AQUATIC RESOURCES REPORT Ellis Tracts Project Town of Dryden, Tompkins County, NY

APRIL 2017

Prepared for:

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Aquatic Resources Report Ellis Tracts Tompkins County, New York

1.0 Introduction

Tetra Tech, Inc. (Tetra Tech) was contracted by SUN8 PDC, LLC ("SUN8") to perform an aquatic resources survey of three (3) areas, totaling approximately 170-acres. All three locations are adjacent to Stevenson Road, between Turkey Hill Road and Game Farm Road (tax identification numbers 56.-5-31, 57.0-1-6, 57.0-1-7.1, 67.0-1-3, 67.0-1-4, 67.0-1-7.2, and 67.-1-27.2) in the Town of Dryden, Tompkins County, New York.

The purpose of this investigation was to determine the presence and extent of resources within the survey area that meet the criteria for federal wetlands designation according to the United States Army Corps of Engineers (USACE) guidelines, and are potentially jurisdictional and regulated under Section 404 of the Clean Water Act (CWA). Additionally, the survey was used to determine the presence and extents of any New York State Department of Environmental Conservation (NYSDEC) Freshwater Wetlands (FWW) and their 100-foot wide adjacent area or buffer. Background review information, such as U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) mapped soils, presence of U.S. Fish and Wildlife Service National Wetlands Inventory (USFWS NWI) features, and presence of NYSDEC FWW features that fall within the survey limits are summarized within Survey Methods below.

The following report summarizes the characteristics of delineated resources and report attachments include: Attachment A - Figures, Attachment B - Photographic Log, and Attachment C - Data Forms.

2.0 Survey Methods

2.1 Background Research

Prior to conducting fieldwork, Tetra Tech reviewed existing information for the survey area, including:

- Draft site plan layouts of the proposed arrays for the Ellis Road Project produced by Labella Associates, D.P.C., dated April 7, 2017
- United States Geological Survey (USGS) 7.5-minute series topographic quadrangle maps for the survey areas (Ithaca East, NY 1978).
- Soil survey maps, descriptions, and lists, to determine presence and extent of hydric and upland soils (USDA, NRCS 1965), Soil Survey Geographic [SSURGO] database for: Tompkins County, NY (1965).
- NWI geospatial data available from the USFWS for the survey area (USFWS, Wetlands Mapper, data downloaded April 2017); and,
- NYSDEC FWW locations, last updated 1994 (NYSDEC, downloaded April 2017, available at http://cugir.mannlib.cornell.edu/datatheme.jsp?id=111)
- Aerial photographs to identify drainage and other hydrologic features (Environmental Sciences Research Institute, Inc. [ESRI] online mapping services, available at: services.arcgisonline.com/arcgis/service).

2.2 On-Site Delineation

Following the review of background information, two experienced wetland scientists (each has over three years extensive experience with wetland delineations and aquatic resource restoration) performed a field survey on April 5 and 10, 2017. The surveys consisted of walk-through inspection of the survey area to identify topographic, drainage, and vegetation features that would indicate the potential for a wetland determination. Potential wetlands were further evaluated by collecting soil, vegetation, and hydrology data

at upland and wetland sample locations at suspected wetland boundaries. Sample plot data were recorded on Northcentral and Northeast Region Wetland Determination Data Forms provided within the regional supplement.

The survey area was evaluated for the presence and extent of wetlands using the routine, Level-2 determination method described in the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0)* (USACE 2012). Wetlands identified and delineated were subsequently classified in accordance with the Classification of Wetlands and Deepwater Habitats of the United States (Cowardin *et al.* 1979). Classifications were restricted to palustrine emergent (PEM), palustrine scrub-shrub (PSS), and palustrine forested (PFO). Wetland boundaries were also flagged and marked in the field and each wetland area was photographed.

Each wetland and waterbody was further evaluated to characterize the hydrological connection to adjacent upland, wetland, and waterbody regions occurring in proximity to the survey area investigated. Specific methods for characterizing and evaluating the soils, vegetation, and hydrologic indicators are described below.

Vegetation: Dominant plant species in each major vegetation stratum (tree, sapling/shrub, herbaceous, and woody vine) were identified within 30-foot radius sample plots. The wetland indicator status of each species was assigned according to the *Eastern Mountains* and *Piedmont Region National Wetlands Plant List* (Lichvar *et al.* 2014a) and *Northcentral* and *Northeast Regional Wetland Plant List* (Lichvar *et al.* 2014b). Hydrophytic vegetation was determined to be present where more than 50 percent of the dominant species from all vegetation strata were classified as facultative (FAC), facultative wetland (FACW), or obligate wetland species (OBL). Other tests used to evaluate the dominance of hydrophytic species included the Dominance Test and the Prevalence Index (USACE 2012).

Soils: A soil auger was used at each sample plot to extract a core sample to a depth where either hydric indicators were observed, approximately 20 inches, or until rocky substrate resulted in auger refusal. The soils were characterized by determining the color and texture of each soil horizon. Soil matrix and mottle colors were identified using Munsell Soil Color Charts (Munsell Color 2009). Soils were considered hydric if they exhibited one (1) or more of the following indicators, including, but not limited to: histosols, histic epipedons, black histic, hydrogen sulfide, stratified layers, 2 cm muck, depletion below dark surface, thick dark surface, sandy mucky mineral, sandy gleyed matrix, sandy redox, stripped matrix, dark surface, polyvalue below surface, thin dark surface, loamy gleyed matrix, depleted matrix, redox dark surface, depleted dark surface, redox depressions, iron-manganese masses, umbric surface, Piedmont floodplain soils, and red parent material. These indicators support a hydric soil determination, although secondary or additional indicators may also be present.

Hydrology: Each sample plot was examined for evidence of wetland hydrology. Indicators of wetland hydrology include: surface water, high water table, saturations, water marks, sediment deposits, drift deposits, algal mat or crust, iron deposits, visible inundation on aerials, water stained leaves, aquatic fauna, true aquatic plants, hydrogen sulfide odor, oxidized rhizospheres on living roots, presence of reduced iron, recent iron reduction in tilled soils, or a thin muck surface. Presence of standing water or depth to soil saturation was recorded at each sampling location.

2.3 Waterbody Identification

Prior to field surveys, known waterbodies in the survey area were identified on USGS topographic quadrangle maps. During the field investigation a qualified biologist examined the entire field survey area for mapped and unmapped waterbodies. Waterbodies identified included perennial, intermittent, and ephemeral streams and ponds. Data recorded included stream name, associated wetlands, flow regime (perennial, intermittent, or ephemeral), direction of flow, water width, bank-to-bank width, bank height and slope, water depth, bottom and bank substrates, observed water quality, channel meander, and adjacent vegetation type. In addition, indicators of aquatic habitat, wildlife use, and soil erosion potential were recorded.

2.4 GPS Mapping

Wetland and waterbody boundaries/alignments were flagged at regular intervals to accurately represent the boundary between the aquatic resource and the adjacent upland. Flag points were then land surveyed using a Trimble, Inc. (Sunnyvale, CA) Geo XH Global Positioning System (GPS). Each point used an identification code and was numbered consecutively to facilitate the desktop mapping process. Flag points were differentially corrected in accordance with Trimble, Inc. sub-meter accuracy standards. All data was recorded in the WGS 84 coordinate zone and then projected into NAD 83 State Plane New York Central using ArcGIS 10.2.

Attribute data for all flag points was recorded, including the following information:

- Unique number or name;
- NAD 1983 coordinates;
- Date:
- Time;
- Number of positions recorded;
- Max value position dilution of precision (PDOP); and,
- Horizontal accuracy (in meters)

GPS data were differentially corrected using Pathfinder Office 5.60 software (Trimble Inc., Sunnyvale, CA) and commercial base station control points. Corrected flag points were then imported into ArcView 10.2 (ESRI; Redlands, CA) Geographic Information System (GIS) mapping software where points were connected in consecutive order and according to surveyor notes. Wetland boundaries were left "open" when the wetland extended beyond the survey boundaries and were "closed" when contained entirely within the survey boundaries. Stream alignments were connected in a similar manner and designated as "line" data. A geo-referenced wetland delineation boundary suitable for overlay onto themed base layers was created using ArcView 10.2 GIS software. The same GIS software was also used as an analytical tool, providing acreages of the delineated wetlands and coordinate location of the centroids of the polygons.

3.0 Survey Results

3.1 Background Data Review

General Area Description

Land use within the survey boundary consists shrubland, cropland, undeveloped forest, shrublands, and a variety of wetland habitats. Attachment A, Figure 2 provides an aerial basemap of the survey area.

Soils

A review of published and publicly available soils data for the survey area indicates that twenty (20) soils series are mapped within the survey boundary (Attachment A, Figure 1). Mapped soil series are summarized in Table 1 below.

Table 1. Mapped Soil Types for the Ellis Tracts Wetland Delineation

Soil Symbol	Soil Name and Brief Description ¹	Hydric Soil Classification
BoE	Bath and Valois soils, 25 to 35 percent slopes	N
BvA	Braceville gravelly silt loam, 0 to 5 percent slopes	N
Ca	Canandaigua and Lamson soils	Y
CdC	Chenango gravelly loam, 5 to 15 percent slopes	Y
DgB	Darien gravelly silt loam, 2 to 8 percent slopes	Y
EbB	Erie channery silt loam, 3 to 8 percent slopes	Y
EbC	Erie channery silt loam, 8 to 15 percent slopes	Y
EbC3	Erie channery silt loam, 8 to 15 percent slopes, eroded	Y
ErA	Erie-Chippewa channery silt loams, 0 to 3 percent slopes	Y
HsB	Hudson silty clay loam, 2 to 6 percent slopes	N
IcB	Ilion silty clay loam, 2 to 6 percent slopes	Y
LaB	Langford channery silt loam, 2 to 8 percent slopes	N
LaC	Langford channery silt loam, 8 to 15 percent slopes	N
LaC3	Langford channery silt loam, 8 to 15 percent slopes, eroded	N
Mm	Madalin mucky silty clay loam	Y
NaB	Niagara silt loam, 2 to 6 percent slopes	Y
OcC3	Ovid silty clay loam, 6 to 12 percent slopes eroded	Y
RkA	Rhinebeck silt loam, 0 to 2 percent slopes	Y
RkB	Rhinebeck silt loam, 2 to 6 percent slopes	Y
Ws	Wayland soils complex, 0 to 3 percent slopes, frequently flooded	Y

¹USDA, NRCS, Soil Series Descriptions for Tompkins County, NY, 1965.

Mapped Wetlands

Eight (8) USFWS mapped NWI features were identified in the Site boundary. That includes four (4) riverine (R4SBC) features, two (2) freshwater emergent wetland (PEM1A and PEM1E) features, one (1) freshwater forested/shrub (PSS4A) feature, and one (1) freshwater pond (PUBHh) feature. No NYSDEC Freshwater Wetlands Program wetland features or 100-foot adjacent areas were located in the immediate proximity or within the Site boundary.

Mapped Waterbodies

The USGS 7.5-minute series topographic quadrangle maps depict two (2) streams in or adjacent to the survey areas. The northern survey area on the west side has a NYSDEC Class A stream. The southwestern survey area has a Class C stream flowing along the eastern limits, and additionally, two more Class C streams are identified flowing through the southwestern survey area.

3.2 Delineated Aquatic Resources

Thirteen (13) wetlands meeting USACE identification criteria were identified in the survey. Three (3) of the identified wetlands contain multiple cover classes (PFO, PSS, and/or PEM) as defined by Cowardin classification. Table 2 below summarizes these wetlands and their current conditions. Geometry and alignments of these wetlands are provided in Attachment A, Figure 2, and photos of these wetlands can be found in Attachment B.

Table 2. Delineated Wetlands on the Ellis Tracts Wetland Delineation

	Tuk	Jie Z. Beillieu			racts wetland Delineation
Wetland ID	Cover Class ¹	Hydrology Indicator ²	Hydric Vegetation Indicator ^{2, 3}	Hydric Soils Indicator ²	Brief Wetland Description
	PEM	A1, A2, A3, C4, B10, D2, D4	RT, DT	A3, F3	Large wetland complex with a drainage feeding
W5a	PFO	A3, B1, B9, C4, B10, B16, D1, D2, D4	RT, DT	A3, F3, F8	through the active agricultural areas into stream S5a. Plateau formation at the base of a large hill.
W6a	PEM	A1, A2, A3, B8, B10, D2	RT, DT	F3	Depressional areas where ponded water gathers. Dominated by herbaceous wetland vegetation.
W7a	PEM	A1, A3, B9, C9, D4	RT, DT	A3, F3, F8	Depressional drainage basin associated with stream S7.
W9a/W10a	PEM	A1, A2, A3, C3, C4, B10, D2, D4	RT, DT	A3, F3	Seep and drainage basin wetland adjacent to the toe of slope along Cascadilla Creek. Part of a very large wetland complex off-site.
W11a	PEM	A1, A2, A3, C3, C4, B10, D2, D4	RT, DT	A3, F3	Seep and drainage basin wetland adjacent to the toe of slope along Cascadilla Creek. Part of a very
	PSS	A3, B1, C4, B10, B16, D1, D2, D4	RT, DT	A3, F3	large wetland complex off-site.
	PEM	A1, A2, A3, B1, C1, C4, B10, D2, D4	RT, DT, PI	A3, A4, A5, F3	
W12a	PSS	A3, B1, C3, C4, B10, B16, D2, D4	RT, DT	A3, F3	Seep and drainage basin wetland adjacent to the toe of slope along Cascadilla Creek. Part of a very large off-site wetland complex.
	PFO	A3, B9, B10, B16, D1, D2, D4	RT, DT, PI	F3, F8	
W/42-	PEM	A1, A2, A3, C4, B10, B16, D2, D4	RT, DT	F3, F8	Seep and drainage wetland adjacent to the active agricultural field south of the survey boundaries.
W13a	PSS	A1, A2, A3, C4, B10, B16, D2, D4	RT, DT	A3, A5, F3	Most likely the result of drainage from streams S12 and S11 in addition to hillside seeps.
W14a	PEM	A1, A2, A3, B1, C4, B10, B16, D2, D4	RT, DT	A3, F3	Hillside drainage wetland that likely occurs due to drainage from stream S16.
W2b	PEM	A1, A3, B4, B8, C1, B6, C9	RT	F3	Isolated drainage basin, most likely the result of a seep, within active pasture.
W3b	PEM	A1, A2, A3, B1	RT, DT	A3, F3	Depressional swale within old field.
W4b	PEM	A1, A3, B4, C1	RT, DT	A3, F3	Small depressional wetland within old field.
W5b	PEM	A1, A3	RT, DT	A3, F3	Depressional drainage swale associated with larger wetland complex offsite to the south.
W6b	PFO	A2, A3, B9, B16	RT, DT	A3, F3	Basin wetland area as water flow is bound by streams S8 and S9 and topographical ridges.

¹Field classification based on Cowardin et al. 1979.

The wetland areas are dominated by cottonwood (*Populus deltoides*), green ash (*Fraxinus pennsylvanica*), and black willow (*Salix nigra*) in the tree stratum. Redosier dogwood (*Cornus sericea*), grey-stemmed dogwood (*Cornus racemosa*) various willows (*Salix spp.*), honeysuckle (*Lonicera spp.*), boxelder (*Acer*

²Indicator codes from Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (V 2.0).

³DT = Dominance Test, PI = Prevalence Index.

negundo) and hawthorne (*Crataegus* spp.) were found in the shrub layers across the Site, and broadleaf cattail (*Typha latifolia*), reed canarygrass (Phalaris arundinacea), and sensitive fern (*Onclea sensibilis*) were the dominant species in the herb stratum. Other species present in the Site include nannyberry (*Viburnum lentago*), red maple (Acer rubrum), skunk cabbage (*Symplocarpus foetidus*), woolgrass (*Scirpus cyperinus*), and soft rush (*Juncus effusus*).

Fourteen (14) streams were identified during the survey, all unnamed tributaries (UNT) to Cascadilla Creek immediately north of the Site. Table 3 below summarizes the streams identified on-site. Geometry and alignments of these streams are provided in Attachment A, Figure 2, and photos of these streams can be found in Attachment B.

Table 3. Delineated Streams on the Ellis Tracts Wetland Delineation							
Stream ID	USGS Name	Flow Regime	Bank Width (feet)	Water Width (feet)	Water Depth (inches)	NYS Water Quality Classification	Flow Direction
S5a	UNT to Cascadilla Creek	Ephemeral	1	1	3	Drains to C	SW
S6	UNT to Cascadilla Creek	Ephemeral	10	4	2	Drains to A	W
S7	UNT to Cascadilla Creek	Intermittent	3	1	3	Drains to A	W
S8	UNT to Cascadilla Creek	Ephemeral	2	6	4	С	N
S9	UNT to Cascadilla Creek	Ephemeral	3	1	2	Drains to C	NE
S10	UNT to Cascadilla Creek	Perennial	12	1	2	Drains to C	N
S11	UNT to Cascadilla Creek	Intermittent	2	1.5	2	Drains to C	N
S12	UNT to Cascadilla Creek	Ephemeral	3	1	2	Drains to C	Е
S13	UNT to Cascadilla Creek	Perennial	12	4	8	С	N
S14	UNT to Cascadilla Creek	Intermittent	2	1	3	Drains to C	N
S15	UNT to Cascadilla Creek	Ephemeral	10	4	3	Drains to C	NW
S16	UNT to Fall Creek	Ephemeral	3	0.5	3	Drains to C	NE
S17	UNT to Fall Creek	Ephemeral	5	1	2	Drains to C	Е
S18	UNT to Fall Creek	Intermittent	3	2	4	Drains to C	N

Table 3. Delineated Streams on the Ellis Tracts Wetland Delineation

Additionally, two (2) ponds were identified in the Site boundaries. Pond P4 is an intermittent pond generally retaining stormwater and groundwater seasonally. Pond P5 is an excavated pond that perennially holds water and is used for drainage.

4.0 Summary

Tetra Tech completed an aquatic resource survey on an approximately 170 acre area located adjacent to Stevenson Road, between Turkey Hill Road and Game Farm Road, in the Town of Dryden, Tompkins County, New York. Fourteen (14) wetlands, fourteen (14) streams, and two (2) ponds were identified in the Site. Section 3.2 summarizes the data for the delineated resources. Attachment A provides figures regarding the location and results of the survey, Attachment B provides photos of the feature and the site, and Attachment C provides the data forms from the survey.

5.0 References

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. FWS/OBS-79/31, Washington, D.C. 131 pp.

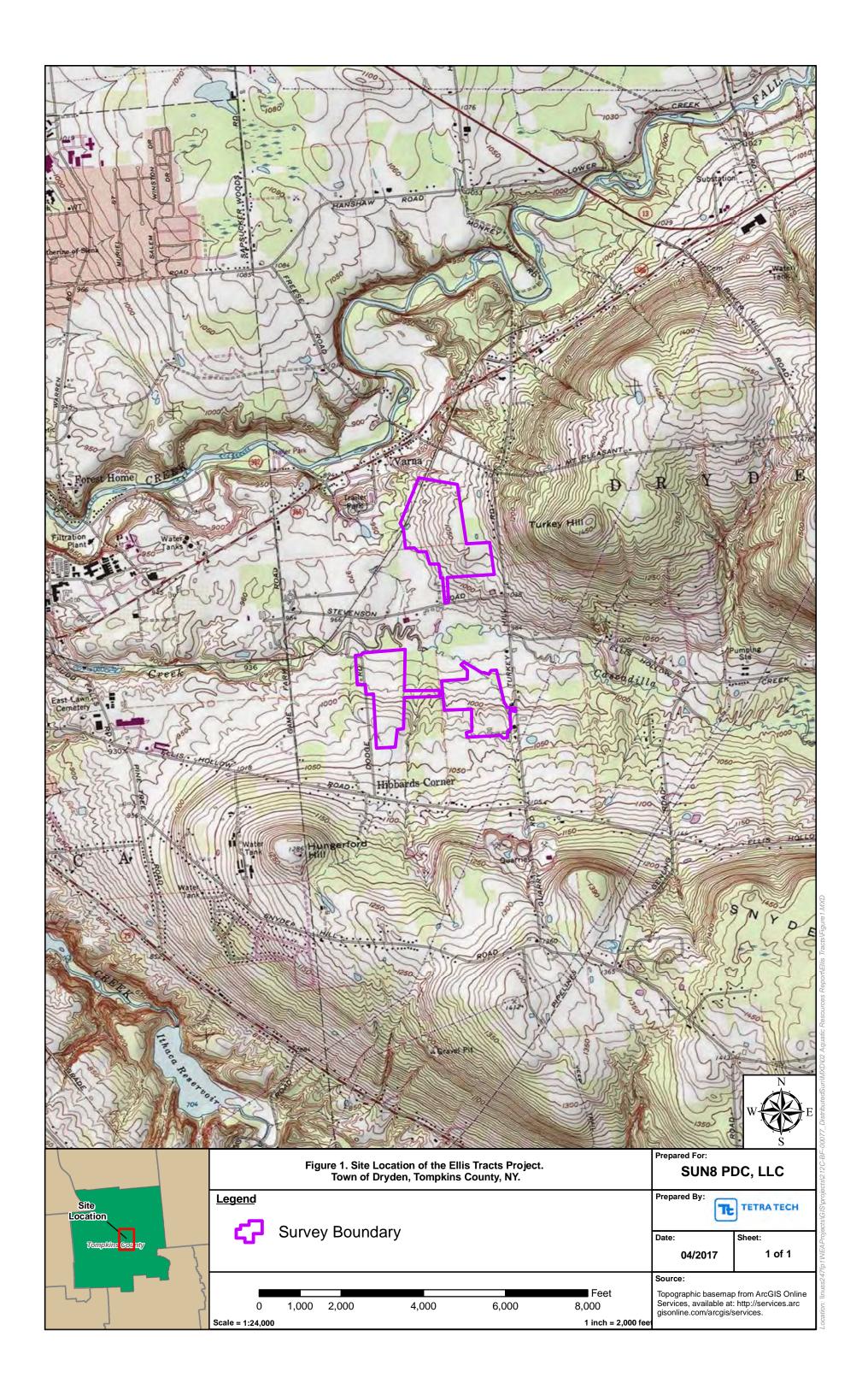
Environmental Laboratory. 1987. United States Army Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, U.S. Army Engineers Waterways Experiment Station, Vicksburg, MS. 100 pp.

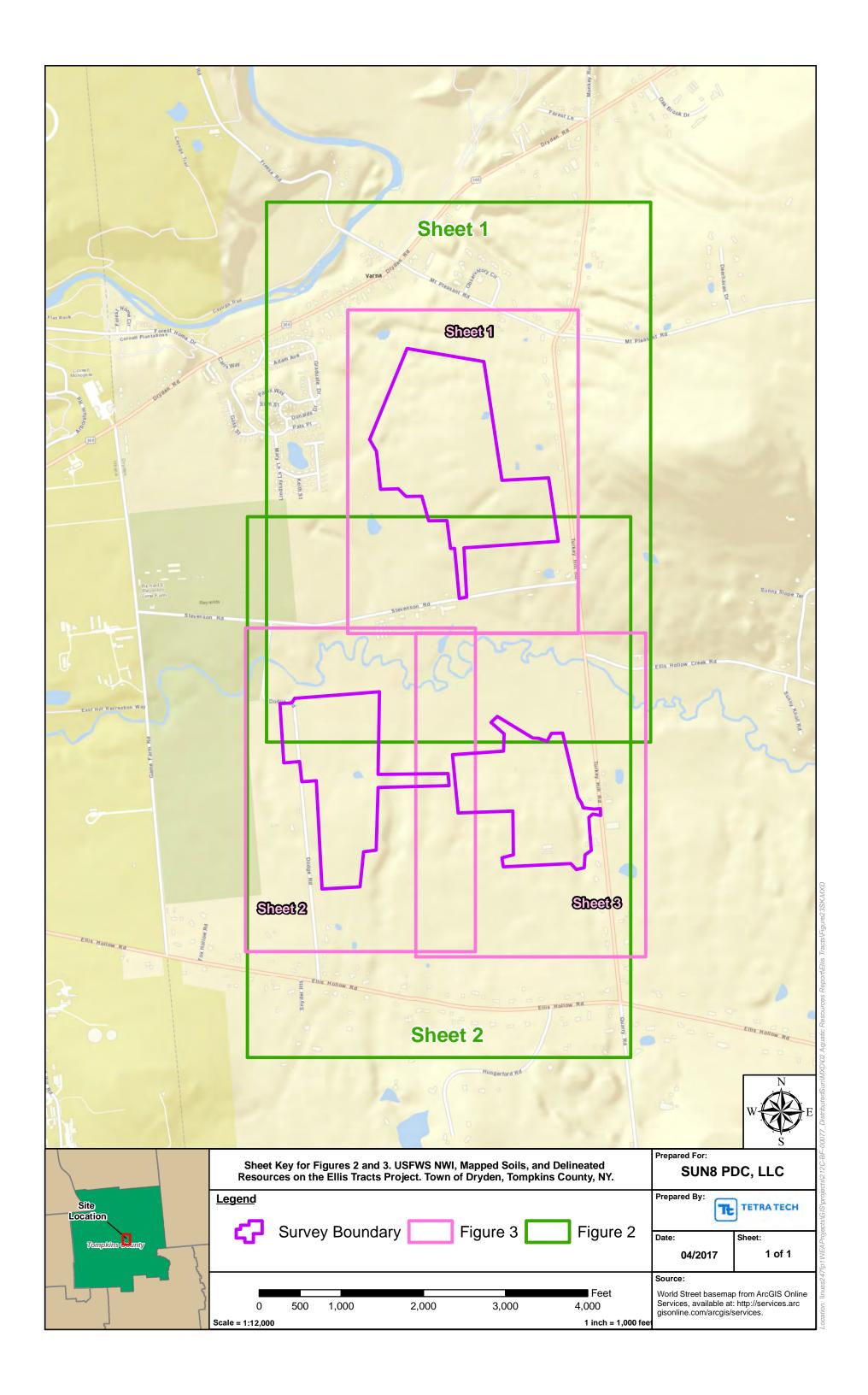
^{*}Note that widths and depths are averages based on the assessed limits of the features

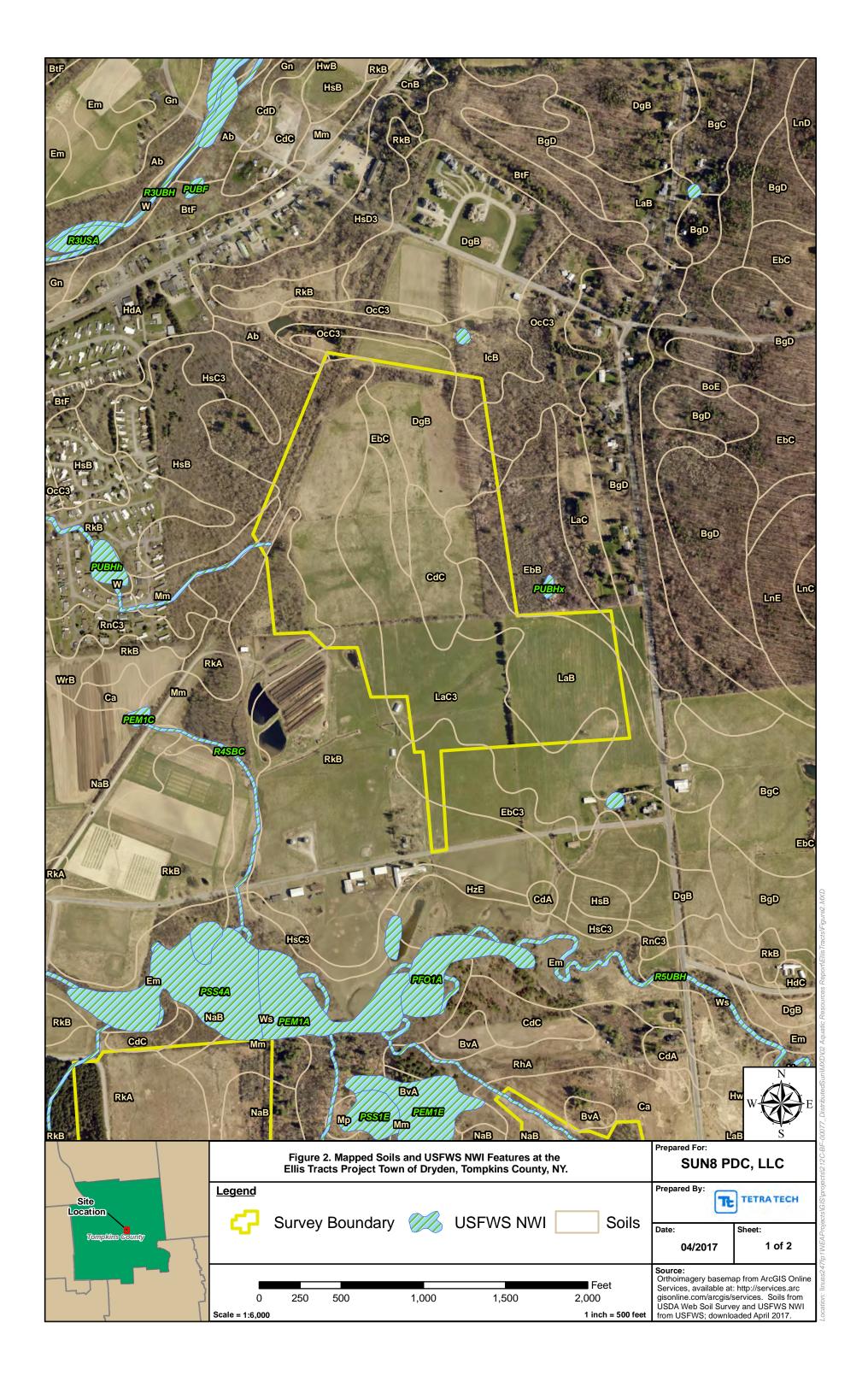
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- Lichvar, R.W., M. Butterwick, N.C. Melvin, and W.N. Kirchner. 2014. *The National Wetland Plant List*: 2014 Update of Wetland Ratings. Phytoneuron 2014-41: 1-42.
- United States Army Corps of Engineers. 2012. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0). Vicksburg, MS. 176 pp.
- United States Department of Agriculture, Natural Resources Conservation Service and University of California Davis. 2011. SoilWeb App. Available at http://casoilresource.lawr.ucdavis.edu/soilwebapps/.

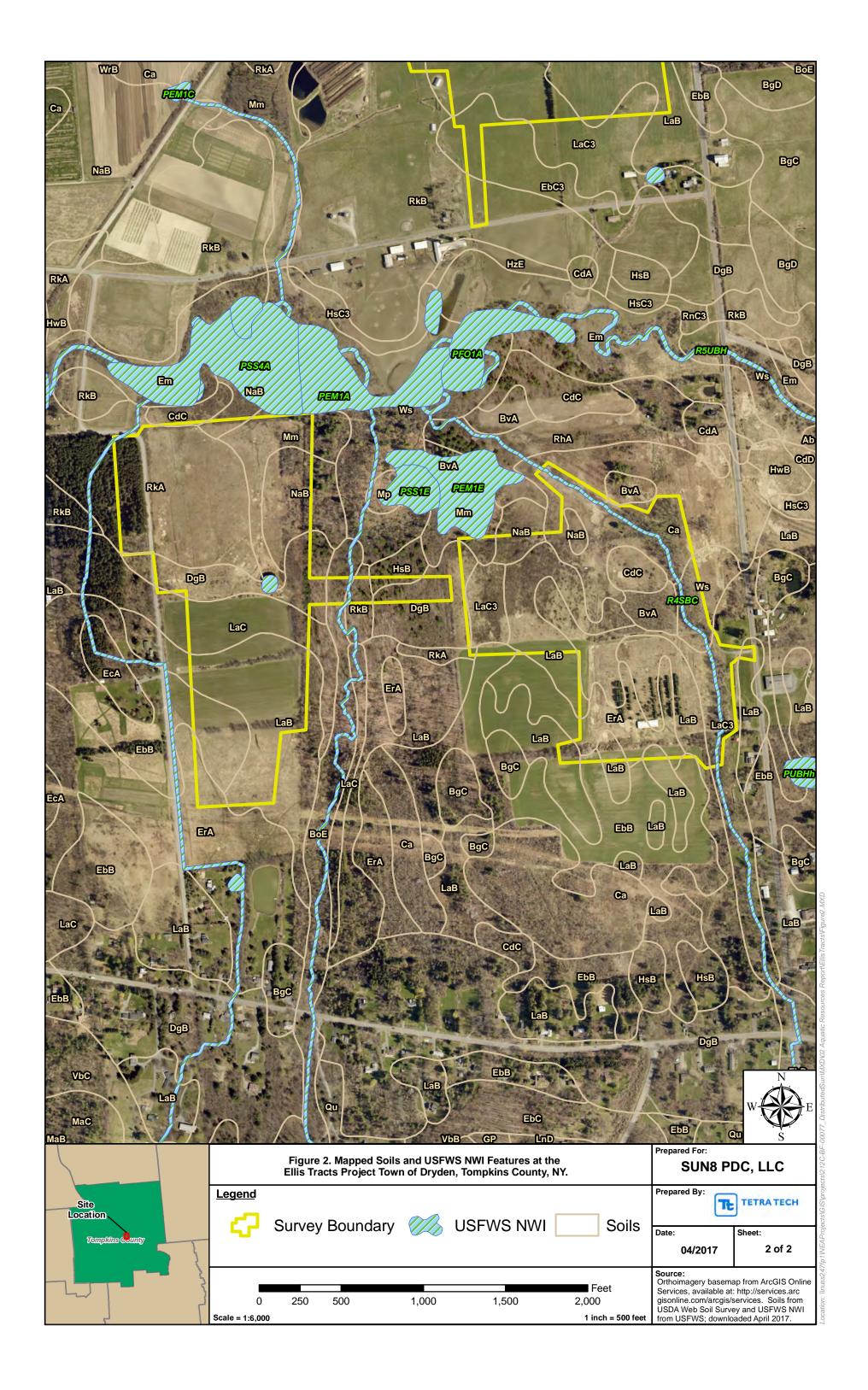
ATTACHMENT A

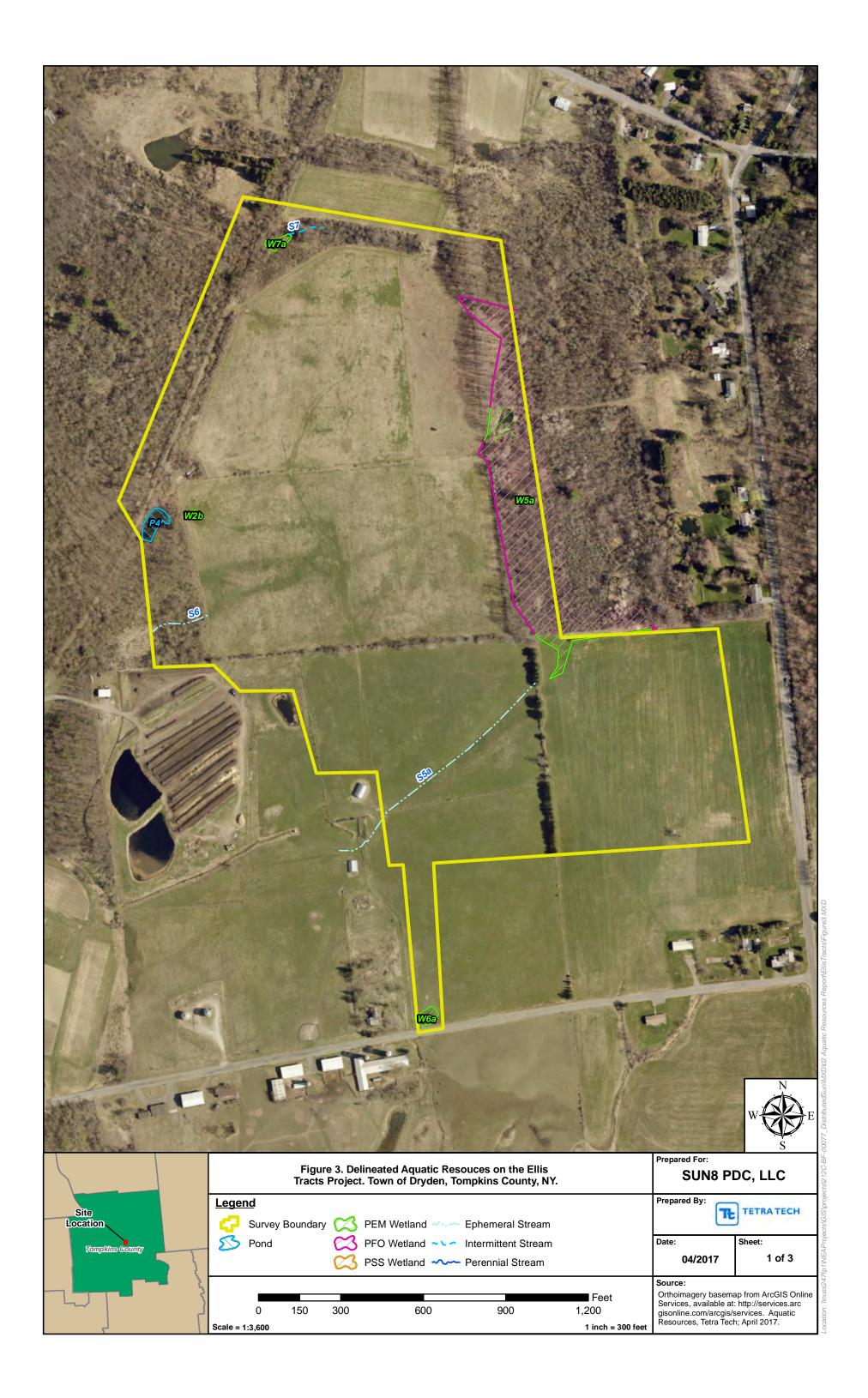
FIGURES















ATTACHMENT B

PHOTOGRAPHIC LOG

SUN8 PDC, LLC Ellis Tracts Project **Company: Project:**

Photolog



Photographer: M. Guinan Date: 04/05/2017

Photo No.: 1 **Direction:** SE

Comments: Wetland W5a PEM portion characterized by tussocks, drainage patterns and standing

water.



Photographer: M. Guinan 04/05/2017 Date:

Photo No.: 2 Е **Direction:**

Comments: Wetland W5a PFO section characterized by living trees, redox depressions, moss trim lines, buttressing of individual features.

SUN8 PDC, LLC Ellis Tracts Project **Company: Project:**

Photolog



Photographer: M. Guinan Date: 04/05/2017

3 Photo No.: **Direction:** \mathbf{S}

Comments: Upland area adjacent to wetland W5a. No signs of hydrophyte growth or hydrology are present and soil indicators are lacking.



Photographer: M. Guinan 04/05/2017 Date:

Photo No.: 4 **Direction:** NE

Comments: Wetland W6a PEM characterized by tussocks, drainage patterns, stressed vegetation growth and standing water

Company: SUN8 PDC, LLC
Project: Ellis Tracts Project
Photolog



Photographer: M. Guinan **Date:** 04/10/2017

Photo No.: 5
Direction: N

Comments: Wetland W9a/W10a characterized by tussocks, drainage patterns and hydrophyte growth. Wetland is formed in an open meadow between swales and drains to a larger scrub/shrub wetland located outside of survey boundaries.



Photographer: M. Guinan **Date:** 04/10/2017

Photo No.: 6 **Direction:** E

Comments: Upland area adjacent to wetland W9a/W10a. No signs of hydrology are present and vegetation community changes are obvious.

Company: SUN8 PDC, LLC
Project: Ellis Tracts Project
Photolog



Photographer: M. Guinan **Date:** 04/10/2017

Photo No.: 7
Direction: N

Comments: Wetland W9a/W10a PEM section characterized by tussocks, drainage patterns, and hydrophyte growth in between swales in an open meadow. Wetland is formed in an open meadow between swales and drains to a larger scrub/shrub wetland located outside of survey boundaries.



Photographer: M. Guinan **Date:** 04/10/2017

Photo No.: 8
Direction: N

Comments: Wetland W11a PEM section characterized by tussocks, standing water, drainage patterns and thick hydrophyte growth.

Company: SUN8 PDC, LLC
Project: Ellis Tracts Project
Photolog



Photographer: M. Guinan **Date:** 04/10/2017

Photo No.: 9
Direction: E

Comments: Wetland W11a PSS section characterized by thick shrub vegetation, tussocks, moss trim lines, standing water, drainage patterns and redox depressions.



Photographer: M. Guinan **Date:** 04/10/2017

Photo No.: 10
Direction: NE

Comments: Upland area associated with Wetland W11a. No signs of hydrology are present and there is an identifiable topographic change.

Company: SUN8 PDC, LLC
Project: Ellis Tracts Project
Photolog



Photographer: M. Guinan **Date:** 04/10/2017

Photo No.: 11 Direction: W

Comments: Wetland W12a PEM section characterized by heavy hydrophyte growth, tussocks and standing water.



Photographer: M. Guinan **Date:** 04/10/2017

Photo No.: 12 Direction: SW

Comments: Wetland W12a PFO section characterized by living trees, drainage patterns, moss trim lines and stunted herbaceous vegetation growth. Wetland is located in the floodplain of stream S13.

Company: SUN8 PDC, LLC
Project: Ellis Tracts Project
Photolog



Photographer: M. Guinan **Date:** 04/10/2017

Photo No.: 13 Direction: E

Comments: Wetland W13a PEM section characterized by thick hydrophyte growth, sparse willow growth, standing water and drainage patterns.



Photographer: M. Guinan **Date:** 04/10/2017

Photo No.: 14 **Direction:** SW

Comments: Wetland W13a PSS section characterized by thick shrub vegetation, standing/flowing water, moss rim lines and drainage patterns.

Company: SUN8 PDC, LLC
Project: Ellis Tracts Project
Photolog



Photographer: M. Guinan **Date:** 04/10/2017

Photo No.: 15 Direction: N

Comments: Additional photograph of wetland W13a PEM portion with adjacent upland section pictured. Drainage depression that forms W13a PEM transitions to an upland swale.



Photographer: M. Guinan **Date:** 04/05/2017

Photo No.: 16
Direction: N

Comments: Wetland W14a PEM portion characterized by hydrophyte vegetation growth surrounding the floodplain of stream S16.

SUN8 PDC, LLC Ellis Tracts Project Photolog **Company: Project:**



M. Guinan Photographer: Date: 04/10/2017

17 Photo No.: NW **Direction:**

Comments: Additional photograph of wetland W14a with adjacent upland section pictured. Photograph depicts the transition from hydrophyte growth to FACU shrub species.

ATTACHMENT C

DATA FORMS

Surveyors: N. Gasse / M. Gaunsa Date: 4/5/17 Resource Sun 8 State: NY Photo Number (s): 4339 1, 4340 Canopy Cover: 0%	county: Thompkins
Flow Regime: [] Perennial [] Intermittent [
Substrate: [] Bedrock% [] Boulder% [] Cobble/Gravel /5 % [] Sand% [] Silt/Clay № 6 [] Sand [] [] Organic _5 % Bank Substrate: Height: Left _6" Right _6" [] Bedrock [] [] Boulder [] [] Sand [] [] Sand [] [] Silt/Clay [] [] Organic []	Floodplain Width: Left Right [] <10 feet [] [] <25 feet [] [] <50 feet [] [] <100 feet [] [] >100 feet []
Dominant Vegetation: [] Forested Species: [] Shrub Species: [Microbia grasses - active pasture.	
Wildlife Observed/Notes:	- ž
Sketch: Pastar Continer Continer	Hadyon 2>

Surveyors: N. Gosse M. Gudia Date: 4/5/17 Resource	ce ID Number: 56
Surveyors: N. Grasse / M. Gradie Date: 4/5/17 Resource Project: SUN 8 State: Date: 4/5/17 C	ounty: Thompkins
Photo Number (s): 43421, 4343 V Canopy Cover: 100 %	
Flow Direction:/ Bank Width:/ feet High Water Depth:/ feet Water Depth:/ feet	Water Width: 2-6 feet
High Water Depth:/_ feet Water Depth:2'' feet	Turbidity:
Flow Regime: [] Perennial [] Intermittent	Ditch [] Dry/Stagnant Ditch
Sinuosity: Features:	
Low [] Riffles [Y Sand/Mud Bar K] Run/Glide [] Medium [] Pools [] Gravel Bar [] Braided	8
[] High [] Rapids [] Aquatic Vegetation [] Other	
Substrate: Bank Substrate:	Floodplain Width:
[] Bedrock%	Left Right
[] Cobble/Gravel% [] Boulder [] [] Sand% [] Gravel []	[] <25 feet [] [] <50 feet []
[] Silt/Clay% [] Sand []	[] <100 feet []
[X] Organic // Silt/Clay P() Organic X	[] >100 feet []
Dominant Vegetation: Forested Prunus sero than Carpinus caroliniana Shrub Lonicera Morrowii Herbaceous Species:	
Wildlife Observed/Notes:	
None	
Sketch:	
Forst	
st field	
Loust (
Confiner	
t.	1,
	N

Surveyors: N. Gruss M. Guthan Date: 4/5/17 Resource ID Number: 57 Project: SUN 8 State: NY County: Thompkins
Photo Number (s): 43467, 43471 Canopy Cover: 100%
Flow Direction: Bank Width: feet
Flow Regime: [] Perennial [] Intermittent [X] Ephemeral [] Flowing Ditch [] Dry/Stagnant Ditch
Sinuosity: Features: [] Low [X] Riffles [X] Sand/Mud Bar [X] Run/Glide Medium [X] Pools [X] Gravel Bar [X] Braided [X] High [X] Rapids [X] Aquatic Vegetation [X] Other
Substrate: Bank Substrate: Floodplain Width: [] Bedrock% Height: Left _/ Right _/ Left Right [] Boulder% [] Bedrock [] ✓ 10 feet ✓ [] Sand% [] Gravel [] [] <50 feet []
Dominant Vegetation: [X Forested Species: Tilia americana, Prunus seroting Shrub Species: Lonicara spp. [] Herbaceous Species:
Wildlife Observed/Notes:
None
Sketch: Field
Forested Sens/Shrus 57
Field Field

Surveyors:N.G.	8 State: NY	Resource ID Number: 58
Project: SUN	8 State: MY	County: Thomakins
Photo Number (s): 43	358 1, 4359 L Canopy Cover: 100%	
(*,*,=		
Flow Direction:/ High Water Depth:	Bank Width: 12 feet Water Depth: 4" feet	Water Width: feet Turbidity:
Flow Regime: [X] P	erennial [] Intermittent [] Ephemeral []	Flowing Ditch [] Dry/Stagnant Ditch
Sinuosity: [] Low ☑ Medium [] High	Features: ☐ Riffles [] Sand/Mud Bar ☐ Fools ☐ Gravel Bar [] E [] Rapids [] Aquatic Vegetation [] C	Run/Glide Braided Other
Substrate: [] Bedrock% [] Boulder% [] Cobble/Gravel () [] Sand% [] Silt/Clay% [] Organic%	Bank Substrate: Height: Left 3 Right 3 [] Bedrock [] [] Boulder [] [] Gravel [] [] Sand [] [] Silt/Clay [] [] Organic []	Floodplain Width: Left Right [] <10 feet []
Dominant Vegetation [X] Forested Species: Shrub Species: [] Herbaceous Species:	Acer saccharum Loniera morrowii	
Wildlife Observed/No	otes:	
Sketch:		
Survey	Constell 58 W65	× ×
	Foresk	N

Surveyors: N. Gross / M. G. Project: SUN 8	nihan Date: 4/10/17 F	Resource ID Number: 59
Project: SUN 8	State;	County: Thompkins
Photo Number (s): 4360 7, 43611	Canopy Cover: 100 %	,
Flow Direction: NE High Water Depth: 6" feet		
Flow Regime: [] Perennial [] I	Intermittent [X] Ephemeral [] I	Flowing Ditch [] Dry/Stagnant Ditch
Sinuosity:Features[] Low[] Riffle[X] Medium[] Poo[] High[] Rap	s: es []Sand/Mud Bar [∕]Ri ls []Gravel Bar []Br ids [∕] Aquatic Vegetation []Ot	un/Glide aided her
Substrate: [] Bedrock% [] Boulder% [¼] Cobble/Gravel4% [] Sand% [] Silt/Clay% [½] Organic60_%	Bank Substrate: Height: Left	Floodplain Width: Left Right [] <10 feet []
Dominant Vegetation: [X Forested Species: Fraxious Parities Provided Parities Parities Provided Parities Parities Provided Parities Parities Parities Provided Parities Parit	ennsylvanica, Acer sac Morrowij	chainn
Wildlife Observed/Notes:		
None	3	
Sketch:	Firest Sonst	

Surveyors: N. Gass M. Gassa Date: 4/16/17 Resource ID Number: 510 Project: 500 State: Ny County: Thompkins Photo Number (s): 43627, 43634 Canopy Cover: 90 %
Flow Direction:/ Bank Width: feet
Flow Regime: [] Perennial [] Intermittent
Sinuosity: Features: ∫ Low [] Riffles ∑ Sand/Mud Bar [∑ Run/Glide [] Medium [] Pools [] Gravel Bar [] Braided [] High [] Rapids [] Aquatic Vegetation [] Other
Substrate: Floodplain Width: [] Bedrock% Height: Left _/ Right _/ Left Right [] Boulder% [] Bedrock [] [] <10 feet
Dominant Vegetation: X Forested Fraxing pennsylvanica Species: Lonicera morrowii, Rosa multiflora Herbaceous Species: Species:
Wildlife Observed/Notes:
None
Sketch: Survey Sio Sio N

Surveyors: N. Grosse M. Guihan Date: 4/10/17 Resource ID Number: 5// Project: 5008 State: NY County: Thompkins Photo Number (s): 4374 7, 4375 Canopy Cover: 600 %
Flow Direction: NE High Water Depth: 4" Water Depth: 2" Water Width: 1.5 feet Turbidity: 665
Flow Regime: [] Perennial Intermittent [] Ephemeral [] Flowing Ditch [] Dry/Stagnant Ditch
Sinuosity: Features: [] Low [] Riffles [] Sand/Mud Bar [] Run/Glide [] Medium [] Pools [] Gravel Bar [] Braided [] High [] Rapids [] Aquatic Vegetation [] Other
Substrate: Floodplain Width: [] Bedrock% Height. Left _6" Right 6" Left Right [] Boulder% [] Bedrock [] 1 < 10 feet 1
Dominant Vegetation: [X] Forested Species: Populus deltoides [X] Shrub Species: Loniara spp. [] Herbaceous Species:
Wildlife Observed/Notes:
None. Goes underground et end.
Sketch: Field Wisa V Wisa V Forested Fredgiron
Feld

Surveyors: N. Grosse M. Guiran Date: 4/0/17 Resource ID Number: 5/2 Project: 5VN8 State: NY County: 7hompkins Photo Number (s): 4376 7, 4377 V Canopy Cover: 100 %	-
Flow Direction: Bank Width: feet	
Flow Regime: [] Perennial [] Intermittent [] Ephemeral [] Flowing Ditch Dry/Stagnant Dit Sinuosity: Features: Low	
Substrate: Floodplain Width: [] Bedrock% Height: Left _/ Right _/ Left Right [] Boulder% [] Bedrock [] [] <10 feet%	
Dominant Vegetation: [X Forested Species: Prunus Serofina Fraxinus pennsylvanica [X Shrub Species: Lonicera mornowii [] Herbaceous Species:	
Wildlife Observed/Notes:	
Sketch: W13° V V V V V V V V V V V V V	

Suprovors: N. Conses /M. Gul De Miliolis - C12
Surveyors: N. Grosse /M. Gu.han Date: 4/10/17 Resource ID Number: 5/3 Project: 50 N 8 State: NY County: Thompking
Photo Number (s): <u>43781, 4379</u> ✓ Canopy Cover: <u>100</u> %
Flour Direction: 17
Flow Direction: Bank Width: feet
Flow Regime: Perennial [] Intermittent [] Ephemeral [] Flowing Ditch [] Dry/Stagnant Ditcl
Sinuosity: Features:
[] Low Kiffles Kand/Mud Bar Kan/Glide Kan/Gli
Medium Pools Gravel Bar Braided Shapids Aquatic Vegetation Other
Substrate: Bank Substrate: Floodplain Width:
[] Bedrock%
[X] Silt/Clay 10 % Sand [X] [] <100 feet []
[] Organic% [x] Silt/Clay [x] [] >100 feet []
Dominant Vegetation:
Species Justans niaca Salix niaca
Shrub / Colifer 500 // tis 500
Species: Juglans nigra Salix nigra [XShrub Species: Loniara Spp. Vitis spp. [Herbaceous Species: Phlans arandinaa
Species: Mans annadirica
Wildlife Observed/Notes:
None observed
Sketch:
See GIS mapping - too lage to sketch.
see on s mapping
w

Surveyors: N. Gosse / M. Grines Del Wights - CIL
Surveyors: N. Grosse M. Grand Date: 4/10/17 Resource ID Number: 5/4 Project: SUN 8 State: Ny County: Thompkins
Photo Number (s): 4381 1, 4382 \(\square \) Canopy Cover: 75 %
Carlopy Cover19_76
Flow Direction: \(\frac{\sqrt{W}}{\sqrt{W}} \) High Water Depth: \(\frac{\sqrt{get}}{\sqrt{eet}} \) Water Depth: \(\frac{\sqrt{get}}{\sqrt{eet}} \) Turbidity: \(\frac{\cappa_{\sqrt{eex}}}{\sqrt{eex}} \)
Flow Regime: [] Perennial [] Intermittent [] Ephemeral [] Flowing Ditch [] Dry/Stagnant Ditch
Sinuosity: Features: ↓ Low
Substrate: Floodplain Width: [] Bedrock% Height: Left _/ Right / Left Right [] Boulder% [] Bedrock [] [] <10 feet []
Dominant Vegetation: M Forested Species: Selix nigra Shrub Morrowij Herbaceous Species: Species:
Wildlife Observed/Notes:
None observed
See GIS mapping for detail- all contained whin WIZa. Extends to west past somey boundary. N
SIY

Surveyors: N.Grosse / M.Gracken Date: 4/10/17 Resource ID Number: 5	75
Project: SUNS State: NY County: Thomask,	hs
Surveyors: N.Grosse M.Grandon Date: 4/10/17 Resource ID Number: 5 Project: SUN 8 State: NY County: Thompton Photo Number (s): 4383 7, 4384 V Canopy Cover: 65 %	
Flow Direction: NE Bank Width: 10 feet Water Width: 4 High Water Depth: 3" Water Turbidity: c4a	_ feet
High Water Depth: feet Water Depth: Turbidity: Turbidity:	_
Flow Regime: [] Perennial [] Intermittent [] Ephemeral [X Flowing Ditch [] Dry/Stag	nant Ditch
Sinuosity: Features: [] Low [] Riffles Sand/Mud Bar [] Run/Glide [] Medium [] Pools [] Gravel Bar [] Braided [] High [] Rapids Aquatic Vegetation [] Other	
Substrate: Floodplain Width: [] Bedrock% Height. Left	[] [] t []
Dominant Vegetation: [] Forested Species:	
Species: Loricero morrowii Salix discolor	
Species: Lonicero morrowii Salix discolor [Y Herbaceous Species: Typha; Juneus, Phloris	
Wildlife Observed/Notes:	
Man made ditch	
John made distri	
Sketch:	
517 7 S15	
	<i>N</i>

Surveyors: N. Gusse M. Gushan Date: 4 Project: 50N8 State: NY Photo Number (s): 4385 1 4386 Canopy Cover	County: Thompkins 10/17 Resource ID Number: \$16
Flow Direction:/_ Bank Width:	
Flow Regime: [] Perennial [] Intermittent	emeral [X] Flowing Ditch [] Dry/Stagnant Ditch
Sinuosity: Features: Low ∑ Riffles [] Sand/Mud B [] Medium [] Pools ☑ Gravel Bar [] High [] Rapids ☑ Aquatic Veg	ar **TRun/Glide [] Braided etation [] Other
Substrate: [] Bedrock% [] Boulder% [] Cobble/Gravel 75 % [] Boulde Sand 20 % [] Silt/Clay% [] Organic 5 % Bank Substrate: Height: Left/ F Bedrock [] Bedrock [] Bedrock [] Boulde [] Sound [] Gravel [] Sand [] Silt/Clay [] Organic	Ck []
Dominant Vegetation: X Forested Fraxing pennsylvanica X Shrub Lonice Morrowii Companica	rnus racemosa.
Wildlife Observed/Notes:	
Associated w/ WI4a. Headwa	to is more ditch like, lower reach
13 naturally channelized	ι,
Sketch: Scrub/shi	

Surveyors: N. Grossi / M. Grossi Date: 4/10/17 Resc Project: SUNS State: NY Photo Number (s): 43871,43881 Canopy Cover: 103%	ource ID Number: S17 County: Thompkins
Flow Direction: Bank Width: feet High Water Depth: feet Water Depth: feet	
Flow Regime: [] Perennial [] Intermittent [☐ Ephemeral [☐ Flow Sinuosity: Features: ☐ Riffles ☐ Sand/Mud Bar [] Run/G [] Medium [] Pools [] Gravel Bar [] Braide [] High [] Rapids ☐ Aquatic Vegetation [] Other	
Substrate: [] Bedrock% [] Boulder% [] Cobble/Gravel 60% [] Sand% [] Silt/Clay 10 % [] Sand [] [] Organic 20% Bank Substrate: Height: Left4 Right 4	Floodplain Width: Left Right <10 feet [] [] <25 feet [] [] <50 feet [] [] <100 feet [] [] >100 feet []
Dominant Vegetation: [X Forested Populus Kemuloides [X Shrub Species:	
Wildlife Observed/Notes: - Intersects w/ 515. Flusted ruffer. - Man made	grouse.
Sketch: Scrub/shrub Sin Sin Sin Sin Sin Sin Sin Si	↑

Surveyors: N. Gosse / M. Guiha Date: 4/10/17 Resource ID Number: 5/8 Project: 5008 State: NV County: Thompkins Photo Number (s): 4389 7, 4390 Canopy Cover: 40 %					
Flow Direction: M Bank Width: 3 feet Water Width: 2 feet High Water Depth: 4" Water Depth: Clear					
Flow Regime: [] Perennial Intermittent [] Ephemeral [] Flowing Ditch [] Dry/Stagnant Ditch					
Sinuosity: Features: Y Low					
Substrate: Bank Substrate: Floodplain Width: [] Bedrock% Height: Left _/ Right _/ Left Right [] Boulder% [] Bedrock [] [] <10 feet []					
Dominant Vegetation: [X] Forested Species: Fraxinus gennsylvanica [M] Shrub Species: Lonicera monomii					
Species: Phlanis arundinaux, Cirsium unlgare.					
Starts at tile line outflow, washs out into WIZa.					
Sketch:					
Sketch: Sketch: Sketch: Significant Sign					
Field					

Tetra Tech Waterbody Data Sheet

Surveyors: N. Grosse M. Gruhan Date: 4/5/17 Resource ID Number: POND 4 Project: SUN 8 State: NY County: Thompkins
Project: SUN 8 State: NY County: Thompkins
Photo Number (s): 4345-NE Canopy Cover: 100%
LAKE/BAY/OCEAN
Name:
Associated Stream ID:
POOL/POND
Associated Stream ID: Water Width: 50 feet Water Depth: 3 feet Turbidity: clear
Type:
[] Agricultural [] Landscape Topographic [] Stormwater
Observed Use:
[] Drinking [] Irrigation [] Fishing [] Boating [] Drainage
Dominant Vegetation:
Species: [X] Shrub Species: [Anice re morrowii]
Species: Lonicera morrowii
[] 1 1015400040
Species:
Beach Type:
Wildlife Observed/Notes:
Spring peepers
Sketch:
pord 4 Gield
Forest
(Port)

Tetra Tech Waterbody Data Sheet

Surveyors: N. Grosse M. Grann Date: 4/0/17 Resource ID Number: POND 5 Project: SUNS State: NY County: Thompkins
Project: State: NY County: Thompkins
Photo Number (s): 4356 - W Canopy Cover: 5 %
LAKE/BAY/OCEAN
Name:
Associated Stream ID:
•
POOL/POND
Associated Stream ID: Wila Water Width: 75 feet Water Depth: 6 feet Turbidity: 66
Туре:
[] Agricultural [XLandscape [XTopographic [] Stormwater
Observed Use:
[] Drinking [] Irrigation [] Fishing [] Boating Marinage
Dominant Vegetation:
[] Forested
Species:
Species: Lonium spp M Herbaceous Species: Phlans arundinaum, junus spp, Carex spp.
[] Barren Beach Type:
Wildlife Observed/Notes:
Unknown anurans
Sketch:
old fill
Pond 5 Forest
WIIa

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region
Project/Site: FULLS TOURTS Co Sampling Date: 4/10/2017
Applicant/Owner: Sun Sampling Point: W5a - U
Investigator(s): MZKF (uznar) Section, Township, Range:
Landform (hillslope, terrace, etc.): Du field Local relief (concave, convex, none): Concave Slope (%): D
Subregion (LRR or MLRA): 12 Lat: 42.4434 Long: 76.4322 Datum: 68.65
Soil Map Unit Name: Lab- Langford channey 5.1+ loam, 2-8 % states NWI classification: PEH
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc
Hydrophytic Vegetation Present? Yes X No Hydric Soil Present? Yes X No Wetland Hydrology Present? No If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.)
HYDROLOGY
Wetland Hydrology Indicators: Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6)
✓ Surface Water (A1) Water-Stained Leaves (B9) ✓ Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16)
✓ Saturation (A3)
Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
, <u> </u>
Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aguitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Kinanow Aquitaid (D3)
Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5)
Field Observations:
Surface Water Present? Yes X No Depth (inches): 5 Water Table Present? Yes X No Depth (inches): -4"
Water Table Present? Yes X No Depth (inches): -L(1)
Saturation Present? Yes X No Depth (inches): Wetland Hydrology Present? Yes X No No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:

VEGETATION – Use scientific names of plants.

	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover Species? Status	Number of Dominant Species
1		That Are OBL, FACW, or FAC: (A)
2.		Total Number of Dominant
3.		Species Across All Strata: (B)
4		Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
5		That Ale OBE, I AGVV, G. 1710.
6		Prevalence Index worksheet:
7.		Total % Cover of: Multiply by:
	= Total Cover	OBL species x 1 =
		FACW species x 2 =
Sepling/Shrub Stratum (Plot size:		FAC species x 3 =
1		FACU species x 4 =
2		
3.		UPL species x 5 =
100		Column Totals: (A) (B)
5		Prevalence Index = B/A =
6		Hydrophytic Vegetation Indicators:
		1 - Rapid Test for Hydrophytic Vegetation
7,		2 - Dominance Test is >50%
	= Total Cover	3 - Prevalence Index is ≤3.0¹
Herb Stratum (Plot size: 9)	20 × OBL	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
		Problematic Hydrophytic Vegetation¹ (Explain)
2. Phalavis armdinacia		Problematic Hydrophytic Vegetation (Explain)
3. Corex 502.	10	¹Indicators of hydric soil and wetland hydrology must
4		be present, unless disturbed or problematic.
5		Definitions of Vegetation Strata:
		Tree – Woody plants 3 in. (7.6 cm) or more in diameter
6		at breast height (DBH), regardless of height.
7,		Sapling/shrub – Woody plants less than 3 in. DBH
8		and greater than or equal to 3.28 ft (1 m) tall.
9		
10.		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11.		
		Woody vines - All woody vines greater than 3.28 ft in
12	45 = Total Cover	height.
Woody Vine Stratum (Plot size:)		
1,		Hydrophytic
2		Hydrophytic Vegetation
3.		Present? Yes X No
4		
7	= Total Cover	
Remarks: (Include photo numbers here or on a sepa		
Remarks. (include photo flumbers here of on a sepa	nate sheet.)	
10 and		
12.73		
_		266

Depth	Matrix		pth needed to docui Redo	x Feature	S			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	_Loc ² _	Texture	Remarks
0-5	1045315	100						
5-10	1042 2/2	95	5 4R 416	5	RM	M	Sillo	
¹Type: C=Co	oncentration, D=Dep	letion, RM	=Reduced Matrix, MS	 S=Masked	Sand Gra	ins.	² Location:	PL=Pore Lining, M=Matrix.
Hydric Soil I Histosol Histic Ep Black His Hydroge Stratified Depleted Thick Da Sandy M Sandy G Sandy R Stripped Dark Sur Indicators of Restrictive L	Indicators: (A1) bipedon (A2) stic (A3) n Sulfide (A4) I Layers (A5) I Below Dark Surface ork Surface (A12) ucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, M hydrophytic vegetati ayer (if observed):	e (A11) ILRA 1491	Polyvalue Belov MLRA 149B) Thin Dark Surfa Loamy Mucky M Loamy Gleyed M V Depleted Matrix Redox Dark Sur Depleted Dark S Redox Depressi	v Surface ce (S9) (L fineral (F1) Matrix (F2) (F3) face (F6) Surface (F ons (F8)	(S8) (LRR .RR R, ML) (LRR K,)	R, RA 149B L)	Indicators (2 cm M 5 cm M Dark Su Polyvalu Thin Da Iron-Ma Piedmo Mesic S Red Pa Very Sh Other (E	for Problematic Hydric Soils ³ : uck (A10) (LRR K, L, MLRA 149B) Prairie Redox (A16) (LRR K, L, R) ucky Peat or Peat (S3) (LRR K, L, R) urface (S7) (LRR K, L, M) ue Below Surface (S8) (LRR K, L) urk Surface (S9) (LRR K, L) unganese Masses (F12) (LRR K, L, R) nt Floodplain Soils (F19) (MLRA 149B) Spodic (TA6) (MLRA 144A, 145, 149B) rent Material (F21) allow Dark Surface (TF12) Explain in Remarks)
Depth (inc	hes):						Hydric Soil F	Present? Yes 🔟 No

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: FUTS 791113 City/County: Tom	Sampling Date: 4/10/2017				
	State: NY Sampling Point: W54 - WET 2				
and the state of t	, Range:				
Landform (hillslope, terrace, etc.): Function Local relief (concave, of					
Subregion (LRR or MLRA): LRR - R. Lat: 42 - 4510	Long: - 74, 4322 Datum: 1/65.94				
Subregion (LRR or MLRA): LRR - R Lat: 42-4510 Soil Map Unit Name: DaB - Davier gravuly 511+ locm, 2-8 %	Seas NIM elegation PFD				
Are climatic / hydrologic conditions on the site typical for this time of year? Yes N					
Are Vegetation, Soil, or Hydrology significantly disturbed?	· · · · · · · · · · · · · · · · · · ·				
Are Vegetation, Soil, or Hydrology naturally problematic? (If SUMMARY OF FINDINGS – Attach site map showing sampling point	If needed, explain any answers in Remarks.)				
W.					
Hydrophytic Vegetation Present? Yes No Is the Samp within a Wei					
Made d I hadrolone Proceeds					
Wetland Hydrology Present? YesX No If yes, option Remarks: (Explain alternative procedures here or in a separate report.)	nal Wetland Site ID:				
HYDROLOGY					
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1) <u>★</u> Water-Stained Leaves (B9)	✓ Drainage Patterns (B10)				
High Water Table (A2) Aquatic Fauna (B13)	✓ Moss Trim Lines (B16)				
Marl Deposits (B15)	Dry-Season Water Table (C2)				
✓ Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2) Oxidized Rhizospheres on Living Ro	3 , (· · /				
Drift Deposits (B3) Presence of Reduced Iron (C4)	★ Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils Iron Deposits (B5) Thin Muck Surface (C7)					
<u> </u>					
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8)	✓ Microtopographic Relief (D4)✓ FAC-Neutral Test (D5)				
Field Observations:	170-Neutral Test (D3)				
Surface Water Present? Yes No _ Depth (inches):					
Water Table Present? Yes No Depth (inches): -54					
Saturation Present? Yes 🔀 No Depth (inches): 🔘 1	Wetland Hydrology Present? Yes _ No				
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspectio					
Describe Necorded Data (Stream gauge, monitoring well, aerial photos, previous inspectio	ins), if available:				
Remarks:					
2	4				
	1				

VEGETATION – Use scientific names of plants.

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30)		Species?	<u>Status</u>	Number of Deminant Cooring
1. Populus deltoides	30%	<u> </u>	FAC	Number of Dominant Species That Are OBL, FACW, or FAC:(A)
2. Fraxinus pennsylvanica		×	FAKW	
3. Quercus renbra	5		FALL	Total Number of Dominant Species Across All Strata: (B)
3. Whereus years			77.00	Species Across Air Strata.
4		_		Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6.				Prevalence Index worksheet:
			4	Total % Cover of: Multiply by:
7		= Total Cov		
1		= Total Cov	er	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15)				FACW species x 2 =
1. Viburum lentago	15	×	FAE	FAC species x 3 =
2. Loricera spa	15		V _{(2, pr. (3, pr. 1)}	FACU species x 4 =
				UPL species x 5 =
3				Column Totals: (A) (B)
4				D 1 1-1
5				Prevalence Index = B/A =
6.				Hydrophytic Vegetation Indicators:
· ·	-170			1 - Rapid Test for Hydrophytic Vegetation
7	3-			2 - Dominance Test is >50%
. 1	30	= Total Cov	er	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size:)		NE	yanne .	4 - Morphological Adaptations ¹ (Provide supporting
1. Unoclea susibilis	25	×	MALL	data in Remarks or on a separate sheet)
2. Glyceria strictes	25		OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Sphagnum spp.	5	early -		¹ Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
5.				Definitions of Vegetation Strata:
7.0%				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
6				at breast height (DBH), regardless of height.
7			.——	
8				Sapting/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9				and greater than or equal to 5.25 it (1 m) tail.
10.				Herb - All herbaceous (non-woody) plants, regardless of
		-		size, and woody plants less than 3.28 ft tall.
11,	2	-		Woody vines – All woody vines greater than 3.28 ft in
12				height.
	38	_ = Total Co	/er	
Woody Vine Stratum (Plot size:)				
1,				Hydrophytic
2	. — —			Vegetation
3				Present? Yes 💹 No
4.				
		= Total Co	/er	
Remarks: (Include photo numbers here or on a separat	e sheet)			
Remarks. (molude photo numbers here of on a separat	C SHOOL,			
1				

(inches)	Matrix		Redo	x Feature			m the absence of inc		
	Color (moist)	%	Color (moist)	%	Type ¹	_Loc ²	Texture	Remarks	
0-101	10 423/2	100					5.16	* 1	
10-16	54411	70	2.545/6	30	RM	jut	Bilch		
			55						
				<u></u>					
¹Type: C=Co	ncentration, D=Dep	letion, RM	=Reduced Matrix, MS	S=Masked	I Sand Gra	ins.	Location: PL=	Pore Lining, M=Matrix	
Hydric Soil Ir	idicators:					1112-00		oblematic Hydric So	
Black His Hydrogen Stratified Depleted Thick Dar Sandy Mt Sandy Gle Sandy Re Stripped M Dark Surfa	Sulfide (A4) Layers (A5) Below Dark Surface k Surface (A12) icky Mineral (S1) eyed Matrix (S4) dox (S5) Matrix (S6) ace (S7) (LRR R, N	ILRA 1498) ace (S9) (L dineral (F1 Matrix (F2) (F3) rface (F6) Surface (F ions (F8)	LRR R, ML I) (LRR K,)	RA 149B L)	Coast Prairie 5 cm Mucky F Dark Surface Polyvalue Be Thin Dark Su Iron-Mangane Piedmont Flo Mesic Spodic Red Parent M Very Shallow Other (Explain	A10) (LRR K, L, MLRA Redox (A16) (LRR K, Peat or Peat (S3) (LRI (S7) (LRR K, L, M) low Surface (S8) (LRI rface (S9) (LRR K, L) ese Masses (F12) (LR odplain Soils (F19) (M (TA6) (MLRA 144A, laterial (F21) Dark Surface (TF12) in in Remarks)	R K, L, R) R K, L, R) R K, L) R K, L, R) ILRA 149B)
In alternation - 4 to	ydrophytic vegetat	ion and we	etland hydrology mus	t be prese	nt, unless	disturbed	or problematic.		
Indicators of r	ver (if observed):								
Restrictive La Type:	yer (if observed):						Hydric Soil Broson	nt2 Vos V	lo.
Restrictive La							Hydric Soil Prese	nt? Yes <u>X</u> I	lo

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: City.	County: Tungkins Co Sampling Date: 1/10/2017
Applicant/Owner: Sur & South	State: NY Sampling Point: W54 - W
Investigator(s): MLG GUINAW Sec	
	elief (concave, convex, none): Slope (%): 0 - 5
	Long: -76, 4775 Datum: V48 84
	NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of year?	Voc. V No. (//fine evolein in Remarks)
Are Vegetation, Soil, or Hydrology significantly distu	
Are Vegetation, Soil, or Hydrology naturally problem	natic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sa	mpling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wes No Yes No Western Hydrophys Present?	Is the Sampled Area within a Wetland? Yes No ×
Wetland Hydrology Present? Yes No No 	

2.	Absolute	Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species? Status	Number of Dominant Species
1. Quercus rubra	12	X FACU	That Are OBL, FACW, or FAC: (A)
2. Prumus surokina	5	X Facen	Total Number of Dominant
3.			Species Across All Strata: (B)
2-11			Research of Demineral Species
4			Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
5			
6	-		Prevalence Index worksheet:
7			Total % Cover of:Multiply by:
	20	= Total Cover	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15			FACW species x 2 =
1. Promis suction	dig-	X TOTALL	FAC species x 3 =
1. Thomas strong		x FAC	FACU species x 4 =
2. Accr rubrum		ac TAC	UPL species x 5 =
3			Column Totals: (A) (B)
4.			(-)
5.			Prevalence Index = B/A =
6			Hydrophytic Vegetation Indicators:
			1 - Rapid Test for Hydrophytic Vegetation
7			2 - Dominance Test is >50%
	10	= Total Cover	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size:)	da ~		4 - Morphological Adaptations ¹ (Provide supporting
1. Glyceria spp	70		data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain)
2	05		
3	.):		¹Indicators of hydric soil and wetland hydrology must
4	0		be present, unless disturbed or problematic.
5			Definitions of Vegetation Strata:
6			Tree – Woody plants 3 in. (7.6 cm) or more in diameter
			at breast height (DBH), regardless of height.
7			Sapling/shrub – Woody plants less than 3 in. DBH
8			and greater than or equal to 3.28 ft (1 m) tall.
9,			W. I. All harbonous (non-superh) plants considered
10			Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11			
12			Woody vines – All woody vines greater than 3.28 ft in height.
	40	= Total Cover	neight.
549 (87,502 VeV V	100	- Total Cover	
Woody Vine Stratum (Plot size:)			
1,	-		the december of
2			Hydrophytic Vegetation
3.			Present? Yes No
4			
**		= Total Cover	
Remarks: (Include photo numbers here or on a separate	sheet \	_ 10tal Cover	
Remarks. (Michael prioto numbers here of on a separate	Silect.)		
			4

Depth	Matrix		pth needed to document the in Redox Features			. are absence o	i indicators.j	
(inches)	Color (moist)	%	Color (moist) %	Type ¹	_Loc ²	<u>Texture</u>	Remarks	
0-8	10 4R 3/4	_ <u></u>				Loam		
		J.	9 					
	T	=						
								
	-							
	Δ	-		-				
	ii-					},		
)	-						
'Type: C=Co Hydric Soil I	oncentration, D=Dep	letion, RM	=Reduced Matrix, MS=Masked S	Sand Gra	ins.		PL=Pore Lining, M=Matrix.	
Histosol			Polyvalue Below Surface (20\ /I DD	D		or Problematic Hydric Soil	
	pipedon (A2)		Polyvalue Below Surface (S MLRA 149B)	30) (LKK	ĸ,		ck (A10) (LRR K, L, MLRA airie Redox (A16) (LRR K,	,
Black His	stic (A3)		Thin Dark Surface (S9) (LF	RR R, ML	RA 149B)		cky Peat or Peat (S3) (LRR	
	n Sulfide (A4)		Loamy Mucky Mineral (F1)	(LRR K,	L)	Dark Sur	face (S7) (LRR K, L, M)	
	l Layers (A5) I Below Dark Surfac	o (A11)	Loamy Gleyed Matrix (F2)				e Below Surface (S8) (LRR	K, L)
	rk Surface (A12)	e (A11)	Depleted Matrix (F3) Redox Dark Surface (F6)				k Surface (S9) (LRR K, L) iganese Masses (F12) (LRF	2 K I D\
	lucky Mineral (S1)		Depleted Dark Surface (F7)			t Floodplain Soils (F19) (M L	
	leyed Matrix (S4)		Redox Depressions (F8)				odic (TA6) (MLRA 144A, 1	
	edox (S5)						ent Material (F21)	
	Matrix (S6) face (S7) (LRR R, N	M RA 149F	2)				allow Dark Surface (TF12) xplain in Remarks)	
		ILION 140L	-,			Other (E.	xpiain in Remarks)	
			etland hydrology must be presen	t, unless	disturbed	or problematic.		
	ayer (if observed):							
Type:	haa).							
Depth (inc	nes):					Hydric Soil Pi	resent? Yes N	<u> </u>
Remarks:								

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region EUTS MMI 3 City/County: Tompkens Co Applicant/Owner: ___ Sampling Point: (UGA - (UET MTKE (LITNAW ______ Section, Township, Range:_ Investigator(s): Subregion (LRR or MLRA): 12 Lat: 42 4443 Long: -76, 4343 Soil Map Unit Name: PLKB- Phinchell Sitt Loan 2. 6 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _K___ No _____ (If no, explain in Remarks.) Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _ K _ No____ Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? No within a Wetland? Hydric Soil Present? Wetland Hydrology Present? No If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) ⋉ Surface Water (A1) Water-Stained Leaves (B9) ✓ Drainage Patterns (B10) ✓ High Water Table (A2) _ Aquatic Fauna (B13) Moss Trim Lines (B16) X Saturation (A3) ___ Marl Deposits (B15) ___ Dry-Season Water Table (C2) Water Marks (B1) ___ Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) _ Iron Deposits (B5) ___ Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) __ Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: No Depth (inches): 44 Surface Water Present? __ No ____ Depth (inches): b" Water Table Present? No ____ Depth (inches): ð " Saturation Present? Wetland Hydrology Present? Yes (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

ree Stratum (Plot size:)	Absolute Dominant Indicator	
	% Cover Species? Status	Dominance Test worksheet:
		Number of Dominant Species That Are OBL, FACW, or FAC: (A)
		That Are OBL, FACW, or FAC:
	-,	Total Number of Dominant
		Species Across All Strata: (B)
		Percent of Dominant Species
		That Are OBL, FACW, or FAC: / (A/B
	= Total Cover	OBL species x 1 =
apling/Shrub Stratum (Plot size:	_)	FACW species x 2 =
		FAC species x 3 =
		FACU species x 4 =
		UPL species x 5 =
		Column Totals: (A) (B)
		B Park and Andrew B PA
		Prevalence Index = B/A =
		Hydrophytic Vegetation Indicators:
		1 - Rapid Test for Hydrophytic Vegetation
	= Total Cover	2 - Dominance Test is >50%
	= Total Cover	3 - Prevalence Index is ≤3.0¹
erb Stratum (Plot size:)		4 - Morphological Adaptations ¹ (Provide supporting
Phalais grundynasco	20 X FACU	data in Remarks or on a separate sheet)
Juneus effusus	10 × OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
Galenoun 500.		Indicators of hydric soil and wetland hydrology must
		be present, unless disturbed or problematic.
		- Definitions of Vogetation Strata:
(<u> </u>		Definitions of Vegetation Strata:
		Tree - Woody plants 3 in. (7.6 cm) or more in diameter
		at breast height (DBH), regardless of height.
		Sapling/shrub – Woody plants less than 3 in. DBH
		and greater than or equal to 3.28 ft (1 m) tall.
		Herb - All herbaceous (non-woody) plants, regardless of
0		size, and woody plants less than 3.28 ft tall.
1		Woody vines – All woody vines greater than 3.28 ft in
2		height.
	€ Total Cover	
landy Vina Stratum (Plot size:		
/oody Vine Stratum (Plot size:)		
		Hydrophytic
		- Vegetation
		Present? Yes X No
N a	= Total Cover	-
Remarks: (Include photo numbers here or on a sepa		
3	rate sheet.) where were disturbed	

Color (moist)		Redox	x Feature	S	or confirm		
	%	Color (moist)	%	Type ¹	_Loc ²	Texture	Remarks
10424/1	100	V 				5:160	
10 412 3/2	10	4.5 4R 5/4	10	RM	М	5.160	
				_			
7.7							
						2	English v
oncentration, D≕Deple Indicators:	uon, KM	-reduced Matrix, MS	=iviasked	Sand Gra	ins.	*Location: PL=Po	re Lining, M=Matrix.
pipedon (A2) stic (A3) In Sulfide (A4) I Layers (A5) I Below Dark Surface Irk Surface (A12) lucky Mineral (S1) seleyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, ML	.RA 149E	MLRA 149B) Thin Dark Surface Loamy Mucky M Loamy Gleyed M Depleted Matrix Redox Dark Surf Depleted Dark S Redox Depression	ce (S9) (L ineral (F1 flatrix (F2) (F3) face (F6) urface (F7 ons (F8)	RR R, ML) (LRR K, 7)	RA 149B) L)	Coast Prairie Re 5 cm Mucky Per Dark Surface (S Polyvalue Belov Thin Dark Surfa Iron-Manganese Piedmont Flood Mesic Spodic (T Red Parent Mat Very Shallow Da Other (Explain in	edox (A16) (LRR K, L, R) at or Peat (S3) (LRR K, L, R) it) (LRR K, L, M) v Surface (S8) (LRR K, L) ce (S9) (LRR K, L) e Masses (F12) (LRR K, L, R) plain Soils (F19) (MLRA 149B) it (F21) ark Surface (TF12)
	n and we	tland hydrology must	be preser	nt, unless	disturbed	or problematic.	
ayer (ii observed):							
hes):						Hydric Soil Present?	P Yes <u>X</u> No
	Indicators: (A1) Dipedon (A2) Stic (A3) In Sulfide (A4) I Layers (A5) I Below Dark Surface Ark Surface (A12) Ilucky Mineral (S1) Ileyed Matrix (S4) Iledox (S5) Matrix (S6) Iface (S7) (LRR R, ML)	Indicators: (A1) Dipedon (A2) Stic (A3) En Sulfide (A4) I Layers (A5) I Below Dark Surface (A11) En Surface (A12) Elucky Mineral (S1) Eleyed Matrix (S4) Edox (S5) Matrix (S6) Fface (S7) (LRR R, MLRA 149E Endough Indicate (Indicate Indicate In	Indicators: (A1)	Indicators: (A1)	Indicators: (A1)	— Polyvalue Below Surface (S8) (LRR R, bipedon (A2) stic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) In Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) In Redox Dark Surface (F6) In Loamy Mineral (S1) Depleted Dark Surface (F7) Redox Depressions (F8) In Redox Depressions (F8) In Matrix (S6) In Matrix	Indicators: (A1)

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region City/County: Tompy Los Co Sampling Date: 4/10/2017 Applicant/Owner: Sur & Saute Investigator(s): MUKE GUINAW Section, Township, Range: Local relief (concave, convex, none): __/____ Slope (%) Landform (hillslope, terrace, etc.): Subregion (LRR or MLRA): L12 2 2 Lat: 42,444 Long: -74,4743 Datum: WKS 8 NWI classification:____ Soil Map Unit Name: [2KB - Rhincbuck 51+ locus 2.8 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _ K _ No _____ (If no, explain in Remarks.) Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No. Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? Yes ____ No within a Wetland? Hydric Soil Present? Wetland Hydrology Present? Yes _____ No 🗶 If yes, optional Wetland Site ID:____ Remarks: (Explain alternative procedures here or in a separate report.) **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) ___ Surface Soil Cracks (B6) ___ Surface Water (A1) Water-Stained Leaves (B9) ___ Drainage Patterns (B10) ___ High Water Table (A2) ___ Aquatic Fauna (B13) ___ Moss Trim Lines (B16) Saturation (A3) ___ Marl Deposits (B15) Dry-Season Water Table (C2) Water Marks (B1) ___ Hydrogen Sulfide Odor (C1) __ Crayfish Burrows (C8) ___ Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) ___ Saturation Visible on Aerial Imagery (C9) _ Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) ___ Iron Deposits (B5) Thin Muck Surface (C7) __ Shallow Aquitard (D3) _ Inundation Visible on Aerial Imagery (B7) __ Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Yes ____ No 🔀 Depth (inches): Surface Water Present? Yes ____ No X Depth (inches): Water Table Present? Saturation Present? Yes _____ No X Depth (inches): Wetland Hydrology Present? Yes ____ No 💢 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

VEGETATION – Use scientific names of plants.

VEGETATION - Ose scientific flames of plants.				
Trac Otratium (Diet einer	Absolute	Dominant Species?		Dominance Test worksheet:
Tree Stratum (Plot size:)				Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
				That Are OBL, FACW, or FAC: (A/B)
5				
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
		= Total Cov	er	OBL species x 1 =
Sapling/Shrub Stratum (Plot size:)				FACW species x 2 =
				FAC species x3 =
1,				FACU species x 4 =
2,				UPL species x 5 =
3				Column Totals: (A) (B)
4.				(5)
				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7,				2 - Dominance Test is >50%
		= Total Cov	er	
Herb Stratum (Plot size: 9'				3 - Prevalence Index is ≤3.0¹
1. Trisdian pretus	15	16	FACE	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
			1-000	Problematic Hydrophytic Vegetation¹ (Explain)
2. Taraxacum officiale				Problematic Hydrophytic Vegetation (Explain)
3. Unknow son	10	E- 1337*	- Marie -	¹ Indicators of hydric soil and wetland hydrology must
4			·	be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
÷				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
6		-		at breast height (DBH), regardless of height.
7		×		
8		8: 		Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9,				
				Herb – All herbaceous (non-woody) plants, regardless of
10		25		size, and woody plants less than 3.28 ft tall.
11,				Woody vines - All woody vines greater than 3.28 ft in
12,		-		height.
	27	= Total Cov	er	
Woody Vine Stratum (Plot size:)				
1-				
				Hydrophytic
2				Vegetation Present? Yes No X
3		-		Present? Yes No ^
4				
		= Total Cov	/er	
Remarks: (Include photo numbers here or on a separate	sheet.)			
Mount maintained pas				
1	•			

	Color (moist)	100	Color (moist) %				
0-3 7	.5 42 413	100		Type ¹ Loc ²	Texture	Remark	S
					_ 5:/Lo _		
				· ·			
				Ÿ	-11		
	, , , , , , , , , , , , , , , , , , ,				-/×		
	;						
1T 0-0		Ver DM I			- 1/2 - 1/2		
Hydric Soil Indica	itration, D≕Depie ators:	tion, RM≅i	Reduced Matrix, MS=Masked	Sand Grains.		Pore Lining, M=N	
Histosol (A1)	ators.		Polyvalue Below Surface (CO) // DD D	Indicators for Pr		
Histic Epipedo	on (A2)	-	MLRA 149B)	So) (LKK K,		\10) (LRR K, L, i Redox (A16) (LF	
Black Histic (A		_	Thin Dark Surface (S9) (LF	RR R. MLRA 149E		Peat or Peat (S3)	
Hydrogen Sul	fide (A4)	_	Loamy Mucky Mineral (F1)			(S7) (LRR K, L,	
Stratified Laye		_	Loamy Gleyed Matrix (F2)			low Surface (S8)	
	w Dark Surface ((A11) _	Depleted Matrix (F3)			rface (S9) (LRR I	
Thick Dark Su		_	Redox Dark Surface (F6)			ese Masses (F12	
Sandy Mucky Sandy Gleyed		_	Depleted Dark Surface (F7Redox Depressions (F8))		odplain Soils (F1	
Sandy Redox		_	redux Depressions (Fo)		Red Parent N	(TA6) (MLRA 1 4 Istorial (E21)	44A, 145, 149B)
Stripped Matri						Dark Surface (TI	F12)
	(S7) (LRR R, ML	RA 149B)			·	n in Remarks)	, ,_,
						,	
		n and wetl	and hydrology must be presen	t, unless disturbed	d or problematic.		
Restrictive Layer	(if observed):						
Туре:							
Depth (inches):					Hydric Soil Prese	nt? Yes	No <u> </u>
Remarks:							

T//	A FORM – Northcentral and Northeast Region
Project/Site:	City/County: Thomphin Sampling Date: 4/5/17 State: NY Sampling Point: W7a - W
Applicant/Owner: <i>SUN 8</i>	State: NY Sampling Point: W7a - W
Investigator(s): N. Grosse M. Guinge	Section, Township, Range: Ithrus
Landform (hillslope, terrace, etc.): Depression Lo	ocal relief (concave, convex, none):
Subregion (LRR or MLRA): LRZ - R Lat: 42 4525	Long: -76. 4356 Datum: V458Y
Soil Map Unit Name: RKB - Phinibuck Sile I am	Datum. V47/1
Are climatic / hydrologic conditions on the site typical for this time of ye	NVVI classification:
Are Vegetation, Soil, or Hydrology significantly	•
Are Vegetation, Soil, or Hydrology naturally pro	
	(and any another in Normanie.)
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate repo	Is the Sampled Area within a Wetland? If yes, optional Wetland Site ID: W 7 a.
HYDROLOGY	
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
✓ Surface Water (A1) ✓ Water-Stained L	Surface Soil Cracks (B6)
High Water Table (A2) Aquatic Fauna (
X Saturation (A3) Marl Deposits (B	
Water Marks (B1) Hydrogen Sulfid	
	spheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Rec	
	duction in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surfa	<u> </u>
Inundation Visible on Aerial Imagery (B7) Other (Explain in	n Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8) Field Observations:	FAC-Neutral Test (D5)
Surface Water Present? Yes X No Depth (inches):	111
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes X No Depth (inches):	
(includes capillary fringe)	, , ,
Describe Recorded Data (stream gauge, monitoring well, aerial photos	, previous inspections), if available:
Remarks:	
Fed by S7.	57 2
V	
(V W7a	

VEGETATION – Use scientific names of plants.

Sampling Point: W/a - wf

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Indicator Species? Status	Dominance Test worksneet:
1,			Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2			
3			Total Number of Dominant Species Across All Strata: (B)
4			_ , , , , , , , , , , , , , , , , , , ,
5			Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6			December 1 to 1
7			
		= Total Cover	OBL species x1 =
Sapling/Shrub Stratum (Plot size:)		7 5 6 6 7 5 7 5 7 5 7 5 7 5 7 5 7 5 7 5	FACW species x 2 =
			FAC species x 3 =
1			FACU species x 4 =
2			UPL species x 5 =
3			Column Totals:(A)(B)
4			
5			Prevalence Index = B/A =
6			Hydrophytic Vegetation Indicators:
7			∴ 1 - Rapid Test for Hydrophytic Vegetation
	:	= Total Cover	∠ 2 - Dominance Test is >50%
Herb Stratum (Plot size:)			3 - Prevalence Index is ≤3.0¹
1. Phloris arandinacea	85	Y FACW	 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
2. Carex Spp	10	FAC	Problematic Hydrophytic Vegetation¹ (Explain)
3			
4			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5			
6			Definitions of Vegetation Strata:
7			Tree – Woody plants 3 in. (7.6 cm) or more in diameter
8			at breast height (DBH), regardless of height.
8 9			Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10			DIC LINE
11	// ====== 1.9		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
12		*:	Woody vines – All woody vines greater than 3.28 ft in
	95	Total Cover	height.
Woody Vine Stratum (Plot size:)		Total Cover	
1			y.
2			
3			Hydrophytic
			Vegetation Present? Yes No
		Total Cover	10
Remarks: (Include photo numbers here or on a separate s		Total Cover	resent? res_/\No
			*/

Sampling Point: W7a-wfl

(imale e e l	Matrix		Redo	x Features	S		n the absence of		
(inches)	Color (moist)	%_	Color (moist)	%	Type ¹	Loc ²	Texture	Rema	arks
0-10	10 YR 3/2	100					SiLo		
10-16	54 4/1	70	2.545/6	30	RM	M	SiLo		
	×			=					
Type: C=Co	ncentration, D=Depl	etion, RM=	Reduced Matrix, MS	=Masked	Sand Gra	ins.	² Location: PI	_=Pore Lining, M=	=Matrix.
Histosol (_ Polyvalue Below	Surface /	S8\ /I DD	D		Problematic Hyd	
Histic Epi	pedon (A2)	-	MLRA 149B)				2 cm Muck	(A10) (LRR K, L rie Redox (A16) (., MLRA 149B) IRR K J R\
✓ Black Hist Hydrogon	tic (A3) Sulfide (A4)	-	_ Thin Dark Surfac	e (S9) (LF	RR R, ML	RA 149B)	5 cm Muck	y Peat or Peat (S	3) (LRR K, L, R)
	Layers (A5)	-	Loamy Mucky MLoamy Gleyed N	ineral (F1)	(LRR K,	L)	Dark Surfa	ce (S7) (LRR K, I	L)
	Below Dark Surface	(A11)	Depleted Matrix				Polyvalue I	Below Surface (S Surface (S9) (LRI	8) (LRR K, L)
	k Surface (A12)		Redox Dark Surf	ace (F6)			Iron-Manga	nese Masses (F	12) (LRR K, L, R)
	icky Mineral (S1) eyed Matrix (S4)	_	_ Depleted Dark S	urface (F7))		Piedmont F	loodplain Soils (F	19) (MLRA 149B
Sandy Re		_	✓ Redox Depression Output Depression Output Depression Output Depression Depre	ons (F8)			Mesic Spoo	dic (TA6) (MLRA	144A, 145, 149B)
Stripped N								: Material (F21)	TE40)
Dark Surfa	ace (S7) (LRR R, ML	-RA 149B)						w Dark Surface (ain in Remarks)	1F12)
ndicators of h	ydrophytic vegetatio	n and wetla	and hydrology must	be present	t, unless o	disturbed o	or problematic.		
	yer (if observed):								
IVne:						1			
Type:	ec).		==				Market A. Da	\	(
Type: Depth (inche	es):		=				Hydric Soil Pres	\	
Depth (inche	es):		-	-	1		Hydric Soil Pres	\	(
Depth (inche	es):				· ·		Hydric Soil Pres	\	(
Depth (inche	es):						Hydric Soil Pres	\	(
Depth (inche	es):				e e		Hydric Soil Pres	\	(
Depth (inche	es):						Hydric Soil Pres	\	(
Depth (inche	es):		-	a.			Hydric Soil Pres	\	(
Depth (inche	es):						Hydric Soil Pres	\	(
Depth (inche	es):						Hydric Soil Pres	\	(
Depth (inche	es):						Hydric Soil Pres	\	(

-1.	LILAND DETERMINATION	DATA FORM - N	iorthcentral a	ind Northeast	Region 7 /
Project/Site:Ellis	- North	City/County: _			ampling Date: 4/5/17
Applicant/Owner:	/ N &		- 5	01-1-1	1./2
Investigator(s):/ 6	rosse / M. Auinen	Section Town	ship Panga:	THE.	Sampling Point: IV 74 - 0
Landform (hillslope, terrace,	, etc.): 1130AL	Local relief (cons	snip, Range:	20 22	
Subregion (LRR or MLRA):	120.0	Local relier (conc	ive, convex, none	rone	Slope (%):
Soil Man Unit Name: 1747	Lee . 2 Lat: 42 4	10 -1	Long: <u>- 7</u> _	e. 4355	Datum: _\/ ທ 5 ຄ 4
An alimet's the text	- Phinbule silt loam	- 4-6 %	olopus	NWI classification	on:onu
Are climatic / hydrologic con	ditions on the site typical for this time	e of year? YesX	No (If	no, explain in Rem	arks.)
Are Vegetation, Soil	, or Hydrology signific	cantly disturbed?			sent? Yes <u>X</u> No
Are Vegetation, Soil	, or Hydrology natura	ally problematic?		olain any answers i	
SUMMARY OF FINDIN	NGS – Attach site map show	wing sampling p	oint location	s, transects, ir	mportant features, etc
Hydrophytic Vegetation Pre			ampled Area		
Hydric Soil Present?	Yes No		Wetland?	Yes	No
Wetland Hydrology Present		If yes, or	otional Wetland Si	ite ID:	
Remarks: (Explain alternati	tive procedures here or in a separate	report.)	All trotains of		
Ilpland 5	ample point			12	
	Para		*		
2					
HYDROLOGY					
Wetland Hydrology Indicat	tors:				2
	n of one is required; check all that ap	inty)			(minimum of two required)
Surface Water (A1)		ned Leaves (B9)		_ Surface Soil Crac	
High Water Table (A2)	Aquatic Fa		-	Drainage Pattern	, ,
Saturation (A3)	Mari Depos		5 -	Moss Trim Lines	
Water Marks (B1)		Sulfide Odor (C1)	-	Dry-Season Wate	
Sediment Deposits (B2)		hizospheres on Living	Roote (C3)	Crayfish Burrows	
Drift Deposits (B3)		of Reduced Iron (C4)	, 1100ts (C3)		on Aerial Imagery (C9)
Algal Mat or Crust (B4)		Reduction in Tilled S	Soils (C6)	Stunted or Stress Geomorphic Posi	
Iron Deposits (B5)	Thin Muck			Shallow Aquitard	
Inundation Visible on Aer		ain in Remarks)	-	Microtopographic	
Sparsely Vegetated Cond	cave Surface (B8)	,		FAC-Neutral Test	- ` ,
Field Observations:			T = =	- Tio Houldi Test	(00)
Surface Water Present?	Yes No Depth (incl	hes):	1		
Water Table Present?	Yes NoX Depth (incl		1		
Saturation Present?	Yes No Depth (incl		Wetland Hydro	ology Present?	Yes No X
(includes capillary fringe) Describe Recorded Data (stre	eam gauge, monitoring well, aerial ph	notos parada d			103 NO <u>//</u>
(grago, monitoring went, aeriai pi	iotos, previous inspe	ctions), if available) :	
			*1		
Remarks:					
	5				
	9				
*					1
			ai a		
					.17
7					
No.					
		>e ⁴	0.00		
			192		

VEGETATION - Use	scientific names of	of plants.
------------------	---------------------	------------

Sampling Point: W7a - U/

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator	Dominance Test worksheet:
1				Number of Dominant Species
2.				That Are OBL, FACW, or FAC:(A)
3				Total Number of Dominant
3				Species Across All Strata:(B)
4				Percent of Dominant Species
5.				That Are OBL, FACW, or FAC: (A/B
6				Prevalence Index worksheet:
7.				Total % Cover of: Multiply by:
		= Total Cov		OBL species x 1 =
Sapling/Shrub Stratum (Plot size:)				FACW species x 2 =
1. Loriera Morrowii	100	Y	FACU	FAC species x 3 =
2				FACU species x 4 =
3				UPL species x 5 =
3				Column Totals: (A) (B)
4		- 1		
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
	100 =	Total Cove	er	2 - Dominance Test is >50%
Herb Stratum (Plot size:)				3 - Prevalence Index is ≤3.0¹
				4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
	-0			Problematic Hydrophytic Vegetation¹ (Explain)
3				
	-			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
- A				Definitions of Vegetation Strata:
)) -		Tree - Woody plants 3 in. (7.6 cm) or more in diameter
				at breast height (DBH), regardless of height.
				Sapling/shrub - Woody plants less than 3 in. DBH
				and greater than or equal to 3.28 ft (1 m) tall.
D				Herb - All herbaceous (non-woody) plants, regardless
				of size, and woody plants less than 3.28 ft tall.
				Woody vines - All woody vines greater than 3.28 ft in
ū.	=	Total Cover		height.
oody Vine Stratum (Plot size:)			+	
				- 4
				Hydrophytic Vegetation
				Present? Yes No
marker (Include abote control	=	otal Cover		· · · · · · · · · · · · · · · · · · ·
marks: (Include photo numbers here or on a separate sh	eet.)			1
2.				=
				_
		E		
				ı

SOIL Sampling Point: Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features (inches) Color (moist) Color (moist) % Type1 Texture 100 ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ²Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators for Problematic Hydric Soils³: _ Histosol (A1) Polyvalue Below Surface (S8) (LRR R, _ 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) _ Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): **Hydric Soil Present?** Remarks:

WEILAND DETERMINATION DATA	rokim – Northcentral and Northeast Region
Project/Site:FULS TAMS	City/County: Tomescars Co Sampling Date: 4/10/2017
Applicant/Owner: Sur & Solar	State: NY Sampling Point: W9 4 -
Investigator(s): MIKE CULNEN	Section, Township, Range:
Landform (hillslope, terrace, etc.): Meadow/filld Lo	cal relief (concave, convex, none): Slope (%):_5-5
Subregion (LRR or MLRA): LRL - R Lat: 42.445	
Soil Map Unit Name: RKA - Phintback Sitt Loans	
Are climatic / hydrologic conditions on the site typical for this time of ye	
Are Vegetation, Soil, or Hydrology significantly	
Are Vegetation, Soil, or Hydrology naturally pro	
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes ✓ No	Is the Sampled Area
Hydric Soil Present? Yes No	within a Wetland? Yes No
Wetland Hydrology Present? Yes _∠ No	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate repor	t.)
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
∑ Surface Water (A1) Water-Stained L	
High Water Table (A2) Aquatic Fauna (
Saturation (A3) Mari Deposits (B	,
Water Marks (B1) Hydrogen Sulfid	
Drift Deposits (B3) Presence of Rec	
	Juction in Tilled Soils (C6)
Iron Deposits (B5) Thin Muck Surfa	ice (C7) Shallow Aquitord (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in	52,000,000,000,000,000,000,000,000,000,0
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	(AO-Neutral Test (D3)
Surface Water Present? Yes _ No Depth (inches):	2"
Water Table Present? Yes K No Depth (inches):	-2"
Saturation Present? Yes _ K No Depth (inches):	
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos	, previous inspections), if available:
Remarks:	
	-

PEOPLEMENT SOCIONAMIO NAMIOS S. Plantos				
To Otrotom (Dict sine)		Dominant I Species?		Dominance Test worksheet:
Tree Stratum (Plot size:)	<u> % Cover</u>	_Species :	Status	Number of Dominant Species
1,				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3.				Total Number of Dominant Species Across All Strata: (B)
65.0 0				Descent of Deminent Species
4				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
5				
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
		= Total Cove	er	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 151)				FACW species x 2 =
1. Corus serces	2-	1	=0.11)	FAC species x 3 =
1. Corns serces			PACCO	FACU species x 4 =
2				UPL species x 5 =
3	·			Column Totals: (A) (B)
4.	()			(2)
5.				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
	5	= Total Cove	er	3 - Prevalence Index is ≤3.0¹
Herb Stratum (Plot size:)				_
1. Juneus effusus	20	×	OBL	 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
2. Photois arund, nacca	15	×	FACW	Problematic Hydrophytic Vegetation¹ (Explain)
3. Carex yulpinoides				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Onochia sens, b, lis	10			
5. Scipus Cypinus	5		DBL	Definitions of Vegetation Strata:
6. Carex 500.	20	-	Section 1999	Tree – Woody plants 3 in. (7.6 cm) or more in diameter
				at breast height (DBH), regardless of height.
7				Sapling/shrub – Woody plants less than 3 in. DBH
8				and greater than or equal to 3.28 ft (1 m) tall.
9		Di 		Herb – All herbaceous (non-woody) plants, regardless of
10				size, and woody plants less than 3.28 ft tall.
11.				
12.				Woody vines – All woody vines greater than 3.28 ft in height.
12	90	= Total Cove		neight.
Desc. 23 VA 400 CO	70	_= Total Cove	81	
Woody Vine Stratum (Plot size:)				
1,		·		
2.				Hydrophytic Vegetation
3.				Present? Yes No
	-	8(
4	-			
		= Total Cov	er 	
Remarks: (Include photo numbers here or on a separate	sheet.)			

Depth	Matrix		pth needed to docu Rede	x Features				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	_Loc²	Texture	Remarks
0-5	16 412 3/2	100					5.160	
5-10	1048 3/1	35	541.518	15	RM	H	SIKL	
								
	,	**	7.————————————————————————————————————					
					_			
					_			3
Type: C=Co	ncentration, D=Dep	letion, RM	=Reduced Matrix, M	S=Masked	Sand Gra	ins.	Location: PL	=Pore Lining, M=Matrix.
Hydric Soil I	ndicators:						Indicators for P	Problematic Hydric Soils ³ :
Black His Hydroger Stratified Depleted Thick Dai Sandy Mo Sandy Gl Sandy Re Stripped I Dark Surf	ipedon (A2) tic (A3) n Sulfide (A4) Layers (A5) Below Dark Surface k Surface (A12) ucky Mineral (S1) eyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, M	ILRA 149E	Polyvalue Below MLRA 149B) Thin Dark Surfa Loamy Mucky M Loamy Gleyed I Depleted Matrix Redox Dark Sur Depleted Dark Sur Redox Depress Redox Depress	oce (S9) (Li dice (S9) (Li dineral (F1) Matrix (F2) (F3) face (F3) Gurface (F7 ions (F8)	RR R, ML) (LRR K, 7)	RA 149B) L)	Coast Prairi 5 cm Mucky Dark Surface Polyvalue B Thin Dark S Iron-Mangar Piedmont FI Mesic Spod Red Parent Very Shallor Other (Explain	(A10) (LRR K, L, MLRA 149B) te Redox (A16) (LRR K, L, R) te Peat or Peat (S3) (LRR K, L, R) te (S7) (LRR K, L, M) telow Surface (S8) (LRR K, L) turface (S9) (LRR K, L) turface (S9) (LRR K, L) turface (S9) (LRR K, L) turface (T40) (MLRA 149B) tic (T40) (MLRA 144A, 145, 149B) Material (F21) tw Dark Surface (TF12) tain in Remarks)
Restrictive La	yer (if observed):				,		- productionalio.	
Type:								
Depth (inch Remarks:	nes):						Hydric Soil Prese	ent? Yes K No

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region NY Sampling Point: W9a -Applicant/Owner: San & Solan Investigator(s): MIKE GUZNKV _____ Section, Township, Range:____ Landform (hillslope, terrace, etc.): Muchton Local relief (concave, convex, none): Slope (%): 0 = 3 Subregion (LRR or MLRA): LRR 2 Lat: 42.4407 Long: 74.4414 Datum: Whise 4 Soil Map Unit Name: 2kA - 72hinbuk 5ill loam 5-2% 5(ag 5 NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.) Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes K No Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Yes _____ No 🔀 Hydric Soil Present? Yes _____ No ✓ Wetland Hydrology Present? Yes No of If yes, optional Wetland Site ID:____ Remarks: (Explain alternative procedures here or in a separate report.) **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) ___ Water-Stained Leaves (B9) ___ Drainage Patterns (B10) High Water Table (A2) __ Aquatic Fauna (B13) ___ Moss Trim Lines (B16) Saturation (A3) Marl Deposits (B15) ___ Dry-Season Water Table (C2) Water Marks (B1) ___ Hydrogen Sulfide Odor (C1) ___ Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) _ Drift Deposits (B3) Presence of Reduced Iron (C4) __ Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) __ Geomorphic Position (D2) __ Iron Deposits (B5) _ Thin Muck Surface (C7) Shallow Aquitard (D3) __ Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Depth (inches): Yes _____ No No No Depth (inches): Water Table Present? Yes _____ No _X__ Depth (inches): Saturation Present? Wetland Hydrology Present? Yes _____ No X (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

VEGETATION – Use scientific names of plants.

	Absolute		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species? Status	Number of Dominant Species
1,			That Are OBL, FACW, or FAC: (A)
2			Total Number of Dominant
3			Species Across All Strata: 2 (B)
			Percent of Dominant Species
4)% :	*****	That Are OBL, FACW, or FAC: (A/B)
5			mat Ale OBE, I AON, OT I AO.
6.			Paradana Index weeksheets
6		*	Prevalence Index worksheet:
7,			Total % Cover of: Multiply by:
		= Total Cover	OBL species x 1 =
			FACW species x 2 =
Sapling/Shrub Stratum (Plot size:	_)		
1.			FAC species x 3 =
			FACU species x 4 =
2,			UPL species x 5 =
3			Column Totals: (A) (B)
			Column Totals. (A)
4			Prevalence Index = B/A =
5			Prevalence index = D/A -
24			Hydrophytic Vegetation Indicators:
6			1 - Rapid Test for Hydrophytic Vegetation
7			
		= Total Cover	2 - Dominance Test is >50%
۵۱		- Total Gover	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size:)			4 - Morphological Adaptations ¹ (Provide supporting
1. Dipsacus Fullonum	30	x FACU	data in Remarks or on a separate sheet)
		- Total 4 4 4 4	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Solidago altissima		K FAM	Floblematic Hydrophrytic Vegetation (Explain)
3. Cirsium Valgari	15	FACU	¹ Indicators of hydric soil and wetland hydrology must
) 	be present, unless disturbed or problematic.
4			
5			Definitions of Vegetation Strata:
And the second s			Tree Meady plants 3 in (7.6 cm) or more in diameter
6		$\overline{}$	Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
7			at breast height (DDH), regardiess of height.
3°			Sapling/shrub - Woody plants less than 3 in. DBH
8			and greater than or equal to 3.28 ft (1 m) tall.
9		·	
10.			Herb - All herbaceous (non-woody) plants, regardless of
10			size, and woody plants less than 3.28 ft tall.
11,			Woody vines – All woody vines greater than 3.28 ft in
13			height.
12	- 90		neight.
	90	_ = Total Cover	
Woody Vine Stratum (Plot size:)	Y.		
vvoody vine Stratum (Flot size.			
1:			
2.			Hydrophytic
			Vegetation Present? Yes No
3			Fleseiff, les 140 ×
4			
		T.110	
		_ = Total Cover	
Remarks: (Include photo numbers here or on a sepa	arate sheet.)		<u> </u>
I .			

Depth	Matrix		pth needed to document the in Redox Features			i the absence of	maicators.,	
(inches)	Color (moist)	%	Color (moist) %	Type ¹	Loc ²	<u>Texture</u>	Rem	arks
0-12	1042 3/3	حق) _				51/6		
12-18	2.545h	100				5:1cL_		
	<u> </u>				<u></u>			
	O							
	-			_				
'Type: C=Co Hydric Soil I	oncentration, D=Dep	letion, RM	=Reduced Matrix, MS=Masked	Sand Gra	ins.		L=Pore Lining, M Problematic Hy	
Black His Hydroger Stratified Depleted Thick Dai	ipedon (A2)	e (A11)	Polyvalue Below Surface (SMLRA 149B) Thin Dark Surface (S9) (LF Loamy Mucky Mineral (F1) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7 Redox Depressions (F8)	RR R, ML (LRR K,	RA 149B)	2 cm Muck Coast Prai 5 cm Muck Dark Surfa Polyvalue Thin Dark Iron-Mang	k (A10) (LRR K, I irie Redox (A16) ky Peat or Peat (S ace (S7) (LRR K, Below Surface (S Surface (S9) (LR anese Masses (F Floodplain Soils (L, MLRA 149B) (LRR K, L, R) S3) (LRR K, L, R) L, M) S8) (LRR K, L)
Stripped	edox (S5) Matrix (S6) face (S7) (LRR R, N	ILRA 149E	, ,			Red Paren Very Shall	nt Material (F21) ow Dark Surface plain in Remarks)	(TF12)
			etland hydrology must be presen	t, unless	disturbed	or problematic.		
Type:	ayer (if observed):							
Depth (incl	hes):					Hydric Soil Pre	20m42 V-2	NI-
Remarks:					-	nyunc son Pre	sent? res	No_ <u>K</u>

WEILAND DEIERMINATION DA	TA FORM – Northcentral and Northeast Region
Project/Site: E(1:75 TANT)	City/County: Sampling Date:
Applicant/Owner: Sup 8 Source	State: NY Sampling Point: Woc- W
Investigator(s): MTICL GUZWIN	Section, Township, Range:
	Local relief (concave, convex, none): Slope (%):
Subregion (LRR or MLRA); LR2 R Lat: 42.41	1) Long: - 7 La 4412 Datum: 1/594
Soil Map Unit Name: 72KA - Phimbrok Silt los	Long: -74.4412 Datum: W(504
Are climatic / hydrologic conditions on the site typical for this time o	f year? Yes X No (If no explain in Remarks.)
Are Vegetation, Soil, or Hydrology significat	
Are Vegetation, Soil, or Hydrology naturally	
	ng sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes ¼ No	Is the Sampled Area
Hydric Soil Present? Yes No	within a Wetland? Yes No
Wetland Hydrology Present? Yes No	If yes, optional Wetland Site ID:
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of the resulted)
Primary Indicators (minimum of one is required; check all that appl	Secondary Indicators (minimum of two required) y) Surface Soil Cracks (B6)
	ed Leaves (B9)
High Water Table (A2) Aquatic Faur	
Saturation (A3) Marl Deposit	
	ulfide Odor (C1) Crayfish Burrows (C8)
,	zospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
	Reduced Iron (C4) Stunted or Stressed Plants (D1)
Iron Deposits (B5) Thin Muck Si	Reduction in Tilled Soils (C6) Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7) Other (Expla	17
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inche	
Water Table Present? Yes No Depth (inche	· /
Saturation Present? Yes 🗶 No Depth (inche (includes capillary fringe)	es): () " Wetland Hydrology Present? Yes K No
Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous inspections), if available:
Remarks:	
2	

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		
				Number of Dominant Species That Are OBL, FACW, or FAC: (A)
1				That Are OBE, I AOW, OF I AO.
2				Total Number of Dominant
3				Species Across All Strata: 3 (B)
4				Percent of Dominant Species
				That Are OBL, FACW, or FAC: (A/B)
5	9			
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
		= Total Cov		OBL species x 1 =
	-	- Total Oov	C1	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 151)	der			
1. Cornus sercea	5		FALL	FAC species x 3 =
2.				FACU species x 4 =
				UPL species x 5 =
3	::- 			Column Totals: (A) (B)
4.	<u> </u>			
5.				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7	-			I -
	5	= Total Cov	/er	2 - Dominance Test is >50%
9		5		3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size:) 1. Carex Vule, woodca	25	×	OBL	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
. Carex viap, was seen				Problematic Hydrophytic Vegetation ¹ (Explain)
2. Euthamnia gramustalia	72_		FAC	
3. Juneus estusus	10		ORT	¹ Indicators of hydric soil and wetland hydrology must
4. Onselea sensibiles	5		FACW	be present, unless disturbed or problematic.
5. Carex 300.				Definitions of Vegetation Strata:
5. CONTEX SPP.				_
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
7		0.0		at bleast fleight (DBH), regardless of fleight.
8.				Sapling/shrub – Woody plants less than 3 in. DBH
	-	×		and greater than or equal to 3.28 ft (1 m) tall.
9				Herb – All herbaceous (non-woody) plants, regardless of
10		07		size, and woody plants less than 3.28 ft tall.
11.				
Committee				Woody vines – All woody vines greater than 3.28 ft in
12	-			height.
] 0	_ = Total Co	ver	
Woody Vine Stratum (Plot size:)				
10000000000000000000000000000000000000				
1	-			Hydrophytic
2				Vegetation
3				Present? Yes No
4.				
м		T		
		_ = Total Co	ver	
Remarks: (Include photo numbers here or on a separate	e sheet.)			
I .				

Depth	Matrix		pth needed to docur Redo	x Feature	es			Nine contrate (Contrate)		
(inches)	Color (moist)		Color (moist)	%	Type ¹	_Loc ²	Texture	Remarks		
0-5	10 412 312	95	7.542416	_5_	Rhe	H	5.160			
5-12	10 42311	85	5 4F 515	15	RM	M	SICL			
					<u> </u>					
Type: C=Co	ncentration D=Den	letion RM	=Reduced Matrix, MS				21 acetics: DI-	-Dan Links Walker		
lydric Soil I	ndicators:	ietion, rav	-Reduced Matrix, MS	-wasket	Sand Gra	uns.	Indicators for P	Pore Lining, M=Matrix. roblematic Hydric Soils ³ :		
Black His Hydroger Stratified Depleted Thick Dar Sandy Mu Sandy Gle Sandy Re Stripped I	pedon (A2) tic (A3) n Sulfide (A4) Layers (A5) Below Dark Surface k Surface (A12) ucky Mineral (S1) eyed Matrix (S4)		Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8)				2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R)			
ndicators of lestrictive La	hydrophytic vegetati hyer (if observed):	ion and w	etland hydrology must	be prese	ent, unless	disturbed	or problematic.			
Type:										
Depth (inch	nes):						Hydric Soil Prese	ent? Yes <u>K</u> No		

	TION DATA FURIM – Northcentral and Northeas	
Project/Site: EUZS TUM(7)	City/County:Tom(K2NS Co	Sampling Date: 4//0/2017
Applicant/Owner: Sun & Sulan	State: NY	Sampling Point: WIL4 - U
Investigator(s): MAKE GUANAW	Section, Township, Range	
	Local relief (concave, convex, none):	d Slone /9/\v D
Subregion (LRR or MLRA): L7 77 13	H2 4414 Long: -76 4358	Slope (%):
Soil Man Unit Name: Man	12 loam, 2. 6 of slopes NWI classific	Datum: V-9701
	or this time of year? YesX No (If no, explain in F	
Are Vegetation, Soil, or Hydrology		present? Yes 💢 No
Are Vegetation, Soil, or Hydrology	naturally problematic? (If needed, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site m	nap showing sampling point locations, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes	No Is the Sampled Area	
Hydric Soil Present?	No within a Wetland? YesX	No
Wetland Hydrology Present?	No If yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedures here or in a	a separate report.)	
HYDROLOGY		U.
Wetland Hydrology Indicators:		tors (minimum of two required)
Primary Indicators (minimum of one is required; check	<u>all that apply)</u> Surface Soil	Cracks (B6)
	Water-Stained Leaves (B9) 💢 Drainage Pat	terns (B10)
I . #	Aquatic Fauna (B13) Moss Trim Li	nes (B16)
		Nater Table (C2)
	Hydrogen Sulfide Odor (C1) Crayfish Burr	rows (C8)
		sible on Aerial Imagery (C9)
		ressed Plants (D1)
	Recent Iron Reduction in Tilled Soils (C6) K Geomorphic	Position (D2)
	Thin Muck Surface (C7) Shallow Aqui	tard (D3)
	Other (Explain in Remarks) Killing Microtopogra	phic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral	Test (D5)
Field Observations:	Daniel Co. C. C. C.	
	Depth (inches): \\\ Depth (inches): \\\	
1	Depth (inches): O''	
(includes capillary fringe)	Depth (inches): D'1 Wetland Hydrology Present	t? Yes No
Describe Recorded Data (stream gauge, monitoring we	ell, aerial photos, previous inspections), if available:	,
Remarks:		
Nemans.		
		1

To a Chartery (District)	Absolute % Cover	Dominant Species?		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:)	% Cover	<u>Species:</u>	Status	Number of Dominant Species That Are OBL FACW or FAC: (A)
1				That Are OBL, FACW, or FAC:
2				Total Number of Dominant
3				Species Across All Strata: (B)
4.				Percent of Dominant Species
5.				That Are OBL, FACW, or FAC: (A/B)
D2				
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
		= Total Cov	er	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 151)				FACW species x 2 =
1. Cornes racemesa	15	×	FAC	FAC species x 3 =
2 Copins Semeced	-5	×	FACW	FACU species x 4 =
2. Control State Chan			11.00	UPL species x 5 =
3	-X	-		Column Totals: (A) (B)
4				
5.				Prevalence Index = B/A =
6.				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
7				× 2 - Dominance Test is >50%
	2.0	_ = Total Cov	/er	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size:	20		FACW	4 - Morphological Adaptations ¹ (Provide supporting
1. Onselea sursibiles				data in Remarks or on a separate sheet)
2. Carex vulpinaides			OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Juneus efficus	15	-	OBL	¹ Indicators of hydric soil and wetland hydrology must
4. Scirpus cypining	- 446		BBL	be present, unless disturbed or problematic.
5. Lythrum Balicaria			OBL	Definitions of Vegetation Strata:
7	منيور		OBL	Tree – Woody plants 3 in. (7.6 cm) or more in diameter
6. Typha latisolia				at breast height (DBH), regardless of height.
7. Sphagnum spp.	_ 10	-		
8. Carex 5pp.	20			Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9		(c) 		
10				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11.				
				Woody vines – All woody vines greater than 3.28 ft in
12				height.
	110	_ = Total Co	ver	
Woody Vine Stratum (Plot size:)				
1				
2.				Hydrophytic
			-	Vegetation Present? Yes No
3	-	-		
4			·	
		_ = Total Co	ver	
Remarks: (Include photo numbers here or on a separat	e sheet.)			
				*

Depth	cription: (Describe Matrix		Rede	ox Feature	S			
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	_Loc ²	<u>Texture</u>	Remarks
0-5	10412312	1000					5i/Lo	
5-12	口地到	35	542516	15	PH	<u> </u>	5./Loke	
							·——·	
	6 80			y 				
	k (1	- S						
				6				
		-			_			
	%							
Type: C=C	oncentration, D=Dep Indicators:	letion, RM=	Reduced Matrix, M	S=Masked	Sand Gra	ins.	² Location: PL=	=Pore Lining, M≕Matrix.
Histosol			Polyvalue Belor	w Surface	(S8) (I D D	D		Problematic Hydric Soils ³ :
	pipedon (A2)		MLRA 149B		(30) (ERN	ı,		(A10) (LRR K, L, MLRA 149B) e Redox (A16) (LRR K, L, R)
	istic (A3)		Thin Dark Surfa	ace (S9) (L				Peat or Peat (S3) (LRR K, L, R)
	en Sulfide (A4)		Loamy Mucky N			L)	Dark Surfac	e (S7) (LRR K, L, M)
	d Layers (A5)	~ (A11)	Loamy Gleyed)			elow Surface (S8) (LRR K, L)
	d Below Dark Surface ark Surface (A12)	e (ATT)	_X Depleted Matrix Redox Dark Su					urface (S9) (LRR K, L)
	lucky Mineral (S1)		Depleted Dark		7)			nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149 B
	Bleyed Matrix (S4)	•	Redox Depress		• ,			ic (TA6) (MLRA 144A, 145, 149B)
	ledox (S5)	•		(, ,				Material (F21)
	Matrix (S6)							w Dark Surface (TF12)
_ Dark Su	rface (S7) (LRR R, M	ILRA 149B)					ain in Remarks)
ndicators of estrictive L	hydrophytic vegetati	ion and wet	liand hydrology mus	t be prese	nt, unless	disturbed	or problematic.	
Type:								
Depth (inc	ches):						Hydric Soil Prese	ent? Yes <u>K</u> No
emarks:								

WETLAND DETERMINATION DATA	FORM – Northcentral and Northeast Region
Project/Site: EULS 74M15	City/County: Sampling Date: 4/10/1017
	State: NY Sampling Point: Wile - U
Section 12 No.	Section, Township, Range:
	al relief (concave, convex, none):
	Long: 76.4355 Datum: 16564
Soil Map Unit Name: Mn - Niagaz Sila Loom	
Are climatic / hydrologic conditions on the site typical for this time of year	
Are Vegetation, Soil, or Hydrology naturally probability of the Vegetation, Soil	isturbed? Are "Normal Circumstances" present? Yes X NoNo
CHAMADY OF FINDINGS Attack at a second	
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report)	Is the Sampled Area within a Wetland? Yes No If yes, optional Wetland Site ID:
(a-painted processes as a separate report	
HYDROLOGY	r e
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Le	1 -
High Water Table (A2) Aquatic Fauna (B	
✓ Saturation (A3) Marl Deposits (B	 , , , , , , , , , , , , , , , , , ,
✓ Water Marks (B1)	_ , , , , , , , , , , , , , , , , , , ,
	heres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) ✓ Presence of Redu Algal Mat or Crust (B4) Recent Iron Redu	
Iron Deposits (B5) Recent from Redu Recent from Redu Thin Muck Surface	ction in Tilled Soils (C6)
Inundation Visible on Aerial Imagery (B7) Other (Explain in	
Sparsely Vegetated Concave Surface (B8)	,
Field Observations:	FAC-Neutral Test (D5)
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes X No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes X No
Describe Recorded Data (stream gauge, monitoring well, aerial photos,	previous inspections), if available:
Remarks:	
Tomans.	

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size:)		Species?		Dominance Test worksheet:
				Number of Dominant Species That Are OBL FACW or FAC: 2 (A)
1				That Are OBL, FACW, or FAC: (A)
2		-		Total Number of Dominant
3.				Species Across All Strata: 2 (B)
4.				Percent of Dominant Species
				That Are OBL, FACW, or FAC: (A/B)
5,	·			
6	··			Prevalence Index worksheet:
7.				Total % Cover of: Multiply by:
•		- Total Car		
ر حميم		= Total Cov	er	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15 1)				FACW species x 2 =
1. Cours racemosa	15	X	FAL	FAC species x 3 =
2. Cornus screcca			FACW	FACU species x 4 =
			Tricus	UPL species x 5 =
3. Cratagus spr-				Column Totals: (A) (B)
4. Fraxinus Danny Warica	25		FACW	(,
				Prevalence Index = B/A =
5	5(Harles should No seaballon by diseases
6		-		Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
	70	= Total Cov	/er	2 - Dominance Test is >50%
21	·	- Total Cov	761	3 - Prevalence Index is ≤3.0¹
Herb Stratum (Plot size: 9')				4 - Morphological Adaptations ¹ (Provide supporting
1. Onocica scinsibilis	20		FACE	data in Remarks or on a separate sheet)
2. Sciepus Experinces	10		OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
,				1
3. Glycer, a spp.	- 70			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Schagnura 508.	20			be present, unless distarbed of problematic.
5.				Definitions of Vegetation Strata:
				The 144 standards 2 in 77.5 cm) or more in diameter
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
7				at breast height (bbit), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH
				and greater than or equal to 3.28 ft (1 m) tall.
9		\ 		Herb – All herbaceous (non-woody) plants, regardless of
10				size, and woody plants less than 3.28 ft tall.
11.				
				Woody vines – All woody vines greater than 3.28 ft in
12		(/		height.
	40	= Total Co	ver	
Woody Vine Stratum (Plot size:)				
1,	-	/		Hydrophytic
2		/		Vegetation
3.				Present? Yes No
4				
	-	= Total Co	ver	
Remarks: (Include photo numbers here or on a separate	sheet.)			

Matrix		Red	ox Features						
Color (moist)	%	Color (moist)	%	Type ¹	<u>Loc²</u>	Texture	R	emarks	
	100		· · · · · · · ·			3:160			
10 4R 3/2	80	542.416	20	IZM		5./20/64_			
				_ _ _					
		39							
oncentration, D=Dep	letion, RM	=Reduced Matrix, M	S=Masked	Sand Gra	ins.	² Location: F	PI =Pore I ininc	M=Mat	riy
ndicators:						Indicators for	Problematic	Hydric	Soils ³ :
bipedon (A2) stic (A3) In Sulfide (A4) Layers (A5) Below Dark Surface rk Surface (A12) ucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6)		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)			RA 149B)	 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) 			
hydrophytic vegetati	ion and we	etland hydrology mus	st be presen	t, unless	disturbed o	or problematic.			
ayer (if observed):									
hoo):								./	
nes):						Hydric Soil Pre	esent? Yes		No
֡֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜	ndicators: (A1) ipedon (A2) stic (A3) n Sulfide (A4) Layers (A5) Below Dark Surface rk Surface (A12) ucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, N	oncentration, D=Depletion, RM ndicators: (A1) (A1) (A2) (A2) (A3) (A3) (A4) (A3) (A4) (A4) (A4) (A4) (A4) (A5) (A6) (A6) (A6) (A6) (A6) (A7) (A7) (A7) (A8) (A8) (A8) (A9) (A9) (A9) (A9) (A9) (A9) (A9) (A9	oncentration, D=Depletion, RM=Reduced Matrix, Mandicators: (A1)	noncentration, D=Depletion, RM=Reduced Matrix, MS=Masked Indicators: (A1)	poncentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grandicators: (A1)	poncentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ndicators: (A1)	poncentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Cocation: Findicators: Indicators for	Indicators: (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) In Dark Surface (S9) (LRR R, MLRA 149B) In Dark Surface (S9) (LRR R, MLRA 149B) In Sulfide (A4) Layers (A5) Layers (A5) Redox Dark Surface (F6) In Surface (A11) Redox Dark Surface (F7) Peledmont Floodplain So (Peled Matrix (S4) Redox Casses (Pale	Indicators for Problematic Hydro: Annother Plance Polyvalue Below Surface Polyvalue Below

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region
Project/Site:
Applicant/Owner: Sun & State: NV Sampling Point: LUIZa - L
Investigator(s): Section, Township, Range:
Landform (hillslope, terrace, etc.): Wet has dow Local relief (concave, convex, none):
Subregion (LRR or MLRA): Lat:
Soil Map Unit Name: Car Canandaiana & Lamson Soil & NWI classification: PEM
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrologysignificantly disturbed? Are "Normal Circumstances" present? Yes _K No Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes _ K
Remarks: (Explain alternative procedures here or in a separate report.)
HYDROLOGY
Wetland Hydrology Indicators: Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15) Dry-Season Water Table (C2)
Water Marks (B1) Water Marks (B2) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5)
Field Observations:
Surface Water Present? Yes X No Depth (inches):
Water Table Present? YesX No Depth (inches): 0 "
Saturation Present? Yes X No Depth (inches): O Wetland Hydrology Present? Yes X No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Demado
Remarks:

VEGETATION – Use	scientific names of	plants
-------------------------	---------------------	--------

120217(110)(Ood Colonialis Hamiles of Francis				
T Of the (District		Dominant Species?		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species:	<u>Status</u>	Number of Dominant Species That Are ORL FACW or FAC: (A)
1				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3.				Species Across All Strata: (B)
4				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
5				mat Ale OBL, 1 AOVV, OI 1 AO.
6.				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
				VI
	-	= Total Cov	er	OBL species x 1 =
Sapling/Shrub Stratum (Plot size:)				FACW species 3 x2 = C
1				FAC species x 3 = 3
				FACU species x 4 =
2				UPL species x 5 =
3		-		Column Totals: (A) 9 (B)
4				
5				Prevalence Index = B/A = 1.5
6				Hydrophytic Vegetation Indicators:
	-	-		
7			====	X 2 - Dominance Test is >50%
		= Total Cov	er	X 3 - Prevalence Index is ≤3.0¹
Herb Stratum (Plot size: 9'	20		OBL	4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
1. Lythrum salicaria				Problematic Hydrophytic Vegetation¹ (Explain)
2. Onocles sensibilis			FALW	Problematic Hydrophytic Vegetation (Explain)
3. Phalance arundinacea	20		FACIN	¹ Indicators of hydric soil and wetland hydrology must
4. Verbern historia			FALW	be present, unless disturbed or problematic.
5. Filipendula ulmeria				Definitions of Vegetation Strata:
				_
6. Lecroic orgenites			DFC	Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
7. Cares 500	10			at bleast height (DBH), regardless of height.
8.				Sapling/shrub - Woody plants less than 3 in. DBH
				and greater than or equal to 3.28 ft (1 m) tall.
9				Herb – All herbaceous (non-woody) plants, regardless of
10				size, and woody plants less than 3.28 ft tall.
11:				NV A 1 All was business proceed than 2.29 ft in
12.				Woody vines – All woody vines greater than 3.28 ft in height.
	110	= Total Cov		noight.
	110	_ = Total Cov	er	
Woody Vine Stratum (Plot size:)				
1.				
2.				Hydrophytic
		00.		Vegetation
3				163 <u></u> 16
4				
		= Total Cov	/er	
Remarks: (Include photo numbers here or on a separate	sheet.)			
, and a second s				

	cription: (Describe	to the de				or confirm	n the absence of i	ndicators.)		
Depth (inches)	Matrix Color (moist)	%	Color (moist)	ox Feature %	S Type ¹	Loc ²	Texture	Remarks		
0-10	10 412 2/2	100					51/LO	Nemarks		
10-16	10 412 311	75	7.54R 5/8	. (2	RM	1.4	5:16/66			
16-20	7.54R 511	80	54R 51U	20	777	100	5/10/00			
TOD E-PE	447 16 71	<u> </u>	415 310	10	12M	<u>M</u> _	Clay -			
	-				-		8			
-			-		-					
			·							
		-		//o 			***************************************			
				· · · · · ·			·			
¹Type: C=Co	oncentration, D=Depl	etion. RM	=Reduced Matrix. M	S=Masked	Sand Gra	ins	2 ocation: Pl	=Pore Lining, M=Matrix.		
Hydric Soil I	ndicators:			- 111001100	5 2.16 5 12			Problematic Hydric Soils ³ :		
Histosol			Polyvalue Belo		(S8) (LRR	R,		(A10) (LRR K, L, MLRA 149B)		
Black His	ipedon (A2) stic (A3)		MLRA 149B Thin Dark Surfa		RR R. ML	RA 149B		ie Redox (A16) (LRR K, L, R) y Peat or Peat (S3) (LRR K, L, R)		
	n Sulfide (A4)		Loamy Mucky	Mineral (F1) (LRR K,			ce (S7) (LRR K, L, M)		
	Layers (A5)	48.445	Loamy Gleyed)			Below Surface (S8) (LRR K, L)		
	Below Dark Surface rk Surface (A12)	(A11)						Surface (S9) (LRR K, L)		
	ucky Mineral (S1)		Depleted Dark	, ,	7)			inese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B)		
Sandy GI	eyed Matrix (S4)		Redox Depress	•	.,		Mesic Spodic (TA6) (MLRA 144A, 145, 149B)			
Sandy Re								Material (F21)		
	Matrix (S6) face (S7) (LRR R, Mi	PA 149F	3/					w Dark Surface (TF12)		
Baik bail	(07) (EIXIX IX, IMI	-1471	5 /				Other (Expi	ain in Remarks)		
3Indicators of	hydrophytic vegetatio	on and we	etland hydrology mus	st be prese	nt, unless	disturbed	or problematic.			
Type:	ayer (if observed):									
Depth (incl	nes):						Hydric Soil Pres	sent? Yes K No		
Remarks:							Hydric 30ii Fres	Bentr res NO		

Subregion (LRR or MLRA): Lat: Long: Datum: W65 81 Soil Map Unit Name: Soil Map Unit Name: No Micro PFO Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.) Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No (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 Wetland Hydrology Present? Yes No If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.)	WETLAND DETERMINATION DATA FOR	RM – Northcentral and Northeast Region
Applicant/Owner: SLAND Salar: Investigator(s): PTE (LUZNET) Section, Township, Range: Investigator(s): PTE (LUZNET) Section, Township, Range: Local relief (concave, convex, none): Loca	Project/Site: City/	County:
Investigator(s): Invest		
Local relief (concave, convex, none):	and the state of	
Subregion (LRR or MLRA): Lat: Lat: Long: Datum: MM classification: For No (If no, explain in Remarks.) No (If no, explain in Remarks.) Are vegetation Soil or Hydrology instinately disturbed? Are Vegetation Soil or Hydrology neturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No Wetland Hydrology Present? Yes No If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: check all that apply) Surface Water (A1) Water-Stained Leaves (B9) High Water Table (A2) Aquatic Fauna (B13) Water Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Oxidezed Rhizospheres on Living Roots (C3) Algal Mat or Crust (B4) Recent Iron Reduction in Titled Soils (C6) Find Deposits (B3) Presence of Reduced Iron (C4) Surface Water (A1) Solar Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Recent Iron Reduction in Titled Soils (C6) Find Observations: Surface Water Present? Yes No Depth (inches): Water Harks (B10) Surface Odor (C1) Solar Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Water Harks (B10) Mater Table (C2) Find Observations: Surface Water Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Yes N		
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	Subregion (LRR or MLRA): LRC Lat:	Long: Datum: L/((bx/
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	Soil Man Unit Name: W5 - Wayland Soils complex	Data Sanda de Allande de Sanda
Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes 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 Hydrology Present? Yes No Wetland Hydrology Present? Yes No Hydrology Present? Yes No Hydrology Present? Yes No Hydrology Indicators: Primary Indicators (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: check all that apply) Surface Water (A1) High Water Table (A2) Aquatic Fauna (B13) Mart Deposits (B15) Water Marks (B1) Sediment Deposits (B2) Oridaged Rhizospheres on Living Roots (C3) Drift Deposits (B2) Drift Deposits (B3) Agail Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Sparasely Vegetated Concave Surface (B8) Field Observations: Ves No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches):		
Are Vegetation, Soil, or Hydrologynaturally problematic?		
Hydrophytic Vegetation Present? Wetland Hydrology Present? Wetland Hydrology Present? Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) High Water Table (A2) Water Marks (B1) Saturation (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Saturation (C4) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No		
Hydric Soil Present? Wetland Hydrology Present?? Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) High Water Table (A2) Water Table (A2) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	SUMMARY OF FINDINGS – Attach site map showing sam	npling point locations, transects, important features, etc.
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) High Water Table (A2) Water Saturation (A3) Water Barks (B1) Water Marks (B1) Dry-Season Water Table (C2) Water Marks (B1) Dry-Season Water Table (C2) Crayfish Burrows (C8) Sediment Deposits (B2) Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Inon Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Soil Cracks (B6) Water Marks (B10) Mari Deposits (B13) Mari Deposits (B15) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No No Depth (inches): Wetland Hydrology Present? Yes No Depth (inches):	Hydrophytic Vegetation Present? Hydric Soil Present? Wes No Yes No Wetland Hydrology Present? Yes No	Is the Sampled Area within a Wetland? Yes No
Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) High Water Table (A2) Aquatic Fauna (B13) Water Marks (B1) Hydrogen Sulfide Odor (C1) 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) Field Observations: Surface Water Marks (B8) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) K Stunted or Stressed Plants (D1) K Stunted or Stressed Plants (D1) Sparsely Vegetated Concave Surface (B8) 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 No Depth (inches): Wetland Hydrology Present? Yes No	HYDROLOGY Westland Hydrology Indicators	
Surface Water (A1)		
High Water Table (A2) Aquatic Fauna (B13) Advance Fauna (B15) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Advance Fauna (B13) Advance Fauna (B16) Dry-Season Water Table C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Advance Fauna (B13) Advance Fauna (B13) Advance Fauna (B13) Advance Fauna (B13) Advance Fauna (B16) Dry-Season Water Table C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Advance Fauna (B13) Advance Fauna (B16) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Advance Fauna (B13) Advance Fauna (B16) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Advance Fauna (B1) Advance Fauna (B13) Advance Fauna (B16) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Advance Fauna (B1) Advance Fauna (B16) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Saturation Visible on Aerial Imagery (C9) Saturation Fauna (B1) Advance Fauna (B1) Advance Fauna (B1) Advance Fauna (B16) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Saturation Visible on Aerial Imagery (B1) Advance Fauna (B1) Saturation Visible on Aerial Imagery		
✓ Saturation (A3)		
Water Marks (B1)		
Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) No No Depth (inches): Vescribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Saturation Visible on Aerial Imagery (C9) Saturation Visible on Aerial Imagery (C9) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)		
Drift Deposits (B3) Presence of Reduced Iron (C4) X Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) X Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) X Microtopographic Relief (D4) FAC-Neutral Test (D5) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) X Depth (inches): X No		
Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) X Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Surface Water Present? Yes No X Depth (inches):		I Iron (C4)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	l	_ , ,
Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes No _K Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		,
Field Observations: Surface Water Present? Yes No _K_ Depth (inches): Water Table Present? Yes No _K_ Depth (inches): Saturation Present? Yes K No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	_ , _ , _ , _ , .	
Surface Water Present? Yes No _K Depth (inches): Water Table Present? Yes No _K Depth (inches): Saturation Present? Yes _K No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		FAC-Neutral Test (D5)
Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Obscribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Surface Water Present? Yes No K Depth (inches):	
Saturation Present? Yes K No Depth (inches): Wetland Hydrology Present? Yes No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Saturation Present? Yes K No Depth (inches):	Wetland Hydrology Present? Yes No
Remarks:		vious inspections), if available:
Remarks:		
	Remarks:	

VEOLITION — 836 Scientific flames of plants.				
Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?		Dominance Test worksheet:
	20	<u>opcoios;</u>	FALW	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
1. Salix Migra		×		That Are OBL, FACW, or FAC: (A)
2. Populus destrides			FAC	Total Number of Dominant Species Across All Strata: 3 (B)
3. Juglans Nigra	10	<u>X</u>	FACU	Species Across All Strata: (B)
4. Fraxious pennsylvaica	2		FALW	Percent of Dominant Species
5.				That Are OBL, FACW, or FAC:
6				Prevalence Index worksheet:
		AII		Total % Cover of: Multiply by:
7		= Total Cov		OBL species
5 = 50 N 50 N	-	= Total Cov	eı	FACW species x 2 = 8
Sapling/Shrub Stratum (Plot size: 15 ')	_			FAC species 2 x3=
1. Lonice/a 500	20		 -	FACU species x 4 =
2. Fraxinus Nigra	_5		FALW	UPL species x 5 =
3. Salik higger	-5		FACW	Column Totals: (A) (B)
4. Meco negurdo	3		FAL	Column Totals (A) (B)
		-		Prevalence Index = B/A = 2.5
5				Hydrophytic Vegetation Indicators:
6		-		1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
	33	= Total Cov	er	X 3 - Prevalence Index is ≤3.0¹
Herb Stratum (Plot size:9')				4 - Morphological Adaptations¹ (Provide supporting
1. 5 dragnum spp.	20		Najarati eter	data in Remarks or on a separate sheet)
2. Unknown sop.			\puserson-	Problematic Hydrophytic Vegetation¹ (Explain)
3				¹ Indicators of hydric soil and wetland hydrology must
N-41				be present, unless disturbed or problematic.
4				Definitions of Vegetation Strata:
5		-		
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
7				at breast neight (DBH), regardless of neight.
8.)		Sapling/shrub - Woody plants less than 3 in. DBH
9.				and greater than or equal to 3.28 ft (1 m) tall.
10				Herb - All herbaceous (non-woody) plants, regardless of
10	-	10		size, and woody plants less than 3.28 ft tall.
11,		V:		Woody vines - All woody vines greater than 3.28 ft in
12		-		height.
	80	= Total Cov	er er	
Woody Vine Stratum (Plot size:)				
1.				
2.				Hydrophytic
3.				Vegetation Present? Yes No
3:	•			
4-	-			
		_ = Total Cov	/er	
Remarks: (Include photo numbers here or on a separate	sheet.)	A 15		C) B:
hurb stratum was matter	ic tub	w ha	cht	LIODA'NJ

Profile Des	cription: (Describe	to the de	pth needed to docum	nent the i	ndicator	or confirm	n the absence	of indicators	s.)	
Depth	Matrix			x Features						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	_Loc ² _	Texture		Remarks	
0-10	10 4R 3/2	100	·				5.160	Alla	wint	
10-15	10 4R 2/2	95	7.5 4R 46	5	2-	H	5./Lo			
						<u></u>			T.,	-
-	-		+		-		/ = 8			
1										
k		-	-				***************************************			
E			-			-				
	(- 									
								111		
										
	/									
¹Type: C=C	oncentration, D=Dep	letion, RM	=Reduced Matrix, MS	=Masked	Sand Gra	ains.	² Location	PI =Pore I in	ning, M=Matr	iv
Hydric Soil	Indicators:						Indicators f	or Problema	atic Hydric S	ioils ³ :
Histosol	(A1)		Polyvalue Below	Surface ((S8) (LRF	R,			RR K, L, MLF	
	oipedon (A2)		MLRA 149B)				Coast P	rairie Redox	(A16) (LRR	K, L, R)
Black Hi			Thin Dark Surface						Peat (S3) (LI	
	n Sulfide (A4) I Layers (A5)		Loamy Mucky M Loamy Gleyed M			. L)			RR K, L, M)	
	l Below Dark Surface	(A11)	Depleted Matrix						rface (S8) (LF S9) (LRR K, L	
	rk Surface (A12)	. (,	Redox Dark Surf						sses (F12) (L	•
	lucky Mineral (S1)		Depleted Dark S	urface (F7	7)					(MLRA 149B)
	leyed Matrix (S4)		🔀 Redox Depression	ons (F8)			Mesic S	podic (TA6)	(MLRA 144A	
-	edox (S5)							rent Material		
	Matrix (S6) face (S7) (LRR R, M	I DA 1405	3 \						Surface (TF12	2)
Daik our	lace (O/) (LIXIX IX, III	ILIVA 143L	•,				Other (E	Explain in Re	marks)	
3Indicators of	hydrophytic vegetati	on and we	etland hydrology must	be preser	nt, unless	disturbed	or problematic.			
Restrictive L	ayer (if observed):									
Type:							I .			
Depth (inc	hes):						Hydric Soil F	resent? \	res_⊠_	No
Remarks:										

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region ELLS TARES Sampling Date: 4/10/2017 Applicant/Owner: Sun Silan Investigator(s): MIKE GUZNED _____ Section, Township, Range: Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): ______ Slope (%): Subregion (LRR or MLRA): 1777 - R Lat: 47.4332 Long: -76.4320 Datum: W6584 Soil Map Unit Name: Cananalaigus + Lamson 5011 _____NWI classification: 155 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.) Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes 📉 No Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? Wetland Hydrology Present? If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) Water-Stained Leaves (B9) ✓ Drainage Patterns (B10) High Water Table (A2) ___ Aquatic Fauna (B13) Moss Trim Lines (B16) Saturation (A3) ___ Marl Deposits (B15) ___ Dry-Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Presence of Reduced Iron (C4) Drift Deposits (B3) Stunted or Stressed Plants (D1) _ Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) K Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes ____ No X Depth (inches): Water Table Present? Yes ____ No 💉 Depth (inches): Saturation Present? _ No ____ Depth (inches): 🔿 11 Wetland Hydrology Present? Yes ____ No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	<u>Status</u>	
1				Number of Dominant Species That Are OBL, FACW, or FAC:(A)
				Matrie Obl., From, of the
2			82	Total Number of Dominant
3				Species Across All Strata: (B)
4.				Percent of Dominant Species
				That Are OBL, FACW, or FAC: (A/B)
5		-		
6				Prevalence Index worksheet:
7.				Total % Cover of: Multiply by:
		= Total Cov	er	OBL species x 1 =
161		- Total Cov	Ci	
Sapling/Shrub Stratum (Plot size: 15 1)				FACW species x 2 =
1. Cornus racerrussa	30	×	FAL	FAC species x 3 =
2. Cornus amorram	10	X	Mew	FACU species x 4 =
			FACILI	UPL species x 5 =
3. Corners Sevecca			· ——	Column Totals: (A) (B)
4. Vacciniano corymbosum	2		FALW	
5				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
6		-		
7				1 - Rapid Test for Hydrophytic Vegetation
	57	= Total Cov	er	2 - Dominance Test is >50%
Herb Stratum (Plot size:)				3 - Prevalence Index is ≤3.0 ¹
	7	-1	T-4. (>	4 - Morphological Adaptations¹ (Provide supporting
1. Phalars asundinace			FALW	data in Remarks or on a separate sheet)
2. Lythrum salicain	10	X	DBL	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Filipudula ulmaria	10	×	EAC	¹ Indicators of hydric soil and wetland hydrology must
4. Scirpus cyperines	10	×	GBL	be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6		-		Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
7,				at bleast neight (DDH), regardless of neight.
8				Sapling/shrub - Woody plants less than 3 in. DBH
				and greater than or equal to 3.28 ft (1 m) tall.
9		-	. ———	Herb – All herbaceous (non-woody) plants, regardless of
10				size, and woody plants less than 3.28 ft tall.
11:				
100V				Woody vines – All woody vines greater than 3.28 ft in
12	<u> </u>	-		height.
	<u>50</u>	= Total Co	ver	
Woody Vine Stratum (Plot size:)				
1				
	i c			Hydrophytic
2		\ 		Vegetation
3				Present? Yes No
4				
7-		- Total Co		
		= Total Co	ver	
Remarks: (Include photo numbers here or on a separate	sheet.)			

	cription: (Describe	to the dep				or confir	m the absence	of indicators.)
Depth (inches)	Matrix Color (moist)	- %	Color (moist)	x Feature: %	<u>S</u> Type ¹	_Loc²	Texture	Remarks
0-10	10 42 3/1	90	7,542 516	8	12 mg		Jillo	Muck surface
				7			, At	
				-				-
	*****				1 = #	-		-
	*							
	-				-	***		
		×			_	-		
		e				•		
	,							
							33	
				-				
¹Type: C=Cc	oncentration, D=Depl	letion RMs		=-Mackad	Sand Gr		21 continu	DI -Dove Linius Manualis
Hydric Soil I	indicators:	edon, Mil	-Neduced Watrix, Wic	5-Maskeu	Sand Gra	allis.		PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ :
Histosol			Polyvalue Belov		(S8) (LRF	RR,	2 cm M	luck (A10) (LRR K, L, MLRA 149B)
Histic Ep	pipedon (A2)		MLRA 149B)		DD D 441	DA 440D		Prairie Redox (A16) (LRR K, L, R)
	n Sulfide (A4)		Thin Dark Surfa Loamy Mucky M					lucky Peat or Peat (S3) (LRR K, L, R) urface (S7) (LRR K, L, M)
Stratified	Layers (A5)		Loamy Gleyed N	Matrix (F2)		, –,	Polyval	ue Below Surface (S8) (LRR K, L)
	l Below Dark Surface rk Surface (A12)	(A11)	✓ Depleted Matrix ☐ Depleted Matrix					ark Surface (S9) (LRR K, L)
	ucky Mineral (S1)		Redox Dark Sur Depleted Dark S		7)			anganese Masses (F12) (LRR K, L, R) ont Floodplain Soils (F19) (MLRA 149B)
Sandy G	leyed Matrix (S4)		Redox Depressi	•	.,			Spodic (TA6) (MLRA 144A, 145, 149B)
	edox (S5)							rent Material (F21)
	Matrix (S6) face (S7) (LRR R, M	LRA 149B	3)					nallow Dark Surface (TF12) Explain in Remarks)
³ Indicators of	hydrophytic vegetati	on and we	tland hydrology must	t be prese	nt, unless	disturbed	or problematic.	
Restrictive L	ayer (if observed):			· -			1	
Type:								\
Depth (incl	hes):						Hydric Soil I	Present? Yes _ X No
Remarks:								

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region State: MY Sampling Point: WIZa - W Applicant/Owner: San & Sach Investigator(s): MTLE GUZNAP _____ Section, Township, Range:_ Landform (hillslope, terrace, etc.): Hillside Local relief (concave, convex, none): Subregion (LRR or MLRA): LRZ Lat: 42.43% Long: 43.55 Soil Map Unit Name: Cole - Chromy gravelly Warn, 5-15 2 Stoper 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? Are "Normal Circumstances" present? Yes __X Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Yes _____ No K Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? Yes _____ No ≪ Yes _____ No 💢 Wetland Hydrology Present? If yes, optional Wetland Site ID:_____ Remarks: (Explain alternative procedures here or in a separate report.) **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) ___ Surface Soil Cracks (B6) Surface Water (A1) ___ Water-Stained Leaves (B9) Drainage Patterns (B10) High Water Table (A2) __ Aquatic Fauna (B13) ___ Moss Trim Lines (B16) Saturation (A3) ___ Marl Deposits (B15) ___ Dry-Season Water Table (C2) __ Water Marks (B1) ___ Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) __ Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) _ Drift Deposits (B3) Presence of Reduced Iron (C4) ___ Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) _ Geomorphic Position (D2) ___ Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aguitard (D3) _ Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes ____ No K Depth (inches): Water Table Present? Saturation Present? __ Depth (inches): Wetland Hydrology Present? Yes No ✗ (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size:)		Species?		Dominance Test worksheet:
	:- 1			Number of Dominant Species That Are ORL EACH or EAC:
1,	- :			That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
2:				Species Across All Strata:
3	-			Opedies / toross / tir otrata.
4.				Percent of Dominant Species
E				That Are OBL, FACW, or FAC: (A/B)
5	- X			
6	-1			Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
·				
· ·		= Total Cov	er	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15				FACW species x 2 =
Saping/Ornab Gratam (Fiot Size:		-	- March Styl.	FAC species x 3 =
1 Lonicera spp.	12			FACU species x 4 =
2. Posa multiflora	10	×	FALL	
35:				UPL species x 5 =
3		_		Column Totals: (A) (B)
4.				
VA 455				Prevalence Index = B/A =
5				
6.				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
7		-	. ——	2 - Dominance Test is >50%
	25	= Total Cov	/er	3 - Prevalence Index is ≤3.0¹
Herb Stratum (Plot size: 9)				
	4.		_	4 - Morphological Adaptations¹ (Provide supporting
1. Solidage altissima	30	<u>×</u>	T-4ch	data in Remarks or on a separate sheet)
2. Dipsacus Intonum	15	×	FACU	Problematic Hydrophytic Vegetation¹ (Explain)
			-	1
3			. —	¹Indicators of hydric soil and wetland hydrology must
4.				be present, unless disturbed or problematic.
*				Definitions of Vegetation Strata:
5				Dominations of Cogements
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
				at breast height (DBH), regardless of height.
7		-		a management of the state of th
8				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9.				and greater than or equal to 5.26 it (1 iii) tail.
9	-	3		Herb - All herbaceous (non-woody) plants, regardless of
10				size, and woody plants less than 3.28 ft tall.
11,				
118			-	Woody vines – All woody vines greater than 3.28 ft in
12		-		height.
	45	= Total Co	ver	
		-		
Woody Vine Stratum (Plot size:)				
1				
				Hydrophytic
2		-		Vegetation
3.				Present? Yes No 🔀
4	_			
		_= Total Co	ver	
Remarks: (Include photo numbers here or on a separat	e sheet.)			
Tromano: (morado prior name a ser a	•			
1				

Depth	Matrix		Redox Features	3	m the absence of ind	accatacter. € 1
(inches)	Color (moist)	% Color (moi		Type ¹ Loc ²	<u>Texture</u>	Remarks
0-8	10 4R H/4			Sec. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	5:160	
	-					
			 8:			
				7. 3		
	:			— —		
1 -				<u> </u>		
Type: C=Co Hydric Soil I	ncentration, D=Depletion	on, RIVI=Reduced Matr	ix, MS=Masked	Sand Grains.		Pore Lining, M=Matrix. oblematic Hydric Soils ³ :
Histosol (Polyvalue	Below Surface ('C0\ /I DD D		
	ipedon (A2)	MLRA		30) (LKK K,		.10) (LRR K, L, MLRA 149B) Redox (A16) (LRR K, L, R)
Black His	. , ,		,	RR R, MLRA 149E		Peat or Peat (S3) (LRR K, L, R)
	n Sulfide (A4)		icky Mineral (F1)			(S7) (LRR K, L, M)
	Layers (A5)		eyed Matrix (F2)		Polyvalue Bel	ow Surface (S8) (LRR K, L)
	Below Dark Surface (A		Matrix (F3)			face (S9) (LRR K, L)
	rk Surface (A12) ucky Mineral (S1)		rk Surface (F6) Dark Surface (F7	7)		ese Masses (F12) (LRR K, L, R)
	eyed Matrix (S4)		pressions (F8))		odplain Soils (F19) (MLRA 149 B (TA6) (MLRA 144A, 145, 149B)
Sandy Re					Red Parent M	
	Matrix (S6)					Dark Surface (TF12)
Dark Surf	ace (S7) (LRR R, MLR	A 149B)			Other (Explain	n in Remarks)
			must be present	st vindaga diativiba.		
	hydrophytic vegetation :		must be presen	it, uniess disturbed	or problematic.	
Indicators of	hydrophytic vegetation a	and wetland hydrology			1	
Indicators of Restrictive La	hydrophytic vegetation a ayer (if observed):	and wetland hydrology				
Indicators of Restrictive La	ayer (if observed):	and wetland hydrology			Mardaia Cail Bassaca	
Indicators of Restrictive La Type: Depth (inch	ayer (if observed):	and wetland hydrology			Hydric Soil Preser	nt? YesNo_X
Indicators of Restrictive La	ayer (if observed):	and wetland hydrology			Hydric Soil Preser	nt? Yes No X
Indicators of l Restrictive La Type: Depth (inch	ayer (if observed):	and wetland hydrology			Hydric Soil Preser	nt? YesNo_X
Indicators of Restrictive La Type: Depth (inch	ayer (if observed):	and wetland hydrology			Hydric Soil Preser	nt? YesNo_X
Indicators of Restrictive La Type: Depth (inch	ayer (if observed):	and wetland hydrology			Hydric Soil Preser	nt? Yes No_X
Indicators of l Restrictive La Type: Depth (inch	ayer (if observed):	and wetland hydrology			Hydric Soil Preser	nt? Yes No X
Indicators of l Restrictive La Type: Depth (inch	ayer (if observed):	and wetland hydrology			Hydric Soil Preser	nt? YesNo_X
Indicators of Restrictive La Type: Depth (inch	ayer (if observed):	and wetland hydrology			Hydric Soil Preser	nt? Yes No X
Indicators of l Restrictive La Type: Depth (inch	ayer (if observed):	and wetland hydrology			Hydric Soil Preser	nt? Yes No X
Indicators of Restrictive La Type: Depth (inch	ayer (if observed):	and wetland hydrology			Hydric Soil Preser	nt? Yes No X
Indicators of Restrictive La Type: Depth (inch	ayer (if observed):	and wetland hydrology			Hydric Soil Preser	nt? Yes No X
Indicators of Restrictive La Type: Depth (inch	ayer (if observed):	and wetland hydrology			Hydric Soil Preser	nt? YesNo_X
Indicators of l Restrictive La Type: Depth (inch	ayer (if observed):	and wetland hydrology			Hydric Soil Preser	nt? Yes No X
Indicators of Restrictive La Type: Depth (inch	ayer (if observed):	and wetland hydrology			Hydric Soil Preser	nt? Yes No X
Indicators of Restrictive La Type: Depth (inch	ayer (if observed):	and wetland hydrology			Hydric Soil Preser	nt? Yes No X
Indicators of lactors of lactors and lactors and lactors are lactors and lactors are lactors and lactors are lactors and lactors are lacto	ayer (if observed):	and wetland hydrology			Hydric Soil Preser	nt? Yes No X
Indicators of lactors of lactors and lactors and lactors are lactors and lactors are lactors and lactors are lactors and lactors are lacto	ayer (if observed):	and wetland hydrology			Hydric Soil Preser	nt? Yes No X

	ATA FORM – Northcentral and Northeast Region
Project/Site: FULS TLACTS	City/County: TOMIKENS Sampling Date: 4/10/2017
Applicant/Owner: Sw & Solve	State: NY Sampling Point: w134 - WET
Investigator(s): MLKE GUZN AW	Section, Township, Range: Three
Landform (hillslope, terrace, etc.):	Local relief (concave, convex, none):Slope (%):
Subregion (LRR or MLRA): LRR-R Lat: 42.4	35976 Long: 76.48/572 Datum: W6584
Soil Map Unit Name: ErA - Erie - Chipaewa chenze	ry silt loam 0-3%, slope NWI classification: PEM
Are climatic / hydrologic conditions on the site typical for this time	of year? Yes X No. (If no evaluit in Demodul)
Are Vegetation, Soil, or Hydrology signific	
Are Vegetation, Soil, or Hydrology natura	
	,
SUMMARY OF FINDINGS – Attach site map show	wing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Yes No Yes No	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present? Yes No	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate	report.)
	*
-	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that ap	<u> </u>
1/	ined Leaves (B9) <u>▼</u> Drainage Patterns (B10)
/	auna (B13) <u>K</u> Moss Trim Lines (B16)
★ Saturation (A3)	_ ,
	Sulfide Odor (C1) Crayfish Burrows (C8)
	Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
	of Reduced Iron (C4) Stunted or Stressed Plants (D1)
Recent Irol Iron Deposits (B5) Thin Muck	n Reduction in Tilled Soils (C6) Geomorphic Position (D2)
Sparsely Vegetated Concave Surface (B8)	
Field Observations:	FAC-Neutral Test (D5)
Surface Water Present? Yes _ No Depth (inc	ches): \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Water Table Present? Yes K No Depth (inc	thes): -2"
Saturation Present? Yes 😾 No Depth (inc	
(includes capillary fringe)	,
Describe Recorded Data (stream gauge, monitoring well, aerial p	hotos, previous inspections), if available:
Remarks:	

	Absolute	Dominant	Indicator	Deminance Test worksheet:
Tree Stratum (Plot size:)		Species?		Dominance Test worksheet:
1				Number of Dominant Species That Are OBL, FACW, or FAC: (A)
				MacAic Obe, I Novi, of I No.
2				Total Number of Dominant Species Across All Strata: (B)
3		·		Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
		= Total Cov	er	OBL species 3 x1 = 3
Sapling/Shrub Stratum (Plot size: 15)				FACW species x 2 =
1. Salix nigra	10	X	FALW	FAC species x 3 =3
. January		4	FULLE	FACU species x 4 =
2. Balix Severen	7		70	UPL species x 5 =
3. Salix discolor	<u>.</u> j	7	ENCL	Column Totals: (A) (B)
4				
5				Prevalence Index = B/A = 0.5 6
				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
	23	= Total Co	ver	3 - Prevalence Index is ≤3.0¹
Herb Stratum (Plot size: 9')				
1. Phalaris arundinales	40	×	FACW	4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
1. Marans aranate			OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Luthourn selicaria			W. L. W. W. W. W.	Problematic Hydrophytic Vogstation (Explain)
3. Typha latifolia	10		DBC	¹ Indicators of hydric soil and wetland hydrology must
4. Verbeug . historia	5		FACW	be present, unless disturbed or problematic.
5. Thuring Corespos	-0		ENL	Definitions of Vegetation Strata:
S. IEDANN C. CONSTITUTE			OBL	Tree – Woody plants 3 in. (7.6 cm) or more in diameter
6. Learn orystoides				at breast height (DBH), regardless of height.
7. Corux Spa	723			
8				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9.				and greater than or equal to 5.20 k (1 m) tail.
0040		91		Herb - All herbaceous (non-woody) plants, regardless of
10) -		size, and woody plants less than 3.28 ft tall.
11,	-	-		Woody vines – All woody vines greater than 3.28 ft in
12				height.
	100	= Total Co	ver	
Mandy Vino Stratum (Plat size:				
Woody Vine Stratum (Plot size:)				
1				Hydrophytic
2				Vegetation
3				Present? Yes No
4				
7		- Total Ca		
	- absat \	_ = Total Co	vei	
Remarks: (Include photo numbers here or on a separate	e sneet.)			

Depth		to the de	pth needed to docu			or confirm	n the absence of in	dicators.)
(inches)	Matrix Color (moist)	%	Color (moist)	x Feature:	<u>Type¹</u>	_ Loc²	Texture	Remarks
0-8	104R 2/2	100					5140	T CONTROLLED
8-12	10 42311	90	7.5 472 4/6		774	4 4		
0 ,-	10 11 5/1		017 31P C. P	10	RM	11	5.160	
<u></u>								
		=:=====================================					10	
		-						
					-		·	
<u></u>							7.=====================================	
		-	-					
								
		letion, RM	=Reduced Matrix, MS	S=Masked	Sand Gra	ins.	² Location: PL=	Pore Lining, M=Matrix.
Hydric Soil In			Debaselus Belev	06	(CO) // DD	_		roblematic Hydric Soils ³ :
Histosol (pedon (A2)		Polyvalue Below MLRA 149B)		(S8) (LRR	. К,		A10) (LRR K, L, MLRA 149B) Redox (A16) (LRR K, L, R)
▼ Black His			Thin Dark Surfa		RR R, ML	RA 149B)		Peat or Peat (S3) (LRR K, L, R)
	Sulfide (A4)		Loamy Mucky N	fineral (F1) (LRR K,		,	e (S7) (LRR K, L, M)
	Layers (A5)	~ (844)	Loamy Gleyed	Matrix (F2)				elow Surface (S8) (LRR K, L)
	Below Dark Surfac k Surface (A12)	e (ATT)	✓ Depleted Matrix — Redox Dark Sur	(F3) face (F6)				urface (S9) (LRR K, L) lese Masses (F12) (LRR K, L, R)
	icky Mineral (S1)		Depleted Dark S		7)			podplain Soils (F19) (MLRA 149B)
	eyed Matrix (S4)		Redox Depress	•	•			c (TA6) (MLRA 144A, 145, 149B)
Sandy Re								Material (F21)
	Matrix (S6) ace (S7) (LRR R, N	AI RA 149F	3/					Dark Surface (TF12)
Bank Gan	doc (Or) (ERRY IX, II	1107 1751	-)				Other (Expra	in in Remarks)
³ Indicators of h	nydrophytic vegetat	ion and we	etland hydrology mus	be presei	nt, unless	disturbed	or problematic.	
	yer (if observed):							
Type:	10							V
Depth (inch	es):						Hydric Soil Prese	ent? Yes No
Remarks:								

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: FUTS 14MT) Cit	y/County: York Mark Co Sampling Date: 4/10/2017
Applicant/Owner: Sun & Solar-	State: NY Sampling Point: W13s - WETZ
Investigator(s): Many Guanger Se	
Landform (hillslope, terrace, etc.): DitchLocal	
Subregion (LRR or MLRA): LRR-R Lat: 42-43578	-31
Soil Map Unit Name: LaB- Lang Ford channey si	
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 dis	, ,
Are Vegetation, Soil, or Hydrology naturally proble	•
	ampling point locations, transects, important features, etc.
	mportant reading, transcots, important readines, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydric Soil Present? Yes No	within a Wetland? Yes No
Wetland Hydrology Present? Yes No	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate report.)	
1	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Lear	ves (B9) <u>K</u> Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B1)	3) <u>√</u> Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide C	
1	eres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	
	tion in Tilled Soils (C6) K Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface	
Inundation Visible on Aerial Imagery (B7) Other (Explain in Re	,
Sparsely Vegetated Concave Surface (B8) Field Observations:	FAC-Neutral Test (D5)
Surface Water Present? Yes V No Depth (inches): 2	
Water Table Present? Yes No Depth (inches): -	2
Saturation Present? Yes K No Depth (inches): O	Wetland Hydrology Present? YesK No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, p	revious inspections), if available:
Remarks:	
remarks.	
ž.	
"	

VEGETATION — 636 solentine flames of plants.	A1 1 1	D :	1. 4	
Tree Stratum (Plot size:)		Dominant Species?		Dominance Test worksheet:
	_			Number of Dominant Species That Are OBL, FACW, or FAC: (A)
1				That Are OBL, FACW, or FAC:(A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
				That Are OBL, FACW, or FAC: (A/B)
5				
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
		= Total Cov	er	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15 1				FACW species x 2 =
1. Jalik Wigon	40	M	FACILI	FAC species x 3 =
1. Dank Deigra				FACU species x 4 =
2. Salis disvolur	<u> </u>	$\stackrel{\wedge}{-}$	FARW	UPL species x 5 =
3				Column Totals: (A) (B)
4				Column Totals (A) (B)
				Prevalence Index = B/A =
5				the description of the descripti
6				Hydrophytic Vegetation Indicators:
7			7	1 - Rapid Test for Hydrophytic Vegetation
	150	= Total Cov	er	2 - Dominance Test is >50%
Herb Stratum (Plot size:9 ')				3 - Prevalence Index is ≤3.0 ¹
	14	×	Times	4 - Morphological Adaptations (Provide supporting
1. Oroclea sensibilis	15		FALW	data in Remarks or on a separate sheet)
2. Juneus affusus	_5_		OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
3		·		¹ Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
				Definitions of Vegetation Strata:
5				Definitions of Fogetation Struct.
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sapling/shrub - Woody plants less than 3 in. DBH
ře .				and greater than or equal to 3.28 ft (1 m) tall.
9				Herb - All herbaceous (non-woody) plants, regardless of
10				size, and woody plants less than 3.28 ft tall.
11,				
12.				Woody vines – All woody vines greater than 3.28 ft in height.
	20	- Total Cau		netght.
Silved on lower in large into		= Total Cov	er	
Woody Vine Stratum (Plot size:)				
1,				
2.				Hydrophytic
======================================				Vegetation Present? Yes K No
3				7.55
4		-		
		= Total Cov	er	
Remarks: (Include photo numbers here or on a separate	sheet.)			

	cription: (Describe	to the de				or confirn	n the absence of in	dicators.)	
Depth (inches)	Matrix Color (moist)	%	Color (moist)	x Feature %	S Type ¹	Loc ²	Texture	Remarks	
0.H	10 4R 2/2	100	Color (moist)		Type		5/Lo	Kemarks	
4-10	10 412 211		10 48 516	15	Ry	1.4	5./Lo		
1-10-	10 110	00	545/2	5	_	М			
	-		07012	3	13M	<u>ч</u>	CL/LO _		
						-			
		-	-						
,,					-				
				-			:		
	99				-				
	·				-		· · · · · · · · ·		
3	·		-						
1= 0.0					= -				
Hydric Soil I	oncentration, D=Depl	etion, RM	=Reduced Matrix, MS	S=Masked	Sand Gra	ins.	*Location: PL=	Pore Lining, M=Matrix. roblematic Hydric Soils³:	
Histosol			Polyvalue Belov	v Surface	(S8) (LRR	R,		A10) (LRR K, L, MLRA 149B)	
	ipedon (A2)		MLRA 149B)	•			Coast Prairie	e Redox (A16) (LRR K, L, R)	
∠ Black His Hydroge	stic (A3) n Sulfide (A4)		Thin Dark Surfa Loamy Mucky N					Peat or Peat (S3) (LRR K, L, R)	
	Layers (A5)		Loamy Gleyed I			_)	Dark Surface (S7) (LRR K, L, M) Polyvalue Below Surface (S8) (LRR K, L)		
	Below Dark Surface	(A11)	Depleted Matrix	(F3)			Thin Dark Surface (S9) (LRR K, L)		
	rk Surface (A12) ucky Mineral (S1)		Redox Dark Sur Depleted Dark S		7)			ese Masses (F12) (LRR K, L, R)	
	leyed Matrix (S4)		Redox Depressi		′)			oodplain Soils (F19) (MLRA 149B) c (TA6) (MLRA 144A, 145, 149B)	
	edox (S5)						Red Parent I	Material (F21)	
	Matrix (S6) face (S7) (LRR R, MI	LRA 149E	3)					v Dark Surface (TF12) in in Remarks)	
³ Indicators of	hydrophytic vegetation	on and we	tland hydrology mus	t be prese	nt, unless	disturbed	or problematic.		
	ayer (if observed):								
Type: Depth (inc	hes):						Hydric Soil Prese		
Remarks:	nes)						Hydric Soil Prese	ent? Yes No	
rtornatto.									

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region ______City/County: _______Compress to Sampling Date: 4//0 Sun & soun Applicant/Owner: State: NY Sampling Point: 6.13 MZKE GUZNAN Thaca Investigator(s): ____ Section, Township, Range:___ Landform (hillslope, terrace, etc.): Subregion (LRR or MLRA): LRR -R 42.436079 Long: -76.43/8// Datum: W. Soil Map Unit Name: ErA- Erie- Chippewa channey silt loam, 0-37, slopes NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ X No ____ (If no, explain in Remarks.) Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ______ Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. is the Sampled Area Hydrophytic Vegetation Present? Yes _____ No X within a Wetland? Hydric Soil Present? Yes ____ No X Yes _____ No X Wetland Hydrology Present? If yes, optional Wetland Site ID:_____ Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) __ Surface Soil Cracks (B6) ___ Surface Water (A1) __ Water-Stained Leaves (B9) ___ Drainage Patterns (B10) High Water Table (A2) Aguatic Fauna (B13) __ Moss Trim Lines (B16) Saturation (A3) ___ Marl Deposits (B15) ___ Dry-Season Water Table (C2) Water Marks (B1) ___ Hydrogen Sulfide Odor (C1) ___ Crayfish Burrows (C8) ___ Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) _ Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Yes ____ No _ Surface Water Present? Depth (inches): Water Table Present? Saturation Present? Depth (inches): Wetland Hydrology Present? Yes ____ No √ (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size:)		Species?		Dominance Test worksheet:
				Number of Dominant Species
1				That Are OBL, FACW, or FAC:(A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
30				Descript of Descinant Coopies
4			45 X	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
5				mat Ale Obc, I AOW, OT Ao.
6				Prevalence Index worksheet:
				W
7			-	Total % Cover of: Multiply by:
		= Total Cov	/er	OBL species x 1 =
Sapling/Shrub Stratum (Plot size:)				FACW species x 2 =
				FAC species x 3 =
1				FACU species x 4 =
2			4	UPL species x 5 =
3.				
	-			Column Totals: (A) (B)
4				Business Indon = B/A =
5		·		Prevalence Index = B/A =
6.				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
7				_
		= Total Cov	ver	2 - Dominance Test is >50%
Herb Stratum (Plot size: 9 ')				3 - Prevalence Index is ≤3.0¹
1. Dipsacus Fullonum	15	×	FACL	4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
			FACE	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Dactylis glorvereta	13	\sim		Troblemation yerophytic vogetation (Explain)
3. Poa pratensis	. 10		FALL	¹ Indicators of hydric soil and wetland hydrology must
4. Unknown 500				be present, unless disturbed or problematic.
3.9):	Definitions of Vegetation Strata:
5				Deminions of Fogotation Status
6				Tree - Woody plants 3 in. (7.6 cm) or more in diameter
				at breast height (DBH), regardless of height.
7				Sapling/shrub – Woody plants less than 3 in. DBH
8				and greater than or equal to 3.28 ft (1 m) tall.
9.				and ground than or equal to only the control of the
10				Herb - All herbaceous (non-woody) plants, regardless of
10	. —			size, and woody plants less than 3.28 ft tall.
11		-		Woody vines – All woody vines greater than 3.28 ft in
12				height.
· · · · · · · · · · · · · · · · · · ·	\-0	= Total Co		
		= Total Co	ver	
Woody Vine Stratum (Plot size:)				
1				
100	-		-:	Hydrophytic
2		-		Vegetation
3				Present? Yes No K
1				
4	-		-2:	
	-	= Total Co	ver	
Remarks: (Include photo numbers here or on a separate	sheet.)			

452 350	or (moist) 112 4/8	% رف	Color (moist)	x Features 	Type ¹	Loc ²	Texture	Rema	rks
Type: C=Concentrati Hydric Soil Indicators Histosol (A1) Histic Epipedon (A Black Histic (A3) Hydrogen Sulfide Stratified Layers (A Depleted Below D Thick Dark Surface Sandy Mucky Mine Sandy Gleyed Mat Sandy Redox (S5) Stripped Matrix (S6 Dark Surface (S7) Indicators of hydrophy Restrictive Layer (if o Type: Depth (inches):	124/3	<u> </u>					5/10		
Hydric Soil Indicators Histosol (A1) Histic Epipedon (A Black Histic (A3) Hydrogen Sulfide (A3) Stratified Layers (A3) Thick Dark Surface (A3) Sandy Mucky Mine (A3) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Indicators of hydrophy Restrictive Layer (if o									
Hydric Soil Indicators Histosol (A1) Histic Epipedon (A Black Histic (A3) Hydrogen Sulfide Stratified Layers (A Depleted Below Di Thick Dark Surface Sandy Mucky Mine Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Indicators of hydrophy Restrictive Layer (if o									
Hydric Soil Indicators Histosol (A1) Histic Epipedon (A Black Histic (A3) Hydrogen Sulfide Stratified Layers (A Depleted Below Di Thick Dark Surface Sandy Mucky Mine Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Indicators of hydrophy Restrictive Layer (if o			•		(8)				
Hydric Soil Indicators Histosol (A1) Histic Epipedon (A Black Histic (A3) Hydrogen Sulfide Stratified Layers (A Depleted Below Da Thick Dark Surface Sandy Mucky Mine Sandy Gleyed Mat Sandy Redox (S5) Stripped Matrix (S6 Dark Surface (S7) Indicators of hydrophy Restrictive Layer (if o									
Histic Epipedon (A Black Histic (A3) Hydrogen Sulfide (Stratified Layers (A Depleted Below Di Thick Dark Surface Sandy Mucky Mine Sandy Gleyed Mat Sandy Redox (S5) Stripped Matrix (S6 Dark Surface (S7) Blindicators of hydrophy Restrictive Layer (if o Type: Depth (inches):	tion, D=Depleti	ion, RM=Re	educed Matrix, MS	=Masked S	and Grai	ns.	² Location: PL=	Pore Lining, March	
Restrictive Layer (if o Type: Depth (inches):	e (A4) (A5) Dark Surface (Acc (A12) neral (S1) atrix (S4) (S6) (LRR R, MLR		Polyvalue Below MLRA 149B) Thin Dark Surfact Loamy Mucky M Loamy Gleyed N Depleted Matrix Redox Dark Surfact Depleted Dark S Redox Depression	ce (S9) (LR dineral (F1) Matrix (F2) (F3) face (F6) durface (F7) ons (F8)	R R, MLF (LRR K, I	RA 149B) ∟)	2 cm Muck (Coast Prairi 5 cm Mucky Dark Surfac Polyvalue B Thin Dark S Iron-Mangar Piedmont FI Mesic Spodi Red Parent Very Shallov Other (Explain	A10) (LRR K, L e Redox (A16) (I Peat or Peat (S e (S7) (LRR K, I elow Surface (Si urface (S9) (LRI nese Masses (F' codplain Soils (F	, MLRA 149B) LRR K, L, R) 3) (LRR K, L, R) L, M) 8) (LRR K, L) R K, L) 12) (LRR K, L, R F19) (MLRA 149 144A, 145, 149B
Depth (inches):	observed):		,	20 p. 000 iii	, 4111000 4	lotar boa	n problemate.		
Indianas -cox-s		-							
Remarks:							Hydric Soil Prese	ent? Yes	No_ <u>×</u> _

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region Project/Site: EUYS TAATTS _____ City/County: Townsky CO Sampling Date: 4/10/2017 Applicant/Owner: ____SINR SOLAN Investigator(s): Make CuzNKP _____ Section, Township, Range: THAKA Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Slope (%): Subregion (LRR or MLRA): _______ LRR - P. _____ Lat: ______ 42.43 7 884 ______ Long: -76-434469 Soil Map Unit Name: Lac3 - Long Ford Channey silt loam, 8-18%. 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? Are "Normal Circumstances" present? Yes ⋉ No Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? Wetland Hydrology Present? If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) X Surface Water (A1) K Drainage Patterns (B10) ___ Water-Stained Leaves (B9) ✓ High Water Table (A2) ___ Aquatic Fauna (B13) ✓ Moss Trim Lines (B16) X Saturation (A3) Marl Deposits (B15) ___ Dry-Season Water Table (C2) Water Marks (B1) ___ Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) ___ Saturation Visible on Aerial Imagery (C9) ✓ Presence of Reduced Iron (C4) ___ Drift Deposits (B3) Stunted or Stressed Plants (D1) _ Algal Mat or Crust (B4) K Geomorphic Position (D2) __ Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Iron Deposits (B5) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) K Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Yes X No Depth (inches): 2 " Surface Water Present? Yes Ko Depth (inches): 0" Water Table Present? ∠ No ____ Depth (inches):
∂ `` Saturation Present? Wetland Hydrology Present? Yes X No. (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: Stream Goodplan

Sampling Point: WHa-WET

	Absolute			Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1,				That Are OBL, FACW, or FAC:(A)
2.				
				Total Number of Dominant Species Across All Strata: (B)
3				Species Across Air Strata.
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
		= Total Cov	er	OBL species x 1 =
a tar agranger v				FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)				
1				FAC species x 3 =
2				-FACU species x 4 =
				UPL species x 5 =
3	-			Column Totals: (A) (B)
4				
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
		-		1 - Rapid Test for Hydrophytic Vegetation
7,				2 - Dominance Test is >50%
		= Total Cov	er	3 - Prevalence Index is <3.01
Herb Stratum (Plot size:9)				4 - Morphological Adaptations¹ (Provide supporting
1. Typha lati Bic			OBL	data in Remarks or on a separate sheet)
2. Phalois arundinance	50	X	Fach	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Ousched sensibilis	15		FARW	¹ Indicators of hydric soil and wetland hydrology must
4. Leersia orgxesides	Section 1		OBC	be present, unless disturbed or problematic.
5. Carex Spp.		_ C 	-	Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH
201		()		and greater than or equal to 3.28 ft (1 m) tall.
9			-	Herb – All herbaceous (non-woody) plants, regardless of
10				size, and woody plants less than 3.28 ft tall.
11.		v=		
				Woody vines – All woody vines greater than 3.28 ft in
12	90	-		height.
	90	_= Total Cov	er	
Woody Vine Stratum (Plot size:)				
1.				
				Hydrophytic
2				Vegetation 0/2
3		a <u></u>		Present? Yes No
4.				
		= Total Cov	/er	
Remarks: (Include photo numbers here or on a separate	sheet)			
Tremains. (moldde photo hambers here of the separate	511001)			

Depth	Matrix		pth needed to docu Red	ox Feature				
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type ¹	_Loc ²	Texture	Remarks
0-8	104R3/2						5/6	
3-12	10 4R 2/2	90	5478 514	0	RM	H	Sillo	
		-						
		-	7.7 	ke 				
	0.			: 				
Type: C=Co	oncentration, D=Dep	oletion, RM	=Reduced Matrix, M	S=Masked	Sand Gra	ins.	² Location: Pl	L=Pore Lining, M=Matrix. Problematic Hydric Soils ³ :
Black His Hydroge Stratified Depleted Thick Da Sandy M Sandy G Sandy R Stripped Dark Sur	pipedon (A2) stic (A3) in Sulfide (A4) I Layers (A5) I Below Dark Surface irk Surface (A12) lucky Mineral (S1) ileyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, III	/ILRA 149	Polyvalue Below MLRA 149B Thin Dark Surfa Loamy Mucky M Loamy Gleyed Depleted Matrix Redox Dark Su Depleted Dark Su Redox Depress Redox Depress) ace (S9) (L dineral (F1 Matrix (F2) ((F3) rface (F6) Surface (F ions (F8)	.RR R, ML) (LRR K,)	RA 149B L)	Coast Prai 5 cm Muck Dark Surfa Polyvalue Thin Dark Iron-Manga Piedmont I Mesic Spo Red Paren Very Shalk	k (A10) (LRR K, L, MLRA 149B) irie Redox (A16) (LRR K, L, R) ky Peat or Peat (S3) (LRR K, L, R) ince (S7) (LRR K, L, M) Below Surface (S8) (LRR K, L) Surface (S9) (LRR K, L) anese Masses (F12) (LRR K, L, R) Floodplain Soils (F19) (MLRA 149B) dic (TA6) (MLRA 144A, 145, 149B) at Material (F21) by Dark Surface (TF12) clain in Remarks)
estrictive L	ayer (if observed):		, 0,		,		l problematio.	
Type: Depth (inc	hee).						Undain Cail Dan	sent? Yes ^K No
emarks:			:				Hydric Soil Pres	sent? Yes No No

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region ELES TRACES City/County: TOMPRESS (D Sampling Date: UD/UI Project/Site: Applicant/Owner: San & Suffe Sampling Point: WIL Investigator(s): MRV4 GyznkN Ithaca Section, Township, Range:___ Landform (hillslope, terrace, etc.): ______ Local relief (concave, convex, none): ______ A one. Subregion (LRR or MLRA): <u>LRR-R</u> Lat: <u>42-438010</u> Long: <u>-76.434519</u> Soil Map Unit Name: LaC3 - Langford channery silt bar Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.) Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. is the Sampled Area Hydrophytic Vegetation Present? Yes _____ No 1/2 within a Wetland? Hydric Soil Present? Yes _____ No X Wetland Hydrology Present? Yes _____ No 🗡 If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) ___ Water-Stained Leaves (B9) __ Drainage Patterns (B10) ___ High Water Table (A2) __ Aquatic Fauna (B13) __ Moss Trim Lines (B16) Saturation (A3) __ Marl Deposits (B15) __ Dry-Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) ___ Crayfish Burrows (C8) ___ Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) ___ Saturation Visible on Aerial Imagery (C9) __ Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) _ Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) __ Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) __ Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes _____ No _ No _ Depth (inches): Water Table Present? Saturation Present? Wetland Hydrology Present? Yes _____ No X (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

	Absolute	Dessissed	Indiantas		
Tree Stratum (Plot size:)		Dominant Species?		Dominance Test worksheet:	
				Number of Dominant Species	
1,	·——			That Are OBL, FACW, or FAC: (A)	
2				Total Number of Dominant	
3				Species Across All Strata: (B)	
4				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/	ъ,
5				That Are OBL, FACVV, of FAC(A	"
6				Prevalence Index worksheet:	
		-		**************************************	- 1
7	21/			Total % Cover of: Multiply by:	- 1
		= Total Cov	er	OBL species x 1 =	
Sapling/Shrub Stratum (Plot size: 15				FACW species x 2 =	
1. Louice/a 501	70			FAC species 2 x 3 = 1	_
	15			FACU species x 4 =	
2. Cornes vacamosa 3. Phammas catherica	10		FAC	UPL species x 5 = 5	- 1
3. Thammas cathatica	5		FAL	Column Totals: (A)	ا ۱۵
4				Coldisis Totals (A)	"
				Prevalence Index = B/A = 3.75	-
5					-
6				Hydrophytic Vegetation Indicators:	
7				1 - Rapid Test for Hydrophytic Vegetation	1
· · · · · · · · · · · · · · · · · · ·	1	= Total Cov		2 - Dominance Test is >50%	- 1
		= Total Cov	er	3 - Prevalence Index is ≤3.0 ¹	- 1
Herb Stratum (Plot size: 9)			2.0	4 - Morphological Adaptations ¹ (Provide support	ina
1. Solidago albssima	35	X	FALL	data in Remarks or on a separate sheet)	٦
2. Fragaic Vesca	10)!	WPL	Problematic Hydrophytic Vegetation ¹ (Explain)	
2. Fragaic resea	70	-			
3. Unknown	10			¹ Indicators of hydric soil and wetland hydrology must	:
4				be present, unless disturbed or problematic.	
5				Definitions of Vegetation Strata:	
					. 1
6				Tree – Woody plants 3 in. (7.6 cm) or more in diame at breast height (DBH), regardless of height.	ter
7				at breast height (DDH), regardless of height.	- i
8				Sapling/shrub - Woody plants less than 3 in. DBH	
				and greater than or equal to 3.28 ft (1 m) tall.	
9				Herb – All herbaceous (non-woody) plants, regardless of	.
10				size, and woody plants less than 3.28 ft tall.	
11.					
		-		Woody vines – All woody vines greater than 3.28 ft in	
12		-		height.	
	55	= Total Cov	/er		
Woody Vine Stratum (Plot size:					
1				Hydrophytic	
2		:		Vegetation	1
3.				Present? Yes No X	
4		-		e	
		= Total Cov	/er		
Remarks: (Include photo numbers here or on a separate	sheet.)				
, , , , , , , , , , , , , , , , , , , ,	2				

Type: C=Concentration, Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4 Stratified Layers (A5) Depleted Below Dark	D=Depletion, RI			5i	Remarks
Type: C=Concentration, Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4 Stratified Layers (A5)	D=Depletion, RI		=Masked Sand Grains.		
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5)			=Masked Sand Grains.	21 224 27 50	
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5)			=Masked Sand Grains.	21 224 27	
Iydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5)			=Masked Sand Grains.	21 224 27	
Iydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5)			=Masked Sand Grains.	21 224 27 27	
Iydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5)			=Masked Sand Grains.	21 224 27 27	
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5)			=Masked Sand Grains.	21 0004507 171	
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5)			=Masked Sand Grains.	21 0001107	
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5)			=Masked Sand Grains.	21 224 22	
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5)			=Masked Sand Grains.	21 0001107	
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5)			=Masked Sand Grains.	21 0001107	
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5)			=Masked Sand Grains.	21 0001107	
lydric Soil Indicators: _ Histosol (A1) _ Histic Epipedon (A2) _ Black Histic (A3) _ Hydrogen Sulfide (A4) _ Stratified Layers (A5)			=Masked Sand Grains.	21 0001100 1	
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5)			=Masked Sand Grains.	21 acetics DI	
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5)			=Masked Sand Grains.	21 continue DI	
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5)			=Masked Sand Grains.	21 costing DI	
Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5)			=Masked Sand Grains.		2744-0-37-0-47-47-0-47-0-4
Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4 Stratified Layers (A5)		Polyvalue Below		Indicators for	.=Pore Lining, M=Matrix. Problematic Hydric Solls ³ :
Histic Epipedon (A2)Black Histic (A3)Hydrogen Sulfide (A4Stratified Layers (A5)			Surface (S8) (LRR R,		(A10) (LRR K, L, MLRA 149B)
Hydrogen Sulfide (A4Stratified Layers (A5)		MLRA 149B)	Currace (CO) (LINK IX,		rie Redox (A16) (LRR K, L, R)
Stratified Layers (A5)		Thin Dark Surfac	e (S9) (LRR R, MLRA 1 4		y Peat or Peat (S3) (LRR K, L, R)
	•		ineral (F1) (LRR K, L)		ce (S7) (LRR K, L, M)
Debieted Below Dark		Loamy Gleyed M			Below Surface (S8) (LRR K, L)
Thick Dark Surface (A		Depleted Matrix (Surface (S9) (LRR K, L)
Sandy Mucky Mineral	-	Redox Dark Surfa			anese Masses (F12) (LRR K, L, R)
Sandy Gleyed Matrix		Redox Depression			Floodplain Soils (F19) (MLRA 149B dic (TA6) (MLRA 144A, 145, 149B)
Sandy Redox (S5)	. ,		(-/		t Material (F21)
Stripped Matrix (S6)					ow Dark Surface (TF12)
Dark Surface (S7) (LF	RR R, MLRA 149	9B)		Other (Expl	lain in Remarks)
ndicators of hydrophytic	vegetation and w	vetland hydrology must	he present upless distud	hed or problematic	
estrictive Layer (if obse	erved):	rolland hydrology mast	be present, unless distuit	bed of problematic.	
Туре:		_			
Depth (inches):		2		Hydric Soil Pres	sent? Yes No_K
emarks:				1., 2.1.0 00.11 100	70010

Project/Site:	-1-
Project/Site: Ellis - No-th City/County: Thompkins Sampling Date: 4/5	117
Applicant/Owner:State:	6-W
Section, Township, Range:	
Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): Concave Slope (%):	5
Subregion (LRR or MLRA): L2R Lat: 42.4455 Long: -7-4423-	Sad
Soil Map Unit Name: RKB- Phinaback Silt Joan, 2-6 2 slopes NWI classification: PEM	181
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?	
And March 11	٥
and the state of t	
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features	s, etc.
Hydrophytic Vegetation Present? YesX No Is the Sampled Area	
Hydric Soil Present? Yes X No within a Wetland? Yes X No	
Wetland Hydrology Present? Yes No If yes, optional Wetland Site ID: W2.b	
Remarks: (Explain alternative procedures here or in a separate report.)	
HYDROLOGY	
Wetland Hydrology Indicators: Secondary Indicators (minimum of two requirements)	uired)
Primary Indicators (minimum of one is required; check all that apply) Y Surface Soil Cracks (B6)	
X Surface Water (A1) Water-Stained Leaves (B9) Drainage Patterns (B10)	
High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16)	
X Saturation (A3) Marl Deposits (B15) Dry-Season Water Table (C2) Water Marks (B1) X Hydrogen Sulfide Odor (C1) Crayfish Burroug (C8)	
Grayisir Bullows (Co)	
Date Demonstration (PO)	9)
Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)	
Iron Deposits (B5)	
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4)	
Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5)	
Field Observations:	
Surface Water Present? Yes X No Depth (inches):	
Water Table Present? Yes No Depth (inches): Saturation Present? Yes X No Depth (inches): // Waterd Hydrology Present X X	
(includes capillary fringe)	_
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	
Porded wetland area within active pasture. Appears to	
Porded wetland area within active pasture. Appears to be fed by seep.	
, ,	
× ×	

Sampling Point: W25 - wef

Tree Stratum (Plot size:)		Dominant Indicator Species? Status	Dominance Test worksheet:
1			Number of Dominant Species That Are OBL, FACW, or FAC:(A)
2			
3.			Total Number of Dominant Species Across All Strata: (B)
4			Percent of Dominant Species
5			That Are OBL, FACW, or FAC: (A/B)
6			Prevalence Index worksheet:
7			Total % Cover of: Multiply by:
		Total Cover	OBL species x 1 =
Sapling/Shrub Stratum (Plot size:)			FACW species x 2 =
			FAC species x 3 =
1			FACU species x 4 =
2.			UPL species x 5 =
3.			Column Totals: (A) (B)
4			(A)(B)
5			Prevalence Index = B/A =
6	-		Hydrophytic Vegetation Indicators:
7			1 - Rapid Test for Hydrophytic Vegetation
		Total Cover	2 - Dominance Test is >50%
Herb Stratum (Plot size:)		Total Cover	3 - Prevalence Index is ≤3.0¹
1. Algae			 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
2			Problematic Hydrophytic Vegetation¹ (Explain)
3			4 6/6
4			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5			Definitions of Vegetation Strata:
6			
7			Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
8	-		Sapling/shrub - Woody plants less than 3 in. DBH
9			and greater than or equal to 3.28 ft (1 m) tall.
10			Herb – All herbaceous (non-woody) plants, regardless
11			of size, and woody plants less than 3.28 ft tall.
12			Woody vines - All woody vines greater than 3.28 ft in
-	=	Fotal Cover	height.
Noody Vine Stratum (Plot size:)			
M			a a
i	0=		
		======	Hydrophytic Vegetation
			Present? Yes No
Remarks: (Include photo numbers here or on a separate sh		otal Cover	
ternarks. (include prioto numbers here or on a separate sr	heet.)		
4351 in Area	15	indireate,	floating algae is straton with.h.
male	line	herbacous	straton within
4352 out	live	FO- DOLOGE 13	O to a to
_			

	Matrix Color (moist)	%	Color (moist)	Feature						
O-8	10 YR 4/1		Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
	7/ 	100	70 =1				5. Lo			
8-14	10 4R3/2	90	7.5485/4		RM	<u>M</u>	SiLo			V.
		— ;								
Type: C=Co	ncentration, D=Deple	etion, RM=	Reduced Matrix, MS=	Masked	Sand Gra	ins.	2Location:	PI =Pore I	_ining, M=Ma	triv.
Histosol (In Histic Epi Histic Epi Black His Hydrogen Stratified Depleted Thick Dark Sandy Musandy Gle Stripped Musandy Gle Stripped Musandicators of h	ndicators: A1) pedon (A2) tic (A3) a Sulfide (A4) Layers (A5) Below Dark Surface k Surface (A12) ucky Mineral (S1) eyed Matrix (S4) dox (S5)	- (A11) - - - - - - - - - - - - - - - - - -	Polyvalue Below MLRA 149B) Thin Dark Surface Loamy Mucky Mil Loamy Gleyed Mi Comy Gleyed Matrix (Redox Dark Surface Depleted Dark Surface Redox Depression	Surface (e (S9) (Lineral (F1) atrix (F2) F3) ince (F6) inface (F7) ins (F8)	(S8) (LRR RR R, ML) (LRR K,	R, RA 149B) L)	Indicators for 2 cm Mu Coast Pr 5 cm Mu Dark Sur Polyvalue Thin Dari Iron-Man Piedmont Mesic Sp Red Pare Very Sha Other (Ex	or Problem ck (A10) (I airie Redo cky Peat o face (S7) (e e Below Si k Surface (ganese M: t Floodplai odic (TA6) ent Materia	natic Hydric LRR K, L, MI ox (A16) (LRR or Peat (S3) (I (LRR K, L) urface (S8) (I (S9) (LRR K, asses (F12) (in Soils (F19)) (MLRA 144, II (F21) Surface (TF1	Soils ³ : LRA 149B) KK, L, R) LRR K, L, R) LRR K, L) L) LRR K, L, R (MLRA 149B A, 145, 149B
Type:							11	_	Yes V	No
Type: Depth (inch	es):		_				Hydric Soil Pro	esent?		
Туре:	es):				14		Hydric Soll Pr	esent?	165	
Type: Depth (inch	es):				æ		Hydric Soll Pr	esent?	165	
Type: Depth (inch	es):				æ		Hydric Soll Pr	esent?	163	
Type: Depth (inch	es):				24		Hydric Soll Pr	esent?	163	
Type: Depth (inch	es):				H		Hydric Soll Pr	esent?	163	

	A FORM – Northcentral and Northeast Region
Project/Site: Ellis - North	City/County: Thompkins Sampling Date: 4/5/17
Applicant/Owner: SUN 8	State: NY Sampling Point: W25 -0
	Section, Township, Range: Thaca
	cal relief (concave, convex, none): Slope (%):
	Slope (%): <u>8</u> Long: <u>-2 4 4 2 6 9</u> Datum: <u>W 6 5 8</u>
Soil Map Unit Name: PK B- Phinbuck site loan,	Z-675(2015 NIMI classification: 0905)
Are climatic / hydrologic conditions on the site hydrologic for this sites at	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of ye	
	disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology naturally pro	
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, transects, important features, etc
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes No X No X Remarks: (Explain alternative procedures here or in a separate repor	Is the Sampled Area within a Wetland? If yes, optional Wetland Site ID: t.)
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained L	
High Water Table (A2) Aquatic Fauna (Saturation (A3) Marl Deposits (B	
Water Marks (B1) Hydrogen Sulfid	
	e Odor (C1) Crayfish Burrows (C8) pheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Rec	· · · · · · · · · · · · · · · · · · ·
	uction in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surfa	
Inundation Visible on Aerial Imagery (B7) Other (Explain in	
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes NoX Depth (inches):	
Saturation Present? Yes NoX Depth (inches): (includes capillary fringe)	, , , , , , , , , , , , , , , , , , , ,
Describe Recorded Data (stream gauge, monitoring well, aerial photos	, previous inspections), if available:
Remarks:	
Active pasture - moved/mainta	ine d
	9
	* ·

Total Number of Dominant Species Across All Strata: Total Species Across All Strata:	<u>Tree Stratum</u> (Plot size:) 1		Dominant Indicator Species? Status	Number of Dominant Species
Percent of Dominant Species That Are OBL, FACVV, or FAC: (A That Are OBL, FACVV, or FACV	2.			Total Namber of Dominant
That Are OBL, FACW, or FAC: (A Prevalence Indox worksheet: Total % Cover of: Multiply by: OBL species				
Prevalence Index worksheet: Total % Cover of:				
Total % Cover of				
Total Scover of:				Prevalence Index worksheet:
Sapiling/Shrub Stratum (Plot size:)	7			and the second s
FACW species			= Total Cover	
FAC species	Sapling/Shrub Stratum (Plot size:)			
2.	1:			
UPL species				
Column Totals:				
Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is \$3.0' 4 - Morphological Adaptations! (Provide supporting that in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation! (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Vegetation Strata: Tree — Woody plants as in, (7.6 cm) or more in diamet at breast height (DBH), regardless of height. Sapiling/Shrub — Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1m) tall. Herb — All herbaceous (non-woody) plants, regardles of size, and woody plants less than 3.28 ft in height. Woody Vine Stratum (Plot size:) #### Hydrophytic Vegetation Hydrophytic Vegetation Present? Yes No				Column Totals: (A) (B)
Hydrophytic Vegetation Indicators: 7.	5			
1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >560% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supportidata in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) 1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diamet at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tail. Herb - All herbaceous (non-woody) plants, regardles of size, and woody plants less than 3.28 ft in height. Woody Vine Stratum (Plot size:) Hydrophytic Vegetation Present? Yes No	6		78.55	
Total Cover				-
Herb Stratum (Plot size:) 1. See rmicks				
4. Morphological Adaptations' (Provide supportidata in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diamet at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardles of size, and woody plants less than 3.28 ft in height. Woody Vines – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No	Herh Stratum (Plot size:		- rotar Cover	
	· Sea anchs			4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
be present, unless disturbed or problematic. Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diamet at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tail. Herb – All herbaceous (non-woody) plants, regardles of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No	2			
be present, unless disturbed or problematic. Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diamet at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardles of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No				Indicators of hydric soil and watered hydroles
Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diamet at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardles of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No	4			be present, unless disturbed or problematic.
at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardles of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height. Woody Vine Stratum (Plot size:	5			
Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardles of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No Xemarks: (Include photo numbers here or on a separate sheet.)	7			Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
Herb – All herbaceous (non-woody) plants, regardles of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes No	3			Sapling/shrub – Woody plants less than 3 in. DBH
of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size:) Hydrophytic Vegetation Present? Yes No X				and greater than or equal to 3.28 ft (1 m) tall.
Woody vines – All woody vines greater than 3.28 ft in height. Total Cover				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
Total Cover Hydrophytic Vegetation Present? Yes No X			· · · · · · · · · · · · · · · · · · ·	
Woody Vine Stratum (Plot size:) Hydrophytic Vegetation Present? Yes No X emarks: (Include photo numbers here or on a separate sheet.)			Total Course	
Hydrophytic Vegetation Present? Yes No X	Voody Vine Stratum (Plot oi-o	=	Total Cover	
Hydrophytic Vegetation Present? Yes No X				
Hydrophytic Vegetation Present? Yes No X emarks: (Include photo numbers here or on a separate sheet.)				
emarks: (Include photo numbers here or on a separate sheet.)				
= Total Cover emarks: (Include photo numbers here or on a separate sheet.)	•			Hydrophytic
emarks: (Include photo numbers here or on a separate sheet.)				Vegetation
emarks: (Include photo numbers here or on a separate sheet.)		= '	Total Cover	Present? Yes No /
	emarks: (Include photo numbers here or on a separate s		1	
			tained lawn	- unk grass SPP
		1		J
				_

Depth Matrix (inches) Color (moist) %	Redox Features		
	Color (moist) % Type ¹ Loc ²		Remarks
0-8 7.5 YR 4/3 100	14	SiLo	
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10			
		(
		0)	
), ————————————————————————————————————			
		10	
Type: C=Concentration D=Depletion Rt	M=Reduced Matrix, MS=Masked Sand Grains.	20 00	3
lydric Soil Indicators:	M-Reduced Matrix, Mo-Masked Sand Grains.	Location: PL=Poi	re Lining, M=Matrix.
Histosol (A1)	Polyvalue Below Surface (S8) (LRR R,		lematic Hydric Soils ³ :
Histic Epipedon (A2)	MLRA 149B)	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Black Histic (A3)	Thin Dark Surface (S9) (LRR R, MLRA 149B)	Coast Prairie Re	edox (A16) (LRR K, L, R)
Hydrogen Sulfide (A4)	Loamy Mucky Mineral (F1) (LRR K, L)		at or Peat (S3) (LRR K, L, R)
Stratified Layers (A5)	Loamy Gleyed Matrix (F2)	Dark Surface (S	
Depleted Below Dark Surface (A11)	Depleted Matrix (F3)	Polyvalue Below	Surface (S8) (LRR K, L)
Thick Dark Surface (A12)	Redox Dark Surface (F6)	Iron Manganasa	ce (S9) (LRR K, L)
Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)	non-wanganese	Masses (F12) (LRR K, L, R)
Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	Pledition: Plood	plain Soils (F19) (MLRA 149B)
Sandy Redox (S5)		Red Parent Mate	A6) (MLRA 144A, 145, 149B)
Stripped Matrix (S6)	Y .		irk Surface (TF12)
_ Dark Surface (S7) (LRR R, MLRA 149	B)	Other (Explain in	
			. riomano,
ndicators of hydrophytic vegetation and w	etland hydrology must be present, unless disturbed	or problematic.	
estrictive Layer (if observed):			
Туре:			,
Depth (inches):		Hydric Soil Present?	Vac Na X
emarks:		riyanc 3011 Fresent?	Yes No
CONTRACTOR			
रक्षात्मक (कर्ष्य) 	3		
त्तर (राज्य राज्य र)			
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2010/07/2012/2019	S00.		
2010/07/2012/2019	200		
	2 30.		
	26.		
	200 E		

WETLAND	DETERMINATION DAT	'A FORM – Northcentr	al and Northeas	t Region
Project/Site: Ellis - Sout	41	City/County Thomas	iking	Samulia Data 4/16/17
Applicant/Owner:SUN 8		only county.	State: NV	Sampling Date: W36 W
Investigator(s):	M. Guinan	Section, Township, Range:		_ Sampling Point: W30° W
Landform (hillslope, terrace, etc.):				Slope (%): (2 - 5
Subregion (LRR or MLRA): LRR V	Lat: 42, 43(a)	Language, Convex, 1	2. 4.200	Slope (%): <u>/5 - 3</u>
Soil Map Unit Name: La B Lange	and charmed live	Long:	14. (314	Datum: <u>1/6 > () 1</u>
Are climatic / hydrologic conditions on	the site typical for this time of w	or? Ves V N	NVVI classifica	ation:
Are Vegetation, Soil, o	r Hydrology			
Are Vegetation, Soil, o				resent? Yes No
		·	, explain any answers	s in Remarks.)
SUMMARY OF FINDINGS - A	Attach site map showing	sampling point locat	ions, transects,	important features, etc
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: (Explain alternative proced	Yes	Is the Sampled Area within a Wetland?	Yes	_ No
HYDROLOGY	£	×		
Wetland Hydrology Indicators:	1			
Primary Indicators (minimum of one is	required: check all that apply)			rs (minimum of two required)
X Surface Water (A1)	Water-Stained L	eaves (R9)	Surface Soil Ci	The state of the s
∠ High Water Table (A2)	Aquatic Fauna (I		Drainage Patte Moss Trim Line	, ,
∠ Saturation (A3)	Marl Deposits (B			ater Table (C2)
Water Marks (B1)	Hydrogen Sulfide		Crayfish Burrow	
Sediment Deposits (B2)Drift Deposits (B3)	Oxidized Rhizos	pheres on Living Roots (C3)	X Saturation Visit	ole on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Presence of Red			ssed Plants (D1)
Iron Deposits (B5)	Thin Muck Surface	uction in Tilled Soils (C6)	Geomorphic Po	
Inundation Visible on Aerial Image	ry (B7) Other (Explain in		Shallow Aquitar	
Sparsely Vegetated Concave Surface		· iomano,	Microtopograph FAC-Neutral Te	
Field Observations:	/	1111	T/XO-Nedital Te	ist (DO)
	No Depth (inches):			
Water Table Present? Yes	No Depth (inches):			e .
Saturation Present? Yes 🔌	No Depth (inches):	₩etland H	lydrology Present?	Yes No
Describe Recorded Data (stream gauge	, monitoring well, aerial photos,	previous inspections), if ava	ilable:	
		TO THE RESERVE OF THE PARTY OF		
Remarks:				
	fled	ser a		
		a person in the lower purpose of	man and the second of the seco	
			34	
	(*)	1	
	\w	old field		
	(0	()		

Sampling Point: W36-Wet/

Tree Stratum (Plot size:) 1)		Dominant Indica Species? Statu	Number of Dominant Species That Are OBL, FACW or FAC:
2			Total Number of Dominant Species Across All Strata: (B)
4 5			That Are OBL, FACW, or FAC:(A/B)
6	_		Prevalence Index worksheet:
0		= Total Cover	OBL species x 1 =
Sapling/Shrub Stratum (Plot size:)		F	FACW species x 2 =
1,			FAC species x 3 =
2			FACU species x 4 =
3			UPL species x 5 =
4			Column Totals: (A) (B)
5			Prevalence Index = B/A =
6		· · · · · · · · · · · · · · · · · · ·	
7			1 - Rapid Test for Hydrophytic Vegetation
	=	Total Cover	∠2 - Dominance Test is >50%
Herb Stratum (Plot size:)			3 - Prevalence Index is ≤3.0¹
1. Juncus ethisms	75	Y OBL	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
2. Phlaris arundinama	30	Y FACW	Problematic Hydrophytic Vegetation¹ (Explain)
3			
l			Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5 S	- (Definitions of Vegetation Strata:
			Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
			Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
0			
1			 Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
2			Woody vines – All woody vines greater than 3.28 ft in
-	105 =	Total Cover	height.
/oody Vine Stratum (Plot size:)			
<u> </u>			;4
			Hydrophytic
			Vegetation Present? Yes No
amarka: (Include abota a color la color		otal Cover	
emarks: (Include photo numbers here or on a separate s	sheet.)		*
4367			· · · · · · · · · · · · · · · · · · ·
, - ,			,
			:
			. 8

Sampling Point: W3b-Wet/

Debut	IVIATRIX		pth needed to docur	x Feature	S			uiodi	,	
(inches)	Color (moist)		Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-6	10 YR 3/Z	90	7.5 YR 4/6	10	RM	M	5,20			
,-12	10 YR 3/1	85	5 YR 5/8	15	RM	M	s.Lo			
pe: C=Cor dric Soil In	ncentration, D=Depl	etion, RM=	Reduced Matrix, MS=	Masked S	Sand Grain	18.	² Location:	PL=Pore	Lining, M=Mat	rix.
Black Hist Hydrogen Stratified L Depleted B	pedon (A2)	(A11)	Polyvalue Below MLRA 149B) Thin Dark Surface Loamy Mucky Mir Loamy Gleyed Ma	e (S9) (LR neral (F1) atrix (F2) F3)	RR, MLR	A 149B)	2 cm Mu Coast Pr 5 cm Mu Dark Sur Polyvalue	ick (A10) (rairie Redo cky Peat (face (S7) e Below S	matic Hydric ((LRR K, L, ML ox (A16) (LRR or Peat (S3) (L (LRR K, L) (urface (S8) (L (S9) (LRR K,	RA 149B) K, L, R) .RR K, L, F RR K, L)
Sandy Muc Sandy Gle Sandy Rec Stripped M Dark Surfa cators of hy crictive Lay	cky Mineral (S1) eyed Matrix (S4) dox (S5) latrix (S6) ace (S7) (LRR R, ML ydrophytic vegetatio yer (if observed):		Redox Dark Surfa Depleted Dark Su Redox Depression and hydrology must b	rface (F7) ns (F8)			Iron-Man Piedmon Mesic Sp Red Pare Very Sha Other (Ex	ganese M t Floodpla podic (TA6 ent Materia Ilow Dark xplain in R	lasses (F12) (I in Soils (F19) i) (MLRA 144A al (F21) Surface (TF12 emarks)	LRR K, L, F (MLRA 149 A, 145, 149
Sandy Muc Sandy Gle Sandy Red Stripped M Dark Surfa- icators of hy	cky Mineral (S1) eyed Matrix (S4) dox (S5) latrix (S6) ace (S7) (LRR R, ML ydrophytic vegetatio yer (if observed):		Depleted Dark Su Redox Depression	rface (F7) ns (F8)			Iron-Man Piedmon Mesic Sp Red Pare Very Sha Other (Ex	ganese M t Floodpla podic (TA6 ent Materia Ilow Dark xplain in R	lasses (F12) (I iin Soils (F19) i) (MLRA 1444 al (F21) Surface (TF12	LRR K, L, F (MLRA 149 A, 145, 149
Sandy Muc Sandy Gle Sandy Rec Stripped M Dark Surfa icators of hy trictive Lay type:	cky Mineral (S1) eyed Matrix (S4) dox (S5) latrix (S6) ace (S7) (LRR R, ML ydrophytic vegetatio yer (if observed):		Depleted Dark Su Redox Depression	rface (F7) ns (F8)			Iron-Man Piedmon Mesic Sp Red Pare Very Sha Other (Ex	ganese M t Floodpla podic (TA6 ent Materia Ilow Dark xplain in R	lasses (F12) (I in Soils (F19) i) (MLRA 144A al (F21) Surface (TF12 emarks)	LRR K, L, I (MLRA 149 A, 145, 149
Sandy Muc Sandy Gle Sandy Rec Stripped M Dark Surfa cators of hy trictive Lay ype: epth (inche	cky Mineral (S1) eyed Matrix (S4) dox (S5) latrix (S6) ace (S7) (LRR R, ML ydrophytic vegetatio yer (if observed):		Depleted Dark Su Redox Depression	rface (F7) ns (F8)			Iron-Man Piedmon Mesic Sp Red Pare Very Sha Other (Ex	ganese M t Floodpla podic (TA6 ent Materia Ilow Dark xplain in R	lasses (F12) (I in Soils (F19) i) (MLRA 144A al (F21) Surface (TF12 emarks)	LRR K, L, I (MLRA 149 A, 145, 149
Sandy Muc Sandy Gle Sandy Rec Stripped M Dark Surfa cators of hy rictive Lay ype: epth (inche	cky Mineral (S1) eyed Matrix (S4) dox (S5) latrix (S6) ace (S7) (LRR R, ML ydrophytic vegetatio yer (if observed):		Depleted Dark Su Redox Depression	rface (F7) ns (F8)			Iron-Man Piedmon Mesic Sp Red Pare Very Sha Other (Ex	ganese M t Floodpla podic (TA6 ent Materia Ilow Dark xplain in R	lasses (F12) (I in Soils (F19) i) (MLRA 144A al (F21) Surface (TF12 emarks)	LRR K, L, I (MLRA 14: A, 145, 149
Sandy Muc Sandy Gle Sandy Rec Stripped M Dark Surfa cators of hy trictive Lay ype: epth (inche	cky Mineral (S1) eyed Matrix (S4) dox (S5) latrix (S6) ace (S7) (LRR R, ML ydrophytic vegetatio yer (if observed):		Depleted Dark Su Redox Depression	rface (F7) ns (F8)			Iron-Man Piedmon Mesic Sp Red Pare Very Sha Other (Ex	ganese M t Floodpla podic (TA6 ent Materia Ilow Dark xplain in R	lasses (F12) (I in Soils (F19) i) (MLRA 144A al (F21) Surface (TF12 emarks)	LRR K, L, (MLRA 14 A, 145, 149

WEILAND DETERMINATION L	JATA FURM - No	rthcentral and Northeas	st Region
Project/Site: Ellis - South 1	City/County:	Thompkits	Sampling Date: 4/10/17
Applicani/Owner: 507V 6		C4-4-1 A 14	0 " - 1 14/21
Investigator(s): N. Grosse / M. Guihan	Section Townshi	in Decree 74	Sampling Point:
Landform (hillslope, terrace, etc.):	Section, rownshi	p, Range:	
Subregion / I PP or MI PA).	_ Local relief (concave	i, convex, none):	Slope (%):
Subregion (LRR or MLRA): LRR R Lat: 42.45	f(a)	Long: <u>-76. 4397</u>	Datum: <u>W1584</u>
Soil Map Unit Name: LaB - Langfard chancery 51	It loam, 2-8	NWI classific	ation:
Are climatic / hydrologic conditions on the site typical for this time	of year? Yes _ X	No (If no, explain in Re	emarks.)
Are Vegetation, Soil, or Hydrology signific			resent? Yes X No
Are Vegetation, Soil, or Hydrology naturall		(If needed, explain any answer	
SUMMARY OF FINDINGS – Attach site map show		int locations, transects.	important features etc
Hydrophytic Vegetation Present? Hydric Soil Present? Yes No	s the Sam	npled Area /etland? Yes	\
Wetland Hydrology Present? Yes No	/ 1		_ No <u>X</u>
Remarks: (Explain alternative procedures here or in a separate r	If yes, optio	onal Wetland Site ID:	
(Explain alternative procedures here of in a separate i	ероп.)		
1 1 1 1 0 - 1	/	12	
Upland sample point	* I		
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicate	ors (minimum of two required)
Primary Indicators (minimum of one is required; check all that app	oly)	Surface Soil C	
Surface Water (A1) Water-Stain	ed Leaves (B9)	Drainage Patte	72
High Water Table (A2) Aquatic Fau	` '	Moss Trim Line	
Saturation (A3) Mari Deposi	its (B15)		ater Table (C2)
Water Marks (B1) Hydrogen S		Crayfish Burro	
Sediment Deposits (B2) Oxidized Rh	izospheres on Living R		ble on Aerial Imagery (C9)
	Reduced Iron (C4)	Stunted or Stre	essed Plants (D1)
	Reduction in Tilled Soil		` /
		Shallow Aquita	rd (D3)
Sparsely Vegetated Concave Surface (B8)	in in Remarks)	Microtopograph	
Field Observations:		FAC-Neutral Te	est (D5)
Surface Water Present? Yes No Depth (inch-	\-)
	es):	11	
Saturation Present? Yes No Depth (inches		141.41	
(includes capillary fringe)		Wetland Hydrology Present?	Yes No _X
Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous inspectio	ons), if available:	
Remarks:			
8			
			Q.
	rach.		
		(3.6)	

Sampling Point: W36-UP/

Trans Christians (District	Absolute Dominant Indicato	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover Species? Status	Number of Dessires t Out 1
1		That Are OBL, FACW, or FAC: (A)
2.		Total Number of Dominant /
3		Species Across All Strata: (B)
4	- 	Percent of Dominant Species
5		Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6		Prevalence Index worksheet:
7		Total % Cover of: Multiply by:
	= Total Cover	OBL species x 1 =
Sapling/Shrub Stratum (Plot size:)		FACW species x 2 =
1	·	FAC species x 3 =
2		FACU species x 4 =
3		UPL species x 5 =
4		Column Totals: (A) (B)
5.		Prevalence Index = B/A =
5		
6		Hydrophytic Vegetation Indicators:
7		1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50%
DE E DESERVE (DI	= Total Cover	3 - Prevalence Index is ≤3.0¹
Herb Stratum (Plot size:)	1 / (Ac)	4 - Morphological Adaptations ¹ (Provide supporting
1. Dacylis glowerate	65 Y FACU	data in Remarks or on a separate sheet)
2. Phleum pratuse	20 FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Solidejo spp		Indicators of hudring all and all and
4		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5		Definitions of Vegetation Strata:
6		
7.		Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
3		
		Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
0.		
1		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
2		SHOW WILLIAM STATES OF THE STA
	≈ Total Cover	Woody vines – All woody vines greater than 3.28 ft in height.
Voody Vine Stratum (Plot size:)	~ Total Cover	=
		*
		Hydrophytic
		Vegetation Present? Yes No
	= Total Cover	1.00
emarks: (Include photo numbers here or on a separate sh	neet.)	2
4		
		**
		-
#-	8	-

Depth (inches)	Matrix Color (moist)	%	th needed to document the indicator or conf	_	
0-9	10 YR 3/3	107	Color (moist) % Type ¹ Loc ²		Remarks
	-			S, Lo	
9-15	254R 5/2	100		Si'L.	
	-	.—.			
·				¥ <u>2</u> 2 3	
	\ 				
	:				
	-			-10	
				·	
¹ Type: C=Co	ncentration, D=Deple	etion, RM=R	Reduced Matrix, MS=Masked Sand Grains.	² Location: PI =F	ore Lining, M=Matrix.
Hydric Soil Ir Histosol (nuicators:	3		Indicators for Pro	blematic Hydric Soils ³ :
	pedon (A2)	_	Polyvalue Below Surface (S8) (LRR R, MLRA 149B)	2 cm Muck (A	10) (LRR K, L, MLRA 149B)
Black Hist		_	Thin Dark Surface (S9) (LRR R, MLRA 149E	Coast Prairie 3) 5 cm Mucky P	Redox (A16) (LRR K, L, R) eat or Peat (S3) (LRR K, L, R)
	Sulfide (A4) Layers (A5)	53 	Loamy Mucky Mineral (F1) (LRR K, L) Loamy Gleyed Matrix (F2)	Dark Surface	(S7) (LRR K, L)
Depleted I	Below Dark Surface	(A11)	Depleted Matrix (F3)	Polyvalue Beld	ow Surface (S8) (LRR K, L) face (S9) (LRR K, L)
	k Surface (A12) icky Mineral (S1)) :	Redox Dark Surface (F6)	Iron-Mangane	se Masses (F12) (LRR K, L, R)
	eyed Matrix (S4)	=	_ Depleted Dark Surface (F7) _ Redox Depressions (F8)	Piedmont Floo	dplain Soils (F19) (MLRA 149B)
Sandy Red		-		Niesic Spodic	TA6) (MLRA 144A, 145, 149B)
Stripped M Dark Surfa	/latrix (S6) ace (S7) (LRR R, M L	PA 1/10P)		Very Shallow I	Park Surface (TF12)
				Other (Explain	in Remarks)
ndicators of h	ydrophytic vegetatio	n and wetla	nd hydrology must be present, unless disturbed	or problematic.	
Type:	yer (ir observed):				
Depth (inche	es):		_	Undata Call D	V
emarks:			-	Hydric Soil Present	? Yes No^
			ē		
				19	
			g .		30
			ia Le		>-
			18 E		301 20
					34 A1
					30 30 30 30
					2e -
					36 30 31
					Seri
					a An

WETLAND DETERMINATION DAT	A FORM – Northcentral and Northeast Region
Project/Site: Ellis - South 1	City/County: Thomphins Sampling Date: 4/10/17
Applicant/Owner.	01-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-
Investigator(s): N. Grosse M. Grande	Section Township Page: The Sampling Point: W 45° W
Landform (hillslope, terrace, etc.): hill for ferrace 10	cal relief (concave, convex, none): Slope (%): Slope (%):
Subregion (LRR or MLRA): LEE R Lat 42, 4353	Slope (%): <u>0 - 2</u> Long: <u>-26 4403</u> Datum: <u>LV 6 84</u>
Soil Map Unit Name: La B - Lang Food channery Sitt	Long: 4485 Datum: 1/684
Are climatic / hydrologic conditions on the site typical for this time of ye	NWI classification:
Are Vegetation, Soil, or Hydrology significantly	
Are Vegetation, Soil, or Hydrology naturally pro	140 140
	sampling point locations, transects, important features, etc.
/ titue in one map one wing	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydric Soil Present? Yes No	within a Wetland? Yes No
Wetland Hydrology Present? Yes No	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate repor	1.)
.80	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
X Surface Water (A1) Water-Stained Lo	eaves (B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B	15) Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide	
Sediment Deposits (B2) Oxidized Rhizos	oheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Red	
	uction in Tilled Soils (C6) Geomorphic Position (D2)
······ ··· ··· ··· ··· ··· ··· ···	
Inundation Visible on Aerial Imagery (B7) Other (Explain in	innoveropographic relief (D4)
Sparsely Vegetated Concave Surface (B8) Field Observations:	FAC-Neutral Test (D5)
Surface Water Present? Yes X No Depth (inches):	2/1
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes X No Depth (inches):	
(includes capillary fringe)	, 8, 100
Describe Recorded Data (stream gauge, monitoring well, aerial photos,	previous inspections), if available:
	187
Remarks:	
Pull Comment	
t W	16 6) field
	/ /
	V
- ,	
3.0	9

Sampling Point: W4b-Wet1

Tree Stratum (Plot size:) 1	% Cover Species?		Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2	-		Total Number of Dominant Species Across All Strata: (B)
4 5			Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6			Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size:) 1)	= Total Cov		OBL species x 1 =
2			FACU species x 4 = UPL species x 5 =
3			Column Totals: (A) (B)
5 6 7.			Prevalence Index = B/A = Hydrophytic Vegetation Indicators:
7	= Total Cov	er	1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹
1. Phlaris arundinacea 2. Juneus effusas	5 	FACW	 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
3. Lythman Salicaria	5	OBL	Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must
4			be present, unless disturbed or problematic. Definitions of Vegetation Strata:
			Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
			Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
1			Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
2.5	90 = Total Cove	ır	Woody vines – All woody vines greater than 3.28 ft in height.
foody Vine Stratum (Plot size:)			
			Hydrophytic
	= Total Çover		Vegetation Present? Yes No
emarks: (Include photo numbers here or on a separate sh 436 q	eet.)	- I	
(007			
			-
	C 5'		

(inches)	Matrix Color (moist)	%	Color (moist)	x Feature:	S		m the absence of indi	**************************************	
0-5	10 YR 3/2	95	1	%	Type ¹	_Loc ²	Texture	Remarks	3
- 12			7.5 YR 4/6	5	RM	1	5,60		
5-12	10 YR3/1	85	5 YR 5/8	15	RM	M	S.L.		
		_					5 3 H		
ivne: C=Cor	acceptation D. D. I								
ydric Soil In	dicators:	etion, RM=	Reduced Matrix, MS	=Masked S	Sand Gra	ns.	² Location: PL=Po	re Lining, M=Ma	itrix.
_ Stratified L	Sulfide (A4) .ayers (A5)	: :	Thin Dark Surface Loamy Mucky Min Loamy Gleyed Ma	neral (F1) atrix (F2)	RR, MLF (LRRK, I	RA 149B) L)	Coast Prairie R 5 cm Mucky Pe Dark Surface (S Polyvalue Beloy	at or Peat (S3) (LRR K, L, R
Thick Dark Sandy Muc Sandy Gley Sandy Red Stripped Ma Dark Surfac	atrix (S6) ce (S7) (LRR R, ML rdrophytic vegetatio	RA 149B)		ace (F6) Irface (F7) ns (F8)		isturbed (Thin Dark Surfa Iron-Manganese Piedmont Flood Mesic Spodic (T Red Parent Mate Very Shallow Da Other (Explain in	ce (S9) (LRR K, Masses (F12) (plain Soils (F19) A6) (MLRA 144 erial (F21) ark Surface (TF1	L) (LRR K, L, F (MLRA 149 A, 145, 149
Thick Dark Sandy Muc Sandy Gley Sandy Red Stripped Ma Dark Surfac	Surface (A12) cky Mineral (S1) yed Matrix (S4) lox (S5) atrix (S6) ce (S7) (LRR R, ML	RA 149B)	Redox Dark Surfa Depleted Dark Su Redox Depression	ace (F6) Irface (F7) ns (F8)		isturbed o	Thin Dark Surfa Iron-Manganese Piedmont Flood Mesic Spodic (T Red Parent Mate Very Shallow Da Other (Explain in	ce (S9) (LRR K, Masses (F12) (plain Soils (F19) A6) (MLRA 144 erial (F21) ark Surface (TF1	L) (LRR K, L, R (MLRA 149 A, 145, 149
Thick Dark Sandy Muc Sandy Red Sandy Red Stripped Ma Dark Surfac dicators of hy strictive Lay	cky Mineral (S1) cky Mineral (S1) yed Matrix (S4) lox (S5) atrix (S6) ce (S7) (LRR R, ML drophytic vegetatio er (if observed):	RA 149B)	Redox Dark Surfa Depleted Dark Su Redox Depression	ace (F6) Irface (F7) ns (F8)		isturbed o	Thin Dark Surfa Iron-Manganese Piedmont Flood Mesic Spodic (T Red Parent Mate Very Shallow Da Other (Explain in	ce (S9) (LRR K, Masses (F12) (plain Soils (F19) A6) (MLRA 144 erial (F21) ark Surface (TF1	L) (LRR K, L, R (MLRA 149 A, 145, 149
Thick Dark Sandy Muc Sandy Red Stripped Ma Dark Surfact dicators of hy strictive Lay Type: Depth (inches	cky Mineral (S1) cky Mineral (S1) yed Matrix (S4) lox (S5) atrix (S6) ce (S7) (LRR R, ML drophytic vegetatio er (if observed):	RA 149B)	Redox Dark Surfa Depleted Dark Su Redox Depression	ace (F6) Irface (F7) ns (F8)		isturbed o	Thin Dark Surfa Iron-Manganese Piedmont Flood Mesic Spodic (T Red Parent Mate Very Shallow Da Other (Explain in	ce (S9) (LRR K, e Masses (F12) (plain Soils (F19) (A6) (MLRA 144, erial (F21) ark Surface (TF1 1 Remarks)	L) (LRR K, L, R (MLRA 149 A, 145, 149
Thick Dark Sandy Muc Sandy Red Stripped Ma Dark Surfac dicators of hy strictive Lay Type: Depth (inches	cky Mineral (S1) cky Mineral (S1) yed Matrix (S4) lox (S5) atrix (S6) ce (S7) (LRR R, ML drophytic vegetatio er (if observed):	RA 149B)	Redox Dark Surfa Depleted Dark Su Redox Depression	ace (F6) Irface (F7) ns (F8)		isturbed (Thin Dark Surfa Iron-Manganese Piedmont Flood Mesic Spodic (T Red Parent Mate Very Shallow Da Other (Explain in	ce (S9) (LRR K, e Masses (F12) (plain Soils (F19) (A6) (MLRA 144, erial (F21) ark Surface (TF1 1 Remarks)	L) (LRR K, L, F (MLRA 149 A, 145, 149)
Thick Dark Sandy Muc Sandy Red Sandy Red Stripped Ma Dark Surfactions of hy Strictive Laye Type: Depth (inches	cky Mineral (S1) cky Mineral (S1) yed Matrix (S4) lox (S5) atrix (S6) ce (S7) (LRR R, ML drophytic vegetatio er (if observed):	RA 149B)	Redox Dark Surfa Depleted Dark Su Redox Depression	ace (F6) Irface (F7) ns (F8)		isturbed (Thin Dark Surfa Iron-Manganese Piedmont Flood Mesic Spodic (T Red Parent Mate Very Shallow Da Other (Explain in	ce (S9) (LRR K, e Masses (F12) (plain Soils (F19) (A6) (MLRA 144, erial (F21) ark Surface (TF1 1 Remarks)	L) (LRR K, L, F (MLRA 149 A, 145, 149 2)
Thick Dark Sandy Muc Sandy Red Stripped Ma Dark Surfac dicators of hy strictive Lay Type: Depth (inches	cky Mineral (S1) cky Mineral (S1) yed Matrix (S4) lox (S5) atrix (S6) ce (S7) (LRR R, ML drophytic vegetatio er (if observed):	RA 149B)	Redox Dark Surfa Depleted Dark Su Redox Depression	ace (F6) Irface (F7) ns (F8)		isturbed o	Thin Dark Surfa Iron-Manganese Piedmont Flood Mesic Spodic (T Red Parent Mate Very Shallow Da Other (Explain in	ce (S9) (LRR K, e Masses (F12) (plain Soils (F19) (A6) (MLRA 144, erial (F21) ark Surface (TF1 1 Remarks)	L) (LRR K, L, F (MLRA 149 A, 145, 149 2)
Thick Dark Sandy Muc Sandy Red Stripped Ma Dark Surfac dicators of hy strictive Lay Type: Depth (inches	cky Mineral (S1) cky Mineral (S1) yed Matrix (S4) lox (S5) atrix (S6) ce (S7) (LRR R, ML drophytic vegetatio er (if observed):	RA 149B)	Redox Dark Surfa Depleted Dark Su Redox Depression	ace (F6) Irface (F7) ns (F8)		isturbed o	Thin Dark Surfa Iron-Manganese Piedmont Flood Mesic Spodic (T Red Parent Mate Very Shallow Da Other (Explain in	ce (S9) (LRR K, e Masses (F12) (plain Soils (F19) (A6) (MLRA 144, erial (F21) ark Surface (TF1 1 Remarks)	L) (LRR K, L, F (MLRA 149 A, 145, 149)
Thick Dark Sandy Muc Sandy Red Stripped Ma Dark Surfac dicators of hy strictive Lay Type: Depth (inches	cky Mineral (S1) cky Mineral (S1) yed Matrix (S4) lox (S5) atrix (S6) ce (S7) (LRR R, ML drophytic vegetatio er (if observed):	RA 149B)	Redox Dark Surfa Depleted Dark Su Redox Depression	ace (F6) Irface (F7) ns (F8)		isturbed o	Thin Dark Surfa Iron-Manganese Piedmont Flood Mesic Spodic (T Red Parent Mate Very Shallow Da Other (Explain in	ce (S9) (LRR K, e Masses (F12) (plain Soils (F19) (A6) (MLRA 144, erial (F21) ark Surface (TF1 1 Remarks)	L) (LRR K, L, F (MLRA 149 A, 145, 149 2)
Thick Dark Sandy Muc Sandy Red Stripped Ma Dark Surfac dicators of hy strictive Lay Type: Depth (inches	cky Mineral (S1) cky Mineral (S1) yed Matrix (S4) lox (S5) atrix (S6) ce (S7) (LRR R, ML drophytic vegetatio er (if observed):	RA 149B)	Redox Dark Surfa Depleted Dark Su Redox Depression	ace (F6) Irface (F7) ns (F8)		isturbed o	Thin Dark Surfa Iron-Manganese Piedmont Flood Mesic Spodic (T Red Parent Mate Very Shallow Da Other (Explain in	ce (S9) (LRR K, e Masses (F12) (plain Soils (F19) (A6) (MLRA 144, erial (F21) ark Surface (TF1 1 Remarks)	L) (LRR K, L, F (MLRA 149 A, 145, 149)
Thick Dark Sandy Muc Sandy Red Sandy Red Stripped Ma Dark Surfac dicators of hy strictive Lay	cky Mineral (S1) cky Mineral (S1) yed Matrix (S4) lox (S5) atrix (S6) ce (S7) (LRR R, ML drophytic vegetatio er (if observed):	RA 149B)	Redox Dark Surfa Depleted Dark Su Redox Depression	ace (F6) Irface (F7) ns (F8)		isturbed o	Thin Dark Surfa Iron-Manganese Piedmont Flood Mesic Spodic (T Red Parent Mate Very Shallow Da Other (Explain in	ce (S9) (LRR K, e Masses (F12) (plain Soils (F19) (A6) (MLRA 144, erial (F21) ark Surface (TF1 1 Remarks)	L) (LRR K, L, R (MLRA 149 A, 145, 149E
Thick Dark Sandy Muc Sandy Red Stripped Ma Dark Surfac dicators of hy strictive Lay Type: Depth (inches	cky Mineral (S1) cky Mineral (S1) yed Matrix (S4) lox (S5) atrix (S6) ce (S7) (LRR R, ML drophytic vegetatio er (if observed):	RA 149B)	Redox Dark Surfa Depleted Dark Su Redox Depression	ace (F6) Irface (F7) ns (F8)		isturbed o	Thin Dark Surfa Iron-Manganese Piedmont Flood Mesic Spodic (T Red Parent Mate Very Shallow Da Other (Explain in	ce (S9) (LRR K, e Masses (F12) (plain Soils (F19) (A6) (MLRA 144, erial (F21) ark Surface (TF1 1 Remarks)	L) (LRR K, L, F (MLRA 149 A, 145, 149)

WETLAND DETERMINATION DATA FORM - N	orthcentral and Northeast Region
Project/Site: Ellis - South 1 City/County: _	Thompkins 4/10/17
Applicant/Owner:	Sampling Date: _// /
Investigator(s): N. Gosse / M. Gushan Section, Towns	State: NY Sampling Point: WYb-
Landform (hillstope, terrace, etc.): hillstope terrace Local relief (conca	ship, Range:
Subregion (I BB or MI Da) RG D	ive, convex, none): Slope (%):
Subregion (LRR or MLRA): LRR 12 Lat: 47. 4354	Long: <u>-76 440l</u> Datum: <u>U6554</u>
Soil Wap Unit Name: 28 - Langtond Chancey Sitt Dam 7-8	L CLORES NIMI classification:
Are climatic? Hydrologic conditions on the site typical for this time of year? Yes	No (If πο, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed?	Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problematic?	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling p	oint locations, transects, important features, etc
Hydrophytic Vegetation Present? Hydric Soil Present? Yes No X within a	ampled Area Wetland? Yes No _—— bitional Wetland Site ID:
Upland sample point	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Drift Deposits (B3) Presence of Reduced Iron (C4)	Roots (C3) Saturation Visible on Aerial Imagery (C9)
	Stunted or Stressed Plants (D1)
	Soils (C6) Geomorphic Position (D2)
Time index outlable (07)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8)	Microtopographic Relief (D4)
Field Observations:	FAC-Neutral Test (D5)
Surface Water Present? Yes No _X Depth (inches):	
Water Table Present? Yes No Depth (inches):	_
Saturation Present? Yes No Depth (inches)	Wetland Hydrology Present? Yes No X
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	
the state of the s	ctions), if available:
Pamada	:
Remarks:	
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a d	9

Sampling Point: W46- vpl

Tree Stratum (Plot size:)	Absolute Dominant Indicator % Cover Species? Status	Dominance Test worksheet:
1,		Number of Dominant Species That Are OBL, FACW, or FAC:(A)
2		Total Number of Davis
3		Total Number of Dominant Species Across All Strata: (B)
4		Percent of Dominant Species That Are OBL FACW or FAC
5		That Are OBL, FACW, or FAC: (A/B
6		Prevalence Index worksheet:
7		
5	= Total Cover	OBL species x 1 =
Sapling/Shrub Stratum (Plot size:)		FACW species x 2 =
1		FAC species x 3 =
2		FACU species x 4 =
3		UPL species x 5 =
4.		Column Totals: (A) (B)
4		
5		
3.		Hydrophytic Vegetation Indicators:
7		1 - Rapid Test for Hydrophytic Vegetation
	= Total Cover	2 - Dominance Test is >50%
Herb Stratum (Plot size:)	2	3 - Prevalence Index is ≤3.0¹
Phleum pratense	28 Y FAC	4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
Phileum praterisa	40 Y FACU	Problematic Hydrophytic Vegetation¹ (Explain)
Dactylis glomate	_ 35 Y FACU	1
		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
		Definitions of Vegetation Strata:
		Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
*		Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
)		
		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
		Woody vines - All woody vines greater than 3.28 ft in
	/00 = Total Cover	height.
oody Vine Stratum (Plot size:)	Total Cover	
		4.
		lt.
		le .
		Hydrophytic
		Hydrophytic Vegetation Present? Yes No

Sampling Point: W46 - Upl

(inches)	Matrix Color (moist)	%	th needed to doo	dox Feature	es				(30)	
6-10	10 YR 3/3		Color (moist)	%	Type ¹	_Loc ² _	Texture		Remar	ks
	127	100		_			SLO			
10-16	2.5 YR 5/2	(60					5:60			
				1						
								(====		
								-		
-						27				
								-		
						-	-			
17				_						
				,	-					
				-						
/pe: C=Con	ncentration, D=Depl	letion DM-D	oduced Metric As		28 8		920			
dric Soil Inc	dicators:	etion, Kivi-K	reduced Matrix, M	S=Masked	Sand Grain	18.	² Location	PL=Pore	Lining, M=N	latrix.
Histosol (A		ā	_ Polyvalue Belo	w Surface ('S8) (LRR F				matic Hydri	
Histic Epip			MLRA 149B)	(CO) (LICIT	٧,	2 cm iv	uck (A10) Prairie Rec	(LRR K, L, I lox (A16) (LF	WLRA 149B
Black Histi		-	Thin Dark Surfa	ace (S9) (Li	RR R, MLR	A 149B)	5 cm M	ucky Peat	or Peat (S3)	(LRRKI
Stratified L	Sulfide (A4) avers (A5)	_	Loamy Mucky I	Mineral (F1)	(LRR K, L	.)	Dark Si	urface (S7)	(LRR K, L)	
	Below Dark Surface	(A11)	Loamy Gleyed Depleted Matrix	Matrix (F2)			Polyval	ue Below	Surface (S8)	(LRR K, L)
Thick Dark	Surface (A12)	· · · · · ·	_ Redox Dark Su				Thin Da	rk Surface	(S9) (LRR I	< , L)
							Iron Man			
Sandy Muc	cky Mineral (S1)	_	Depleted Dark	Surface (F7	")		Iron-Ma	nganese l nt Floodol	Masses (F12)) (LRR K, L,
Sandy Muc Sandy Gley	yed Matrix (S4)		_ Depleted Dark : _ Redox Depress	Surface (F7	")		Piedmo	nt Floodpl	ain Soils (F1	9) (MLRA 14
Sandy Muc Sandy Gley Sandy Red	yed Matrix (S4) lox (S5)		Depleted Dark	Surface (F7	")		Piedmo Mesic S Red Pa	nt Floodpl podic (TA rent Mater	ain Soils (F1: 6) (MLRA 14 ial (F21)	9) (MLRA 14 4A, 145, 14
Sandy Muc Sandy Gley Sandy Red Stripped Ma	yed Matrix (S4) lox (S5) atrix (S6)		Depleted Dark	Surface (F7	r) :		Piedmo Mesic S Red Pa Very Sh	nt Floodpl podic (TA ent Mater allow Dark	ain Soils (F19 6) (MLRA 14 ial (F21) c Surface (TF	9) (MLRA 14 4A, 145, 14
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Sandy Muc Sandy Gley Sandy Red Stripped Ma Dark Surfac	yed Matrix (S4) lox (S5) atrix (S6) ce (S7) (LRR R, ML		_ Depleted Dark (_ Redox Depress	Surface (F7 ions (F8)		sturbed or	Piedmo Mesic S Red Pa Very Sh Other (E	nt Floodpl podic (TA ent Mater allow Dark	ain Soils (F19 6) (MLRA 14 ial (F21) c Surface (TF	9) (MLRA 14 4A, 145, 14
Sandy Muc Sandy Gley Sandy Red Stripped Ma Dark Surfact dicators of hys	yed Matrix (S4) lox (S5) atrix (S6) ce (S7) (LRR R, ML		_ Depleted Dark (_ Redox Depress	Surface (F7 ions (F8)		sturbed or	Piedmo Mesic S Red Pa Very Sh Other (E	nt Floodpl podic (TA ent Mater allow Dark	ain Soils (F19 6) (MLRA 14 ial (F21) c Surface (TF	9) (MLRA 14 4A, 145, 14
Sandy Muc Sandy Gley Sandy Red Stripped Ma Dark Surfactions of hy- strictive Layer Type:	yed Matrix (S4) lox (S5) atrix (S6) ce (S7) (LRR R, ML drophytic vegetation er (if observed):		_ Depleted Dark (_ Redox Depress	Surface (F7 ions (F8)			Piedmo Mesic S Red Pa Very Sh Other (E	nt Floodpl podic (TA rent Mater allow Dark xplain in F	ain Soils (F19 6) (MLRA 14 ial (F21) c Surface (TF	9) (MLRA 14 4A, 145, 14
Sandy Muc Sandy Gley Sandy Red Stripped Ma Dark Surfactions of hystrictive Layer Type:	yed Matrix (S4) lox (S5) atrix (S6) ce (S7) (LRR R, ML drophytic vegetation er (if observed):		_ Depleted Dark (_ Redox Depress	Surface (F7 ions (F8)			Piedmo Mesic S Red Pa Very Sh Other (E	nt Floodpl podic (TA rent Mater allow Dark xplain in F	ain Soils (F19 6) (MLRA 14 ial (F21) c Surface (TF	9) (MLRA 14 4A, 145, 14
Sandy Muc Sandy Gley Sandy Red Stripped Ma Dark Surfactions of hystrictive Layer Type:	yed Matrix (S4) lox (S5) atrix (S6) ce (S7) (LRR R, ML drophytic vegetation er (if observed):		_ Depleted Dark (_ Redox Depress	Surface (F7 ions (F8)			Piedmo Mesic S Red Pa Very Sh Other (E	nt Floodpl podic (TA rent Mater allow Dark xplain in F	ain Soils (F1: 6) (MLRA 14 ial (F21) c Surface (TF Remarks)	9) (MLRA 14 4A, 145, 14
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Sandy Muc Sandy Gley Sandy Red Stripped Ma Dark Surfac dicators of hy strictive Laye Type: Depth (inches	yed Matrix (S4) lox (S5) atrix (S6) ce (S7) (LRR R, ML drophytic vegetation er (if observed):		_ Depleted Dark (_ Redox Depress	Surface (F7 ions (F8)			Piedmo Mesic S Red Pa Very Sh Other (E	nt Floodpl podic (TA rent Mater allow Dark xplain in F	ain Soils (F1: 6) (MLRA 14 ial (F21) c Surface (TF Remarks)	9) (MLRA 14 4A, 145, 14
Sandy Muc Sandy Gley Sandy Red Stripped Ma Dark Surfac licators of hy strictive Laye Type: Depth (inches	yed Matrix (S4) lox (S5) atrix (S6) ce (S7) (LRR R, ML drophytic vegetation er (if observed):		_ Depleted Dark (_ Redox Depress	Surface (F7 ions (F8)			Piedmo Mesic S Red Pa Very Sh Other (E	nt Floodpl podic (TA rent Mater allow Dark xplain in F	ain Soils (F1: 6) (MLRA 14 ial (F21) c Surface (TF Remarks)	9) (MLRA 14 4A, 145, 14
Sandy Muc Sandy Gley Sandy Red Stripped Ma Dark Surfactions of hystrictive Layer Type:	yed Matrix (S4) lox (S5) atrix (S6) ce (S7) (LRR R, ML drophytic vegetation er (if observed):		_ Depleted Dark (_ Redox Depress	Surface (F7 ions (F8)			Piedmo Mesic S Red Pa Very Sh Other (E	nt Floodpl podic (TA rent Mater allow Dark xplain in F	ain Soils (F1: 6) (MLRA 14 ial (F21) c Surface (TF Remarks)	9) (MLRA 14 4A, 145, 14
Sandy Muc Sandy Gley Sandy Red Stripped Ma Dark Surfactions of hystrictive Layer Type:	yed Matrix (S4) lox (S5) atrix (S6) ce (S7) (LRR R, ML drophytic vegetation er (if observed):		_ Depleted Dark (_ Redox Depress	Surface (F7 ions (F8)			Piedmo Mesic S Red Pa Very Sh Other (E	nt Floodpl podic (TA rent Mater allow Dark xplain in F	ain Soils (F1: 6) (MLRA 14 ial (F21) c Surface (TF Remarks)	9) (MLRA 14 4A, 145, 14
Sandy Muc Sandy Gley Sandy Red Stripped Ma Dark Surfac licators of hy strictive Laye Type: Depth (inches	yed Matrix (S4) lox (S5) atrix (S6) ce (S7) (LRR R, ML drophytic vegetation er (if observed):		_ Depleted Dark (_ Redox Depress	Surface (F7 ions (F8)			Piedmo Mesic S Red Pa Very Sh Other (E	nt Floodpl podic (TA rent Mater allow Dark xplain in F	ain Soils (F1: 6) (MLRA 14 ial (F21) c Surface (TF Remarks)	9) (MLRA 14 4A, 145, 14
Sandy Muc Sandy Gley Sandy Red Stripped Ma Dark Surfac licators of hy strictive Laye Type: Depth (inches	yed Matrix (S4) lox (S5) atrix (S6) ce (S7) (LRR R, ML drophytic vegetation er (if observed):		_ Depleted Dark (_ Redox Depress	Surface (F7 ions (F8)			Piedmo Mesic S Red Pa Very Sh Other (E	nt Floodpl podic (TA rent Mater allow Dark xplain in F	ain Soils (F1: 6) (MLRA 14 ial (F21) c Surface (TF Remarks)	9) (MLRA 14 4A, 145, 14
Sandy Muc Sandy Gley Sandy Red Stripped Ma Dark Surfac dicators of hy strictive Laye Type: Depth (inches	yed Matrix (S4) lox (S5) atrix (S6) ce (S7) (LRR R, ML drophytic vegetation er (if observed):		_ Depleted Dark (_ Redox Depress	Surface (F7 ions (F8)			Piedmo Mesic S Red Pa Very Sh Other (E	nt Floodpl podic (TA rent Mater allow Dark xplain in F	ain Soils (F1: 6) (MLRA 14 ial (F21) c Surface (TF Remarks)	9) (MLRA 14 4A, 145, 14
Sandy Muc Sandy Gley Sandy Red Stripped Ma Dark Surfac dicators of hy strictive Laye Type: Depth (inches	yed Matrix (S4) lox (S5) atrix (S6) ce (S7) (LRR R, ML drophytic vegetation er (if observed):		_ Depleted Dark (_ Redox Depress	Surface (F7 ions (F8)			Piedmo Mesic S Red Pa Very Sh Other (E	nt Floodpl podic (TA rent Mater allow Dark xplain in F	ain Soils (F1: 6) (MLRA 14 ial (F21) c Surface (TF Remarks)	9) (MLRA 14 4A, 145, 14
Sandy Muc Sandy Gley Sandy Red Stripped Ma Dark Surfac	yed Matrix (S4) lox (S5) atrix (S6) ce (S7) (LRR R, ML drophytic vegetation er (if observed):		_ Depleted Dark (_ Redox Depress	Surface (F7 ions (F8)			Piedmo Mesic S Red Pa Very Sh Other (E	nt Floodpl podic (TA rent Mater allow Dark xplain in F	ain Soils (F1: 6) (MLRA 14 ial (F21) c Surface (TF Remarks)	9) (MLRA 14 4A, 145, 14
Sandy Muc Sandy Gley Sandy Red Stripped Ma Dark Surfac licators of hy strictive Laye Type: Depth (inches	yed Matrix (S4) lox (S5) atrix (S6) ce (S7) (LRR R, ML drophytic vegetation er (if observed):		_ Depleted Dark (_ Redox Depress	Surface (F7 ions (F8)			Piedmo Mesic S Red Pa Very Sh Other (E	nt Floodpl podic (TA rent Mater allow Dark xplain in F	ain Soils (F1: 6) (MLRA 14 ial (F21) c Surface (TF Remarks)	9) (MLRA 14 4A, 145, 14
Sandy Muc Sandy Gley Sandy Red Stripped Ma Dark Surfac dicators of hy strictive Laye Type: Depth (inches	yed Matrix (S4) lox (S5) atrix (S6) ce (S7) (LRR R, ML drophytic vegetation er (if observed):		_ Depleted Dark (_ Redox Depress	Surface (F7 ions (F8)			Piedmo Mesic S Red Pa Very Sh Other (E	nt Floodpl podic (TA rent Mater allow Dark xplain in F	ain Soils (F1: 6) (MLRA 14 ial (F21) c Surface (TF Remarks)	9) (MLRA 14 4A, 145, 14
Sandy Muc Sandy Gley Sandy Red Stripped Ma Dark Surfac licators of hy strictive Laye Type: Depth (inches	yed Matrix (S4) lox (S5) atrix (S6) ce (S7) (LRR R, ML drophytic vegetation er (if observed):		_ Depleted Dark (_ Redox Depress	Surface (F7 ions (F8)			Piedmo Mesic S Red Pa Very Sh Other (E	nt Floodpl podic (TA rent Mater allow Dark xplain in F	ain Soils (F1: 6) (MLRA 14 ial (F21) c Surface (TF Remarks)	9) (MLRA 14 4A, 145, 14

WETLAND DETE	RMINATION DATA FORM - N	lorthcentral and Northeast Region
Project/Site: Ellis - South 1	City/County:	Thompkin Sampling Date: 4/10/17
Applicant/Owner: SVN 8	Only County	Sampling Date: 1011
Investigator(s): N. Grosse / M. G	41060 Section Tour	State: NY Sampling Point: W55-w
Landform (hillslope, terrace, etc.): hillh	P tyra u Land relief (same	
Subregion (LRR or MLRA)	Local relier (conce	Slope (%): 0-5
Soil Man Unit Name:	Lat: _ - \(2. \(9.7 \) \	Long:76. 4410 Datum:/65 &V
Are elimatic / hydrologic and distance of the in-	appella chancey silt	loams, 0-32 NWI classification: PEM
Are climatic / hydrologic conditions on the site to	pical for this time of year? Yes	No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrolo		Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrolog		(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach	site map showing sampling p	oint locations, transects, important features, etc
Hydrophytic Vegetation Present? Yes	No Is the S	ampled Area
Hydric Soil Present? Yes	No within a	Wetland? Yes No
Wetland Hydrology Present? Yes	No If yes, or	otional Wetland Site ID:W5 b
Remarks: (Explain alternative procedures here	or in a separate report.)	
1		
	a)	R I
HYDROLOGY		
Wetland Hydrology Indicators:		Sacondani ladiastara (asinina di
Primary Indicators (minimum of one is required:	check all that apply)	Secondary Indicators (minimum of two required)
X Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10) Moss Trim Lines (B16)
🔀 Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living	Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled S	Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Field Observations:		FAC-Neutral Test (D5)
	Depth (inches): 3-4 4	8
101	Depth (inches):	
Saturation Present? Yes X No	Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe)		7 - 1
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous inspe	ctions), if available:
	2	s .
Remarks:		
Long linear soon	1. wetland - di	rainess reffers.
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<u>Tree Stratum</u> (Plot size:) 1		Dominant Species?	Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
5				That Are OBL, FACW, or FAC: (A/B) Prevalence Index worksheet:
7		= Total Cov		
1				FACW species x 2 = FAC species x 3 = FACU species x 4 =
3				UPL species
5 6				Prevalence Index = B/A = Hydrophytic Vegetation Indicators:
7.				1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50%
1. Juneus effusion 2. Phlans arundinada	35	· ·	OBL	3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
3. Carrx spp 4. Celtha palustris	20	<u> </u>	FACW OBL	Problematic Hydrophytic Vegetation ¹ (Explain) Indicators of hydric soil and wetland hydrology must
56				be present, unless disturbed or problematic. Definitions of Vegetation Strata:
7 8				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless
11		Total Cover		of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.
Voody Vine Stratum (Plot size:)				
				Hydrophytic
Omeder (Include the Control	= T	otal Çover		Vegetation Present? Yes No
emarks: (Include photo numbers here or on a separate sh	eet.)			
				=

Depth (inches)	Matrix Color (moist)		Red	ox Feature	es		m the absence of indic	material II	
0-6		%_	Color (moist)	%	_Type ¹	_Loc ²	Texture	Remarks	
	10 YR 3/2	100					SiLo		
6-12	10 YR 3/1	35	54R 5/8	15	RM	M	SiLo		
			-						
				-: iq					
				-					
									
				• ——			·		
 Гуре: C=Cor	ncentration, D=Depl	etion. RM=	Reduced Matrix MS	-Mackad	Sand One		20.		
yunc son m	uicators:		TOGGOCG MIGHTA, INC.	-iviaskeu	Sand Gra	ns.	² Location: PL=Por Indicators for Probl	e Lining, M=Mate	trix.
Histosol (A			Polyvalue Below		(S8) (LRR	R,	2 cm Muck (A10		
_ ⊓istic Epip	pedon (A2) ic (A3)		MLRA 149B)				Coast Prairie Re	dox (A16) (LRR	K, L, R)
	Sulfide (A4)	:-	Thin Dark Surface Loamy Mucky M	ineral (F1	RRR, MILI	RA 149B)	5 cm Mucky Pea	t or Peat (S3) (L	RR K, L, R
_ Stratified L		_	Loamy Gleyed N	Matrix (F2)	/ (LNK K, I	-)	Dark Surface (S7	') (LRR K, L)	==
	Below Dark Surface	(A11)	X Depleted Matrix	(F3)		=	Polyvalue Below Thin Dark Surface	ouriace (58) (L e (59) (I RR K	.RR K, L)
_ I DICK Dark	Surface (A12) cky Mineral (S1)	-	Redox Dark Surf	face (F6)			Iron-Manganese	Masses (F12) (LRRK.L.R
	yed Matrix (\$4)	_	_ Depleted Dark S		7)		Piedmont Floodp	lain Soils (F19)	(MLRA 149
_ Sandy Red		_	_ Redox Depression	ons (F8)			Mesic Spodic (TA	6) (MLRA 144A	A, 145, 149E
_ Stripped M							Red Parent Mate	rial (F21)	
_ Dark Surfac	ce (S7) (LRR R, ML	.RA 149B)					Very Shallow Dar Other (Explain in	k Surface (TF12 Remarks)	2)
dicators of hy	drophytic vegetatio	n and wetla	and hydrology must	be presen	it, unless d	isturbed o	r problematic.		
Type:	er (if observed):								
Depth (inches	s).		_					~/	
marks:	9,.				-		Hydric Soil Present?	Yes X	No
			17						
25									
			× .						
									- 1
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WETLAND DETERMINA	ATION DATA FORM – Northcentr	al and Northeast Region
Project/Site: Ellis - South / Applicant/Owner: SUN 8	Thanks Thanks	ok hi
Applicant/Owner: SUN 8	City/County:/	Sampling Date: 4/10/17
Investigator(s): N. Grosse / M. Guina		State: Sampling Point: W56- v
Investigator(s):	Section, Township, Range:	Ithaca
Landform (hillslope, terrace, etc.):hi// t-o p	Local relief (concave, convex,	none): Slope (%):
Subregion (LRR or MLRA): Lat:	42, 4355 Long: -	-7/ July 5/1/5/01/
Soil Map Unit Name: 674 - 67. L - Ch. pg. L	- channoy silt loom, 0.3%	NWI classification:
Are climatic / hydrologic conditions on the site typical for	this time of year? YesX No	(If no, explain in Remarks)
Are Vegetation, Soil, or Hydrology		nal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology		I, explain any answers in Remarks.)
	•	, copiant any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site ma	ip snowing sampling point locat	ions, transects, important features, etc
Hydrophytic Vegetation Present? Yes Hydric Soil Present? Yes Wetland Hydrology Present? Yes	No within a Wetland? No If yes, optional Wetlan	
Remarks: (Explain alternative procedures here or in a	separate report.)	
Upland sample po.	int	
HYDROLOGY	ii a	
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check a	ill that apply)	
	/ater-Stained Leaves (B9)	Surface Soil Cracks (B6) Drainage Patterns (B10)
I Date 184 () = 1 () () ()	quatic Fauna (B13)	Moss Trim Lines (B16)
	arl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hy	ydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	xidized Rhizospheres on Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Pro	esence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Re	ecent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5) Th	in Muck Surface (C7)	Shallow Aquitard (D3)
	her (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes NoX De	epth (inches):	
	epth (inches):	
Saturation Present? Yes No De (includes capillary fringe)	epth (inches): Wetland H	lydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well,	aerial photos, previous inspections) if ava	ilable:
	protest, proteste inopeditoris), il ava	mable.
Remarks:	- *	
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Sampling Point: W56-Vpl

Tree Stratum (Plot size:)	Absolute Dominant Indicato <u>% Cover Species? Status</u>	Dominance Test worksheet:
1.		Number of Dominant Species
2		That Are OBL, FACW, or FAC:(A)
3		Total Number of Dominant Species Across All Strata: (B)
4		
5.		That A CDI Escala
5		That Are OBL, FACW, or FAC: (A/B)
6		Prevalence Index worksheet:
7		Total % Cover of: Multiply by:
	= Total Cover	OBL species x 1 = O
Sapling/Shrub Stratum (Plot size:)	FACW species x 2 = 10
		FAC species x3 = 12.0
2		FACU species
3		UPL species
4		Column Totals: 95 (A) 345 (B)
5		Prevalence Index = B/A = 3.63
6		Hydrophytic Vegetation Indicators:
7		1 - Rapid Test for Hydrophytic Vegetation
	= Total Cover	2 - Dominance Test is >50%
Herb Stratum (Plot size:)	= Total Cover	3 - Prevalence Index is ≤3.0¹
1. Solidago spe	40 Y FAC	4 - Morphological Adaptations ¹ (Provide supporting
2. Dactylis glonerate	35 Y FACO	data in Remarks or on a separate sheet)
3. Phlenn prature		Problematic Hydrophytic Vegetation ¹ (Explain)
4. Phloris arundinacea		¹ Indicators of hydric soil and wetland hydrology must
	5 FACW	be present, unless disturbed or problematic.
5		Definitions of Vegetation Strata:
6		Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7		at breast height (DBH), regardless of height.
8		Sapling/shrub – Woody plants less than 3 in. DBH
9		and greater than or equal to 3.28 ft (1 m) tall.
10		Herb – All herbaceous (non-woody) plants, regardless
11.		of size, and woody plants less than 3.28 ft tall.
12		Woody vines - All woody vines greater than 3.28 ft in
3	= Total Cover	height.
Noody Vine Stratum (Plot size:)		9
		2 2
		Hydrophytic Vegetation
		Present? Yes No
emarks: (Include photo numbers here or on a separate	= Total Cover	
conditions (motion priority frame) and a separate	sneet.)	0
4372		
		·

Depth (inches)	Color (moist)	%	th needed to document the indicator or con Redox Features		
0-10	10 YR 3/3		Color (moist) % Type ¹ Loc ²	Texture	Remarks
		(00		_ SiLo	
0-14	25 YR 5/2	100	<u> </u>	SiLo	
			• • • • • • • • • • • • • • • • • • • •		
-					
		-		=0=====	
				- X	
)* <u> </u>		
ype: C=Co /dric Soil Ir	ncentration, D=Deple	etion, RM=F	Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=P	ore Lining, M=Matrix.
_ Histosol (Polyagha Patrico d	Indicators for Pro	blematic Hydric Soils ³ :
	pedon (A2)	-	Polyvalue Below Surface (S8) (LRR R, MLRA 149B)	2 cm Muck (A	10) (LRR K, L, MLRA 149B)
_ Black Hist	tic (A3)		Thin Dark Surface (S9) (LRR R, MLRA 149)	Coast Prairie F	Redox (A16) (LRR K, L, R)
	Sulfide (A4)		Loamy Mucky Mineral (F1) (LRR K, L)		eat or Peat (S3) (LRR K, L, F S7) (LRR K, L)
	Layers (A5)	-	Loamy Gleyed Matrix (F2)	Polyvalue Beld	ow Surface (S8) (LRR K, L)
Depleted Thick Dark	Below Dark Surface k Surface (A12)	(A11) _	_ Depleted Matrix (F3)	Thin Dark Surf	ace (S9) (LRR K, L)
					~~~ (~~) ( <b>~</b> 1\\\ 1\\\ <u>~</u> )
		-	Redox Dark Surface (F6)	Iron-Manganes	se Masses (F12) (LRR K, L, I
_ Sandy Mu	cky Mineral (S1) eyed Matrix (S4)	_	_ Depleted Dark Surface (F7)	Iron-Manganes Piedmont Floor	se Masses (F12) (LRR K, L, I dplain Soils (F19) (MLRA 14!
_ Sandy Mu _ Sandy Gle _ Sandy Red	cky Mineral (S1) eyed Matrix (S4) dox (S5)			Iron-Manganes Piedmont Floor Mesic Spodic (	se Masses (F12) (LRR K, L, I dplain Soils (F19) (MLRA 149 TA6) (MLRA 144A, 145, 149
Sandy Mu Sandy Gle Sandy Red Stripped M	cky Mineral (S1) eyed Matrix (S4) dox (S5) Matrix (S6)		_ Depleted Dark Surface (F7)	Iron-Manganes Piedmont Floo Mesic Spodic ( Red Parent Ma	se Masses (F12) (LRR K, L, I dplain Soils (F19) (MLRA 149 TA6) (MLRA 144A, 145, 149 iterial (F21)
Sandy Mu Sandy Gle Sandy Red Stripped M	cky Mineral (S1) eyed Matrix (S4) dox (S5)	RA 149B)	_ Depleted Dark Surface (F7)	Iron-Manganes Piedmont Floo Mesic Spodic ( Red Parent Ma	se Masses (F12) (LRR K, L, I dplain Soils (F19) (MLRA 149 TA6) (MLRA 144A, 145, 149 sterial (F21) Dark Surface (TF12)
Sandy Mu Sandy Gle Sandy Rec Stripped M Dark Surfa	cky Mineral (S1) eyed Matrix (S4) dox (S5) fatrix (S6) ace (S7) (LRR R, ML		_ Depleted Dark Surface (F7) _ Redox Depressions (F8)	Iron-Manganes Piedmont Floo Mesic Spodic ( Red Parent Ma Very Shallow D Other (Explain	se Masses (F12) (LRR K, L, I dplain Soils (F19) (MLRA 149 TA6) (MLRA 144A, 145, 149 sterial (F21) Dark Surface (TF12)
Sandy Mu Sandy Gle Sandy Red Stripped M Dark Surfa	cky Mineral (S1) eyed Matrix (S4) dox (S5) fatrix (S6) ace (S7) (LRR R, ML		_ Depleted Dark Surface (F7)	Iron-Manganes Piedmont Floo Mesic Spodic ( Red Parent Ma Very Shallow D Other (Explain	se Masses (F12) (LRR K, L, I dplain Soils (F19) (MLRA 149 TA6) (MLRA 144A, 145, 149 sterial (F21) Dark Surface (TF12)
Sandy Mu Sandy Gle Sandy Rec Stripped M Dark Surfa	cky Mineral (S1) eyed Matrix (S4) dox (S5) fatrix (S6) ace (S7) (LRR R, ML ydrophytic vegetation		_ Depleted Dark Surface (F7) _ Redox Depressions (F8)	Iron-Manganes Piedmont Floo Mesic Spodic ( Red Parent Ma Very Shallow D Other (Explain	se Masses (F12) (LRR K, L, I dplain Soils (F19) (MLRA 149 TA6) (MLRA 144A, 145, 149 sterial (F21) Dark Surface (TF12)
Sandy Mu Sandy Gle Sandy Rec Stripped M Dark Surfa licators of he strictive Lay	cky Mineral (S1) eyed Matrix (S4) dox (S5) Matrix (S6) ace (S7) (LRR R, ML ydrophytic vegetation yer (if observed):		_ Depleted Dark Surface (F7) _ Redox Depressions (F8)	Iron-Manganes Piedmont Floo Mesic Spodic ( Red Parent Ma Very Shallow D Other (Explain	se Masses (F12) (LRR K, L, I dplain Soils (F19) (MLRA 149 TA6) (MLRA 144A, 145, 149 sterial (F21) Dark Surface (TF12) in Remarks)
Sandy Mu Sandy Gle Sandy Rec Stripped M Dark Surfa licators of h strictive La Type: Depth (inches	cky Mineral (S1) eyed Matrix (S4) dox (S5) Matrix (S6) ace (S7) (LRR R, ML ydrophytic vegetation yer (if observed):		_ Depleted Dark Surface (F7) _ Redox Depressions (F8)	Iron-Manganes Piedmont Floo Mesic Spodic ( Red Parent Ma Very Shallow D Other (Explain	se Masses (F12) (LRR K, L, I dplain Soils (F19) (MLRA 149 TA6) (MLRA 144A, 145, 149 sterial (F21) Park Surface (TF12) in Remarks)
Sandy Mu Sandy Gle Sandy Rec Stripped M Dark Surfa dicators of h strictive La Type: Depth (inches	cky Mineral (S1) eyed Matrix (S4) dox (S5) Matrix (S6) ace (S7) (LRR R, ML ydrophytic vegetation yer (if observed):		_ Depleted Dark Surface (F7) _ Redox Depressions (F8)	Iron-Manganes Piedmont Floo Mesic Spodic ( Red Parent Ma Very Shallow D Other (Explain	se Masses (F12) (LRR K, L, I dplain Soils (F19) (MLRA 149 TA6) (MLRA 144A, 145, 149 sterial (F21) Dark Surface (TF12) in Remarks)
Sandy Mu Sandy Gle Sandy Rec Stripped M Dark Surfa licators of h strictive La Type: Depth (inches	cky Mineral (S1) eyed Matrix (S4) dox (S5) Matrix (S6) ace (S7) (LRR R, ML ydrophytic vegetation yer (if observed):		_ Depleted Dark Surface (F7) _ Redox Depressions (F8)	Iron-Manganes Piedmont Floo Mesic Spodic ( Red Parent Ma Very Shallow D Other (Explain	se Masses (F12) (LRR K, L, I dplain Soils (F19) (MLRA 149 TA6) (MLRA 144A, 145, 149 sterial (F21) Dark Surface (TF12) in Remarks)
Sandy Mu Sandy Gle Sandy Rec Stripped M Dark Surfa dicators of h strictive La Type: Depth (inches	cky Mineral (S1) eyed Matrix (S4) dox (S5) Matrix (S6) ace (S7) (LRR R, ML ydrophytic vegetation yer (if observed):		_ Depleted Dark Surface (F7) _ Redox Depressions (F8)	Iron-Manganes Piedmont Floo Mesic Spodic ( Red Parent Ma Very Shallow D Other (Explain	se Masses (F12) (LRR K, L, I dplain Soils (F19) (MLRA 149 TA6) (MLRA 144A, 145, 149 sterial (F21) Dark Surface (TF12) in Remarks)
Sandy Mu Sandy Gle Sandy Rec Stripped M Dark Surfa dicators of h strictive La Type: Depth (inches	cky Mineral (S1) eyed Matrix (S4) dox (S5) Matrix (S6) ace (S7) (LRR R, ML ydrophytic vegetation yer (if observed):		_ Depleted Dark Surface (F7) _ Redox Depressions (F8)	Iron-Manganes Piedmont Floo Mesic Spodic ( Red Parent Ma Very Shallow D Other (Explain	se Masses (F12) (LRR K, L, I dplain Soils (F19) (MLRA 149 TA6) (MLRA 144A, 145, 149 sterial (F21) Dark Surface (TF12) in Remarks)
Sandy Mu Sandy Gle Sandy Rec Stripped M Dark Surfa licators of h strictive La Type: Depth (inches	cky Mineral (S1) eyed Matrix (S4) dox (S5) Matrix (S6) ace (S7) (LRR R, ML ydrophytic vegetation yer (if observed):		_ Depleted Dark Surface (F7) _ Redox Depressions (F8)	Iron-Manganes Piedmont Floo Mesic Spodic ( Red Parent Ma Very Shallow D Other (Explain	se Masses (F12) (LRR K, L, I dplain Soils (F19) (MLRA 149 TA6) (MLRA 144A, 145, 149 sterial (F21) Dark Surface (TF12) in Remarks)
Sandy Mu Sandy Gle Sandy Rec Stripped M Dark Surfa licators of h strictive La Type: Depth (inches	cky Mineral (S1) eyed Matrix (S4) dox (S5) Matrix (S6) ace (S7) (LRR R, ML ydrophytic vegetation yer (if observed):		_ Depleted Dark Surface (F7) _ Redox Depressions (F8)	Iron-Manganes Piedmont Floo Mesic Spodic ( Red Parent Ma Very Shallow D Other (Explain	se Masses (F12) (LRR K, L, I dplain Soils (F19) (MLRA 149 TA6) (MLRA 144A, 145, 149 sterial (F21) Dark Surface (TF12) in Remarks)
Sandy Mu Sandy Gle Sandy Rec Stripped M Dark Surfa licators of h strictive La Type: Depth (inches	cky Mineral (S1) eyed Matrix (S4) dox (S5) Matrix (S6) ace (S7) (LRR R, ML ydrophytic vegetation yer (if observed):		_ Depleted Dark Surface (F7) _ Redox Depressions (F8)	Iron-Manganes Piedmont Floo Mesic Spodic ( Red Parent Ma Very Shallow D Other (Explain	se Masses (F12) (LRR K, L, I dplain Soils (F19) (MLRA 149 TA6) (MLRA 144A, 145, 149 sterial (F21) Dark Surface (TF12) in Remarks)
Sandy Mu Sandy Gle Sandy Rec Stripped M Dark Surfa licators of h strictive La Type: Depth (inches	cky Mineral (S1) eyed Matrix (S4) dox (S5) Matrix (S6) ace (S7) (LRR R, ML ydrophytic vegetation yer (if observed):		_ Depleted Dark Surface (F7) _ Redox Depressions (F8)	Iron-Manganes Piedmont Floo Mesic Spodic ( Red Parent Ma Very Shallow D Other (Explain	se Masses (F12) (LRR K, L, I dplain Soils (F19) (MLRA 149 TA6) (MLRA 144A, 145, 149 sterial (F21) Dark Surface (TF12) in Remarks)
Sandy Mu Sandy Gle Sandy Rec Stripped M Dark Surfa dicators of h strictive La Type: Depth (inches	cky Mineral (S1) eyed Matrix (S4) dox (S5) Matrix (S6) ace (S7) (LRR R, ML ydrophytic vegetation yer (if observed):		_ Depleted Dark Surface (F7) _ Redox Depressions (F8)	Iron-Manganes Piedmont Floo Mesic Spodic ( Red Parent Ma Very Shallow D Other (Explain	se Masses (F12) (LRR K, L, I dplain Soils (F19) (MLRA 149 TA6) (MLRA 144A, 145, 149 sterial (F21) Dark Surface (TF12) in Remarks)
Sandy Mu Sandy Gle Sandy Rec Stripped M Dark Surfa licators of h strictive La Type: Depth (inches	cky Mineral (S1) eyed Matrix (S4) dox (S5) Matrix (S6) ace (S7) (LRR R, ML ydrophytic vegetation yer (if observed):		_ Depleted Dark Surface (F7) _ Redox Depressions (F8)	Iron-Manganes Piedmont Floo Mesic Spodic ( Red Parent Ma Very Shallow D Other (Explain	se Masses (F12) (LRR K, L, I dplain Soils (F19) (MLRA 149 TA6) (MLRA 144A, 145, 149 sterial (F21) Dark Surface (TF12) in Remarks)
Sandy Mu Sandy Gle Sandy Rec Stripped M Dark Surfa licators of h strictive La Type: Depth (inches	cky Mineral (S1) eyed Matrix (S4) dox (S5) Matrix (S6) ace (S7) (LRR R, ML ydrophytic vegetation yer (if observed):		_ Depleted Dark Surface (F7) _ Redox Depressions (F8)	Iron-Manganes Piedmont Floo Mesic Spodic ( Red Parent Ma Very Shallow D Other (Explain	se Masses (F12) (LRR K, L, I dplain Soils (F19) (MLRA 149 TA6) (MLRA 144A, 145, 149 sterial (F21) Dark Surface (TF12) in Remarks)
Sandy Mu Sandy Gle Sandy Rec Stripped M Dark Surfa dicators of h strictive La Type: Depth (inches	cky Mineral (S1) eyed Matrix (S4) dox (S5) Matrix (S6) ace (S7) (LRR R, ML ydrophytic vegetation yer (if observed):		_ Depleted Dark Surface (F7) _ Redox Depressions (F8)	Iron-Manganes Piedmont Floo Mesic Spodic ( Red Parent Ma Very Shallow D Other (Explain	se Masses (F12) (LRR K, L, I dplain Soils (F19) (MLRA 149 TA6) (MLRA 144A, 145, 149 sterial (F21) Dark Surface (TF12) in Remarks)
Sandy Mu Sandy Gle Sandy Rec Stripped M Dark Surfa dicators of h strictive La Type: Depth (inches	cky Mineral (S1) eyed Matrix (S4) dox (S5) Matrix (S6) ace (S7) (LRR R, ML ydrophytic vegetation yer (if observed):		_ Depleted Dark Surface (F7) _ Redox Depressions (F8)	Iron-Manganes Piedmont Floo Mesic Spodic ( Red Parent Ma Very Shallow D Other (Explain	se Masses (F12) (LRR K, L, I dplain Soils (F19) (MLRA 149 TA6) (MLRA 144A, 145, 149 sterial (F21) Dark Surface (TF12) in Remarks)
Sandy Mu Sandy Gle Sandy Red Stripped M Dark Surfa dicators of h	cky Mineral (S1) eyed Matrix (S4) dox (S5) Matrix (S6) ace (S7) (LRR R, ML ydrophytic vegetation yer (if observed):		_ Depleted Dark Surface (F7) _ Redox Depressions (F8)	Iron-Manganes Piedmont Floo Mesic Spodic ( Red Parent Ma Very Shallow D Other (Explain	se Masses (F12) (LRR K, L, I dplain Soils (F19) (MLRA 149 TA6) (MLRA 144A, 145, 149 sterial (F21) Dark Surface (TF12) in Remarks)
Sandy Mu Sandy Gle Sandy Rec Stripped M Dark Surfa licators of h strictive La Type: Depth (inches	cky Mineral (S1) eyed Matrix (S4) dox (S5) Matrix (S6) ace (S7) (LRR R, ML ydrophytic vegetation yer (if observed):		_ Depleted Dark Surface (F7) _ Redox Depressions (F8)	Iron-Manganes Piedmont Floo Mesic Spodic ( Red Parent Ma Very Shallow D Other (Explain	se Masses (F12) (LRR K, L, I dplain Soils (F19) (MLRA 149 TA6) (MLRA 144A, 145, 149 sterial (F21) Dark Surface (TF12) in Remarks)

WETLAND DETERMINATION DATA FO	RM – Northcentral and Northeast Region
Project/Site: Ellic - South 1 City/	County: Thompkins Sampling Date: 4/10/17
Applicant/Owner: SUNS	- 1/1/
Investigator(s): N. Grosse M. Guinage Section	State: <u>NY</u> Sampling Point: <u>Wob-wards</u>
Landform (hillslope, terrace, etc.): The of slope Local reli	on, Township, Range:
Subregion (LRR or MLRA): Lat: 42.438	Slope (%):
Soil Man Unit Name: PKR - RV	Long:
Soil Map Unit Name: RKB - Rhineback Silt Luan, 2 to	1
Are climatic / hydrologic conditions on the site typical for this time of year? Y	, , , , , , , , , , , , , , , , , , , ,
Are Vegetation, Soil, or Hydrology significantly disturb  Are Vegetation, Soil, or Hydrology naturally problema	
	the state of the s
SUMMARY OF FINDINGS – Attach site map showing sam	pling point locations, transects, important features, etc
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydric Soil Present? YesX_ No	within a Wetland? Yes No
Wetland Hydrology Present? Yes No	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate report.)	
	*
·	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves	(B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
★ Saturation (A3)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor	(C1) Crayfish Burrows (C8)
Sediment Deposits (B2)  Oxidized Rhizospheres	
Trift Deposits (B3)	ron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)  Recent Iron Reduction i	
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remai	
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	(D3)
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes X No Depth (inches):3'	
Saturation Present? Yes X No Depth (inches): //	Wetland Hydrology Present? Yes X
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previo	US inspections) if available:
	as map ostalia, il avallable.
Remarks:	j s
Normands.	9
4	
# F	
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	: 8
	9

Sampling Point: Wbb-wet1

Tree Stratum (Plot size:)	Absolute % Cover	Dominar Species	nt Indicator	Dominance Test worksheet:
1. Au rubrun	55	Y	FAC	Number of Dominant Species
2. Fraxinus pennsylvanica	40	Y	FACW	That Are OBL, FACW, or FAC: (A)
3				Total Number of Dominant
4.				
5.				
5	- G			That Are OBL, FACW, or FAC: (A/B
6				Prevalence Index worksheet:
7.		·		Total % Cover of: Multiply by:
	95	= Total Co	ver	OBL species x 1 =
Sapling/Shrub Stratum (Plot size:)				FACW species x 2 =
1. honiwa spp	_ 75	Y	FAC	FAC species x 3 =
2				FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
4			-	
5.,				Prevalence Index = B/A =
6.				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
	_75_	= Total Cov	/er	2 - Dominance Test is >50%
Herb Stratum (Plot size:)				3 - Prevalence Index is ≤3.0¹
1. Phalaris arundinacea	50	У	FACW	4 - Morphological Adaptations (Provide supporting
2. Juneus ethisms	40	- V	OBL	data in Remarks or on a separate sheet)
3. Ranunculus spp	5		FAL	Problematic Hydrophytic Vegetation ¹ (Explain)
a justification of the second				¹Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
5				
				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
				Sapling/shrub Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
0,				
1,				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
·				
2	-0/			Woody vines - All woody vines greater than 3.28 ft in
	95 =	Total Cove	er	height.
/oody Vine Stratum (Plot size:)			1	
				a
				Hydrophytic Vegetation
		:		Present? Yes No
amarka: (Ingludo photo puebo - base	= Total Cover			
emarks: (Include photo numbers here or on a separate sh	eet.)			
# ²				
				2.0
				la.
				5

Sampling Point: Wb-well

(inches)	Matrix Color (moist)	%	Red	ox Featur	es		n the absence of inc		
(inches)	10 YR 3/2	100	Color (moist)	%_	Type ¹	_Loc ²	Texture	Remark	s
0-6							SiLo		
6-11	10 YR 2/2	95	54R4/6	- 5	RM	M	sile_		
		->		-					
				=					-
		<del>-</del>		-			5 T		
							T	-	
Type: C=Co	uncentration D-Donl	otion DM	D. J. 111						
lydric Soil Ir	ncentration, D=Deplindicators:	edoli, Kivi=	Reduced Matrix, MS	=Masked	Sand Gra	ns.	² Location: PL=P	ore Lining, M=Ma	atrix.
Histosol (			Polyvalue Below	v Surface	(S8) (LRR	R.	Indicators for Pro		
	ipedon (A2)		MLRA 149B)				Coast Prairie	ro) (LKK K, L, M Redox (A16) (LR)	LKA 149B) R.K. I. R)
∠ Black Hist Hvdrogen	itic (A3) i Sulfide (A4)		Thin Dark Surface	ce (S9) (L	RR R, MLI	RA 149B)	5 cm Mucky P	eat or Peat (S3)	(LRR K, L, R)
	Layers (A5)	8	Loamy Mucky M Loamy Gleyed N	lineral (F1 Natrix (F2)	) (LRR <b>K,</b> I	L)	Dark Surface (	S7) (LRR K, L)	
_ Depleted I	Below Dark Surface	(A11)	Depleted Matrix		,	23	Polyvalue Belo	ow Surface (S8) ( ace (S9) ( <b>LRR K</b>	LRR K, L)
_ Thick Dark	k Surface (A12)						riini Daik Suli	ace logi ilkk k	_ L.)
		U -	Redox Dark Surl	face (F6)			Iron-Manganes	e Masses (F12)	/IRRKID\
_ Sandy Mu	icky Mineral (S1)		Depleted Dark S	urface (F	7)		Iron-Manganes	e Masses (F12)	(LRR K. L. R)
_ Sandy Mu _ Sandy Gle	cky Mineral (S1) eyed Matrix (S4)	-	Redox Dark Surl Depleted Dark S Redox Depression	urface (F	7)		Iron-Manganes Piedmont Floo Mesic Spodic (	se Masses (F12) dplain Soils (F19 TA6) ( <b>MLRA 14</b> 4	(LRR K, L, R) ) (MLRA 1498
_ Sandy Mu	ucky Mineral (S1) eyed Matrix (S4) dox (S5)	_	Depleted Dark S	urface (F	7)		Iron-Manganes Piedmont Floo Mesic Spodic ( Red Parent Ma	se Masses (F12) dplain Soils (F19 TA6) ( <b>MLRA 14</b> 4 iterial (F21)	(LRR K, L, R) ) (MLRA 149B) IA, 145, 149B)
Sandy Mu Sandy Gle Sandy Red Stripped M	ucky Mineral (S1) eyed Matrix (S4) dox (S5)	.RA 149B)	Depleted Dark S Redox Depression	urface (F	7) -		Iron-Manganes Piedmont Floo Mesic Spodic ( Red Parent Ma	se Masses (F12) dplain Soils (F19 TA6) ( <b>MLRA 14</b> 4 sterial (F21) Dark Surface (TF	(LRR K, L, R) ) (MLRA 149B) IA, 145, 149B)
Sandy Mu Sandy Gle Sandy Rec Stripped M Dark Surfa	icky Mineral (S1) eyed Matrix (S4) dox (S5) Matrix (S6) ace (S7) (LRR R, ML nydrophytic vegetatio		Depleted Dark S Redox Depression	urface (F7 ons (F8)	· -	isturbed o	Iron-Manganes Piedmont Floo Mesic Spodic ( Red Parent Ma Very Shallow D Other (Explain	se Masses (F12) dplain Soils (F19 TA6) ( <b>MLRA 14</b> 4 sterial (F21) Dark Surface (TF	(LRR K, L, R) ) (MLRA 149B) IA, 145, 149B)
Sandy Mu Sandy Gle Sandy Rec Stripped M Dark Surfa	icky Mineral (S1) eyed Matrix (S4) dox (S5) Matrix (S6)		Depleted Dark S Redox Depression	urface (F7 ons (F8)	· -	isturbed o	Iron-Manganes Piedmont Floo Mesic Spodic ( Red Parent Ma Very Shallow D Other (Explain	se Masses (F12) dplain Soils (F19 TA6) ( <b>MLRA 14</b> 4 sterial (F21) Dark Surface (TF	(LRR K, L, R) ) (MLRA 149B) IA, 145, 149B)
Sandy Mu Sandy Gle Sandy Rec Stripped M Dark Surfa	icky Mineral (S1) eyed Matrix (S4) dox (S5) Matrix (S6) ace (S7) (LRR R, ML eydrophytic vegetatio yer (if observed):		Depleted Dark S Redox Depression	urface (F7 ons (F8)	· -		Iron-Manganes Piedmont Floo Mesic Spodic ( Red Parent Ma Very Shallow D Other (Explain	se Masses (F12) dplain Soils (F19 TA6) ( <b>MLRA 144</b> sterial (F21) Park Surface (TF- in Remarks)	(LRR K, L, R) ) (MLRA 149B IA, 145, 149B)
Sandy Mu Sandy Gle Sandy Rec Stripped M Dark Surfa	icky Mineral (S1) eyed Matrix (S4) dox (S5) Matrix (S6) ace (S7) (LRR R, ML eydrophytic vegetatio yer (if observed):		Depleted Dark S Redox Depression	urface (F7 ons (F8)	· -		Iron-Manganes Piedmont Floo Mesic Spodic ( Red Parent Ma Very Shallow D Other (Explain	se Masses (F12) dplain Soils (F19 TA6) ( <b>MLRA 144</b> sterial (F21) Park Surface (TF- in Remarks)	(LRR K, L, R) ) (MLRA 149B) IA, 145, 149B)
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Sandy Mu Sandy Gle Sandy Rec Stripped M Dark Surfa dicators of h estrictive Lay Type: Depth (inches	icky Mineral (S1) eyed Matrix (S4) dox (S5) Matrix (S6) ace (S7) (LRR R, ML eydrophytic vegetatio yer (if observed):		Depleted Dark S Redox Depression	urface (F7 ons (F8)	· -		Iron-Manganes Piedmont Floo Mesic Spodic ( Red Parent Ma Very Shallow D Other (Explain	se Masses (F12) dplain Soils (F19 TA6) ( <b>MLRA 144</b> sterial (F21) Park Surface (TF- in Remarks)	(LRR K, L, R) ) (MLRA 149E IA, 145, 149B)
Sandy Mu Sandy Gle Sandy Rec Stripped M Dark Surfa dicators of h estrictive Lay Type: Depth (inches	icky Mineral (S1) eyed Matrix (S4) dox (S5) Matrix (S6) ace (S7) (LRR R, ML eydrophytic vegetatio yer (if observed):		Depleted Dark S Redox Depression	urface (F7 ons (F8)	· -		Iron-Manganes Piedmont Floo Mesic Spodic ( Red Parent Ma Very Shallow D Other (Explain	se Masses (F12) dplain Soils (F19 TA6) ( <b>MLRA 144</b> sterial (F21) Park Surface (TF- in Remarks)	(LRR K, L, R) ) (MLRA 149B IA, 145, 149B)
Sandy Mu Sandy Gle Sandy Rec Stripped M Dark Surfa dicators of h estrictive Lay Type: Depth (inches	icky Mineral (S1) eyed Matrix (S4) dox (S5) Matrix (S6) ace (S7) (LRR R, ML eydrophytic vegetatio yer (if observed):		Depleted Dark S Redox Depression	urface (F7 ons (F8)	· -		Iron-Manganes Piedmont Floo Mesic Spodic ( Red Parent Ma Very Shallow D Other (Explain	se Masses (F12) dplain Soils (F19 TA6) ( <b>MLRA 144</b> sterial (F21) Park Surface (TF- in Remarks)	(LRR K, L, R) ) (MLRA 149E IA, 145, 149B)
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Sandy Mu Sandy Gle Sandy Rec Stripped M Dark Surfa	icky Mineral (S1) eyed Matrix (S4) dox (S5) Matrix (S6) ace (S7) (LRR R, ML eydrophytic vegetatio yer (if observed):		Depleted Dark S Redox Depression	urface (F7 ons (F8)	· -		Iron-Manganes Piedmont Floo Mesic Spodic ( Red Parent Ma Very Shallow D Other (Explain	se Masses (F12) dplain Soils (F19 TA6) ( <b>MLRA 144</b> sterial (F21) Park Surface (TF- in Remarks)	(LRR K, L, R) ) (MLRA 149E IA, 145, 149B 12)
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Sandy Mu Sandy Gle Sandy Rec Stripped M Dark Surfa	icky Mineral (S1) eyed Matrix (S4) dox (S5) Matrix (S6) ace (S7) (LRR R, ML eydrophytic vegetatio yer (if observed):		Depleted Dark S Redox Depression	urface (F7 ons (F8)	· -		Iron-Manganes Piedmont Floo Mesic Spodic ( Red Parent Ma Very Shallow D Other (Explain	se Masses (F12) dplain Soils (F19 TA6) ( <b>MLRA 144</b> sterial (F21) Park Surface (TF- in Remarks)	(LRR K, L, R) ) (MLRA 149B IA, 145, 149B)
Sandy Mu Sandy Gle Sandy Rec Stripped M Dark Surfa dicators of h estrictive Lay Type: Depth (inches	icky Mineral (S1) eyed Matrix (S4) dox (S5) Matrix (S6) ace (S7) (LRR R, ML eydrophytic vegetatio yer (if observed):		Depleted Dark S Redox Depression	urface (F7 ons (F8)	· -		Iron-Manganes Piedmont Floo Mesic Spodic ( Red Parent Ma Very Shallow D Other (Explain	se Masses (F12) dplain Soils (F19 TA6) ( <b>MLRA 144</b> sterial (F21) Park Surface (TF- in Remarks)	(LRR K, L, R) ) (MLRA 149B IA, 145, 149B)
Sandy Mu Sandy Gle Sandy Rec Stripped M Dark Surfa dicators of h estrictive Lay Type: Depth (inches	icky Mineral (S1) eyed Matrix (S4) dox (S5) Matrix (S6) ace (S7) (LRR R, ML eydrophytic vegetatio yer (if observed):		Depleted Dark S Redox Depression	urface (F7 ons (F8)	· -		Iron-Manganes Piedmont Floo Mesic Spodic ( Red Parent Ma Very Shallow D Other (Explain	se Masses (F12) dplain Soils (F19 TA6) ( <b>MLRA 144</b> sterial (F21) Park Surface (TF- in Remarks)	(LRR K, L, R) ) (MLRA 149E IA, 145, 149B)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region
Project/Site: Ellis - South   City/County: The mpkin Sampling Date: 4/10/1
Applicant/Owner: SVN 8 Sampling Date: The Sampling Date:
Applicant/Owner: State: NY Sampling Point: Wbb- Investigator(s): N. Grsse M. Gruhan Section, Township, Range: Thick
Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): Slope (%): 15
Subregion (LRR or MLRA): Lat: 42 4344 Long: -74.4379 Datum: W/59
Soil Map Unit Name: Bot - Bath and Valors Soils, 25-35 % Slopes NWI classification: Now
Are climatic / hydrologic conditions on the site hydrologic for this time of the site hydrologic conditions.
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No  Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)
the state of the s
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, et
Hydrophytic Vegetation Present?  Yes No   Is the Sampled Area
Hydric Soil Present? Yes No within a Wetland? Yes No
Wetland Hydrology Present? Yes No If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate report.)
Upland sample point
INDDOLOGY.
HYDROLOGY
Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)  Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9) Drainage Patterns (B10)
High Water Table (A2)  Aquatic Fauna (B13)  Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15) Dry-Season Water Table (C2)
Vvaler warks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) Sparsely Vegetated Concave Surface (B8)
Field Observations:  FAC-Neutral Test (D5)
Surface Water Present? Yes NoX Depth (inches):
Water Table Present?  Yes No Depth (inches):
Saturation Present? Yes No X Denth (inches)
(includes capillary fringe)
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:
183
98

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator	Dominance Test worksheet:		
1. Acer Saccharum	75		FACV	Number of Dominant Species	2	
2. Pinus strobus	20	<del></del>	FACU	That Are OBL, FACW, or FAC:	0	(A)
3			- C - C - C - C - C - C - C - C - C - C	Total Number of Dominant	7	
				Species Across All Strata:	_3	(B)
4 5				Percent of Dominant Species That Are OBL, FACW, or FAC:	0/3	(A/E
S				Prevalence Index worksheet:		
	9<	= Total Cov		Total % Cover of:		- 5
online/Charle Charles (Dist		= Total Cov	er	OBL species		
apling/Shrub Stratum (Plot size:		W	-	FACW species		
Lonicera Morrowii	65	<u> </u>	FACU	FAC species		
				FACU species x		
				UPL speciesx	(5 =	2
				Column Totals: (/		
	<del></del> .			Prevalence Index = B/A =	0	-
				Hydrophytic Vegetation Indica		
<del>-</del>				1 - Rapid Test for Hydrophy		
	_65_=	Total Cove	<b>∍</b> Γ	2 - Dominance Test is >50%		
erb Stratum (Plot size:)			-	3 - Prevalence Index is ≤3.0		
				4 - Morphological Adaptatio data in Remarks or on a Problematic Hydrophytic Ve	separate sheet) egetation ¹ (Explain	)
				¹ Indicators of hydric soil and wet be present, unless disturbed or p	problematic.	Jst
				<b>Definitions of Vegetation Strat</b>	a:	
				Tree – Woody plants 3 in. (7.6 ca at breast height (DBH), regardles	m) or more in diam ss of height.	neter
				Sapling/shrub – Woody plants lead greater than or equal to 3.28	ess than 3 in. DBF 3 ft (1 m) tall.	4
				Herb – All herbaceous (non-wood of size, and woody plants less that	dv) plants, regardi	less
				Woody vines – All woody vines		ft in
7 m	=	Total Cover	1 1	height.		
ody Vine Stratum (Plot size:)			_			
1						
1				⊣ydrophytic ∕egetation	2.4	
		otal Cover	P	Present? Yes	No X	
narks: (Include photo numbers here or on a separate	sheet.)					_

Depth	IVIamx		Redox	Features		n the absence of ind		
(inches)	Color (moist)	%	Color (moist)	Type¹	_Loc ²	Texture	Remarks	
)-10	10 YR 3/4	_ 100				5720		
							2	
-								
					5.			
		100						
						8		
					a)			
					10			
pe: C=Co	ncentration, D=De	pletion, RM=I	Reduced Matrix, MS=N	Masked Sand Grai		21		
dric Soil In	ndicators:		The matrix, WO	viaskeu Saliu Glai	ris.	² Location: PL=P	ore Lining, M≃Ma	trix.
Histosol (A	A1)		Polyvalue Below S	Surface (S8) (LDD	Þ	Indicators for Pro		
	pedon (A2)	_	MLRA 149B)	MINUSC (OU) (LIKK	ι,	2 cm Muck (A1	0) (LRR K, L, ML	_RA 149B)
Black Hist		_	Thin Dark Surface	(S9) (LRR R. MLF	RA 149R)	Coast Prairie F	Redox (A16) (LRR	₹ K, L, R)
	Sulfide (A4)	_	Loamy Mucky Mine	eral (F1) (LRR K. I	_)	Dark Surface (	eat or Peat (S3) (I	LRR K, L, F
	Layers (A5)	_	_ Loamy Gleyed Mat	trix (F2)	-,	Polyvalue Belo	w Surface (S8) (L	DD K IV
Depleted I	Below Dark Surfac	e (A11) _	_ Depleted Matrix (F:	3)		This Dark O. 6	W Surface (So) (L	RR K, L)
						Tuin Dark Suns		
	k Surface (A12)	× -	_ Redox Dark Surface	e (F6)		Thin Dark Surfa	e Masses (F12) (	L) IRRKII
Sandy Mu	cky Mineral (S1)	-	_ Depleted Dark Surf	face (F7)		Iron-Manganes	e Masses (F12) (	LRR K. L. I
Sandy Mud Sandy Gle	cky Mineral (S1) eyed Matrix (S4)		<ul><li>Redox Dark Surfac</li><li>Depleted Dark Surf</li><li>Redox Depressions</li></ul>	face (F7)		Iron-Manganes Piedmont Floor	e Masses (F12) ( Iplain Soils (F19)	LRR K, L, I
Sandy Mud Sandy Gle Sandy Red	cky Mineral (S1) eyed Matrix (S4) dox (S5)	-	_ Depleted Dark Surf	face (F7)		Iron-Manganes Piedmont Floor Mesic Spodic ( Red Parent Ma	e Masses (F12) ( dplain Soils (F19) TA6) ( <b>MLRA 144</b> , terial (F21)	LRR K, L, I (MLRA 149 A, 145, 149
Sandy Muc Sandy Gle Sandy Red Stripped M	cky Mineral (S1) eyed Matrix (S4) dox (S5) Matrix (S6)	II RA 140R)	_ Depleted Dark Surf	face (F7)		Iron-Manganes Piedmont Floor Mesic Spodic ( Red Parent Ma Very Shallow D	e Masses (F12) ( dplain Soils (F19) TA6) ( <b>MLRA 144</b> , terial (F21) ark Surface (TF1;	LRR K, L, I (MLRA 149 A, 145, 149
Sandy Muc Sandy Gle Sandy Red Stripped M	cky Mineral (S1) eyed Matrix (S4) dox (S5)	       LRA 149B	_ Depleted Dark Surf	face (F7)		Iron-Manganes Piedmont Floor Mesic Spodic ( Red Parent Ma	e Masses (F12) ( dplain Soils (F19) TA6) ( <b>MLRA 144</b> , terial (F21) ark Surface (TF1;	LRR K, L, I (MLRA 149 A, 145, 149
Sandy Muc Sandy Gle Sandy Red Stripped M Dark Surfa	cky Mineral (S1) eyed Matrix (S4) dox (S5) fatrix (S6) ace (S7) (LRR R, N ydrophytic vegetat	ion and wetla	<ul><li>Depleted Dark Surf</li><li>Redox Depressions</li></ul>	face (F7) s (F8)	isturbad sa	Iron-Manganes Piedmont Floor Mesic Spodic ( Red Parent Ma Very Shallow D Other (Explain	e Masses (F12) ( dplain Soils (F19) TA6) ( <b>MLRA 144</b> , terial (F21) ark Surface (TF1;	LRR K, L, I (MLRA 149 A, 145, 149
Sandy Muc Sandy Gle Sandy Red Stripped M Dark Surfa cators of hy	cky Mineral (S1) eyed Matrix (S4) dox (S5) flatrix (S6) ace (S7) (LRR R, N	ion and wetla	_ Depleted Dark Surf	face (F7) s (F8)	isturbed on	Iron-Manganes Piedmont Floor Mesic Spodic ( Red Parent Ma Very Shallow D Other (Explain	e Masses (F12) ( dplain Soils (F19) TA6) ( <b>MLRA 144</b> , terial (F21) ark Surface (TF1;	LRR K, L, I (MLRA 149 A, 145, 149
Sandy Muc Sandy Gle Sandy Red Stripped M Dark Surfa cators of hy	cky Mineral (S1) eyed Matrix (S4) dox (S5) fatrix (S6) ace (S7) (LRR R, N ydrophytic vegetat	ion and wetla	<ul><li>Depleted Dark Surf</li><li>Redox Depressions</li></ul>	face (F7) s (F8)	isturbed or	Iron-Manganes Piedmont Floor Mesic Spodic ( Red Parent Ma Very Shallow D Other (Explain	e Masses (F12) ( dplain Soils (F19) TA6) ( <b>MLRA 144</b> , terial (F21) ark Surface (TF1;	LRR K, L, I (MLRA 149 A, 145, 149
Sandy Muc Sandy Gle Sandy Rec Stripped M Dark Surfa cators of hy rictive Lay	cky Mineral (S1) eyed Matrix (S4) dox (S5) fatrix (S6) ace (S7) (LRR R, N ydrophytic vegetat yer (if observed):	ion and wetla	<ul><li>Depleted Dark Surf</li><li>Redox Depressions</li></ul>	face (F7) s (F8)		Iron-Manganes Piedmont Floor Mesic Spodic (* Red Parent Ma Very Shallow D Other (Explain in	e Masses (F12) ( dplain Soils (F19) TA6) (MLRA 144) terial (F21) ark Surface (TF1) in Remarks)	LRR K, L, (MLRA 14 A, 145, 149
Sandy Muc Sandy Gle Sandy Rec Stripped M Dark Surfa cators of hy rictive Lay /pe:	cky Mineral (S1) eyed Matrix (S4) dox (S5) fatrix (S6) ace (S7) (LRR R, N ydrophytic vegetat yer (if observed):	ion and wetla	<ul><li>Depleted Dark Surf</li><li>Redox Depressions</li></ul>	face (F7) s (F8)		Iron-Manganes Piedmont Floor Mesic Spodic ( Red Parent Ma Very Shallow D Other (Explain	e Masses (F12) ( dplain Soils (F19) TA6) (MLRA 144) terial (F21) ark Surface (TF1) in Remarks)	LRR K, L, (MLRA 14 A, 145, 149
Sandy Muc Sandy Gle Sandy Rec Stripped M Dark Surfa cators of hy rictive Lay /pe:	cky Mineral (S1) eyed Matrix (S4) dox (S5) fatrix (S6) ace (S7) (LRR R, N ydrophytic vegetat yer (if observed):	ion and wetla	<ul><li>Depleted Dark Surf</li><li>Redox Depressions</li></ul>	face (F7) s (F8)		Iron-Manganes Piedmont Floor Mesic Spodic (* Red Parent Ma Very Shallow D Other (Explain in	e Masses (F12) ( dplain Soils (F19) TA6) (MLRA 144) terial (F21) ark Surface (TF1) in Remarks)	LRR K, L, (MLRA 14 A, 145, 149
Sandy Muc Sandy Gle Sandy Rec Stripped M Dark Surfa cators of hy rictive Lay /pe:epth (inche	cky Mineral (S1) eyed Matrix (S4) dox (S5) fatrix (S6) ace (S7) (LRR R, N ydrophytic vegetat yer (if observed):	ion and wetla	<ul><li>Depleted Dark Surf</li><li>Redox Depressions</li></ul>	face (F7) s (F8)		Iron-Manganes Piedmont Floor Mesic Spodic (* Red Parent Ma Very Shallow D Other (Explain in	e Masses (F12) ( dplain Soils (F19) TA6) (MLRA 144) terial (F21) ark Surface (TF1) in Remarks)	LRR K, L, (MLRA 14 A, 145, 149
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Sandy Muc Sandy Gle Sandy Rec Stripped M Dark Surfa cators of hy	cky Mineral (S1) eyed Matrix (S4) dox (S5) fatrix (S6) ace (S7) (LRR R, N ydrophytic vegetat yer (if observed):	ion and wetla	<ul><li>Depleted Dark Surf</li><li>Redox Depressions</li></ul>	face (F7) s (F8)		Iron-Manganes Piedmont Floor Mesic Spodic (* Red Parent Ma Very Shallow D Other (Explain in	e Masses (F12) ( dplain Soils (F19) TA6) (MLRA 144) terial (F21) ark Surface (TF1) in Remarks)	LRR K, L, I (MLRA 149 A, 145, 149
Sandy Muc Sandy Gle Sandy Rec Stripped M Dark Surfa cators of hy rictive Lay /pe:	cky Mineral (S1) eyed Matrix (S4) dox (S5) fatrix (S6) ace (S7) (LRR R, N ydrophytic vegetat yer (if observed):	ion and wetla	<ul><li>Depleted Dark Surf</li><li>Redox Depressions</li></ul>	face (F7) s (F8)		Iron-Manganes Piedmont Floor Mesic Spodic (* Red Parent Ma Very Shallow D Other (Explain in	e Masses (F12) ( dplain Soils (F19) TA6) (MLRA 144) terial (F21) ark Surface (TF1) in Remarks)	LRR K, L, I (MLRA 149 A, 145, 149
Sandy Muc Sandy Gle Sandy Rec Stripped M Dark Surfa cators of hy rictive Lay ype: epth (inche	cky Mineral (S1) eyed Matrix (S4) dox (S5) fatrix (S6) ace (S7) (LRR R, N ydrophytic vegetat yer (if observed):	ion and wetla	<ul><li>Depleted Dark Surf</li><li>Redox Depressions</li></ul>	face (F7) s (F8)		Iron-Manganes Piedmont Floor Mesic Spodic (* Red Parent Ma Very Shallow D Other (Explain in	e Masses (F12) ( dplain Soils (F19) TA6) (MLRA 144) terial (F21) ark Surface (TF1) in Remarks)	LRR K, L, I (MLRA 149 A, 145, 149
Sandy Muc Sandy Gle Sandy Rec Stripped M Dark Surfa cators of hy rictive Lay /pe:	cky Mineral (S1) eyed Matrix (S4) dox (S5) fatrix (S6) ace (S7) (LRR R, N ydrophytic vegetat yer (if observed):	ion and wetla	<ul><li>Depleted Dark Surf</li><li>Redox Depressions</li></ul>	face (F7) s (F8)		Iron-Manganes Piedmont Floor Mesic Spodic (* Red Parent Ma Very Shallow D Other (Explain in	e Masses (F12) ( dplain Soils (F19) TA6) (MLRA 144) terial (F21) ark Surface (TF1) in Remarks)	LRR K, L, I (MLRA 149 A, 145, 149
Sandy Muc Sandy Gle Sandy Rec Stripped M Dark Surfa cators of hy rictive Lay /pe:epth (inche	cky Mineral (S1) eyed Matrix (S4) dox (S5) fatrix (S6) ace (S7) (LRR R, N ydrophytic vegetat yer (if observed):	ion and wetla	<ul><li>Depleted Dark Surf</li><li>Redox Depressions</li></ul>	face (F7) s (F8)		Iron-Manganes Piedmont Floor Mesic Spodic (* Red Parent Ma Very Shallow D Other (Explain in	e Masses (F12) ( dplain Soils (F19) TA6) (MLRA 144) terial (F21) ark Surface (TF1) in Remarks)	LRR K, L, I (MLRA 149 A, 145, 149
Sandy Muc Sandy Gle Sandy Rec Stripped M Dark Surfa cators of hy rictive Lay /pe:	cky Mineral (S1) eyed Matrix (S4) dox (S5) fatrix (S6) ace (S7) (LRR R, N ydrophytic vegetat yer (if observed):	ion and wetla	<ul><li>Depleted Dark Surf</li><li>Redox Depressions</li></ul>	face (F7) s (F8)		Iron-Manganes Piedmont Floor Mesic Spodic (* Red Parent Ma Very Shallow D Other (Explain in	e Masses (F12) ( dplain Soils (F19) TA6) (MLRA 144) terial (F21) ark Surface (TF1) in Remarks)	LRR K, L, I (MLRA 149 A, 145, 149
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Sandy Muc Sandy Gle Sandy Rec Stripped M Dark Surfa cators of hy rictive Lay /pe:	cky Mineral (S1) eyed Matrix (S4) dox (S5) fatrix (S6) ace (S7) (LRR R, N ydrophytic vegetat yer (if observed):	ion and wetla	<ul><li>Depleted Dark Surf</li><li>Redox Depressions</li></ul>	face (F7) s (F8)		Iron-Manganes Piedmont Floor Mesic Spodic (* Red Parent Ma Very Shallow D Other (Explain in problematic.	e Masses (F12) ( dplain Soils (F19) TA6) (MLRA 144) terial (F21) ark Surface (TF1) in Remarks)	LRR K, L, I (MLRA 149 A, 145, 149
Sandy Muc Sandy Gle Sandy Rec Stripped M Dark Surfa cators of hy rictive Lay /pe:	cky Mineral (S1) eyed Matrix (S4) dox (S5) fatrix (S6) ace (S7) (LRR R, N ydrophytic vegetat yer (if observed):	ion and wetla	<ul><li>Depleted Dark Surf</li><li>Redox Depressions</li></ul>	face (F7) s (F8)		Iron-Manganes Piedmont Floor Mesic Spodic (* Red Parent Ma Very Shallow D Other (Explain in problematic.	e Masses (F12) ( dplain Soils (F19) TA6) (MLRA 144) terial (F21) ark Surface (TF1) in Remarks)	LRR K, L, (MLRA 14 A, 145, 149