Clean Water Act Section 404: Site Visit/Case Development

United States Environmental Protection Agency

For inspections authorized pursuant to Clean Water Act sections 308 and 404 (33 U.S.C. §§ 1318 and 1344)

This report includes only factual information gained by documentation, onsite observations, and/or onsite interviews.

Inspector Name(s)	Stephanie Andreescu Austin Jepsky (in-training)	Time In	10:38 AM	Start Date	May 23, 2023
		Time Out	1:05 PM	End Date	May 23, 2023
Inspector's Organization	U.S. EPA Region 2				
Organization Requesting Inspection (if different)					
Inspection Type	Evaluation	Inspection Status	Original		
Site Name	Battaglia Properties				
Site Address*	2 Dikeman Drive (Parcel ID: 122-1-2.1) & 6 Dikeman Drive (Parcle ID: 122-1-2.2)				
City*	Goshen	County*	Orange	State*	NY
Zip Code*	10924				
Mailing Address*	U.S. FOIA (b)(6)				
City*	U.S. FOIA (b)(6)	County*	U.S. FOIA (b)(6)	State*	U.S. FOIA (b)
Zip Code*	U.S. FOIA (b)(6)				
Latitude*	41.3911	Longitude*	-74.3398		
Estimated Size of Site (acres)	6	Is there a home on the site?	☐ Yes	☒ No	
Inspector Signature	Stephanie Andreescu Digitally signed by STEPHANIE ANDREESCU Date: 2023.07.26 15:05:04 -04'00'	Date	7/26/23		
Supervisor Signature	MARCO FINOCCHIARO Digitally signed by MARCO FINOCCHIARO Date: 2023.07.26 15:40:22 -04'00'	Date	7/26/23		

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Site Name	Battaglia Properties	Start Date	May 23, 2023
		End Date	May 23, 2023
Inspection Purpose	Follow-up site visit		

Opening Conference

☒ Presentation of Inspector Credentials

Name and Title (Use N/A if owner/operator not available to join the inspection)

Credentials were presented to Mr. Giuseppe (Joe) Battaglia, the owner/president of Orange Builders, LLC

☒ Opening Conference

Name of person authorizing access if applicable

Mr. Battaglia exchanged emails with EPA to schedule the inspection.

Notes from Opening Conference

The opening conference was brief and included introductions of individuals present. Mr. Battaglia expressed frustration with EPA's inspection report from 1/17/23 because he felt like it was opinion and not fact.

☐ Access Issues if Any

Describe

N/A

Inspection Observations and Sample Collection

Site Owner/Site Operator/Responsible Party (Name, title and contact information)

Orange Builders, LLC; Mr. Giuseppe Battaglia - owner/president, U.S. FOIA (b)(6) , U.S. FOIA (b)(6)

Additional Persons Present at Inspection

Lauren Fischer and Andie D'Angelo - EPA Office of Regional Counsel; Brian Orzel - U.S. Army Corps of Engineers, NY District

General Site Characteristics (layout of property, etc.)

2 and 6 Dikeman Drive (the "Dikeman Drive Properties") are 3-acre adjoining rectangular parcels bordered by New York State Route 17A to the east, Dikeman Drive to the north, Dikeman Firehouse property/10 Dikeman Drive (122-1-2.3) to the west and another private parcel to the south (13-1-10.12). The Dikeman Drive Properties are undeveloped and dominated by grasses and forbs. The properties slope towards Dikeman Drive.

Purpose and Need for Discharge of Dredged and/or Fill Material

Fill material was discharged as a result of ditch excavation on the Dikeman Drive Properties.

Site Overview (Past inspections, site description, permits, etc.)

EPA's Wetland Protection Section previously inspected 6 Dikeman Drive on January 17, 2023.

On May 30, 2000, the U.S. Army Corps of Engineers (Corps) issued a letter regarding the discharge of fill material into waters of the United States for the construction of a new Village of Goshen fire station located at what is now 10 Dikeman Drive. The letter authorized the filling of a maximum of 1.33 acres of wetlands under a Nationwide Permit 26. Mitigation for the wetland impact was

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Site Name	Battaglia Properties	Start Date	May 23, 2023
		End Date	May 23, 2023

1.84 acres of wetland creation and enhancement on the Dikeman Drive Properties.

The Corps is in possession of a wetland delineation for the Dikeman Drive Properties that was conducted prior to construction of the mitigation wetland as well as a map of the proposed mitigation.

The Village of Goshen issued a Stop Work Order for the Dikeman Drive Properties on June 10, 2021 for "Damage to Federal & State Protected Wetlands" among other violations.

Scope of Inspection (Areas inspected or not inspected)

EPA inspected areas around excavated ditches on the Dikeman Drive Properties

Site Name	Battaglia Properties	Start Date	May 23, 2023
		End Date	May 23, 2023

Environmental Conditions (e.g., wind, rain, smoke, dust, temperature, snow)

mid-60's to low-70's; sunny

Field Work Conducted

The purpose of the inspection was to document whether there has been a discharge of dredged/fill material into wetlands without proper authorization from the Corps.

Data recorded during the inspection included GPS points; soils, vegetation, and hydrology data from three sampling locations; photographs; and handwritten notes.

When EPA arrived at the Dikeman Drive properties, Mr. Battaglia was in the process of mowing the properties with a riding lawn mower.

EPA began the inspection observing the excavated ditch at the 6 and 10 Dikeman Drive properties. EPA observed sidecasted material in areas surrounding the ditch and noted indicators of hydric soil in the piles of material. EPA took a soil sample, SS1, near the ditch and sidecasted material (see attached map). At this location, EPA observed indicators of wetland hydrology, hydrophytic (wetland) vegetation, and hydric soils, and concluded that the sampling location was in a wetland. Dominant vegetation included reed canary grass and common reed.

EPA took a second soil sample, SS2, on the hillside (see attached map). Vegetation had been cut and was documented by EPA on the wetland data forms as "significantly disturbed." According to Mr. Battaglia, vegetation at that location had been mowed the weekend prior. While water was seeping at eight inches below the surface, soils at SS2 did not exhibit field indicators of hydric soils. EPA determined that this location was not in a wetland.

EPA observed a second ditch that had been excavated on the 2 Dikeman Drive property and that sidecasted material lay nearby. A third soil sample, SS3, was taken on the 2 Dikeman Drive property near sidecasted material (see attached map). EPA observed surface water, a high water table, hydrophytic (wetland) vegetation, and hydric soils, and concluded that the sampling location was in a wetland. Dominant vegetation included cattail and reed canary grass.

Closing Conference

Documents Received and/or Requested During the Inspection

N/A

Compliance Assistance Provided (If any)

N/A

Observations Relayed to Site Owner/Operator

EPA explained the process of delineating a wetland (3-parameter approach) to Mr. Battaglia.

Actions Taken by Owner/Operator During the Inspection (If any)

N/A

Potential Issues of Concern Including Regulatory Citations

EPA observed indicators of ditching and sidecasting within a wetland at the Dikeman Drive Properties.

United States Environmental Protection Agency

Clean Water Act Section 404: Site Visit/Case Development

For inspections authorized pursuant to Clean Water Act sections 308 and 404 (33 U.S.C. §§ 1318 and 1344)

Site Name	Battaglia Properties	Start Date	May 23, 2023
		End Date	May 23, 2023

EPA continues to have concerns that wetlands at 6 Dikeman Drive are currently undermapped, which may lead to potential violations of Section 404 of the Clean Water Act if the property is developed according to plan and without the necessary authorizations.

Attachments*

☒ Maps and Sketches

☒ Photographs (including location) and Photo Log

☒ Other (SSIP, Wetlands Delineation Forms, etc.)

Attachments: Map of GPS points; Photographs and Photolog; and Wetland Delineation Forms for Soil Sampling Locations 1-3

Additional Notes

EPA

Battaglia Properties
5/23/2023 CWA Section 404 Inspection
2 & 6 Dikeman Drive, Orange County, NY
41.3904, -74.3400

- 5/23/2023 GPS Point
- 5/23/2023 GPS Line
- Orange County Stream
- Approximate Parcel Boundary

EPA CWA 404 Inspection Photolog
Battaglia Properties
2 & 6 Dikeman Drive
Goshen, NY

May 23, 2023

Date: 5/23/2023
Time: 10:42 AM
Photographer: S. Andreescu
Photo ID: 1 – P5230082

Description:

Dikeman Drive properties actively being mowed by property owner prior to inspection

Date: 5/23/2023
Time: 10:50 AM
Photographer: S. Andreescu
Photo ID: 2 – P5230083

Description:

Sampling location (SS1); recently mowed

GPS location

Date: 5/23/2023
Time: 11:02 AM
Photographer: S. Andreescu
Photo ID: 3 – P5230084

Description:

Soil sample 1 (SS1) soil profile

GPS Location

Date: 5/23/2023
Time: 11:09 AM
Photographer: S. Andreescu
Photo ID: 4 – P5230085

Description:

Closeup of redoximorphic features in soil sample (SS1)

GPS Location

Date: 5/23/2023
Time: 11:20 AM
Photographer: S. Andreescu
Photo ID: 5 – P5230086

Description:

Example of sidecasted material in area dominated by hydrophytic vegetation

Date: 5/23/2023
Time: 11:36 AM
Photographer: S. Andreescu
Photo ID: 6 – P5230087

Description:

Soil profile 2 (SS2) soil profile

GPS Location

Date: 5/23/2023
Time: 11:41 AM
Photographer: S. Andreescu
Photo ID: 7 – P5230088

Description:

Soil sample 2 (SS2) surrounding area

GPS Location

Date: 5/23/2023
Time: 11:41 AM
Photographer: S. Andreescu
Photo ID: 8 – P5230089

Description:

Soil sample 2 (SS2) surrounding area; recently mowed

Date: 5/23/2023
Time: 11:48 AM
Photographer: S. Andreescu
Photo ID: 9 – P5230090

Description:

Water seeping from side of soil pit

Date: 5/23/2023
Time: 12:17 PM
Photographer: S. Andreescu
Photo ID: 10 – P5230091

Description:

Soil sample 3 (SS3) soil profile

GPS Location

Date: 5/23/2023
Time: 12:17 PM
Photographer: S. Andreescu
Photo ID: 11 – P5230092

Description:

Soil pit 3 (SS3) with high water table

GPS Location

Date: 5/23/2023
Time: 12:25 PM
Photographer: S. Andreescu
Photo ID: 12 – P5230093

Description:

Closeup of redoximorphic features in soil sample (SS3); oxidized root channels

Date: 5/23/2023
Time: 12:32 PM
Photographer: S. Andreescu
Photo ID: 13 – P5230094

Description:

Sidecasted material near ditch;
2 Dikeman Drive

Date: 5/23/2023
Time: 12:45 PM
Photographer: S. Andreescu
Photo ID: 14 – P5230095

Description:

Crayfish head found in wetland;
2 Dikeman Drive

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region
See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: 2 & 6 Dikeman Drive Properties; Joe Battaglia City/County: Goshen / Orange Sampling Date: 5/23/2023

Applicant/Owner: Orange Builders, LLC; Joe Battaglia State: NY Sampling Point: 1

Investigator(s): S.Andreescu, A. Jepsky Section, Township, Range:

Landform (hillside, terrace, etc.): Local relief (concave, convex, none): Slope %:

Subregion (LRR or MLRA): LRR R Lat: 41.390955 Long: -74.339672 Datum:

Soil Map Unit Name: Madalin Silt Loam (Ma) NWI classification: N/A

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

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

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

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

Hydrophytic Vegetation Present?	Yes X No	**Is the Sampled Area**
Hydric Soil Present?	Yes X No	**within a Wetland?** **Yes** X **No**
Wetland Hydrology Present?	Yes X 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)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- Marl Deposits (B15)
- Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

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

Field Observations:

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

Wetland Hydrology Present? **Yes** X **No**

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

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: 1

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Herb Stratum (Plot size: 5)			
1. *Phragmites australis*	55	Yes	FACW
2. *Impatiens capensis*	5	No	FACW
3. *Phalaris arundinacea*	20	Yes	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	80 =Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	80	x 2 =	160
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	80 (A)		160 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation recently cut. Vegetation sampling limited to remaining vegetation in reduced plot.

SOIL

Sampling Point: 1

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 3/1	90	7.5YR 4/6	10	C	PL	Loamy/Clayey	Prominent redox concentrations
8-21	10YR 4/1	95	10YR 5/8	15	C	PL	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Mesic Spodic (A17) **(MLRA 144A, 145, 149B)**
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)
- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ 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**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

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

Remarks:

Many rhizomes present in soil layers

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region
See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: 2 & 6 Dikeman Drive Properties; Joe Battaglia City/County: Goshen / Orange Sampling Date: 5/23/2023

Applicant/Owner: Orange Builders, LLC; Joe Battaglia State: NY Sampling Point: 2

Investigator(s): S.Andreescu, A. Jepsky Section, Township, Range:

Landform (hillside, terrace, etc.): Local relief (concave, convex, none): Slope %:

Subregion (LRR or MLRA): LRR R Lat: 41.39065 Long: -74.340236 Datum:

Soil Map Unit Name: Erie Gravelly Silt Loam, 3-8 Percent Slopes (ErB) NWI classification: N/A

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

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

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

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

Hydrophytic Vegetation Present?	Yes	No	**Is the Sampled Area**
Hydric Soil Present?	Yes	No X	**within a Wetland?** **Yes** **No** X
Wetland Hydrology Present?	Yes X	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)
- X High Water Table (A2)
- X Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- Marl Deposits (B15)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present?	Yes	No X	Depth (inches):
Water Table Present?	Yes X	No	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes X	No	Depth (inches): 8

Wetland Hydrology Present? **Yes** X **No**

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

Remarks:
Water was actively seeping into the soil pit at 8 inches below the surface. Water table was at 14.5 inches and rising.

VEGETATION – Use scientific names of plants. Sampling Point: 2

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Herb Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	=Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? **Yes** ____ **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation recently mowed (prior weekend). Remaining vegetation included an unknown sedge, Solidago canadensis, and Barbarea vulgaris.

SOIL

Sampling Point: 2

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)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/1	100						
4-15	10YR 4/1	100						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Mesic Spodic (A17) **(MLRA 144A, 145, 149B)**
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ 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)
- ___ Marl (F10) (**LRR K, L**)
- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ 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**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

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

Remarks:

Shovel refusal at 15 inches

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region
See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: 2 & 6 Dikeman Drive Properties; Joe Battaglia City/County: Goshen / Orange Sampling Date: 5/23/2023

Applicant/Owner: Orange Builders, LLC; Joe Battaglia State: NY Sampling Point: 3

Investigator(s): S.Andreescu, A. Jepsky Section, Township, Range:

Landform (hillside, terrace, etc.): Local relief (concave, convex, none): Slope %:

Subregion (LRR or MLRA): LRR R Lat: 41.390508 Long: -74.338754 Datum:

Soil Map Unit Name: Madalin Silt Loam (Ma) NWI classification: N/A

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

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

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

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

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present?	Yes X	No ___	Depth (inches): 2
Water Table Present?	Yes X	No ___	Depth (inches): 2.5
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 2.5

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:
Surface water present in ditch nearby

VEGETATION – Use scientific names of plants.

Sampling Point: 3

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Herb Stratum (Plot size: 5)			
1. *Typha latifolia*	35	Yes	OBL
2. *Phalaris arundinacea*	25	Yes	FACW
3. *Impatiens capensis*	2	No	FACW
4. *Lythrum salicaria*	2	No	OBL
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	64 =Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	37	x 1 =	37
FACW species	27	x 2 =	54
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	64 (A)		91 (B)

Prevalence Index = B/A = 1.42

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? **Yes** X **No** ___

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

SOIL

Sampling Point: 3

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	7.5YR 2.5/1	100					Muck	
6-15	10YR 4/1	75	7.5YR 4/6	25	C	PL	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Mesic Spodic (A17) **(MLRA 144A, 145, 149B)**
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)
- ___ Red Parent Material (F21) **(MLRA 145)**

Indicators for Problematic Hydric Soils[3]:

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- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
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[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

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

Remarks:
Shovel refusal at 15 inches