM	
14-18	7.5YR 4/6	100					SILT LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☐ **Yes** ☑ **No**

Remarks:

Photos

Photo Name: BR1CW260_100913_UPL1S.jpg Note: BR-1C-W260-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost City/County: Broome Sampling Date: 2013/10/24

Applicant/Owner: Williams State: NY Sampling Point: BR-1C-W261-WET1

Investigator(s): RR;KH USGS Quad: North Sanford Section, Township, Range: Sanford

Landform: depression in cornfield Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 0

Subregion: Middle Atlantic Latitude: 42.137884 Longitude: -75.45602 Datum: NAD 1988

Soil Map Unit Name: Middlebury silt loam NWI Classification: Not Mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks:

Field Wetland Classification: PEM

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☑ Yes ☐ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Phalaris arundinacea	70	YES	FACW
Cyperus esculentus	30	YES	FACW
Total Cover:	100		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	100	x 2 =	200	
FAC Species:	0	x 3 =	0	
FACU Species:	0	x 4 =	0	
UPL Species:	0	x 5 =	0	
Column Totals:	100	(A)	200	(B)
Prevalence Index = B/A =			2.00	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth (in.)	Matrix Color (Moist)	Matrix %	Redox Features Color (Moist)	Redox Features %	Type [1]	Loc [2]	Texture	Remarks
0-4	10YR 4/2	95	7.5YR 4/6	5	C	PL	SILT LOAM	
4-18	5Y 5/1	80	7.5YR 4/6	20	C	PL	SILT LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☑ **Yes** ☐ **No**

Remarks:

Photos

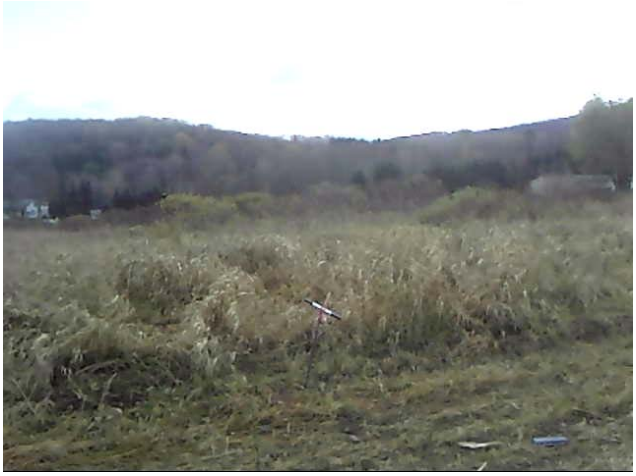

Photo Name: BR1CW261_102413_WET1SE.jpg Note: BR-1C-W261-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost City/County: Broome Sampling Date: 2013/10/24

Applicant/Owner: Williams State: NY Sampling Point: BR-1C-W261-UPL1

Investigator(s): RR;KH USGS Quad: North Sanford Section, Township, Range: Sanford

Landform: Floodplain Local Relief: ☐ Concave ☑ Convex ☐ None Slope (%): 0

Subregion: Middle Atlantic Latitude: 42.139317 Longitude: -75.45597 Datum: NAD 1988

Soil Map Unit Name: Cattaraugus channery silt loam, 5 to 15 percent slopes NWI Classification: Not Mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks: Upland plot

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☐ Yes ☑ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Zea mays	50	YES	UPL
Trifolium repens	2	NO	FACU
Total Cover:	52		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
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:	0	x 1 =	0	
FACW Species:	0	x 2 =	0	
FAC Species:	0	x 3 =	0	
FACU Species:	2	x 4 =	8	
UPL Species:	50	x 5 =	250	
Column Totals:	52	(A)	258	(B)

Prevalence Index = B/A = 4.96

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☐ Yes ☑ No

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-2	10YR 4/4	100				None	SILT LOAM	
2-18	10YR 4/6	100				None	SILT LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☐ **Yes** ☑ **No**

Remarks:

Photos

Photo Name: BR1CW261_102413_UPL1S.jpg Note: BR-1C-W261-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 27.32850 City/County: Broome Sampling Date: 2014/04/25

Applicant/Owner: Williams State: NY Sampling Point: BR-1C-W263-WET1

Investigator(s): PL, RR USGS Quad: Gulf Summit Section, Township, Range: Sanford

Landform: Drainageway Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 0

Subregion: Middle Atlantic Latitude: 42.020800 Longitude: -75.52560 Datum: NAD 1983

Soil Map Unit Name: Wayland silt loam NWI Classification: Not mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks:

Field Wetland Classification: PEM

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☑ Yes	☐ No	Depth (inches): 6
Saturation Present:	☑ Yes	☐ No	Depth (inches): 0

Wetland Hydrology Present? ☑ Yes ☐ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Alnus incana	15	YES	FACW
Total Cover: 15			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Phalaris arundinacea	85	YES	FACW
Onoclea sensibilis	3	NO	FACW
Total Cover: 88			

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	103	x 2 =	206	
FAC Species:	0	x 3 =	0	
FACU Species:	0	x 4 =	0	
UPL Species:	0	x 5 =	0	
Column Totals:	103	(A)	206	(B)
		Prevalence Index = B/A =	2.00	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-14	2.5Y 3/2	97	2.5Y 3/3	3	C	PL	FINE SANDY LOAM	
14-22	2.5Y 4/2	80	10YR 3/4	20	C	M	FINE SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

Photo Name: BR1CW263_042514_WET1N.jpg Note: BR-1C-W263-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 27.31239 City/County: Broome Sampling Date: 2014/04/25

Applicant/Owner: Williams State: NY Sampling Point: BR-1C-W263-WET2

Investigator(s): PL, RR USGS Quad: Gulf Summit Section, Township, Range: Sanford

Landform: Floodplain, terrace Local Relief: ☐ Concave ☐ Convex ☑ None Slope (%): 0

Subregion: Middle Atlantic Latitude: 42.020551 Longitude: -75.52605 Datum: NAD 1983

Soil Map Unit Name: Wayland silt loam NWI Classification: Not mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks:

Field Wetland Classification: PSS

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☑ Yes	☐ No	Depth (inches): 10
Saturation Present:	☑ Yes	☐ No	Depth (inches): 0

Wetland Hydrology Present? ☑ Yes ☐ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Malus pumila	10	YES	UPL
Total Cover:	10		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Alnus incana	8	NO	FACW
Salix sp	55	YES	FAC
Spiraea alba	8	NO	FACW
Total Cover:	71		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Onoclea sensibilis	65	YES	FACW
Solidago sp	5	NO	FAC
Total Cover:	70		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	67	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	81	x 2 =	162	
FAC Species:	60	x 3 =	180	
FACU Species:	0	x 4 =	0	
UPL Species:	10	x 5 =	50	
Column Totals:	151	(A)	392	(B)
		Prevalence Index = B/A =	2.60	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-8	2.5Y 3/2	100				None	FINE SANDY LOAM	
8-22	2.5Y 4/1	80	10YR 3/4	20	C	M	FINE SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

Photo Name: BR1CW263_042514_WET2NE.jpg Note: BR-1C-W263-WET2

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 27.28764 City/County: Broome Sampling Date: 2014/04/25

Applicant/Owner: Williams State: NY Sampling Point: BR-1C-W263-UPL1

Investigator(s): PL, RR USGS Quad: Gulf Summit Section, Township, Range: Sanford

Landform: Gravel road shoulder Local Relief: ☐ Concave ☑ Convex ☐ None Slope (%):

Subregion: Middle Atlantic Latitude: 42.020183 Longitude: -75.52578 Datum: NAD 1983

Soil Map Unit Name: Culvers channery silt loam, 8 to 15 percent slopes NWI Classification: PSS1A

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks: UPLAND
ROAD SHOULDER

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☐ Yes ☑ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Sapling Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Vine Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
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: 0 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index Worksheet:

Total % Cover of:			Multiply by:	
OBL Species:	0	x 1 =	0	
FACW Species:	0	x 2 =	0	
FAC Species:	0	x 3 =	0	
FACU Species:	0	x 4 =	0	
UPL Species:	0	x 5 =	0	
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth (in.)	Matrix Color (Moist)	Matrix %	Redox Features Color (Moist)	Redox Features %	Redox Features Type [1]	Redox Features Loc [2]	Texture	Remarks
0-20	2.5Y 3/3	100				None	LOAMY SAND	With gravel

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☐ **Yes** ☑ **No**

Remarks:
Fill material and gravel

Photos

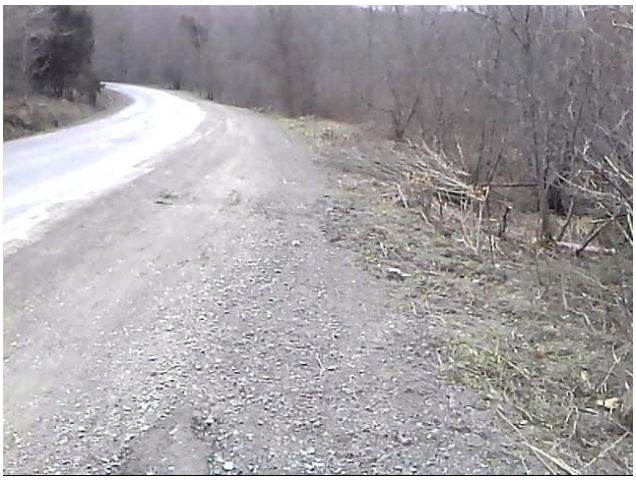

Photo Name: BR1CW263_042514_UPL1W.jpg Note: BR-1C-W263-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 30.39879 City/County: Broome Sampling Date: 2014/05/30

Applicant/Owner: Williams State: Sampling Point: BR-1C-W268-WET1

Investigator(s): RR TS USGS Quad: Gulf Summit Section, Township, Range: Sanford

Landform: DEPRESSION ON TERRACE Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 0

Subregion: Middle Atlantic Latitude: 42.056956 Longitude: -75.50678 Datum: NAD 1983

Soil Map Unit Name: Morris channery silt loam, 8 to 15 percent slopes NWI Classification: Not mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks: Use upland plot BR-1C-W267-UPL1

Field Wetland Classification: PFO

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present:	☑ Yes	☐ No	Depth (inches): 1
Water Table Present:	☑ Yes	☐ No	Depth (inches): 0
Saturation Present:	☑ Yes	☐ No	Depth (inches): 0

Wetland Hydrology Present? ☑ Yes ☐ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Tsuga canadensis	80	YES	FACU
Acer rubrum	20	YES	FAC
Total Cover:	100		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Impatiens capensis	5	YES	FACW
Dryopteris intermedia	5	YES	FAC
Oxalis montana	1	NO	FACU
Total Cover:	11		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	4	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	75	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	5	x 2 =	10	
FAC Species:	25	x 3 =	75	
FACU Species:	81	x 4 =	324	
UPL Species:	0	x 5 =	0	
Column Totals:	111	(A)	409	(B)
		Prevalence Index = B/A =	3.68	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-4	2.5Y2.5/1	100					ORGANIC	ORGANIC LOAM
4-12	2.5Y5/1	95	GLEY14/10GY	5	D	M	FINE SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present):	
Type: ROCK Depth (inches): 12	**Hydric Soil Present?** ☑ **Yes** ☐ **No**

Remarks:
AUGER REFUSAL

Photos

Photo Name: BR1CW268_053014_WET1E.jpg Note: BR-1C-W268-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost: 30.38394 City/County: Broome Sampling Date: 2014/05/30

Applicant/Owner: Williams State: Sampling Point: BR-1C-W267-UPL1

Investigator(s): RR TS USGS Quad: Gulf Summit Section, Township, Range: Sanford

Landform: HILLSIDE Local Relief: ☐ Concave ☐ Convex ☑ None Slope (%): 10

Subregion: Middle Atlantic Latitude: 42.056651 Longitude: -75.50665 Datum: NAD 1983

Soil Map Unit Name: Lordstown and Oquaga channery silt loams, 25 to 35 percent slopes NWI Classification: Not mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks: UPLAND FOREST; also upland plot for BR-1C-W268-WET1

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☐ Yes ☑ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Tsuga canadensis	70	YES	FACU
Betula lenta	20	YES	FACU
Acer rubrum	10	NO	FAC
Total Cover:	**100**		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Tsuga canadensis	5	YES	FACU
Total Cover:	**5**		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Dryopteris intermedia	5	YES	FAC
Total Cover:	**5**		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
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:	4	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	25	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	0	x 2 =	0	
FAC Species:	15	x 3 =	45	
FACU Species:	95	x 4 =	380	
UPL Species:	0	x 5 =	0	
Column Totals:	110	(A)	425	(B)
		Prevalence Index = B/A =	3.86	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-2	10YR2/2	100					ORGANIC	
2-8	10YR4/4	100					LOAM	
8-20	10YR5/6	100					LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☐ **Yes** ☑ **No**

Remarks:

Photos

Photo Name: BR1CW267_053014_UPL1E.jpg Note: BR-1C-W267-UPL1

DELAWARE COUNTY

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 73.5 City/County: Delaware Sampling Date: 2013/06/03

Applicant/Owner: Williams State: NY Sampling Point: DE-1A-W125A-WET1

Investigator(s): PL;KH USGS Quad: Oneonta Section, Township, Range: Franklin

Landform: Drainageway Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 2

Subregion: Middle Atlantic Latitude: 42.416668 Longitude: -75.04953 Datum: NAD1983

Soil Map Unit Name: Onteora and Ontusia soils, 2 to 10 percent slopes, very stony NWI Classification: Not Mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks:

Field Wetland Classification: PFO

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☑ Yes ☐ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Betula alleghaniensis	25	NO	FAC
Pinus strobus	35	YES	FACU
Acer rubrum	40	YES	FAC
Total Cover:	**100**		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Quercus rubra	8	YES	FACU
Betula alleghaniensis	10	YES	FAC
Total Cover:	**18**		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Rhamnus frangula	15	YES	FAC
Total Cover:	**15**		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Onoclea sensibilis	20	YES	FACW
Equisetum palustre	5	NO	FACW
Impatiens capensis	50	YES	FACW
Rubus hispidus	3	NO	FACW
Total Cover:	**78**		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	5	(A)
Total Number of Dominant Species Across All Strata:	7	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	71	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	78	x 2 =	156	
FAC Species:	90	x 3 =	270	
FACU Species:	43	x 4 =	172	
UPL Species:	0	x 5 =	0	
Column Totals:	211	(A)	598	(B)
		Prevalence Index = B/A =	2.83	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth (in.)	Matrix Color (Moist)	Matrix %	Redox Features Color (Moist)	Redox %	Type [1]	Loc [2]	Texture	Remarks
0-6	10YR 3/1	100				None	SILT LOAM	
6-15	5YR 4/2	95	5YR 4/1	5	C	M	SILT LOAM	Organic staining in subsoil

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

Photo Name: DE1AW125A_060313_WET1S.jpg Note: DE-1A-W125A-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 73.5 City/County: Delaware Sampling Date: 2013/06/03

Applicant/Owner: Williams State: NY Sampling Point: DE-1A-W125A-UPL1

Investigator(s): PL;KH USGS Quad: Oneonta Section, Township, Range: Franklin

Landform: Sideslope Local Relief: ☐ Concave ☑ Convex ☐ None Slope (%): 4

Subregion: Middle Atlantic Latitude: 42.416831 Longitude: -75.04930 Datum: NAD1983

Soil Map Unit Name: Onteora and Ontusia soils, 2 to 10 percent slopes, very stony NWI Classification: Not Mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks: Upland plot

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☐ Yes ☑ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer rubrum	10	NO	FAC
Pinus strobus	30	YES	FACU
Quercus rubra	20	YES	FACU
Betula alleghaniensis	15	NO	FAC
Ostrya virginiana	8	NO	FACU
Total Cover:	83		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Betula alleghaniensis	8	YES	FAC
Total Cover:	8		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Maianthemum canadense	10	NO	FACU
Dennstaedtia punctilobula	45	YES	UPL
Thelypteris noveboracensis	15	YES	FAC
Total Cover:	70		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	5	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	40	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	0	x 2 =	0	
FAC Species:	48	x 3 =	144	
FACU Species:	68	x 4 =	272	
UPL Species:	45	x 5 =	225	
Column Totals:	161	(A)	641	(B)
		Prevalence Index = B/A =	3.98	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-2	5YR 2.5/1	100				None	FINE SANDY LOAM	
2-7	5YR 4/2	100				None	FINE SANDY LOAM	
7-15+	5YR 3/4	100				None	FINE SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☐ **Yes** ☑ **No**

Remarks:

Photos

Photo Name: DE1AW125A_060313_UPL1NE.jpg Note: DE-1A-W125A-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 73.6 City/County: Delaware Sampling Date: 2013/06/03

Applicant/Owner: Williams State: NY Sampling Point: DE-1A-W125B-WET1

Investigator(s): PL;KH USGS Quad: Oneonta Section, Township, Range: Franklin

Landform: Isolated depression Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 1

Subregion: Middle Atlantic Latitude: 42.416980 Longitude: -75.04896 Datum: NAD1983

Soil Map Unit Name: Willowemoc channery silt loam, 3 to 8 percent slopes NWI Classification: Not Mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks: Use Upland plot DE-1A-W125A-UPL1

Field Wetland Classification: PFO

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☑ Yes ☐ No

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

Remarks:

organic staining; reduced matrix-tree species not in wetland

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Tsuga canadensis	10	YES	FACU
Fagus grandifolia	40	YES	FACU
Total Cover:	50		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Rhamnus frangula	15	YES	FAC
Total Cover:	15		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Impatiens capensis	5	NO	FACW
Osmunda cinnamomea	30	YES	FACW
Thelypteris novemboracensis	10	NO	FAC
Solidago sp	15	NO	FAC
Carex stricta	25	YES	OBL
Total Cover:	85		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	5	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	60	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	25	x 1 =	25	
FACW Species:	35	x 2 =	70	
FAC Species:	40	x 3 =	120	
FACU Species:	50	x 4 =	200	
UPL Species:	0	x 5 =	0	
Column Totals:	150	(A)	415	(B)
		Prevalence Index = B/A =	2.77	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-12	5YR 2.5/1	100				None	SILT LOAM	
12-18	5YR 4/2	90	10YR 3/4	10	C	M	SILT LOAM	Organic staining in subsoil

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

Photo Name: DE1AW125B_060313_WET1NW.jpg Note: DE-1A-W125B-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 78.3 City/County: Deleware Sampling Date: 2013/11/06

Applicant/Owner: Williams State: NY Sampling Point: DE-1A-W248A-WET1

Investigator(s): PL;KH USGS Quad: West Davenport Section, Township, Range: Davenport

Landform: floodplain/terrac landscape Local Relief: ☐ Concave ☐ Convex ☑ None Slope (%): 1

Subregion: Middle Atlantic Latitude: 42.423188 Longitude: -74.96092 Datum: NAD 1988

Soil Map Unit Name: Wellsboro channery silt loam, 15 to 25 percent slopes NWI Classification: Not Mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks:

Field Wetland Classification: PEM

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☑ Yes ☐ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Rosa multiflora	15	YES	FACU
Total Cover:	15		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Juncus effusus	8	NO	OBL
Epilobium ciliatum	3	NO	FACW
Rumex crispus	2	NO	FAC
Copteris groenlandica	70	YES	FACW
Phleum pratense	10	NO	FACU
Symphyotrichum lateriflorum	3	NO	FAC
Total Cover:	96		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
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:	2	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	50	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL Species:	8	x 1 =	8
FACW Species:	73	x 2 =	146
FAC Species:	5	x 3 =	15
FACU Species:	25	x 4 =	100
UPL Species:	0	x 5 =	0
Column Totals:	111	(A)	269 (B)
		Prevalence Index = B/A =	2.42

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth (in.)	Matrix Color (Moist)	Matrix %	Redox Features Color (Moist)	Redox %	Type [1]	Loc [2]	Texture	Remarks
0-4	5Y 3/2	100					SANDY LOAM	W/Gravel
4-20	5Y 3/2	97	5Y 3/4	3	C	PL	FINE SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

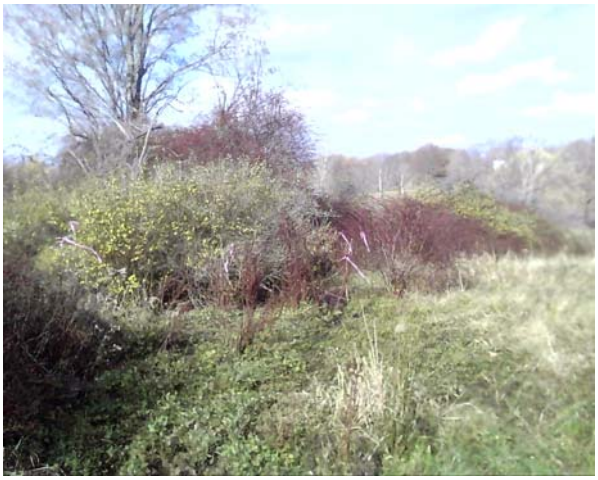

Photo Name: DE1AW248A_110613_WET1NW.jpg Note: DE-1A-W248A-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 78.3 City/County: Deleware Sampling Date: 2013/11/06

Applicant/Owner: Williams State: NY Sampling Point: DE-1A-W248A-UPL1

Investigator(s): PL;KH USGS Quad: West Davenport Section, Township, Range: Davenport

Landform: Floodplain terrace Local Relief: ☐ Concave ☐ Convex ☑ None Slope (%): 2

Subregion: Middle Atlantic Latitude: 42.423269 Longitude: -74.96077 Datum: NAD 1988

Soil Map Unit Name: Wellsboro channery silt loam, 15 to 25 percent slopes NWI Classification: Not Mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks: Upland plot

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☐ Yes ☑ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Rosa multiflora	5	YES	FACU
Total Cover: 5			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Phleum pratense	2	NO	FACU
Agrostis sp.	70	YES	FAC
Copteris groenlandica	5	NO	FACU
Total Cover: 77			

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
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:	2	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	50	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	0	x 2 =	0	
FAC Species:	70	x 3 =	210	
FACU Species:	12	x 4 =	48	
UPL Species:	0	x 5 =	0	
Column Totals:	82	(A)	258	(B)
		Prevalence Index = B/A =	3.15	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☐ Yes ☑ No

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-6	7.5YR 3/2	100					FINE SANDY LOAM	
6-15	7.5YR 3/3	100					FINE SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☐ **Yes** ☑ **No**
Remarks:	

Photos

Photo Name: DE1AW248A_110613_UPL1E.jpg Note: DE-1A-W248A-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost City/County: Deleware Sampling Date: 2013/11/12

Applicant/Owner: Williams State: NY Sampling Point: DE-1A-W361-WET1

Investigator(s): PL;KH USGS Quad: Oneonta Section, Township, Range: Franklin

Landform: drainageway Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 0

Subregion: Middle Atlantic Latitude: 42.390766 Longitude: -75.09577 Datum: NAD 1988

Soil Map Unit Name: Barbour loam NWI Classification: Not Mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks:

Field Wetland Classification: PFO

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☑ Yes	☐ No	Depth (inches): 6
Saturation Present:	☑ Yes	☐ No	Depth (inches): 0

Wetland Hydrology Present? ☑ Yes ☐ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer rubrum	40	YES	FAC
Crataegus crus-galli	25	YES	FAC
Total Cover:	65		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Impatiens capensis	18	YES	FACW
Symphyotrichum lateriflorum	10	NO	FAC
Juncus effusus	3	NO	OBL
Solidago gigantea	25	YES	FACW
Total Cover:	56		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	4	(A)
Total Number of Dominant Species Across All Strata:	4	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	3	x 1 =	3	
FACW Species:	43	x 2 =	86	
FAC Species:	75	x 3 =	225	
FACU Species:	0	x 4 =	0	
UPL Species:	0	x 5 =	0	
Column Totals:	121	(A)	314	(B)
		Prevalence Index = B/A =	2.60	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth (in.)	Matrix Color (Moist)	Matrix %	Redox Features Color (Moist)	Redox %	Type [1]	Loc [2]	Texture	Remarks
0-14	7.5YR 2.5/2	100					FINE SANDY LOAM	Mucky
14-20	7.5YR 4/2	95	7.5YR 4/4	5	C	PL	SILT LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

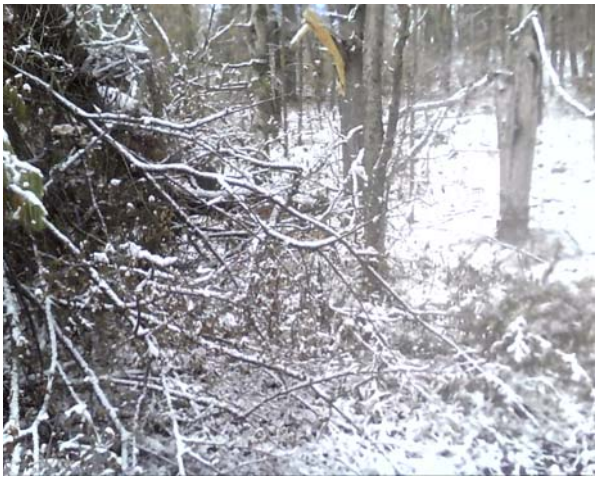

Photo Name: DE1AW361_111213_WET1SW.jpg Note: DE-1A-W361-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost City/County: Deleware Sampling Date: 2013/11/12

Applicant/Owner: Williams State: NY Sampling Point: DE-1A-W361-UPL1

Investigator(s): PL;KH USGS Quad: Oneonta Section, Township, Range: Franklin

Landform: Hillside/Sideslope Local Relief: ☐ Concave ☐ Convex ☑ None Slope (%): 15

Subregion: Middle Atlantic Latitude: 42.390848 Longitude: -75.09607 Datum: NAD 1988

Soil Map Unit Name: Lackawanna and Bath soils, 15 to 35 percent slopes, very stony NWI Classification: Not Mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks: upland pkot; share with DE-1A-W362

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☐ Yes ☑ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Fagus grandifolia	40	YES	FACU
Fagus americana	30	YES	FACU
Acer saccharum	10	NO	FACU
Ostrya virginiana	10	NO	FACU
Total Cover:	90		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Fagus grandifolia	15	YES	FACU
Total Cover:	15		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	0	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	0	x 2 =	0	
FAC Species:	0	x 3 =	0	
FACU Species:	105	x 4 =	420	
UPL Species:	0	x 5 =	0	
Column Totals:	105	(A)	420	(B)
		Prevalence Index = B/A =	4.00	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☐ Yes ☑ No

Remarks:

SOIL

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

Depth (in.)	Matrix Color (Moist)	Matrix %	Redox Features Color (Moist)	Redox %	Type [1]	Loc [2]	Texture	Remarks
0-6	7.5YR 3/2	100					FINE SANDY LOAM	
6-16	5YR 3/4	100					FINE SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☐ **Yes** ☑ **No**
Remarks:	

Photos

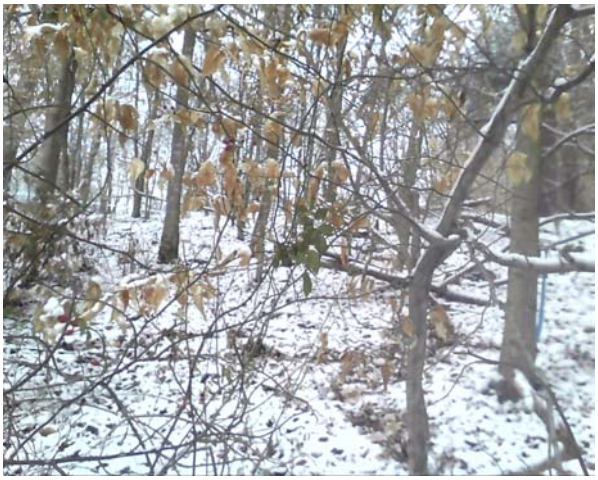

Photo Name: DE1AW361_111213_UPL1NW.jpg Note: DE-1A-W361-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost City/County: Deleware Sampling Date: 2013/11/12

Applicant/Owner: Williams State: NY Sampling Point: DE-1A-W362-WET1

Investigator(s): PL;KH USGS Quad: Oneonta Section, Township, Range: Franklin

Landform: drainageway Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 0

Subregion: Middle Atlantic Latitude: 42.390692 Longitude: -75.09610 Datum: NAD 1988

Soil Map Unit Name: Barbour loam NWI Classification: Not Mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks: Use DE-1A-W361-UPL1 as representative upland plot

Field Wetland Classification: PEM

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☑ Yes ☐ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Rosa multiflora	20	YES	FACU
Total Cover:	20		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Symphyotrichum lateriflorum	15	YES	FAC
Phalaris arundinacea	40	YES	FACW
Rumex crispus	8	NO	FAC
Arctium minus	5	NO	FACU
Total Cover:	68		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	67	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	40	x 2 =	80	
FAC Species:	23	x 3 =	69	
FACU Species:	25	x 4 =	100	
UPL Species:	0	x 5 =	0	
Column Totals:	88	(A)	249	(B)
		Prevalence Index = B/A =	2.83	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-20	5YR 3/2	100					FINE SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 68.27240 City/County: Delaware Sampling Date: 2014/05/02

Applicant/Owner: Williams State: NY Sampling Point: DE-1A-W373-WET1

Investigator(s): PL;KH USGS Quad: Otego Section, Township, Range: Franklin

Landform: Drainageway Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 2

Subregion: Middle Atlantic Latitude: 42.383361 Longitude: -75.12731 Datum: NAD 1983

Soil Map Unit Name: Morris and Volusia soils, 2 to 10 percent slopes, very stony NWI Classification: Not mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks:

Field Wetland Classification: PFO

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☑ Yes	☐ No	Depth (inches): 6
Saturation Present:	☑ Yes	☐ No	Depth (inches): 0

Wetland Hydrology Present? ☑ Yes ☐ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Tsuga canadensis	60	YES	FACU
Total Cover:	**60**		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Betula alleghaniensis	2	YES	FAC
Total Cover:	**2**		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Hamamelis virginiana	5	YES	FACU
Total Cover:	**5**		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Carex sp	60	YES	OBL
Solidago sp	1	NO	FAC
Coptis trifolia	15	NO	FACW
Total Cover:	**76**		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	4	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	50	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	60	x 1 =	60	
FACW Species:	15	x 2 =	30	
FAC Species:	3	x 3 =	9	
FACU Species:	65	x 4 =	260	
UPL Species:	0	x 5 =	0	
Column Totals:	143	(A)	359	(B)
		Prevalence Index = B/A =	2.51	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-10	7.5YR 3/1	100					SILT LOAM	
10-16	7.5YR 4/2	95	7.5YR 4/4	5	C	M	SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

Photo Name: DE1AW373_050214_WET1NW.jpg Note: DE-1A-W373-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 68.26464 City/County: Delaware Sampling Date: 2014/05/02

Applicant/Owner: Williams State: NY Sampling Point: DE-1A-W374-WET1

Investigator(s): PL;KH USGS Quad: Otego Section, Township, Range: Franklin

Landform: sideslope Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 2

Subregion: Middle Atlantic Latitude: 42.383574 Longitude: -75.12766 Datum: NAD 1983

Soil Map Unit Name: Morris and Volusia soils, 2 to 10 percent slopes, very stony NWI Classification: Not mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks:

Field Wetland Classification: PFO

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☑ Yes	☐ No	Depth (inches): 6
Saturation Present:	☑ Yes	☐ No	Depth (inches): 0

Wetland Hydrology Present? ☑ Yes ☐ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Tsuga canadensis	10	NO	FACU
Betula alleghaniensis	60	YES	FAC
Fagus americana	10	NO	FACU
Total Cover:	80		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Fagus americana	8	YES	FACU
Total Cover:	8		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Onoclea sensibilis	20	YES	FACW
Erythronium americanum	5	NO	FACU
Coptis trifolia	18	YES	FACW
Total Cover:	43		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	4	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	75	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	38	x 2 =	76	
FAC Species:	60	x 3 =	180	
FACU Species:	33	x 4 =	132	
UPL Species:	0	x 5 =	0	
Column Totals:	131	(A)	388	(B)
		Prevalence Index = B/A =	2.96	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth (in.)	Matrix Color (Moist)	Matrix %	Redox Features Color (Moist)	Redox %	Type [1]	Loc [2]	Texture	Remarks
0-10	7.5YR 3/1	100					SILT LOAM	
10-16	7.5YR 4/2	95	7.5YR 4/4	5	C	PL	SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

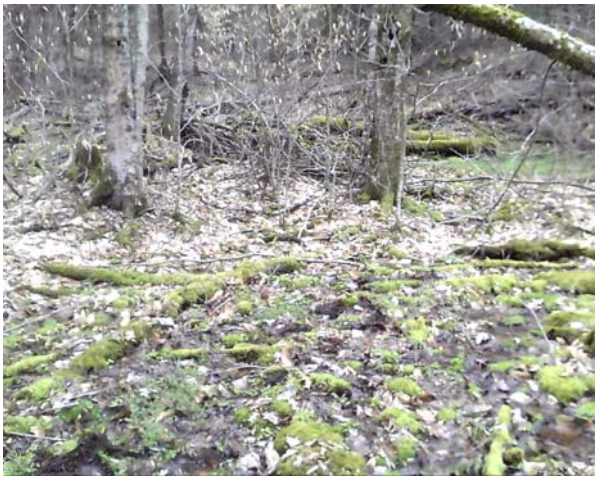

Photo Name: DE1AW374_050214_WET1W.jpg Note: DE-1A-W374-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 68.25606 City/County: Delaware Sampling Date: 2014/05/02

Applicant/Owner: Williams State: NY Sampling Point: DE-1A-W374-UPL1

Investigator(s): PL;KH USGS Quad: Otego Section, Township, Range: Franklin

Landform: sideslope Local Relief: ☐ Concave ☐ Convex ☑ None Slope (%): 2

Subregion: Middle Atlantic Latitude: 42.383414 Longitude: -75.12773 Datum: NAD 1983

Soil Map Unit Name: Morris and Volusia soils, 2 to 10 percent slopes, very stony NWI Classification: Not mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks: Upland plot

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☐ Yes ☑ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Tsuga canadensis	80	YES	FACU
Betula alleghaniensis	10	NO	FAC
Total Cover:	90		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Fagus americana	10	YES	FACU
Total Cover:	10		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	0	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	0	x 2 =	0	
FAC Species:	10	x 3 =	30	
FACU Species:	90	x 4 =	360	
UPL Species:	0	x 5 =	0	
Column Totals:	100	(A)	390	(B)
		Prevalence Index = B/A =	3.90	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☐ Yes ☑ No

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-4	10YR 2/1	100					SANDY LOAM	
4-15	5YR 4/4	100					FINE SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☐ **Yes** ☑ **No**
Remarks:	

Photos

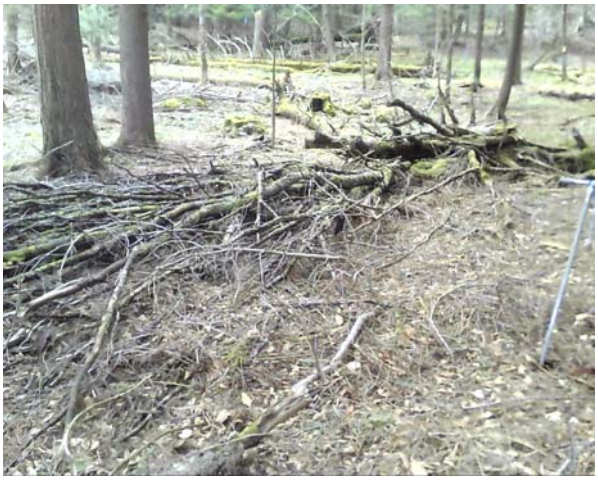

Photo Name: DE1AW374_050214_UPL1SE.jpg Note: DE-1A-W374-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 63.81006 City/County: Delaware Sampling Date: 2014/05/20

Applicant/Owner: Williams State: NY Sampling Point: DE-1A-W463-WET1

Investigator(s): PL, RR USGS Quad: Franklin Section, Township, Range: Sidney

Landform: Drainageway Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 1

Subregion: Middle Atlantic Latitude: 42.353690 Longitude: -75.20527 Datum: NAD 1983

Soil Map Unit Name: Wellsboro channery silt loam, 3 to 8 percent slopes NWI Classification: Not mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks:

Field Wetland Classification: PFO

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☑ Yes ☐ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer rubrum	40	YES	FAC
Betula lenta	10	YES	FACU
Total Cover:	50		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Betula lenta	3	YES	FACU
Total Cover:	3		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Carex crinita	45	YES	OBL
Solidago rugosa	8	NO	FAC
Carex sp	30	YES	FACW
Impatiens capensis	10	NO	FACW
Total Cover:	93		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	5	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	60	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	45	x 1 =	45	
FACW Species:	40	x 2 =	80	
FAC Species:	48	x 3 =	144	
FACU Species:	13	x 4 =	52	
UPL Species:	0	x 5 =	0	
Column Totals:	146	(A)	321	(B)
		Prevalence Index = B/A =	2.20	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth (in.)	Matrix Color (Moist)	Matrix %	Redox Features Color (Moist)	Redox %	Type [1]	Loc [2]	Texture	Remarks
0-8	10YR 3/1	100				None	FINE SANDY LOAM	
8-16	10YR 4/2	90	10YR 3/4	10	C	M	FINE SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

Photo Name: DE1AW463_052014_WET1S.jpg Note: DE-1A-W463-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 63.84682 City/County: Delaware Sampling Date: 2014/05/20

Applicant/Owner: Williams State: NY Sampling Point: DE-1A-W467-WET1

Investigator(s): PL, RR USGS Quad: Franklin Section, Township, Range: Sidney

Landform: Drainageway Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%):

Subregion: Middle Atlantic Latitude: 42.354288 Longitude: -75.20456 Datum: NAD 1983

Soil Map Unit Name: Volusia channery silt loam, 3 to 8 percent slopes NWI Classification: Not mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks:

Field Wetland Classification: PFO

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☑ Yes	☐ No	Depth (inches): 6
Saturation Present:	☑ Yes	☐ No	Depth (inches): 0

Wetland Hydrology Present? ☑ Yes ☐ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer rubrum	60	YES	FAC
Pinus strobus	10	YES	FACU
Total Cover:	70		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Carpinus caroliniana	15	YES	FAC
Betula lenta	5	YES	FACU
Total Cover:	20		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Spiraea alba	8	YES	FACW
Total Cover:	8		

Herb Stratum			
Plot Size: 530 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Onoclea sensibilis	18	YES	FACW
Solidago sp	8	NO	FAC
Rubus hispidus	10	NO	FACW
Glyceria sp	40	YES	FACW
Total Cover:	76		

Vine Stratum			
Plot Size: feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	5	(A)
Total Number of Dominant Species Across All Strata:	7	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	71	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	76	x 2 =	152	
FAC Species:	83	x 3 =	249	
FACU Species:	15	x 4 =	60	
UPL Species:	0	x 5 =	0	
Column Totals:	174	(A)	461	(B)
		Prevalence Index = B/A =	2.65	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth (in.)	Matrix Color (Moist)	Matrix %	Redox Features Color (Moist)	Redox %	Type [1]	Loc [2]	Texture	Remarks
0-2	2.5Y 3/2					None	FINE SANDY LOAM	
2-14	2.5Y 4/1	80	2.5Y 3/3	10	C	M	FINE SANDY LOAM	2.5Y 3/4 10% C, M

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

Photo Name: DE1AW467_052014_WET1W.jpg Note: DE-1A-W467-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 63.88910 City/County: Delaware Sampling Date: 2014/05/20

Applicant/Owner: Williams State: NY Sampling Point: DE-1A-W468-WET1

Investigator(s): PL, RR USGS Quad: Franklin Section, Township, Range: Sidney

Landform: Drainage Local Relief: [x] Concave [ ] Convex [ ] None Slope (%): 1

Subregion: Middle Atlantic Latitude: 42.353818 Longitude: -75.20373 Datum: NAD 1983

Soil Map Unit Name: Mardin channery silt loam, 3 to 8 percent slopes NWI Classification: Not mapped

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

Are Vegetation [ ] Soil [ ] or Hydrology [ ] significantly disturbed? [x] No Are "Normal Circumstances" present? [x] Yes [ ] No

Are Vegetation [ ] Soil [ ] or Hydrology [ ] naturally problematic? [x] No (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	[x] Yes	[ ] No	**Is the Sampled Area within a Wetland?** [x] **Yes** [ ] **No**
Hydric Soil Present?	[x] Yes	[ ] No	
Wetland Hydrology Present?	[x] Yes	[ ] No	

Remarks:

Field Wetland Classification: PEM

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present:	[ ] Yes	[x] No	Depth (inches):
Water Table Present:	[ ] Yes	[x] No	Depth (inches):
Saturation Present:	[x] Yes	[ ] No	Depth (inches): 0

Wetland Hydrology Present? [x] Yes [ ] No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer rubrum	18	YES	FAC
Total Cover:	18		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Carex crinita	25	YES	OBL
Viola sp	5	NO	FAC
Carex sp	30	YES	FAC
Juncus effusus	10	NO	OBL
Impatiens capensis	12	NO	FACW
Onoclea sensibilis	8	NO	FACW
Total Cover:	90		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	35	x 1 =	35	
FACW Species:	20	x 2 =	40	
FAC Species:	53	x 3 =	159	
FACU Species:	0	x 4 =	0	
UPL Species:	0	x 5 =	0	
Column Totals:	108	(A)	234	(B)
		Prevalence Index = B/A =	2.17	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-5	2.5Y 3/2	90	2.5Y 4/3	10	C	M	FINE SANDY LOAM	
5-15	2.5Y 4/2	80	2.5Y 3/3	20	C	M	FINE SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

Photo Name: DE1AW468_052014_WET1E.jpg Note: DE-1A-W468-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 63.89527 City/County: Delaware Sampling Date: 2014/05/20

Applicant/Owner: Williams State: NY Sampling Point: DE-1A-W468-UPL1

Investigator(s): PL, RR USGS Quad: Franklin Section, Township, Range: Sidney

Landform: Side slope Local Relief: ☐ Concave ☐ Convex ☑ None Slope (%): 1

Subregion: Middle Atlantic Latitude: 42.354034 Longitude: -75.20361 Datum: NAD 1983

Soil Map Unit Name: Mardin channery silt loam, 3 to 8 percent slopes NWI Classification: Not mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks: Upland

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☐ Yes ☑ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Fagus grandifolia	65	YES	FACU
Tsuga canadensis	10	NO	FACU
Total Cover:	75		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Fagus grandifolia	40	YES	FACU
Total Cover:	40		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Maianthemum canadense	8	YES	FACU
Erythronium albidum	8	YES	FACU
Total Cover:	16		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
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:	4	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	0	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	0	x 2 =	0	
FAC Species:	0	x 3 =	0	
FACU Species:	131	x 4 =	524	
UPL Species:	0	x 5 =	0	
Column Totals:	131	(A)	524	(B)
		Prevalence Index = B/A =	4.00	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☐ Yes ☑ No

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-8	10YR 2/2	100				None	FINE SANDY LOAM	
8-14	10YR 3/4	100				None	FINE SANDY LOAM	Auger refusal at 14"

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☐ **Yes** ☑ **No**

Remarks:

Photos

Photo Name: DE1AW468_052014_UPL1NW.jpg Note: DE-1A-W468-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 63.91642 City/County: Delaware Sampling Date: 2014/05/20

Applicant/Owner: Williams State: NY Sampling Point: DE-1A-W469-WET1

Investigator(s): PL, RR USGS Quad: Franklin Section, Township, Range: Sidney

Landform: Depression Local Relief: [x] Concave [ ] Convex [ ] None Slope (%): 0

Subregion: Middle Atlantic Latitude: 42.354021 Longitude: -75.20320 Datum: NAD 1983

Soil Map Unit Name: Mardin channery silt loam, 3 to 8 percent slopes NWI Classification: Not mapped

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

Are Vegetation [ ] Soil [ ] or Hydrology [ ] significantly disturbed? [x] No Are "Normal Circumstances" present? [x] Yes [ ] No

Are Vegetation [ ] Soil [ ] or Hydrology [ ] naturally problematic? [x] No (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	[x] Yes	[ ] No	**Is the Sampled Area within a Wetland?** [x] **Yes** [ ] **No**
Hydric Soil Present?	[x] Yes	[ ] No	
Wetland Hydrology Present?	[x] Yes	[ ] No	

Remarks:

Field Wetland Classification: PFO

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present:	[ ] Yes	[x] No	Depth (inches):
Water Table Present:	[ ] Yes	[x] No	Depth (inches):
Saturation Present:	[x] Yes	[ ] No	Depth (inches): 0

Wetland Hydrology Present? [x] Yes [ ] No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 5 feet **Scientific Name**	**% Cover**	**Dominant**	**Indicator**
Fagus grandifolia	65	YES	FACU
Total Cover:	**65**		

Sapling Stratum			
Plot Size: 5 feet **Scientific Name**	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 5 feet **Scientific Name**	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet **Scientific Name**	**% Cover**	**Dominant**	**Indicator**
Impatiens capensis	5	NA	FACW
Carex crinita	60	YES	OBL
Viola sp	20	YES	FAC
Total Cover:	**85**		

Vine Stratum			
Plot Size: 5 feet **Scientific Name**	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	67	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	60	x 1 =	60	
FACW Species:	5	x 2 =	10	
FAC Species:	20	x 3 =	60	
FACU Species:	65	x 4 =	260	
UPL Species:	0	x 5 =	0	
Column Totals:	150	(A)	390	(B)
		Prevalence Index = B/A =	2.60	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth (in.)	Matrix Color (Moist)	Matrix %	Redox Features Color (Moist)	Redox %	Type [1]	Loc [2]	Texture	Remarks
0-5	2.5Y 3/1					None	SILT LOAM	
5-14	2.5Y 4/2	92	2.5Y 4/4	8	C	M	FINE SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

Photo Name: DE1AW469_052014_WET1E.jpg Note: DE-1A-W469-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 80.90426 City/County: Delaware Sampling Date: 2014/05/21

Applicant/Owner: Williams State: Sampling Point: DE-1A-W472-WET1

Investigator(s): PL;KH USGS Quad: West Davenport Section, Township, Range: Davenport

Landform: Depression Local Relief: [x] Concave [ ] Convex [ ] None Slope (%): 0

Subregion: Middle Atlantic Latitude: 42.428184 Longitude: -74.91310 Datum: NAD 1983

Soil Map Unit Name: Willowemoc channery silt loam, 3 to 8 percent slopes NWI Classification: Not mapped

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

Are Vegetation [ ] Soil [ ] or Hydrology [ ] significantly disturbed? [x] No Are "Normal Circumstances" present? [x] Yes [ ] No

Are Vegetation [ ] Soil [x] or Hydrology [ ] naturally problematic? [ ] No (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	[x] Yes	[ ] No	**Is the Sampled Area within a Wetland?** [x] **Yes** [ ] **No**
Hydric Soil Present?	[x] Yes	[ ] No	
Wetland Hydrology Present?	[x] Yes	[ ] No	

Remarks:

Field Wetland Classification: PFO

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present:	[ ] Yes	[x] No	Depth (inches):
Water Table Present:	[ ] Yes	[x] No	Depth (inches):
Saturation Present:	[x] Yes	[ ] No	Depth (inches): 0

Wetland Hydrology Present? [x] Yes [ ] No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer rubrum	60	YES	FAC
Fraxinus americana	10	NO	FACU
Populus tremuloides	18	YES	FACU
Total Cover:	88		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Rhododendron viscosum	25	YES	FACW
Total Cover:	25		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Onoclea sensibilis	25	YES	FACW
Rubus hispidus	25	YES	FACW
Parthenocissus quinquefolia	3	NO	FACU
Total Cover:	53		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	4	(A)
Total Number of Dominant Species Across All Strata:	5	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	80	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	75	x 2 =	150	
FAC Species:	60	x 3 =	180	
FACU Species:	31	x 4 =	124	
UPL Species:	0	x 5 =	0	
Column Totals:	166	(A)	454	(B)
		Prevalence Index = B/A =	2.73	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-8	7.5YR 3/3	100					FINE SANDY LOAM	
8-15	5YR 4/3	95	7.5YR 5/2	5	C	M	FINE SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

Photo Name: DE1AW472_052114_WET1SE.jpg Note: DE-1A-W472-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 80.91300 City/County: Delaware Sampling Date: 2014/05/21

Applicant/Owner: Williams State: Sampling Point: DE-1A-W472-UPL1

Investigator(s): PL;KH USGS Quad: West Davenport Section, Township, Range: Davenport

Landform: Hillside Local Relief: ☐ Concave ☐ Convex ☑ None Slope (%): 0

Subregion: Middle Atlantic Latitude: 42.428151 Longitude: -74.91285 Datum: NAD 1983

Soil Map Unit Name: Willowemoc channery silt loam, 3 to 8 percent slopes NWI Classification: Not mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks: Upland plot

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☐ Yes ☑ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Tsuga canadensis	20	YES	FACU
Populus tremuloides	18	YES	FACU
Pinus strobus	10	NO	FACU
Acer rubrum	40	YES	FAC
Total Cover:	88		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer rubrum	5	YES	FAC
Total Cover:	5		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Crataegus crus-galli	5	YES	FAC
Carya sp	3	NO	FACU
Maianthemum canadense	20	YES	FACU
Total Cover:	28		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	6	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	50	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	0	x 2 =	0	
FAC Species:	50	x 3 =	150	
FACU Species:	71	x 4 =	284	
UPL Species:	0	x 5 =	0	
Column Totals:	121	(A)	434	(B)
		Prevalence Index = B/A =	3.59	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☐ Yes ☑ No

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-3	5Y 3/1	100					FINE SANDY LOAM	
3-10	5YR 3/3	100					FINE SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☐ **Yes** ☑ **No**
Remarks:	

Photos

Photo Name: DE1AW472_052114_UPL1NW.jpg Note: DE-1A-W472-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 62.53985 City/County: Delaware Sampling Date: 2014/05/30

Applicant/Owner: Williams State: Sampling Point: DE-1A-W473-WET1

Investigator(s): PL;KH USGS Quad: Franklin Section, Township, Range: Sidney

Landform: Drainageway Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 2

Subregion: Middle Atlantic Latitude: 42.355436 Longitude: -75.22986 Datum: NAD 1983

Soil Map Unit Name: Morris flaggy silt loam, 3 to 8 percent slopes NWI Classification: Not mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks:

Field Wetland Classification: PFO

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☑ Yes	☐ No	Depth (inches): 8
Saturation Present:	☑ Yes	☐ No	Depth (inches): 0

Wetland Hydrology Present? ☑ Yes ☐ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer rubrum	70	YES	FAC
Quercus alba	10	NO	FACU
Total Cover:	80		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer rubrum	15	YES	FAC
Total Cover:	15		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Impatiens capensis	25	YES	FACW
Carex crinita	45	YES	OBL
Solidago sp	15	NO	FAC
Rubus sp	10	NO	FACW
Total Cover:	95		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	4	(A)
Total Number of Dominant Species Across All Strata:	4	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	45	x 1 =	45	
FACW Species:	35	x 2 =	70	
FAC Species:	100	x 3 =	300	
FACU Species:	10	x 4 =	40	
UPL Species:	0	x 5 =	0	
Column Totals:	190	(A)	455	(B)
		Prevalence Index = B/A =	2.39	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-8	7.5YR 3/2	97	7.5YR 2.5/3	3	C	M	LOAM	
8-16+	7.5YR 4/2	92	10YR 3/4	8	C	M	FINE SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

Photo Name: DE1AW473_053014_WET1SE.jpg Note: DE-1A-W473-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 62.53397 City/County: Delaware Sampling Date: 2014/05/30

Applicant/Owner: Williams State: Sampling Point: DE-1A-W473-UPL1

Investigator(s): PL;KH USGS Quad: Franklin Section, Township, Range: Sidney

Landform: Drainageway Local Relief: ☐ Concave ☑ Convex ☐ None Slope (%): 2

Subregion: Middle Atlantic Latitude: 42.355444 Longitude: -75.22999 Datum: NAD 1983

Soil Map Unit Name: Morris flaggy silt loam, 3 to 8 percent slopes NWI Classification: Not mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks: Upland plot

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☐ Yes ☑ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer rubrum	50	YES	FAC
Acer saccharum	35	YES	FACU
Total Cover:	85		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Crataegus crus-galli	8	YES	FAC
Total Cover:	8		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Carex crinita	25	YES	OBL
Quercus alba	3	NO	FACU
Anthoxanthum odoratum	40	YES	FACU
Veratrum viride	8	NO	FACW
Rubus idaeus	3	NO	FACU
Total Cover:	79		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	5	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	60	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	25	x 1 =	25	
FACW Species:	8	x 2 =	16	
FAC Species:	58	x 3 =	174	
FACU Species:	81	x 4 =	324	
UPL Species:	0	x 5 =	0	
Column Totals:	172	(A)	539	(B)
		Prevalence Index = B/A =	3.13	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☐ Yes ☑ No

Remarks:

SOIL

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

Depth (in.)	Matrix Color (Moist)	Matrix %	Redox Features Color (Moist)	Redox %	Type [1]	Loc [2]	Texture	Remarks
0-8	7.5YR 3/2	100					LOAM	
8-18	7.5YR 3/3	100					FINE SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☐ **Yes** ☑ **No**
Remarks:	

Photos

Photo Name: DE1AW473_053014_UPL1NW.jpg Note: DE-1A-W473-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 62.45020 City/County: Delaware Sampling Date: 2014/05/30

Applicant/Owner: Williams State: Sampling Point: DE-1A-W475-WET1

Investigator(s): PL;KH USGS Quad: Franklin Section, Township, Range: Sidney

Landform: Drainage Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 1

Subregion: Middle Atlantic Latitude: 42.354899 Longitude: -75.23146 Datum: NAD 1983

Soil Map Unit Name: Morris flaggy silt loam, 3 to 8 percent slopes NWI Classification: Not mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks:

Field Wetland Classification: PFO

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☑ Yes ☐ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer rubrum	75	YES	FAC
Carya ovata	10	NO	FACU
Total Cover:	85		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Impatiens capensis	40	YES	FACW
Solidago rugosa	8	NO	FAC
Onoclea sensibilis	30	YES	FACW
Total Cover:	78		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	70	x 2 =	140	
FAC Species:	83	x 3 =	249	
FACU Species:	10	x 4 =	40	
UPL Species:	0	x 5 =	0	
Column Totals:	163	(A)	429	(B)
		Prevalence Index = B/A =	2.63	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-8	5YR 3/1	100					FINE SANDY LOAM	
8-16	7.5YR 5/2	92	7.5YR 5/6	8	C	M	FINE SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

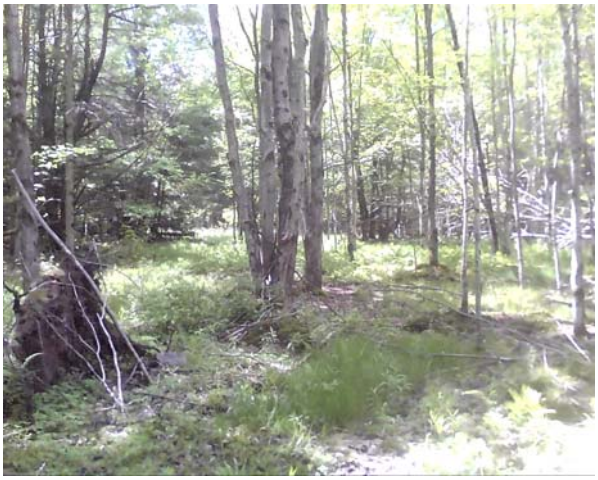

Photo Name: DE1AW475_053014_WET1W.jpg Note: DE-1A-W475-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 62.45772 City/County: Delaware Sampling Date: 2014/05/30

Applicant/Owner: Williams State: Sampling Point: DE-1A-W475-UPL1

Investigator(s): PL;KH USGS Quad: Franklin Section, Township, Range: Sidney

Landform: Drainageway Local Relief: ☐ Concave ☐ Convex ☑ None Slope (%): 1

Subregion: Middle Atlantic Latitude: 42.354659 Longitude: -75.23115 Datum: NAD 1983

Soil Map Unit Name: Morris flaggy silt loam, 3 to 8 percent slopes NWI Classification: Not mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks: Upland plot; W474 & W475

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☐ Yes ☑ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Tsuga canadensis	40	YES	FACU
Betula nigra	8	NO	FACW
Acer rubrum	20	YES	FAC
Betula alleghaniensis	10	NO	FAC
Total Cover:	78		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Maianthemum canadense	55	YES	FACU
Coptis trifolia	5	YES	FACW
Total Cover:	60		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	4	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	50	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	13	x 2 =	26	
FAC Species:	30	x 3 =	90	
FACU Species:	95	x 4 =	380	
UPL Species:	0	x 5 =	0	
Column Totals:	138	(A)	496	(B)
		Prevalence Index = B/A =	3.59	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☐ Yes ☑ No

Remarks:

SOIL

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

Depth (in.)	Matrix Color (Moist)	Matrix %	Redox Features Color (Moist)	Redox %	Type [1]	Loc [2]	Texture	Remarks
0-6	7.5YR 3/1	100					FINE SANDY LOAM	
6-14	7.5YR 3/4	100					FINE SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☐ **Yes** ☑ **No**
Remarks:	

Photos

Photo Name: DE1AW475_053014_UPL1NE.jpg Note: DE-1A-W475-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 62.43746 City/County: Delaware Sampling Date: 2014/05/30

Applicant/Owner: Williams State: Sampling Point: DE-1A-W476-WET1

Investigator(s): PL;KH USGS Quad: Franklin Section, Township, Range: Sidney

Landform: Depression Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 0

Subregion: Middle Atlantic Latitude: 42.354429 Longitude: -75.23145 Datum: NAD 1983

Soil Map Unit Name: Morris flaggy silt loam, 3 to 8 percent slopes NWI Classification: Not mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks:

Field Wetland Classification: PFO

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☑ Yes ☐ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Tsuga canadensis	70	YES	FAC
Betula alleghaniensis	20	NO	FAC
Total Cover:	90		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Onoclea sensibilis	15	YES	FACW
Total Cover:	15		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	15	x 2 =	30	
FAC Species:	90	x 3 =	270	
FACU Species:	0	x 4 =	0	
UPL Species:	0	x 5 =	0	
Column Totals:	105	(A)	300	(B)
		Prevalence Index = B/A =	2.86	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☑ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-14	10YR 3/2	100					SILT LOAM	
14-18	10YR 2/2	100					SILT LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

Photo Name: DE1AW476_053014_WET1SE.jpg Note: DE-1A-W476-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 61.80755 City/County: Delaware Sampling Date: 2014/05/30

Applicant/Owner: Williams State: Sampling Point: DE-1A-W478-WET1

Investigator(s): PL;KH USGS Quad: Franklin Section, Township, Range: Sidney

Landform: Drainage Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 2

Subregion: Middle Atlantic Latitude: 42.352037 Longitude: -75.24240 Datum: NAD 1983

Soil Map Unit Name: Morris and Volusia soils, 2 to 10 percent slopes, very stony NWI Classification: Not mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks:

Field Wetland Classification: PFO

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☑ Yes ☐ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Fagus grandifolia	10	NO	FACU
Acer rubrum	40	YES	FAC
Carya ovata	5	NO	FACU
Total Cover:	55		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Fagus grandifolia	15	YES	FACU
Carpinus caroliniana	15	YES	FAC
Total Cover:	30		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Carex crinita	60	YES	OBL
Onoclea sensibilis	5	NO	FACW
Hamamelis virginiana	8	NO	FACU
Total Cover:	73		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	4	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	75	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	60	x 1 =	60	
FACW Species:	5	x 2 =	10	
FAC Species:	55	x 3 =	165	
FACU Species:	38	x 4 =	152	
UPL Species:	0	x 5 =	0	
Column Totals:	158	(A)	387	(B)
		Prevalence Index = B/A =	2.45	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth (in.)	Matrix Color (Moist)	Matrix %	Redox Features Color (Moist)	Redox %	Type [1]	Loc [2]	Texture	Remarks
0-4	2.5Y 3/2	100					SILT LOAM	
4-14	2.5Y 4/2	90	10YR 5/6	10	C	M	SILT LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

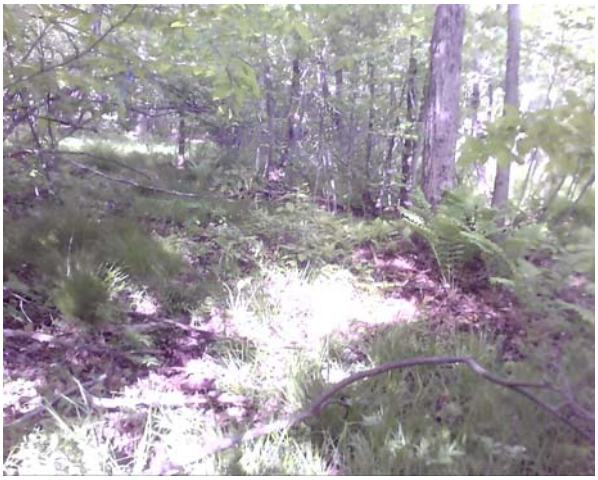

Photo Name: DE1AW478_053014_WET1SE.jpg Note: DE-1A-W478-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 61.67351 City/County: Delaware Sampling Date: 2014/05/30

Applicant/Owner: Williams State: Sampling Point: DE-1A-W478-WET2

Investigator(s): PL;KH USGS Quad: Franklin Section, Township, Range: Sidney

Landform: Drainage Local Relief: ☐ Concave ☐ Convex ☑ None Slope (%): 1

Subregion: Middle Atlantic Latitude: 42.350669 Longitude: -75.24427 Datum: NAD 1983

Soil Map Unit Name: Morris and Volusia soils, 2 to 10 percent slopes, very stony NWI Classification: Not mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks:

Field Wetland Classification: PEM

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☑ Yes ☐ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer rubrum	40	YES	FAC
Fagus grandifolia	10	NO	FACU
Carya ovata	5	NO	FACU
Total Cover:	55		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Salix sp	15	YES	FACW
Total Cover:	15		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Ranunculus sp	10	NO	FAC
Onoclea sensibilis	8	NO	FACW
Carex stricta	50	YES	OBL
Anthoxanthum odoratum	20	YES	FACU
Total Cover:	88		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	4	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	75	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	50	x 1 =	50	
FACW Species:	23	x 2 =	46	
FAC Species:	50	x 3 =	150	
FACU Species:	35	x 4 =	140	
UPL Species:	0	x 5 =	0	
Column Totals:	158	(A)	386	(B)
		Prevalence Index = B/A =	2.44	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-4	7.5YR 3/2	97	7.5YR 2.5Y/3	3	C	M	SILT LOAM	Organic matter
4-14+	2.5Y 4/2	90	10YR 5/6	10	C	M	SILT LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

Photo Name: DE1AW478_053014_WET2NE.jpg Note: DE-1A-W478-WET2

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 61.82001 City/County: Delaware Sampling Date: 2014/05/30

Applicant/Owner: Williams State: Sampling Point: DE-1A-W478-UPL1

Investigator(s): PL;KH USGS Quad: Franklin Section, Township, Range: Sidney

Landform: N/A Local Relief: ☐ Concave ☐ Convex ☑ None Slope (%): 10

Subregion: Middle Atlantic Latitude: 42.352177 Longitude: -75.24225 Datum: NAD 1983

Soil Map Unit Name: Morris and Volusia soils, 2 to 10 percent slopes, very stony NWI Classification: Not mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks: Upland plot

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☐ Yes ☑ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Carpinus caroliniana	45	YES	FAC
Ostrya virginiana	25	YES	FACU
Acer saccharum	15	NO	FACU
Total Cover:	**85**		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer saccharum	8	YES	FACU
Total Cover:	**8**		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Hamamelis virginiana	10	YES	FACU
Total Cover:	**10**		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Ostrya virginiana	3	NO	FACU
Anthoxanthum odoratum	40	YES	FACU
Fagus grandifolia	5	NO	FACU
Total Cover:	**48**		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
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:	5	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	20	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	0	x 2 =	0	
FAC Species:	45	x 3 =	135	
FACU Species:	106	x 4 =	424	
UPL Species:	0	x 5 =	0	
Column Totals:	151	(A)	559	(B)
		Prevalence Index = B/A =	3.70	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☐ Yes ☑ No

Remarks:

SOIL

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

Depth (in.)	Matrix Color (Moist)	Matrix %	Redox Features Color (Moist)	Redox %	Type [1]	Loc [2]	Texture	Remarks
0-6	7.5YR 3/2	100					FINE SANDY LOAM	
6-14	7.5YR 4/4	100					FINE SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☐ **Yes** ☑ **No**
Remarks:	

Photos

Photo Name: DE1AW478_053014_UPL1N.jpg Note: DE-1A-W478-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost City/County: Delaware Sampling Date: 2014/06/18

Applicant/Owner: Williams State: Sampling Point: DE-1A-W484-WET1

Investigator(s): PL, TS USGS Quad: West Davenport Section, Township, Range: Davenport

Landform: Drainageway Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 0

Subregion: Middle Atlantic Latitude: 42.455580 Longitude: -74.89796 Datum: NAD 1983

Soil Map Unit Name: Deposit gravelly silt loam NWI Classification: Not mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks:

Field Wetland Classification: PEM

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present:	☑ Yes	☐ No	Depth (inches): 2
Water Table Present:	☑ Yes	☐ No	Depth (inches): 0
Saturation Present:	☑ Yes	☐ No	Depth (inches): 0

Wetland Hydrology Present? ☑ Yes ☐ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Juncus effusus	8	NO	OBL
Ranunculus acris	60	YES	FAC
Carex crinita	25	YES	OBL
Eleocharis obtusa	5	NO	OBL
Total Cover:	98		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)

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

Percent of Dominant Species that are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	38	x 1 =	38	
FACW Species:	0	x 2 =	0	
FAC Species:	60	x 3 =	180	
FACU Species:	0	x 4 =	0	
UPL Species:	0	x 5 =	0	
Column Totals:	98	(A)	218	(B)
		Prevalence Index = B/A =	2.22	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-5	2.5Y 3/2	92	10YR 3/4	8	C	PL	FINE SANDY LOAM	
5-15	10YR 4/1	90	10YR 3/4	10	C	M,PL	FINE SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

Photo Name: DE1AW484_061814_WET1SW.jpg Note: DE-1A-W484-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost City/County: Delaware Sampling Date: 2014/06/18

Applicant/Owner: Williams State: Sampling Point: DE-1A-W484-UPL1

Investigator(s): PL, TS USGS Quad: West Davenport Section, Township, Range: Davenport

Landform: Plain Local Relief: ☐ Concave ☑ Convex ☐ None Slope (%): 2

Subregion: Middle Atlantic Latitude: 42.455944 Longitude: -74.89801 Datum: NAD 1983

Soil Map Unit Name: Deposit gravelly silt loam NWI Classification: Not mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks: Upland

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☐ Yes ☑ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Trifolium repens	15	NO	FACU
Dactylis glomerata	85	YES	FACU
Total Cover:	**100**		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
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:	0	x 1 =	0	
FACW Species:	0	x 2 =	0	
FAC Species:	0	x 3 =	0	
FACU Species:	100	x 4 =	400	
UPL Species:	0	x 5 =	0	
Column Totals:	100	(A)	400	(B)

Prevalence Index = B/A = 4.00

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☐ Yes ☑ No

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-12	10YR 3/2	100				None	FINE SANDY LOAM	
12-20	10YR 4/4	100					FINE SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☐ **Yes** ☑ **No**

Remarks:

Photos

Photo Name: DE1AW484_061814_UPL1S.jpg Note: DE-1A-W484-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost City/County: Delaware Sampling Date: 2014/06/18

Applicant/Owner: Williams State: Sampling Point: DE-1A-W485-WET1

Investigator(s): PL, TS USGS Quad: West Davenport Section, Township, Range: Davenport

Landform: Depression Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 0

Subregion: Middle Atlantic Latitude: 42.456383 Longitude: -74.89792 Datum: NAD 1983

Soil Map Unit Name: Deposit gravelly silt loam NWI Classification: Not mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks:

Field Wetland Classification: PEM

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present:	☑ Yes	☐ No	Depth (inches): 2
Water Table Present:	☑ Yes	☐ No	Depth (inches): 0
Saturation Present:	☑ Yes	☐ No	Depth (inches): 0

Wetland Hydrology Present? ☑ Yes ☐ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Juncus effusus	20	YES	OBL
Ranunculus acris	60	YES	FAC
Eleocharis obtusa	8	NO	OBL
Total Cover:	88		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)

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

Percent of Dominant Species that are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	28	x 1 =	28	
FACW Species:	0	x 2 =	0	
FAC Species:	60	x 3 =	180	
FACU Species:	0	x 4 =	0	
UPL Species:	0	x 5 =	0	
Column Totals:	88	(A)	208	(B)
		Prevalence Index = B/A =	2.36	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-5	2.5Y 3/2	90	10YR 3/4	10	C	PL	FINE SANDY LOAM	
5-15	10YR 4/2	85	10YR 3/4	15	C	M,PL	FINE SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

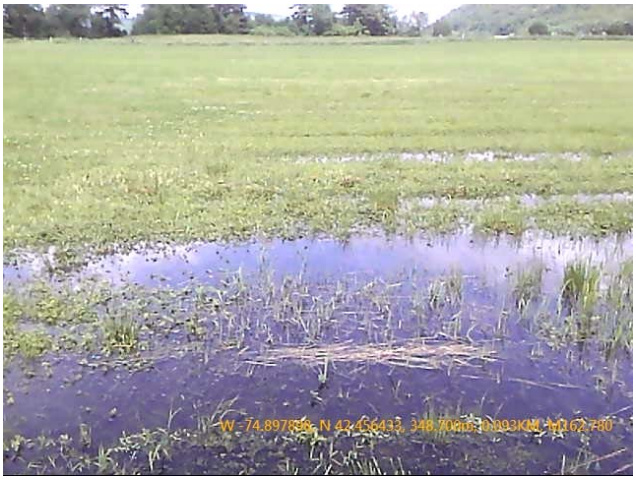

Photo Name: DE1AW485_061814_WET1NE.jpg Note: DE-1A-W485-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost City/County: Delaware Sampling Date: 2014/06/18

Applicant/Owner: Williams State: Sampling Point: DE-1A-W486-WET1

Investigator(s): PL, TS USGS Quad: West Davenport Section, Township, Range: Davenport

Landform: Depressions Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 0

Subregion: Middle Atlantic Latitude: 42.456334 Longitude: -74.89874 Datum: NAD 1983

Soil Map Unit Name: Deposit gravelly silt loam NWI Classification: Not mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks:

Field Wetland Classification: PEM

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present:	☑ Yes	☐ No	Depth (inches): 3
Water Table Present:	☑ Yes	☐ No	Depth (inches): 0
Saturation Present:	☑ Yes	☐ No	Depth (inches): 0

Wetland Hydrology Present? ☑ Yes ☐ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Eleocharis obtusa	25	YES	OBL
Ranunculus acris	70	YES	FAC
Total Cover:	95		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	25	x 1 =	25	
FACW Species:	0	x 2 =	0	
FAC Species:	70	x 3 =	210	
FACU Species:	0	x 4 =	0	
UPL Species:	0	x 5 =	0	
Column Totals:	95	(A)	235	(B)
Prevalence Index = B/A =			2.47	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth (in.)	Matrix Color (Moist)	Matrix %	Redox Features Color (Moist)	Redox Features %	Type [1]	Loc [2]	Texture	Remarks
0-5	2.5Y 3/2	90	10YR 3/4	10	C	PL	FINE SANDY LOAM	
5-15	10YR 4/2	87	10YR 3/4	13	C	M,PL	FINE SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☑ **Yes** ☐ **No**

Remarks:

Photos

Photo Name: DE1AW486_061814_WET1NW.jpg Note: DE-1A-W486-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost City/County: Delaware Sampling Date: 2014/06/18

Applicant/Owner: Williams State: Sampling Point: DE-1A-W487-WET1

Investigator(s): PL, TS USGS Quad: West Davenport Section, Township, Range: Davenport

Landform: Drainage Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 0

Subregion: Middle Atlantic Latitude: 42.455926 Longitude: -74.89839 Datum: NAD 1983

Soil Map Unit Name: Deposit gravelly silt loam NWI Classification: Not mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks:

Field Wetland Classification: PEM

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☑ Yes ☐ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Ranunculus acris	65	YES	FAC
Carex crinita	25	YES	OBL
Total Cover:	90		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	25	x 1 =	25	
FACW Species:	0	x 2 =	0	
FAC Species:	65	x 3 =	195	
FACU Species:	0	x 4 =	0	
UPL Species:	0	x 5 =	0	
Column Totals:	90	(A)	220	(B)
		Prevalence Index = B/A =	2.44	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth (in.)	Matrix Color (Moist)	Matrix %	Redox Features Color (Moist)	Redox Features %	Type [1]	Loc [2]	Texture	Remarks
0-5	2.5Y 3/2	92	10YR 3/4	8	C	PL	FINE SANDY LOAM	
5-15	10YR 4/2	87	10YR 3/4	13	C	M,PL	FINE SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☑ **Yes** ☐ **No**

Remarks:

Photos

Photo Name: DE1AW487_061814_WET1S.jpg Note: DE-1A-W487-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost City/County: Delaware Sampling Date: 2014/06/18

Applicant/Owner: Williams State: Sampling Point: DE-1A-W488-WET1

Investigator(s): PL, TS USGS Quad: West Davenport Section, Township, Range: Davenport

Landform: DRAINAGE Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 1

Subregion: Middle Atlantic Latitude: 42.456724 Longitude: -74.89960 Datum: NAD 1983

Soil Map Unit Name: Deposit gravelly silt loam NWI Classification: Not mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks:

Field Wetland Classification: PEM

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☑ Yes ☐ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Carex crinita	45	YES	OBL
Ranunculus acris	40	YES	FAC
Trifolium repens	5	NO	FACU
Total Cover:	**90**		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	45	x 1 =	45	
FACW Species:	0	x 2 =	0	
FAC Species:	40	x 3 =	120	
FACU Species:	5	x 4 =	20	
UPL Species:	0	x 5 =	0	
Column Totals:	90	(A)	185	(B)
		Prevalence Index = B/A =	2.06	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-5	2.5Y 3/2	95	10YR 3/4	5	C	PL	FINE SANDY LOAM	
5-15	10YR 4/2	89	10YR 3/4	11	C	M,PL	FINE SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

Photo Name: DE1AW488_061814_WET1S.jpg Note: DE-1A-W488-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 70.6 City/County: Delaware Sampling Date: 2013/04/02

Applicant/Owner: Williams State: NY Sampling Point: DE-1B-W270-WET1

Investigator(s): CH, SH USGS Quad: Oneonta Section, Township, Range: Franklin

Landform: Local Relief: ☐ Concave ☐ Convex ☐ None Slope (%):

Subregion: Middle Atlantic Latitude: 42.419889 Longitude: -75.06151 Datum: NAD1983

Soil Map Unit Name: Onteora channery silt loam, 0 to 3 percent slopes NWI Classification:

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks: ADJACENT TO DE-1P-S059

Field Wetland Classification: PFO

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present:	☑ Yes	☐ No	Depth (inches): 1
Water Table Present:	☑ Yes	☐ No	Depth (inches):
Saturation Present:	☑ Yes	☐ No	Depth (inches): 0

Wetland Hydrology Present? ☑ Yes ☐ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Quercus rubra	40	YES	FACU
Quercus prinus	25	YES	UPL
Acer saccharum	15	NO	FACU
Total Cover:	**80**		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Fagus grandifolia	10	YES	FACU
Total Cover:	**10**		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Betula lenta	5	YES	FACU
Total Cover:	**5**		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Osmunda cinnamomea	40	YES	FACW
Sphagnum sp.	75	NA	NONE
Total Cover:	**115**		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
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:	5	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	20	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	40	x 2 =	80	
FAC Species:	0	x 3 =	0	
FACU Species:	70	x 4 =	280	
UPL Species:	25	x 5 =	125	
Column Totals:	135	(A)	485	(B)
		Prevalence Index = B/A =	3.59	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☑ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks: Problematic vegetation, hydric soils and hydrology present.

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-16	7.5YR 4/2	90	7.5YR 4/6	5	C	M	SILT LOAM	AND 5% 10YR 2/1

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

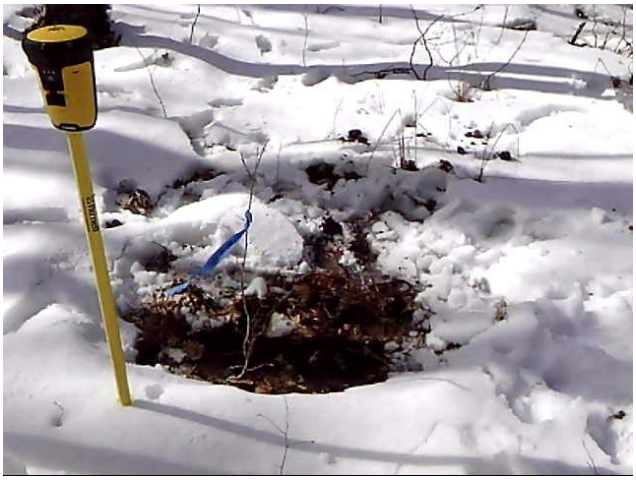

Photo Name: DE1BW270_04022013_WET1.jpg Note: DE-1B-W270 WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 70.6 City/County: Delaware Sampling Date: 2013/04/02

Applicant/Owner: Williams State: NY Sampling Point: DE-1B-W270-UPL1

Investigator(s): CH, SH USGS Quad: Oneonta Section, Township, Range: Franklin

Landform: Local Relief: ☐ Concave ☐ Convex ☐ None Slope (%):

Subregion: Middle Atlantic Latitude: -75.03420 Longitude: -75.03420 Datum: NAD1983

Soil Map Unit Name: Onteora channery silt loam, 0 to 3 percent slopes NWI Classification:

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks: UPLAND PLOT
4" SNOW

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☐ Yes ☑ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer saccharum	10	NO	FACU
Quercus rubra	60	YES	FACU
Prunus serotina	5	NO	FACU
Total Cover:	**75**		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Fagus grandifolia	30	YES	FACU
Vaccinium angustifolium	10	YES	FACU
Total Cover:	**40**		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	0	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	0	x 2 =	0	
FAC Species:	0	x 3 =	0	
FACU Species:	115	x 4 =	460	
UPL Species:	0	x 5 =	0	
Column Totals:	115	(A)	460	(B)
		Prevalence Index = B/A =	4.00	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☐ Yes ☑ No

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-1	10YR 2/2	60					LOAM	
1-18	7.5YR 4/4	100					SILT LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Greyed 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)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☐ **Yes** ☑ **No**
Remarks:	

Photos

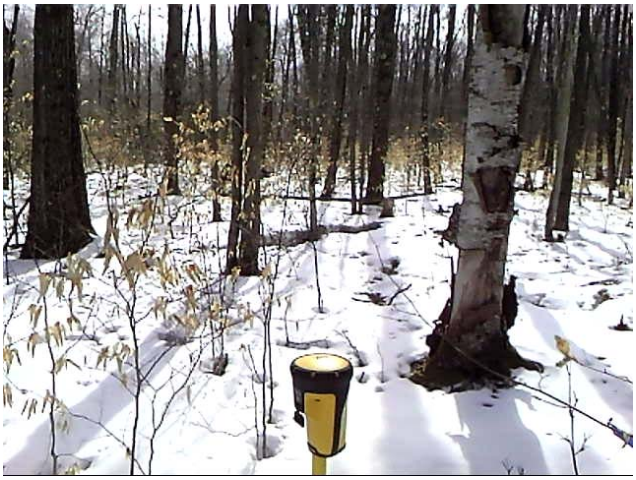

Photo Name: DE1BW270_04022013_UPLAND1.jpg Note: DE-1B-W270-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 54.13 City/County: Delaware Sampling Date: 2013/09/12

Applicant/Owner: Williams State: NY Sampling Point: DE-1C-W158A-WET1

Investigator(s): RR;KH USGS Quad: Unadilla Section, Township, Range: Sidney

Landform: Hillside Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 8

Subregion: Middle Atlantic Latitude: 42.289866 Longitude: -75.35009 Datum: NAD 1983

Soil Map Unit Name: Halcott, Mongaup, and Vly soils, 15 to 35 percent slopes, very rocky NWI Classification: Not Mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks:

Field Wetland Classification: PEM

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☑ Yes	☐ No	Depth (inches): 3
Saturation Present:	☑ Yes	☐ No	Depth (inches): 0

Wetland Hydrology Present? ☑ Yes ☐ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Scirpus cyperinus	20	YES	OBL
Euthamia graminifolia	30	YES	FAC
Solidago gigantea	10	NO	FACW
Carex lurida	15	NO	OBL
Agrostis gigantea	5	NO	FACW
Onoclea sensibilis	10	NO	FACW
Spiraea alba	5	NO	FACW
Eupatorium perfoliatum	2	NO	FACW
Epilobium coloratum	3	NO	OBL
Total Cover:	**100**		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	38	x 1 =	38	
FACW Species:	32	x 2 =	64	
FAC Species:	30	x 3 =	90	
FACU Species:	0	x 4 =	0	
UPL Species:	0	x 5 =	0	
Column Totals:	100	(A)	192	(B)
		Prevalence Index = B/A =	1.92	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-1	2.5Y 3/2	100				None	LOAM	
1-3	2.5Y 5/1	95	7.5YR 4/6	5	C	PL	LOAM	
3-14	Gley1 4/10Y	100				None	LOAM	Refusal @14"

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☑ **Yes** ☐ **No**

Remarks:

Photos

Photo Name: DE1CW158a_091213_WET1NW.jpg Note: DE-1C-W158A-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 54.13 City/County: Delaware Sampling Date: 2013/09/12

Applicant/Owner: Williams State: NY Sampling Point: DE-1C-W158A-UPL1

Investigator(s): RR;KH USGS Quad: Unadilla Section, Township, Range: Sidney

Landform: hillside Local Relief: ☐ Concave ☐ Convex ☑ None Slope (%): 15

Subregion: Middle Atlantic Latitude: 42.289972 Longitude: -75.35012 Datum: NAD 1983

Soil Map Unit Name: Halcott, Mongaup, and Vly soils, 15 to 35 percent slopes, very rocky NWI Classification: Not Mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks: Upland plot

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☐ Yes ☑ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Quercus rubra	5	YES	FACU
Hamamelis virginiana	15	YES	FACU
Total Cover:	20		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Solidago canadensis	20	YES	FACU
Euthamia graminifolia	20	YES	FAC
Solidago rugosa	10	NO	FAC
Rhus typhina	5	NO	UPL
Rubus allegheniensis	10	NO	FACU
Phleum pratense	5	NO	FACU
Unknown grass	10	NO	NONE
Total Cover:	80		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
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:	4	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	25	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	0	x 2 =	0	
FAC Species:	30	x 3 =	90	
FACU Species:	55	x 4 =	220	
UPL Species:	5	x 5 =	25	
Column Totals:	90	(A)	335	(B)
		Prevalence Index = B/A =	3.72	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☐ Yes ☑ No

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-4	10YR 3/3	100				None	LOAM	10% Gravel
4-16	10YR 4/4	100				None	LOAM	10% Gravel

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☐ **Yes** ☑ **No**
Remarks:	

Photos

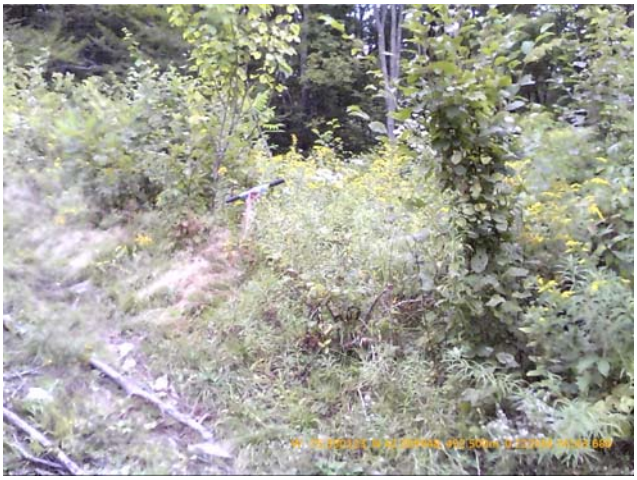

Photo Name: DE1CW158a_091213_UPL1NW.jpg Note: DE-1C-W158A-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 53.87 City/County: Delaware Sampling Date: 2013/09/13

Applicant/Owner: Williams State: NY Sampling Point: DE-1C-W158B-WET1

Investigator(s): RR;KH;PL USGS Quad: Unadilla Section, Township, Range: Sidney

Landform: Depression Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 2

Subregion: Middle Atlantic Latitude: 42.288747 Longitude: -75.35494 Datum: NAD 1983

Soil Map Unit Name: Mongaup channery loam, 15 to 25 percent slopes NWI Classification: Not Mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks: Located at edge of overhead utility corridor.

Field Wetland Classification: PEM

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☑ Yes ☐ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Spiraea alba	10	YES	FACW
Total Cover:	10		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Solidago gigantea	20	YES	FACW
Solidago rugosa	25	YES	FAC
Persicaria sagittata	10	NO	OBL
Carex crinita	25	YES	OBL
Impatiens capensis	10	NO	FACW
Euthamia graminifolia	10	NO	FAC
Total Cover:	100		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	4	(A)
Total Number of Dominant Species Across All Strata:	4	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	35	x 1 =	35	
FACW Species:	40	x 2 =	80	
FAC Species:	35	x 3 =	105	
FACU Species:	0	x 4 =	0	
UPL Species:	0	x 5 =	0	
Column Totals:	110	(A)	220	(B)
		Prevalence Index = B/A =	2.00	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth (in.)	Matrix Color (Moist)	Matrix %	Redox Features Color (Moist)	Redox %	Type [1]	Loc [2]	Texture	Remarks
0-14	2.5Y 4/2	85	10YR 4/6	15	C	M,PL	LOAM	
14-18	5Y 4/1	85	7.5YR 4/6	15	C	M,PL	CLAY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

Photo Name: DE1CW158B_091313_WET1W.jpg Note: DE-1C-W158B-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 53.88 City/County: Delaware Sampling Date: 2013/09/13

Applicant/Owner: Williams State: NY Sampling Point: DE-1C-W158B-UPL1

Investigator(s): RR;KH USGS Quad: Unadilla Section, Township, Range: Sidney

Landform: side slope Local Relief: ☐ Concave ☐ Convex ☑ None Slope (%): 4

Subregion: Middle Atlantic Latitude: 42.288831 Longitude: -75.35487 Datum: NAD 1983

Soil Map Unit Name: Mongaup channery loam, 15 to 25 percent slopes NWI Classification: Not Mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks: Upland plot. Located at edge of overhead utility corridor.

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☐ Yes ☑ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Spiraea alba	2	NO	FACW
Total Cover:	2		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Phleum pratense	5	NO	FACU
Solidago rugosa	30	YES	FAC
Solidago canadensis	30	YES	FACU
Fragaria virginiana	5	NO	FACU
Doellingeria umbellata	25	YES	FACW
Asclepias syricea	5	NO	NONE
Total Cover:	100		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	67	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	27	x 2 =	54	
FAC Species:	30	x 3 =	90	
FACU Species:	40	x 4 =	160	
UPL Species:	0	x 5 =	0	
Column Totals:	97	(A)	304	(B)
		Prevalence Index = B/A =	3.13	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-4	10YR 4/3	100					LOAM	
4-16	10YR 4/4	100					LOAM	
16-18	10YR 5/6	100					LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☐ **Yes** ☑ **No**

Remarks:

Photos

Photo Name: DE1CW158B_091313_UPL1W.jpg Note: DE-1C-W158B-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 53.89 City/County: Delaware Sampling Date: 2013/09/13

Applicant/Owner: Williams State: NY Sampling Point: DE-1C-W158C-WET1

Investigator(s): RR;KH;PL USGS Quad: Unadilla Section, Township, Range: Sidney

Landform: Drainage Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 3

Subregion: Middle Atlantic Latitude: 42.288843 Longitude: -75.35472 Datum: NAD 1983

Soil Map Unit Name: Mongaup channery loam, 15 to 25 percent slopes NWI Classification: Not Mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks: Use DE-1C-W158B-UPL1 for representative upland plot. Located within overhead utility corridor.

Field Wetland Classification: PEM

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☑ Yes ☐ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Scirpus cyperinus	3	NO	OBL
Spiraea tomentosa	7	NO	FACW
Onoclea sensibilis	15	YES	FACW
Sphagnum sp.	15	YES	FACW
Persicaria sagittata	5	NO	OBL
Carex vulpinoidea	10	NO	OBL
Carex crinita	20	YES	OBL
Scirpus atrovirens	10	NO	OBL
Juncus effusus	10	NO	OBL
Carex scoparia	20	YES	FACW
Total Cover:	**115**		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	4	(A)
Total Number of Dominant Species Across All Strata:	4	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	58	x 1 =	58	
FACW Species:	57	x 2 =	114	
FAC Species:	0	x 3 =	0	
FACU Species:	0	x 4 =	0	
UPL Species:	0	x 5 =	0	
Column Totals:	115	(A)	172	(B)
		Prevalence Index = B/A =	1.50	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-3	2.5Y 6/1	90	10YR 5/6	10	C	PL	SANDY LOAM	
3-16	2.5Y 6/2	80	10YR 5/6	20	C	M,PL	SANDY LOAM	W/gravel;rock refusal @16"

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

Photo Name: DE1CW158C_091313_WET1E.jpg Note: DE-1C-W158C-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 70.8 City/County: Delaware Sampling Date: 2013/08/16

Applicant/Owner: Williams State: NY Sampling Point: DE-1C-W329-WET1

Investigator(s): RR;KH USGS Quad: Oneonta Section, Township, Range: Franklin

Landform: Drainageway Local Relief: [x] Concave [ ] Convex [ ] None Slope (%): 3

Subregion: Middle Atlantic Latitude: 42.404053 Longitude: -75.09146 Datum: NAD1983

Soil Map Unit Name: Morris flaggy silt loam, 8 to 15 percent slopes NWI Classification: Not Mapped

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

Are Vegetation [ ] Soil [ ] or Hydrology [ ] significantly disturbed? [x] No Are "Normal Circumstances" present? [x] Yes [ ] No

Are Vegetation [ ] Soil [ ] or Hydrology [ ] naturally problematic? [x] No (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	[x] Yes	[ ] No	**Is the Sampled Area within a Wetland?** [x] **Yes** [ ] **No**
Hydric Soil Present?	[x] Yes	[ ] No	
Wetland Hydrology Present?	[x] Yes	[ ] No	

Remarks:

Field Wetland Classification: PEM

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present:	[ ] Yes	[x] No	Depth (inches):
Water Table Present:	[x] Yes	[ ] No	Depth (inches): 2
Saturation Present:	[x] Yes	[ ] No	Depth (inches): 0

Wetland Hydrology Present? [x] Yes [ ] No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Pinus strobus	20	YES	FACU
Salix nigra	5	YES	OBL
Total Cover:	25		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Spiraea tomentosa	5	YES	FACW
Total Cover:	5		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Scirpus cyperinus	25	YES	OBL
Solidago gigantea	20	YES	FACW
Solidago rugosa	15	NO	FAC
Onoclea sensibilis	10	NO	FACW
Impatiens capensis	10	NO	FACW
Juncus effusus	10	NO	OBL
Carex lurida	5	NO	OBL
Euthamia graminifolia	5	NO	FAC
Total Cover:	100		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	4	(A)
Total Number of Dominant Species Across All Strata:	5	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	80	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	45	x 1 =	45	
FACW Species:	45	x 2 =	90	
FAC Species:	20	x 3 =	60	
FACU Species:	20	x 4 =	80	
UPL Species:	0	x 5 =	0	
Column Totals:	130	(A)	275	(B)
		Prevalence Index = B/A =	2.12	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-6	7.5YR 4/3	97	7.5YR 4/6	3	C	PL	SANDY LOAM	W/organic material
6-18	7.5YR 4/2	95	7.5YR 4/6	5	C	M,PL	CLAY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

Photo Name: DE1CW329_081613_WET1SW.jpg Note: DE-1C-W329-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 70.9 City/County: Delaware Sampling Date: 2013/08/16

Applicant/Owner: Williams State: NY Sampling Point: DE-1C-W329-UPL1

Investigator(s): RR;KH USGS Quad: Oneonta Section, Township, Range: Franklin

Landform: Knoll Local Relief: ☐ Concave ☑ Convex ☐ None Slope (%): 3

Subregion: Middle Atlantic Latitude: 42.404095 Longitude: -75.09138 Datum: NAD1983

Soil Map Unit Name: Morris flaggy silt loam, 8 to 15 percent slopes NWI Classification: Not Mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks: Upland plot

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☐ Yes ☑ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Pinus strobus	65	YES	FACU
Total Cover:	65		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Vaccinium angustifolium	50	YES	FACU
Crataegus crus-galli	5	NO	FAC
Anthoxanthum odoratum	10	NO	FACU
Satureja vulgaris	5	NO	UPL
Total Cover:	70		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	0	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	0	x 2 =	0	
FAC Species:	5	x 3 =	15	
FACU Species:	125	x 4 =	500	
UPL Species:	5	x 5 =	25	
Column Totals:	135	(A)	540	(B)
		Prevalence Index = B/A =	4.00	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☐ Yes ☑ No

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-9	5YR 3/3	100					LOAM	
9-18	5YR 4/4	100					CLAY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☐ **Yes** ☑ **No**
Remarks:	

Photos

Photo Name: DE1CW329_081613_UPL1NE.jpg Note: DE-1C-W329-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 53.65 City/County: Delaware Sampling Date: 2013/09/13

Applicant/Owner: Williams State: NY Sampling Point: DE-1C-W338BR-WET1

Investigator(s): RR;KH USGS Quad: Unadilla Section, Township, Range: Sidney

Landform: Drainage Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 3

Subregion: Middle Atlantic Latitude: 42.286111 Longitude: -75.35850 Datum: NAD 1983

Soil Map Unit Name: Ontusia channery silt loam, 3 to 8 percent slopes NWI Classification: Not Mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks:

Field Wetland Classification: PEM

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☑ Yes ☐ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Pinus strobus	10	YES	FACU
Acer rubrum	10	YES	FAC
Total Cover:	20		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Impatiens capensis	35	YES	FACW
Euthamia graminifolia	20	YES	FAC
Carex lurida	5	NO	OBL
Scirpus atrovirens	5	NO	OBL
Symphyotrichum novae-angliae	10	NO	FACW
Solidago gigantea	25	YES	FACW
Total Cover:	100		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	4	(A)
Total Number of Dominant Species Across All Strata:	5	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	80	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	10	x 1 =	10	
FACW Species:	70	x 2 =	140	
FAC Species:	30	x 3 =	90	
FACU Species:	10	x 4 =	40	
UPL Species:	0	x 5 =	0	
Column Totals:	120	(A)	280	(B)
		Prevalence Index = B/A =	2.33	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-10	10YR 4/2	80	7.5YR 4/6	20	C	M,PL	LOAM	
10-18	10YR 5/3	80	7.5YR 4/6	20	D	M	CLAY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

Photo Name: DE1CW338-BR_091313_WET1SE.jpg Note: DE-1C-W338BR-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 53.65 City/County: Delaware Sampling Date: 2013/09/13

Applicant/Owner: Williams State: NY Sampling Point: DE-1C-W338BR-UPL1

Investigator(s): RR;KH USGS Quad: Unadilla Section, Township, Range: Sidney

Landform: Hillside Local Relief: ☐ Concave ☐ Convex ☑ None Slope (%): 4

Subregion: Middle Atlantic Latitude: 42.286164 Longitude: -75.35860 Datum: NAD 1983

Soil Map Unit Name: Willdin channery silt loam, 8 to 15 percent slopes NWI Classification: Not Mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks: Upland plot

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☐ Yes ☑ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer rubrum	30	YES	FAC
Acer saccharum	20	YES	FACU
Pinus strobus	30	YES	FACU
Fraxinus americana	20	YES	FACU
Total Cover:	**100**		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Crataegus crus-galli	5	YES	FAC
Total Cover:	**5**		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Rosa multiflora	5	YES	FACU
Total Cover:	**5**		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Solidago caesia	10	YES	FACU
Fraxinus americana	10	YES	FACU
Potentilla simplex	15	YES	FACU
Fragaria virginiana	10	YES	FACU
Quercus rubra	5	NO	FACU
Total Cover:	**50**		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	10	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	20	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	0	x 2 =	0	
FAC Species:	35	x 3 =	105	
FACU Species:	125	x 4 =	500	
UPL Species:	0	x 5 =	0	
Column Totals:	160	(A)	605	(B)
		Prevalence Index = B/A =	3.78	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☐ Yes ☑ No

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-6	10YR 3/3	100					LOAM	
6-18	10YR 4/4	100					LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☐ **Yes** ☑ **No**
Remarks:	

Photos

Photo Name: DE1CW338-BR_091313_UPL1N.jpg Note: DE-1C-W338BR-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 92.06 City/County: Delaware Sampling Date: 2013/09/20

Applicant/Owner: Williams State: NY Sampling Point: DE-1C-W344-WET1

Investigator(s): RR;KH USGS Quad: Charlotteville Section, Township, Range: Harpersfield

Landform: Drainage way Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 2

Subregion: Middle Atlantic Latitude: 42.503553 Longitude: -74.72519 Datum: NAD 1983

Soil Map Unit Name: Willdin channery silt loam, 2 to 8 percent slopes NWI Classification: Not Mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks:

Field Wetland Classification: PFO

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☑ Yes	☐ No	Depth (inches): 8
Saturation Present:	☑ Yes	☐ No	Depth (inches): 0

Wetland Hydrology Present? ☑ Yes ☐ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Carpinus caroliniana	5	NO	FAC
Fraxinus americana	7	YES	FACU
Acer rubrum	5	NO	FAC
Ulmus rubra	15	YES	FAC
Total Cover:	32		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Carpinus caroliniana	15	YES	FAC
Acer saccharum	2	NO	FACU
Total Cover:	17		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Glyceria melicaria	20	YES	OBL
Persicaria sagittata	5	NO	OBL
Impatiens capensis	20	YES	FACW
Osmunda claytoniana	10	NO	FAC
Onoclea sensibilis	5	NO	FACW
Solidago gigantea	10	NO	FACW
Epilobium coloratum	5	NO	OBL
Symphyotrichum novi-belgii	10	NO	FACW
Carex crinita	15	NO	OBL
Total Cover:	100		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	4	(A)
Total Number of Dominant Species Across All Strata:	5	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	80	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	45	x 1 =	45	
FACW Species:	45	x 2 =	90	
FAC Species:	50	x 3 =	150	
FACU Species:	9	x 4 =	36	
UPL Species:	0	x 5 =	0	
Column Totals:	149	(A)	321	(B)
		Prevalence Index = B/A =	2.15	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-1	10YR 3/2	100					LOAM	
1-13	5Y 4/1	95	7.5YR 4/6	5	C	PL	SILT LOAM	
13-18	Gley1 4/10Y	90	10YR 4/6	10	C	M	CLAY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☑ **Yes** ☐ **No**

Remarks:

Photos

Photo Name: DE1CW344_092613_WET1S.jpg Note: DE-1C-W344-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 92.03 City/County: Delaware Sampling Date: 2013/09/20

Applicant/Owner: Williams State: NY Sampling Point: DE-1C-W344-UPL1

Investigator(s): RR;KH USGS Quad: Charlotteville Section, Township, Range: Harpersfield

Landform: side slope Local Relief: ☐ Concave ☑ Convex ☐ None Slope (%): 5

Subregion: Middle Atlantic Latitude: 42.503511 Longitude: -74.72586 Datum: NAD 1983

Soil Map Unit Name: Willdin channery silt loam, 2 to 8 percent slopes NWI Classification: Not Mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks: Upland plot; Share upland plot with DE-1C-W343

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☐ Yes ☑ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Ostrya virginiana	10	NO	FACU
Carpinus caroliniana	15	YES	FAC
Acer saccharum	40	YES	FACU
Acer rubrum	10	NO	FAC
Total Cover:	75		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Carpinus caroliniana	10	YES	FAC
Total Cover:	10		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Carex pennsylvanicum	3	YES	UPL
Dryopteris intermedia	2	YES	FAC
Rubus allegheniensis	3	YES	FACU
Total Cover:	8		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	6	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	50	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	0	x 2 =	0	
FAC Species:	37	x 3 =	111	
FACU Species:	53	x 4 =	212	
UPL Species:	3	x 5 =	15	
Column Totals:	93	(A)	338	(B)
		Prevalence Index = B/A =	3.63	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-1	10YR 3/2	100					SILT LOAM	
1-8	10YR 3/3	100					SILT LOAM	
8-18	10YR 4/4	100					SILT LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☐ **Yes** ☑ **No**

Remarks:

Photos

Photo Name: DE1CW344_092013_UPL1SE.jpg Note: DE-1C-W344-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 81.39 City/County: Delaware Sampling Date: 2013/09/18

Applicant/Owner: Williams State: NY Sampling Point: DE-1C-W345-WET1

Investigator(s): RR;KH USGS Quad: West Davenport Section, Township, Range: Davenport

Landform: Floodplain Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 0

Subregion: Middle Atlantic Latitude: 42.434399 Longitude: -74.90266 Datum: NAD 1983

Soil Map Unit Name: Tunkhannock gravelly loam, 25 to 50 percent slopes NWI Classification: Not Mapped

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

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

Are Vegetation ☐ Soil ☑ or Hydrology ☐ naturally problematic? ☐ No (If needed, explain any answers in Remarks.)

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

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

Remarks: Alluvial soils and auger refusal at 4".

Field Wetland Classification: PSS

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☑ Yes ☐ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Tsuga canadensis	25	YES	FACU
Carpinus caroliniana	2	NO	FAC
Total Cover:	27		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Alnus incana	10	YES	FACW
Salix nigra	5	NO	OBL
Fallopia japonica	10	YES	FACU
Robinia pseudoacacia	5	NO	FACU
Total Cover:	30		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Solidago gigantea	25	YES	FACW
Phalaris arundinacea	5	NO	FACW
Symphyotrichum novi-belgii	20	YES	FACW
Carex lurida	10	NO	OBL
Impatiens capensis	10	NO	FACW
Eutrochium maculatum	15	NO	OBL
Total Cover:	85		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	5	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	60	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	30	x 1 =	30	
FACW Species:	70	x 2 =	140	
FAC Species:	2	x 3 =	6	
FACU Species:	40	x 4 =	160	
UPL Species:	0	x 5 =	0	
Column Totals:	142	(A)	336	(B)
		Prevalence Index = B/A =	2.37	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-4	10YR 3/3	100				None	SAND	50% Gravel & Rock

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**

Remarks:
Alluvial soils. Auger refusal at 4".

Photos

Photo Name: DE1CW345_091813_WET1SW.jpg Note: DE-1C-W345-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 81.4 City/County: Delaware Sampling Date: 2013/09/18

Applicant/Owner: Williams State: NY Sampling Point: DE-1C-W345-UPL1

Investigator(s): RR;KH USGS Quad: West Davenport Section, Township, Range: Davenport

Landform: island Local Relief: ☐ Concave ☑ Convex ☐ None Slope (%): 0

Subregion: Middle Atlantic Latitude: 42.434464 Longitude: -74.90254 Datum: NAD 1983

Soil Map Unit Name: Tunkhannock gravelly loam, 25 to 50 percent slopes NWI Classification: Not Mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks: Upland plot

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☐ Yes ☑ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Carpinus caroliniana	3	NO	FAC
Tsuga canadensis	85	YES	FACU
Total Cover:	88		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
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:	0	x 1 =	0	
FACW Species:	0	x 2 =	0	
FAC Species:	3	x 3 =	9	
FACU Species:	85	x 4 =	340	
UPL Species:	0	x 5 =	0	
Column Totals:	88	(A)	349	(B)
		Prevalence Index = B/A =	3.97	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☐ Yes ☑ No

Remarks:

SOIL

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

Depth	Matrix		Redox Features					
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]	Texture	Remarks
0-2	10YR 2/2	200					SILT LOAM	
2-8	10YR 3/3	100					SILT LOAM	
8-20	7.5YR 4/4	100					SILT LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☐ **Yes** ☑ **No**

Remarks:

Photos

Photo Name: DE1CW345_091813_UPL1E.jpg Note: DE-1C-W345-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 81.64 City/County: Delaware Sampling Date: 2013/09/19

Applicant/Owner: Williams State: NY Sampling Point: DE-1C-W346-WET1

Investigator(s): RR;KH USGS Quad: Davenpoirt Section, Township, Range: Davenpoirt

Landform: Depression Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 0

Subregion: Middle Atlantic Latitude: 42.446034 Longitude: -74.86777 Datum: NAD 1983

Soil Map Unit Name: Mongaup channery loam, 8 to 15 percent slopes NWI Classification: Not Mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks:

Field Wetland Classification: PEM

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☑ Yes ☐ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Betula alleghaniensis	5	YES	FAC
Acer rubrum	10	YES	FAC
Total Cover:	15		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Solidago gigantea	10	NO	FACW
Impatiens capensis	10	NO	FACW
Onoclea sensibilis	30	YES	FACW
Spiraea alba	5	NO	FACW
Rubus idaeus	2	NO	FACU
Galeopsis tetrahit	5	NO	FACU
Carex crinita	15	NO	OBL
Dryopteris sp	10	NO	NONE
Juncus effusus	10	NO	OBL
Persicaria sagittata	3	NO	OBL
Total Cover:	100		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	28	x 1 =	28	
FACW Species:	55	x 2 =	110	
FAC Species:	15	x 3 =	45	
FACU Species:	7	x 4 =	28	
UPL Species:	0	x 5 =	0	
Column Totals:	105	(A)	211	(B)
		Prevalence Index = B/A =	2.01	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-12	10YR 4/2	95	10YR 4/6	5	C	PL	SILT LOAM	
12-18	10YR 5/4	85	10YR 5/6	15	C	M	LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

Photo Name: DE1CW346_091913_WET1N.jpg Note: DE-1C-W346-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 81.64 City/County: Delaware Sampling Date: 2013/09/19

Applicant/Owner: Williams State: NY Sampling Point: DE-1C-W346-UPL1

Investigator(s): RR;KH USGS Quad: Davenpoirt Section, Township, Range: Davenpoirt

Landform: Plateau Local Relief: ☐ Concave ☐ Convex ☑ None Slope (%): 0

Subregion: Middle Atlantic Latitude: 42.446165 Longitude: -74.86778 Datum: NAD 1983

Soil Map Unit Name: Mongaup channery loam, 8 to 15 percent slopes NWI Classification: Not Mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks: Upland plot

Field Wetland Classification: OTHER

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☐ Yes ☑ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Tsuga canadensis	50	YES	FACU
Betula papyrifera	5	NO	FACU
Acer rubrum	20	YES	FAC
Total Cover:	75		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Fagus grandifolia	5	YES	FACU
Total Cover:	5		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Maianthemum canadense	5	YES	FACU
Mitchella repens	3	NO	FACU
Total Cover:	8		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
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:	4	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	25	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	0	x 2 =	0	
FAC Species:	20	x 3 =	60	
FACU Species:	68	x 4 =	272	
UPL Species:	0	x 5 =	0	
Column Totals:	88	(A)	332	(B)
		Prevalence Index = B/A =	3.77	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-1	7.5YR 2.5/2	100					ORGANIC	
1-5	7.5YR 4/4	100					LOAM	
5-16	7.5YR 5/6	100					SILT LOAM	
16-18	7.5YR 5/4						SILT LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☐ **Yes** ☑ **No**

Remarks:

Photos

Photo Name: DE1CW346_091913_UPL1NE.jpg Note: DE-1C-W346-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 81.48 City/County: Delaware Sampling Date: 2013/09/25

Applicant/Owner: Williams State: NY Sampling Point: DE-1C-W350-WET1

Investigator(s): RR;KH USGS Quad: West Davenport Section, Township, Range: Davenport

Landform: depression Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 3

Subregion: Middle Atlantic Latitude: 42.434861 Longitude: -74.90090 Datum: NAD 1983

Soil Map Unit Name: Maplecrest gravelly silt loam, 8 to 15 percent slopes NWI Classification: Not Mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks: Use DE-1C-W351-UPL1 as representative upland plot.

Field Wetland Classification: PEM

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☑ Yes ☐ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Onoclea sensibilis	30	YES	FACW
Carex vulpinoidea	20	YES	OBL
Euthamia graminifolia	10	NO	FAC
Solidago rugosa	10	NO	FAC
Juncus effusus	10	NO	OBL
Ranunculus bulbosus	5	NO	FACW
Scirpus atrovirens	5	NO	OBL
Carex lurida	10	NO	OBL
Total Cover:	100		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	45	x 1 =	45	
FACW Species:	35	x 2 =	70	
FAC Species:	20	x 3 =	60	
FACU Species:	0	x 4 =	0	
UPL Species:	0	x 5 =	0	
Column Totals:	100	(A)	175	(B)
		Prevalence Index = B/A =	1.75	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-4	7.5YR 4/2	98	7.5YR 4/6	2	C	PL	LOAM	
4-12	7.5YR 5/2	95	7.5YR 5/6	5	C	M,PL	LOAM	
12-18	7.5YR 5/2	95	7.5YR 5/6	5	C	M,PL	SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☑ **Yes** ☐ **No**

Remarks:

Photos

Photo Name: DE1CW350_092513_WET1W.jpg Note: DE-1C-W350-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 81.47 City/County: Delaware Sampling Date: 2013/09/25

Applicant/Owner: Williams State: NY Sampling Point: DE-1C-W351-WET1

Investigator(s): RR;KH USGS Quad: West Davenport Section, Township, Range: Davenport

Landform: depression Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 1

Subregion: Middle Atlantic Latitude: 42.434721 Longitude: -74.90107 Datum: NAD 1983

Soil Map Unit Name: Maplecrest gravelly silt loam, 8 to 15 percent slopes NWI Classification: Not Mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks:

Field Wetland Classification: PEM

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☑ Yes ☐ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Juncus effusus	30	YES	OBL
Euthamia graminifolia	25	YES	FAC
Solidago rugosa	15	NO	FAC
Agrostis gigantea	15	NO	FACW
Carex vulpinoidea	10	NO	OBL
Persicaria sagittata	2	NO	OBL
Epilobium coloratum	3	NO	OBL
Total Cover:	100		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	45	x 1 =	45	
FACW Species:	15	x 2 =	30	
FAC Species:	40	x 3 =	120	
FACU Species:	0	x 4 =	0	
UPL Species:	0	x 5 =	0	
Column Totals:	100	(A)	195	(B)
		Prevalence Index = B/A =	1.95	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth (in.)	Matrix Color (Moist)	Matrix %	Redox Features Color (Moist)	Redox %	Type [1]	Loc [2]	Texture	Remarks
0-12	7.5YR 4/2	98	7.5YR 4/6	2	C	PL	LOAM	
12-18	7.5YR 4/3	80	7.5YR 5/4	20	C	M	LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

Photo Name: DE1CW351_092513_WET1NE.jpg Note: DE-1C-W351-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 81.48 City/County: Delaware Sampling Date: 2013/09/25

Applicant/Owner: Williams State: NY Sampling Point: DE-1C-W351-UPL1

Investigator(s): RR;KH USGS Quad: West Davenport Section, Township, Range: Davenport

Landform: Side slope Local Relief: ☐ Concave ☑ Convex ☐ None Slope (%): 5

Subregion: Middle Atlantic Latitude: 42.434805 Longitude: -74.90104 Datum: NAD 1983

Soil Map Unit Name: Maplecrest gravelly silt loam, 8 to 15 percent slopes NWI Classification: Not Mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks: Upland plot

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☐ Yes ☑ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Solidago canadensis	55	YES	FACU
Solidago rugosa	10	NO	FAC
Phleum pratense	10	NO	FACU
Fragaria virginiana	5	NO	FACU
Galium mollugo	10	NO	FACW
Dactylis glomerata	5	NO	FACU
Satureja vulgaris	5	NO	UPL
Total Cover:	100		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
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:	0	x 1 =	0	
FACW Species:	10	x 2 =	20	
FAC Species:	10	x 3 =	30	
FACU Species:	75	x 4 =	300	
UPL Species:	5	x 5 =	25	
Column Totals:	100	(A)	375	(B)
		Prevalence Index = B/A =	3.75	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-2	10YR 3/3	100					LOAM	
2-14	10YR 3/4	100					LOAM	
14-18	10YR 4/4	100					LOAM	W/30% gravel

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☐ **Yes** ☑ **No**

Remarks:

Photos

Photo Name: DE1CW351_092513_UPL1NW.jpg Note: DE-1C-W351-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 81.7 City/County: Deleware Sampling Date: 2013/10/15

Applicant/Owner: Williams State: NY Sampling Point: DE-1C-W353-WET1

Investigator(s): RR;KH USGS Quad: West Davenport Section, Township, Range: Davenport

Landform: Depression Local Relief: [x] Concave [ ] Convex [ ] None Slope (%): 0

Subregion: Middle Atlantic Latitude: 42.435130 Longitude: -74.90158 Datum: NAD 1988

Soil Map Unit Name: Maplecrest gravelly silt loam, 8 to 15 percent slopes NWI Classification: Not Mapped

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

Are Vegetation [x] Soil [ ] or Hydrology [ ] significantly disturbed? [ ] No Are "Normal Circumstances" present? [x] Yes [ ] No

Are Vegetation [ ] Soil [ ] or Hydrology [ ] naturally problematic? [x] No (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	[x] Yes	[ ] No	**Is the Sampled Area within a Wetland?** [x] **Yes** [ ] **No**
Hydric Soil Present?	[x] Yes	[ ] No	
Wetland Hydrology Present?	[x] Yes	[ ] No	

Remarks: disturbed veg-recently mowed field

Field Wetland Classification: PEM

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present:	[ ] Yes	[x] No	Depth (inches):
Water Table Present:	[ ] Yes	[x] No	Depth (inches):
Saturation Present:	[x] Yes	[ ] No	Depth (inches): 0

Wetland Hydrology Present? [x] Yes [ ] No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acorus americanus	60	YES	OBL
Juncus effusus	20	YES	OBL
Euthamia graminifolia	5	NO	FAC
Solidago gigantea	15	NO	FACW
Total Cover:	**100**		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	80	x 1 =	80	
FACW Species:	15	x 2 =	30	
FAC Species:	5	x 3 =	15	
FACU Species:	0	x 4 =	0	
UPL Species:	0	x 5 =	0	
Column Totals:	100	(A)	125	(B)
		Prevalence Index = B/A =	1.25	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-1	10YR 3/2	100					LOAM	
1-12	10YR 4/2	90	7.5YR 4/6	10	C	PL	LOAM	
12-18	10YR 4/2	97	7.5YR 4/6	3	C	PL	CLAY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☑ **Yes** ☐ **No**

Remarks:

Photos

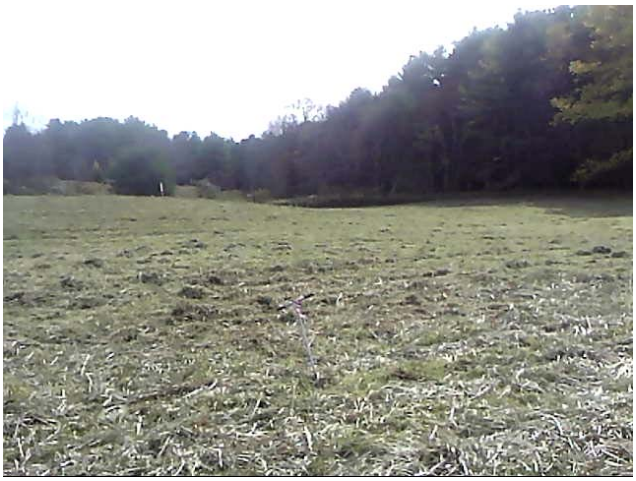

Photo Name: DE1CW353_101513_WET1SE.jpg Note: DE-1C-W353-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 81.7 City/County: Deleware Sampling Date: 2013/10/15

Applicant/Owner: Williams State: NY Sampling Point: DE-1C-W353-UPL1

Investigator(s): RR;KH USGS Quad: West Davenport Section, Township, Range: Davenport

Landform: hillslope Local Relief: ☐ Concave ☐ Convex ☑ None Slope (%): 4

Subregion: Middle Atlantic Latitude: 42.435041 Longitude: -74.90144 Datum: NAD 1988

Soil Map Unit Name: Maplecrest gravelly silt loam, 8 to 15 percent slopes NWI Classification: Not Mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks: Upland plot

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☐ Yes ☑ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Phleum pratense	20	YES	FACU
Fragaria virginiana	5	NO	FACU
Galium mollugo	5	NO	UPL
Satureja vulgaris	5	NO	UPL
Solidago canadensis	20	YES	FACU
Unidentified species	45	YES	NONE
Total Cover:	100		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	0	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	0	x 2 =	0	
FAC Species:	0	x 3 =	0	
FACU Species:	45	x 4 =	180	
UPL Species:	10	x 5 =	50	
Column Totals:	55	(A)	230	(B)
		Prevalence Index = B/A =	4.18	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☐ Yes ☑ No

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-6	10YR 3/3	100				None	LOAM	
6=18	10YR 4/3	100				None	LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☐ **Yes** ☑ **No**
Remarks:	

Photos

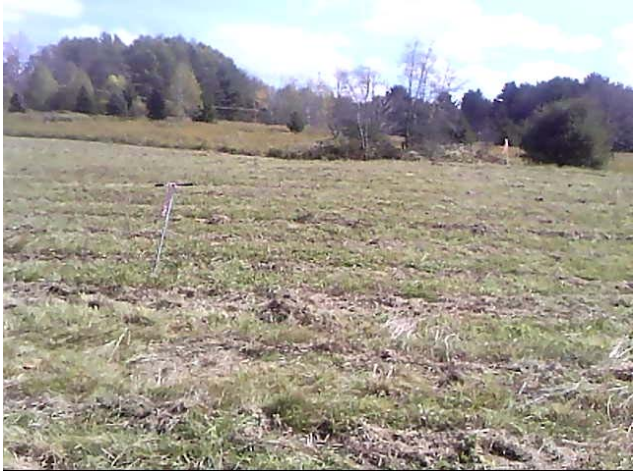

Photo Name: DE1CW353_101513_UPL1E.jpg Note: DE-1C-W353-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 81.6 City/County: Deleware Sampling Date: 2013/10/15

Applicant/Owner: Williams State: NY Sampling Point: DE-1C-W354-WET1

Investigator(s): RR;KH USGS Quad: West Davenport Section, Township, Range: Davenport

Landform: hillside Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 6

Subregion: Middle Atlantic Latitude: 42.433864 Longitude: -74.90432 Datum: NAD 1988

Soil Map Unit Name: Lackawanna and Bath soils, 15 to 35 percent slopes, very stony NWI Classification: Not Mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks:

Field Wetland Classification: PFO

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☑ Yes ☐ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer saccharum	50	YES	FACU
Betula alleghaniensis	15	YES	FAC
Total Cover:	65		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Carex crinita	80	YES	OBL
Dryopteris intermedia	5	NO	FAC
Impatiens capensis	5	NO	FACW
Tiarella cordifolia	10	NO	FACU
Total Cover:	100		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	67	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	80	x 1 =	80	
FACW Species:	5	x 2 =	10	
FAC Species:	20	x 3 =	60	
FACU Species:	60	x 4 =	240	
UPL Species:	0	x 5 =	0	
Column Totals:	165	(A)	390	(B)
		Prevalence Index = B/A =	2.36	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-1	10YR 2/2	100				None	ORGANIC	
1-4	10YR 3/2	100				None	SANDY LOAM	W/Organic material
4-18	Gley1 4/5GY	90	5YR 4/2	10	D	M	SANDY CLAY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils

- ☐ 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)

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

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☑ **Yes** ☐ **No**

Remarks:

Photos

Photo Name: DE1CW354_101513_WET1SW.jpg Note: DE-1C-W354-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 81.6 City/County: Deleware Sampling Date: 2013/10/15

Applicant/Owner: Williams State: NY Sampling Point: DE-1C-W354-UPL1

Investigator(s): RR;KH USGS Quad: West Davenport Section, Township, Range: Davenport

Landform: Hillside Local Relief: ☐ Concave ☐ Convex ☑ None Slope (%): 8

Subregion: Middle Atlantic Latitude: 42.433854 Longitude: -74.90424 Datum: NAD 1988

Soil Map Unit Name: Lackawanna and Bath soils, 15 to 35 percent slopes, very stony NWI Classification: Not Mapped

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

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

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

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

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

Remarks: Upland plot

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? ☐ Yes ☑ No

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

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer saccharum	65	YES	FACU
Tilia americana	15	NO	FACU
Betula alleghaniensis	5	NO	FAC
Total Cover:	85		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Fagus grandifolia	5	YES	FACU
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Dryopteris intermedia	5	YES	FAC
Carex pennsylvanicum	3	YES	UPL
Tiarella cordifolia	4	YES	FACU
Total Cover:	12		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
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:	5	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	20	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	0	x 2 =	0	
FAC Species:	10	x 3 =	30	
FACU Species:	84	x 4 =	336	
UPL Species:	3	x 5 =	15	
Column Totals:	97	(A)	381	(B)
		Prevalence Index = B/A =	3.93	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

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

Remarks:

SOIL

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

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-3	10YR 3/3	100				None	LOAM	
3-12	7.5YR 3/4	100				None	LOAM	
12-16	7.5YR 4/4	100				None	LOAM	Refusal @16''

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils

- ☐ 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☐ **Yes** ☑ **No**

Remarks:

Photos

Photo Name: DE1CW354_101513_UPL1W.jpg Note: DE-1C-W354-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 65.25 City/County: Delaware Sampling Date: 2013/12/12

Applicant/Owner: Williams State: NY Sampling Point: DE-1C-W363-WET1

Investigator(s): RR,PL;KH USGS Quad: Otego Section, Township, Range: Franklin

Landform: Hilside Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 4

Subregion: Middle Atlantic Latitude: 42.375772 Longitude: -75.14748 Datum: NAD 1983

Soil Map Unit Name: Morris and Volusia soils, 2 to 10 percent slopes, very stony NWI Classification: Not Mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☑ Yes	☐ No	**Is the Sampled Area within a Wetland?** ☑ **Yes** ☐ **No**
Hydric Soil Present?	☑ Yes	☐ No	
Wetland Hydrology Present?	☑ Yes	☐ No	

Remarks:

Field Wetland Classification: PFO

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☑ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☑ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☑ Yes	☐ No	Depth (inches): .5
Water Table Present:	☑ Yes	☐ No	Depth (inches): 0
Saturation Present:	☑ Yes	☐ No	Depth (inches): 0

Wetland Hydrology Present? ☑ Yes ☐ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer rubrum	30	YES	FAC
Pinus strobus	5	NO	FACU
Total Cover:	35		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Crataegus crus-galli	5	NO	FAC
Spiraea alba	5	NO	FACW
Lyonia ligustrina	30	YES	FACW
Total Cover:	40		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Onoclea sensibilis	15	YES	FACW
Euthamia graminifolia	5	YES	FAC
Total Cover:	20		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	4	(A)
Total Number of Dominant Species Across All Strata:	4	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	50	x 2 =	100	
FAC Species:	40	x 3 =	120	
FACU Species:	5	x 4 =	20	
UPL Species:	0	x 5 =	0	
Column Totals:	95	(A)	240	(B)
		Prevalence Index = B/A =	2.53	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☑ **Yes** ☐ **No**

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-4	7.5YR 4/2	100					SILT LOAM	
4-14	7.5YR 4/2	95	7.5YR 4/6	5	C	PL	SILT LOAM	
14-18	7.5YR 5/2	85	7.5YR 5/6	15	C	M	FINE SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils

- ☐ 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☑ **Yes** ☐ **No**

Remarks:

Photos

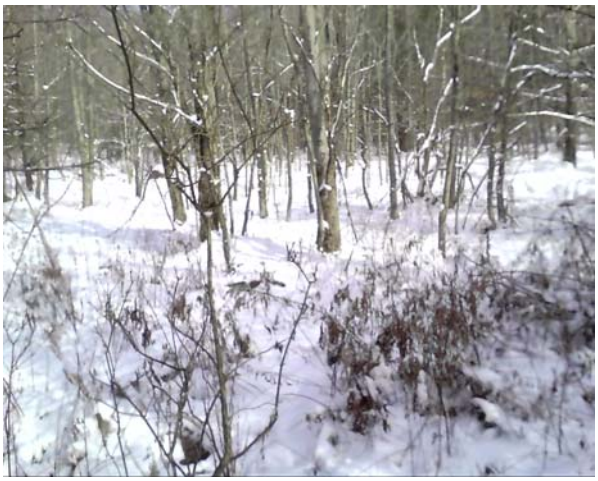

Photo Name: DE1CW363_121213_WET1N.jpg Note: DE-1C-W363-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 65.06 City/County: Delaware Sampling Date: 2013/12/12

Applicant/Owner: Williams State: NY Sampling Point: DE-1C-W363-WET2

Investigator(s): RR;PL;KH USGS Quad: Otego Section, Township, Range: Franklin

Landform: Drainageway/toe of slope Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 3

Subregion: Middle Atlantic Latitude: 42.375120 Longitude: -75.15111 Datum: NAD 1983

Soil Map Unit Name: Morris flaggy silt loam, 0 to 3 percent slopes NWI Classification: Not Mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☑ Yes	☐ No	**Is the Sampled Area within a Wetland?** ☑ **Yes** ☐ **No**
Hydric Soil Present?	☑ Yes	☐ No	
Wetland Hydrology Present?	☑ Yes	☐ No	

Remarks:

Field Wetland Classification: PSS

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☑ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☑ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☑ Yes	☐ No	Depth (inches): 0
Saturation Present:	☑ Yes	☐ No	Depth (inches): 0

Wetland Hydrology Present? ☑ Yes ☐ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer rubrum	5	YES	FAC
Total Cover:	5		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Spiraea alba	30	YES	FACW
Salix sp	30	YES	FACW
Total Cover:	60		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Juncus effusus	5	NO	OBL
Epilobium coloratum	20	YES	OBL
Carex lurida	5	NO	OBL
Carex crinita	20	YES	OBL
Carex scoparia	20	YES	FACW
Thelypteris palustris	5	NO	FACW
Glyceria canadensis	10	NO	OBL
Scirpus cyperinus	10	NO	OBL
Total Cover:	95		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	6	(A)
Total Number of Dominant Species Across All Strata:	6	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	70	x 1 =	70	
FACW Species:	85	x 2 =	170	
FAC Species:	5	x 3 =	15	
FACU Species:	0	x 4 =	0	
UPL Species:	0	x 5 =	0	
Column Totals:	160	(A)	255	(B)
		Prevalence Index = B/A =	1.59	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☑ **Yes** ☐ **No**

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-1	10YR 2/2	100					ORGANIC	
1-3	10YR 4/1	100					FINE SANDY LOAM	
3-12	10YR 4/1	96	Gley1 4/10GY	2	C	M	FINE SANDY LOAM	7.5YR 4/6 (2%) C,PL

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils

- ☐ 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☑ **Yes** ☐ **No**

Remarks:

Photos

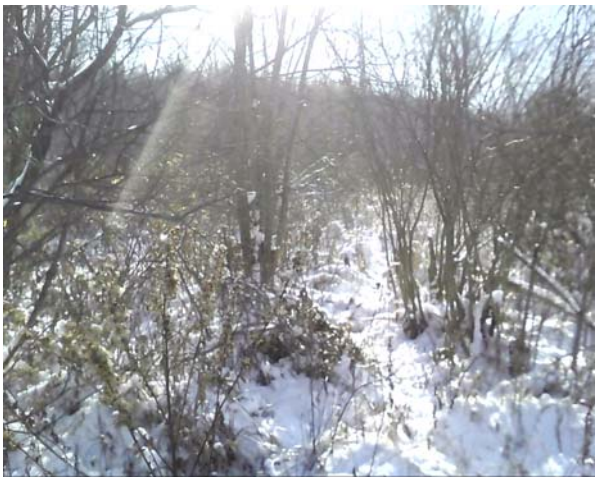

Photo Name: DE1CW363_121213_WET2NW.jpg Note: DE-1C-W363-WET2

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 64.99 City/County: Delaware Sampling Date: 2013/12/12

Applicant/Owner: Williams State: NY Sampling Point: DE-1C-W363-WET3

Investigator(s): RR;PL;KH USGS Quad: Franklin Section, Township, Range: Franklin

Landform: Plateau Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 1

Subregion: Middle Atlantic Latitude: 42.374695 Longitude: -75.15243 Datum: NAD 1983

Soil Map Unit Name: Morris flaggy silt loam, 0 to 3 percent slopes NWI Classification: Not Mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☑ Yes	☐ No	**Is the Sampled Area within a Wetland?** ☑ **Yes** ☐ **No**
Hydric Soil Present?	☑ Yes	☐ No	
Wetland Hydrology Present?	☑ Yes	☐ No	

Remarks:

Field Wetland Classification: PEM

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☑ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☑ Yes	☐ No	Depth (inches): 0
Saturation Present:	☑ Yes	☐ No	Depth (inches): 0

Wetland Hydrology Present? ☑ Yes ☐ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Epilobium coloratum	5	NO	OBL
Phleum pratense	5	NO	FACU
Carex vulpinoidea	20	YES	OBL
Symphoricarpos sp	10	NO	NONE
Onoclea sensibilis	10	NO	FACW
Juncus effusus	30	YES	OBL
Carex scoparia	20	YES	FACW
Total Cover:	**100**		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	55	x 1 =	55	
FACW Species:	30	x 2 =	60	
FAC Species:	0	x 3 =	0	
FACU Species:	5	x 4 =	20	
UPL Species:	0	x 5 =	0	
Column Totals:	90	(A)	135	(B)
		Prevalence Index = B/A =	1.50	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☑ **Yes** ☐ **No**

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-1	5YR 3/2	100					ORGANIC	
1-5	7.5YR 4/2	95	7.5YR 4/6	5	C	PL	FINE SANDY LOAM	
5-18	7.5YR 4/2	80	7.5YR 4/6	20	C	M,PL	FINE SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils

- ☐ 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☑ **Yes** ☐ **No**

Remarks:

Photos

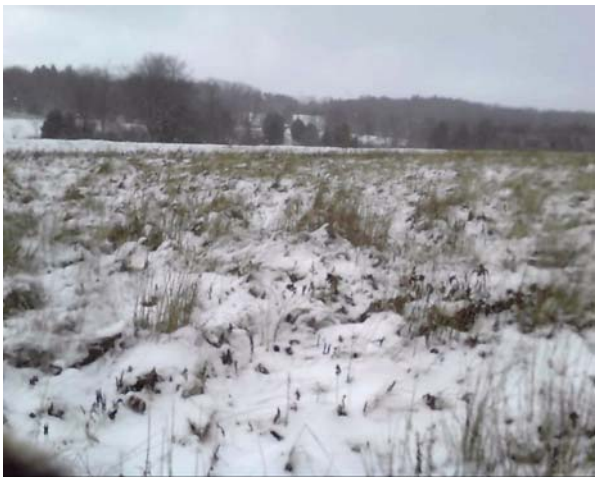

Photo Name: DE1CW363_121213_WET3N.jpg Note: DE-1C-W363-WET3

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 65.1 City/County: Delaware Sampling Date: 2013/12/12

Applicant/Owner: Williams State: NY Sampling Point: DE-1C-W363-UPL1

Investigator(s): RR;PL;KH USGS Quad: Otego Section, Township, Range: Franklin

Landform: Hillside Local Relief: ☐ Concave ☐ Convex ☑ None Slope (%): 5

Subregion: Middle Atlantic Latitude: 42.375265 Longitude: -75.15046 Datum: NAD 1983

Soil Map Unit Name: Morris and Volusia soils, 2 to 10 percent slopes, very stony NWI Classification: Not Mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☐ Yes	☑ No	**Is the Sampled Area within a Wetland?** ☐ **Yes** ☑ **No**
Hydric Soil Present?	☐ Yes	☑ No	
Wetland Hydrology Present?	☐ Yes	☑ No	

Remarks: Upland Plot

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☐ Yes	☑ No	Depth (inches):
Saturation Present:	☐ Yes	☑ No	Depth (inches):

Wetland Hydrology Present? ☐ Yes ☑ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer saccharum	10	NO	FACU
Acer rubrum	25	YES	FAC
Pinus strobus	15	YES	FACU
Tsuga canadensis	10	NO	FACU
Total Cover:	60		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Fagus grandifolia	10	YES	FACU
Acer rubrum	5	YES	FAC
Total Cover:	15		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Fagus grandifolia	2	NO	FACU
Total Cover:	2		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	4	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	50	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	0	x 2 =	0	
FAC Species:	30	x 3 =	90	
FACU Species:	47	x 4 =	188	
UPL Species:	0	x 5 =	0	
Column Totals:	77	(A)	278	(B)
		Prevalence Index = B/A =	3.61	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☐ **Yes** ☑ **No**

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-1	7.5YR 2.5/2	100					SILT LOAM	
1-10	7.5YR 3/3	100					LOAM	
10-12	7.5YR 3/4	100					LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils

- ☐ 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☐ **Yes** ☑ **No**

Remarks:

Photos

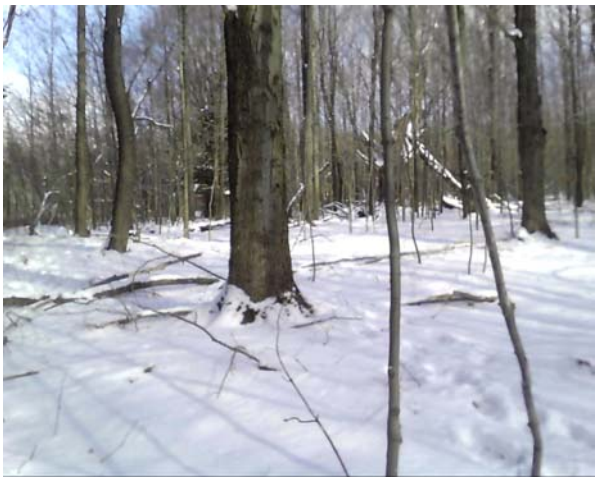

Photo Name: DE1CW363_121213_UPL1N.jpg Note: DE-1C-W363-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 64.88 City/County: Delaware Sampling Date: 2013/12/12

Applicant/Owner: Williams State: NY Sampling Point: DE-1C-W364-WET1

Investigator(s): RR;PL;KH USGS Quad: Franklin Section, Township, Range: Franklin

Landform: toe of slope Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 1

Subregion: Middle Atlantic Latitude: 42.374271 Longitude: -75.15453 Datum: NAD 1983

Soil Map Unit Name: Morris flaggy silt loam, 3 to 8 percent slopes NWI Classification: Not Mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☑ Yes	☐ No	**Is the Sampled Area within a Wetland?** ☑ **Yes** ☐ **No**
Hydric Soil Present?	☑ Yes	☐ No	
Wetland Hydrology Present?	☑ Yes	☐ No	

Remarks:

Field Wetland Classification: PEM

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☑ Yes	☐ No	Depth (inches): 0
Saturation Present:	☑ Yes	☐ No	Depth (inches): 0

Wetland Hydrology Present? ☑ Yes ☐ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Phleum pratense	10	NO	FACU
Euthamia graminifolia	20	YES	FAC
Juncus effusus	20	YES	OBL
Unknown grass	20	YES	NONE
Carex scoparia	30	YES	FACW
Rubus hispidus	10	NO	FACW
Total Cover:	110		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	4	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	75	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	20	x 1 =	20	
FACW Species:	40	x 2 =	80	
FAC Species:	20	x 3 =	60	
FACU Species:	10	x 4 =	40	
UPL Species:	0	x 5 =	0	
Column Totals:	90	(A)	200	(B)
		Prevalence Index = B/A =	2.22	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☑ **Yes** ☐ **No**

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-6	10YR 2/1	100					LOAM	refusal @6" - rocky

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☑ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils

- ☐ 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

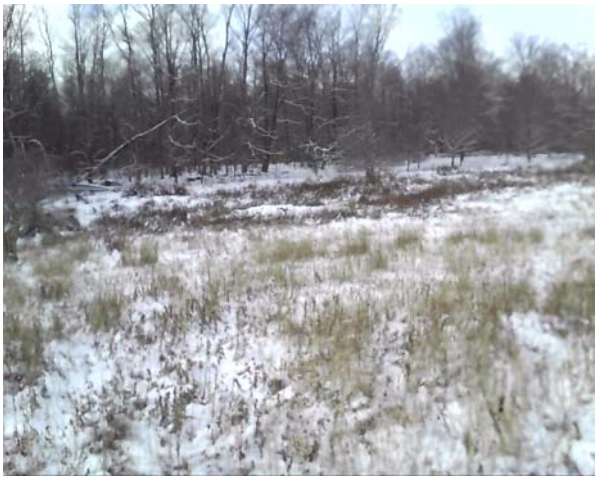

Photo Name: DE1CW364_121213_WET1W.jpg Note: DE-1C-W364-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 64.9 City/County: Delaware Sampling Date: 2013/12/12

Applicant/Owner: Williams State: NY Sampling Point: DE-1C-W364-UPL1

Investigator(s): RR;PL;KH USGS Quad: Franklin Section, Township, Range: Franklin

Landform: Field Local Relief: ☐ Concave ☐ Convex ☑ None Slope (%): 0

Subregion: Middle Atlantic Latitude: 42.374220 Longitude: -75.15399 Datum: NAD 1983

Soil Map Unit Name: Morris flaggy silt loam, 3 to 8 percent slopes NWI Classification: Not Mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☐ Yes	☑ No	**Is the Sampled Area within a Wetland?** ☐ **Yes** ☑ **No**
Hydric Soil Present?	☐ Yes	☑ No	
Wetland Hydrology Present?	☐ Yes	☑ No	

Remarks: Upland Plot

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☐ Yes	☑ No	Depth (inches):
Saturation Present:	☐ Yes	☑ No	Depth (inches):

Wetland Hydrology Present? ☐ Yes ☑ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Phleum pratense	20	YES	FACU
unknown veg	80	YES	UPL
Total Cover:	**100**		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	0	x 2 =	0	
FAC Species:	0	x 3 =	0	
FACU Species:	20	x 4 =	80	
UPL Species:	80	x 5 =	400	
Column Totals:	100	(A)	480	(B)
		Prevalence Index = B/A =	4.80	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☐ **Yes** ☑ **No**

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-2	7.5YR 3/3	100					SILT LOAM	
2-14	7.5YR 3/4	100					FINE SANDY LOAM	
14-18	7.5YR 4/6	100					FINE SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils

- ☐ 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☐ **Yes** ☑ **No**

Remarks:

Photos

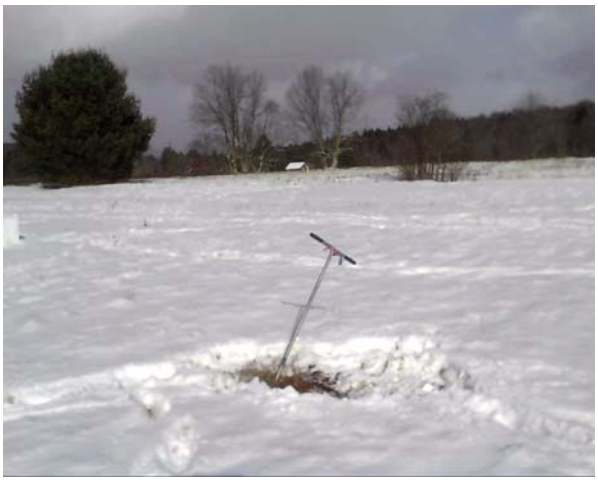

Photo Name: DE1CW364_121213_UPL1SW.jpg Note: DE-1C-W364-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 75.83550 City/County: Delaware Sampling Date: 2014/04/24

Applicant/Owner: Williams State: NY Sampling Point: DE-1C-W371-WET1

Investigator(s): RR;KH USGS Quad: Oneonta Section, Township, Range: Davenport

Landform: Drainageway Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 1

Subregion: Middle Atlantic Latitude: 42.419490 Longitude: -75.00725 Datum: NAD 1983

Soil Map Unit Name: Onteora channery silt loam, 3 to 8 percent slopes NWI Classification: Not mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☑ Yes	☐ No	**Is the Sampled Area within a Wetland?** ☑ **Yes** ☐ **No**
Hydric Soil Present?	☑ Yes	☐ No	
Wetland Hydrology Present?	☑ Yes	☐ No	

Remarks:

Field Wetland Classification: PSS

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☑ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☑ Yes	☐ No	Depth (inches): 2
Saturation Present:	☑ Yes	☐ No	Depth (inches): 0

Wetland Hydrology Present? ☑ Yes ☐ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer rubrum	5	YES	FAC
Salix sp	5	YES	FAC
Total Cover:	10		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Spiraea alba	10	YES	FACW
Viburnum dentatum	10	YES	FAC
Salix sp	30	YES	FAC
Total Cover:	50		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Solidago gigantea	10	NO	FACW
Scirpus cyperinus	25	YES	OBL
Onoclea sensibilis	40	YES	FACW
Carex sp	10	NO	FAC
Total Cover:	85		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	7	(A)
Total Number of Dominant Species Across All Strata:	7	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	25	x 1 =	25	
FACW Species:	60	x 2 =	120	
FAC Species:	60	x 3 =	180	
FACU Species:	0	x 4 =	0	
UPL Species:	0	x 5 =	0	
Column Totals:	145	(A)	325	(B)
		Prevalence Index = B/A =	2.24	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☑ **Yes** ☐ **No**

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-6	7.5YR 4/2	100					SILT LOAM	W/organic material
6-20	5YR 4/2	98	2.5Y 5/4	2	D	M	FINE SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils

- ☐ 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

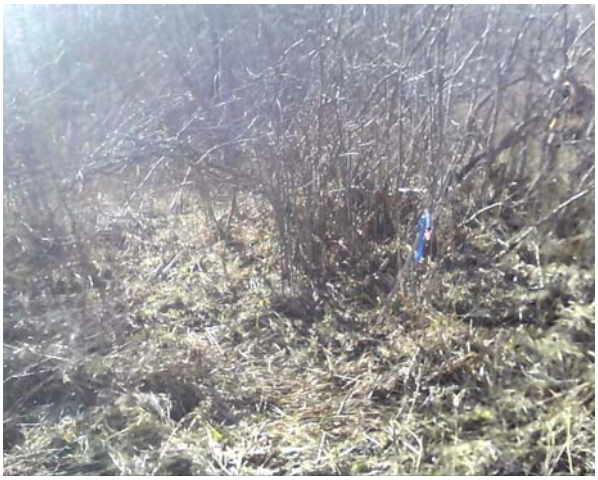

Photo Name: DE1CW371_042414_WET1SE.jpg Note: DE-1C-W371-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 75.81244 City/County: Delaware Sampling Date: 2014/04/24

Applicant/Owner: Williams State: NY Sampling Point: DE-1C-W371-UPL1

Investigator(s): RR;KH USGS Quad: Oneonta Section, Township, Range: Davenport

Landform: Hillside Local Relief: ☐ Concave ☐ Convex ☑ None Slope (%): 4

Subregion: Middle Atlantic Latitude: 42.419305 Longitude: -75.00770 Datum: NAD 1983

Soil Map Unit Name: Onteora channery silt loam, 3 to 8 percent slopes NWI Classification: Not mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☐ Yes	☑ No	**Is the Sampled Area within a Wetland?** ☐ **Yes** ☑ **No**
Hydric Soil Present?	☐ Yes	☑ No	
Wetland Hydrology Present?	☐ Yes	☑ No	

Remarks: Upland plot

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☐ Yes	☑ No	Depth (inches):
Saturation Present:	☐ Yes	☑ No	Depth (inches):

Wetland Hydrology Present? ☐ Yes ☑ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Pinus serotina	15	YES	OBL
Carpinus caroliniana	15	NO	FAC
Acer saccharum	5	YES	FACU
Fraxinus americana	20	YES	FACU
Total Cover:	55		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Carpinus caroliniana	15	YES	FAC
Fraxinus americana	5	YES	FACU
Total Cover:	20		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Dactylis glomerata	10	YES	FACU
Solidago sp	3	NO	FACU
Total Cover:	13		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	6	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	33	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	15	x 1 =	15	
FACW Species:	0	x 2 =	0	
FAC Species:	30	x 3 =	90	
FACU Species:	43	x 4 =	172	
UPL Species:	0	x 5 =	0	
Column Totals:	88	(A)	277	(B)
		Prevalence Index = B/A =	3.15	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☐ **Yes** ☑ **No**

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-6	7.5YR 3/3	100					SILT LOAM	
6-12	7.5YR 4/3	100					SILT LOAM	
12-18	5YR 4/4	100					SILT LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils

- ☐ 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☐ **Yes** ☑ **No**

Remarks:

Photos

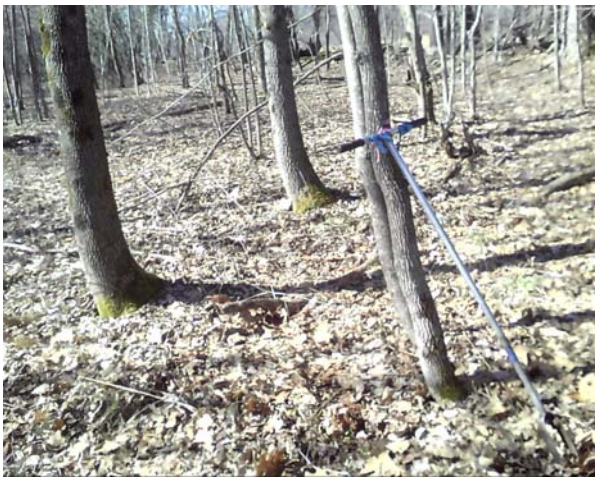

Photo Name: DE1CW371_042414_UPL1S.jpg Note: DE-1C-W371-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 76.87419 City/County: Delaware Sampling Date: 2014/05/05

Applicant/Owner: Williams State: NY Sampling Point: DE-1C-W375A-WET1

Investigator(s): RR;KH USGS Quad: West Davenport Section, Township, Range: Davenport

Landform: Hillside Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 2

Subregion: Middle Atlantic Latitude: 42.423173 Longitude: -74.98797 Datum: NAD 1983

Soil Map Unit Name: Halcott, Mongaup, and Vly soils, 2 to 15 percent slopes, very rocky NWI Classification: Not mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☑ or Hydrology ☐ naturally problematic? ☐ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☑ Yes	☐ No	**Is the Sampled Area within a Wetland?** ☑ **Yes** ☐ **No**
Hydric Soil Present?	☑ Yes	☐ No	
Wetland Hydrology Present?	☑ Yes	☐ No	

Remarks:

Field Wetland Classification: PFO

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☑ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☑ Yes	☐ No	Depth (inches): 0
Saturation Present:	☑ Yes	☐ No	Depth (inches): 0

Wetland Hydrology Present? ☑ Yes ☐ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer rubrum	25	YES	FAC
Pinus strobus	10	YES	FACU
Total Cover:	35		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer rubrum	35	YES	FAC
Total Cover:	35		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Carex crinita	10	YES	OBL
Leersia oryzoides	15	YES	OBL
Solidago sp	5	NO	FAC
Rubus hispidus	2	NO	FACW
Total Cover:	32		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	4	(A)
Total Number of Dominant Species Across All Strata:	5	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	80	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	25	x 1 =	25	
FACW Species:	2	x 2 =	4	
FAC Species:	65	x 3 =	195	
FACU Species:	10	x 4 =	40	
UPL Species:	0	x 5 =	0	
Column Totals:	102	(A)	264	(B)
		Prevalence Index = B/A =	2.59	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☑ **Yes** ☐ **No**

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-6	7.5YR 3/3	98	5YR 4/6	2	C	M	FINE SANDY LOAM	
6-12	5YR 4/3	95	5YR 4/6	5	C	M	FINE SANDY LOAM	
12-18	5YR 4/3	90	5YR 4/6	5	C	M	FINE SANDY LOAM	10YR 5/6 (5%) C,M

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils

- ☐ 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☑ **Yes** ☐ **No**

Remarks:

Photos

Photo Name: DE1CW375A_050514_WET1NW.jpg Note: DE-1C-W375A-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 76.75817 City/County: Delaware Sampling Date: 2014/05/05

Applicant/Owner: Williams State: NY Sampling Point: DE-1C-W376-WET1

Investigator(s): RR;KH USGS Quad: West Davenport Section, Township, Range: Davenport

Landform: Drainageway Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 2

Subregion: Middle Atlantic Latitude: 42.422456 Longitude: -74.99003 Datum: NAD 1983

Soil Map Unit Name: Willowemoc channery silt loam, 3 to 8 percent slopes NWI Classification: Not mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☑ or Hydrology ☐ naturally problematic? ☐ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☑ Yes	☐ No	**Is the Sampled Area within a Wetland?** ☑ **Yes** ☐ **No**
Hydric Soil Present?	☑ Yes	☐ No	
Wetland Hydrology Present?	☑ Yes	☐ No	

Remarks:

Field Wetland Classification: PFO

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☑ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☑ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☑ Yes	☐ No	Depth (inches): 4
Saturation Present:	☑ Yes	☐ No	Depth (inches): 0

Wetland Hydrology Present? ☑ Yes ☐ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Populus tremuloides	45	YES	FACU
Acer rubrum	10	NO	FAC
Pinus strobus	5	NO	FACU
Total Cover:	**60**		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Fraxinus americana	10	YES	FACU
Populus tremuloides	15	YES	FACU
Total Cover:	**25**		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Crataegus crus-galli	10	YES	FAC
Total Cover:	**10**		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Onoclea sensibilis	20	YES	FACW
Rubus hispidus	5	NO	FACW
Solidago sp	5	NO	FAC
Carex sp	5	NO	FAC
Euthamia graminifolia	10	NO	FAC
Ranunculus sp	5	NO	FAC
Total Cover:	**50**		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	5	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	40	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	25	x 2 =	50	
FAC Species:	45	x 3 =	135	
FACU Species:	75	x 4 =	300	
UPL Species:	0	x 5 =	0	
Column Totals:	145	(A)	485	(B)
		Prevalence Index = B/A =	3.34	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☑ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☑ **Yes** ☐ **No**

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-1	5YR 3/3	100					FINE SANDY LOAM	
1-12	5YR 4/3	97	5YR 4/6	3	C	PL	SILT LOAM	
12-20	5YR 4/3	90	5YR 5/6	10	C	M	CLAY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils

- ☐ 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☑ **Yes** ☐ **No**

Remarks:

Photos

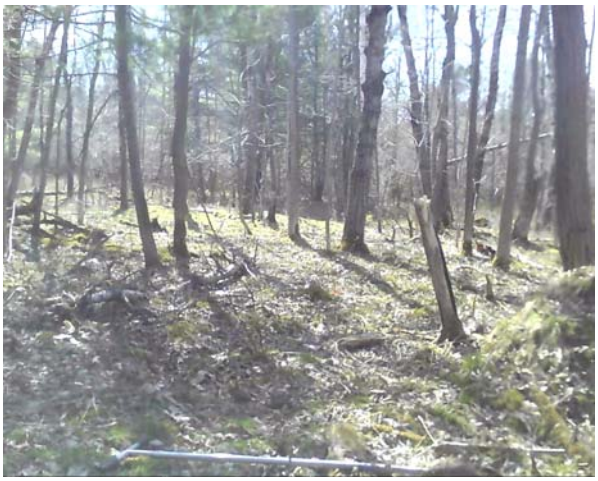

Photo Name: DE1CW376_050514_WET1N.jpg Note: DE-1C-W376-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 76.88645 City/County: Delaware Sampling Date: 2014/05/06

Applicant/Owner: Williams State: NY Sampling Point: DE-1C-W377-WET1

Investigator(s): RR;KH USGS Quad: West Davenport Section, Township, Range: Davenport

Landform: Drainageway Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 2

Subregion: Middle Atlantic Latitude: 42.424606 Longitude: -74.98844 Datum: NAD 1983

Soil Map Unit Name: Vly channery silt loam, 8 to 15 percent slopes NWI Classification: Not mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☑ Yes	☐ No	**Is the Sampled Area within a Wetland?** ☑ **Yes** ☐ **No**
Hydric Soil Present?	☑ Yes	☐ No	
Wetland Hydrology Present?	☑ Yes	☐ No	

Remarks: egg masses present in standing water

Field Wetland Classification: PSS

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☑ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☑ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☑ Yes	☐ No	Depth (inches): 2
Water Table Present:	☑ Yes	☐ No	Depth (inches): 0
Saturation Present:	☑ Yes	☐ No	Depth (inches): 0

Wetland Hydrology Present? ☑ Yes ☐ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer rubrum	5	YES	FAC
Populus tremuloides	10	YES	FACU
Malus sp	3	NO	NONE
Total Cover:	18		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Spiraea alba	25	YES	FACW
Lonicera morrowii	2	NO	FACU
Crataegus crus-galli	5	NO	FAC
Total Cover:	32		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Juncus effusus	20	YES	OBL
Carex crinita	20	YES	OBL
Persicaria sagittata	5	NO	OBL
Impatiens capensis	10	NO	FACW
Total Cover:	55		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	4	(A)
Total Number of Dominant Species Across All Strata:	5	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	80	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	45	x 1 =	45	
FACW Species:	35	x 2 =	70	
FAC Species:	10	x 3 =	30	
FACU Species:	12	x 4 =	48	
UPL Species:	0	x 5 =	0	
Column Totals:	102	(A)	193	(B)
		Prevalence Index = B/A =	1.89	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☑ **Yes** ☐ **No**

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-3	7.5YR 3/4	100					LOAM	
3-8	5YR 4/4	100					LOAM	
8-12	5YR 4/3	97	5YR 4/6	3	C	M	CLAY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils

- ☐ 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☑ **Yes** ☐ **No**

Remarks:

Photos

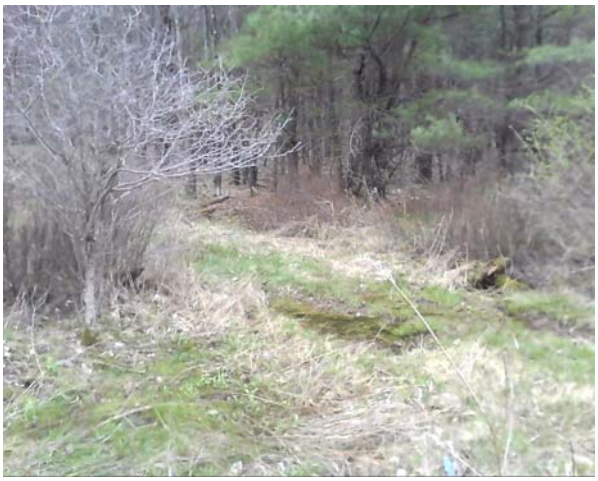

Photo Name: DE1CW377_050614_WET1SW.jpg Note: DE-1C-W377-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 76.87986 City/County: Delaware Sampling Date: 2014/05/06

Applicant/Owner: Williams State: NY Sampling Point: DE-1C-W377-UPL1

Investigator(s): RR;KH USGS Quad: West Davenport Section, Township, Range: Davenport

Landform: terrace Local Relief: ☐ Concave ☐ Convex ☑ None Slope (%): 2

Subregion: Middle Atlantic Latitude: 42.424618 Longitude: -74.98859 Datum: NAD 1983

Soil Map Unit Name: Vly channery silt loam, 8 to 15 percent slopes NWI Classification: Not mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☐ Yes	☑ No	**Is the Sampled Area within a Wetland?** ☐ **Yes** ☑ **No**
Hydric Soil Present?	☐ Yes	☑ No	
Wetland Hydrology Present?	☐ Yes	☑ No	

Remarks: Upland plot

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☐ Yes	☑ No	Depth (inches):
Saturation Present:	☐ Yes	☑ No	Depth (inches):

Wetland Hydrology Present? ☐ Yes ☑ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet **Scientific Name**	**% Cover**	**Dominant**	**Indicator**
Acer rubrum	15	YES	FAC
Total Cover:	**15**		

Sapling Stratum			
Plot Size: 15 feet **Scientific Name**	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet **Scientific Name**	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet **Scientific Name**	**% Cover**	**Dominant**	**Indicator**
Taraxacum officinale	20	YES	FACU
Galium mollugo	5	NO	UPL
Plantago lanceolata	10	NO	FACU
unknown grass	65	YES	UPL
Total Cover:	**100**		

Vine Stratum			
Plot Size: 30 feet **Scientific Name**	**% Cover**	**Dominant**	**Indicator**
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:	3	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	33	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	0	x 2 =	0	
FAC Species:	15	x 3 =	45	
FACU Species:	30	x 4 =	120	
UPL Species:	70	x 5 =	350	
Column Totals:	115	(A)	515	(B)
		Prevalence Index = B/A =	4.48	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☐ **Yes** ☑ **No**

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-4	7.5YR 3/4	100					SILT LOAM	
4-10	7.5YR 4/4	100					SILT LOAM	
10-13	5YR 4/4	100					SILTY CLAY LOAM	Refusal@13" rocky

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils

- ☐ 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☐ **Yes** ☑ **No**

Remarks:

Photos

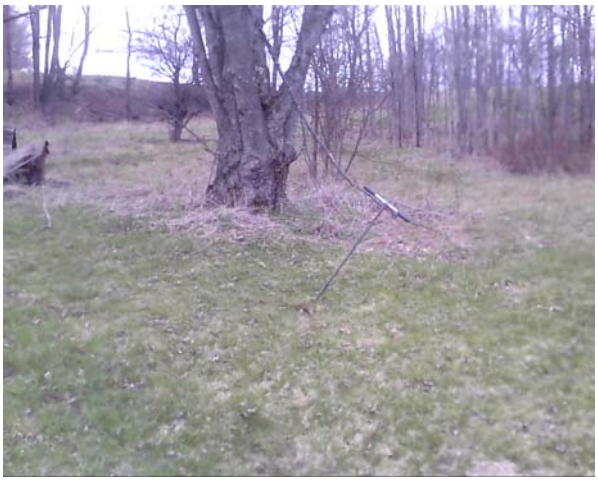

Photo Name: DE1CW377_050614_UPL1N.jpg Note: DE-1C-W377-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 83.49 City/County: Delaware Sampling Date: 2012/07/19

Applicant/Owner: Williams State: NY Sampling Point: DE-1G-W011-WET1

Investigator(s): AH,ELG USGS Quad: Davenport Section, Township, Range: Davenport

Landform: Depression Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 5

Subregion: Middle Atlantic Latitude: 42.454819 Longitude: -74.83290 Datum: NAD1983

Soil Map Unit Name: Willowemoc and Willdin soils, 2 to 15 percent slopes, very stony NWI Classification: Not mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☑ Yes	☐ No	**Is the Sampled Area within a Wetland?** ☑ **Yes** ☐ **No**
Hydric Soil Present?	☑ Yes	☐ No	
Wetland Hydrology Present?	☑ Yes	☐ No	

Remarks:

Field Wetland Classification: PFO

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☑ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☑ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☑ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☐ Yes	☑ No	Depth (inches):
Saturation Present:	☑ Yes	☐ No	Depth (inches): 0

Wetland Hydrology Present? ☑ Yes ☐ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Tsuga canadensis	60	YES	FACU
Fraxinus pennsylvanica	20	YES	FACW
Ostrya virginiana	5	NO	FACU
Total Cover:	**85**		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer rubrum	10	YES	FAC
Fraxinus pennsylvanica	10	YES	FACW
Total Cover:	**20**		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:	**0**		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Arisaema triphyllum	10	YES	FAC
Oxalis montana	5	NO	FACU
Thelypteris simulata	20	YES	FACW
Total Cover:	**35**		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:	**0**		

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	5	(A)
Total Number of Dominant Species Across All Strata:	6	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	83	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	50	x 2 =	100	
FAC Species:	20	x 3 =	60	
FACU Species:	70	x 4 =	280	
UPL Species:	0	x 5 =	0	
Column Totals:	140	(A)	440	(B)
		Prevalence Index = B/A =	3.14	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☑ **Yes** ☐ **No**

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-12	10YR 3/1	90	10YR 5/6	10	C	M	CLAY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils[3]

- ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- ☐ Coast: Prairie Redox (A16) (LRR K, L, R)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- ☐ Dark Surface (S7) (LRR K, L, 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present): Type: ROCK Depth (inches): 12	**Hydric Soil Present?** ☑ **Yes** ☐ **No**

Remarks:

Photos

Photo Name: DE1GW011_20120719_WET1W.jpg Note: DE-1G-W011-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 83.48 City/County: Delaware Sampling Date: 2012/07/19

Applicant/Owner: Williams State: NY Sampling Point: DE-1G-W011-UPL1

Investigator(s): AH,ELG USGS Quad: Davenport Section, Township, Range: Davenport

Landform: Terrace Local Relief: ☐ Concave ☐ Convex ☑ None Slope (%): 0

Subregion: Middle Atlantic Latitude: 42.454836 Longitude: -74.83314 Datum: NAD1983

Soil Map Unit Name: Willowemoc and Willdin soils, 2 to 15 percent slopes, very stony NWI Classification: Not mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☐ Yes	☑ No	**Is the Sampled Area within a Wetland?** ☐ **Yes** ☑ **No**
Hydric Soil Present?	☐ Yes	☑ No	
Wetland Hydrology Present?	☐ Yes	☑ No	

Remarks: Upland

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☐ Yes	☑ No	Depth (inches):
Saturation Present:	☐ Yes	☑ No	Depth (inches):

Wetland Hydrology Present? ☐ Yes ☑ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Tsuga canadensis	80	YES	FACU
Betula alleghaniensis	10	NO	FAC
Total Cover:	**90**		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:	**0**		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:	**0**		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Maianthemum canadense	5	YES	FACU
Polystichum acrostichoides	20	YES	FACU
Total Cover:	**25**		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:	**0**		

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	0	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	0	x 2 =	0	
FAC Species:	10	x 3 =	30	
FACU Species:	105	x 4 =	420	
UPL Species:	0	x 5 =	0	
Column Totals:	115	(A)	450	(B)
		Prevalence Index = B/A =	3.91	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☐ Yes ☑ No

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (in.)	Matrix Color (Moist)	Matrix %	Redox Features Color (Moist)	Redox %	Type [1]	Loc [2]	Texture	Remarks
0-1		0		0				ORGANIC
1-6	10YR 4/3	100		0		None	SILT LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils[3]

- ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- ☐ Coast: Prairie Redox (A16) (LRR K, L, R)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- ☐ Dark Surface (S7) (LRR K, L, 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present):	
Type: ROCK REFUSAL Depth (inches): 6	**Hydric Soil Present?** ☐ **Yes** ☑ **No**
Remarks:	

Photos

Photo Name: DE1GW011_20120719_UPL1W.jpg Note: DE-1G-W011-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 70.4 City/County: Delaware Sampling Date: 2013/04/02

Applicant/Owner: Williams State: NY Sampling Point: DE-1H-W268-WET1

Investigator(s): AT; KH (SH) USGS Quad: Oneonta Section, Township, Range: Franklin

Landform: toe of slope Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%):

Subregion: Middle Atlantic Latitude: -75.04167 Longitude: -75.04167 Datum: NAD1983

Soil Map Unit Name: Fluvaquents-Udifluvents complex, frequently flooded NWI Classification:

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☑ Yes	☐ No	**Is the Sampled Area within a Wetland?** ☑ **Yes** ☐ **No**
Hydric Soil Present?	☐ Yes	☐ No	
Wetland Hydrology Present?	☐ Yes	☐ No	

Remarks:

Field Wetland Classification: PSS

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☑ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☑ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☑ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☐ No	Depth (inches):
Water Table Present:	☐ Yes	☐ No	Depth (inches):
Saturation Present:	☐ Yes	☐ No	Depth (inches):

Wetland Hydrology Present? ☐ Yes ☐ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer rubrum	15	YES	FAC
Total Cover:	**15**		

Sapling Stratum			
Plot Size: feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Alnus rugosa	15	YES	NONE
Vaccinium corymbosum	30	YES	FACW
Spiraea alba	10	NO	FACW
Lonicera tatarica	10	NO	FACU
Sambucus canadensis	5	NO	FACW
Acer rubrum	15	YES	FAC
Viburnum nudum	10	NO	FACU
Total Cover:	**95**		

Herb Stratum			
Plot Size: feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Onoclea sensibilis	40	YES	FACW
Glyceria striata	15	YES	OBL
Total Cover:	**55**		

Vine Stratum			
Plot Size: feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	5	(A)
Total Number of Dominant Species Across All Strata:	6	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	83.33	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	15	x 1 =	15	
FACW Species:	85	x 2 =	170	
FAC Species:	30	x 3 =	90	
FACU Species:	20	x 4 =	80	
UPL Species:	0	x 5 =	0	
Column Totals:	150	(A)	355	(B)
		Prevalence Index = B/A =	2.37	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☑ **Yes** ☐ **No**

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-3	Organic					None	ORGANIC	
3-6	7.5YR 4/2	100				None	SILT LOAM	
6-12	7.5YR 4/2	80	10YR 3/4	20	C	PL	SILT	Rocky-silt
12-18+	10YR 4/2	70	10YR 5/4	30	C	PL	SILT	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Greyed 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)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils

- ☐ 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☐ **Yes** ☐ **No**

Remarks:

Photos

Photo Name: DE1HW268_040213_WET1N.jpg Note: DE-1H-W268-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 70.4 City/County: Delaware Sampling Date: 2013/04/02

Applicant/Owner: Williams State: NY Sampling Point: DE-1H-W268-WET1

Investigator(s): AT; KH (SH) USGS Quad: Oneonta Section, Township, Range: Franklin

Landform: toe of slope Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%):

Subregion: Middle Atlantic Latitude: -75.04167 Longitude: -75.04167 Datum: NAD1983

Soil Map Unit Name: Fluvaquents-Udifluvents complex, frequently flooded NWI Classification:

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☑ Yes	☐ No	**Is the Sampled Area within a Wetland?** ☑ **Yes** ☐ **No**
Hydric Soil Present?	☐ Yes	☐ No	
Wetland Hydrology Present?	☐ Yes	☐ No	

Remarks:

Field Wetland Classification: PSS

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☑ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☑ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☑ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☐ No	Depth (inches):
Water Table Present:	☐ Yes	☐ No	Depth (inches):
Saturation Present:	☐ Yes	☐ No	Depth (inches):

Wetland Hydrology Present? ☐ Yes ☐ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer rubrum	15	YES	FAC
Total Cover:	**15**		

Sapling Stratum			
Plot Size: feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Alnus rugosa	15	YES	NONE
Vaccinium corymbosum	30	YES	FACW
Spiraea alba	10	NO	FACW
Lonicera tatarica	10	NO	FACU
Sambucus canadensis	5	NO	FACW
Acer rubrum	15	YES	FAC
Viburnum nudum	10	NO	FACU
Total Cover:	**95**		

Herb Stratum			
Plot Size: feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Onoclea sensibilis	40	YES	FACW
Glyceria striata	15	YES	OBL
Total Cover:	**55**		

Vine Stratum			
Plot Size: feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	5	(A)
Total Number of Dominant Species Across All Strata:	6	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	83.33	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	15	x 1 =	15	
FACW Species:	85	x 2 =	170	
FAC Species:	30	x 3 =	90	
FACU Species:	20	x 4 =	80	
UPL Species:	0	x 5 =	0	
Column Totals:	150	(A)	355	(B)
		Prevalence Index = B/A =	2.37	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☑ **Yes** ☐ **No**

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-3	Organic					None	ORGANIC	
3-6	7.5YR 4/2	100				None	SILT LOAM	
6-12	7.5YR 4/2	80	10YR 3/4	20	C	PL	SILT	Rocky-silt
12-18+	10YR 4/2	70	10YR 5/4	30	C	PL	SILT	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Greyed 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)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils

- ☐ 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☐ **Yes** ☐ **No**

Remarks:

Photos

Photo Name: DE1HW268_040213_WET1N.jpg Note: DE-1H-W268-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 70.5 City/County: Delaware Sampling Date: 2013/04/02

Applicant/Owner: Williams State: NY Sampling Point: DE-1H-W268-UPL1

Investigator(s): AT; KH USGS Quad: Oneonta Section, Township, Range: Franklin

Landform: Local Relief: ☐ Concave ☐ Convex ☐ None Slope (%):

Subregion: Middle Atlantic Latitude: 42.424328 Longitude: -75.07030 Datum: NAD1983

Soil Map Unit Name: Onteora and Ontusia soils, 2 to 10 percent slopes, very stony NWI Classification:

Are climatic/hydrologic conditions on the site typical for this time of year? ☐ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☐ No Are "Normal Circumstances" present? ☐ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☐ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☐ Yes	☑ No	**Is the Sampled Area within a Wetland?** ☐ **Yes** ☑ **No**
Hydric Soil Present?	☐ Yes	☑ No	
Wetland Hydrology Present?	☐ Yes	☑ No	

Remarks: Upland plot

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☐ Yes	☑ No	Depth (inches):
Saturation Present:	☐ Yes	☑ No	Depth (inches):

Wetland Hydrology Present? ☐ Yes ☑ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Pinus resinosa	45	YES	FACU
Acer rubrum	10	NO	FAC
Total Cover:	55		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Fagus grandifolia	20	YES	FACU
Acer rubrum	10	YES	FAC
Total Cover:	30		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Rubus hispidus	10	YES	FACW
Total Cover:	10		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	4	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	50	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	10	x 2 =	20	
FAC Species:	20	x 3 =	60	
FACU Species:	65	x 4 =	260	
UPL Species:	0	x 5 =	0	
Column Totals:	95	(A)	340	(B)
		Prevalence Index = B/A =	3.58	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☐ **Yes** ☑ **No**

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-18	5YR 4/4	100					SILT	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils

- ☐ 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☐ **Yes** ☑ **No**
Remarks:	

Photos

Photo Name: DE1HW268_040213_UPL1NE.jpg Note: DE-1H-W268-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 81.87 City/County: Delaware Sampling Date: 2012/07/18

Applicant/Owner: Williams State: NY Sampling Point: DE-1N-W005-WET1

Investigator(s): DG,ELG USGS Quad: Davenport Section, Township, Range: Davenport

Landform: Depression/ pits & mounds Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 2

Subregion: Middle Atlantic Latitude: 42.449344 Longitude: -74.86295 Datum: NAD1983

Soil Map Unit Name: Middlebrook-Mongaup complex, 2 to 8 percent slopes NWI Classification: Not mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☐ Yes ☑ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☑ Yes	☐ No	**Is the Sampled Area within a Wetland?** ☑ **Yes** ☐ **No**
Hydric Soil Present?	☑ Yes	☐ No	
Wetland Hydrology Present?	☑ Yes	☐ No	

Remarks: VERY DRY CLIMATE CONDITIONS DUE TO DROUGHT. SOILS DRY BUT STILL HYDRIC.

Field Wetland Classification: PFO

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☑ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☑ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☐ Yes	☑ No	Depth (inches):
Saturation Present:	☐ Yes	☑ No	Depth (inches):

Wetland Hydrology Present? ☑ Yes ☐ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 20 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer rubrum	60	YES	FAC
Total Cover:	**60**		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:	**0**		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Vaccinium corymbosum	70	YES	FACW
Total Cover:	**70**		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer rubrum	10	YES	FAC
Scirpus cyperinus	10	YES	OBL
Carex lurida	5	YES	OBL
Typha latifolia	10	YES	OBL
Spiraea alba	10	YES	FACW
Total Cover:	**45**		

Vine Stratum			
Plot Size: 20 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:	**0**		

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC: 7 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	25	x 1 =	25	
FACW Species:	80	x 2 =	160	
FAC Species:	70	x 3 =	210	
FACU Species:	0	x 4 =	0	
UPL Species:	0	x 5 =	0	
Column Totals:	175	(A)	395	(B)
		Prevalence Index = B/A =	2.26	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☑ **Yes** ☐ **No**

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (in.)	Matrix Color (Moist)	Matrix %	Redox Features Color (Moist)	Redox %	Type [1]	Loc [2]	Texture	Remarks
0-2		0		0		None		ORGANIC LAYER
2-10	10YR 4/2	70	10 YR 4/6	30	C	M	LOAM	REALLY DRY

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils[3]

- ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- ☐ Coast: Prairie Redox (A16) (LRR K, L, R)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- ☐ Dark Surface (S7) (LRR K, L, 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

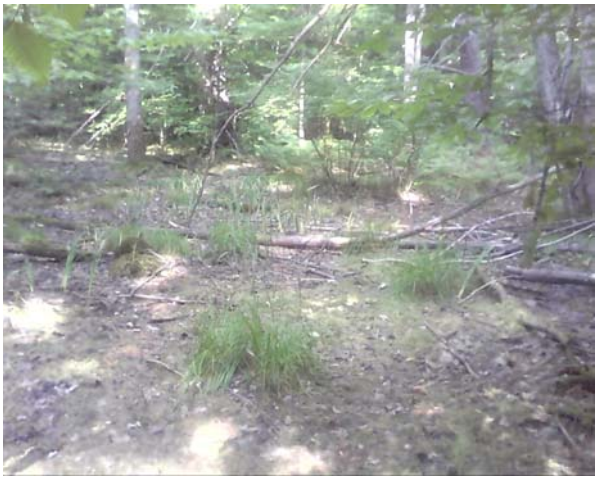

Photo Name: DE1NW005_20120718_WET1E.jpg Note: DE-1N-W005-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 81.87 City/County: Delaware Sampling Date: 2012/07/18

Applicant/Owner: Williams State: NY Sampling Point: DE-1N-W005-UPL1

Investigator(s): DG,ELG USGS Quad: Davenport Section, Township, Range: Davenport

Landform: Flat Local Relief: ☐ Concave ☐ Convex ☑ None Slope (%):

Subregion: Middle Atlantic Latitude: 42.449212 Longitude: -74.86298 Datum: NAD1983

Soil Map Unit Name: Middlebrook-Mongaup complex, 2 to 8 percent slopes NWI Classification: Not mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☐ Yes ☑ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☐ Yes	☑ No	**Is the Sampled Area within a Wetland?** ☐ **Yes** ☑ **No**
Hydric Soil Present?	☐ Yes	☑ No	
Wetland Hydrology Present?	☐ Yes	☑ No	

Remarks: Upland

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☐ Yes	☑ No	Depth (inches):
Saturation Present:	☐ Yes	☑ No	Depth (inches):

Wetland Hydrology Present? ☐ Yes ☑ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Pinus strobus	30	YES	FACU
Acer rubrum	50	YES	FAC
Fagus grandifolia	20	YES	FACU
Total Cover:	**100**		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Fagus grandifolia	30	YES	FACU
Total Cover:	**30**		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:	**0**		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Maianthemum canadense	30	YES	FACU
Pteridium aquilinum	10	NO	FACU
Dryopteris sp.	40	YES	NONE
Coptis trifolia	20	YES	FACW
Lycopodium dendroideum	10	NO	NONE
Total Cover:	**110**		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:	**0**		

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	7	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	29	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	20	x 2 =	40	
FAC Species:	50	x 3 =	150	
FACU Species:	120	x 4 =	480	
UPL Species:	0	x 5 =	0	
Column Totals:	190	(A)	670	(B)
		Prevalence Index = B/A =	3.53	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☐ Yes ☑ No

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
1-7	10YR 3/3	100		0		None	SILT LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils[3]

- ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- ☐ Coast: Prairie Redox (A16) (LRR K, L, R)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- ☐ Dark Surface (S7) (LRR K, L, 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☐ **Yes** ☑ **No**
Remarks:	

Photos

Photo Name: DE1NW005_20120718_UPL1NE.jpg Note: DE-1N-W005-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 83.76 City/County: Delaware Sampling Date: 2012/08/20

Applicant/Owner: Williams State: NY Sampling Point: DE-1N-W156A-WET1

Investigator(s): DO, DP USGS Quad: Davenport Section, Township, Range: Davenport

Landform: Bottom land swamp Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 0

Subregion: Middle Atlantic Latitude: 42.456441 Longitude: -74.82791 Datum: NAD1983

Soil Map Unit Name: Norchip silt loam NWI Classification: PFO4/1E

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☑ Yes	☐ No	**Is the Sampled Area within a Wetland?** ☑ **Yes** ☐ **No**
Hydric Soil Present?	☑ Yes	☐ No	
Wetland Hydrology Present?	☑ Yes	☐ No	

Remarks:

Field Wetland Classification: PFO

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☑ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☑ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☑ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☑ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☑ Yes	☐ No	Depth (inches): 2
Water Table Present:	☑ Yes	☐ No	Depth (inches): 0
Saturation Present:	☑ Yes	☐ No	Depth (inches): 0

Wetland Hydrology Present? ☑ Yes ☐ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer rubrum	70	YES	FAC
Tsuga canadensis	30	YES	FACU
Total Cover:	**100**		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:	**0**		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Vaccinium corymbosum	20	YES	FACW
Total Cover:	**20**		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Osmunda cinnamomea	70	YES	FACW
Sphagnum sp.	20	YES	NONE
Total Cover:	**90**		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:	**0**		

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	5	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	60	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	90	x 2 =	180	
FAC Species:	70	x 3 =	210	
FACU Species:	30	x 4 =	120	
UPL Species:	0	x 5 =	0	
Column Totals:	190	(A)	510	(B)
		Prevalence Index = B/A =	2.68	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☑ **Yes** ☐ **No**

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-12		0		0			ORGANIC	
12-20	Gley 1 4/10Y	100		0			SANDY CLAY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☑ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils[3]

- ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- ☐ Coast: Prairie Redox (A16) (LRR K, L, R)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- ☐ Dark Surface (S7) (LRR K, L, 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

Photo Name: DE1NW156A_20120820_WET1N.jpg Note: DE-1N-W156-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 83.78 City/County: Delaware Sampling Date: 2012/08/20

Applicant/Owner: Williams State: NY Sampling Point: DE-1N-W156A-UPL1

Investigator(s): DO, DP USGS Quad: Davenport Section, Township, Range: Davenport

Landform: None Local Relief: ☐ Concave ☑ Convex ☐ None Slope (%): 2

Subregion: Middle Atlantic Latitude: 42.456318 Longitude: -74.82772 Datum: NAD1983

Soil Map Unit Name: Norchip silt loam NWI Classification: Not mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☐ Yes	☑ No	**Is the Sampled Area within a Wetland?** ☐ **Yes** ☑ **No**
Hydric Soil Present?	☐ Yes	☑ No	
Wetland Hydrology Present?	☐ Yes	☑ No	

Remarks: Upland

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☐ Yes	☑ No	Depth (inches):
Saturation Present:	☐ Yes	☑ No	Depth (inches):

Wetland Hydrology Present? ☐ Yes ☑ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Tsuga canadensis	40	YES	FACU
Acer saccharum	15	NO	FACU
Acer rubrum	15	NO	FAC
Betula papyrifera	10	NO	FACU
Betula alleghaniensis	10	NO	FAC
Prunus serotina	10	NO	FACU
Total Cover:	**100**		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Fagus grandifolia	10	YES	FACU
Acer saccharum	5	YES	FACU
Acer pensylvanicum	5	YES	FACU
Total Cover:	**20**		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:	**0**		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:	**0**		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:	**0**		

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	4	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	0	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	0	x 2 =	0	
FAC Species:	25	x 3 =	75	
FACU Species:	95	x 4 =	380	
UPL Species:	0	x 5 =	0	
Column Totals:	120	(A)	455	(B)
		Prevalence Index = B/A =	3.79	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☐ **Yes** ☑ **No**

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-12	7.5YR 4/6	100		0			CLAY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils[3]

- ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- ☐ Coast: Prairie Redox (A16) (LRR K, L, R)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- ☐ Dark Surface (S7) (LRR K, L, 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☐ **Yes** ☑ **No**
Remarks:	

Photos

Photo Name: DE1NW156A_20120820_UPL1SE.jpg Note: DE-1N-W156-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 88.46 City/County: Delaware Sampling Date: 2012/08/06

Applicant/Owner: Williams State: NY Sampling Point: DE-1P-W128-WET1

Investigator(s): AM,RZ USGS Quad: Davenport Section, Township, Range: Harpersfield

Landform: Local Relief: ☐ Concave ☐ Convex ☐ None Slope (%):

Subregion: Middle Atlantic Latitude: 42.493556 Longitude: -74.75637 Datum: NAD1983

Soil Map Unit Name: Willdin channery silt loam, 2 to 8 percent slopes NWI Classification: Not mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☑ Yes	☐ No	**Is the Sampled Area within a Wetland?** ☑ **Yes** ☐ **No**
Hydric Soil Present?	☑ Yes	☐ No	
Wetland Hydrology Present?	☑ Yes	☐ No	

Remarks:

Field Wetland Classification: PSS

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☑ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☐ Yes	☑ No	Depth (inches):
Saturation Present:	☑ Yes	☐ No	Depth (inches): 0

Wetland Hydrology Present? ☑ Yes ☐ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:	**0**		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer rubrum	10	YES	FAC
Total Cover:	**10**		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Viburnum dentatum	15	YES	FAC
Vaccinium corymbosum	30	YES	FACW
Spiraea alba	30	YES	FACW
Total Cover:	**75**		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Solidago gigantea	80	YES	FACW
Euthamia caroliniana	10	NO	FAC
Total Cover:	**90**		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:	**0**		

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	5	(A)
Total Number of Dominant Species Across All Strata:	5	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	140	x 2 =	280	
FAC Species:	35	x 3 =	105	
FACU Species:	0	x 4 =	0	
UPL Species:	0	x 5 =	0	
Column Totals:	175	(A)	385	(B)
		Prevalence Index = B/A =	2.20	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☑ **Yes** ☐ **No**

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-7	7.5YR3/2	100		0			SILT LOAM	
7-15	7.5YR4/2	91	7.5YR 5/6	7	C	M	SILT LOAM	7.5YR 5/1 2% C,M

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils[3]

- ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- ☐ Coast: Prairie Redox (A16) (LRR K, L, R)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- ☐ Dark Surface (S7) (LRR K, L, 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

Photo Name: DE1P_W128_12-08-06_WET1S.jpg Note: DE-1P-W128-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 88.49 City/County: Delaware Sampling Date: 2012/08/06

Applicant/Owner: Williams State: NY Sampling Point: DE-1P-W128-WET2

Investigator(s): JM,RZ USGS Quad: Davenport Section, Township, Range: Harpersfield

Landform: Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%):

Subregion: Middle Atlantic Latitude: 42.493052 Longitude: -74.75460 Datum: NAD1983

Soil Map Unit Name: Willdin channery silt loam, 2 to 8 percent slopes NWI Classification: Not mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☑ Yes	☐ No	**Is the Sampled Area within a Wetland?** ☑ **Yes** ☐ **No**
Hydric Soil Present?	☑ Yes	☐ No	
Wetland Hydrology Present?	☑ Yes	☐ No	

Remarks:

Field Wetland Classification: PFO

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☑ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☑ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☐ Yes	☑ No	Depth (inches):
Saturation Present:	☑ Yes	☐ No	Depth (inches): 0

Wetland Hydrology Present? ☑ Yes ☐ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer rubrum	90	YES	FAC
Betula alleghaniensis	5	NO	FAC
Total Cover:	**95**		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:	**0**		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Vaccinium corymbosum	25	YES	FACW
Total Cover:	**25**		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Carex crinita	5	NO	OBL
Sphagnum sp.	15	YES	OBL
Solidago gigantea	25	YES	FACW
Total Cover:	**45**		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:	**0**		

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	4	(A)
Total Number of Dominant Species Across All Strata:	4	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL Species:	20	x 1 =	20
FACW Species:	50	x 2 =	100
FAC Species:	95	x 3 =	285
FACU Species:	0	x 4 =	0
UPL Species:	0	x 5 =	0
Column Totals:	165	(A)	405 (B)
		Prevalence Index = B/A =	2.45

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☑ **Yes** ☐ **No**

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-10	7.5YR 4/2	91	7.5YR 5/6	7	C	M	SILT LOAM	7.5YR5/1 D,M 2%

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils[3]

- ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- ☐ Coast: Prairie Redox (A16) (LRR K, L, R)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- ☐ Dark Surface (S7) (LRR K, L, 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

Photo Name: DE1P_W128_12-08-06_WET2S.jpg Note: DE-1P-W128-WET2

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 88.23 City/County: Delaware Sampling Date: 2012/08/06

Applicant/Owner: Williams State: NY Sampling Point: DE-1P-W128-WET3

Investigator(s): AM,RZ USGS Quad: Davenport Section, Township, Range: Harpersfield

Landform: Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%):

Subregion: Middle Atlantic Latitude: 42.490622 Longitude: -74.75875 Datum: NAD1983

Soil Map Unit Name: Willdin channery silt loam, 2 to 8 percent slopes NWI Classification: Not mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☑ Yes	☐ No	**Is the Sampled Area within a Wetland?** ☑ **Yes** ☐ **No**
Hydric Soil Present?	☑ Yes	☐ No	
Wetland Hydrology Present?	☑ Yes	☐ No	

Remarks:

Field Wetland Classification: PEM

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☐ Yes	☑ No	Depth (inches):
Saturation Present:	☑ Yes	☐ No	Depth (inches): 0

Wetland Hydrology Present? ☑ Yes ☐ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:	0		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:	0		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:	0		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Carex vulpinoidea	15	YES	OBL
Scirpus atrocinctus	20	YES	OBL
Scirpus cyperinus	5	NO	OBL
Juncus effusus	5	NO	OBL
Phalaris arundinacea	5	NO	FACW
Euthamia graminifolia	10	NO	FAC
Total Cover:	60		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:	0		

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	45	x 1 =	45	
FACW Species:	5	x 2 =	10	
FAC Species:	10	x 3 =	30	
FACU Species:	0	x 4 =	0	
UPL Species:	0	x 5 =	0	
Column Totals:	60	(A)	85	(B)
		Prevalence Index = B/A =	1.42	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☑ **Yes** ☐ **No**

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-4	7.5YR3/2	100		0			SILT LOAM	
4-15	7.5YR4/2	91	10YR 5/6	7	C	M	SILT LOAM	7.5YR 5/1 D,M 2%

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils[3]

- ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- ☐ Coast: Prairie Redox (A16) (LRR K, L, R)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- ☐ Dark Surface (S7) (LRR K, L, 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**

Remarks:

Photos

Photo Name: DE1P_W128_12-08-06_WET3S.jpg Note: DE-1P-W128-WET3

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 88.49 City/County: Delaware Sampling Date: 2012/08/06

Applicant/Owner: Williams State: NY Sampling Point: DE-1P-W128-UPL1

Investigator(s): AM,RZ USGS Quad: Davenport Section, Township, Range: Harpersfield

Landform: Local Relief: ☐ Concave ☑ Convex ☐ None Slope (%):

Subregion: Middle Atlantic Latitude: 42.493948 Longitude: -74.75613 Datum: NAD1983

Soil Map Unit Name: Ontusia channery silt loam, 3 to 8 percent slopes NWI Classification: Not mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☐ Yes	☑ No	**Is the Sampled Area within a Wetland?** ☐ **Yes** ☑ **No**
Hydric Soil Present?	☐ Yes	☑ No	
Wetland Hydrology Present?	☐ Yes	☑ No	

Remarks: UPL

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☐ Yes	☑ No	Depth (inches):
Saturation Present:	☐ Yes	☑ No	Depth (inches):

Wetland Hydrology Present? ☐ Yes ☑ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Prunus serotina	10	NO	FACU
Acer rubrum	20	YES	FAC
Acer saccharum	25	YES	FACU
Total Cover:	**55**		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer saccharum	20	YES	FACU
Total Cover:	**20**		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Vaccinium corymbosum	15	YES	FACW
Prunus serotina	5	YES	FACU
Total Cover:	**20**		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Maianthemum canadense	85	YES	FACU
Total Cover:	**85**		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:	**0**		

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	6	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	33	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	15	x 2 =	30	
FAC Species:	20	x 3 =	60	
FACU Species:	145	x 4 =	580	
UPL Species:	0	x 5 =	0	
Column Totals:	180	(A)	670	(B)
		Prevalence Index = B/A =	3.72	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☐ Yes ☑ No

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-5	7.5YR3/2	100		0			SILT LOAM	
5-20	7.5YR5/4	100		0			SILT LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils[3]

- ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- ☐ Coast: Prairie Redox (A16) (LRR K, L, R)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- ☐ Dark Surface (S7) (LRR K, L, 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☐ **Yes** ☑ **No**
Remarks:	

Photos

Photo Name: DE1P_W128_12-08-06_UPL1N.jpg Note: DE-1P-W128-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 73.12 City/County: Delaware Sampling Date: 2012/07/28

Applicant/Owner: Williams State: NY Sampling Point: DE-1W-W127-WET1

Investigator(s): CH, JM USGS Quad: Oneonta Section, Township, Range: Davenport

Landform: Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 10

Subregion: Middle Atlantic Latitude: 42.423607 Longitude: -75.02015 Datum: NAD1983

Soil Map Unit Name: Vly channery silt loam, 8 to 15 percent slopes NWI Classification: Not mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☑ Yes	☐ No	**Is the Sampled Area within a Wetland?** ☑ **Yes** ☐ **No**
Hydric Soil Present?	☑ Yes	☐ No	
Wetland Hydrology Present?	☑ Yes	☐ No	

Remarks:

Field Wetland Classification: PEM

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☑ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☐ Yes	☑ No	Depth (inches):
Saturation Present:	☑ Yes	☐ No	Depth (inches): 2

Wetland Hydrology Present? ☑ Yes ☐ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:	**0**		

Sapling Stratum			
Plot Size: feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:	**0**		

Shrub Stratum			
Plot Size: feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:	**0**		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Scirpus cyperinus	15	NO	OBL
Scirpus atrovirens	25	YES	OBL
Euthamia graminifolia	15	NO	FAC
Solidago gigantea	30	YES	FACW
Phleum pratense	5	NO	FACU
Total Cover:	**90**		

Vine Stratum			
Plot Size: feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:	**0**		

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	40	x 1 =	40	
FACW Species:	30	x 2 =	60	
FAC Species:	15	x 3 =	45	
FACU Species:	5	x 4 =	20	
UPL Species:	5	x 5 =	25	
Column Totals:	95	(A)	190	(B)
		Prevalence Index = B/A =	2.00	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☑ **Yes** ☐ **No**

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-7	2.5YR3/1	100		0		None	SILT LOAM	
7-15		0	5YR5/2	3	D	M	SANDY LOAM	
7-15	5YR5/3	87	5YR4/6	10	C	M	SILT LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils[3]

- ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- ☐ Coast: Prairie Redox (A16) (LRR K, L, R)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- ☐ Dark Surface (S7) (LRR K, L, 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☑ **Yes** ☐ **No**

Remarks:

Photos

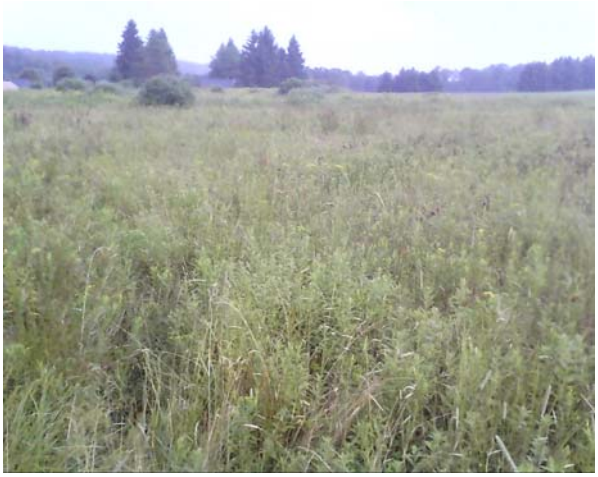

Photo Name: DE1WW127_20120728_WET1_1N.jpg Note: DE-1W-W127-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 73.14 City/County: Delaware Sampling Date: 2012/07/28

Applicant/Owner: Williams State: NY Sampling Point: DE-1W-W127-UPL1

Investigator(s): CH, JM USGS Quad: Oneonta Section, Township, Range: Davenport

Landform: Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 15

Subregion: Middle Atlantic Latitude: 42.423540 Longitude: -75.01987 Datum: NAD1983

Soil Map Unit Name: Vly channery silt loam, 8 to 15 percent slopes NWI Classification: Not mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☐ Yes	☑ No	**Is the Sampled Area within a Wetland?** ☐ **Yes** ☑ **No**
Hydric Soil Present?	☐ Yes	☑ No	
Wetland Hydrology Present?	☐ Yes	☑ No	

Remarks: UPLAND

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☐ Yes	☑ No	Depth (inches):
Saturation Present:	☐ Yes	☑ No	Depth (inches):

Wetland Hydrology Present? ☐ Yes ☑ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Malus sp.	60	YES	UPL
Prunus serotina	20	YES	FACU
Acer rubrum	15	NO	FAC
Total Cover:	**95**		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:	**0**		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Vaccinium corymbosum	10	YES	FACW
Total Cover:	**10**		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Solidago rugosa	5	YES	FAC
Euthamia graminifolia	15	YES	FAC
Phleum pratense	5	YES	FACU
Total Cover:	**25**		

Vine Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:	**0**		

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	6	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	50	(A/B)

Prevalence Index Worksheet:

Total % Cover of:			Multiply by:	
OBL Species:	0	x 1 =	0	
FACW Species:	10	x 2 =	20	
FAC Species:	35	x 3 =	105	
FACU Species:	25	x 4 =	100	
UPL Species:	60	x 5 =	300	
Column Totals:	130	(A)	525	(B)
		Prevalence Index = B/A =	4.04	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☐ Yes ☑ No

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-5	5YR3/2	100		0		None	SILT LOAM	
5-15	5YR4/4	100		0		None	SILT LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils[3]

- ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- ☐ Coast: Prairie Redox (A16) (LRR K, L, R)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- ☐ Dark Surface (S7) (LRR K, L, 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☐ **Yes** ☑ **No**
Remarks:	

Photos

Photo Name: DE1WW127_20120728_UPL1_1N.jpg Note: DE-1W-W127-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 88.89 City/County: Delaware Sampling Date: 2012/08/06

Applicant/Owner: Williams State: NY Sampling Point: DE-1W-W129-WET1

Investigator(s): JM, RZ USGS Quad: Harpersfield Section, Township, Range: Harpersfield

Landform: Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%):

Subregion: Middle Atlantic Latitude: 42.496621 Longitude: -74.74874 Datum: NAD1983

Soil Map Unit Name: Willdin channery silt loam, 2 to 8 percent slopes NWI Classification: Not mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☑ Soil ☑ or Hydrology ☐ naturally problematic? ☐ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☐ Yes	☑ No	**Is the Sampled Area within a Wetland?** ☑ **Yes** ☐ **No**
Hydric Soil Present?	☑ Yes	☐ No	
Wetland Hydrology Present?	☑ Yes	☐ No	

Remarks:

Field Wetland Classification: PFO

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☑ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☑ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☐ Yes	☑ No	Depth (inches):
Saturation Present:	☑ Yes	☐ No	Depth (inches):

Wetland Hydrology Present? ☑ Yes ☐ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer rubrum	25	YES	FAC
Tsuga canadensis	75	YES	FACU
Betula alleghaniensis	10	NO	FAC
Total Cover:	**110**		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:	**0**		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Tsuga canadensis	5	YES	FACU
Total Cover:	**5**		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Dryopteris intermedia	20	YES	FAC
Total Cover:	**20**		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:	**0**		

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL Species:	0	x 1 =	0
FACW Species:	0	x 2 =	0
FAC Species:	55	x 3 =	165
FACU Species:	80	x 4 =	320
UPL Species:	0	x 5 =	0
Column Totals:	135 (A)		485 (B)
		Prevalence Index = B/A =	3.59

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☑ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☐ Yes ☑ No

Remarks: Tsuga canadensis is problematic.

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (in.)	Matrix Color (Moist)	Matrix %	Redox Features Color (Moist)	Redox %	Type [1]	Loc [2]	Texture	Remarks
0-8	7.5YR3/2	100		0			SILT LOAM	
8-15	7.5YR4/3	91	7.5YR 5/6	7	C	M	SILT LOAM	7.5YR5/1 C,M 2%

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils[3]

- ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- ☐ Coast: Prairie Redox (A16) (LRR K, L, R)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- ☐ Dark Surface (S7) (LRR K, L, 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

Photo Name: DE1W_W129_12-08-06_WET1W.jpg Note: DE-1W-W129-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 88.9 City/County: Delaware Sampling Date: 2012/08/06

Applicant/Owner: Williams State: NY Sampling Point: DE-1W-W129-UPL1

Investigator(s): JM,RZ USGS Quad: Harpersfield Section, Township, Range: Harpersfield

Landform: Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%):

Subregion: Middle Atlantic Latitude: 42.496771 Longitude: -74.74873 Datum: NAD1983

Soil Map Unit Name: Willdin channery silt loam, 2 to 8 percent slopes NWI Classification: Not mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☐ Yes	☑ No	**Is the Sampled Area within a Wetland?** ☐ **Yes** ☑ **No**
Hydric Soil Present?	☐ Yes	☑ No	
Wetland Hydrology Present?	☐ Yes	☑ No	

Remarks: UPL

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☐ Yes	☑ No	Depth (inches):
Saturation Present:	☐ Yes	☑ No	Depth (inches):

Wetland Hydrology Present? ☐ Yes ☑ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Tsuga canadensis	75	YES	FACU
Acer rubrum	15	NO	FAC
Total Cover:	**90**		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:	**0**		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Tsuga canadensis	5	YES	FACU
Fagus grandifolia	5	YES	FACU
Total Cover:	**10**		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Dryopteris marginalis	75	YES	FACU
Lycopodium lagopus	15	NO	FACU
Total Cover:	**90**		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:	**0**		

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	4	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	0	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	0	x 2 =	0	
FAC Species:	15	x 3 =	45	
FACU Species:	175	x 4 =	700	
UPL Species:	0	x 5 =	0	
Column Totals:	190	(A)	745	(B)
		Prevalence Index = B/A =	3.92	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☐ **Yes** ☑ **No**

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-2	7.5YR3/2	100		0			SILT LOAM	
1-0		0		0			ORGANIC	DUFF LAYER
2-15	7.5YR4/4	100		0			SILT LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils[3]

- ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- ☐ Coast: Prairie Redox (A16) (LRR K, L, R)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- ☐ Dark Surface (S7) (LRR K, L, 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☐ **Yes** ☑ **No**

Remarks:

Photos

Photo Name: DE1W_W129_12-08-06_UPL1NE.jpg Note: DE-1W-W129-UPL1

OTSEGO COUNTY

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost City/County: Otsego Sampling Date: 2013/10/22

Applicant/Owner: Williams State: NY Sampling Point: OT-1C-W001-WET1

Investigator(s): RR;KH USGS Quad: West Davenport Section, Township, Range:

Landform: Depression Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 0

Subregion: Middle Atlantic Latitude: 42.472838 Longitude: -74.98855 Datum: NAD 1988

Soil Map Unit Name: Chenango gravelly silt loam, 3 to 8 percent slopes NWI Classification: Not Mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☑ Yes	☐ No	**Is the Sampled Area within a Wetland?** ☑ **Yes** ☐ **No**
Hydric Soil Present?	☑ Yes	☐ No	
Wetland Hydrology Present?	☑ Yes	☐ No	

Remarks:

Field Wetland Classification: PEM

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☑ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☑ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☑ Yes	☐ No	Depth (inches): 2
Water Table Present:	☐ Yes	☑ No	Depth (inches): 0
Saturation Present:	☐ Yes	☑ No	Depth (inches): 0

Wetland Hydrology Present? ☑ Yes ☐ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Typha angustifolia	35	YES	OBL
Scirpus cyperinus	30	YES	OBL
Juncus effusus	15	NO	OBL
Euthamia graminifolia	10	NO	FAC
Phalaris arundinacea	5	NO	FACW
Total Cover:	**95**		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	80	x 1 =	80	
FACW Species:	5	x 2 =	10	
FAC Species:	10	x 3 =	30	
FACU Species:	0	x 4 =	0	
UPL Species:	0	x 5 =	0	
Column Totals:	95	(A)	120	(B)
		Prevalence Index = B/A =	1.26	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☑ **Yes** ☐ **No**

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-12	5Y 4/2	98	10YR 4/6	2	C	PL	SANDY LOAM	40% Gravel

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils

- ☐ 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**

Remarks:
Auger refusal @12"

Photos

Photo Name: OT1CW001_102213_WET1W.jpg Note: OT-1C-W001-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost City/County: Otsego Sampling Date: 2013/10/22

Applicant/Owner: Williams State: NY Sampling Point: OT-1C-W001-UPL1

Investigator(s): RR;KH USGS Quad: West Davenport Section, Township, Range:

Landform: Hillslope Local Relief: ☐ Concave ☐ Convex ☑ None Slope (%): 30

Subregion: Middle Atlantic Latitude: 42.472895 Longitude: -74.98861 Datum: NAD 1988

Soil Map Unit Name: Chenango gravelly silt loam, 3 to 8 percent slopes NWI Classification: Not Mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☑ Soil ☐ or Hydrology ☐ significantly disturbed? ☐ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☐ Yes	☑ No	**Is the Sampled Area within a Wetland?** ☐ **Yes** ☑ **No**
Hydric Soil Present?	☐ Yes	☑ No	
Wetland Hydrology Present?	☐ Yes	☑ No	

Remarks: Upland plot. Within open field.

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☐ Yes	☑ No	Depth (inches):
Saturation Present:	☐ Yes	☑ No	Depth (inches):

Wetland Hydrology Present? ☐ Yes ☑ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Dactylis glomerata	20	YES	FACU
Phleum pratense	20	YES	FACU
Trifolium pratense	10	NO	FACU
Galium mollugo	10	NO	UPL
Euthamia graminifolia	10	NO	FAC
Plantago major	5	NO	FACU
Symphyotrichum lanceolatum	5	NO	FACW
Bromus sp.	20	YES	NONE
Total Cover:	**100**		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	0	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	5	x 2 =	10	
FAC Species:	10	x 3 =	30	
FACU Species:	55	x 4 =	220	
UPL Species:	10	x 5 =	50	
Column Totals:	80	(A)	310	(B)
		Prevalence Index = B/A =	3.88	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☐ **Yes** ☑ **No**

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-18	2.5Y 4/4					None	SANDY LOAM	30% Gravel

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils

- ☐ 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☐ **Yes** ☑ **No**
Remarks:	

Photos

Photo Name: OT1CW001_102213_UPL1N.jpg Note: OT-1C-W001-UPL1

SCHOHARIE COUNTY

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 118.67 City/County: Schoharie Sampling Date: 2013/12/06

Applicant/Owner: Williams State: NY Sampling Point: SC-1A-W160A-WET1

Investigator(s): PL;KH USGS Quad: Schoharie Section, Township, Range: Schoharie

Landform: Drainageway Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 2

Subregion: Middle Atlantic Latitude: 42.708696 Longitude: -74.29724 Datum: NAD 1983

Soil Map Unit Name: Mohawk and Honeoye silt loams, 10 to 20 percent slopes NWI Classification: Not Mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☑ Soil ☐ or Hydrology ☐ significantly disturbed? ☐ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☑ Yes	☐ No	**Is the Sampled Area within a Wetland?** ☑ **Yes** ☐ **No**
Hydric Soil Present?	☑ Yes	☐ No	
Wetland Hydrology Present?	☑ Yes	☐ No	

Remarks: veg disturbance due to cleared path

Field Wetland Classification: PFO

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☑ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☑ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☐ Yes	☑ No	Depth (inches):
Saturation Present:	☑ Yes	☐ No	Depth (inches): 0

Wetland Hydrology Present? ☑ Yes ☐ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Pinus strobus	35	YES	FACU
Total Cover:	**35**		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Cornus racemosa	20	YES	FAC
Viburnum recognitum	5	NO	NONE
Lonicera sp	12	YES	FAC
Total Cover:	**37**		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Onoclea sensibilis	65	YES	FACW
Total Cover:	**65**		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	4	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	75	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	65	x 2 =	130	
FAC Species:	32	x 3 =	96	
FACU Species:	35	x 4 =	140	
UPL Species:	0	x 5 =	0	
Column Totals:	132	(A)	366	(B)
		Prevalence Index = B/A =	2.77	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☑ **Yes** ☐ **No**

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (in.)	Matrix Color (Moist)	Matrix %	Redox Features Color (Moist)	Redox %	Type [1]	Loc [2]	Texture	Remarks
0-5	2.5Y 3/2	100					FINE SANDY LOAM	
5-16	2.5Y 4/1	90	10YR 3/4	10	C	PL	FINE SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils

- ☐ 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

Photo Name: SC1AW160A_120613_WET1NW.jpg Note: SC-1A-W160A-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 118.66 City/County: Schoharie Sampling Date: 2013/12/06

Applicant/Owner: Williams State: NY Sampling Point: SC-1A-W160A-UPL1

Investigator(s): PL;KH USGS Quad: Schoharie Section, Township, Range: Schoharie

Landform: Sideslope Local Relief: ☐ Concave ☐ Convex ☑ None Slope (%): 5

Subregion: Middle Atlantic Latitude: 42.708657 Longitude: -74.29738 Datum: NAD 1983

Soil Map Unit Name: Mohawk and Honeoye silt loams, 10 to 20 percent slopes NWI Classification: Not Mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☐ Yes	☑ No	**Is the Sampled Area within a Wetland?** ☐ **Yes** ☑ **No**
Hydric Soil Present?	☐ Yes	☑ No	
Wetland Hydrology Present?	☐ Yes	☑ No	

Remarks: Upland Plot

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☐ Yes	☑ No	Depth (inches):
Saturation Present:	☐ Yes	☑ No	Depth (inches):

Wetland Hydrology Present? ☐ Yes ☑ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Pinus strobus	85	YES	FACU
Total Cover:	85		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Betula nigra	25	YES	FACW
Cornus amomum	8	NO	FACW
Acer saccharum	15	YES	FACU
Total Cover:	48		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Dryopteris intermedia	10	YES	FAC
Pinus strobus	3	NO	FACU
Total Cover:	13		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	4	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	50	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	33	x 2 =	66	
FAC Species:	10	x 3 =	30	
FACU Species:	103	x 4 =	412	
UPL Species:	0	x 5 =	0	
Column Totals:	146	(A)	508	(B)
		Prevalence Index = B/A =	3.48	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☐ Yes ☑ No

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-1	10YR 3/2	100				None	FINE SANDY LOAM	
1-14+	2.5Y 4/4	100				None	FINE SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils

- ☐ 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☐ **Yes** ☑ **No**
Remarks:	

Photos

Photo Name: SC1AW160A_120613_UPL1W.jpg Note: SC-1A-W160A-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 117.91 City/County: Schoharie Sampling Date: 2013/12/30

Applicant/Owner: Williams State: NY Sampling Point: SC-1A-W459-WET1

Investigator(s): PL, RR USGS Quad: Schoharie Section, Township, Range: Schoharie

Landform: Drainageway Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 0

Subregion: Middle Atlantic Latitude: 42.704307 Longitude: -74.31104 Datum: NAD 1983

Soil Map Unit Name: Alluvial land NWI Classification: Not Mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☑ Yes	☐ No	**Is the Sampled Area within a Wetland?** ☑ **Yes** ☐ **No**
Hydric Soil Present?	☑ Yes	☐ No	
Wetland Hydrology Present?	☑ Yes	☐ No	

Remarks:

Field Wetland Classification: PEM

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☑ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☑ Yes	☐ No	Depth (inches): 2
Saturation Present:	☑ Yes	☐ No	Depth (inches): 0

Wetland Hydrology Present? ☑ Yes ☐ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Juniperus virginiana	10	YES	FACU
Total Cover:	10		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Cornus racemosa	20	YES	FAC
Total Cover:	20		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Typha angustifolia	35	YES	OBL
Onoclea sensibilis	10	NO	FACW
Phalaris arundinacea	20	YES	FACW
Total Cover:	65		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	4	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	75	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL Species:	35	x 1 =	35
FACW Species:	30	x 2 =	60
FAC Species:	20	x 3 =	60
FACU Species:	10	x 4 =	40
UPL Species:	0	x 5 =	0
Column Totals:	95	(A)	195 (B)
		Prevalence Index = B/A =	2.05

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☑ **Yes** ☐ **No**

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (in.)	Matrix Color (Moist)	Matrix %	Redox Features Color (Moist)	Redox %	Type [1]	Loc [2]	Texture	Remarks
0-8	10YR 2/2	100				None	SANDY LOAM	
8-15+	10YR 4/1	95	10YR 4/4	5	C	M	SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils

- ☐ 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

Photo Name: SC1AW459_123013_WET1NW.jpg Note: SC-1A-W459-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 117.91 City/County: Schoharie Sampling Date: 2013/12/30

Applicant/Owner: Williams State: NY Sampling Point: SC-1A-W459-UPL1

Investigator(s): PL, RR USGS Quad: Schoharie Section, Township, Range: Schoharie

Landform: Terrace Local Relief: ☐ Concave ☐ Convex ☑ None Slope (%): 1

Subregion: Middle Atlantic Latitude: 42.704264 Longitude: -74.31089 Datum: NAD 1983

Soil Map Unit Name: Alluvial land NWI Classification: Not Mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☐ Yes	☑ No	**Is the Sampled Area within a Wetland?** ☐ **Yes** ☑ **No**
Hydric Soil Present?	☐ Yes	☑ No	
Wetland Hydrology Present?	☐ Yes	☑ No	

Remarks: Upland Plot

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☐ Yes	☑ No	Depth (inches):
Saturation Present:	☐ Yes	☑ No	Depth (inches):

Wetland Hydrology Present? ☐ Yes ☑ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet **Scientific Name**	**% Cover**	**Dominant**	**Indicator**
Acer saccharum	15	YES	FACU
Total Cover:	**15**		

Sapling Stratum			
Plot Size: 15 feet **Scientific Name**	**% Cover**	**Dominant**	**Indicator**
Acer saccharum	5	YES	FACU
Total Cover:	**5**		

Shrub Stratum			
Plot Size: 15 feet **Scientific Name**	**% Cover**	**Dominant**	**Indicator**
Lonicera sp	5	YES	NONE
Total Cover:	**5**		

Herb Stratum			
Plot Size: 5 feet **Scientific Name**	**% Cover**	**Dominant**	**Indicator**
Solidago canadensis	60	YES	FACU
Total Cover:	**120**		

Vine Stratum			
Plot Size: 30 feet **Scientific Name**	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	5	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	0	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	0	x 2 =	0	
FAC Species:	0	x 3 =	0	
FACU Species:	80	x 4 =	320	
UPL Species:	0	x 5 =	0	
Column Totals:	80	(A)	320	(B)
		Prevalence Index = B/A =	4.00	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☐ Yes ☑ No

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-20"+	10YR 2/2	100				None	FINE SANDY LOAM	5-6' in Elevation higher than wetland

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils

- ☐ 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☐ **Yes** ☑ **No**

Remarks:
Potential old fill

Photos

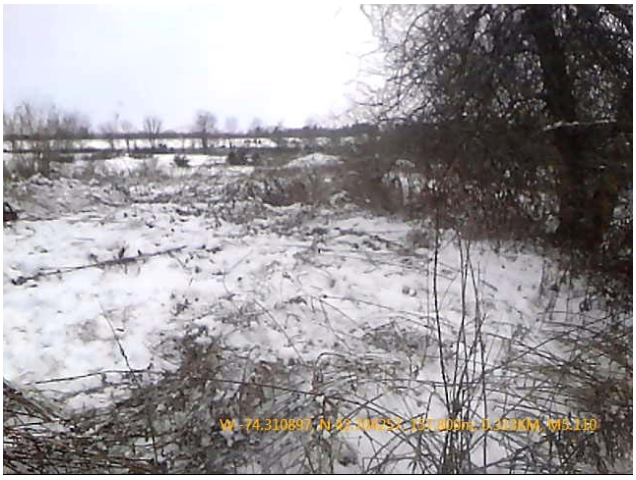

Photo Name: SC1AW459_123013_UPL1N.jpg Note: SC-1A-W459-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 97.78643 City/County: Schoharie Sampling Date: 2014/05/08

Applicant/Owner: Williams State: NY Sampling Point: SC-1A-W460-WET1

Investigator(s): RR;KH USGS Quad: Charlotteville Section, Township, Range: Jefferson

Landform: Floodplain Local Relief: ☐ Concave ☐ Convex ☑ None Slope (%): 1

Subregion: Middle Atlantic Latitude: 42.537409 Longitude: -74.63937 Datum: NAD 1983

Soil Map Unit Name: Chippewa and Norwich very stony soils, 0 to 15 percent slopes NWI Classification: Not mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☑ Yes	☐ No	**Is the Sampled Area within a Wetland?** ☑ **Yes** ☐ **No**
Hydric Soil Present?	☑ Yes	☐ No	
Wetland Hydrology Present?	☑ Yes	☐ No	

Remarks:

Field Wetland Classification: PFO

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☑ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☐ Yes	☑ No	Depth (inches):
Saturation Present:	☑ Yes	☐ No	Depth (inches): 0

Wetland Hydrology Present? ☑ Yes ☐ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Tsuga canadensis	30	YES	FAC
Betula alleghaniensis	30	YES	FAC
Acer rubrum	10	NO	FAC
Total Cover:	70		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Tsuga canadensis	5	YES	FAC
Total Cover:	5		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Veratrum virginicum	5	NO	FACW
Tussilago farfara	10	YES	FACU
Thelypteris palustris	20	YES	FACW
Impatiens capensis	10	YES	FACW
Total Cover:	45		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	5	(A)
Total Number of Dominant Species Across All Strata:	6	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	83	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	35	x 2 =	70	
FAC Species:	75	x 3 =	225	
FACU Species:	10	x 4 =	40	
UPL Species:	0	x 5 =	0	
Column Totals:	120	(A)	335	(B)
		Prevalence Index = B/A =	2.79	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☑ **Yes** ☐ **No**

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-2	10YR 3/2	97	10YR 3/6	3	C	M	SANDY LOAM	
2-14	10YR 4/2	95	10YR 4/6	5	C	M	SANDY LOAM	
14-20	5Y 4/1	93	10YR 4/6	7	C	M	LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils

- ☐ 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☑ **Yes** ☐ **No**

Remarks:

Photos

Photo Name: SC1AW460_041614_WET1NW.jpg Note: SC-1A-W460-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 97.75781 City/County: Schoharie Sampling Date: 2014/05/08

Applicant/Owner: Williams State: NY Sampling Point: SC-1A-W460-WET2

Investigator(s): RR;KH USGS Quad: Charlotteville Section, Township, Range: Jefferson

Landform: Drainageway Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 3

Subregion: Middle Atlantic Latitude: 42.537012 Longitude: -74.63976 Datum: NAD 1983

Soil Map Unit Name: Chippewa and Norwich very stony soils, 0 to 15 percent slopes NWI Classification: Not mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☑ Yes	☐ No	**Is the Sampled Area within a Wetland?** ☑ **Yes** ☐ **No**
Hydric Soil Present?	☑ Yes	☐ No	
Wetland Hydrology Present?	☑ Yes	☐ No	

Remarks:

Field Wetland Classification: PEM

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☑ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☑ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☑ Yes	☐ No	Depth (inches): 10
Saturation Present:	☑ Yes	☐ No	Depth (inches): 0

Wetland Hydrology Present? ☑ Yes ☐ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Juncus effusus	25	YES	OBL
Ranunculus sp	30	YES	FAC
Euthamia graminifolia	5	NO	FAC
Solidago sp	5	NO	FAC
Total Cover:	65		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	25	x 1 =	25	
FACW Species:	0	x 2 =	0	
FAC Species:	40	x 3 =	120	
FACU Species:	0	x 4 =	0	
UPL Species:	0	x 5 =	0	
Column Totals:	65	(A)	145	(B)
		Prevalence Index = B/A =	2.23	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☑ **Yes** ☐ **No**

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-4	2.5Y 4/2	95	10YR 4/6	5	C	PL	FINE SANDY LOAM	
4-18	Gley1 6/10Y	80	2.5Y 4/4	20	C	PL	FINE SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils

- ☐ 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

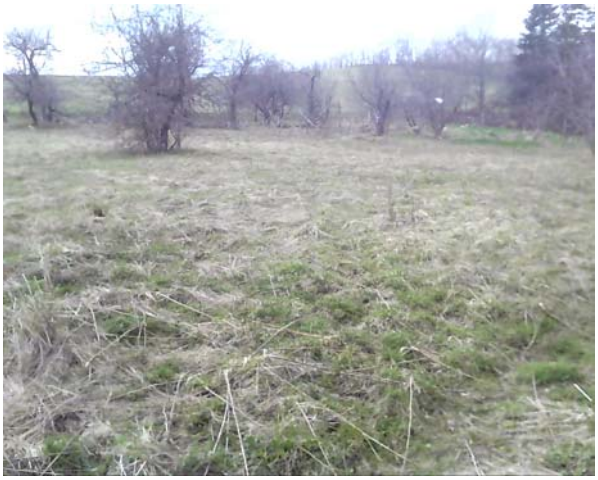

Photo Name: SC1AW460_050814_WET2N.jpg Note: SC-1A-W460-WET2

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 97.76922 City/County: Schoharie Sampling Date: 2014/05/08

Applicant/Owner: Williams State: NY Sampling Point: SC-1A-W460-UPL1

Investigator(s): RR;KH USGS Quad: Charlotteville Section, Township, Range: Jefferson

Landform: Hillside Local Relief: ☐ Concave ☐ Convex ☑ None Slope (%): 20

Subregion: Middle Atlantic Latitude: 42.537033 Longitude: -74.63953 Datum: NAD 1983

Soil Map Unit Name: Chippewa and Norwich very stony soils, 0 to 15 percent slopes NWI Classification: Not mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☐ Yes	☑ No	**Is the Sampled Area within a Wetland?** ☐ **Yes** ☑ **No**
Hydric Soil Present?	☐ Yes	☑ No	
Wetland Hydrology Present?	☐ Yes	☑ No	

Remarks: Upland plot

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☐ Yes	☑ No	Depth (inches):
Saturation Present:	☐ Yes	☑ No	Depth (inches):

Wetland Hydrology Present? ☐ Yes ☑ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Malus sp	5	NO	UPL
Picea sp	20	YES	FACU
Tsuga canadensis	20	YES	FACU
Acer rubrum	5	NO	FAC
Total Cover:	50		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Erythronium americanum	20	YES	FACU
Total Cover:	20		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	0	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	0	x 2 =	0	
FAC Species:	5	x 3 =	15	
FACU Species:	60	x 4 =	240	
UPL Species:	5	x 5 =	25	
Column Totals:	70	(A)	280	(B)
		Prevalence Index = B/A =	4.00	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☐ Yes ☑ No

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-2	2.5Y 3/3	100					LOAM	
2-12	2.5Y 4/4	100					LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils

- ☐ 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☐ **Yes** ☑ **No**
Remarks:	

Photos

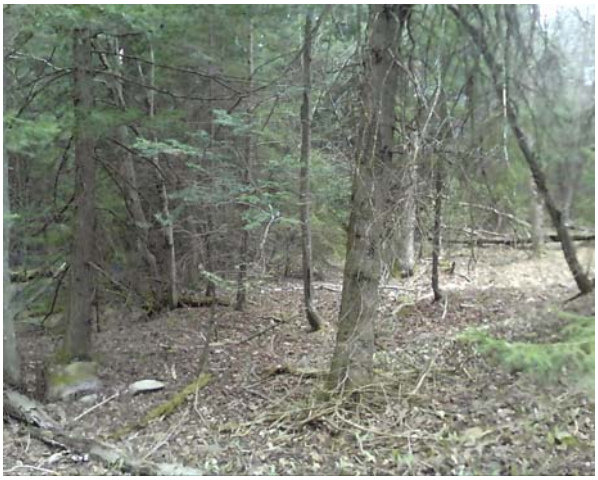

Photo Name: SC1AW460_050814_UPL1E.jpg Note: SC-1A-W460-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 103.6182 City/County: Schoharie Sampling Date: 2014/05/22

Applicant/Owner: Williams State: Sampling Point: SC-1A-W464-WET1

Investigator(s): PL;KH USGS Quad: Summit Section, Township, Range: Summit

Landform: Drainageway Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 3

Subregion: Middle Atlantic Latitude: 42.591322 Longitude: -74.56547 Datum: NAD 1983

Soil Map Unit Name: Lordstown and Oquaga very stony soils, 0 to 35 percent slopes NWI Classification: Not mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☑ Yes	☐ No	**Is the Sampled Area within a Wetland?** ☑ **Yes** ☐ **No**
Hydric Soil Present?	☑ Yes	☐ No	
Wetland Hydrology Present?	☑ Yes	☐ No	

Remarks:

Field Wetland Classification: PSS

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☑ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☐ Yes	☑ No	Depth (inches):
Saturation Present:	☑ Yes	☐ No	Depth (inches): 0

Wetland Hydrology Present? ☑ Yes ☐ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Spiraea latifolia	70	YES	FACW
Rubus idaeus	10	NO	FACU
Lonicera morrowii	5	NO	FACU
Total Cover:	85		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Onoclea sensibilis	30	YES	FACW
Rubus hispidus	10	YES	FACW
Total Cover:	40		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	110	x 2 =	220	
FAC Species:	0	x 3 =	0	
FACU Species:	15	x 4 =	60	
UPL Species:	0	x 5 =	0	
Column Totals:	125	(A)	280	(B)
		Prevalence Index = B/A =	2.24	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☑ **Yes** ☐ **No**

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-8	2.5Y 3/1	100					FINE SANDY LOAM	
8-15	2.5Y 4/2	90	2.5Y 4/4	10	D	M	FINE SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils

- ☐ 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

Photo Name: SC1AW464_052214_WET1SW.jpg Note: SC-1A-W464-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 103.6351 City/County: Schoharie Sampling Date: 2014/05/22

Applicant/Owner: Williams State: Sampling Point: SC-1A-W464-UPL1

Investigator(s): PL;KH USGS Quad: Summit Section, Township, Range: Summit

Landform: Sideslope Local Relief: ☐ Concave ☐ Convex ☑ None Slope (%): 10

Subregion: Middle Atlantic Latitude: 42.591298 Longitude: -74.56511 Datum: NAD 1983

Soil Map Unit Name: Lordstown and Oquaga very stony soils, 0 to 35 percent slopes NWI Classification: Not mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☐ Yes	☑ No	**Is the Sampled Area within a Wetland?** ☐ **Yes** ☑ **No**
Hydric Soil Present?	☐ Yes	☑ No	
Wetland Hydrology Present?	☐ Yes	☑ No	

Remarks: Upland plot

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☐ Yes	☑ No	Depth (inches):
Saturation Present:	☐ Yes	☑ No	Depth (inches):

Wetland Hydrology Present? ☐ Yes ☑ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer saccharum	55	YES	FACU
Acer rubrum	8	NO	FAC
Quercus rubra	25	YES	FACU
Total Cover:	88		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer saccharum	10	YES	FACU
Total Cover:	10		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Crataegus crus-galli	10	NO	FAC
Hamamelis virginiana	30	YES	FACU
Carya sp	8	NO	FAC
Total Cover:	48		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Rubus idaeus	10	NO	FACU
Total Cover:	10		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
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:	4	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	0	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	0	x 2 =	0	
FAC Species:	26	x 3 =	78	
FACU Species:	130	x 4 =	520	
UPL Species:	0	x 5 =	0	
Column Totals:	156	(A)	598	(B)
		Prevalence Index = B/A =	3.83	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☐ Yes ☑ No

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (in.)	Matrix Color (Moist)	Matrix %	Redox Features Color (Moist)	Redox %	Type [1]	Loc [2]	Texture	Remarks
0-8	10YR 3/2	100					FINE SANDY LOAM	
8-12	10YR 3/4	100					FINE SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils

- ☐ 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☐ **Yes** ☑ **No**
Remarks:	

Photos

Photo Name: SC1AW464_052214_UPL1E.jpg Note: SC-1A-W464-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 122.7 City/County: Schoharie Sampling Date: 2013/11/11

Applicant/Owner: Williams State: NY Sampling Point: SC-1C-W172A-WET1

Investigator(s): RR;KH USGS Quad: Schoharie Section, Township, Range: Schoharie

Landform: Depression Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 0

Subregion: Middle Atlantic Latitude: 42.703371 Longitude: -74.26672 Datum: NAD 1988

Soil Map Unit Name: Lansing channery silt loam, 2 to 10 percent slopes NWI Classification: Not Mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☑ Yes	☐ No	**Is the Sampled Area within a Wetland?** ☑ **Yes** ☐ **No**
Hydric Soil Present?	☑ Yes	☐ No	
Wetland Hydrology Present?	☑ Yes	☐ No	

Remarks:

Field Wetland Classification: PEM

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☑ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☐ Yes	☑ No	Depth (inches):
Saturation Present:	☐ Yes	☑ No	Depth (inches):

Wetland Hydrology Present? ☑ Yes ☐ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Cornus racemosa	10	YES	FAC
Total Cover:	10		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Phalaris arundinacea	97	YES	FACW
Scirpus cyperinus	3	NO	OBL
Total Cover:	100		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	3	x 1 =	3	
FACW Species:	97	x 2 =	194	
FAC Species:	10	x 3 =	30	
FACU Species:	0	x 4 =	0	
UPL Species:	0	x 5 =	0	
Column Totals:	110	(A)	227	(B)
		Prevalence Index = B/A =	2.06	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☑ **Yes** ☐ **No**

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-1	2.5Y 3/2	100					SILT LOAM	
1-6	2.5Y 4/2	95	7.5YR 4/4	5	C	PL	SILT LOAM	
6-20	2.5Y 5/1	80	2.5Y 5/6	20	C	M	CLAY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils

- ☐ 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☑ **Yes** ☐ **No**

Remarks:

Photos

Photo Name: SC1CW172A_111113_WET1NE.jpg Note: SC-1C-W172A-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 122.7 City/County: Schoharie Sampling Date: 2013/11/11

Applicant/Owner: Williams State: NY Sampling Point: SC-1C-W172A-WET2

Investigator(s): RR;KH USGS Quad: Schoharie Section, Township, Range: Schoharie

Landform: Depression Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 0

Subregion: Middle Atlantic Latitude: 42.703428 Longitude: -74.26667 Datum: NAD 1988

Soil Map Unit Name: Lansing channery silt loam, 2 to 10 percent slopes NWI Classification: Not Mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☑ Yes	☐ No	**Is the Sampled Area within a Wetland?** ☑ **Yes** ☐ **No**
Hydric Soil Present?	☑ Yes	☐ No	
Wetland Hydrology Present?	☑ Yes	☐ No	

Remarks:

Field Wetland Classification: PSS

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☑ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☐ Yes	☑ No	Depth (inches):
Saturation Present:	☐ Yes	☑ No	Depth (inches):

Wetland Hydrology Present? ☑ Yes ☐ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Ulmus rubra	5	YES	FAC
Acer saccharum	5	YES	FACU
Total Cover:	10		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Cornus amomum	40	YES	FACW
Cornus racemosa	40	YES	FAC
Total Cover:	80		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	4	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	75	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	40	x 2 =	80	
FAC Species:	45	x 3 =	135	
FACU Species:	5	x 4 =	20	
UPL Species:	0	x 5 =	0	
Column Totals:	90	(A)	235	(B)
		Prevalence Index = B/A =	2.61	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☑ **Yes** ☐ **No**

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-12	2.5Y 4/2	95	7.5YR 5/6	5	C	PL	SILT LOAM	
12-18	2.5Y 5/3	90	2.5Y 5/6	10	C	M	FINE SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils

- ☐ 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

Photo Name: SC1CW172A_111113_WET2N.jpg Note: SC-1C-W172A-WET2

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 122.7 City/County: Schoharie Sampling Date: 2013/11/11

Applicant/Owner: Williams State: NY Sampling Point: SC-1C-W172A-UPL1

Investigator(s): RR;KH USGS Quad: Schoharie Section, Township, Range: Schoharie

Landform: cornfield Local Relief: ☐ Concave ☐ Convex ☑ None Slope (%): 1

Subregion: Middle Atlantic Latitude: 42.703160 Longitude: -74.26678 Datum: NAD 1988

Soil Map Unit Name: Lansing channery silt loam, 2 to 10 percent slopes NWI Classification: Not Mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☐ Yes	☑ No	**Is the Sampled Area within a Wetland?** ☐ **Yes** ☑ **No**
Hydric Soil Present?	☐ Yes	☑ No	
Wetland Hydrology Present?	☐ Yes	☑ No	

Remarks: upland plot

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☐ Yes	☑ No	Depth (inches):
Saturation Present:	☐ Yes	☑ No	Depth (inches):

Wetland Hydrology Present? ☐ Yes ☑ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Quercus rubra	15	YES	FACU
Total Cover:	15		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Quercus rubra	10	YES	FACU
Total Cover:	10		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Phleum pratense	5	NO	FACU
Euthamia graminifolia	5	NO	FAC
Zea mays	40	YES	UPL
Total Cover:	50		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	0	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	0	x 2 =	0	
FAC Species:	5	x 3 =	15	
FACU Species:	30	x 4 =	120	
UPL Species:	40	x 5 =	200	
Column Totals:	75	(A)	335	(B)
		Prevalence Index = B/A =	4.47	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☐ **Yes** ☑ **No**

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-2	2.5Y 4/3	100					FINE SANDY LOAM	
2-14	2.5Y 4/4	100					FINE SANDY LOAM	
14-18	2.5Y 5/6	100					FINE SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils

- ☐ 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☐ **Yes** ☑ **No**

Remarks:

Photos

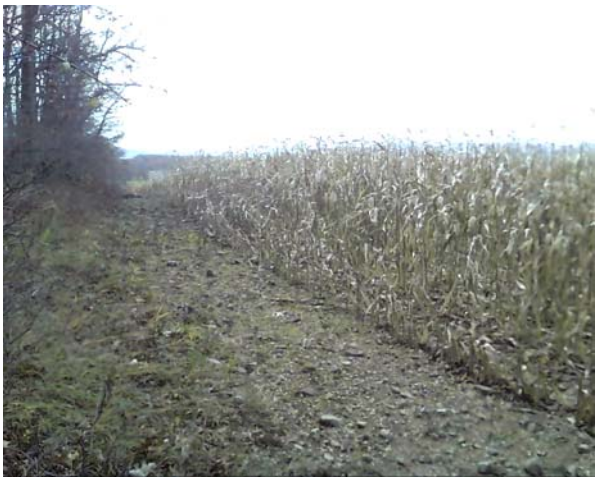

Photo Name: SC1CW172A_111113_UPL1SW.jpg Note: SC-1C-W172A-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 97.46 City/County: Schoharie Sampling Date: 2013/12/10

Applicant/Owner: Williams State: NY Sampling Point: SC-1C-W459-WET1

Investigator(s): RR;KH USGS Quad: Summit Section, Township, Range: Summit

Landform: Depression Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 1

Subregion: Middle Atlantic Latitude: 42.553950 Longitude: -74.61856 Datum: NAD 1983

Soil Map Unit Name: Volusia channery silt loam, 3 to 8 percent slopes NWI Classification: Not Mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☑ Yes	☐ No	**Is the Sampled Area within a Wetland?** ☑ **Yes** ☐ **No**
Hydric Soil Present?	☑ Yes	☐ No	
Wetland Hydrology Present?	☑ Yes	☐ No	

Remarks:

Field Wetland Classification: PFO

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☑ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☑ Yes	☐ No	Depth (inches): 1
Saturation Present:	☑ Yes	☐ No	Depth (inches): 0

Wetland Hydrology Present? ☑ Yes ☐ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer rubrum	30	YES	FAC
Picea mariana	10	YES	FACW
Total Cover:	40		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Spiraea alba	25	YES	FACW
Alnus incana	20	YES	FACW
Total Cover:	45		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Onoclea sensibilis	20	YES	FACW
Total Cover:	20		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	5	(A)
Total Number of Dominant Species Across All Strata:	5	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	75	x 2 =	150	
FAC Species:	30	x 3 =	90	
FACU Species:	0	x 4 =	0	
UPL Species:	0	x 5 =	0	
Column Totals:	105	(A)	240	(B)
		Prevalence Index = B/A =	2.29	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☑ **Yes** ☐ **No**

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-3	10YR 3/2	100					FINE SANDY LOAM	
3-14	10YR 4/3	97	7.5YR 4/6	3	C	PL	FINE SANDY LOAM	
14-20	2.5Y 5/2	90	10 YR 5/6	10	C	M	SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils

- ☐ 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☑ **Yes** ☐ **No**

Remarks:

Photos

Photo Name: SC1CW459_121013_WET1SW.jpg Note: SC-1C-W459-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 97.46 City/County: Schoharie Sampling Date: 2013/12/10

Applicant/Owner: Williams State: NY Sampling Point: SC-1C-W459-UPL1

Investigator(s): RR;KH USGS Quad: Summit Section, Township, Range: Summit

Landform: Side slope Local Relief: ☐ Concave ☐ Convex ☑ None Slope (%): 3

Subregion: Middle Atlantic Latitude: 42.554000 Longitude: -74.61874 Datum: NAD 1983

Soil Map Unit Name: Lordstown channery silt loam, 5 to 15 percent slopes NWI Classification: Not Mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☐ Yes	☑ No	**Is the Sampled Area within a Wetland?** ☐ **Yes** ☑ **No**
Hydric Soil Present?	☐ Yes	☑ No	
Wetland Hydrology Present?	☐ Yes	☑ No	

Remarks: Upland Plot

Field Wetland Classification:

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☐ Yes	☑ No	Depth (inches):
Saturation Present:	☐ Yes	☑ No	Depth (inches):

Wetland Hydrology Present? ☐ Yes ☑ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer rubrum	5	YES	FAC
Malus sp	15	YES	UPL
Total Cover:	20		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Spiraea alba	10	YES	FACW
Total Cover:	10		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Euthamia graminifolia	15	YES	FAC
Solidago canadensis	10	NO	FACU
Phleum pratense	20	YES	FACU
Solidago rugosa	5	NO	FAC
Plantago major	10	NO	FACU
Total Cover:	60		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	5	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	60	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	10	x 2 =	20	
FAC Species:	25	x 3 =	75	
FACU Species:	40	x 4 =	160	
UPL Species:	15	x 5 =	75	
Column Totals:	90	(A)	330	(B)
		Prevalence Index = B/A =	3.67	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☐ **Yes** ☑ **No**

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-4	10YR 3/2	100					LOAM	
4-12	10YR 3/3	100					LOAM	
12-18	10YR 5/4	100					FINE SANDY LOAM	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils

- ☐ 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☐ **Yes** ☑ **No**

Remarks:

Photos

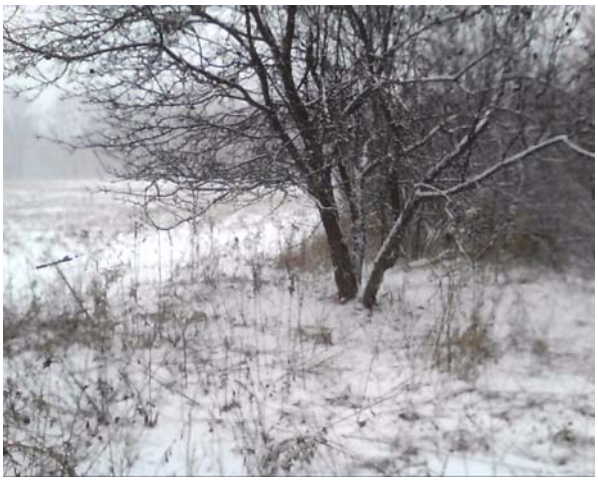

Photo Name: SC1CW459_121013_UPL1NW.jpg Note: SC-1C-W459-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 107.1 City/County: Schoharie Sampling Date: 2013/06/19

Applicant/Owner: Williams State: NY Sampling Point: SC-1Q-W425-WET1

Investigator(s): EG;AM;KH USGS Quad: Richmondville Section, Township, Range: Richmondville

Landform: Hillside Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 8

Subregion: Middle Atlantic Latitude: 42.642552 Longitude: -74.53235 Datum: NAD1983

Soil Map Unit Name: Lordstown, Oquaga, and Nassau soils, 35 to 70 percent slopes NWI Classification: Not Mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☑ Yes	☐ No	**Is the Sampled Area within a Wetland?** ☑ **Yes** ☐ **No**
Hydric Soil Present?	☑ Yes	☐ No	
Wetland Hydrology Present?	☑ Yes	☐ No	

Remarks:

Field Wetland Classification: PFO

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☑ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☑ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☑ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☑ Yes	☐ No	Depth (inches): 1
Water Table Present:	☑ Yes	☐ No	Depth (inches): 15
Saturation Present:	☑ Yes	☐ No	Depth (inches): 0

Wetland Hydrology Present? ☑ Yes ☐ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Acer saccharum	50	YES	FACU
Total Cover:	**50**		

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Fraxinus pennsylvanica	60	YES	FACW
Total Cover:	**60**		

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Fraxinus pennsylvanica	10	YES	FACW
Total Cover:	**10**		

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Impatiens capensis	80	YES	FACW
Onoclea sensibilis	5	NO	FACW
Total Cover:	**85**		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	4	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	75	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	155	x 2 =	310	
FAC Species:	0	x 3 =	0	
FACU Species:	50	x 4 =	200	
UPL Species:	0	x 5 =	0	
Column Totals:	205	(A)	510	(B)
		Prevalence Index = B/A =	2.49	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☑ **Yes** ☐ **No**

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-8	2.5Y 4/1	92	7.5YR 4/6	8	C	M		Muck
8-22	5Y 4/1	97	10YR 5/6	3	C	M	CLAY LOAM	10% gravel

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☑ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils

- ☐ 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☑ **Yes** ☐ **No**
Remarks:	

Photos

Photo Name: SC1QW425_061913_WET1SW.jpg Note: SC-1Q-W425-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 107.1 City/County: Schoharie Sampling Date: 2013/06/19

Applicant/Owner: Williams State: NY Sampling Point: SC-1Q-W425-WET2

Investigator(s): EG;AM;KH USGS Quad: Richmondville Section, Township, Range: Richmondville

Landform: hillside Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%): 10

Subregion: Middle Atlantic Latitude: 42.642457 Longitude: -74.53245 Datum: NAD1983

Soil Map Unit Name: Lordstown, Oquaga, and Nassau soils, 35 to 70 percent slopes NWI Classification: Not Mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☑ Yes	☐ No	**Is the Sampled Area within a Wetland?** ☑ **Yes** ☐ **No**
Hydric Soil Present?	☑ Yes	☐ No	
Wetland Hydrology Present?	☑ Yes	☐ No	

Remarks:

Field Wetland Classification: PEM

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☑ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☑ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☑ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☑ Yes	☐ No	Depth (inches): 5
Water Table Present:	☑ Yes	☐ No	Depth (inches): 0
Saturation Present:	☑ Yes	☐ No	Depth (inches): 0

Wetland Hydrology Present? ☑ Yes ☐ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Impatiens capensis	15	NO	FACW
Solidago sp	15	NO	NONE
Persicaria sagittata	30	YES	OBL
Unknown grass	30	YES	NONE
Veronica anagallis-aquatica	10	YES	OBL
Total Cover:	100		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	67	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	40	x 1 =	40	
FACW Species:	15	x 2 =	30	
FAC Species:	0	x 3 =	0	
FACU Species:	0	x 4 =	0	
UPL Species:	0	x 5 =	0	
Column Totals:	55	(A)	70	(B)
		Prevalence Index = B/A =	1.27	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☑ 2 - Dominance Test is > 50%
- ☑ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☑ **Yes** ☐ **No**

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-6	2.5Y 3/2	100				None		Muck
6-17	2.5Y 3/1	90	10YR 4/5	10	C	M	SILT LOAM	
17-24	Gley 5/10Y	100				None	CLAY LOAM	15% Gravel

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils

- ☐ 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☑ **Yes** ☐ **No**

Remarks:

Photos

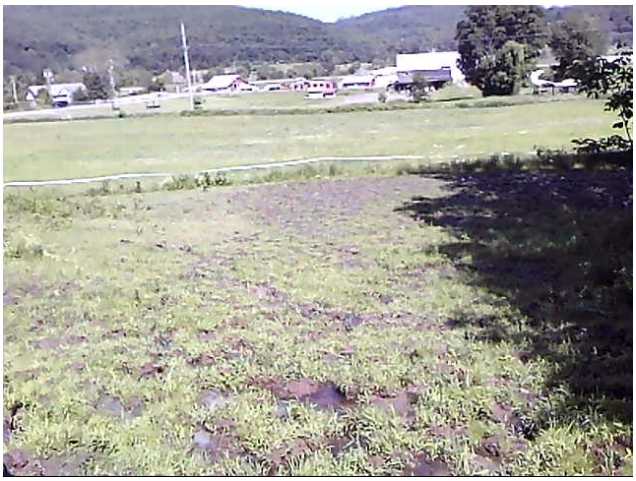

Photo Name: SC1QW425_061913_WET2NW.jpg Note: SC-1Q-W425-WET2

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 107.1 City/County: Schoharie Sampling Date: 2013/06/19

Applicant/Owner: Williams State: NY Sampling Point: SC-1Q-W425-UPL1

Investigator(s): EG;AM;KH USGS Quad: Richmondville Section, Township, Range: Richmondville

Landform: hillside Local Relief: ☐ Concave ☑ Convex ☐ None Slope (%): 10

Subregion: Middle Atlantic Latitude: 42.642338 Longitude: -74.53269 Datum: NAD1983

Soil Map Unit Name: Volusia channery silt loam, 8 to 15 percent slopes NWI Classification: Not Mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☐ Yes	☑ No	**Is the Sampled Area within a Wetland?** ☐ **Yes** ☑ **No**
Hydric Soil Present?	☐ Yes	☑ No	
Wetland Hydrology Present?	☐ Yes	☑ No	

Remarks: Upland plot

Field Wetland Classification: OTHER

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☐ Yes	☑ No	Depth (inches):
Saturation Present:	☐ Yes	☑ No	Depth (inches):

Wetland Hydrology Present? ☐ Yes ☑ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Galium mollugo	60	YES	UPL
wild parsnip	10	NO	FACW
Asclepias syriaca	15	NO	FACU
Veronica chamadrys	10	NO	FACU
Unknown grass	5	NO	NONE
Total Cover:	**100**		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
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:	0	x 1 =	0	
FACW Species:	10	x 2 =	20	
FAC Species:	0	x 3 =	0	
FACU Species:	25	x 4 =	100	
UPL Species:	60	x 5 =	300	
Column Totals:	95	(A)	420	(B)
		Prevalence Index = B/A =	4.42	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☐ Yes ☑ No

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-12	10YR 3/3	100				None	LOAM	
12-16	2.5Y 4/3	100				M,PL	SILT LOAM	20% gravel; Refusal @16''

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils

- ☐ 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☐ **Yes** ☑ **No**
Remarks:	

Photos

Photo Name: SC1QW425_061913_UPL1S.jpg Note: SC-1Q-W425-UPL1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 107.1 City/County: Schoharie Sampling Date: 2013/06/19

Applicant/Owner: Williams State: NY Sampling Point: SC-1Q-W426-WET1

Investigator(s): EG;AM;KH USGS Quad: Richmondville Section, Township, Range: Richmondville

Landform: hillside Local Relief: ☑ Concave ☐ Convex ☐ None Slope (%):

Subregion: Middle Atlantic Latitude: 42.644338 Longitude: -74.53190 Datum: NAD1983

Soil Map Unit Name: Odessa and Rhinebeck silty clay loams, 6 to 12 percent slopes, eroded NWI Classification: Not Mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☑ Yes	☐ No	**Is the Sampled Area within a Wetland?** ☑ **Yes** ☐ **No**
Hydric Soil Present?	☑ Yes	☐ No	
Wetland Hydrology Present?	☑ Yes	☐ No	

Remarks:

Field Wetland Classification: PEM

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☑ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☑ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☑ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☑ Yes	☐ No	Depth (inches): 3
Saturation Present:	☑ Yes	☐ No	Depth (inches): 0

Wetland Hydrology Present? ☑ Yes ☐ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Poa pratensis	100	YES	FACU
Total Cover: 100			

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
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:	0	x 1 =	0	
FACW Species:	0	x 2 =	0	
FAC Species:	0	x 3 =	0	
FACU Species:	100	x 4 =	400	
UPL Species:	0	x 5 =	0	
Column Totals:	100	(A)	400	(B)
		Prevalence Index = B/A =	4.00	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☑ **Yes** ☐ **No**

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (in.)	Matrix Color (Moist)	Matrix %	Redox Features Color (Moist)	Redox Features %	Type [1]	Loc [2]	Texture	Remarks
0-4	2.5Y 3/2	100				None	CLAY LOAM	
4-16	2.5Y 4/1	93	10YR 5/6	7	C	M,PL	CLAY LOAM	Rock refusal @16''; 3 attempts

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☑ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils

- ☐ 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? ☑ **Yes** ☐ **No**

Remarks:

Photos

Photo Name: SC1QW426_061913_WET1E.jpg Note: SC-1Q-W426-WET1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Constitution Milepost 107.1 City/County: Schoharie Sampling Date: 2013/06/19

Applicant/Owner: Williams State: NY Sampling Point: SC-1Q-W426-UPL1

Investigator(s): EG;AM;KH USGS Quad: Richmondville Section, Township, Range: Richmondville

Landform: hillside Local Relief: ☐ Concave ☐ Convex ☐ None Slope (%):

Subregion: Middle Atlantic Latitude: 42.644527 Longitude: -74.53199 Datum: NAD1983

Soil Map Unit Name: Odessa and Rhinebeck silty clay loams, 6 to 12 percent slopes, eroded NWI Classification: Not Mapped

Are climatic/hydrologic conditions on the site typical for this time of year? ☑ Yes ☐ No (If no, explain in Remarks.)

Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? ☑ No Are "Normal Circumstances" present? ☑ Yes ☐ No

Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? ☑ No (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☐ Yes	☑ No	**Is the Sampled Area within a Wetland?** ☐ **Yes** ☑ **No**
Hydric Soil Present?	☐ Yes	☑ No	
Wetland Hydrology Present?	☐ Yes	☑ No	

Remarks: Upland plot

Field Wetland Classification: OTHER

HYDROLOGY

Wetland Hydrology Indicators

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thick Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)
- ☐ Other (Explain in Remarks)

Field Observations:

Surface Water Present:	☐ Yes	☑ No	Depth (inches):
Water Table Present:	☐ Yes	☑ No	Depth (inches):
Saturation Present:	☐ Yes	☑ No	Depth (inches):

Wetland Hydrology Present? ☐ Yes ☑ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION

Tree Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Sapling Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Shrub Stratum			
Plot Size: 15 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Herb Stratum			
Plot Size: 5 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Dactylis glomerata	45	YES	FACU
Taraxacum officinale	5	NO	FACU
Bromus Inermis	20	YES	FACU
Trifolium pratense	5	NO	FACU
Trifolium repens	5	NO	FACU
Phleum pratense	20	YES	FACU
Galium mollugo	5	NO	UPL
Total Cover:	105		

Vine Stratum			
Plot Size: 30 feet			
Scientific Name	**% Cover**	**Dominant**	**Indicator**
Total Cover:			

Dominance Test Worksheet:

Number of Dominant Species that are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of Dominant Species that are OBL, FACW, or FAC:	0	(A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:		
OBL Species:	0	x 1 =	0	
FACW Species:	0	x 2 =	0	
FAC Species:	0	x 3 =	0	
FACU Species:	100	x 4 =	400	
UPL Species:	5	x 5 =	25	
Column Totals:	105	(A)	425	(B)
		Prevalence Index = B/A =	4.05	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is > 50%
- ☐ 3 - Prevalance is ≤ 3.0
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present unless disturbed or problematic.

Hydrophytic Vegetation Present? ☐ Yes ☑ No

Remarks:

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features				Texture	Remarks
(in.)	Color (Moist)	%	Color (Moist)	%	Type [1]	Loc [2]		
0-14	2.5Y 4/3	98	10YR 6/6	2	C	M	CLAY LOAM	Rock refusal @14"

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered Sand or Coated Sand Grains. [2] Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Other (Explain in Remarks)

Indicators for Problematic Hydric Soils

- ☐ 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)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer Present (if present): Type: _____ Depth (inches): _____	**Hydric Soil Present?** ☐ **Yes** ☑ **No**
Remarks:	

Photos

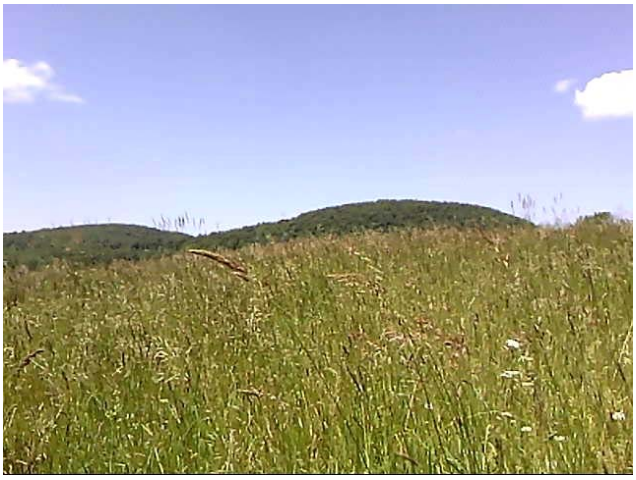

Photo Name: SC1QW426_061913_UPL1W.jpg Note: SC-1Q-W426-UPL1

WETLAND DELINEATION REPORT

SUBMITTAL NO. 3

ATTACHMENT 3

CONSTITUTION PIPELINE

CONSTITUTION PIPELINE

WATERBODY DATA SHEETS AND PHOTOGRAPHS

BROOME COUNTY

AECOM
95 State Road
Sagamore Beach, MA 02662

Waterbody Data Form

Feature ID: BR-1C-S210
Feature Name:
Associated Wetland ID: BR-1C-W263

☐ Centerline ☑ Re-Route ☐ Access Road ☐ Ancillary Facility ☐ Alternative Route ☐ Other

Centerline ID:	Facility Description:	
Date: 2014/04/25	Client/Project Name: Constitution	Latitude/Longitude: 42.020878 , -75.52564
Team: 1A	State/County: NY - Broome	Quad Name: Gulf Summit
Logbook No.: 15	Logbook Page No.: 12	Tract No.: ALT-B-NY-BR-012.000

Waterbody Type: ☐ Lake ☐ Pond ☐ Borrow Pit ☑ Stream ☐ Ag. Ditch ☐ Other

Stream Flow: ☐ Fast ☐ Moderate ☑ Slow ☐ Very Slow ☐ None

Flow Type: ☐ Perennial (Flows year round) ☑ Intermittent (Flows <3 months) ☐ None
☐ Seasonal (Continuous flow ≥ 3 months) ☐ Ephemeral (Flows only in response to rainfall)

Direction of Flow: ☐ N ☐ NE ☐ E ☐ SE ☐ S ☐ SW ☑ W ☐ NW ☐ No Flow

OHWM Width (ft.): 2

Sinuosity: ☑ Braided ☐ Meandering ☐ Straight ☐ N/A

Stream Width (ft.): 2 **Water Surface (At Crossing Location):** 2

Stream Depth (in.): ☐ 0 ☐ 1-3 ☐ 3-6 ☑ 6-12 ☐ 12-18 ☐ 18-24 ☐ 24-36 ☐ 36-48 ☐ 48-60 ☐ 60+

OHWM Indicators:
BENT, MATTED OR MISSING VEGETATION
SCOUR

Bank Height (ft.): (Looking Downstream)
Left: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+
Right: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+

Bank Slope (%): (Looking Downstream)
Left: 4:1
Right: 4:1

Qualitative Attributes

Water Appearance:
☑ Clear ☐ Turbid ☐ Sheen on Surface ☐ Floating Algalmats
☐ Slightly Turbid ☐ Very Turbid ☐ Greenish Color ☐ Obvious Surface Scum
☐ No Flow ☐ Other:

Stream Substrate %:
70% MUCK
10% OTHER - Stone
20% VEGETATION

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95 State Road
Sagamore Beach, MA 02662

Aquatic Habitats:

- [ ] Sand Bar
- [ ] Gravel Bar
- [ ] Mud Bar
- [ ] Undercut Banks
- [ ] Gravel Riffles
- [ ] Deep Pools
- [ ] Bank Root Systems
- [x] Overhanging Trees/Shrubs
- [x] In-stream Emergent Plants — % Cover: 20
- [ ] In-stream Submerged Plants — % Cover:
- [x] Fringing Wetlands[1]
- [ ] None

[1]Characteristics: PEM/PSS

Aquatic Organisms Observed:

FROGS
FISH (JUVENILE)
WATERFOWL

Tributary Condition: [x] Natural [ ] Artificial (Man-Made) [ ] Manipulated

Channel Condition:

- [ ] Channelization/Braiding
- [ ] Dikes/Berms
- [ ] Unnatural Straightening
- [ ] Excessive Bank Erosion
- [ ] Downcutting
- [x] N/A

Habitat Characteristics, Aquatic, and Terrestrial Diversity Description:

Stream Quality: [ ] High [x] Moderate [ ] Low

Comments:

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95 State Road
Sagamore Beach, MA 02662

Photos

Photo Name: BR1CS210_042514_1E.jpg Note: BR-1C-S210

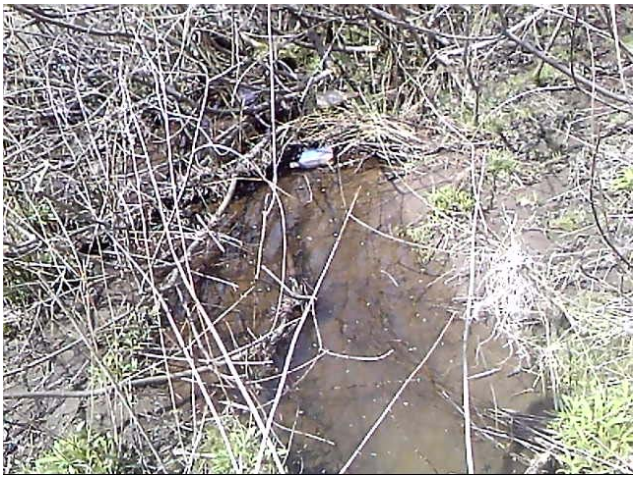

Photo Name: BR1CS210_042514_2W.jpg Note: BR-1C-S210

Photo Name: BR1CS210_042514_3N.jpg Note: BR-1C-S210

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95 State Road
Sagamore Beach, MA 02662

Waterbody Data Form

Feature ID: BR-1C-S211
Feature Name:
Associated Wetland ID: BR-1C-W263

☑ Centerline ☐ Re-Route ☐ Access Road ☐ Ancillary Facility ☐ Alternative Route ☐ Other

Centerline ID:	Facility Description:	
Date: 2014/04/25	Client/Project Name: Constitution	Latitude/Longitude: 42.020431 , -75.52584
Team: 1A	State/County: NY - Broome	Quad Name: Gulf Summit
Logbook No.: 15	Logbook Page No.: 13	Tract No.: ALT-B-NY-BR-012.000

Waterbody Type: ☐ Lake ☐ Pond ☐ Borrow Pit ☑ Stream ☐ Ag. Ditch ☐ Other

Stream Flow: ☐ Fast ☑ Moderate ☐ Slow ☐ Very Slow ☐ None

Flow Type: ☑ Perennial (Flows year round) ☐ Intermittent (Flows <3 months) ☐ None
☐ Seasonal (Continuous flow ≥ 3 months) ☐ Ephemeral (Flows only in response to rainfall)

Direction of Flow: ☐ N ☐ NE ☐ E ☐ SE ☐ S ☐ SW ☑ W ☐ NW ☐ No Flow

OHWM Width (ft.): 9

Sinuosity: ☐ Braided ☑ Meandering ☐ Straight ☐ N/A

Stream Width (ft.): 12 **Water Surface (At Crossing Location):** 9

Stream Depth (in.): ☐ 0 ☐ 1-3 ☑ 3-6 ☐ 6-12 ☐ 12-18 ☐ 18-24 ☐ 24-36 ☐ 36-48 ☐ 48-60 ☐ 60+

OHWM Indicators:
CLEAR NATURAL LINE ON BANK
LITTER AND DEBRIS
SCOUR

Bank Height (ft.): (Looking Downstream)
Left: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+
Right: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+

Bank Slope (%): (Looking Downstream)
Left: Ver
Right: 3:1

Qualitative Attributes

Water Appearance:
☑ Clear ☐ Turbid ☐ Sheen on Surface ☐ Floating Algalmats
☐ Slightly Turbid ☐ Very Turbid ☐ Greenish Color ☐ Obvious Surface Scum
☐ No Flow ☐ Other:

Stream Substrate %:
65% COBBLES
20% GRAVEL
10% SANDS
5% SILTS

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95 State Road
Sagamore Beach, MA 02662

Aquatic Habitats:

- [ ] Sand Bar
- [ ] Gravel Bar
- [ ] Mud Bar
- [ ] Undercut Banks
- [ ] Gravel Riffles
- [ ] Deep Pools
- [x] Bank Root Systems
- [x] Overhanging Trees/Shrubs
- [ ] In-stream Emergent Plants % Cover:
- [ ] In-stream Submerged Plants % Cover:
- [x] Fringing Wetlands[1]
- [ ] None

[1]Characteristics: PSS

Aquatic Organisms Observed:

FROGS
FISH (JUVENILE)
INVERTEBRATES

Tributary Condition: [x] Natural [ ] Artificial (Man-Made) [ ] Manipulated

Channel Condition:

- [ ] Channelization/Braiding
- [ ] Dikes/Berms
- [ ] Unnatural Straightening
- [ ] Excessive Bank Erosion
- [ ] Downcutting
- [x] N/A

Habitat Characteristics, Aquatic, and Terrestrial Diversity Description:

Stream Quality: [ ] High [x] Moderate [ ] Low

Comments: There is a lot of trash in stream, along banks, and in wetland.

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Sagamore Beach, MA 02662

Photos

Photo Name: BR1CS211_042514_1E.jpg Note: BR-1C-S211

Photo Name: BR1CS211_042514_2W.jpg Note: BR-1C-S211

Photo Name: BR1CS211_042514_3N.jpg Note: BR-1C-S211

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95 State Road
Sagamore Beach, MA 02662

Waterbody Data Form

Feature ID: BR-1C-S230
Feature Name:
Associated Wetland ID:

☐ Centerline ☑ Re-Route ☐ Access Road ☐ Ancillary Facility ☐ Alternative Route ☐ Other

Centerline ID: Primary Route		Facility Description:
Date: 2013/10/09	Client/Project Name: Constitution	Latitude/Longitude: 42.009816 , -75.52627
Team: 1C	State/County: NY - Broome	Quad Name: Gulf Summit
Logbook No.: 13	Logbook Page No.: 22	Tract No.: ALT-B-NY-BR-002.001

Waterbody Type: ☐ Lake ☐ Pond ☐ Borrow Pit ☑ Stream ☐ Ag. Ditch ☐ Other

Stream Flow: ☐ Fast ☐ Moderate ☐ Slow ☑ Very Slow ☐ None

Flow Type: ☐ Perennial (Flows year round) ☐ Intermittent (Flows <3 months) ☐ None
☐ Seasonal (Continuous flow ≥ 3 months) ☑ Ephemeral (Flows only in response to rainfall)

Direction of Flow: ☐ N ☐ NE ☐ E ☐ SE ☐ S ☐ SW ☐ W ☑ NW ☐ No Flow

OHWM Width (ft.): 8

Sinuosity: ☐ Braided ☑ Meandering ☐ Straight ☐ N/A

Stream Width (ft.): 10 **Water Surface (At Crossing Location):** 4

Stream Depth (in.): ☐ 0 ☑ 1-3 ☐ 3-6 ☐ 6-12 ☐ 12-18 ☐ 18-24 ☐ 24-36 ☐ 36-48 ☐ 48-60 ☐ 60+

OHWM Indicators:
LEAF LITTER DISTURBED
SCOUR

Bank Height (ft.): (Looking Downstream)
Left: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+
Right: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+

Bank Slope (%): (Looking Downstream)
Left:
Right:

Qualitative Attributes

Water Appearance:
☑ Clear ☐ Turbid ☐ Sheen on Surface ☐ Floating Algalmats
☐ Slightly Turbid ☐ Very Turbid ☐ Greenish Color ☐ Obvious Surface Scum
☐ No Flow ☐ Other:

Stream Substrate %:
75% COBBLES
5% OTHER - BOULDERS
15% SANDS
5% SILTS

Aquatic Habitats:
☐ Sand Bar ☐ Gravel Riffles ☐ In-stream Emergent Plants % Cover:
☐ Gravel Bar ☐ Deep Pools ☐ In-stream Submerged Plants % Cover:
☐ Mud Bar ☐ Bank Root Systems ☐ Fringing Wetlands[1]
☐ Undercut Banks ☐ Overhanging Trees/Shrubs ☑ None

[1]Characteristics:

Aquatic Organisms Observed:
NONE

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Tributary Condition:	☑ Natural	☐ Artificial (Man-Made)	☐ Manipulated
Channel Condition:	☐ Channelization/Braiding	☐ Unnatural Straightening	☐ Downcutting
	☐ Dikes/Berms	☐ Excessive Bank Erosion	☑ N/A

Habitat Characteristics, Aquatic, and Terrestrial Diversity Description:

Stream Quality: ☐ High ☑ Moderate ☐ Low

Comments:

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95 State Road
Sagamore Beach, MA 02662

Photos

Photo Name: BR1CS230_100913_3NE.jpg Note: BR-1C-S230

Photo Name: BR1CS230_100913_2SE.jpg Note: BR-1C-S230

Photo Name: BR1CS230_100913_1NW.jpg Note: BR-1C-S230

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Sagamore Beach, MA 02662

Waterbody Data Form

Feature ID: BR-1C-S230A
Feature Name:
Associated Wetland ID:

☐ Centerline ☑ Re-Route ☐ Access Road ☐ Ancillary Facility ☐ Alternative Route ☐ Other

Centerline ID:	Facility Description:
Primary Route	

Date:	Client/Project Name:	Latitude/Longitude:
2013/10/09	Constitution	42.009838 , -75.52623

Team:	State/County:	Quad Name:
1C	NY - Broome	Gulf Summit

Logbook No.:	Logbook Page No.:	Tract No.:
14	21	ALT-B-NY-BR-002.001

Waterbody Type: ☐ Lake ☐ Pond ☐ Borrow Pit ☑ Stream ☐ Ag. Ditch ☐ Other

Stream Flow: ☐ Fast ☐ Moderate ☐ Slow ☑ Very Slow ☐ None

Flow Type: ☐ Perennial (Flows year round) ☐ Intermittent (Flows <3 months) ☐ None
☐ Seasonal (Continuous flow ≥ 3 months) ☑ Ephemeral (Flows only in response to rainfall)

Direction of Flow: ☐ N ☐ NE ☐ E ☐ SE ☐ S ☐ SW ☐ W ☑ NW ☐ No Flow

OHWM Width (ft.): 2

Sinuosity: ☐ Braided ☐ Meandering ☑ Straight ☐ N/A

Stream Width (ft.): 3 **Water Surface (At Crossing Location):** 0.5

Stream Depth (in.): ☐ 0 ☑ 1-3 ☐ 3-6 ☐ 6-12 ☐ 12-18 ☐ 18-24 ☐ 24-36 ☐ 36-48 ☐ 48-60 ☐ 60+

OHWM Indicators:
LEAF LITTER DISTURBED
SCOUR

Bank Height (ft.): (Looking Downstream)
Left: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+
Right: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+

Bank Slope (%): (Looking Downstream)
Left:
Right:

Qualitative Attributes

Water Appearance:
☑ Clear ☐ Turbid ☐ Sheen on Surface ☐ Floating Algalmats
☐ Slightly Turbid ☐ Very Turbid ☐ Greenish Color ☐ Obvious Surface Scum
☐ No Flow ☐ Other:

Stream Substrate %:
80% COBBLES
5% SANDS
15% SILTS

Aquatic Habitats:
☐ Sand Bar ☐ Gravel Riffles ☐ In-stream Emergent Plants % Cover:
☐ Gravel Bar ☐ Deep Pools ☐ In-stream Submerged Plants % Cover:
☐ Mud Bar ☐ Bank Root Systems ☐ Fringing Wetlands[1]
☐ Undercut Banks ☐ Overhanging Trees/Shrubs ☑ None

[1]Characteristics:

Aquatic Organisms Observed:
NONE

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Sagamore Beach, MA 02662

Tributary Condition:	☑ Natural	☐ Artificial (Man-Made)	☐ Manipulated
Channel Condition:	☐ Channelization/Braiding	☐ Unnatural Straightening	☐ Downcutting
	☐ Dikes/Berms	☐ Excessive Bank Erosion	☑ N/A

Habitat Characteristics, Aquatic, and Terrestrial Diversity Description:

Stream Quality: ☐ High ☑ Moderate ☐ Low

Comments:

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95 State Road
Sagamore Beach, MA 02662

Photos

Photo Name: BR1CS230A_100913_3NE.jpg Note: BR-1C-S230A

Photo Name: BR1CS230A_100913_2SE.jpg Note: BR-1C-S230A

Photo Name: BR1CS230A_100913_1NW.jpg Note: BR-1C-S230A

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Sagamore Beach, MA 02662

Waterbody Data Form

Feature ID: BR-1S-S207C
Feature Name:
Associated Wetland ID:

☐ Centerline ☑ Re-Route ☐ Access Road ☐ Ancillary Facility ☐ Alternative Route ☐ Other

Centerline ID: Primary Route		Facility Description:
Date: 2013/10/09	Client/Project Name: Constitution	Latitude/Longitude: 42.011192 , -75.52571
Team: 1C	State/County: NY - Broome	Quad Name: Gulf Summit
Logbook No.: 13	Logbook Page No.: 24	Tract No.: ALT-B-NY-BR-002.001

Waterbody Type: ☐ Lake ☐ Pond ☐ Borrow Pit ☑ Stream ☐ Ag. Ditch ☐ Other

Stream Flow: ☐ Fast ☐ Moderate ☑ Slow ☐ Very Slow ☐ None

Flow Type: ☑ Perennial (Flows year round) ☐ Intermittent (Flows <3 months) ☐ None
☐ Seasonal (Continuous flow ≥ 3 months) ☐ Ephemeral (Flows only in response to rainfall)

Direction of Flow: ☐ N ☐ NE ☐ E ☐ SE ☐ S ☐ SW ☑ W ☐ NW ☐ No Flow

OHWM Width (ft.): 3

Sinuosity: ☐ Braided ☑ Meandering ☐ Straight ☐ N/A

Stream Width (ft.): 4 **Water Surface (At Crossing Location):** 3

Stream Depth (in.): ☐ 0 ☑ 1-3 ☐ 3-6 ☐ 6-12 ☐ 12-18 ☐ 18-24 ☐ 24-36 ☐ 36-48 ☐ 48-60 ☐ 60+

OHWM Indicators:
LEAF LITTER DISTURBED
LITTER AND DEBRIS
SCOUR

Bank Height (ft.): (Looking Downstream)
Left: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+
Right: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+

Bank Slope (%): (Looking Downstream)
Left:
Right:

Qualitative Attributes

Water Appearance:
☑ Clear ☐ Turbid ☐ Sheen on Surface ☐ Floating Algalmats
☐ Slightly Turbid ☐ Very Turbid ☐ Greenish Color ☐ Obvious Surface Scum
☐ No Flow ☐ Other:

Stream Substrate %:
60% COBBLES
25% GRAVEL
10% SANDS
5% SILTS

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Aquatic Habitats:

- [ ] Sand Bar
- [ ] Gravel Bar
- [ ] Mud Bar
- [ ] Undercut Banks
- [ ] Gravel Riffles
- [ ] Deep Pools
- [ ] Bank Root Systems
- [x] Overhanging Trees/Shrubs
- [ ] In-stream Emergent Plants % Cover:
- [ ] In-stream Submerged Plants % Cover:
- [x] Fringing Wetlands[1]
- [ ] None

[1]Characteristics:

Aquatic Organisms Observed:

INVERTEBRATES
FROGS

Tributary Condition: [x] Natural [ ] Artificial (Man-Made) [ ] Manipulated

Channel Condition:

- [ ] Channelization/Braiding
- [ ] Dikes/Berms
- [ ] Unnatural Straightening
- [ ] Excessive Bank Erosion
- [ ] Downcutting
- [x] N/A

Habitat Characteristics, Aquatic, and Terrestrial Diversity Description:

Stream Quality: [ ] High [x] Moderate [ ] Low

Comments:

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Sagamore Beach, MA 02662

Photos

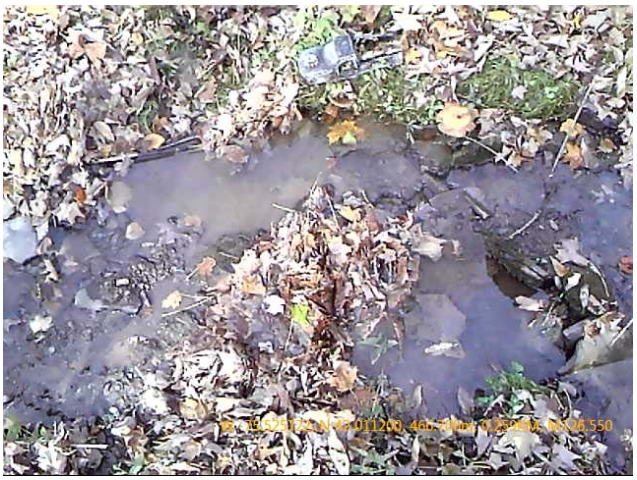

Photo Name: BR1SS207C_100913_3N.jpg Note: BR-1S-S207C

Photo Name: BR1SS207C_100913_2W.jpg Note: BR-1S-S207C

Photo Name: BR1SS207C_100913_1E.jpg Note: BR-1S-S207C

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Waterbody Data Form

Feature ID: BR-1S-S207D
Feature Name:
Associated Wetland ID: BR-1C-W260

☐ Centerline ☑ Re-Route ☐ Access Road ☐ Ancillary Facility ☐ Alternative Route ☐ Other

Centerline ID:	Facility Description:
Primary Route	

Date:	Client/Project Name:	Latitude/Longitude:
2013/10/09	Constitution	42.011114 , -75.52587

Team:	State/County:	Quad Name:
1C	NY - Broome	Gulf Summit

Logbook No.:	Logbook Page No.:	Tract No.:
13	25	ALT-B-NY-BR-002.001

Waterbody Type: ☐ Lake ☐ Pond ☐ Borrow Pit ☑ Stream ☐ Ag. Ditch ☐ Other

Stream Flow: ☐ Fast ☐ Moderate ☐ Slow ☐ Very Slow ☑ None

Flow Type: ☐ Perennial (Flows year round) ☐ Intermittent (Flows <3 months) ☐ None
☐ Seasonal (Continuous flow ≥ 3 months) ☑ Ephemeral (Flows only in response to rainfall)

Direction of Flow: ☐ N ☐ NE ☐ E ☐ SE ☐ S ☑ SW ☐ W ☐ NW ☐ No Flow

OHWM Width (ft.): 2

Sinuosity: ☐ Braided ☑ Meandering ☐ Straight ☐ N/A

Stream Width (ft.): 3 **Water Surface (At Crossing Location):** 0

Stream Depth (in.): ☑ 0 ☐ 1-3 ☐ 3-6 ☐ 6-12 ☐ 12-18 ☐ 18-24 ☐ 24-36 ☐ 36-48 ☐ 48-60 ☐ 60+

OHWM Indicators:
LEAF LITTER DISTURBED
SCOUR

Bank Height (ft.): (Looking Downstream)
Left: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+
Right: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+

Bank Slope (%): (Looking Downstream)
Left:
Right:

Qualitative Attributes

Water Appearance:
☐ Clear ☐ Turbid ☐ Sheen on Surface ☐ Floating Algalmats
☐ Slightly Turbid ☐ Very Turbid ☐ Greenish Color ☐ Obvious Surface Scum
☑ No Flow ☐ Other:

Stream Substrate %:
50% COBBLES
30% GRAVEL
5% SANDS
15% SANDS

Aquatic Habitats:
☐ Sand Bar ☐ Gravel Riffles ☐ In-stream Emergent Plants % Cover:
☐ Gravel Bar ☐ Deep Pools ☐ In-stream Submerged Plants % Cover:
☐ Mud Bar ☐ Bank Root Systems ☑ Fringing Wetlands[1]
☐ Undercut Banks ☐ Overhanging Trees/Shrubs ☐ None

[1]Characteristics: PFO

Aquatic Organisms Observed:
NONE

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Tributary Condition:	☑ Natural	☐ Artificial (Man-Made)	☐ Manipulated
Channel Condition:	☐ Channelization/Braiding	☐ Unnatural Straightening	☐ Downcutting
	☐ Dikes/Berms	☐ Excessive Bank Erosion	☑ N/A

Habitat Characteristics, Aquatic, and Terrestrial Diversity Description:

Stream Quality: ☐ High ☑ Moderate ☐ Low

Comments:

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Sagamore Beach, MA 02662

Photos

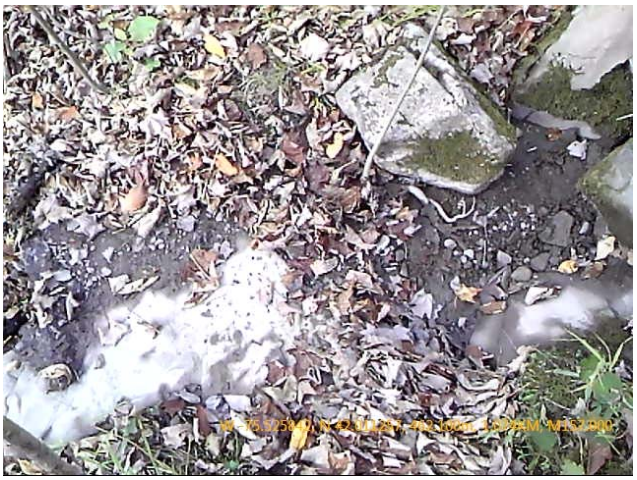

Photo Name: BR1SS207D_100913_3NW.jpg Note: BR-1S-S207D

Photo Name: BR1SS207D_100913_2SW.jpg Note: BR-1S-S207D

Photo Name: BR1SS207D_100913_1NE.jpg Note: BR-1S-S207D

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Waterbody Data Form

Feature ID: BR-1S-S207E
Feature Name:
Associated Wetland ID: BR-1C-W260

☐ Centerline ☑ Re-Route ☐ Access Road ☐ Ancillary Facility ☐ Alternative Route ☐ Other

Centerline ID: Primary Route		Facility Description:
Date: 2013/10/09	Client/Project Name: Constitution	Latitude/Longitude: 42.011207 , -75.52590
Team: 1C	State/County: NY - Broome	Quad Name: Gulf Summit
Logbook No.: 13	Logbook Page No.: 26	Tract No.: ALT-B-NY-BR-002.001

Waterbody Type: ☐ Lake ☐ Pond ☐ Borrow Pit ☑ Stream ☐ Ag. Ditch ☐ Other

Stream Flow: ☐ Fast ☐ Moderate ☑ Slow ☐ Very Slow ☐ None

Flow Type: ☐ Perennial (Flows year round) ☐ Intermittent (Flows <3 months) ☐ None
☐ Seasonal (Continuous flow ≥ 3 months) ☑ Ephemeral (Flows only in response to rainfall)

Direction of Flow: ☐ N ☐ NE ☐ E ☐ SE ☐ S ☐ SW ☑ W ☐ NW ☐ No Flow

OHWM Width (ft.): 3

Sinuosity: ☐ Braided ☑ Meandering ☐ Straight ☐ N/A

Stream Width (ft.): 4 **Water Surface (At Crossing Location):** 2

Stream Depth (in.): ☐ 0 ☑ 1-3 ☐ 3-6 ☐ 6-12 ☐ 12-18 ☐ 18-24 ☐ 24-36 ☐ 36-48 ☐ 48-60 ☐ 60+

OHWM Indicators:
LEAF LITTER DISTURBED
SCOUR

Bank Height (ft.): (Looking Downstream)
Left: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+
Right: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+

Bank Slope (%): (Looking Downstream)
Left:
Right:

Qualitative Attributes

Water Appearance:
☑ Clear ☐ Turbid ☐ Sheen on Surface ☐ Floating Algalmats
☐ Slightly Turbid ☐ Very Turbid ☐ Greenish Color ☐ Obvious Surface Scum
☐ No Flow ☐ Other:

Stream Substrate %:
50% COBBLES
30% GRAVEL
10% SANDS
5% SILTS
5% VEGETATION

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Aquatic Habitats:

- [ ] Sand Bar
- [ ] Gravel Bar
- [ ] Mud Bar
- [ ] Undercut Banks
- [ ] Gravel Riffles
- [ ] Deep Pools
- [ ] Bank Root Systems
- [ ] Overhanging Trees/Shrubs
- [ ] In-stream Emergent Plants — % Cover: 5
- [ ] In-stream Submerged Plants — % Cover:
- [x] Fringing Wetlands[1]
- [ ] None

[1]Characteristics: PFO

Aquatic Organisms Observed:

NONE

Tributary Condition: [x] Natural [ ] Artificial (Man-Made) [ ] Manipulated

Channel Condition:

- [ ] Channelization/Braiding
- [ ] Dikes/Berms
- [ ] Unnatural Straightening
- [ ] Excessive Bank Erosion
- [ ] Downcutting
- [x] N/A

Habitat Characteristics, Aquatic, and Terrestrial Diversity Description:

Stream Quality: [ ] High [x] Moderate [ ] Low

Comments:

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Photos

Photo Name: BR1SS207E_100913_3S.jpg Note: BR-1S-S207E

Photo Name: BR1SS207E_100913_2W.jpg Note: BR-1S-S207E

Photo Name: BR1SS207E_100913_1E.jpg Note: BR-1S-S207E

CHENANGO COUNTY

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Waterbody Data Form

Feature ID: CH-1C-S010F
Feature Name:
Associated Wetland ID:

☐ Centerline ☑ Re-Route ☐ Access Road ☐ Ancillary Facility ☐ Alternative Route ☐ Other

Centerline ID:	Facility Description:

Date:	Client/Project Name:	Latitude/Longitude:
2014/06/06	Constitution	42.261584 , -75.46229

Team:	State/County:	Quad Name:
1A	NY - Chenango	Sidney

Logbook No.:	Logbook Page No.:	Tract No.:
20143	26	NY-CH-026

Waterbody Type: ☐ Lake ☐ Pond ☐ Borrow Pit ☑ Stream ☐ Ag. Ditch ☐ Other

Stream Flow: ☐ Fast ☐ Moderate ☐ Slow ☐ Very Slow ☑ None

Flow Type: ☐ Perennial (Flows year round) ☐ Intermittent (Flows <3 months) ☐ None
☐ Seasonal (Continuous flow ≥ 3 months) ☑ Ephemeral (Flows only in response to rainfall)

Direction of Flow: ☑ N ☐ NE ☐ E ☐ SE ☐ S ☐ SW ☐ W ☐ NW ☐ No Flow

OHWM Width (ft.): 12

Sinuosity: ☐ Braided ☑ Meandering ☐ Straight ☐ N/A

Stream Width (ft.): 12 **Water Surface (At Crossing Location):** 0

Stream Depth (in.): ☑ 0 ☐ 1-3 ☐ 3-6 ☐ 6-12 ☐ 12-18 ☐ 18-24 ☐ 24-36 ☐ 36-48 ☐ 48-60 ☐ 60+

OHWM Indicators:
ABRUPT PLANT COMMUNITY CHANGE
LITTER AND DEBRIS
SOIL CHARACTER CHANGES
WRACK LINE

Bank Height (ft.): (Looking Downstream)
Left: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+
Right: ☐ 0-2 ☑ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+

Bank Slope (%): (Looking Downstream)
Left: 40%
Right: 40%

Qualitative Attributes

Water Appearance:
☐ Clear ☐ Turbid ☐ Sheen on Surface ☐ Floating Algalmats
☐ Slightly Turbid ☐ Very Turbid ☐ Greenish Color ☐ Obvious Surface Scum
☑ No Flow ☐ Other:

Stream Substrate %:
40% OTHER - Loam
60% SANDS

Aquatic Habitats:
☐ Sand Bar ☐ Gravel Riffles ☐ In-stream Emergent Plants % Cover:
☐ Gravel Bar ☐ Deep Pools ☐ In-stream Submerged Plants % Cover:
☐ Mud Bar ☐ Bank Root Systems ☐ Fringing Wetlands[1]
☐ Undercut Banks ☑ Overhanging Trees/Shrubs ☐ None

[1]Characteristics:

Aquatic Organisms Observed:
NONE

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Tributary Condition:	☑ Natural	☐ Artificial (Man-Made)	☐ Manipulated
Channel Condition:	☐ Channelization/Braiding	☐ Unnatural Straightening	☐ Downcutting
	☐ Dikes/Berms	☑ Excessive Bank Erosion	☐ N/A

Habitat Characteristics, Aquatic, and Terrestrial Diversity Description:

Floodplain

Stream Quality: ☐ High ☑ Moderate ☐ Low

Comments:

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Photos

Photo Name: CH1CS010F_060614_1S.jpg Note: CH-1C-S010F

Photo Name: CH1CS010F_060614_2N.jpg Note: CH-1C-S010F

Photo Name: CH1CS010F_060614_3W.jpg Note: CH-1C-S010F

DELAWARE COUNTY

AECOM
95 State Road
Sagamore Beach, MA 02662

Waterbody Data Form

Feature ID: DE-1A-S297
Feature Name:
Associated Wetland ID: DE-1A-W463

☐ Centerline ☐ Re-Route ☑ Access Road ☐ Ancillary Facility ☐ Alternative Route ☐ Other

Centerline ID:	Facility Description:

Date:	Client/Project Name:	Latitude/Longitude:
2014/05/20	Constitution	42.353352 , -75.20543

Team:	State/County:	Quad Name:
1A	NY - Delaware	Franklin

Logbook No.:	Logbook Page No.:	Tract No.:
20142	30	UA-NY-DE-063

Waterbody Type: ☐ Lake ☐ Pond ☐ Borrow Pit ☑ Stream ☐ Ag. Ditch ☐ Other

Stream Flow: ☐ Fast ☑ Moderate ☐ Slow ☐ Very Slow ☐ None

Flow Type: ☐ Perennial (Flows year round) ☑ Intermittent (Flows <3 months) ☐ None
☐ Seasonal (Continuous flow ≥ 3 months) ☐ Ephemeral (Flows only in response to rainfall)

Direction of Flow: ☐ N ☐ NE ☐ E ☐ SE ☑ S ☐ SW ☐ W ☐ NW ☐ No Flow

OHWM Width (ft.): 4

Sinuosity: ☐ Braided ☑ Meandering ☐ Straight ☐ N/A

Stream Width (ft.): 4 **Water Surface (At Crossing Location):** 2

Stream Depth (in.): ☐ 0 ☑ 1-3 ☐ 3-6 ☐ 6-12 ☐ 12-18 ☐ 18-24 ☐ 24-36 ☐ 36-48 ☐ 48-60 ☐ 60+

OHWM Indicators:
ABRUPT PLANT COMMUNITY CHANGE
SOIL CHARACTER CHANGES

Bank Height (ft.): (Looking Downstream)
Left: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+
Right: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+

Bank Slope (%): (Looking Downstream)
Left: 90
Right: 90

Qualitative Attributes

Water Appearance:
☑ Clear ☐ Turbid ☐ Sheen on Surface ☐ Floating Algalmats
☐ Slightly Turbid ☐ Very Turbid ☐ Greenish Color ☐ Obvious Surface Scum
☐ No Flow ☐ Other:

Stream Substrate %:
50% GRAVEL
50% SANDS

Aquatic Habitats:
☐ Sand Bar ☐ Gravel Riffles ☐ In-stream Emergent Plants % Cover:
☐ Gravel Bar ☐ Deep Pools ☐ In-stream Submerged Plants % Cover:
☐ Mud Bar ☐ Bank Root Systems ☑ Fringing Wetlands[1]
☑ Undercut Banks ☑ Overhanging Trees/Shrubs ☐ None

[1]Characteristics: PFO

Aquatic Organisms Observed:
NONE

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95 State Road
Sagamore Beach, MA 02662

Tributary Condition:	☐ Natural ☐ Artificial (Man-Made) ☑ Manipulated		
Channel Condition:	☐ Channelization/Braiding	☐ Unnatural Straightening	☐ Downcutting
	☐ Dikes/Berms	☐ Excessive Bank Erosion	☑ N/A

Habitat Characteristics, Aquatic, and Terrestrial Diversity Description:

Excavated in sections

Stream Quality: ☐ High ☐ Moderate ☑ Low

Comments:

AECOM
95 State Road
Sagamore Beach, MA 02662

Photos

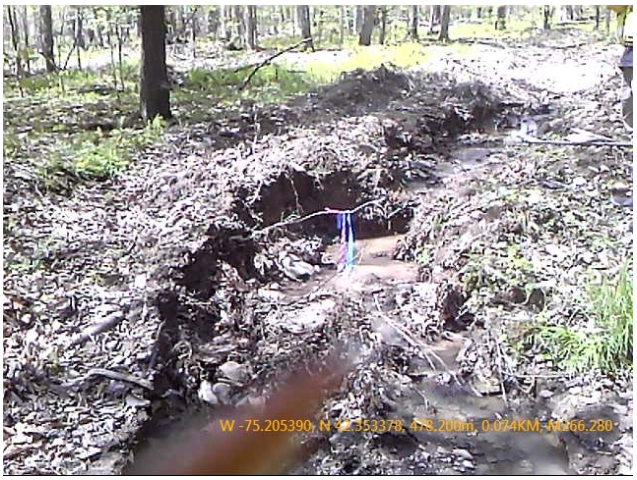

Photo Name: DE1AS297_052014_1N.jpg Note: DE-1A-S297

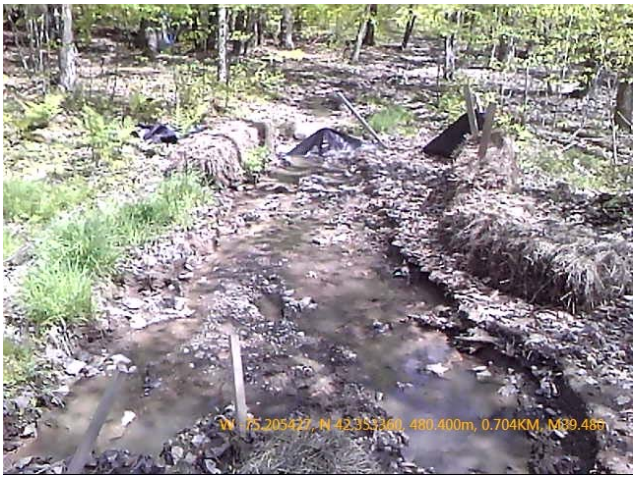

Photo Name: DE1AS297_052014_2S.jpg Note: DE-1A-S297

Photo Name: DE1AS297_052014_3E.jpg Note: DE-1A-S297

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Sagamore Beach, MA 02662

Waterbody Data Form

Feature ID: DE-1A-S301
Feature Name:
Associated Wetland ID: DE-1A-W473; W474; 475

☑ Centerline ☐ Re-Route ☐ Access Road ☐ Ancillary Facility ☐ Alternative Route ☐ Other

Centerline ID:		Facility Description:
Date: 2014/05/30	Client/Project Name: Constitution	Latitude/Longitude: 42.354578 , -75.23166
Team: 1A	State/County: NY - Delaware	Quad Name: Franklin
Logbook No.: 2	Logbook Page No.: 138	Tract No.: NY-DE-050.000

Waterbody Type: ☐ Lake ☐ Pond ☐ Borrow Pit ☑ Stream ☐ Ag. Ditch ☐ Other

Stream Flow: ☐ Fast ☐ Moderate ☑ Slow ☐ Very Slow ☐ None

Flow Type: ☐ Perennial (Flows year round) ☑ Intermittent (Flows <3 months) ☐ None
☐ Seasonal (Continuous flow ≥ 3 months) ☐ Ephemeral (Flows only in response to rainfall)

Direction of Flow: ☑ N ☐ NE ☐ E ☐ SE ☐ S ☐ SW ☐ W ☐ NW ☐ No Flow

OHWM Width (ft.): 8

Sinuosity: ☐ Braided ☑ Meandering ☐ Straight ☐ N/A

Stream Width (ft.): 8 **Water Surface (At Crossing Location):** 2

Stream Depth (in.): ☐ 0 ☑ 1-3 ☐ 3-6 ☐ 6-12 ☐ 12-18 ☐ 18-24 ☐ 24-36 ☐ 36-48 ☐ 48-60 ☐ 60+

OHWM Indicators:
ABRUPT PLANT COMMUNITY CHANGE
SOIL CHARACTER CHANGES

Bank Height (ft.): (Looking Downstream)
Left: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+
Right: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+

Bank Slope (%): (Looking Downstream)
Left: 20
Right: 20

Qualitative Attributes

Water Appearance:
☑ Clear ☐ Turbid ☐ Sheen on Surface ☐ Floating Algalmats
☐ Slightly Turbid ☐ Very Turbid ☐ Greenish Color ☐ Obvious Surface Scum
☐ No Flow ☐ Other:

Stream Substrate %:
30% MUCK - organic
70% SILTS

Aquatic Habitats:
☐ Sand Bar ☐ Gravel Riffles ☐ In-stream Emergent Plants % Cover:
☐ Gravel Bar ☐ Deep Pools ☐ In-stream Submerged Plants % Cover:
☐ Mud Bar ☐ Bank Root Systems ☑ Fringing Wetlands[1]
☐ Undercut Banks ☑ Overhanging Trees/Shrubs ☐ None

[1]Characteristics: PFO

Aquatic Organisms Observed:
NONE

AECOM
95 State Road
Sagamore Beach, MA 02662

Tributary Condition:	☑ Natural	☐ Artificial (Man-Made)	☐ Manipulated
Channel Condition:	☐ Channelization/Braiding	☐ Unnatural Straightening	☐ Downcutting
	☐ Dikes/Berms	☐ Excessive Bank Erosion	☑ N/A

Habitat Characteristics, Aquatic, and Terrestrial Diversity Description:

Stream Quality: ☐ High ☐ Moderate ☑ Low

Comments: Diffuse

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Sagamore Beach, MA 02662

Photos

Photo Name: DE1AS301_053014_3SE.jpg Note: DE-1C-S301

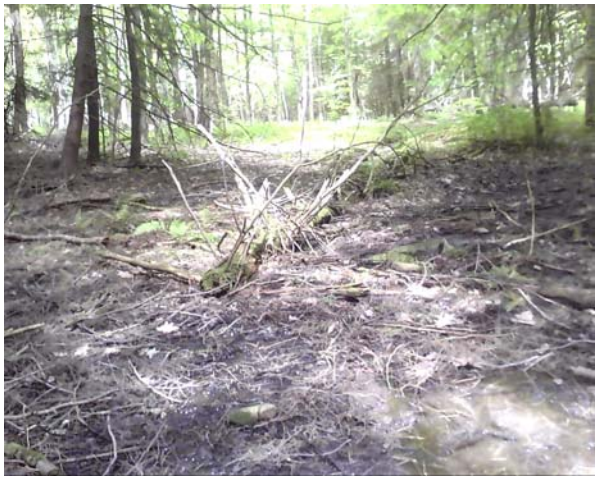

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Photo Name: DE1AS301_053014_1SW.jpg Note: DE-1C-S301

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Sagamore Beach, MA 02662

Waterbody Data Form

Feature ID: DE-1B-S263A
Feature Name:
Associated Wetland ID: DE-1B-W327

☑ Centerline ☐ Re-Route ☐ Access Road ☐ Ancillary Facility ☐ Alternative Route ☐ Other

Centerline ID:	Facility Description:
Primary Route	

Date:	Client/Project Name:	Latitude/Longitude:
2013/08/12	Constitution	42.423880 , -74.96536

Team:	State/County:	Quad Name:
1B	NY - Delaware	West Davenport

Logbook No.:	Logbook Page No.:	Tract No.:
3	12	NY-DE-141.006

Waterbody Type: ☐ Lake ☐ Pond ☐ Borrow Pit ☑ Stream ☐ Ag. Ditch ☐ Other

Stream Flow: ☐ Fast ☑ Moderate ☐ Slow ☐ Very Slow ☐ None

Flow Type: ☐ Perennial (Flows year round) ☑ Intermittent (Flows <3 months) ☐ None
☐ Seasonal (Continuous flow ≥ 3 months) ☐ Ephemeral (Flows only in response to rainfall)

Direction of Flow: ☐ N ☑ NE ☐ E ☐ SE ☐ S ☐ SW ☐ W ☐ NW ☐ No Flow

OHWM Width (ft.): 3

Sinuosity: ☐ Braided ☐ Meandering ☑ Straight ☐ N/A

Stream Width (ft.): 3 **Water Surface (At Crossing Location):** 1

Stream Depth (in.): ☐ 0 ☑ 1-3 ☐ 3-6 ☐ 6-12 ☐ 12-18 ☐ 18-24 ☐ 24-36 ☐ 36-48 ☐ 48-60 ☐ 60+

OHWM Indicators:
SCOUR

Bank Height (ft.): (Looking Downstream)
Left: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+
Right: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+

Bank Slope (%): (Looking Downstream)
Left: 50%
Right: 50%

Qualitative Attributes

Water Appearance:
☑ Clear ☐ Turbid ☐ Sheen on Surface ☐ Floating Algalmats
☐ Slightly Turbid ☐ Very Turbid ☐ Greenish Color ☐ Obvious Surface Scum
☐ No Flow ☐ Other:

Stream Substrate %:
30% COBBLES
70% SILTS

Aquatic Habitats:
☐ Sand Bar ☐ Gravel Riffles ☐ In-stream Emergent Plants % Cover:
☐ Gravel Bar ☐ Deep Pools ☐ In-stream Submerged Plants % Cover:
☐ Mud Bar ☐ Bank Root Systems ☑ Fringing Wetlands[1]
☐ Undercut Banks ☑ Overhanging Trees/Shrubs ☐ None

[1]Characteristics: PFO/PEM

Aquatic Organisms Observed:
NONE

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Tributary Condition:	☑ Natural	☐ Artificial (Man-Made)	☐ Manipulated
Channel Condition:	☐ Channelization/Braiding	☐ Unnatural Straightening	☐ Downcutting
	☐ Dikes/Berms	☐ Excessive Bank Erosion	☑ N/A

Habitat Characteristics, Aquatic, and Terrestrial Diversity Description:

Stream Quality: ☑ High ☐ Moderate ☐ Low

Comments:

AECOM
95 State Road
Sagamore Beach, MA 02662

Photos

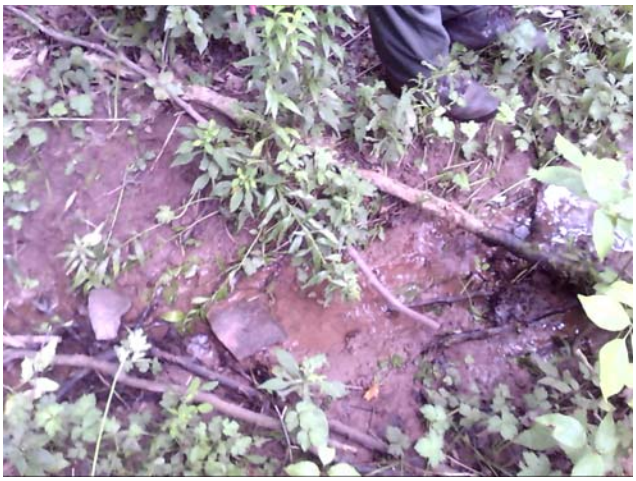

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Photo Name: DE1BS263A_081213_2NE.jpg Note: DE-1B-S263A

Photo Name: DE1BS263A_081213_1SW.jpg Note: DE-1B-S263A

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Waterbody Data Form

Feature ID: DE-1B-S263B
Feature Name:
Associated Wetland ID: DE-1B-W327

☑ Centerline ☐ Re-Route ☐ Access Road ☐ Ancillary Facility ☐ Alternative Route ☐ Other

Centerline ID:	Facility Description:
Primary Route	

Date:	Client/Project Name:	Latitude/Longitude:
2013/08/12	Constitution	42.423842 , -74.96527

Team:	State/County:	Quad Name:
1B	NY - Delaware	West Davenport

Logbook No.:	Logbook Page No.:	Tract No.:
3	13	NY-DE-141.006

Waterbody Type: ☐ Lake ☐ Pond ☐ Borrow Pit ☑ Stream ☐ Ag. Ditch ☐ Other

Stream Flow: ☐ Fast ☐ Moderate ☐ Slow ☐ Very Slow ☑ None

Flow Type: ☐ Perennial (Flows year round) ☑ Intermittent (Flows <3 months) ☐ None
☐ Seasonal (Continuous flow ≥ 3 months) ☐ Ephemeral (Flows only in response to rainfall)

Direction of Flow: ☐ N ☑ NE ☐ E ☐ SE ☐ S ☐ SW ☐ W ☐ NW ☐ No Flow

OHWM Width (ft.): 4

Sinuosity: ☐ Braided ☐ Meandering ☑ Straight ☐ N/A

Stream Width (ft.): 4 **Water Surface (At Crossing Location):** 0

Stream Depth (in.): ☑ 0 ☐ 1-3 ☐ 3-6 ☐ 6-12 ☐ 12-18 ☐ 18-24 ☐ 24-36 ☐ 36-48 ☐ 48-60 ☐ 60+

OHWM Indicators:
SCOUR

Bank Height (ft.): (Looking Downstream)
Left: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+
Right: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+

Bank Slope (%): (Looking Downstream)
Left: 30%
Right: 30%

Qualitative Attributes

Water Appearance:
☐ Clear ☐ Turbid ☐ Sheen on Surface ☐ Floating Algalmats
☐ Slightly Turbid ☐ Very Turbid ☐ Greenish Color ☐ Obvious Surface Scum
☑ No Flow ☐ Other:

Stream Substrate %:
50% COBBLES
50% SILTS

Aquatic Habitats:
☐ Sand Bar ☐ Gravel Riffles ☐ In-stream Emergent Plants % Cover: 20
☐ Gravel Bar ☐ Deep Pools ☐ In-stream Submerged Plants % Cover:
☐ Mud Bar ☐ Bank Root Systems ☑ Fringing Wetlands[1]
☐ Undercut Banks ☑ Overhanging Trees/Shrubs ☐ None

[1]Characteristics:

Aquatic Organisms Observed:
NONE

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Tributary Condition:	☑ Natural	☐ Artificial (Man-Made)	☐ Manipulated
Channel Condition:	☐ Channelization/Braiding	☐ Unnatural Straightening	☐ Downcutting
	☐ Dikes/Berms	☐ Excessive Bank Erosion	☑ N/A

Habitat Characteristics, Aquatic, and Terrestrial Diversity Description:

Stream Quality: ☑ High ☐ Moderate ☐ Low

Comments:

AECOM
95 State Road
Sagamore Beach, MA 02662

Photos

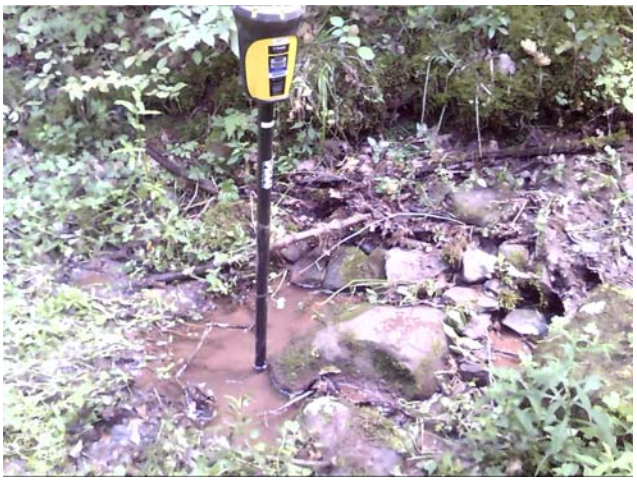

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Photo Name: DE1BS263B_081213_2NE.jpg Note: DE-1B-S263B

Photo Name: DE1BS263B_081213_1SW.jpg Note: DE-1B-S263B

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Waterbody Data Form

Feature ID: DE-1C-S273A
Feature Name:
Associated Wetland ID: DE-1C-W363

☑ Centerline ☐ Re-Route ☐ Access Road ☐ Ancillary Facility ☐ Alternative Route ☐ Other

Centerline ID:	Facility Description:
Primary Route	

Date:	Client/Project Name:	Latitude/Longitude:
2013/12/12	Constitution	42.374895 , -75.15183

Team:	State/County:	Quad Name:
1C	NY - Delaware	Franklin

Logbook No.:	Logbook Page No.:	Tract No.:
14	56	NY-DE-080.000

Waterbody Type: ☐ Lake ☐ Pond ☐ Borrow Pit ☑ Stream ☐ Ag. Ditch ☐ Other

Stream Flow: ☐ Fast ☐ Moderate ☑ Slow ☐ Very Slow ☐ None

Flow Type: ☑ Perennial (Flows year round) ☐ Intermittent (Flows <3 months) ☐ None
☐ Seasonal (Continuous flow ≥ 3 months) ☐ Ephemeral (Flows only in response to rainfall)

Direction of Flow: ☐ N ☐ NE ☐ E ☑ SE ☐ S ☐ SW ☐ W ☐ NW ☐ No Flow

OHWM Width (ft.): 3

Sinuosity: ☐ Braided ☐ Meandering ☑ Straight ☐ N/A

Stream Width (ft.): 5 **Water Surface (At Crossing Location):** 3

Stream Depth (in.): ☐ 0 ☐ 1-3 ☐ 3-6 ☑ 6-12 ☐ 12-18 ☐ 18-24 ☐ 24-36 ☐ 36-48 ☐ 48-60 ☐ 60+

OHWM Indicators:
BENT, MATTED OR MISSING VEGETATION
SCOUR

Bank Height (ft.): (Looking Downstream)
Left: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+
Right: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+

Bank Slope (%): (Looking Downstream)
Left: 1:1
Right: 1:1

Qualitative Attributes

Water Appearance:
☑ Clear ☐ Turbid ☐ Sheen on Surface ☐ Floating Algalmats
☐ Slightly Turbid ☐ Very Turbid ☐ Greenish Color ☐ Obvious Surface Scum
☐ No Flow ☐ Other:

Stream Substrate %:
60% MUCK
40% VEGETATION

Aquatic Habitats:
☐ Sand Bar ☐ Gravel Riffles ☑ In-stream Emergent Plants % Cover: 40
☐ Gravel Bar ☐ Deep Pools ☐ In-stream Submerged Plants % Cover:
☐ Mud Bar ☐ Bank Root Systems ☑ Fringing Wetlands[1]
☐ Undercut Banks ☐ Overhanging Trees/Shrubs ☐ None

[1]Characteristics: PSS

Aquatic Organisms Observed:
FROGS
INVERTEBRATES

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Sagamore Beach, MA 02662

Tributary Condition:	☑ Natural	☐ Artificial (Man-Made)	☐ Manipulated
Channel Condition:	☐ Channelization/Braiding	☐ Unnatural Straightening	☐ Downcutting
	☐ Dikes/Berms	☐ Excessive Bank Erosion	☑ N/A

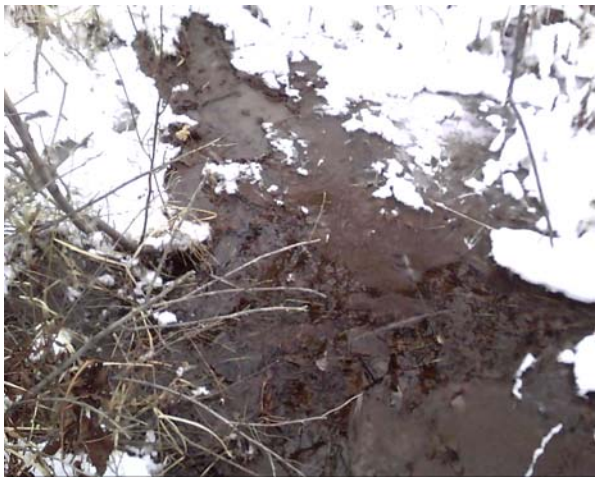
Habitat Characteristics, Aquatic, and Terrestrial Diversity Description:

Stream Quality: ☐ High ☑ Moderate ☐ Low

Comments:

AECOM
95 State Road
Sagamore Beach, MA 02662

Photos



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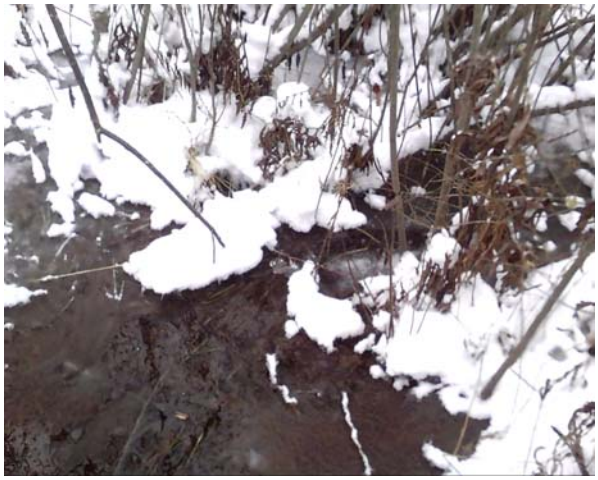

Photo Name: DE1CS273A_121213_2SE.jpg Note: DE-1C-S273A

Photo Name: DE1CS273A_121213_1NW.jpg Note: DE-1C-S273A

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Sagamore Beach, MA 02662

Waterbody Data Form

Feature ID: DE-1C-S274
Feature Name:
Associated Wetland ID: DE-1C-W329

☑ Centerline ☐ Re-Route ☐ Access Road ☐ Ancillary Facility ☐ Alternative Route ☐ Other

Centerline ID:	Facility Description:
Primary Route	

Date:	Client/Project Name:	Latitude/Longitude:
2013/12/12	Constitution	42.403596 , -75.09168

Team:	State/County:	Quad Name:
1C	- NY	Oneonta

Logbook No.:	Logbook Page No.:	Tract No.:
14	62	NY-DE-097.000

Waterbody Type: ☐ Lake ☐ Pond ☐ Borrow Pit ☑ Stream ☐ Ag. Ditch ☐ Other

Stream Flow: ☐ Fast ☐ Moderate ☑ Slow ☐ Very Slow ☐ None

Flow Type: ☐ Perennial (Flows year round) ☑ Intermittent (Flows <3 months) ☐ None
☐ Seasonal (Continuous flow ≥ 3 months) ☐ Ephemeral (Flows only in response to rainfall)

Direction of Flow: ☐ N ☐ NE ☐ E ☑ SE ☐ S ☐ SW ☐ W ☐ NW ☐ No Flow

OHWM Width (ft.): 2

Sinuosity: ☐ Braided ☐ Meandering ☑ Straight ☐ N/A

Stream Width (ft.): 2 **Water Surface (At Crossing Location):** 2

Stream Depth (in.): ☐ 0 ☑ 1-3 ☐ 3-6 ☐ 6-12 ☐ 12-18 ☐ 18-24 ☐ 24-36 ☐ 36-48 ☐ 48-60 ☐ 60+

OHWM Indicators:
CLEAR NATURAL LINE ON BANK
SCOUR

Bank Height (ft.): (Looking Downstream)
Left: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+
Right: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+

Bank Slope (%): (Looking Downstream)
Left: 1:1
Right: 1:1

Qualitative Attributes

Water Appearance:
☑ Clear ☐ Turbid ☐ Sheen on Surface ☐ Floating Algalmats
☐ Slightly Turbid ☐ Very Turbid ☐ Greenish Color ☐ Obvious Surface Scum
☐ No Flow ☐ Other:

Stream Substrate %:
30% COBBLES
30% GRAVEL
20% SANDS
20% SILTS

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Sagamore Beach, MA 02662

Aquatic Habitats:

- [ ] Sand Bar
- [ ] Gravel Bar
- [ ] Mud Bar
- [ ] Undercut Banks
- [ ] Gravel Riffles
- [ ] Deep Pools
- [ ] Bank Root Systems
- [ ] Overhanging Trees/Shrubs
- [ ] In-stream Emergent Plants % Cover:
- [ ] In-stream Submerged Plants % Cover:
- [x] Fringing Wetlands[1]
- [ ] None

[1]Characteristics: PFO

Aquatic Organisms Observed:

FROGS
INVERTEBRATES

Tributary Condition: [x] Natural [ ] Artificial (Man-Made) [ ] Manipulated

Channel Condition:

- [ ] Channelization/Braiding
- [ ] Dikes/Berms
- [ ] Unnatural Straightening
- [ ] Excessive Bank Erosion
- [ ] Downcutting
- [x] N/A

Habitat Characteristics, Aquatic, and Terrestrial Diversity Description:

Stream Quality: [ ] High [x] Moderate [ ] Low

Comments:

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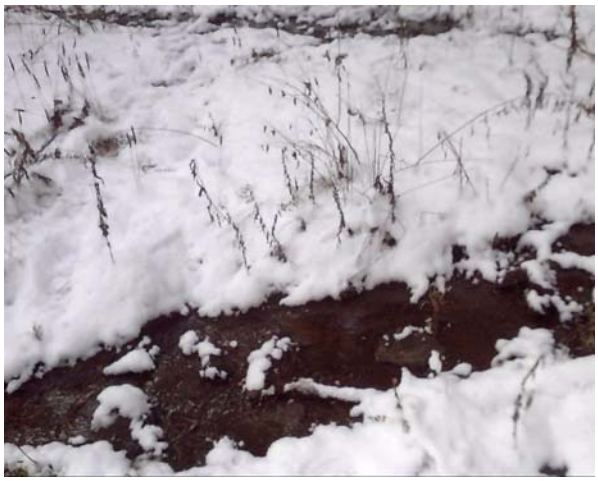
Sagamore Beach, MA 02662

Photos



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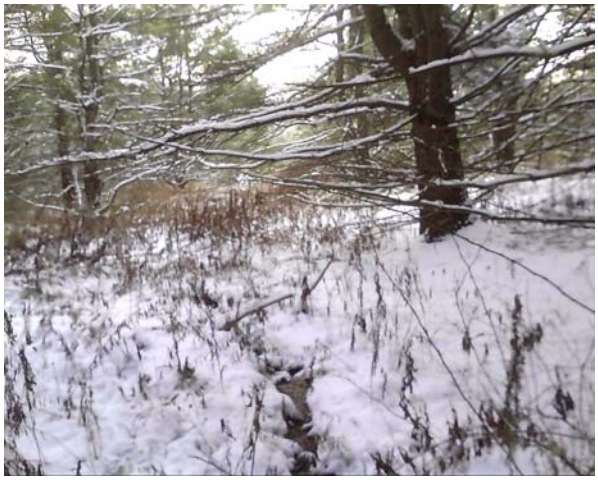

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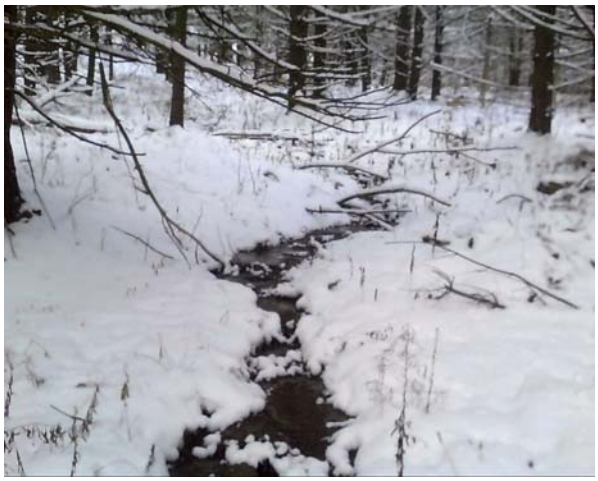

Photo Name: DE1CS274_121213_1NW.jpg Note: DE-1C-S274

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Sagamore Beach, MA 02662

Waterbody Data Form

Feature ID: DE-1C-S275
Feature Name:
Associated Wetland ID: DE-1C-W329

☑ Centerline ☐ Re-Route ☐ Access Road ☐ Ancillary Facility ☐ Alternative Route ☐ Other

Centerline ID: Primary Route		Facility Description:
Date: 2013/12/12	Client/Project Name: Constitution	Latitude/Longitude: 42.403065 , -75.09219
Team: 1C	State/County: - NY	Quad Name: Oneonta
Logbook No.: 14	Logbook Page No.: 63	Tract No.: NY-DE-097.000

Waterbody Type: ☐ Lake ☐ Pond ☐ Borrow Pit ☑ Stream ☐ Ag. Ditch ☐ Other

Stream Flow: ☐ Fast ☐ Moderate ☑ Slow ☐ Very Slow ☐ None

Flow Type: ☐ Perennial (Flows year round) ☑ Intermittent (Flows <3 months) ☐ None
☐ Seasonal (Continuous flow ≥ 3 months) ☐ Ephemeral (Flows only in response to rainfall)

Direction of Flow: ☐ N ☐ NE ☐ E ☐ SE ☑ S ☐ SW ☐ W ☐ NW ☐ No Flow

OHWM Width (ft.): 3

Sinuosity: ☐ Braided ☐ Meandering ☑ Straight ☐ N/A

Stream Width (ft.): 6 **Water Surface (At Crossing Location):** 3

Stream Depth (in.): ☐ 0 ☑ 1-3 ☐ 3-6 ☐ 6-12 ☐ 12-18 ☐ 18-24 ☐ 24-36 ☐ 36-48 ☐ 48-60 ☐ 60+

OHWM Indicators:
CLEAR NATURAL LINE ON BANK
SCOUR

Bank Height (ft.): (Looking Downstream)
Left: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+
Right: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+

Bank Slope (%): (Looking Downstream)
Left: 2:1
Right: 2:1

Qualitative Attributes

Water Appearance:
☑ Clear ☐ Turbid ☐ Sheen on Surface ☐ Floating Algalmats
☐ Slightly Turbid ☐ Very Turbid ☐ Greenish Color ☐ Obvious Surface Scum
☐ No Flow ☐ Other:

Stream Substrate %:
35% COBBLES
30% GRAVEL
10% SANDS
10% SANDS
15% VEGETATION

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Sagamore Beach, MA 02662

Aquatic Habitats:

- [ ] Sand Bar
- [ ] Gravel Bar
- [ ] Mud Bar
- [ ] Undercut Banks
- [ ] Gravel Riffles
- [ ] Deep Pools
- [ ] Bank Root Systems
- [ ] Overhanging Trees/Shrubs
- [ ] In-stream Emergent Plants % Cover:
- [ ] In-stream Submerged Plants % Cover:
- [x] Fringing Wetlands[1]
- [ ] None

[1]Characteristics: PFO/PEM

Aquatic Organisms Observed:

FROGS
INVERTEBRATES

Tributary Condition: [x] Natural [ ] Artificial (Man-Made) [ ] Manipulated

Channel Condition:

- [ ] Channelization/Braiding
- [ ] Dikes/Berms
- [ ] Unnatural Straightening
- [ ] Excessive Bank Erosion
- [ ] Downcutting
- [x] N/A

Habitat Characteristics, Aquatic, and Terrestrial Diversity Description:

Stream Quality: [ ] High [x] Moderate [ ] Low

Comments:

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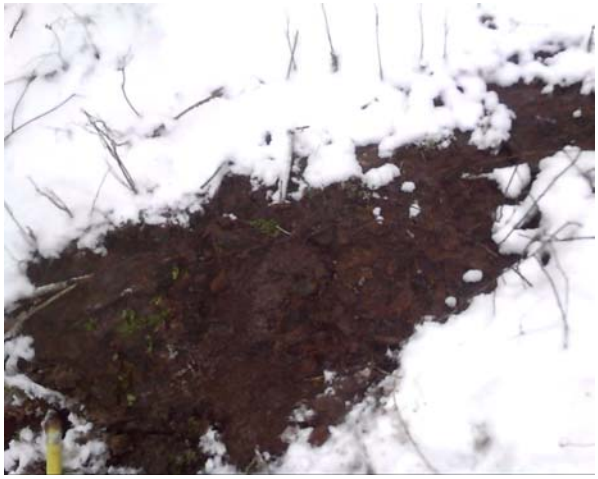
95 State Road
Sagamore Beach, MA 02662

Photos



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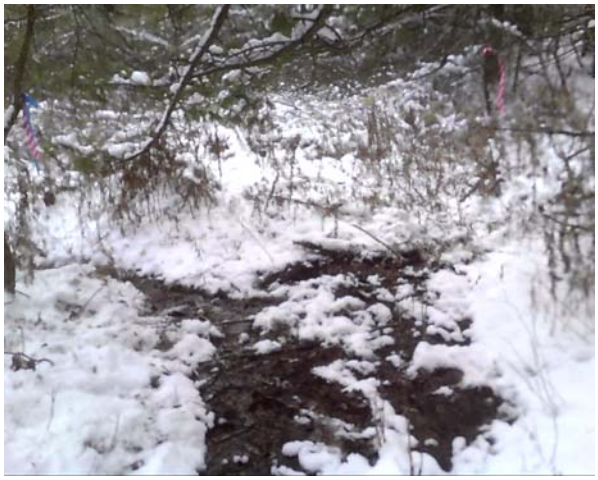

Photo Name: DE1CS275_121213_2S.jpg Note: DE-1C-S275

Photo Name: DE1CS275_121213_1N.jpg Note: DE-1C-S275

AECOM
95 State Road
Sagamore Beach, MA 02662

Waterbody Data Form

Feature ID: DE-1C-S283BR
Feature Name:
Associated Wetland ID: DE-1C-W338-BR

☐ Centerline ☐ Re-Route ☑ Access Road ☐ Ancillary Facility ☐ Alternative Route ☐ Other

Centerline ID:	Facility Description:
Primary Route	

Date:	Client/Project Name:	Latitude/Longitude:
2013/09/13	Constitution	42.286057 , -75.35866

Team:	State/County:	Quad Name:
1C	NY - Delaware	Unadilla

Logbook No.:	Logbook Page No.:	Tract No.:
12	62	UA-NY-DE-013.001.AR

Waterbody Type: ☐ Lake ☐ Pond ☐ Borrow Pit ☑ Stream ☐ Ag. Ditch ☐ Other

Stream Flow: ☐ Fast ☐ Moderate ☑ Slow ☐ Very Slow ☐ None

Flow Type: ☐ Perennial (Flows year round) ☐ Intermittent (Flows <3 months) ☐ None
☐ Seasonal (Continuous flow ≥ 3 months) ☑ Ephemeral (Flows only in response to rainfall)

Direction of Flow: ☐ N ☐ NE ☐ E ☐ SE ☑ S ☐ SW ☐ W ☐ NW ☐ No Flow

OHWM Width (ft.): 2

Sinuosity: ☐ Braided ☑ Meandering ☐ Straight ☐ N/A

Stream Width (ft.): 3 **Water Surface (At Crossing Location):** 1

Stream Depth (in.): ☐ 0 ☑ 1-3 ☐ 3-6 ☐ 6-12 ☐ 12-18 ☐ 18-24 ☐ 24-36 ☐ 36-48 ☐ 48-60 ☐ 60+

OHWM Indicators:
CLEAR NATURAL LINE ON BANK

Bank Height (ft.): (Looking Downstream)
Left: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+
Right: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+

Bank Slope (%): (Looking Downstream)
Left: 1:1
Right: 1:1

Qualitative Attributes

Water Appearance:
☑ Clear ☐ Turbid ☐ Sheen on Surface ☐ Floating Algalmats
☐ Slightly Turbid ☐ Very Turbid ☐ Greenish Color ☐ Obvious Surface Scum
☐ No Flow ☐ Other:

Stream Substrate %:
10% COBBLES
45% GRAVEL
45% SILTS

Aquatic Habitats:
☐ Sand Bar ☐ Gravel Riffles ☐ In-stream Emergent Plants % Cover:
☐ Gravel Bar ☐ Deep Pools ☐ In-stream Submerged Plants % Cover:
☐ Mud Bar ☐ Bank Root Systems ☑ Fringing Wetlands[1]
☐ Undercut Banks ☐ Overhanging Trees/Shrubs ☐ None

[1]Characteristics: PEM

Aquatic Organisms Observed:
FROGS

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95 State Road
Sagamore Beach, MA 02662

Tributary Condition:	☑ Natural	☐ Artificial (Man-Made)	☐ Manipulated
Channel Condition:	☐ Channelization/Braiding	☐ Unnatural Straightening	☐ Downcutting
	☐ Dikes/Berms	☐ Excessive Bank Erosion	☑ N/A

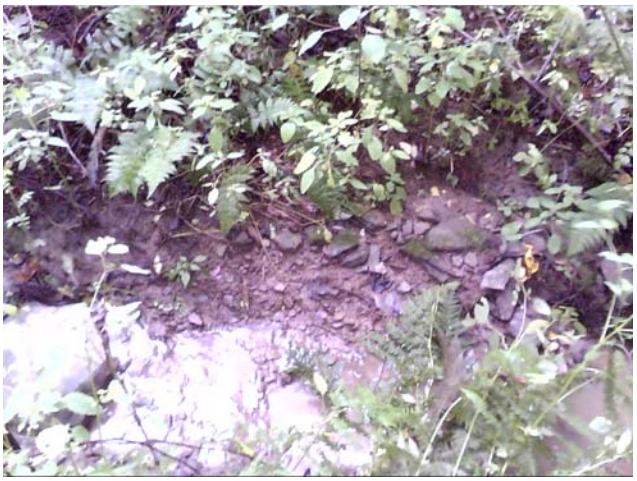
Habitat Characteristics, Aquatic, and Terrestrial Diversity Description:

Stream Quality: ☐ High ☑ Moderate ☐ Low

Comments:

AECOM
95 State Road
Sagamore Beach, MA 02662

Photos



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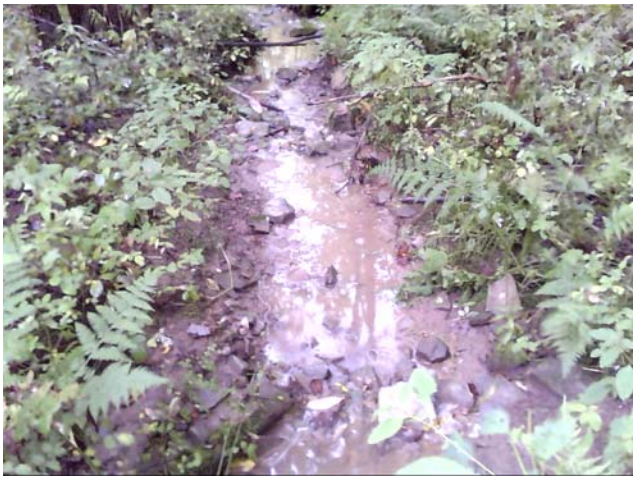

Photo Name: DE1CS283-BR_091313_2S.jpg Note: DE-1C-S283BR

Photo Name: DE1CS283-BR_091313_1N.jpg Note: DE-1C-S283BR

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Waterbody Data Form

Feature ID: DE-1C-S284BR
Feature Name:
Associated Wetland ID:

☐ Centerline ☐ Re-Route ☑ Access Road ☐ Ancillary Facility ☐ Alternative Route ☐ Other

Centerline ID:	Facility Description:
Primary Route	

Date:	Client/Project Name:	Latitude/Longitude:
2013/09/13	Constitution	42.286176 , -75.35776

Team:	State/County:	Quad Name:
1C	NY - Delaware	Unadilla

Logbook No.:	Logbook Page No.:	Tract No.:
12	66	UA-NY-DE-013.001.AR

Waterbody Type: ☐ Lake ☐ Pond ☐ Borrow Pit ☑ Stream ☐ Ag. Ditch ☐ Other

Stream Flow: ☐ Fast ☐ Moderate ☑ Slow ☐ Very Slow ☐ None

Flow Type: ☑ Perennial (Flows year round) ☐ Intermittent (Flows <3 months) ☐ None
☐ Seasonal (Continuous flow ≥ 3 months) ☐ Ephemeral (Flows only in response to rainfall)

Direction of Flow: ☐ N ☐ NE ☐ E ☐ SE ☐ S ☑ SW ☐ W ☐ NW ☐ No Flow

OHWM Width (ft.): 12

Sinuosity: ☐ Braided ☐ Meandering ☑ Straight ☐ N/A

Stream Width (ft.): 16 **Water Surface (At Crossing Location):** 10

Stream Depth (in.): ☐ 0 ☐ 1-3 ☑ 3-6 ☐ 6-12 ☐ 12-18 ☐ 18-24 ☐ 24-36 ☐ 36-48 ☐ 48-60 ☐ 60+

OHWM Indicators:
CLEAR NATURAL LINE ON BANK
SCOUR

Bank Height (ft.): (Looking Downstream)
Left: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+
Right: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+

Bank Slope (%): (Looking Downstream)
Left: 1:1
Right: 2:1

Qualitative Attributes

Water Appearance:
☑ Clear ☐ Turbid ☐ Sheen on Surface ☐ Floating Algalmats
☐ Slightly Turbid ☐ Very Turbid ☐ Greenish Color ☐ Obvious Surface Scum
☐ No Flow ☐ Other:

Stream Substrate %:
65% COBBLES
20% GRAVEL
5% SANDS
10% SILTS

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Aquatic Habitats:

- [ ] Sand Bar
- [ ] Gravel Bar
- [ ] Mud Bar
- [x] Undercut Banks
- [ ] Gravel Riffles
- [ ] Deep Pools
- [x] Bank Root Systems
- [ ] Overhanging Trees/Shrubs
- [ ] In-stream Emergent Plants % Cover:
- [ ] In-stream Submerged Plants % Cover:
- [ ] Fringing Wetlands[1]
- [ ] None

[1]Characteristics:

Aquatic Organisms Observed:

FROGS
INVERTEBRATES

Tributary Condition: [x] Natural [ ] Artificial (Man-Made) [ ] Manipulated

Channel Condition:

- [ ] Channelization/Braiding
- [ ] Dikes/Berms
- [ ] Unnatural Straightening
- [ ] Excessive Bank Erosion
- [ ] Downcutting
- [x] N/A

Habitat Characteristics, Aquatic, and Terrestrial Diversity Description:

Stream Quality: [ ] High [x] Moderate [ ] Low

Comments:

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Photos

Photo Name: DE1CS284-BR_091313_3NW.jpg Note: DE-1C-S284BR

Photo Name: DE1CS284-BR_091313_2SW.jpg Note: DE-1C-S284BR

Photo Name: DE1CS284-BR_091313_1NE.jpg Note: DE-1C-S284BR

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Waterbody Data Form

Feature ID: DE-1C-S287
Feature Name:
Associated Wetland ID: DE-1D-W281

☑ Centerline ☐ Re-Route ☐ Access Road ☐ Ancillary Facility ☐ Alternative Route ☐ Other

Centerline ID:	Facility Description:	
Date: 2014/04/24	Client/Project Name: Constitution	Latitude/Longitude: 42.362419 , -75.18722
Team: 1C	State/County: NY - Delaware	Quad Name: Franklin
Logbook No.: 15	Logbook Page No.: 8	Tract No.: NY-DE-071.000

Waterbody Type: ☐ Lake ☐ Pond ☐ Borrow Pit ☑ Stream ☐ Ag. Ditch ☐ Other

Stream Flow: ☐ Fast ☐ Moderate ☐ Slow ☐ Very Slow ☑ None

Flow Type: ☐ Perennial (Flows year round) ☐ Intermittent (Flows <3 months) ☐ None
☐ Seasonal (Continuous flow ≥ 3 months) ☑ Ephemeral (Flows only in response to rainfall)

Direction of Flow: ☐ N ☐ NE ☐ E ☑ SE ☐ S ☐ SW ☐ W ☐ NW ☐ No Flow

OHWM Width (ft.): 30

Sinuosity: ☐ Braided ☐ Meandering ☑ Straight ☐ N/A

Stream Width (ft.): 32 **Water Surface (At Crossing Location):** 0

Stream Depth (in.): ☑ 0 ☐ 1-3 ☐ 3-6 ☐ 6-12 ☐ 12-18 ☐ 18-24 ☐ 24-36 ☐ 36-48 ☐ 48-60 ☐ 60+

OHWM Indicators:
BENT, MATTED OR MISSING VEGETATION
LEAF LITTER DISTURBED
SCOUR

Bank Height (ft.): (Looking Downstream)
Left: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+
Right: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+

Bank Slope (%): (Looking Downstream)
Left: 1:1
Right: 1:1

Qualitative Attributes

Water Appearance:
☐ Clear ☐ Turbid ☐ Sheen on Surface ☐ Floating Algalmats
☐ Slightly Turbid ☐ Very Turbid ☐ Greenish Color ☐ Obvious Surface Scum
☑ No Flow ☐ Other:

Stream Substrate %:
10% OTHER - stone
10% SILTS
80% VEGETATION

Aquatic Habitats:
☐ Sand Bar ☐ Gravel Riffles ☐ In-stream Emergent Plants % Cover:
☐ Gravel Bar ☐ Deep Pools ☐ In-stream Submerged Plants % Cover:
☐ Mud Bar ☐ Bank Root Systems ☐ Fringing Wetlands[1]
☐ Undercut Banks ☐ Overhanging Trees/Shrubs ☑ None

[1]Characteristics: PFO

Aquatic Organisms Observed:
NONE

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Tributary Condition:	☑ Natural	☐ Artificial (Man-Made)	☐ Manipulated
Channel Condition:	☐ Channelization/Braiding	☐ Unnatural Straightening	☐ Downcutting
	☐ Dikes/Berms	☐ Excessive Bank Erosion	☑ N/A

Habitat Characteristics, Aquatic, and Terrestrial Diversity Description:

Stream Quality: ☐ High ☑ Moderate ☐ Low

Comments: Braided stream channel that is not well defined

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Sagamore Beach, MA 02662

Photos

Photo Name: DE1CS287_042414_3SW.jpg Note: DE-1C-S287

Photo Name: DE1CS287_042414_2SE.jpg Note: DE-1C-S287

Photo Name: DE1CS287_042414_1NW.jpg Note: DE-1C-S287

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Sagamore Beach, MA 02662

Waterbody Data Form

Feature ID: DE-1C-S289
Feature Name:
Associated Wetland ID: DE-1M-W154

☑ Centerline ☐ Re-Route ☐ Access Road ☐ Ancillary Facility ☐ Alternative Route ☐ Other

Centerline ID:	Facility Description:

Date:	Client/Project Name:	Latitude/Longitude:
2014/05/05	Constitution	42.422618 , -74.98903

Team:	State/County:	Quad Name:
1C	NY - Delaware	West Davenport

Logbook No.:	Logbook Page No.:	Tract No.:
15	56	NY-DE-131.000

Waterbody Type: ☐ Lake ☐ Pond ☐ Borrow Pit ☑ Stream ☐ Ag. Ditch ☐ Other

Stream Flow: ☐ Fast ☐ Moderate ☑ Slow ☐ Very Slow ☐ None

Flow Type: ☐ Perennial (Flows year round) ☑ Intermittent (Flows <3 months) ☐ None
☐ Seasonal (Continuous flow ≥ 3 months) ☐ Ephemeral (Flows only in response to rainfall)

Direction of Flow: ☐ N ☐ NE ☐ E ☐ SE ☐ S ☐ SW ☐ W ☑ NW ☐ No Flow

OHWM Width (ft.): 1

Sinuosity: ☐ Braided ☐ Meandering ☑ Straight ☐ N/A

Stream Width (ft.): 2 **Water Surface (At Crossing Location):** 1

Stream Depth (in.): ☐ 0 ☑ 1-3 ☐ 3-6 ☐ 6-12 ☐ 12-18 ☐ 18-24 ☐ 24-36 ☐ 36-48 ☐ 48-60 ☐ 60+

OHWM Indicators:
LEAF LITTER DISTURBED
SCOUR

Bank Height (ft.): (Looking Downstream)
Left: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+
Right: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+

Bank Slope (%): (Looking Downstream)
Left: 3:1
Right: 3:1

Qualitative Attributes

Water Appearance:
☑ Clear ☐ Turbid ☐ Sheen on Surface ☐ Floating Algalmats
☐ Slightly Turbid ☐ Very Turbid ☐ Greenish Color ☐ Obvious Surface Scum
☐ No Flow ☐ Other:

Stream Substrate %:
20% BEDROCK
30% GRAVEL
35% OTHER - Stones
15% SILTS

Aquatic Habitats:
☐ Sand Bar ☐ Gravel Riffles ☐ In-stream Emergent Plants % Cover:
☐ Gravel Bar ☐ Deep Pools ☐ In-stream Submerged Plants % Cover:
☐ Mud Bar ☐ Bank Root Systems ☑ Fringing Wetlands[1]
☐ Undercut Banks ☐ Overhanging Trees/Shrubs ☐ None

[1]Characteristics: PFO

Aquatic Organisms Observed:
NONE

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Tributary Condition:	☐ Natural	☐ Artificial (Man-Made)	☑ Manipulated
Channel Condition:	☐ Channelization/Braiding	☐ Unnatural Straightening	☐ Downcutting
	☐ Dikes/Berms	☐ Excessive Bank Erosion	☑ N/A

Habitat Characteristics, Aquatic, and Terrestrial Diversity Description:

Stream Quality: ☐ High ☐ Moderate ☑ Low

Comments: stream in old road

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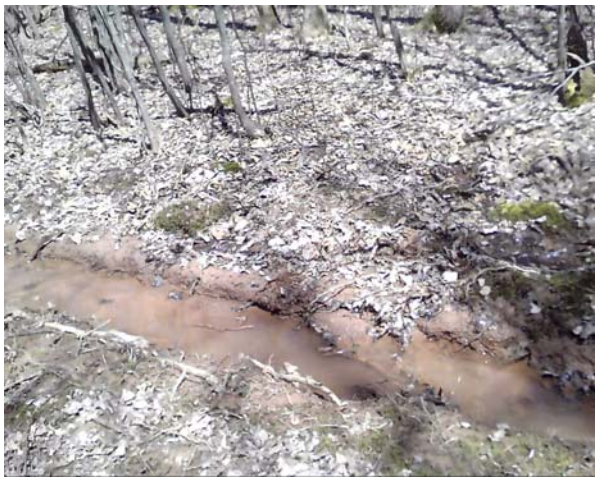
Photos



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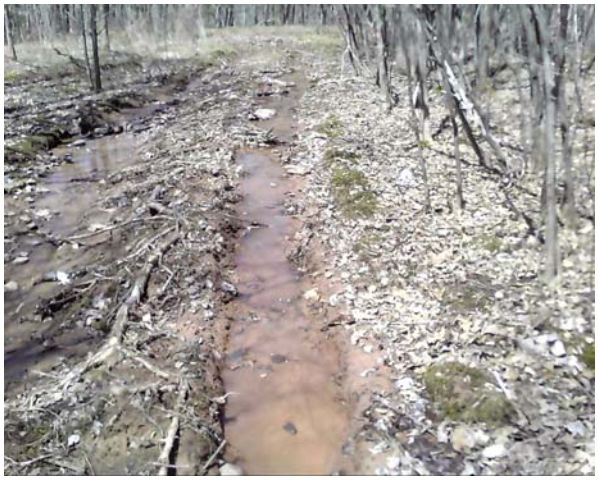

Photo Name: DE1CS289_050514_2NW.jpg Note: DE-1C-S289

Photo Name: DE1CS289_050514_1S.jpg Note: DE-1C-S289

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Waterbody Data Form

Feature ID: DE-1C-S290
Feature Name:
Associated Wetland ID: DE-1C-W376

☑ Centerline ☐ Re-Route ☐ Access Road ☐ Ancillary Facility ☐ Alternative Route ☐ Other

Centerline ID:	Facility Description:	
Date: 2014/05/06	Client/Project Name: Constitution	Latitude/Longitude: 42.422111 , -74.99008
Team: 1C	State/County: NY - Delaware	Quad Name: West Davenport
Logbook No.: 15	Logbook Page No.: 62	Tract No.: NY-DE-131.000

Waterbody Type: ☐ Lake ☐ Pond ☐ Borrow Pit ☑ Stream ☐ Ag. Ditch ☐ Other

Stream Flow: ☐ Fast ☐ Moderate ☐ Slow ☑ Very Slow ☐ None

Flow Type: ☐ Perennial (Flows year round) ☐ Intermittent (Flows <3 months) ☐ None
☐ Seasonal (Continuous flow ≥ 3 months) ☑ Ephemeral (Flows only in response to rainfall)

Direction of Flow: ☐ N ☐ NE ☐ E ☐ SE ☐ S ☐ SW ☑ W ☐ NW ☐ No Flow

OHWM Width (ft.): 2

Sinuosity: ☐ Braided ☑ Meandering ☐ Straight ☐ N/A

Stream Width (ft.): 2.5 **Water Surface (At Crossing Location):** 0.75

Stream Depth (in.): ☐ 0 ☑ 1-3 ☐ 3-6 ☐ 6-12 ☐ 12-18 ☐ 18-24 ☐ 24-36 ☐ 36-48 ☐ 48-60 ☐ 60+

OHWM Indicators:
LEAF LITTER DISTURBED
SCOUR

Bank Height (ft.): (Looking Downstream)
Left: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+
Right: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+

Bank Slope (%): (Looking Downstream)
Left: 4:1
Right: 4:1

Qualitative Attributes

Water Appearance:
☑ Clear ☐ Turbid ☐ Sheen on Surface ☐ Floating Algalmats
☐ Slightly Turbid ☐ Very Turbid ☐ Greenish Color ☐ Obvious Surface Scum
☐ No Flow ☐ Other:

Stream Substrate %:
20% COBBLES
20% GRAVEL
60% OTHER - Loam

Aquatic Habitats:
☐ Sand Bar ☐ Gravel Riffles ☐ In-stream Emergent Plants % Cover:
☐ Gravel Bar ☐ Deep Pools ☐ In-stream Submerged Plants % Cover:
☐ Mud Bar ☐ Bank Root Systems ☑ Fringing Wetlands[1]
☐ Undercut Banks ☐ Overhanging Trees/Shrubs ☐ None

[1]Characteristics: PFO

Aquatic Organisms Observed:
NONE

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Tributary Condition:	☑ Natural	☐ Artificial (Man-Made)	☐ Manipulated
Channel Condition:	☐ Channelization/Braiding	☐ Unnatural Straightening	☐ Downcutting
	☐ Dikes/Berms	☐ Excessive Bank Erosion	☑ N/A

Habitat Characteristics, Aquatic, and Terrestrial Diversity Description:

Stream Quality: ☐ High ☐ Moderate ☑ Low

Comments:

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Photos

Photo Name: DE1CS290_050614_3N.jpg Note: DE-1C-S290

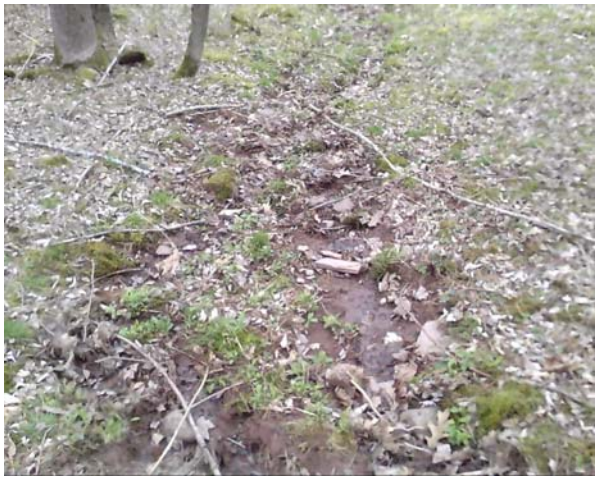

Photo Name: DE1CS290_050614_2W.jpg Note: DE-1C-S290

Photo Name: DE1CS290_050614_1E.jpg Note: DE-1C-S290

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Waterbody Data Form

Feature ID: DE-1C-S303
Feature Name:
Associated Wetland ID:

☑ Centerline ☐ Re-Route ☐ Access Road ☐ Ancillary Facility ☐ Alternative Route ☐ Other

Centerline ID:	Facility Description:	
Date: 2014/06/04	Client/Project Name: Constitution	Latitude/Longitude: 42.350208 , -75.24490
Team:	State/County: NY - Delaware	Quad Name: Franklin
Logbook No.: 15	Logbook Page No.: 128	Tract No.: NY-DE-049.000

Waterbody Type: ☐ Lake ☐ Pond ☐ Borrow Pit ☐ Stream ☐ Ag. Ditch ☑ Other Roadside ditch

Stream Flow: ☐ Fast ☐ Moderate ☑ Slow ☐ Very Slow ☐ None

Flow Type: ☐ Perennial (Flows year round) ☑ Intermittent (Flows <3 months) ☐ None
☐ Seasonal (Continuous flow ≥ 3 months) ☐ Ephemeral (Flows only in response to rainfall)

Direction of Flow: ☐ N ☐ NE ☐ E ☐ SE ☐ S ☐ SW ☑ W ☐ NW ☐ No Flow

OHWM Width (ft.): 3

Sinuosity: ☐ Braided ☐ Meandering ☑ Straight ☐ N/A

Stream Width (ft.): 5 **Water Surface (At Crossing Location):** 2

Stream Depth (in.): ☐ 0 ☑ 1-3 ☐ 3-6 ☐ 6-12 ☐ 12-18 ☐ 18-24 ☐ 24-36 ☐ 36-48 ☐ 48-60 ☐ 60+

OHWM Indicators:
CLEAR NATURAL LINE ON BANK
LEAF LITTER DISTURBED
SCOUR

Bank Height (ft.): (Looking Downstream)
Left: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+
Right: ☐ 0-2 ☑ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+

Bank Slope (%): (Looking Downstream)
Left: 3:1
Right: 3:1

Qualitative Attributes

Water Appearance:
☑ Clear ☐ Turbid ☐ Sheen on Surface ☐ Floating Algalmats
☐ Slightly Turbid ☐ Very Turbid ☐ Greenish Color ☐ Obvious Surface Scum
☐ No Flow ☐ Other:

Stream Substrate %:
30% GRAVEL
50% OTHER - Stone
15% SANDS
5% SILTS

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Aquatic Habitats:

- [ ] Sand Bar
- [ ] Gravel Bar
- [ ] Mud Bar
- [ ] Undercut Banks
- [ ] Gravel Riffles
- [ ] Deep Pools
- [ ] Bank Root Systems
- [ ] Overhanging Trees/Shrubs
- [ ] In-stream Emergent Plants % Cover:
- [ ] In-stream Submerged Plants % Cover:
- [x] Fringing Wetlands[1]
- [ ] None

[1]Characteristics:

Aquatic Organisms Observed:

NONE

Tributary Condition: [ ] Natural [x] Artificial (Man-Made) [ ] Manipulated

Channel Condition:

- [ ] Channelization/Braiding
- [ ] Dikes/Berms
- [ ] Unnatural Straightening
- [ ] Excessive Bank Erosion
- [ ] Downcutting
- [x] N/A

Habitat Characteristics, Aquatic, and Terrestrial Diversity Description:

Ditch

Stream Quality: [ ] High [ ] Moderate [x] Low

Comments:

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Photos

Photo Name: DE1CS303_060414_1E.jpg Note: DE-1C-S303

Photo Name: DE1CS303_060414_2W.jpg Note: DE-1C-S303

Photo Name: DE1CS303_060414_3N.jpg Note: DE-1C-S303

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Waterbody Data Form

Feature ID: DE-1G-S005
Feature Name:
Associated Wetland ID:

☑ Centerline ☐ Re-Route ☐ Access Road ☐ Ancillary Facility ☐ Alternative Route ☐ Other

Centerline ID: Primary Route		Facility Description:
Date: 2012/07/20	Client/Project Name: Constitution	Latitude/Longitude: 42.504018 , -74.72490
Team: 1G	State/County: NY - Delaware	Quad Name: Charlotteville
Logbook No.: 2	Logbook Page No.: 66	Tract No.: NY-DE-231.000

Waterbody Type: ☐ Lake ☐ Pond ☐ Borrow Pit ☑ Stream ☐ Ag. Ditch ☐ Other

Stream Flow: ☐ Fast ☐ Moderate ☐ Slow ☐ Very Slow ☑ None

Flow Type: ☐ Perennial (Flows year round) ☑ Intermittent (Flows <3 months) ☐ None
☐ Seasonal (Continuous flow ≥ 3 months) ☐ Ephemeral (Flows only in response to rainfall)

Direction of Flow: ☑ N ☐ NE ☐ E ☐ SE ☐ S ☐ SW ☐ W ☐ NW ☐ No Flow

OHWM Width (ft.): 10

Sinuosity: ☐ Braided ☑ Meandering ☐ Straight ☐ N/A

Stream Width (ft.): 20 **Water Surface (At Crossing Location):** 0

Stream Depth (in.): ☑ 0 ☐ 1-3 ☐ 3-6 ☐ 6-12 ☐ 12-18 ☐ 18-24 ☐ 24-36 ☐ 36-48 ☐ 48-60 ☐ 60+

OHWM Indicators:
SHELVING

Bank Height (ft.): (Looking Downstream)	Left:	☑ 0-2	☐ 2-4	☐ 4-6	☐ 6-8	☐ 8+
	Right:	☑ 0-2	☐ 2-4	☐ 4-6	☐ 6-8	☐ 8+
Bank Slope: (Looking Downstream)	Left:	☐ 4:1	☐ 3:1	☐ 2:1	☐ 1:1	☑ Vertical
	Right:	☐ 4:1	☐ 3:1	☐ 2:1	☐ 1:1	☑ Vertical

Qualitative Attributes

Water Appearance:
☐ Clear ☐ Turbid ☐ Sheen on Surface ☐ Floating Algalmats
☐ Slightly Turbid ☐ Very Turbid ☐ Greenish Color ☐ Obvious Surface Scum
☑ No Flow ☐ Other:

Stream Substrate %:
60% BEDROCK -
40% COBBLES -

Aquatic Habitats:
☐ Sand Bar ☑ Gravel Riffles ☐ In-stream Emergent Plants % Cover: 0
☐ Gravel Bar ☑ Deep Pools ☐ In-stream Submerged Plants % Cover: 0
☐ Mud Bar ☑ Bank Root Systems ☐ Fringing Wetlands[1]
☐ Undercut Banks ☑ Overhanging Trees/Shrubs ☐ None

[1]Characteristics:

Aquatic Organisms Observed:
FROGS

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Tributary Condition:	☑ Natural	☐ Artificial (Man-Made)	☐ Manipulated
Channel Condition:	☐ Channelization/Braiding	☐ Unnatural Straightening	☐ Downcutting
	☐ Dikes/Berms	☐ Excessive Bank Erosion	☑ N/A

Habitat Characteristics, Aquatic, and Terrestrial Diversity Description:

Stream Quality: ☑ High ☐ Moderate ☐ Low

Comments:

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Sagamore Beach, MA 02662

Photos

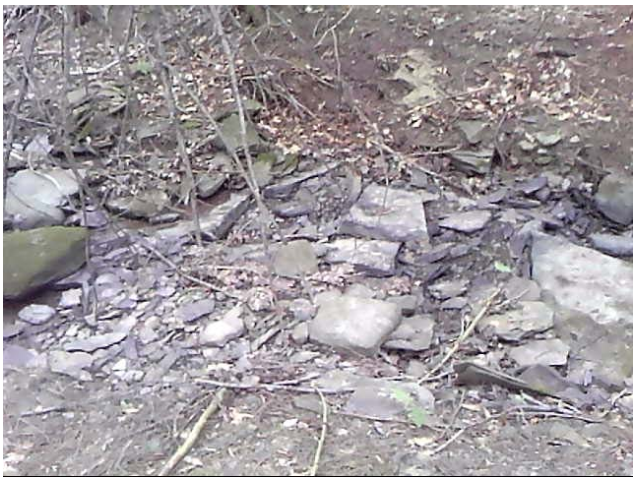

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Photo Name: DE1G_S005_20120720_2N.jpg Note: DE-1G-S005

Photo Name: DE1G_S005_20120720_1S.jpg Note: DE-1G-S005

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Waterbody Data Form

Feature ID: DE-1G-S201A
Feature Name:
Associated Wetland ID:

☑ Centerline ☐ Re-Route ☐ Access Road ☐ Ancillary Facility ☐ Alternative Route ☐ Other

Centerline ID:		Facility Description: TRIB TO DE-1I-S201
Date: 2013/03/29	Client/Project Name: Constitution	Latitude/Longitude: -74.90186 , 42.434071
Team: 1G	State/County: NY - Delaware	Quad Name: West Davenport
Logbook No.: 7	Logbook Page No.: 68	Tract No.: UA-NY-DE-158.003

Waterbody Type: ☐ Lake ☐ Pond ☐ Borrow Pit ☑ Stream ☐ Ag. Ditch ☐ Other

Stream Flow: ☐ Fast ☐ Moderate ☐ Slow ☑ Very Slow ☐ None

Flow Type: ☐ Perennial (Flows year round) ☑ Intermittent (Flows <3 months) ☐ None
☐ Seasonal (Continuous flow ≥ 3 months) ☐ Ephemeral (Flows only in response to rainfall)

Direction of Flow: ☐ N ☐ NE ☐ E ☐ SE ☐ S ☐ SW ☐ W ☑ NW ☐ No Flow

OHWM Width (ft.): 9

Sinuosity: ☐ Braided ☐ Meandering ☑ Straight ☐ N/A

Stream Width (ft.): 10 **Water Surface (At Crossing Location):** 3

Stream Depth (in.): ☐ 0 ☑ 1-3 ☐ 3-6 ☐ 6-12 ☐ 12-18 ☐ 18-24 ☐ 24-36 ☐ 36-48 ☐ 48-60 ☐ 60+

OHWM Indicators:
CLEAR NATURAL LINE ON BANK
WRACK LINE

Bank Height (ft.): (Looking Downstream)
Left: ☐ 0-2 ☑ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+
Right: ☐ 0-2 ☑ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+

Bank Slope (%): (Looking Downstream)
Left: 100%
Right: 60%

Qualitative Attributes

Water Appearance:
☑ Clear ☐ Turbid ☐ Sheen on Surface ☐ Floating Algalmats
☐ Slightly Turbid ☐ Very Turbid ☐ Greenish Color ☐ Obvious Surface Scum
☐ No Flow ☐ Other:

Stream Substrate %:
70% COBBLES
20% GRAVEL
10% SILTS

Aquatic Habitats:
☐ Sand Bar ☐ Gravel Riffles ☐ In-stream Emergent Plants % Cover:
☐ Gravel Bar ☐ Deep Pools ☐ In-stream Submerged Plants % Cover:
☐ Mud Bar ☐ Bank Root Systems ☐ Fringing Wetlands[1]
☐ Undercut Banks ☑ Overhanging Trees/Shrubs ☐ None

[1]Characteristics:

Aquatic Organisms Observed:
INVERTEBRATES

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Sagamore Beach, MA 02662

Tributary Condition:	☑ Natural	☐ Artificial (Man-Made)	☐ Manipulated
Channel Condition:	☐ Channelization/Braiding	☐ Unnatural Straightening	☐ Downcutting
	☐ Dikes/Berms	☐ Excessive Bank Erosion	☑ N/A

Habitat Characteristics, Aquatic, and Terrestrial Diversity Description:

Stream Quality: ☐ High ☑ Moderate ☐ Low

Comments: TRIBUTARY TO DE-1I-S201

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Sagamore Beach, MA 02662

Photos

Photo Name: DE1GS201A_032919_3W.jpg Note: DE-1G-S201A

Photo Name: DE1GS201A_032919_2NW.jpg Note: DE-1G-S201A

Photo Name: DE1GS201A_032919_1SE.jpg Note: DE-1G-S201A

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Sagamore Beach, MA 02662

Waterbody Data Form

Feature ID: DE-1I-S201
Feature Name:
Associated Wetland ID:

☑ Centerline ☐ Re-Route ☐ Access Road ☐ Ancillary Facility ☐ Alternative Route ☐ Other

Centerline ID:	Facility Description:	
Date: 2013/03/29	Client/Project Name: Constitution	Latitude/Longitude: -74.90211 , 42.433911
Team: 1I	State/County: NY - Delaware	Quad Name: West Davenport
Logbook No.: 1	Logbook Page No.: 90	Tract No.: UA-NY-DE-158.003

Waterbody Type: ☐ Lake ☐ Pond ☐ Borrow Pit ☑ Stream ☐ Ag. Ditch ☐ Other

Stream Flow: ☑ Fast ☐ Moderate ☐ Slow ☐ Very Slow ☐ None

Flow Type: ☑ Perennial (Flows year round) ☐ Intermittent (Flows <3 months) ☐ None
☐ Seasonal (Continuous flow ≥ 3 months) ☐ Ephemeral (Flows only in response to rainfall)

Direction of Flow: ☐ N ☐ NE ☐ E ☐ SE ☐ S ☐ SW ☐ W ☑ NW ☐ No Flow

OHWM Width (ft.): 75

Sinuosity: ☐ Braided ☑ Meandering ☐ Straight ☐ N/A

Stream Width (ft.): 75 **Water Surface (At Crossing Location):** 75

Stream Depth (in.): ☐ 0 ☐ 1-3 ☐ 3-6 ☐ 6-12 ☑ 12-18 ☐ 18-24 ☐ 24-36 ☐ 36-48 ☐ 48-60 ☐ 60+

OHWM Indicators:
BENT, MATTED OR MISSING VEGETATION
SCOUR

Bank Height (ft.): (Looking Downstream)
Left: ☐ 0-2 ☑ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+
Right: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+

Bank Slope (%): (Looking Downstream)
Left: VERTICAL
Right: 5%

Qualitative Attributes

Water Appearance:
☑ Clear ☐ Turbid ☐ Sheen on Surface ☐ Floating Algalmats
☐ Slightly Turbid ☐ Very Turbid ☐ Greenish Color ☐ Obvious Surface Scum
☐ No Flow ☐ Other:

Stream Substrate %:
100% COBBLES

Aquatic Habitats:
☐ Sand Bar ☐ Gravel Riffles ☐ In-stream Emergent Plants % Cover:
☐ Gravel Bar ☐ Deep Pools ☐ In-stream Submerged Plants % Cover:
☐ Mud Bar ☑ Bank Root Systems ☐ Fringing Wetlands[1]
☑ Undercut Banks ☑ Overhanging Trees/Shrubs ☐ None

[1]Characteristics:

Aquatic Organisms Observed:
INVERTEBRATES

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Tributary Condition:	☑ Natural	☐ Artificial (Man-Made)	☐ Manipulated
Channel Condition:	☐ Channelization/Braiding	☐ Unnatural Straightening	☐ Downcutting
	☐ Dikes/Berms	☐ Excessive Bank Erosion	☑ N/A

Habitat Characteristics, Aquatic, and Terrestrial Diversity Description:

Stream Quality: ☑ High ☐ Moderate ☐ Low

Comments:

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95 State Road
Sagamore Beach, MA 02662

Photos

Photo Name: DE1IS201_032913_3SW.jpg Note: DE-1I-S201

Photo Name: DE1IS201_032913_2NW.jpg Note: DE-1I-S201

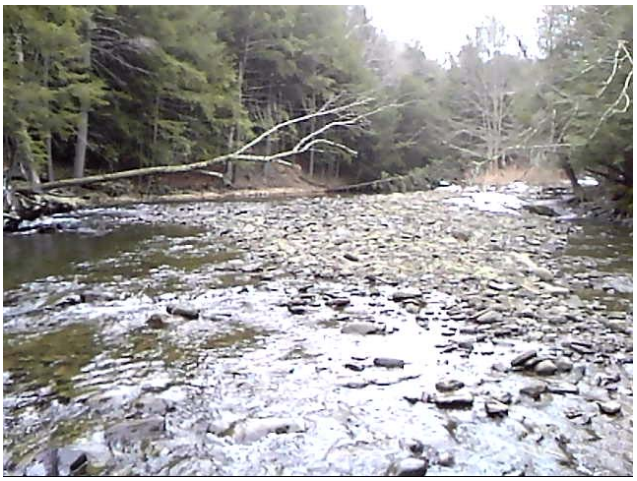

Photo Name: DE1IS201_032913_1SE.jpg Note: DE-1I-S201

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Sagamore Beach, MA 02662

Waterbody Data Form

Feature ID: DE-1L-S210B
Feature Name:
Associated Wetland ID:

☑ Centerline ☐ Re-Route ☐ Access Road ☐ Ancillary Facility ☐ Alternative Route ☐ Other

Centerline ID: Primary Route		Facility Description:
Date: 2013/11/06	Client/Project Name: Constitution	Latitude/Longitude: 42.423257 , -74.96110
Team: 1A	State/County: NY - Delaware	Quad Name: West Davenport
Logbook No.: 5	Logbook Page No.: 18	Tract No.: NY-DE-142.001

Waterbody Type: ☐ Lake ☐ Pond ☐ Borrow Pit ☑ Stream ☐ Ag. Ditch ☐ Other

Stream Flow: ☐ Fast ☐ Moderate ☐ Slow ☐ Very Slow ☑ None

Flow Type: ☐ Perennial (Flows year round) ☐ Intermittent (Flows <3 months) ☐ None
☐ Seasonal (Continuous flow ≥ 3 months) ☑ Ephemeral (Flows only in response to rainfall)

Direction of Flow: ☐ N ☐ NE ☐ E ☐ SE ☐ S ☐ SW ☐ W ☐ NW ☑ No Flow

OHWM Width (ft.): 3

Sinuosity: ☐ Braided ☑ Meandering ☐ Straight ☐ N/A

Stream Width (ft.): 3 **Water Surface (At Crossing Location):** 0

Stream Depth (in.): ☑ 0 ☐ 1-3 ☐ 3-6 ☐ 6-12 ☐ 12-18 ☐ 18-24 ☐ 24-36 ☐ 36-48 ☐ 48-60 ☐ 60+

OHWM Indicators:
ABRUPT PLANT COMMUNITY CHANGE
SCOUR
SOIL CHARACTER CHANGES

Bank Height (ft.): (Looking Downstream)
Left: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+
Right: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+

Bank Slope (%): (Looking Downstream)
Left: 60
Right: 60

Qualitative Attributes

Water Appearance:
☐ Clear ☐ Turbid ☐ Sheen on Surface ☐ Floating Algalmats
☐ Slightly Turbid ☐ Very Turbid ☐ Greenish Color ☐ Obvious Surface Scum
☑ No Flow ☐ Other:

Stream Substrate %:
25% GRAVEL
40% OTHER - Stone
25% SANDS
10% SILTS

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Aquatic Habitats:

- [ ] Sand Bar
- [ ] Gravel Bar
- [ ] Mud Bar
- [ ] Undercut Banks
- [ ] Gravel Riffles
- [ ] Deep Pools
- [ ] Bank Root Systems
- [x] Overhanging Trees/Shrubs
- [ ] In-stream Emergent Plants % Cover:
- [ ] In-stream Submerged Plants % Cover:
- [ ] Fringing Wetlands[1]
- [ ] None

[1]Characteristics:

Aquatic Organisms Observed:

NONE

Tributary Condition: [x] Natural [ ] Artificial (Man-Made) [ ] Manipulated

Channel Condition:

- [ ] Channelization/Braiding
- [ ] Dikes/Berms
- [ ] Unnatural Straightening
- [ ] Excessive Bank Erosion
- [ ] Downcutting
- [x] N/A

Habitat Characteristics, Aquatic, and Terrestrial Diversity Description:

Stream Quality: [ ] High [ ] Moderate [x] Low

Comments:

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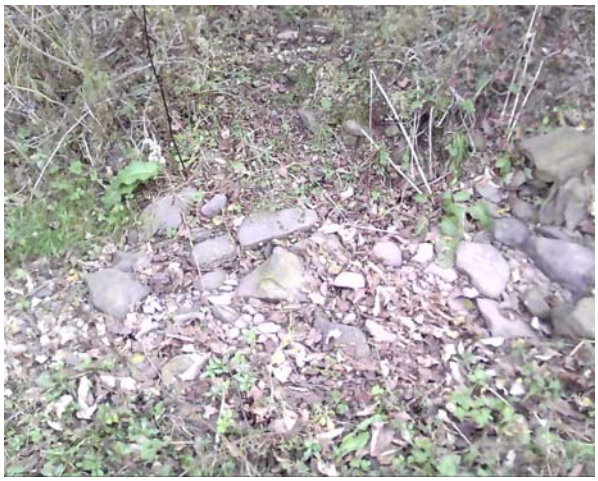
Photos



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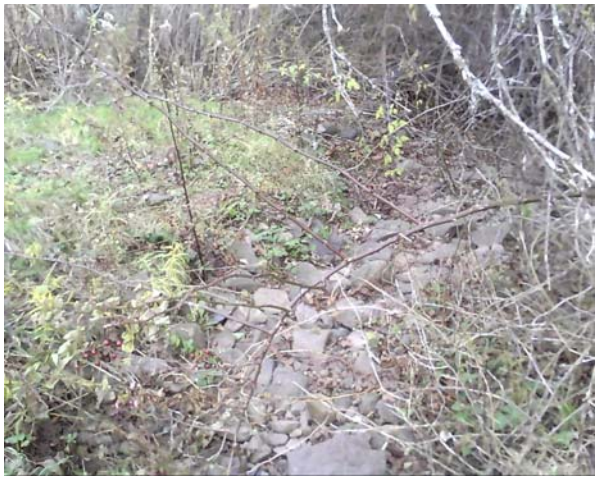

Photo Name: DE1LS210B_110613_2SW.jpg Note: DE-1L-S210B

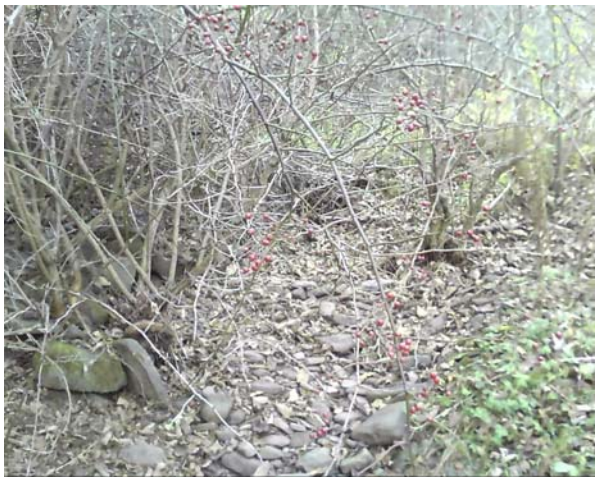

Photo Name: DE1LS210B_110613_1NE.jpg Note: DE-1L-S210B

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Waterbody Data Form

Feature ID: DE-1L-S210C
Feature Name:
Associated Wetland ID: DE-1A-W248A

☑ Centerline ☐ Re-Route ☐ Access Road ☐ Ancillary Facility ☐ Alternative Route ☐ Other

Centerline ID: Primary Route		Facility Description:
Date: 2013/11/06	Client/Project Name: Constitution	Latitude/Longitude: 42.423212 , -74.96095
Team: 1A	State/County: NY - Delaware	Quad Name: West Davenport
Logbook No.: 5	Logbook Page No.: 20	Tract No.: NY-DE-142.001

Waterbody Type: ☐ Lake ☐ Pond ☐ Borrow Pit ☑ Stream ☐ Ag. Ditch ☐ Other

Stream Flow: ☑ Fast ☐ Moderate ☐ Slow ☐ Very Slow ☐ None

Flow Type: ☐ Perennial (Flows year round) ☑ Intermittent (Flows <3 months) ☐ None
☐ Seasonal (Continuous flow ≥ 3 months) ☐ Ephemeral (Flows only in response to rainfall)

Direction of Flow: ☑ N ☐ NE ☐ E ☐ SE ☐ S ☐ SW ☐ W ☐ NW ☐ No Flow

OHWM Width (ft.): 1

Sinuosity: ☐ Braided ☑ Meandering ☐ Straight ☐ N/A

Stream Width (ft.): 1 **Water Surface (At Crossing Location):** 0.8

Stream Depth (in.): ☐ 0 ☑ 1-3 ☐ 3-6 ☐ 6-12 ☐ 12-18 ☐ 18-24 ☐ 24-36 ☐ 36-48 ☐ 48-60 ☐ 60+

OHWM Indicators:
ABRUPT PLANT COMMUNITY CHANGE
SCOUR
SOIL CHARACTER CHANGES

Bank Height (ft.): (Looking Downstream)
Left: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+
Right: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+

Bank Slope (%): (Looking Downstream)
Left: 40
Right: 40

Qualitative Attributes

Water Appearance:
☐ Clear ☐ Turbid ☐ Sheen on Surface ☐ Floating Algalmats
☑ Slightly Turbid ☐ Very Turbid ☐ Greenish Color ☐ Obvious Surface Scum
☐ No Flow ☐ Other:

Stream Substrate %:
60% GRAVEL
30% SANDS
5% SILTS
5% VEGETATION

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Aquatic Habitats:

- [ ] Sand Bar
- [ ] Gravel Bar
- [ ] Mud Bar
- [ ] Undercut Banks
- [ ] Gravel Riffles
- [ ] Deep Pools
- [ ] Bank Root Systems
- [x] Overhanging Trees/Shrubs
- [ ] In-stream Emergent Plants — % Cover: 5
- [ ] In-stream Submerged Plants — % Cover:
- [x] Fringing Wetlands[1]
- [ ] None

[1]Characteristics: PEM

Aquatic Organisms Observed:

NONE

Tributary Condition: [x] Natural [ ] Artificial (Man-Made) [ ] Manipulated

Channel Condition:

- [ ] Channelization/Braiding
- [ ] Dikes/Berms
- [ ] Unnatural Straightening
- [ ] Excessive Bank Erosion
- [ ] Downcutting
- [x] N/A

Habitat Characteristics, Aquatic, and Terrestrial Diversity Description:

Stream Quality: [ ] High [x] Moderate [ ] Low

Comments:

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Sagamore Beach, MA 02662

Photos

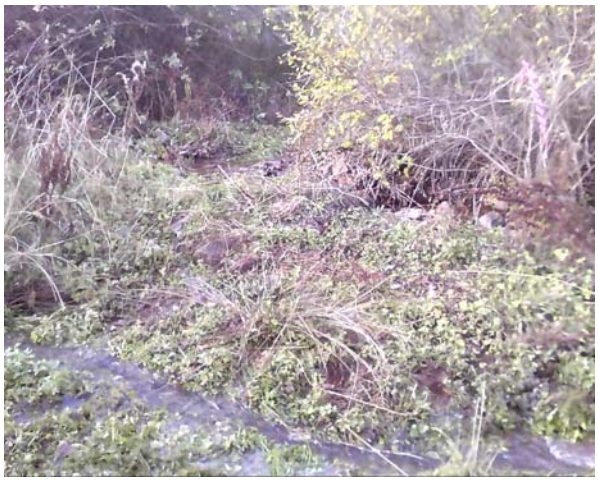

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Photo Name: DE1LS210C_110613_2N.jpg Note: DE-1L-S210C

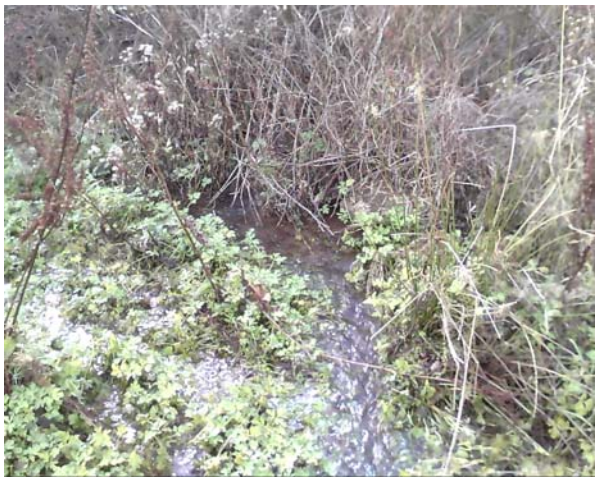

Photo Name: DE1LS210C_1110613_1S.jpg Note: DE-1L-S210C

SCHOHARIE COUNTY

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95 State Road
Sagamore Beach, MA 02662

Waterbody Data Form

Feature ID: SC-1A-S366
Feature Name:
Associated Wetland ID: SC-1A-W459, W292K

☐ Centerline ☐ Re-Route ☑ Access Road ☐ Ancillary Facility ☐ Alternative Route ☐ Other

Centerline ID: Primary Route		Facility Description:
Date: 2013/12/30	Client/Project Name: Constitution	Latitude/Longitude: 42.704372 , -74.31106
Team: 1A	State/County: - NY	Quad Name: Schoharie
Logbook No.: 5	Logbook Page No.: 122	Tract No.: ALT-Q-NY-SC-022

Waterbody Type: ☐ Lake ☐ Pond ☐ Borrow Pit ☐ Stream ☐ Ag. Ditch ☑ Other Excavated channel next to access r

Stream Flow: ☐ Fast ☐ Moderate ☑ Slow ☐ Very Slow ☐ None

Flow Type: ☐ Perennial (Flows year round) ☐ Intermittent (Flows <3 months) ☐ None
☐ Seasonal (Continuous flow ≥ 3 months) ☑ Ephemeral (Flows only in response to rainfall)

Direction of Flow: ☐ N ☐ NE ☐ E ☐ SE ☑ S ☐ SW ☐ W ☐ NW ☐ No Flow

OHWM Width (ft.): 4

Sinuosity: ☐ Braided ☐ Meandering ☑ Straight ☐ N/A

Stream Width (ft.): 5 **Water Surface (At Crossing Location):** 3

Stream Depth (in.): ☐ 0 ☐ 1-3 ☑ 3-6 ☐ 6-12 ☐ 12-18 ☐ 18-24 ☐ 24-36 ☐ 36-48 ☐ 48-60 ☐ 60+

OHWM Indicators:
CLEAR NATURAL LINE ON BANK
SCOUR

Bank Height (ft.): (Looking Downstream)
Left: ☐ 0-2 ☑ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+
Right: ☐ 0-2 ☑ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+

Bank Slope (%): (Looking Downstream)
Left: 60-
Right: 60-

Qualitative Attributes

Water Appearance:
☑ Clear ☐ Turbid ☐ Sheen on Surface ☐ Floating Algalmats
☐ Slightly Turbid ☐ Very Turbid ☐ Greenish Color ☐ Obvious Surface Scum
☐ No Flow ☐ Other:

Stream Substrate %:
100% SILTS

Aquatic Habitats:
☐ Sand Bar ☐ Gravel Riffles ☐ In-stream Emergent Plants % Cover:
☐ Gravel Bar ☐ Deep Pools ☐ In-stream Submerged Plants % Cover:
☐ Mud Bar ☐ Bank Root Systems ☐ Fringing Wetlands[1]
☐ Undercut Banks ☐ Overhanging Trees/Shrubs ☑ None

[1]Characteristics:

Aquatic Organisms Observed:
NONE

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Tributary Condition:	☐ Natural	☑ Artificial (Man-Made)	☐ Manipulated
Channel Condition:	☐ Channelization/Braiding	☐ Unnatural Straightening	☐ Downcutting
	☐ Dikes/Berms	☐ Excessive Bank Erosion	☑ N/A

Habitat Characteristics, Aquatic, and Terrestrial Diversity Description:

Stream Quality: ☐ High ☐ Moderate ☑ Low

Comments: Excavated ditch conveys drainage from SC-1A-W292K TO SC-1A-W459

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Sagamore Beach, MA 02662

Photos

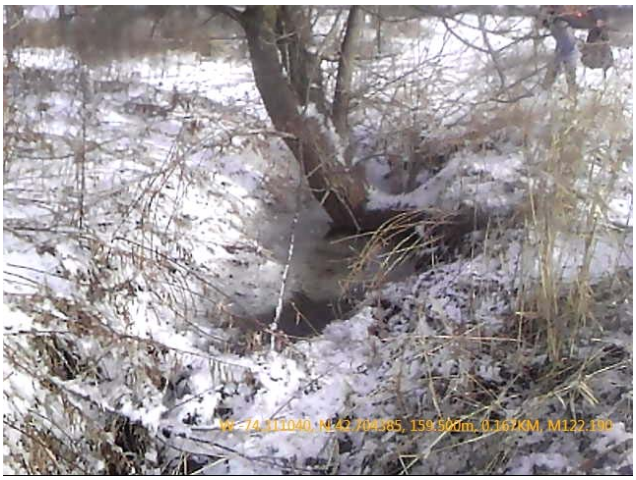

Photo Name: SC1AS366_123013_1N.jpg Note: SC-1A-S366

Photo Name: SC1AS366_123013_2S.jpg Note: SC-1A-S366

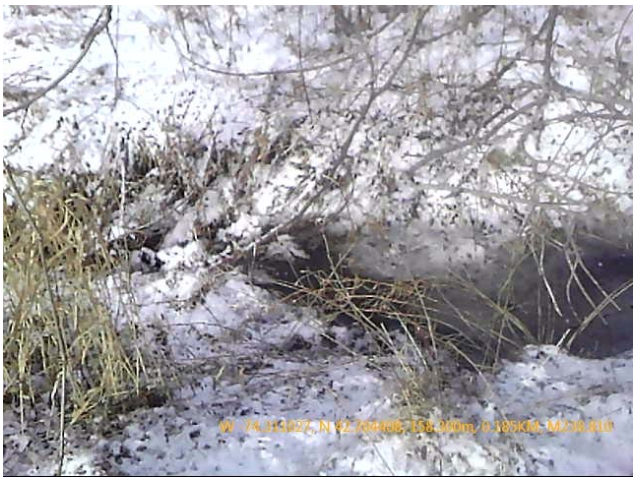

Photo Name: SC1AS366_123013_3W.jpg Note: SC-1A-S366

AECOM
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Sagamore Beach, MA 02662

Waterbody Data Form

Feature ID: SC-1A-S370
Feature Name:
Associated Wetland ID: SC-1A-W460

☑ Centerline ☐ Re-Route ☐ Access Road ☐ Ancillary Facility ☐ Alternative Route ☐ Other

Centerline ID:	Facility Description:

Date:	Client/Project Name:	Latitude/Longitude:
2014/05/08	Constitution	42.537442 , -74.63928

Team:	State/County:	Quad Name:
1C	NY - Schoharie	Charlotteville

Logbook No.:	Logbook Page No.:	Tract No.:
15	89	ALT-F-NY-SC-008.002

Waterbody Type: ☐ Lake ☐ Pond ☐ Borrow Pit ☑ Stream ☐ Ag. Ditch ☐ Other

Stream Flow: ☐ Fast ☑ Moderate ☐ Slow ☐ Very Slow ☐ None

Flow Type: ☑ Perennial (Flows year round) ☐ Intermittent (Flows <3 months) ☐ None
☐ Seasonal (Continuous flow ≥ 3 months) ☐ Ephemeral (Flows only in response to rainfall)

Direction of Flow: ☐ N ☐ NE ☐ E ☐ SE ☑ S ☐ SW ☐ W ☐ NW ☐ No Flow

OHWM Width (ft.): 10

Sinuosity: ☐ Braided ☑ Meandering ☐ Straight ☐ N/A

Stream Width (ft.): 12 **Water Surface (At Crossing Location):** 9

Stream Depth (in.): ☐ 0 ☐ 1-3 ☑ 3-6 ☐ 6-12 ☐ 12-18 ☐ 18-24 ☐ 24-36 ☐ 36-48 ☐ 48-60 ☐ 60+

OHWM Indicators:
CLEAR NATURAL LINE ON BANK
LITTER AND DEBRIS
SCOUR

Bank Height (ft.): (Looking Downstream)
Left: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+
Right: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+

Bank Slope (%): (Looking Downstream)
Left: Ver
Right: Ver

Qualitative Attributes

Water Appearance:
☑ Clear ☐ Turbid ☐ Sheen on Surface ☐ Floating Algalmats
☐ Slightly Turbid ☐ Very Turbid ☐ Greenish Color ☐ Obvious Surface Scum
☐ No Flow ☐ Other:

Stream Substrate %:
40% GRAVEL
40% SANDS
20% SILTS

Aquatic Habitats:
☐ Sand Bar ☐ Gravel Riffles ☐ In-stream Emergent Plants % Cover:
☐ Gravel Bar ☑ Deep Pools ☐ In-stream Submerged Plants % Cover:
☐ Mud Bar ☑ Bank Root Systems ☑ Fringing Wetlands[1]
☑ Undercut Banks ☐ Overhanging Trees/Shrubs ☐ None

[1]Characteristics: PFO

Aquatic Organisms Observed:
INVERTEBRATES

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Tributary Condition:	☑ Natural	☐ Artificial (Man-Made)	☐ Manipulated
Channel Condition:	☐ Channelization/Braiding	☐ Unnatural Straightening	☐ Downcutting
	☐ Dikes/Berms	☐ Excessive Bank Erosion	☑ N/A

Habitat Characteristics, Aquatic, and Terrestrial Diversity Description:

Stream Quality: ☐ High ☑ Moderate ☐ Low

Comments:

AECOM
95 State Road
Sagamore Beach, MA 02662

Photos

Photo Name: SC1AS370_041614_2SW.jpg Note: SC-1A-S370

Photo Name: SC1AS370_041614_1N.jpg Note: SC-1A-S370

Photo Name: SC1AS370_041614_3W.jpg Note: SC-1A-S370

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Sagamore Beach, MA 02662

Waterbody Data Form

Feature ID: SC-1A-S370C
Feature Name:
Associated Wetland ID: SC-1A-W460

☑ Centerline ☐ Re-Route ☐ Access Road ☐ Ancillary Facility ☐ Alternative Route ☐ Other

Centerline ID:	Facility Description:

Date:	Client/Project Name:	Latitude/Longitude:
2014/05/08	Constitution	42.537409 , -74.63954

Team:	State/County:	Quad Name:
1C	NY - Schoharie	Charlotteville

Logbook No.:	Logbook Page No.:	Tract No.:
15	85	ALT-F-NY-SC-008.002

Waterbody Type: ☐ Lake ☐ Pond ☐ Borrow Pit ☑ Stream ☐ Ag. Ditch ☐ Other

Stream Flow: ☐ Fast ☐ Moderate ☑ Slow ☐ Very Slow ☐ None

Flow Type: ☐ Perennial (Flows year round) ☑ Intermittent (Flows <3 months) ☐ None
☐ Seasonal (Continuous flow ≥ 3 months) ☐ Ephemeral (Flows only in response to rainfall)

Direction of Flow: ☐ N ☐ NE ☐ E ☐ SE ☑ S ☐ SW ☐ W ☐ NW ☐ No Flow

OHWM Width (ft.): 3

Sinuosity: ☐ Braided ☑ Meandering ☐ Straight ☐ N/A

Stream Width (ft.): 4 **Water Surface (At Crossing Location):** 3

Stream Depth (in.): ☐ 0 ☐ 1-3 ☑ 3-6 ☐ 6-12 ☐ 12-18 ☐ 18-24 ☐ 24-36 ☐ 36-48 ☐ 48-60 ☐ 60+

OHWM Indicators:
LITTER AND DEBRIS
SCOUR

Bank Height (ft.): (Looking Downstream)
Left: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+
Right: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+

Bank Slope (%): (Looking Downstream)
Left: 3:1
Right: 3:1

Qualitative Attributes

Water Appearance:
☑ Clear ☐ Turbid ☐ Sheen on Surface ☐ Floating Algalmats
☐ Slightly Turbid ☐ Very Turbid ☐ Greenish Color ☐ Obvious Surface Scum
☐ No Flow ☐ Other:

Stream Substrate %:
85% GRAVEL
10% SANDS
5% SILTS

Aquatic Habitats:
☐ Sand Bar ☐ Gravel Riffles ☐ In-stream Emergent Plants % Cover:
☐ Gravel Bar ☑ Deep Pools ☐ In-stream Submerged Plants % Cover:
☐ Mud Bar ☐ Bank Root Systems ☑ Fringing Wetlands[1]
☐ Undercut Banks ☐ Overhanging Trees/Shrubs ☐ None

[1]Characteristics: PFO

Aquatic Organisms Observed:
NONE

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95 State Road
Sagamore Beach, MA 02662

Tributary Condition:	☑ Natural	☐ Artificial (Man-Made)	☐ Manipulated
Channel Condition:	☐ Channelization/Braiding	☐ Unnatural Straightening	☐ Downcutting
	☐ Dikes/Berms	☐ Excessive Bank Erosion	☑ N/A

Habitat Characteristics, Aquatic, and Terrestrial Diversity Description:

Stream Quality: ☐ High ☑ Moderate ☐ Low

Comments:

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95 State Road
Sagamore Beach, MA 02662

Photos

Photo Name: SC1AS370C_041614_3NE.jpg Note: SC-1A-S370C

Photo Name: SC1AS370C_041614_2SE.jpg Note: SC-1A-S370C

Photo Name: SC1AS370C_041614_1NW.jpg Note: SC-1A-S370C

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Sagamore Beach, MA 02662

Waterbody Data Form

Feature ID: SC-1A-S370F
Feature Name:
Associated Wetland ID: SC-1A-W460

☑ Centerline ☐ Re-Route ☐ Access Road ☐ Ancillary Facility ☐ Alternative Route ☐ Other

Centerline ID:	Facility Description:

Date:	Client/Project Name:	Latitude/Longitude:
2014/05/08	Constitution	42.537389 , -74.63919

Team:	State/County:	Quad Name:
1C	NY - Schoharie	Charlotteville

Logbook No.:	Logbook Page No.:	Tract No.:
15	88	ALT-F-NY-SC-008.002

Waterbody Type: ☐ Lake ☐ Pond ☐ Borrow Pit ☑ Stream ☐ Ag. Ditch ☐ Other

Stream Flow: ☐ Fast ☐ Moderate ☐ Slow ☑ Very Slow ☐ None

Flow Type: ☐ Perennial (Flows year round) ☑ Intermittent (Flows <3 months) ☐ None
☐ Seasonal (Continuous flow ≥ 3 months) ☐ Ephemeral (Flows only in response to rainfall)

Direction of Flow: ☐ N ☐ NE ☐ E ☐ SE ☑ S ☐ SW ☐ W ☐ NW ☐ No Flow

OHWM Width (ft.): 6

Sinuosity: ☐ Braided ☑ Meandering ☐ Straight ☐ N/A

Stream Width (ft.): 7 **Water Surface (At Crossing Location):** 5

Stream Depth (in.): ☐ 0 ☑ 1-3 ☐ 3-6 ☐ 6-12 ☐ 12-18 ☐ 18-24 ☐ 24-36 ☐ 36-48 ☐ 48-60 ☐ 60+

OHWM Indicators:
SOIL CHARACTER CHANGES

Bank Height (ft.): (Looking Downstream)
Left: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+
Right: ☑ 0-2 ☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8+

Bank Slope (%): (Looking Downstream)
Left: 1:1
Right: 1:1

Qualitative Attributes

Water Appearance:
☑ Clear ☐ Turbid ☐ Sheen on Surface ☐ Floating Algalmats
☐ Slightly Turbid ☐ Very Turbid ☐ Greenish Color ☐ Obvious Surface Scum
☐ No Flow ☐ Other:

Stream Substrate %:
80% MUCK
20% SILTS

Aquatic Habitats:
☐ Sand Bar ☐ Gravel Riffles ☐ In-stream Emergent Plants % Cover:
☐ Gravel Bar ☐ Deep Pools ☐ In-stream Submerged Plants % Cover:
☐ Mud Bar ☐ Bank Root Systems ☑ Fringing Wetlands[1]
☐ Undercut Banks ☑ Overhanging Trees/Shrubs ☐ None

[1]Characteristics: PFO

Aquatic Organisms Observed:
FROGS

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Tributary Condition:	☑ Natural	☐ Artificial (Man-Made)	☐ Manipulated
Channel Condition:	☐ Channelization/Braiding	☐ Unnatural Straightening	☐ Downcutting
	☐ Dikes/Berms	☐ Excessive Bank Erosion	☑ N/A

Habitat Characteristics, Aquatic, and Terrestrial Diversity Description:

Stream Quality: ☐ High ☑ Moderate ☐ Low

Comments:

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WETLAND DELINEATION REPORT

SUBMITTAL NO. 3

ATTACHMENT 4

CONSTITUTION PIPELINE

CONSTITUTION PIPELINE

WETLAND AND WATERBODY CROSSINGS SITE SPECIFIC DRAWINGS

(REFER TO ATTACHMENT E)