

# Memorandum

To: Excelsior Energy Center, LLC

From: TRC

Subject: Wetland and Stream Delineation Notes – Excelsior Energy Center, LLC.

**Excelsior Energy Center Project** 

Date: June 2020

On June 1, 2020, TRC completed a supplemental delineation effort for the proposed Excelsior Energy Center Project, located in the Town of Byron, Genesee County, New York. (Attachment A – Figure 1). This supplemental field effort covered two tax parcels totaling approximately 36.5 acres (Survey Area) that was added after the original delineation effort was completed in 2019. The field team documented all wetlands and surface waters (including rivers, streams, ponds, lakes, etc.) regardless of jurisdictional status. This memorandum summarizes the results of the wetland and stream delineation conducted for the Survey Area.



# **Table of Contents**

1.0	GENERAL S	SURVEY AREA CONDITIONS	4
2.0	REGULATO	PRY AUTHORITY	4
	2.1	United States Army Corps of Engineers	4
	2.2	New York State Department of Environmental Conservation	6
3.0	WETLAND A	AND STREAM DELINEATION METHODOLOGY	6
4.0	SURVEY AF	REA SOIL CHARACTERISTICS	7
		Table 1. Mapped soils within the Survey Area	7
5.0	FEDERAL A	AND STATE MAPPED WETLANDS AND STREAMS	8
		Table 2. NYSDEC Mapped Streams within the Survey Area	9
6.0	RESULTS		9
	6.1	GENERAL OVERVIEW	9
	6.2	DELINEATED WETLANDS	10
		Table 3. Delineated Wetlands within the Survey Area	11
	6.3	DELINEATED STREAMS	12
		Table 4. Delineated Streams within the Survey Area	13
7.0	CONCLUSIO	ON	14
8.0	REFERENC	ES	15

### **TABLES**

- Table 1. Mapped Soils within the Survey Area
- Table 2. NYSDEC Mapped Streams within the Survey Area
- Table 3. Delineated Wetlands within the Survey Area
- Table 4. Delineated Streams within the Survey Area

## **ATTACHMENTS**

## **Attachment A – Figures**

- Figure 1. Site Location Map
- Figure 2. Soils Map
- Figure 3. Federal & State Water Resources
- Figure 4. Delineated Wetlands and Streams

## Attachment B - Photograph Log

#### Attachment C - Data Forms

Wetland Determination Data Forms
Stream Data Forms

## 1.0 General Survey Area Conditions

The weather at the time of the survey was mild with temperatures generally between 65° and 70° Fahrenheit. The Survey Area did not experience precipitation during the site delineation and received less than 1 inch (0.86 in) the week prior to the delineation. Land use within the Survey Area consists primarily of successional old fields, with some undeveloped forested lots and forested perennial stream buffer zones.

## 2.0 Regulatory Authority

## 2.1 United States Army Corps of Engineers

In accordance with Section 404 of the Clean Water Act (CWA), the USACE asserts jurisdiction over Waters of the United States (WOTUS). WOTUS are defined as wetlands, streams, and other aquatic resources under the regulatory authority of Title 33 Code of Federal Regulations (CFR) Part 328 and the United States Environmental Protection Agency (EPA) per Title 40 CFR Part 230.3(s). Wetlands are defined as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (EPA, 2001).

On August 28, 2015, the EPA released the Clean Water Rule (33 CFR Part 328) intending to clarify the scope of the Clean Water Act (CWA), WOTUS, and definitions of significant nexus. However, on October 9, 2015, implementation of the Clean Water Rule was stayed by the Sixth Circuit Court of Appeals pending further action of the court. On August 16, 2018, the U.S. District Court for the District of South Carolina enjoined the delay of the Clean Water Rule. Therefore, the Clean Water Rule became in effect in 22 states, including New York.

On October 22, 2019, the 2015 CWR was repealed, pending a required 60-day public notification period. This repeal was step one of a two-step rule-making process intended to (re)define the scope of waters of the United States that are regulated under the Clean Water Act. The repeal of the CWR became effective on December 23, 2019. On that date, the definition of WOTUS reverted to the historical context of the pre-2015 timeframe, (AKA the "Rapanos Approach"). The Rapanos Approach was intended as a temporary replacement. An intended permanent replacement, referred to as the Navigable Waters Protection Rule, is considered Step Two in the two-step repeal and replace process. The Navigable Waters Protection Rule was published in the April 21, 2020 Federal Register, and will become effective on June 22, 2020.

Until June 22, 2020, the Step One Rule (Rapanos Approach) remains in effect. Jurisdictional waters are defined as outlined above in the bulleted historical context. On and after June 22, 2020, the Step Two Rule (Navigable Waters Protection Rule) takes effect:

## Navigable Waters Protection Rule:

The Navigable Waters Protection Rule outlines categories of waters considered jurisdictional, as well as those considered non-jurisdictional. The four categories of waters that are considered Waters of the United States, and thus jurisdictional to the USACE, include the following:

- 1. Territorial seas and traditional navigable waters (TNWs)
- Under the final rule, the territorial seas and traditional navigable waters include large rivers and lakes—such as the Mississippi River, the Great Lakes, Chesapeake Bay, and the Erie Canal—and tidally-influenced waterbodies used in interstate or foreign commerce.
  - 2. Tributaries of such waters;
- Tributaries include perennial and intermittent rivers and streams that contribute surface flow to traditional navigable waters in a typical year.
- These naturally occurring surface water channels must flow more often than just after a single precipitation event—that is, tributaries must be perennial or intermittent.
- Tributaries can connect to a traditional navigable water or territorial sea in a typical year either directly or through other "waters of the United States," through channelized non-jurisdictional surface waters, through artificial features (including culverts and spillways), or through natural features (including debris piles and boulder fields).
- Ditches are to be considered tributaries only where they satisfy the flow conditions of the perennial and intermittent tributary definition and either were constructed in or relocate a tributary or were constructed in an adjacent wetland and contribute perennial or intermittent flow to a traditional navigable water in a typical year.
  - 3. Lakes, ponds, and impoundments of jurisdictional waters
- Lakes, ponds, and impoundments of jurisdictional waters are jurisdictional where they contribute surface water flow to a traditional navigable water or territorial sea in a typical year either directly or through other "waters of the United States," through channelized non-jurisdictional surface waters, through artificial features (including culverts and spillways), or through natural features (including debris piles and boulder fields).
- Lakes, ponds, and impoundments of jurisdictional waters are also jurisdictional where they are flooded by a "water of the United States" in a typical year.
  - 4. Adjacent wetlands
  - Wetlands that physically touch other jurisdictional waters are "adjacent wetlands."
- Wetlands separated from a "water of the United States" by only a natural berm, bank or dune are also "adjacent."
  - Wetlands inundated by flooding from a "water of the United States" in a typical year are "adjacent."

- Wetlands that are physically separated from a jurisdictional water by an artificial dike, barrier, or similar artificial structure are "adjacent" so long as that structure allows for a direct hydrologic surface connection between the wetlands and the jurisdictional water in a typical year, such as through a culvert, flood or tide gate, pump, or similar artificial feature.
- An adjacent wetland is jurisdictional in its entirety when a road or similar artificial structure divides the wetland, as long as the structure allows for a direct hydrologic surface connection through or over that structure in a typical year.

#### Exclusions:

Twelve exclusions from the WOTUS definition, or non-jurisdictional waters, include: groundwater; ephemeral streams; stormwater runoff and stormwater control features; ditches that are not jurisdictional; prior converted cropland; artificial lakes and ponds; and artificially irrigated areas, including agricultural areas that would revert to uplands were the irrigation to cease.

#### 2.2 New York State Department of Environmental Conservation

Article 15 of the ECL (Protection of Waters) provides the NYSDEC with regulatory jurisdiction over any activity that disturbs the bed or banks of protected streams. Small lakes and ponds with a surface area of 10 acres or less, located within the course of a protected stream, are considered to be part of a stream and are subject to regulation under the stream protection category of Article 15. A protected stream is defined in the ECL as any stream, or particular portion of a stream, that has been assigned by the NYSDEC any of the following classifications or standards: AA, A, B, C(T), or C(TS) (6 NYCRR Part 701). State water quality classifications of unprotected watercourses include Class C and Class D waterbodies.

For an in-depth analysis of NYSDEC watercourse classifications and the Freshwater Wetlands Act [Article 24 and Title 23 of Article 71 of the Environmental Conservation Law (ECL)], refer to the Wetland and Stream Delineation Report for the Excelsior Energy Center Project.

#### 3.0 Wetland and Stream Delineation Methodology

Prior to initiating field investigations, TRC conducted a desktop review of publicly available data to determine the potential presence of federal and state mapped wetlands and streams within the Survey Area. TRC wetland scientists subsequently performed field investigations to identify aquatic features within the Survey Area. Delineations for wetlands and streams were performed in accordance with criteria set forth in the 1987 Manual (Environmental Laboratory, 1987) and the 2012 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0) (USACE, 2012) (Supplement). Data was collected from a sample plot in each delineated wetland. Depending on the size of the delineated area and any change in cover type, multiple sample plots of the delineated wetland may have been taken. Delineation data was recorded on USACE Wetland Determination Forms (Attachment C). The boundaries of wetlands were located with a GPS unit with reported sub-meter accuracy.

Hydrology, hydrophytic vegetation, and hydric soils make up the criteria set forth in the 1987 Manual (Environmental Laboratory, 1987), and are the key components to assess when delineating a wetland. These three components are thoroughly analyzed via the USACE Wetland Determination Forms. For a more indepth analysis of each component, refer to the Wetland and Stream Delineation Report for the Excelsior Energy Center Project.

#### 4.0 Survey Area Soil Characteristics

Two of the soil map units within the Survey Area contain percentages (33% or more) of mapping units with hydric soil inclusions suggestive of the presence of a wetland feature on-site (Figure 2 of Attachment A). Hydric Soil Rating indicates the percentage of map units that meet the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor non-hydric components in the higher positions on the landform, and map units that are made up dominantly of non-hydric soils may have small areas of minor hydric components in the lower positions on the landform. As such, each map unit is rated based on its respective components and the percentage of each component within the map unit. Although a soil series is given a general hydric soil rating on the online databases, this is for reference only and does not supersede site specific conditions in the field documenting hydric soil presence.

All soil map units identified within the Survey Area by the NRCS soil survey are outlined in Table 1. Refer to Figure 2 of Attachment A for graphically depicted soil map units of the Survey Area.

**Table 1. Mapped Soils within the Survey Area** 

Map Unit Symbol	Map Unit Name	Slope (%)	Drainage Class	Hydric Rating (%)	Acres in Survey Area	Percent of Survey Area (%)
Ad	Alden mucky silt loam	0-3	Very poorly drained	100	1.0	2.8
АрА	Appleton silt loam	0-3	Somewhat poorly drained	4	7.5	20.4
CaA	Canandaigua silt loam	0-2	Poorly drained	95	0.8	2.3
FpA	Fredon gravelly loam	0-3	Somewhat poorly drained	10	7.7	21.2
OnB	Ontario loam	3-8	Well drained	0	0.0	0.1

**Table 1. Mapped Soils within the Survey Area** 

Map Unit Symbol	Map Unit Name	Slope (%)	Drainage Class	Hydric Rating (%)	Acres in Survey Area	Percent of Survey Area (%)
OvA	Ovid silt loam	0-3	Somewhat poorly drained	5	0.2	0.5
OvB	Ovid silt loam	3-8	Somewhat poorly drained	5	8.2	22.4
ShC3	Schoharie silty clay loam	6-12	Moderately well drained	0	0.9	2.4
Wk	Wakeville silt loam	0-3	Somewhat poorly drained	10	10.2	27.9

#### 5.0 Federal and State Mapped Wetlands and Streams

The USFWS is the principal agency tasked with providing information to the public on the status and trends of wetlands on a national scale. The USFWS NWI is a publicly available resource that provides detailed information on the abundance, characteristics, and distribution of nationwide wetlands (where mapped). NWI wetlands do not exclusively carry any federal jurisdiction with their mapped boundaries. These wetlands are utilized as a reference guide by TRC field biologists to conduct a more informed site survey in the delineation of wetlands and streams potentially subject to federal jurisdiction under the CWA within in the Survey Area.

Review of the NWI mapping during the preliminary desktop analysis indicated that there are two federally mapped wetland features within the Survey Area and two federally mapped riverine features within the Survey Area (Figure 3 of Attachment A). The two wetland features are classified as Freshwater Forested/Shrub Wetland (PFO1A and PFO1C). The two riverine features are identified by R2UBH and R4SBCx. During the Survey Area delineation, TRC biologists identified one of the NWI wetlands (PFO1A) but found that the wetland boundary extended beyond the NWI mapped wetland. The other wetland that was mapped on the NWI mapper (PFO1C), was not identified by TRC biologists. As for the riverine features that were mapped on the NWI mapper, TRC biologists stream delineations overlapped the NWI feature.

Review of NYSDEC mapping through access to the online NYSDEC ERM indicates that there are zero NYSDEC-mapped freshwater wetlands and their adjacent 100-foot protective upland buffers mapped within the Survey Area. The closest NYSDEC freshwater wetland to the Survey Area is BY-13 and it is located 0.6 miles northwest of the Survey Area. These features are regulated under Article 24 of the ECL (Figure 3 of Attachment A). The NYSDEC classification system of freshwater wetlands provides class rankings (I-IV) for wetlands according to their specific ability to provide multiple predetermined functions and values (Class I having the highest rank, descending through to Class IV).

Based on available NYSDEC stream classification mapping, there are three mapped streams within the Survey Area. State-protected streams are protected per Article 15 of the ECL (See Section 2.2). Table 2 below provides a detailed summary of all NYSDEC classified (protected and unprotected) streams within the Survey Area.

**Table 2. NYSDEC Mapped Streams within the Survey Area** 

Stream Name and NYSDEC Regulatory ID Number	USGS Sub- basin HUC 8 and Name	NYSDEC Classification and Standard	Cumulative Linear Feet within Survey Area
Black Creek 821-20	04130003 Lower Genesee	С	493
Bigelow Creek 821-52	04130003 Lower Genesee	С	1,186
Black Creek, Middle, and minor tributaries 821-51	04130003 Lower Genesee	С	361

#### 6.0 RESULTS

#### 6.1 General Overview

The Survey Area contains primarily agriculture land cover. Dominant vegetation at the Survey Area included Reed canary grass (*Phalaris arundinacea*), annual bluegrass (*Poa annua*), Eastern cottonwood (*Populus deltoides*), white clover (*Trifolium repens*), Black willow (*Salix nigra*), Eastern skunk cabbage (*Symplocarpus foetidus*), and riverbank grape (*Vitis riparia*). Weather conditions during the delineation were mild with temperatures between 65° and 70° Fahrenheit, with no precipitation and sunny, clear skies. The week prior to the delineation there was less than 1 inch of precipitation and according to the United Stated Drought Monitor, the Survey Area was not experiencing drought conditions.

On June 1, 2020, TRC identified and delineated two wetlands, one identified as W-IMP-1 was classified as a combination of palustrine forested (PFO) and palustrine emergent (PEM), and another identified as W-IMP-2 was classified as PEM. TRC also identified and delineated three streams, two, which were identified as S-IMP-1 and S-IMP-2, classified as perennial streams and one was identified as S-IMP-3 and classified as an intermittent stream within the Survey Area (See Figure 4 of Attachment A). Thirty-one percent (11.31 acres) of the approximately 36.5-acre Survey Area is classified as wetland. Table 3 and Table 4 below detail the wetlands and streams delineated within the Survey Area. Representative photographs were taken of each delineated wetland community and stream within the Survey Area and are included in Attachment B. Descriptions of each wetland and stream are provided below. Completed wetland determination data forms and TRC stream data forms are provided in Attachment C.

#### 6.2 Delineated Wetlands

Wetland W-IBP-1 is a 10.56-acre wetland consisting of 6.62-acre PFO and 3.94-acre PEM located in the central part of the Survey Area. It extends offsite on the north and northeast border of the Survey Area. Wetland W-IMP-1 is mapped as a NWI palustrine forested, temporary flooded broad-leaved deciduous wetland (PFO1A), and palustrine forested, seasonally flooded broad-leaved deciduous wetland (PFO1C). However, the boundaries delineated were larger than the NWI mapping indicates. Within the delineated PFO area, indicators of wetland hydrology include water-stained leaves (B9), saturation (A3), water marks (B1), sediment deposits (B2), oxidized rhizospheres on living roots (C3), drift deposits (B3), presence of reduced iron (C4), and sparsely vegetated concave surface (B8). Dominant vegetation includes black willow, eastern skunk cabbage, riverbank grape, and spotted touch-me-not (*Impatiens capensis*). The hydric soil indicator was redox dark surface (F6), with a silty clay loam texture. Within the PEM portion of the wetland, indicators of wetland hydrology include oxidized rhizospheres on living roots (C3). The dominate vegetation includes Reed canary grass (*Phalaris arundinacea*). The hydric soil indicator observed was a depleted matrix (F3), with a silty clay texture. Under the Navigable Waters Protection Rule (NWPR), Wetland W-IBP-1 is likely jurisdictional by the USACE as the wetland has a surface water connection to WOTUS.

Wetland W-IBP-2 is a 0.75-acre PEM wetland located in the western portion of the Survey Area and extends beyond the Survey Area boundaries. Indicators of wetland hydrology include saturation (A3), and oxidized rhizospheres on living roots (C3). Dominant vegetation includes Eastern cottonwood, Riverbank grape, Silky dogwood (*Cornus amomum*), and Common reed (*Phragmites australis*). The hydric soil indicator observed was a redox dark surface (F6), with a silty clay loam texture. Under the NWPR approach, Wetland W-2 is likely jurisdictional by the USACE as the wetland has a surface water connection to WOTUS.



**Table 3. Delineated Wetlands in the Survey Area** 

Wetland Field	Cover Type Classification <sup>1</sup> and Acreage			Total Wetland Acreage	NWI	NYSDEC	NYSDEC	Potential Jurisdiction	Associated	Latitude	Longitude	
Desig- nation	PEM	PSS	PFO	PUB	within Survey Area	Cover Type <sup>2</sup>	Wetland ID	Wetland Class	Under NWPR	Buffer	of Centroid	of Centroid
W-IBP-1	3.94	-	6.62	-	10.56	PFO1A/ PFO1C	N/A	N/A	USACE	None	43.0686	-78.0674
W-IBP-2	0.75	-	-	-	0.75	N/A	N/A	N/A	USACE	None	43.0691	-78.0725
Total Wetland Acreage Delineated:			11.31									



#### 6.3 Delineated Streams

Stream S-IBP-1 is an approximately 20-foot-wide, 12 to 24-inches-deep, perennial stream with 1.5 to 2.5-foot high banks. Approximately 493 linear feet were delineated within the Survey Area. The streambed consists of cobble/gravel substrate. The stream originates from offsite in the eastern central portion of the Survey Area and flows north offsite. Wetland W-IBP-1 is located adjacent to stream towards the northeast corner and towards the northwest of the stream that intersects with the northern part of the Survey Area. The stream is a known tributary to a named WOTUS, Genesee River, and corresponds to a mapped NWI riverine lower perennial unconsolidated feature (R2UBH) and a Class C unprotected NYSDEC mapped stream feature, Black Creek. Stream S-IBP-1 is USACE jurisdictional under the NWPR approach as a perennial stream that drains off-site and connects to WOTUS.

Stream S-IBP-2 an approximately 20 feet wide, 12 to 24-inches-deep, perennial stream with 1.5-foot high banks. Approximately 1,186 linear feet were delineated within the Survey Area. The streambed consists of cobble/gravel substrate. The stream originates from offsite at the southcentral portion of the Survey Area and flows north offsite. Wetland W-IBP-1 is located adjacent to the east bank of the stream and follows the length of the stream until it intersects with the northern part of the Survey Area. There are small pockets of wetland W-IBP-1 that are located adjacent to the west bank. The stream is a known tributary to a named WOTUS, Genesee River, and corresponds to a mapped NWI riverine lower perennial unconsolidated feature (R2UBH) and a Class C unprotected NYSDEC mapped stream feature, Bigelow Creek. Stream S-IBP-2 is USACE jurisdictional under the NWPR approach as a perennial stream that drains off-site and connects to WOTUS.

Stream S-IBP-3 an approximately 5 feet wide, 6 to 12-inches-deep, intermittent stream with 1.5 to 2.5-foot high banks. Approximately 361 linear feet were delineated within the Survey Area. The streambed consists of silt/clay substrate. The stream originates from a culvert offsite on the western boundary of the Survey Area and flows north offsite. Wetland W-IBP-2 is located adjacent to the east side of the stream and follows the length of the stream for approximately 160-feet. The stream is a known tributary to a named WOTUS, Genesee River, and corresponds to a mapped NWI excavated, seasonally flooded, intermittent streambed riverine feature (R4SBCx) and a Class C unprotected NYSDEC mapped stream feature. Stream S-IBP-3 is USACE jurisdictional under the NWPR approach as a perennial stream that drains off-site and connects to WOTUS.

Table 4. Delineated Streams on the Survey Area

Stream Field Designation	Flow Regime Classification	Linear Feet within Survey Area	NYSDEC Stream Name and Regulation ID Number	NYSDEC Classification and Standard	Potential Jurisdiction Under NWPR	Associated Buffer	Latitude of Centroid	Longitude of Centroid
S-IBP-1	Perennial	493	Black Creek 821-20	Class C	USACE	None	43.0691	-78.0658
S-IBP-2	Perennial	1,186	Bigelow Creek 821-52	Class C	USACE	None	43.0690	-78.0686
S-IBP-3	Intermittent	361	Black Creek and Middle minor tributaries 821-51	Class C	USACE	None	43.0695	-78.0727
Total Stream Length Delineated:		2,040						

#### 7.0 Conclusion

Upon the wetland and stream delineation conducted by TRC on June 1, 2020, it was confirmed that there are two wetlands and three streams in the Survey Area. Wetland W-IBP-1 consisted of 6.62-acres of PFO wetland cover type and 3.94-acres of PEM wetland cover type. Wetland W-IBP-2 consisted of 0.75-acres of PEM wetland cover type. Of the 36.5-acres, 11.31-acres were determined to be wetland. Streams S-IBP-1 and S-IBP-2 were defined with a flow regime classification of perennial and stream S-IBP-3 was defined as intermittent. All wetlands are likely USACE jurisdictional under the Navigable Waters Protection Rule. Because there are no NYSDEC mapped wetlands or their associated buffers mapped within the vicinity of the Survey Area, and all wetlands are smaller than 12.4 acres in size, wetlands W-IBP-1, W-IBP-2, and W-IBP-3 likely do not fall under NYSDEC jurisdiction. Streams S-IBP-1, S-IBP-2, and S-IBP-3 are likely NYSDEC and USACE jurisdictional as they are all mapped NYSDEC priority streams as well as known tributaries to WOTUS. Final determination of the jurisdictional status of the wetlands and streams identified on the Survey Area must be made by both the USACE and the NYSDEC upon completion of detailed reviews.

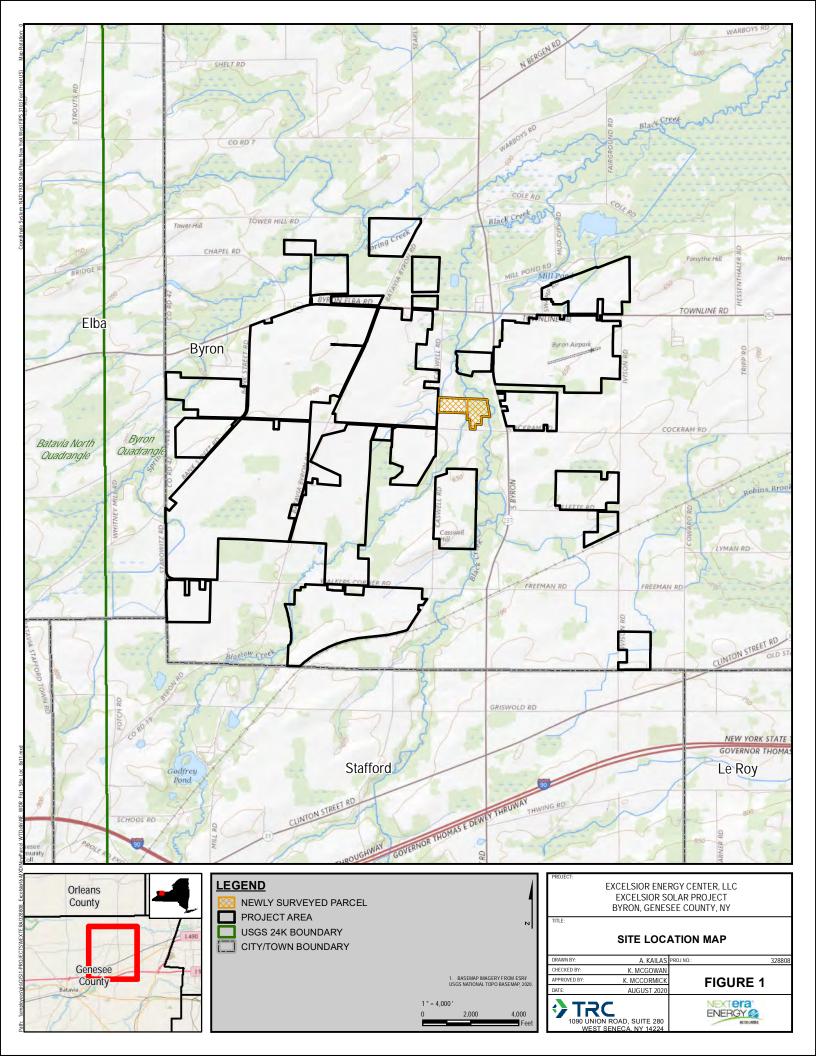
#### 8.0 References

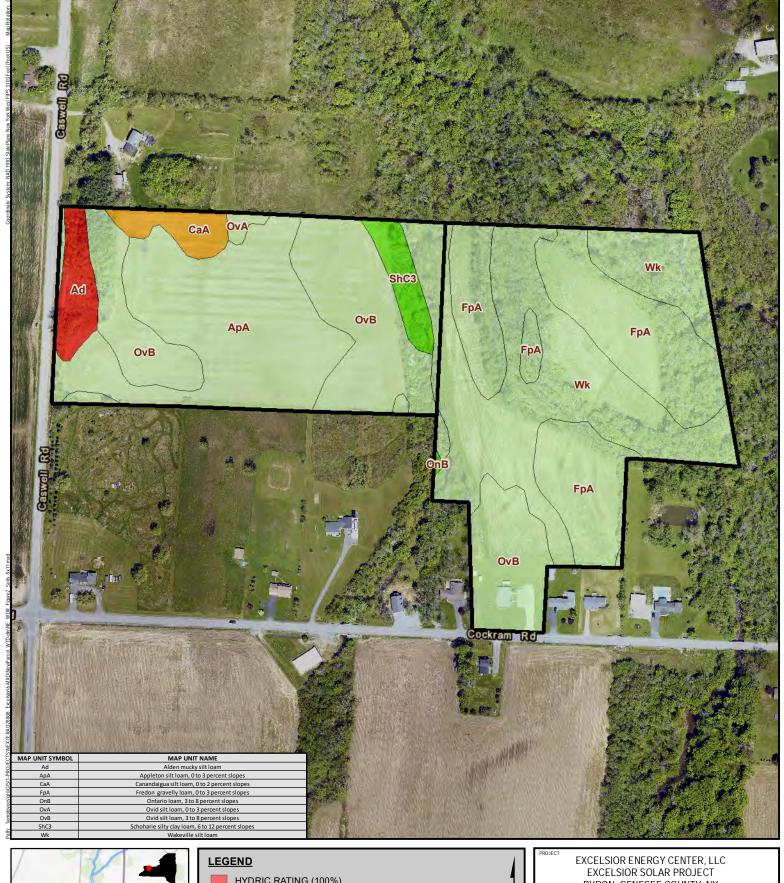
Environmental Laboratory. (1987). *Corps of Engineers Wetland Delineation Manual.* Technical Report Y-87-1. U.S. Army Corps of Engineers: Waterways Experiment Station; Vicksburg, MS.

United States Army Corps of Engineers (USACE). (2012). Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0). U.S. Army Engineer Research and Development Center, Vicksburg, MS, 162 pp.

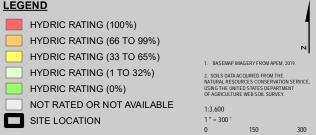
# **ATTACHMENT A**

Figures









EXCELSIOR ENERGY CENTER, LLC
EXCELSIOR SOLAR PROJECT
BYRON, GENESEE COUNTY, NY

TITLE:

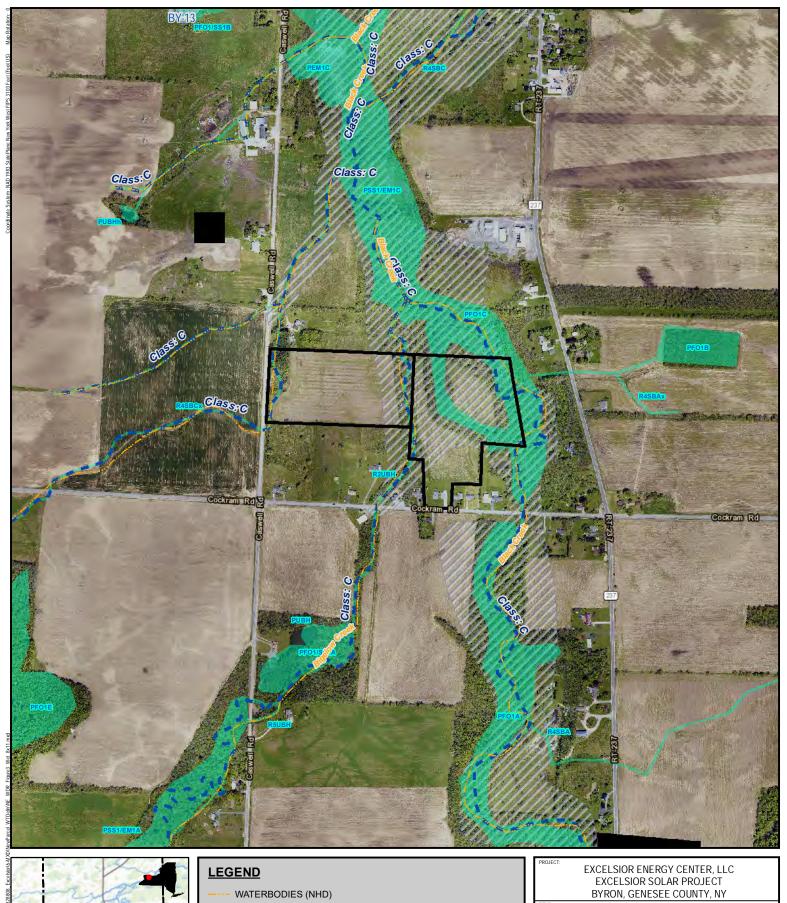
SOILS MAP

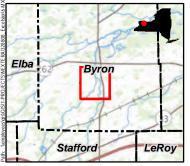
DRAWN BY:
A. KAILAS PROJECT NO: 328808
CHECKED BY:
K. MCCOGMAN
APPROVED BY:
K. MCCOGMICK
DATE:
AUGUST 2020

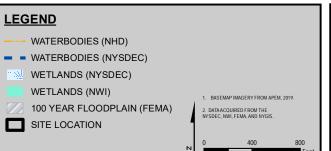
PROJECT:
BYRON, GENESEE COUNTY, NY

TITLE:

FIGURE 2





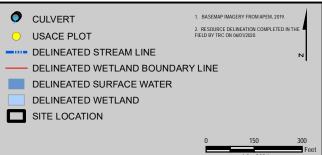


FEDERAL & STATE **WATER RESOURCES** 

DRAWN BY:	A. KAILAS	PROJECT NO.:	328808
CHECKED BY:	K. MCGOWAN		
APPROVED BY:	K. MCCORMICK	FIGURE	3
DATE:	AUGUST 2020		
	ROAD, SUITE 280 SENECA. NY 14224	NEXT <b>era</b> ENERGY	







## **DELINEATED WETLANDS & STREAMS**

DRAWN BY:	A. KAILAS	PROJECT NO.:	328808
CHECKED BY:	I. PALLANT		
APPROVED BY:	K. MCGOWAN	FIGURE	4
DATE:	AUGUST 2020		
	ROAD, SUITE 280 SENECA, NY 14224	ENERGY &	<b>E</b> 8

# **ATTACHMENT B**

Photographic Log



**Photo 1.** View north of stream S-IBP-1's floodplain in a portion of PFO wetland W-IBP-1 in the northeast corner of the Survey Area. 6/1/2020



Photo 2. View northeast of perennial stream S-IBP-1 it in the northeast section on the Survey Area. 6/1/2020



**Photo 3.** View northwest of perennial stream feature S-IBP-2 adjacent to a portion of PFO wetland W-IBP-1 in the north central section on the Survey Area. 6/1/2020



Photo 4. View south of the PEM portion of wetland W-IBP-1 located near the center of the Survey Area. 6/1/2020



Photo 5. View North of perennial stream S-IBP-2 in the central southwestern corner on the Survey Area. 6/1/2020



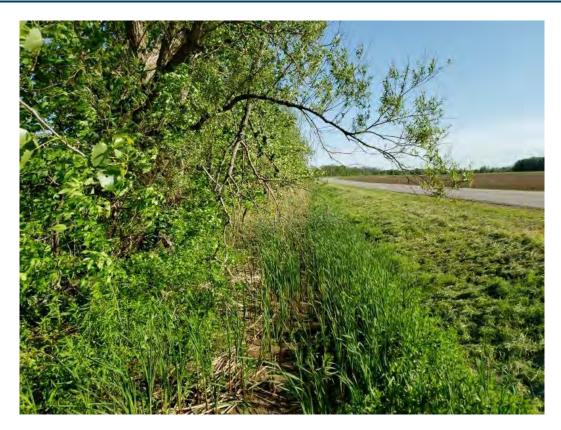
Photo 6. Eastern view of an open field upland area in the east of the Survey Area. 6/1/2020



Photo 7. View South of the upland field in the west of the Survey Area. 6/1/2020



**Photo 8.** View northeast of intermittent stream S-IBP-3 adjacent to PEM wetland W-IBP-2 in the west of the Survey Area. 6/1/2020



**Photo 9.** View south of the non-jurisdictional drianage located in wetland W-IBP-2 adjacent toCaswell Road. 6/1/2020



Photo 10. View North of S-IBP-3 adjacent to Caswell Road on the western side of the Survey Area. 6/1/2020

# **ATTACHMENT C**

Data Forms

## WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Excelsior		City/County: Byro	n, Genesee County	Sampling Date	: 2020-June-01
Applicant/Owner: NextEra			State: New	York Sampling Point:	W-IBP-02; UPL-1
Investigator(s): Isaac Pallant, C	asey Pearce		Section, Township,	Range:	
Landform (hillslope, terrace, etc.)	: Flat		Local relief (concave, conve	ex, none): Flat	Slope (%): 0-1
<u> </u>	RR R		Lat: 43.0691009	Long: -78.0720731	Datum: WGS84
Soil Map Unit Name: Appleton					ication: None
Are climatic/hydrologic conditions	• •	-		(If no, explain in Rema	
Are Vegetation, Soil,		significantly dis		al Circumstances" present?	Yes _ <b>.</b> ✓ No
Are Vegetation, Soil,	or Hydrology	naturally probl	ematic? (If needed,	explain any answers in Ren	iarks.)
SUMMARY OF FINDINGS – A	ttach site map s	howing samplir	ng point locations, tran	sects, important featu	res, etc.
Hydrophytic Vegetation Present?		No _ <b>_</b> _			
Hydric Soil Present?	Yes	No _ <b>_</b> _	Is the Sampled Area withir	n a Wetland?	Yes No⁄_
Wetland Hydrology Present?	Yes _	No _ <b>_</b> _	If yes, optional Wetland Si	te ID:	
TRC covertype is UPL. Area is upl periodically managed.				Old Field, closer to fallow fie	eld, appears to be
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of	one is required; che	eck all that apply)		Secondary Indicators (mini	mum of two required)
Surface Water (A1)		Water-Stained Lea	aves (B9)	Surface Soil Cracks (B6)	
High Water Table (A2)		Aquatic Fauna (B1		Drainage Patterns (B10	)
Saturation (A3)		Marl Deposits (B1	5)	Moss Trim Lines (B16)	
Water Marks (B1)		Hydrogen Sulfide	Odor (C1)	Dry-Season Water Table	e (C2)
Sediment Deposits (B2)		Oxidized Rhizosph	neres on Living Roots (C3)	<ul><li>Crayfish Burrows (C8)</li><li>Saturation Visible on A</li></ul>	arial Imagony (CQ)
Drift Danasits (P2)		Presence of Reduc	rad Iran (CA)	Stunted or Stressed Pla	
Drift Deposits (B3) Algal Mat or Crust (B4)			tion in Tilled Soils (C6)	Geomorphic Position (I	
Iron Deposits (B5)		Thin Muck Surface		Shallow Aquitard (D3)	,_,
Inundation Visible on Aerial I		Other (Explain in F		Microtopographic Relie	f (D4)
Sparsely Vegetated Concave	Surface (B8)			FAC-Neutral Test (D5)	
Field Observations:					
Surface Water Present?	Yes No	<u>∠</u> Depth	(inches):		
Water Table Present?	Yes No	<u>/</u> Depth	(inches):	Wetland Hydrology Presen	t? Yes No 🟒
Saturation Present?	Yes No	Depth (	(inches):		
(includes capillary fringe)					
Describe Recorded Data (stream	gauge, monitoring	well, aerial photos	s, previous inspections), if a	vailable:	
Remarks:					
No positive indication of wetland	l hydrology was obs	served.			

## VEGETATION -- Use scientific names of plants.

·				Danis and Task would be at		
Tree Stratum (Plot size: 30 ft )		Dominant		Dominance Test worksheet:	+	
	-90 COVEI	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:	٠ 0	(A)
1.				Total Number of Dominant Specie		<del></del>
2.				Across All Strata:	2	(B)
3				Percent of Dominant Species Tha		
4				Are OBL, FACW, or FAC:	0	(A/B)
5				Prevalence Index worksheet:		
6				Total % Cover of:	Multiply	By:
7				- OBL species 0	x 1 =	0
	0	= Total Cove	er	FACW species 0	x 2 =	0
Sapling/Shrub Stratum (Plot size: 15 ft )				FAC species 0	x 3 =	0
1				FACU species 215	x 4 =	860
2				- UPL species 0	_ x5=	0
3				- Column Totals 215	_ (A)	860 (B)
4				Prevalence Index = B/A	- ''	000 (B)
5						<del></del>
6.				Hydrophytic Vegetation Indicators		
7.				1- Rapid Test for Hydrophyti	: Vegetatior	ו
	0	= Total Cove	er	2 - Dominance Test is > 50%		
Herb Stratum (Plot size:5 ft)		_		3 - Prevalence Index is ≤ 3.0		
1. Poa pratensis	75	Yes	FACU	4 - Morphological Adaptation		supporting
2. Trifolium repens	50	Yes	FACU	data in Remarks or on a separate		valain)
3. Plantago major	35	No	FACU	<ul> <li>Problematic Hydrophytic Ve</li> <li>Indicators of hydric soil and wetl</li> </ul>		
4. Taraxacum officinale	20	No	FACU	present, unless disturbed or prob	-	igy must be
5. Phleum pratense	 15	No	FACU	Definitions of Vegetation Strata:	Ciliadic	-
6. Galium aparine	10	No	FACU	Tree – Woody plants 3 in. (7.6 cm)	or more in	diameter at
7. Poa annua	10	No	FACU	breast height (DBH), regardless of		diameter at
8.				Sapling/shrub - Woody plants less		DBH and
				greater than or equal to 3.28 ft (1		
40				Herb – All herbaceous (non-wood		gardless of
				size, and woody plants less than 3		
11.				Woody vines – All woody vines gre	ater than 3	3.28 ft in
12	215	= Total Cove	\r	height.		
Mondy Vine Stratum (Plat size 20 ft )		_ TOTAL COVE	:1	Hydrophytic Vegetation Present?	Yes	No 🗸
Woody Vine Stratum (Plot size:30 ft) 1.						
-				-		
2				-		
3.				-		
4				-		
	0	= Total Cove	er			
Remarks: (Include photo numbers here or on a separ	ate sheet.)					
Fallow field, Periodically managed, Succesional old fie	ld					

Profile Des	cription: (Describe	to the de	epth needed to de			ndicato	or confirm the ab	sence of indicators	.)
-						12	Tave	<b>.</b>	Damanka
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>		ture	Remarks
0 - 17	10YR 4/4	100		-			Коску С	ay Loam	Compacted
1Type: C = C	Concentration, D =	Doplotio	n PM – Poducod	Mati	riv MC -	Macked	Sand Grains 21 o	ocation: PL = Pore Li	ning M - Matrix
Hydric Soil		Depletio	ii, Kivi – Reduced	iviati	1, 1013 –	iviaskeu	Sand Grains, -Lo		plematic Hydric Soils <sup>3</sup> :
=			Dalamba Dal		6 (6	0) // DD	NALDA 4 40D)	indicators for Prof	olematic Hydric Solls <sup>3</sup> :
Histoso	oipedon (A2)						R, MLRA 149B)		0) (LRR K, L, MLRA 149B)
	stic (A3)		Thin Dark Su Loamy Mucky						edox (A16) <b>(LRR K, L, R)</b>
	en Sulfide (A4)		Loamy Gleye			(LKK K, I	-)		eat or Peat (S3) <b>(LRR K, L, R)</b>
	d Layers (A5)		Depleted Ma					Dark Surface (	
	d Below Dark Surfa	ace (A11)							w Surface (S8) <b>(LRR K, L)</b>
	ark Surface (A12)		Depleted Dar					Thin Dark Surf	
	lucky Mineral (S1)		Redox Depre						se Masses (F12) <b>(LRR K, L, R)</b>
	Gleyed Matrix (S4)				` '				dplain Soils (F19) <b>(MLRA 149B)</b>
-	ledox (S5)								TA6) (MLRA 144A, 145, 149B)
_	d Matrix (S6)							Red Parent Ma	
	rface (S7) (LRR R, N	11 RA 149	)B)						Park Surface (TF12)
Bark sa	riace (57) (Littin, it	1210 ( 1 12	,,,					Other (Explain	in Remarks)
	of hydrophytic veg		and wetland hydr	ology	y must be	preser	t, unless disturbed	d or problematic.	
Restrictive	Layer (if observed):								
	Type:		None	_		Hydric	Soil Present?		Yes No/_
	Depth (inches):								
Remarks:									
Refusal due	e to coarse fragmer	nts, Refu	sal at 17 inches, (	comp	action as	ssumed	due to previous aş	gricultural activities.	



Photo of Sample Plot







## WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Excelsior	City/County:_ [	Byron, Genesee County	on, Genesee County Sampling Date: 2020-June				
Applicant/Owner: NextEra		State: Nev	w York Sampling Point:	W-IBP-02; PEM-1			
Investigator(s): Isaac Pallant, (	Casey Pearce	Section, Township,	Range:				
Landform (hillslope, terrace, etc.	): <u>Flat</u>	Local relief (concave, conv	/ex, none):Flat	Slope (%): 0-1			
<u> </u>	LRR R	Lat: 43.0692218	Long: -78.0722438	Datum: WGS84			
Soil Map Unit Name: Ovid silt	· '			ication: None			
	ns on the site typical for this time o	-	(If no, explain in Rem				
Are Vegetation, Soil,			al Circumstances" present?	Yes No			
Are Vegetation, Soil,	or Hydrology naturally p	roblematic? (If needed,	explain any answers in Ren	narks.)			
SUMMARY OF FINDINGS –	Attach site map showing sam	pling point locations, tra	nsects, important featu	res, etc.			
Hydrophytic Vegetation Present	t? Yes No						
Hydric Soil Present?	Yes No	Is the Sampled Area with	in a Wetland?	Yes/_ No			
Wetland Hydrology Present?	Yes No	If yes, optional Wetland S	ite ID:	W-IBP-02			
Remarks: (Explain alternative p	rocedures here or in a separate rep	port)					
TRC covertype is PEM. Area is w wetland swale.	retland, all three wetland paramete	rs are present. Ditches/drain	tiles observed, Incorporates	NJD roadside ditch and			
HYDROLOGY							
Wetland Hydrology Indicators:							
Primary Indicators (minimum o	f one is required; check all that app	<u>lly)</u>	Secondary Indicators (mini	mum of two required)			
Surface Water (A1)	Water-Stained	Leaves (B9)	Surface Soil Cracks (B6)				
High Water Table (A2)	Aquatic Fauna	(B13)	Drainage Patterns (B10	)			
<u>✓</u> Saturation (A3)	Marl Deposits						
Water Marks (B1)	Hydrogen Sulf		<pre> Dry-Season Water Table Crayfish Burrows (C8)</pre>	e (C2)			
Sediment Deposits (B2)	<u></u> Oxidized Rhizo	ospheres on Living Roots (C3)	✓ Saturation Visible on A	erial Imagery (C9)			
Drift Deposits (B3)	Presence of Re	educed Iron (C4)	Stunted or Stressed Pla				
Algal Mat or Crust (B4)	<del></del>	eduction in Tilled Soils (C6)	✓ Geomorphic Position (I				
Iron Deposits (B5)	Thin Muck Sur	face (C7)	Shallow Aquitard (D3)	•			
Inundation Visible on Aerial	lmagery (B7) Other (Explain	in Remarks)	✓ Microtopographic Relie	f (D4)			
Sparsely Vegetated Concave	Surface (B8)		✓ FAC-Neutral Test (D5)				
Field Observations:							
Surface Water Present?	Yes No De	pth (inches):	_				
Water Table Present?	Yes No _ <b>_/</b> De	pth (inches):	Wetland Hydrology Presen	t? Yes No			
Saturation Present?	Yes No De	pth (inches): 18					
(includes capillary fringe)							
Describe Recorded Data (stream	n gauge, monitoring well, aerial ph	otos, previous inspections), if	available:				
Remarks:							
Aerial photography depicts a dawetland.	arker signature (i.e. potential depre	ssion or relic scar) at this loca	tion, which suggests the pot	ential for this area to be a			

## VEGETATION -- Use scientific names of plants.

•	Alexalista	Daninant	localitate on	Dominance Test worksheet:		
Tree Stratum (Plot size:30 ft)		Dominant Species?	Status	Number of Dominant Species That		
1. Populus deltoides	25	Yes	FAC	Are OBL, FACW, or FAC:	4	(A)
2.		163	FAC	Total Number of Dominant Species		
3.				Across All Strata:	4	(B)
				Percent of Dominant Species That	100	(A (D)
4				Are OBL, FACW, or FAC:	100	(A/B)
5				Prevalence Index worksheet:		
6				Total % Cover of:	Multiply I	<u>Ву:</u>
7				- OBL species 0	x 1 =	0
	25	= Total Cov	er	FACW species 120	x 2 =	240
Sapling/Shrub Stratum (Plot size: 15 ft )				FAC species 35	x 3 =	105
1. <i>Cornus amomum</i>	25	Yes	FACW	FACU species 0	x 4 =	0
2				- UPL species 0	x 5 =	0
3				Column Totals 155	(A)	345 (B)
4				Prevalence Index = B/A =		313 (5)
5						
6.				Hydrophytic Vegetation Indicators:		
7.				1- Rapid Test for Hydrophytic \	egetation/	
	25	= Total Cove	er	2 - Dominance Test is >50%		
Herb Stratum (Plot size:5 ft)		=		3 - Prevalence Index is ≤ 3.0¹		
1. Phragmites australis	80	Yes	FACW	4 - Morphological Adaptations		supporting
Impatiens capensis	15	No	FACW	data in Remarks or on a separate sh		
3.				Problematic Hydrophytic Vege		
4.				¹Indicators of hydric soil and wetlan	-	gy must be
5.				present, unless disturbed or proble	matic	
				Definitions of Vegetation Strata:		
6				Tree – Woody plants 3 in. (7.6 cm) or		liameter at
7				breast height (DBH), regardless of h	_	
8				Sapling/shrub – Woody plants less t		BH and
9				greater than or equal to 3.28 ft (1 m		
10				Herb – All herbaceous (non-woody)		ardless of
11				size, and woody plants less than 3.2		20.6-:
12				Woody vines – All woody vines grea	ter than 3	28 π in
	95	= Total Cove	er	height.		
Woody Vine Stratum (Plot size: 30 ft )				Hydrophytic Vegetation Present?	Yes <u> </u>	0
1. Vitis riparia	10	Yes	FAC			
2.						
3.				-		
4.				-		
· ·	10	= Total Cove	or .	-		
		- 10tal COV	-1			
Remarks: (Include photo numbers here or on a separa	te sheet.)					
Large Phragmites patch, and wetland swale/ NJD on m	aintained r	oad shoulde	er,			

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)  Depth Matrix Redox Features										
Depth _	Matrix Color (moist)	04	-			1002				
(inches)		<u>%</u>	Color (moist)	<u>%</u>	Type <sup>1</sup>		Loc <sup>2</sup> Texture		Remarks	
0 - 20	10YR 3/2	95	10YR 4/6	5	C	M/PL	Mucky Si	lty Clay Loam		
		- —						_		
		- —								
		_		_				<del>.</del>		
		-								
		- —								
1Tupo: C = C	Concentration D =		ion DM = Doduco	<u> </u>	+riv MC =	Mackad	Cand Crains 21 a	estion DL = Doro Lining	T. M. – Matrix	
		Depiet	ion, Rivi – Reduce	u ivia	u ix, ivi5 -	- iviaskeu	Sand Grains. *LC	ocation: PL = Pore Lining		
Hydric Soil								Indicators for Problen	natic Hydric Soils <sup>3</sup> :	
Histoso			Polyvalue B					2 cm Muck (A10) (I	LRR K, L, MLRA 149B)	
	pipedon (A2)		Thin Dark S					Coast Prairie Redo	ox (A16) <b>(LRR K, L, R)</b>	
Black Hi			Loamy Muc	-			-)	5 cm Mucky Peat o	or Peat (S3) <b>(LRR K, L, R)</b>	
	en Sulfide (A4)		Loamy Gley					Dark Surface (S7) (	(LRR K, L)	
	d Layers (A5) d Below Dark Surfa	oco (A1	Depleted M					Polyvalue Below S	urface (S8) <b>(LRR K, L)</b>	
	ark Surface (A12)	ice (A i	Depleted Da			7)		Thin Dark Surface (S9) (LRR K, L)		
	Mucky Mineral (S1)		Redox Depr			,		Iron-Manganese N	/lasses (F12) <b>(LRR K, L, R)</b>	
_	Gleyed Matrix (S4)		Redox Depi	C331C	113 (10)			Piedmont Floodpla	ain Soils (F19) <b>(MLRA 149B)</b>	
-	-							Mesic Spodic (TA6)	) (MLRA 144A, 145, 149B)	
-	Redox (S5)							Red Parent Materi	ial (F21)	
	d Matrix (S6)							Very Shallow Dark	Surface (TF12)	
Dark Su	rface (S7) (LRR R, N	ILKA 1	49B)					Other (Explain in F	Remarks)	
3Indicators	of hydrophytic veg	etatior	n and wetland hvo	Irolos	v must b	e presen	t. unless disturbed	d or problematic.		
-	Layer (if observed):		<u> </u>		33		,			
	Type:		None			Hydric 9	Soil Present?		Yes/_ No	
	Depth (inches):		NOTIC	•		linguine	on reserie.		16310	
D	Deptil (iliciles).					I				
Remarks:										
A positive indication of hydric soil was observed.										



Photo of Sample Plot







Project/Site: Excelsior	City/County: Byro	on, Genesee County	Sampling Date: 2020-June-01			
Applicant/Owner: NextEra		State: Nev	York Sampling	Point: W-IBP-01; UPL-1		
Investigator(s): Isaac Pallant, Ca	asey Pearce	Section, Township,	Range:			
Landform (hillslope, terrace, etc.):	: Flat	Local relief (concave, conv	ex, none):Flat	Slope (%): 0-1		
Subregion (LRR or MLRA): LF	RR R	Lat: 43.0692347	Long: -78.06641	24 Datum: WGS84		
Soil Map Unit Name: Fredon gr	ravelly loam, 0 to 3 percent slopes		NWI	classification: None		
Are climatic/hydrologic conditions	s on the site typical for this time of ye	ar? Yes <u></u> ✓ No	(If no, explain in	n Remarks.)		
Are Vegetation, Soil,	or Hydrology significantly dis		al Circumstances" pre	esent? Yes 🟒 No		
Are Vegetation, Soil,	or Hydrology naturally probl	ematic? (If needed,	explain any answers	in Remarks.)		
Summary of Findings – A	ttach site map showing samplir	ng point locations, trar	sects, important	features, etc.		
Hydrophytic Vegetation Present?	Yes No <b>_</b> ✓					
Hydric Soil Present?	Yes No	Is the Sampled Area withi	n a Wetland?	Yes No		
		· ·				
Wetland Hydrology Present?	Yes No _ <b>∠</b>	If yes, optional Wetland S	te iD.			
Remarks: (Explain alternative pro	ocedures here or in a separate report	)				
TRC covertype is UPL. Area is upl	and, not all three wetland parameter	s are present. Successiona	old field			
LIVEROLOGY						
HYDROLOGY						
Wetland Hydrology Indicators:						
Primary Indicators (minimum of	one is required; check all that apply)		Secondary Indicator	s (minimum of two required)		
Surface Water (A1)	Water-Stained Lea	aves (B9)	Surface Soil Crac	ks (B6)		
High Water Table (A2)	Aquatic Fauna (B1		Drainage Patterr	ıs (B10)		
Saturation (A3)	Marl Deposits (B1	5)	Moss Trim Lines (B16)			
Water Marks (B1)	Hydrogen Sulfide		Dry-Season Water Table (C2)			
Sediment Deposits (B2)	Oxidized Rhizosph	neres on Living Roots (C3)	Crayfish Burrows			
				e on Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduc		Stunted or Stress			
Algal Mat or Crust (B4) Iron Deposits (B5)		ction in Tilled Soils (C6)	Geomorphic Pos			
Iron Deposits (B5) Inundation Visible on Aerial Ir	Thin Muck Surface magery (B7) Other (Explain in F		Shallow Aquitard Microtopographi			
Sparsely Vegetated Concave S		Nemarks)	FAC-Neutral Test			
Field Observations:	Juliace (Bo)		TAC-Neutral Test	(03)		
Surface Water Present?	Yes No/ Depth (	(inches):				
	•	·	NA/atlamal I budwalama	Dunnant? Von No (		
Water Table Present?	•	(inches):	Wetland Hydrology	Present? Yes No		
Saturation Present?	Yes No Depth (	(inches):				
(includes capillary fringe)						
Describe Recorded Data (stream	gauge, monitoring well, aerial photos	s, previous inspections), if a	vailable:			
Remarks:						

Tree Stratum (Plot size:30 ft)		Dominant		Dominance Test worksheet:					
1.	% Cover	Species?	Status	Number of Dominant Specie Are OBL, FACW, or FAC:	es That _	1	(A)		
2.				Total Number of Dominant S Across All Strata:	Species	3	(B)		
3. 4.				Percent of Dominant Species	s That	33.3	(A /D)		
5.				Are OBL, FACW, or FAC:	_	33.3	(A/B)		
6.				Prevalence Index worksheet		N.A. Jahr I.	D		
7.				Total % Cover of:		Multiply	-		
	0	= Total Cov	er	· -	0 15	x1=_	0		
Sapling/Shrub Stratum (Plot size: 15 ft )						x 2 = _ x 3 =	90		
1				· —	05	_	420		
2.				· -	55 55	x 4 = _	325		
3.					15	x 5 = _	835 (B)		
4.						(A) _	835 (B)		
5.				Prevalence Index =		3.9			
6.				Hydrophytic Vegetation India					
7.				1- Rapid Test for Hydro		egetation			
	0	= Total Cov	er	2 - Dominance Test is > 50%					
Herb Stratum (Plot size: <u>5 ft</u> )		_		3 - Prevalence Index is					
1. Poa annua	85	Yes	FACU	4 - Morphological Adap			supporting		
2. Asclepias syriaca	65	Yes	UPL	data in Remarks or on a sep			enlain)		
3. <i>Phalaris arundinacea</i>	45	Yes	FACW	Problematic Hydrophytic Vegetation¹ (Explain)  ¹Indicators of hydric soil and wetland hydrology must be					
4. Solidago canadensis	20	No	FACU	present, unless disturbed or problematic					
5.				Definitions of Vegetation Str		idele			
6.				Tree – Woody plants 3 in. (7.		more in (	diameter at		
7.				breast height (DBH), regardle			alameter at		
8.				Sapling/shrub - Woody plan		-	DBH and		
				greater than or equal to 3.28					
10				Herb – All herbaceous (non-	woody) p	lants, reg	gardless of		
11.				size, and woody plants less t	han 3.28	ft tall.			
11 12				Woody vines – All woody vin	es greate	er than 3.	28 ft in		
	215	= Total Cov	er	height.					
Woody Vine Stratum (Plot size:30 ft)		-		Hydrophytic Vegetation Pre	sent? Ye	es N	lo <u>/</u>		
1									
2									
3.									
4		= Total Cov							
		_ TOTAL COV	ei						
Remarks: (Include photo numbers here or on a separat	e sheet.)								
Successional old field									

	-	to the de	-			ndicato	or confirm the al	osence of indicators.	)
Depth _	Matrix		Redox			1002	Tov	rtura	Domarko
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>		ture	Remarks
10 - 16	10YR 4/2	100		-				ay Loam	
16 - 20	7.5YR 5/4	100		_			Sandy C	lay Loam	
				_					
				_					
								_	
				_				_	
¹Type: C = C	Concentration, D =	Depletio	n. RM = Reduced	Mati	rix. MS =	Masked	Sand Grains. 21 o	ocation: PL = Pore Lir	ning. M = Matrix
Hydric Soil		Беріссіо	II, IIII II III III	iviaci	17, 1113	Maskea	Sana Grams.		lematic Hydric Soils³:
Histosol			Polyvalue Pol	OW C	urfaca (S	2) /I DD	R, MLRA 149B)		•
	oipedon (A2)		Polyvalue Bel						0) (LRR K, L, MLRA 149B)
Black Hi			Loamy Muck						edox (A16) <b>(LRR K, L, R)</b>
	en Sulfide (A4)		Loamy Gleye			(2	-,		at or Peat (S3) (LRR K, L, R)
	d Layers (A5)		Depleted Ma					Dark Surface (S	
	d Below Dark Surfa	ace (A11)						•	w Surface (S8) (LRR K, L)
Thick Da	ark Surface (A12)		Depleted Dar	k Su	face (F7)	1		Thin Dark Surfa	
Sandy N	lucky Mineral (S1)		Redox Depre	ssior	ıs (F8)				te Masses (F12) (LRR K, L, R)
	ileyed Matrix (S4)								dplain Soils (F19) <b>(MLRA 149B)</b>
Sandy R	edox (S5)								7A6) (MLRA 144A, 145, 149B)
_	d Matrix (S6)							Red Parent Ma	
	rface (S7) (LRR R, N	/ILRA 149	)B)					Very Shallow D	
	(, (, (, ,		,					Other (Explain	in Remarks)
-	of hydrophytic veg		and wetland hydr	olog	y must be	preser	t, unless disturbe	d or problematic.	
Restrictive I	_ayer (if observed):	:							
	Type:		None	-		Hydric	Soil Present?		Yes No/_
	Depth (inches):								
Remarks:									



Photo of Sample Plot







Project/Site: Excelsior	City/County: Byro	n, Genesee County	Sampling Date: 2020-June-01			
Applicant/Owner: NextEra		State: Nev	w York	Sampling Point: W-IBF	P-01; PFO-1	
Investigator(s): Isaac Pallant, C	Casey Pearce	Section, Township,	Range:			
Landform (hillslope, terrace, etc.	): Flood Plain	Local relief (concave, conv	ex, none):_	Flat	Slope (%): 0-1	
Subregion (LRR or MLRA):	LRR R	Lat: 43.0696578	Long:	-78.0662023	Datum: WGS84	
Soil Map Unit Name: Wakevill	e silt loam			NWI classification	n: None	
Are climatic/hydrologic conditior	ns on the site typical for this time of yea	ar? Yes <u></u> ✓ No	(If no	, explain in Remarks.)		
Are Vegetation, Soil,	or Hydrology significantly dis	sturbed? Are "Norm	al Circumst	ances" present?	⁄es _ <b>_∕</b> _ No	
Are Vegetation, Soil,	or Hydrology naturally probl	ematic? (If needed,	explain an	y answers in Remarks.)	)	
SUMMARY OF FINDINGS – A	Attach site map showing samplir	ng point locations, trai	nsects, im	portant features, e	etc.	
Hydrophytic Vegetation Present	t? Yes _ 🗸 No			<u> </u>		
Hydric Soil Present?	Yes _ 🗸 No	Is the Sampled Area withi	in a Wetlan	d? Yes	✓_ No	
	Yes _ <b>✓</b> _ No	If yes, optional Wetland S		W-IB		
Wetland Hydrology Present?	rocedures here or in a separate report)	3 . 1	ite ib.		P-01	
TRC covertype is PFO. Area is we	etland, all three wetland parameters ar	e present. Active floodpla	in associate	ed with Black Creek		
HYDROLOGY						
Wetland Hydrology Indicators:						
	f one is required; check all that apply)		Secondan	/ Indicators (minimum	of two required)	
•		(50)	-	e Soil Cracks (B6)	or two required)	
Surface Water (A1) High Water Table (A2)	⁄ Water-Stained Lea Aquatic Fauna (B1		✓ Drainage Patterns (B10)			
✓ Saturation (A3)	Aquatic Padria (B1		✓ Moss Trim Lines (B16)			
✓ Water Marks (B1)	Hydrogen Sulfide		Dry-Season Water Table (C2)			
✓ Sediment Deposits (B2)		neres on Living Roots (C3)	) Crayfish Burrows (C8)			
	·	_	Satura	tion Visible on Aerial In	nagery (C9)	
✓ Drift Deposits (B3)	<u></u> Presence of Reduc		Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)		tion in Tilled Soils (C6)		orphic Position (D2)		
Iron Deposits (B5) Inundation Visible on Aerial	Thin Muck Surface			w Aquitard (D3)		
✓ Sparsely Vegetated Concave		terriarks)		opographic Relief (D4) eutral Test (D5)		
Field Observations:	24456 (50)			24. 4. 163t (D3)		
Surface Water Present?	Yes No _ <b>_/</b> Depth	(inches):				
Water Table Present?		(inches): 18	- Wetland ⊦	lydrology Present?	Yes No	
Saturation Present?		(inches): 16	-	iyarology i rescrit:	103 _110	
	тез _✔ тио Берит	(11103).	-			
(includes capillary fringe)	m gauge, monitoring well, aerial photos					
Remarks:						

<u>Free Stratum</u> (Plot size: <u>30 ft</u> )		Dominant Species?	Indicator Status	Dominance Test worksh Number of Dominant S		5	(A)
I. Salix nigra	35	Yes	OBL	Are OBL, FACW, or FAC:			(A)
2. Acer negundo	15	Yes	FAC	Total Number of Domin	ant Species	5	(B)
3. Crataegus crus-galli	10	No	FAC	Across All Strata:			
4.				Percent of Dominant Species That		100	(A/B)
5.				Are OBL, FACW, or FAC:	l		<del></del>
5.				Prevalence Index works		N. A Jahr. Jr 1	D
7.				Total % Cover		Multiply I	-
	60	= Total Cov	er	- OBL species	50	x1=	50
Sapling/Shrub Stratum (Plot size: <u>15 ft</u> )		_		FAC species	45	x 2 =	90
i.				- FACU species	30	x3=	90
2.				<u> </u>	0	x 4 =	0
3.				- UPL species	0	x 5 = _	0
1.	<del></del>			- Column Totals	125	(A) _	230 (B)
5.	<del></del>			- Prevalence In	dex = B/A =	1.8	<del></del> -
5.				Hydrophytic Vegetation			
7.				1- Rapid Test for H		egetation/	
· -		= Total Cov	er	2 - Dominance Test is >50%			
Herb Stratum (Plot size: _ 5 ft)		_	C1	3 - Prevalence Ind			
1. Impatiens capensis	35	Yes	FACW	4 - Morphological			supporting
2. Symplocarpus foetidus	15	Yes	OBL	data in Remarks or on a			
3. Phalaris arundinacea		No	FACW	- Problematic Hydro			
4.		110	TACVV	¹Indicators of hydric soi		-	gy must be
5.				present, unless disturbe		matic	
6.				Definitions of Vegetatio			
7				Tree – Woody plants 3 i			liameter a
n				breast height (DBH), reg			DU and
				greater than or equal to			DIT allu
				Herb – All herbaceous (			ardless of
10				size, and woody plants			, ai aic55 0i
11				Woody vines – All wood			28 ft in
12				height.	,		
	60	_= Total Cov	er	Hydrophytic Vegetation	Present?	/es ./ N	0
Woody Vine Stratum (Plot size: 30 ft )	_	.,	F4.6	- iyarapiiyaa ragaaaaa			<u> </u>
1. <i>Vitis riparia</i>	5	Yes	FAC	=			
2.				-			
3				-			
4				_			
	5	_= Total Cov	er				

	-	to the	depth needed to			indicator	or confirm the al	bsence of indicators.)	
Depth	Matrix					12	-	·	Dama da
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc2		exture	Remarks
0 - 20	10YR 3/1	95	10YR 3/6	5	C	M/PL	Mucky S	ilty Clay Loam	
				_					
				_					
-				_					
				_					-
1Typo: C = 0	Concentration, D =	Donlot	ion PM - Paduca	d Ma	triv MC -	- Maskad	Sand Grains 21	ocation: PL = Pore Linir	og M = Matrix
Hydric Soil		pehier	ion, rivi – Reduce	u ivid	LI IA, IVIO -	iviaskeu	Juliu Grairis. *L(	Indicators for Proble	-
Histoso			Pohazius P	ماديد	Surface (	י ממו (ו מפי	MIDA 140D\		•
	oipedon (A2)		Polyvalue B Thin Dark S				R, MLRA 149B) A 149R)		(LRR K, L, MLRA 149B)
	istic (A3)		Loamy Muc						lox (A16) <b>(LRR K, L, R)</b>
	en Sulfide (A4)		Loamy Gley	,			,	•	or Peat (S3) <b>(LRR K, L, R)</b>
	d Layers (A5)		Depleted M					Dark Surface (S7)	
	d Below Dark Surf	ace (A1						-	Surface (S8) (LRR K, L)
Thick D	ark Surface (A12)		Depleted Da	ark Sı	urface (F7	7)		Thin Dark Surfac	
Sandy N	Mucky Mineral (S1)		Redox Depr	essic	ns (F8)				Masses (F12) (LRR K, L, R)
	Gleyed Matrix (S4)							·	olain Soils (F19) (MLRA 149B)
Sandy F	Redox (S5)								6) (MLRA 144A, 145, 149B)
_	d Matrix (S6)							Red Parent Mate	
	ırface (S7) (LRR R, N	/ILRA 1	49B)					Very Shallow Dar	
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,					Other (Explain in	Remarks)
	of hydrophytic veg		n and wetland hyd	Irolog	gy must b	oe presen	t, unless disturbe	d or problematic.	
Restrictive	Layer (if observed) _					l			
	Type:		None			Hydric S	oil Present?		Yes No
	Depth (inches):								
Remarks:									

Hydrology Photos



Soil Photos



Photo of Sample Plot





Project/Site: Excelsior	City/County: Byron, Genesee County	Sampling Date: _ :	2020-June-01
Applicant/Owner: NextEra	State: Ne	w York Sampling Point: W	-IBP-01; PEM-2
Investigator(s): Isaac Pallant, Casey Pearce	Section, Township	, Range:	
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, con		Slope (%):0-1
Subregion (LRR or MLRA): LRR R	Lat: 43.0678977	Long: -78.0673683	Datum: WGS84
Soil Map Unit Name: Wakeville silt loam		NWI classifica	
Are climatic/hydrologic conditions on the site typica		(If no, explain in Remark	
		nal Circumstances" present?	Yes _ <b>∠</b> No
Are Vegetation, Soil, or Hydrology _	naturally problematic? (If needed	, explain any answers in Remar	KS.)
SUMMARY OF FINDINGS – Attach site map	showing sampling point locations, tra	nsects, important feature	s, etc.
Hydrophytic Vegetation Present? Yes _	✓_ No		
Hydric Soil Present? Yes _	✓ No Is the Sampled Area with	in a Wetland?	es No
	∠_No If yes, optional Wetland S	Site ID: V	<i>V</i> -IBP-01
Remarks: (Explain alternative procedures here or in			
TRC covertype is PEM. Area is wetland, all three we	cland parameters are present.		
HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; ch	eck all that apply)	Secondary Indicators (minimu	um of two required)
		Surface Soil Cracks (B6)	ani oi two requirea)
	Water-Stained Leaves (B9) Aquatic Fauna (B13)	✓ Drainage Patterns (B10)	
I	Marl Deposits (B15)	Moss Trim Lines (B16)	
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Dry-Season Water Table (0	[2]
<u> </u>	Oxidized Rhizospheres on Living Roots (C3)		
		✓ Saturation Visible on Aeria	al Imagery (C9)
•	Presence of Reduced Iron (C4)	Stunted or Stressed Plants	
Algal Mat or Crust (B4) Iron Deposits (B5)	Recent Iron Reduction in Tilled Soils (C6)	✓ Geomorphic Position (D2)	
	Thin Muck Surface (C7) Other (Explain in Remarks)	<ul><li>Shallow Aquitard (D3)</li><li>Microtopographic Relief (I</li></ul>	04)
Sparsely Vegetated Concave Surface (B8)	other (Explain in Remarks)	✓ FAC-Neutral Test (D5)	) <del>- 1</del> )
Field Observations:			
Surface Water Present? Yes No,	Depth (inches):		
Water Table Present? Yes No,			Yes No
Saturation Present? Yes _ 🗸 No _	Depth (inches): 18	-	
(includes capillary fringe)		-	
Describe Recorded Data (stream gauge, monitoring	well, aerial photos, previous inspections), if	available:	
Remarks:			
Aerial photography depicts a darker signature (i.e. wetland.	ootential depression or relic scar) at this loca	tion, which suggests the poten	tial for this area to be a

ot size: 30 ft ) Absolute Dominant Indicato						
% Cover Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)			
	Total Number of Dominant Species Across All Strata:	s 1	(B)			
	Percent of Dominant Species That					
	— Are OBL, FACW, or FAC:	100	(A/B)			
	Prevalence Index worksheet:		-			
	— Total % Cover of:	Multiply	By:			
	— OBL species 15	x 1 =	15			
0 = Total Cover	FACW species 85	x 2 =	170			
ratum (Plot size: <u>15 ft</u> )	FAC species 25	x 3 =	75			
	— FACU species 20	x 4 =	80			
	— UPL species 0	x 5 =	0			
	— Column Totals 145	(A)	340 (B)			
	Prevalence Index = B/A =		340 (b)			
			······································			
	Hydrophytic Vegetation Indicators					
	1- Rapid Test for Hydrophytic	Vegetation				
0 = Total Cover	2 - Dominance Test is >50%					
ot size: _ <u>5 ft</u> )	3 - Prevalence Index is ≤ 3.0¹					
ndinacea 85 Yes FACW	4 - Morphological Adaptation		supporting			
pium 25 No FAC	data in Remarks or on a separate s		nlain)			
s 20 No FACU	Problematic Hydrophytic Veg					
ellum 15 No OBL	=	<ul> <li>Indicators of hydric soil and wetland hydrology must be</li> <li>present, unless disturbed or problematic</li> </ul>				
<del></del>	Definitions of Vegetation Strata:	ematic				
	Tree – Woody plants 3 in. (7.6 cm)	or more in a	diameter at			
	breast height (DBH), regardless of		nameter at			
	Sapling/shrub – Woody plants less	_	BH and			
	greater than or equal to 3.28 ft (1)		Birana			
	Herb – All herbaceous (non-wood)		ardless of			
	size, and woody plants less than 3		,			
	Woody vines – All woody vines gre		28 ft in			
AAE Tatal Comm	height.					
145 = Total Cover	Hydronhytic Vegetation Present?	Yes ./ N	n			
tum (Plot size: <u>30 ft</u> )	injuropinjur regellulum resellu	.03				
	_					
	_					
	_					
	_					
0 = Total Cover						
tum (Plot size:30 ft)		Hydrophytic Vegetation Present?	Hydrophytic Vegetation Present? Yes ✓ N			

Profile Desc	cription: (Describe	to the	depth needed to	docu	ment the	indicato	or or confirm the abse	nce of indicators.)
Depth _	Matrix		Redo	x Feat	tures			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0 - 20	7.5YR 4/2	90	10YR 4/4	10	C	M/PL	Silty Clay	
¹Type: C = C	oncentration, D =	Deplet	tion, RM = Reduce	ed Ma	trix, MS =	Maske	d Sand Grains. <sup>2</sup> Locat	ion: PL = Pore Lining, M = Matrix.
Hydric Soil	Indicators:						In	dicators for Problematic Hydric Soils³:
Histosol					-		R, MLRA 149B)	_ 2 cm Muck (A10) <b>(LRR K, L, MLRA 149B)</b>
	oipedon (A2)		Thin Dark S				RA 149B)	Coast Prairie Redox (A16) (LRR K, L, R)
Black Hi			Loamy Mud	-			L)	_ 5 cm Mucky Peat or Peat (S3) <b>(LRR K, L, R)</b>
	en Sulfide (A4)		Loamy Gley					_ Dark Surface (S7) <b>(LRR K, L)</b>
	d Layers (A5) d Below Dark Surfa	260 (	Depleted M Depleted M					_ Polyvalue Below Surface (S8) (LRR K, L)
	ark Surface (A12)	ace (A)	Depleted D			7)		_ Thin Dark Surface (S9) (LRR K, L)
	fucky Mineral (S1)		Redox Dep		-	,		_ Iron-Manganese Masses (F12) (LRR K, L, R)
-	ileyed Matrix (S4)				- (. 0)			_ Piedmont Floodplain Soils (F19) (MLRA 149B)
_	edox (S5)							_ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
_	d Matrix (S6)							_ Red Parent Material (F21)
	rface (S7) <b>(LRR R, N</b>	/ILRA 1	49B)					_ Very Shallow Dark Surface (TF12)
								_ Other (Explain in Remarks)
			n and wetland hy	drolog	gy must k	oe prese	nt, unless disturbed or	r problematic.
	_ayer (if observed): 	:						
	Type:		None			Hydric	Soil Present?	Yes No
	Depth (inches):					1		
Remarks:								
A positive in	ndication of hydric	soil w	as observed.					



Photo of Sample Plot









Project/Site: Excelsior	City/County: Byr	on, Genesee County	Sampling Date: 2020-June-01			
Applicant/Owner: NextEra		State: New York	Sampling Point: W-IBP-01;	UPL-2		
Investigator(s): Isaac Pallant, Ca	sey Pearce	Section, Township, Range	<u> </u>			
Landform (hillslope, terrace, etc.):	Flat	Local relief (concave, convex, no	ne): Flat Slo	pe (%): 0-1		
Subregion (LRR or MLRA): LR	RR R	Lat: 43.0677222 Lo	ng: -78.0672234 Dat	um: WGS84		
Soil Map Unit Name: Fredon gr	avelly loam, 0 to 3 percent slopes		NWI classification: N	one		
Are climatic/hydrologic conditions	on the site typical for this time of ye	ear? Yes No (	lf no, explain in Remarks.)			
Are Vegetation, Soil,	or Hydrology significantly di	sturbed? Are "Normal Circu	ımstances" present? Yes _	✓ No		
Are Vegetation, Soil,	or Hydrology naturally prob	lematic? (If needed, explain	n any answers in Remarks.)			
SUMMARY OF FINDINGS - At	ttach site map showing sampli	ng point locations, transects	, important features, etc.			
Hydrophytic Vegetation Present?	Yes No <b>_</b> ✓_					
Hydric Soil Present?	Yes No	Is the Sampled Area within a We	tland? Yes	_ No <b>∠</b> _		
		· ·	.dana. 163	_140		
Wetland Hydrology Present?	Yes No _ <b>_</b> _	If yes, optional Wetland Site ID:	<del>-</del> -			
Remarks: (Explain alternative pro	cedures here or in a separate report	t)				
TRC covertype is UPL. Area is upla	and, not all three wetland paramete	rs are present.				
HYDROLOGY						
Wetland Hydrology Indicators:						
Primary Indicators (minimum of o	one is required; check all that apply)	<u>Secon</u>	dary Indicators (minimum of tw	<u>vo required)</u>		
Surface Water (A1)	Water-Stained Le	aves (D5)	rface Soil Cracks (B6)			
High Water Table (A2)	Aquatic Fauna (B <sup>2</sup>	-,	rainage Patterns (B10)			
Saturation (A3)	Marl Deposits (B1	5)	Moss Trim Lines (B16)			
Water Marks (B1)	Hydrogen Sulfide	0401 (C1)	y-Season Water Table (C2)			
Sediment Deposits (B2)	Oxidized Rhizosp	neres on Eiving Roots (es)	ayfish Burrows (C8) turation Visible on Aerial Image	an/(C9)		
Drift Danasits (B2)	Drocopes of Dod		•	11 y (C3)		
Drift Deposits (B3) Algal Mat or Crust (B4)	Presence of Redu		unted or Stressed Plants (D1) comorphic Position (D2)			
Iron Deposits (B5)	Kecent from Redu Thin Muck Surfac		allow Aquitard (D3)			
Inundation Visible on Aerial In			crotopographic Relief (D4)			
Sparsely Vegetated Concave S			.C-Neutral Test (D5)			
Field Observations:						
Surface Water Present?	Yes No _ <b>∠</b> Depth	(inches):				
Water Table Present?	,	<del></del>	nd Hydrology Present?	es No <b></b> _		
		· · · · · —	nd riyurology Fresent:	=3 NO _ <b>_</b> Z		
Saturation Present?	Yes No Depth	(inches):				
(includes capillary fringe)						
Describe Recorded Data (stream	gauge, monitoring well, aerial photo	s, previous inspections), if availab	le:			
Remarks:						
No positive indication of wetland	hydrology was observed.					

	Absolute	Dominant	Indicator	Dominance Test workshee					
<u>Tree Stratum</u> (Plot size: <u>30 ft</u> )		Species?	Status	Number of Dominant Spec		0	(4)		
1.		· · ·		Are OBL, FACW, or FAC:		0	(A)		
2.			-	Total Number of Dominan	t Species	2	(B)		
3.			-	Across All Strata:	•		(D)		
4.			-	Percent of Dominant Spec	ies That	0	(A/B)		
5				Are OBL, FACW, or FAC:					
6				Prevalence Index workshe	et:				
7.				Total % Cover of:		Multiply	-		
	0	= Total Cov	ver	- OBL species	0	x 1 =	0		
Sapling/Shrub Stratum (Plot size:15 ft)				FACW species	0	x 2 =	0		
1				FAC species	0	x 3 =	0		
2.				- FACU species	140	x 4 =	560		
3.				- UPL species	10	x 5 =	50		
4.				- Column Totals	150	(A)	610 (B)		
				Prevalence Inde	x = B/A =	4.1			
5.				Hydrophytic Vegetation In	dicators:				
6.				1- Rapid Test for Hyd	rophytic V	egetation	1		
7				2 - Dominance Test is	s > 50%	_			
	0	_= Total Co	ver	3 - Prevalence Index	is ≤ 3.0¹				
Herb Stratum (Plot size:5 ft)		.,	=. =.	4 - Morphological Ad	aptations¹	(Provide	supporting		
1. Dactylis glomerata	75	Yes	FACU	data in Remarks or on a se	eparate sh	eet)			
2. <i>Poa annua</i>	50	Yes	FACU	Problematic Hydroph	nytic Veget	tation¹ (Ex	xplain)		
3. <u>Plantago major</u>	15	No	FACU	lndicators of hydric soil and wetland hydrology must be					
4. <i>Daucus carota</i>	10	No	UPL	present, unless disturbed	or probler	matic			
5				_ Definitions of Vegetation S	strata:				
6				Tree – Woody plants 3 in. (	7.6 cm) or	more in	diameter at		
7				breast height (DBH), regar	dless of he	eight.			
8				Sapling/shrub – Woody pla			DBH and		
9			-	greater than or equal to 3.					
10				Herb – All herbaceous (noi			gardless of		
11				size, and woody plants les					
12.				Woody vines – All woody v	ines great	er than 3	.28 ft in		
	150	= Total Cov	ver	height.					
Woody Vine Stratum (Plot size: 30 ft )		_		Hydrophytic Vegetation P	resent? Y	′es l	Vo <u> </u>		
1.									
2.			-	-					
3.				-					
4.				-					
	0	= Total Cov	ver	-					
		_							
Remarks: (Include photo numbers here or on a separate	e sheet.)								
Succesional Old Field located; appears to be mowed pe	riodically	(bi-annually	or longer ir	ntervals); Adjacent to residen	tial portion	n of parce	el.		

Profile Desc	cription: (Describe Matrix	to the de	epth needed to de			indicato	or confirm the a	bsence of indicators.	)
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Tex	cture	Remarks
0 - 12	7.5YR 4/2	100		_			-	Loam	
12 - 20	10YR 4/6	100	-	_				ndy Loam	
				_					
				_					
				_					
			-				-		
			-				-		
				-					
1T	`anaontustian D	Damlatia	- DM - Dadward	N 4 = 4:	-i NAC -	Nankad	Canal Crains 31	anting DI - Days Liv	ning NA - Matrix
<del></del>	Concentration, D =	Depletio	n, RIVI = Reduced	Mati	1X, MS =	Masked	Sand Grains. <sup>2</sup> Li	ocation: PL = Pore Li	
Hydric Soil			Daharahaa Dal		6 (6	:0\	D A41 DA 4 40D)		lematic Hydric Soils³:
Histosol			-				R, MLRA 149B)	·	O) (LRR K, L, MLRA 149B)
Black Hi	oipedon (A2)		Thin Dark Sui Loamy Mucky						edox (A16) <b>(LRR K, L, R)</b>
	en Sulfide (A4)		Loamy Gleye			(LIXIX IX, I	-)	-	at or Peat (S3) <b>(LRR K, L, R)</b>
, 0	d Layers (A5)		Depleted Mar					Dark Surface (S	
	d Below Dark Surf	ace (A11							w Surface (S8) (LRR K, L)
Thick Da	ark Surface (A12)		Depleted Dar	k Suı	face (F7)	)		Thin Dark Surfa	
Sandy N	lucky Mineral (S1)		Redox Depre	ssior	ıs (F8)				e Masses (F12) (LRR K, L, R)
Sandy G	Gleyed Matrix (S4)								dplain Soils (F19) <b>(MLRA 149B)</b> (A6) <b>(MLRA 144A, 145, 149B)</b>
Sandy R	tedox (S5)							Red Parent Ma	
Stripped	d Matrix (S6)							Very Shallow D	
Dark Su	rface (S7) (LRR R, N	/ILRA 149	9B)					Other (Explain	
3Indicators	of hydrophytic veg	etation a	and wetland hvdr	ology	/ must be	e preser	t. unless disturbe	•	,
-	Layer (if observed)		<u> </u>		,		,		
	Type:		None			Hvdric	Soil Present?		Yes No/_
	Depth (inches):			•					
Remarks:	э срет (е.),								
Kerriarks.									
No positive	indication of hydr	ic soils w	as observed.						

Soil Photos



Photo of Sample Plot







