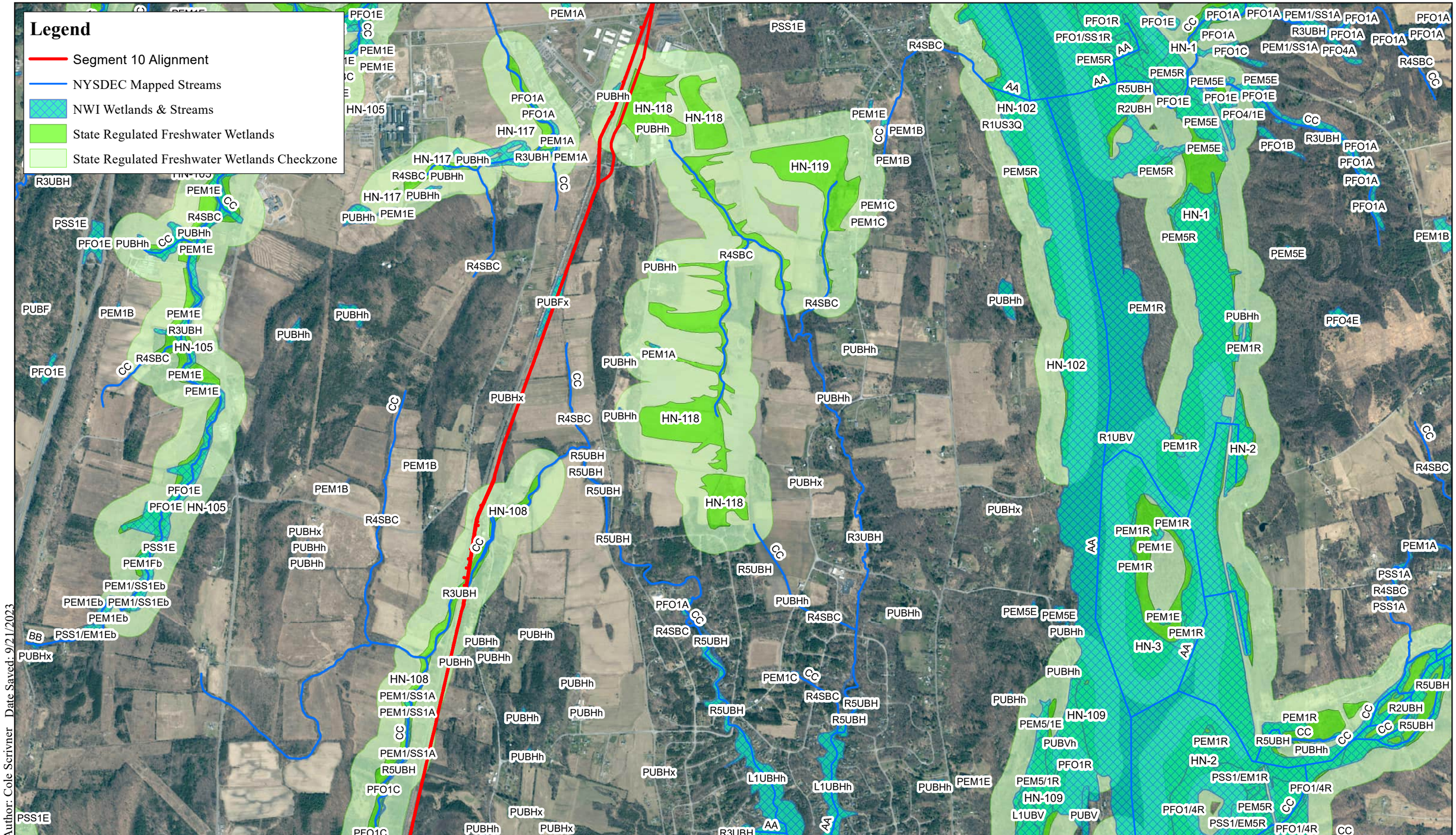

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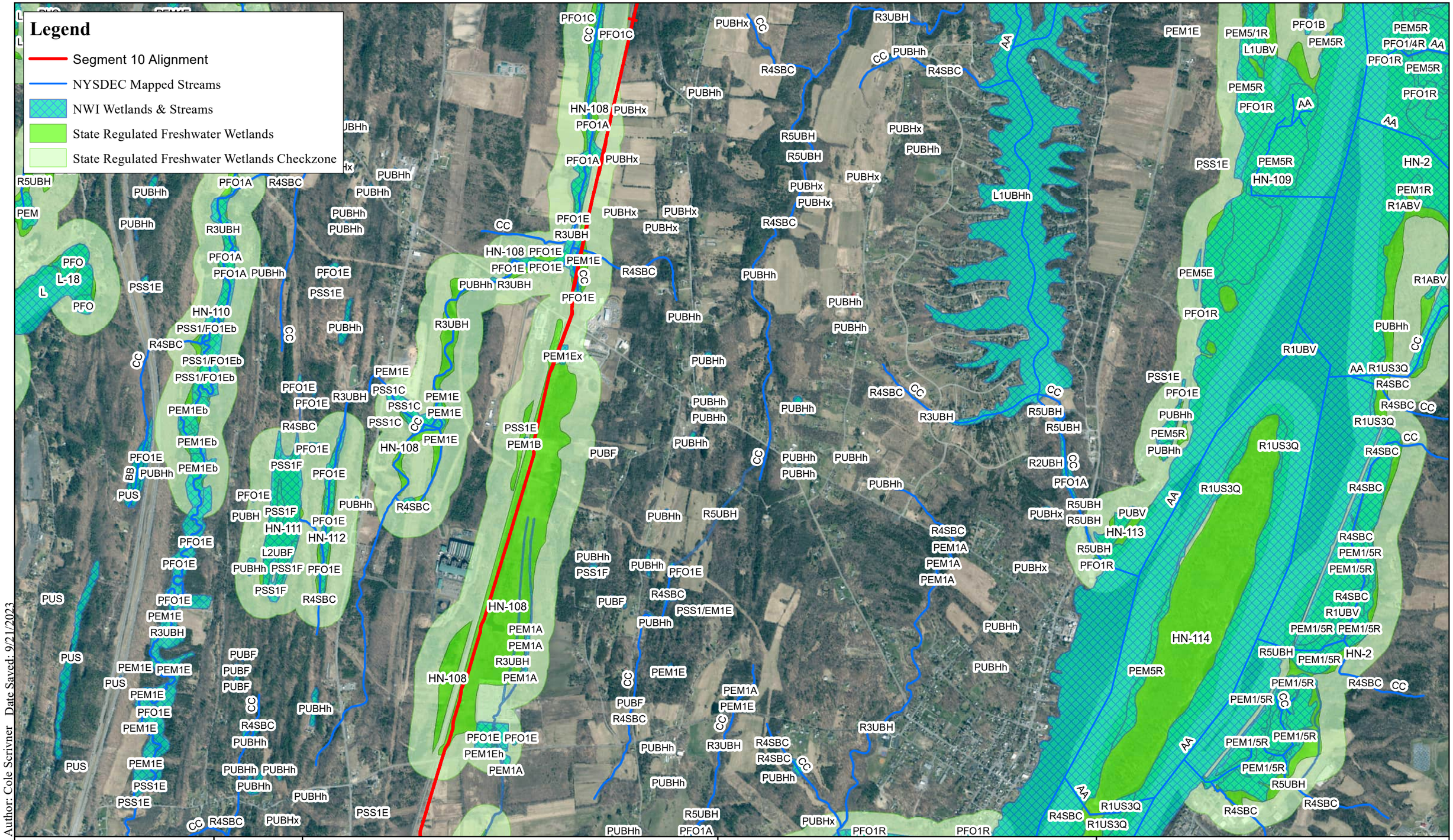
Champlain Hudson Power Express
Segment 10 Wetland & Stream Map
(NWI and NYSDEC)

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community.
Wetland layers obtained from USFWS NWI and NYSDEC


Legend
Segment 10 Alignment
NYSDEC Mapped Streams
NWI Wetlands & Streams
State Regulated Freshwater Wetlands
State Regulated Freshwater Wetlands Checkzone
HN-108
HN-110
HN-111
HN-112
HN-113
HN-114
HN-109
HN-2
L-18
PFO1C
PFO1A
PFO1E
PFO1B
PFO1R
PFO1/4R
PEM1E
PEM1Ex
PEM1A
PEM1B
PEM1Eb
PEM1Eh
PEM5R
PEM5/1R
PEM1/5R
PEM1R
PSS1E
PSS1C
PSS1F
PSS1/FO1Eb
PSS1/EM1E
PUBHh
PUBHx
PUBF
PUS
PEM
PFO
R5UBH
R4SBC
R3UBH
L1UBHh
L1UBV
R1UBV
R1ABV
R1US3Q
R2UBH
L2UBF
PUBV
PUBH
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BB
Author: Cole Scrivner Date Saved: 9/21/2023
Page 6 of 7
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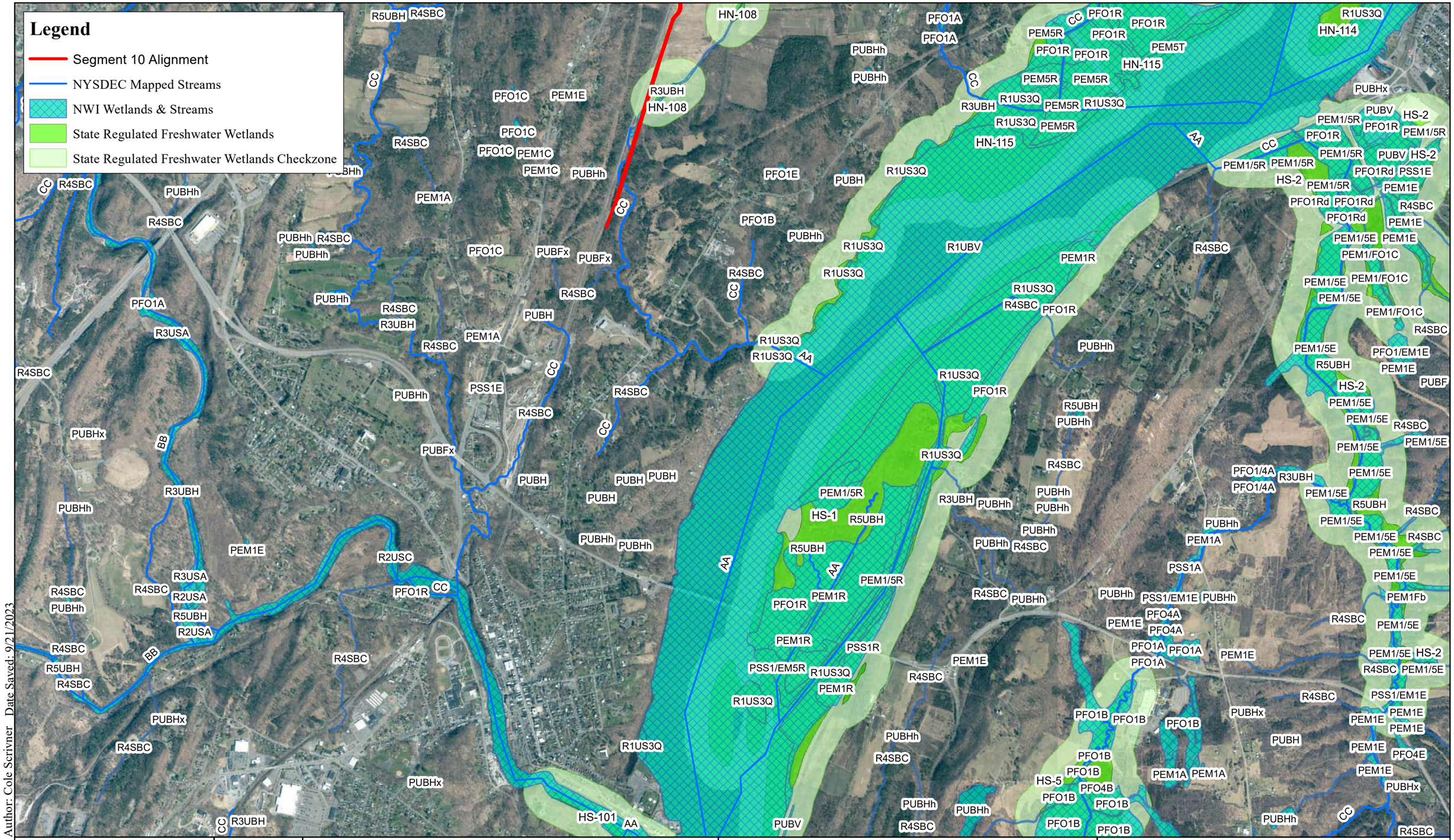
Champlain Hudson Power Express
Segment 10 Wetland & Stream Map
(NWI and NYSDEC)
Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community.
Wetland layers obtained from USFWS NWI and NYSDEC


Legend
Segment 10 Alignment
NYSDEC Mapped Streams
NWI Wetlands & Streams
State Regulated Freshwater Wetlands
State Regulated Freshwater Wetlands Checkzone
HN-108
HN-114
HN-115
HS-1
HS-2
HS-5
HS-101
R3UBH
R4SBC
R5UBH
R1US3Q
R1UBV
R2USC
R2USA
R3USA
PEM1E
PEM1A
PEM1R
PEM1/5R
PEM1/5E
PEM1/FO1C
PEM1Fb
PFO1A
PFO1B
PFO1C
PFO1R
PFO1Rd
PFO1/4A
PFO1/EM1E
PFO4A
PFO4B
PFO4E
PSS1E
PSS1A
PSS1/EM1E
PSS1/EM5R
PUBH
PUBHh
PUBHx
PUBFx
PUBV
PEM5R
PEM5T
AA
BB
CC
Author: Cole Scrivner Date Saved: 9/21/2023
Page 7 of 7
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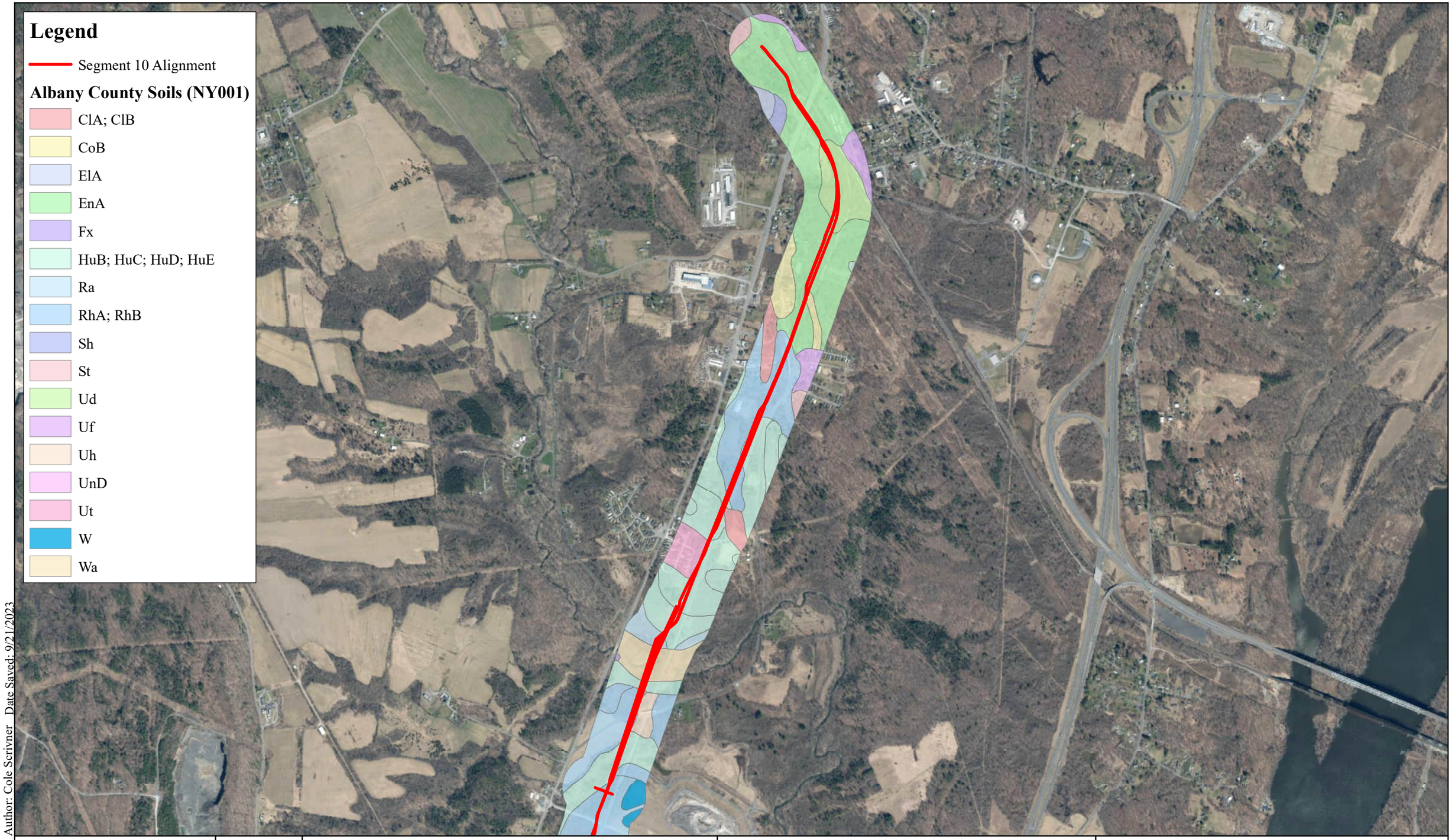
Champlain Hudson Power Express
Segment 10 Wetland & Stream Map
(NWI and NYSDEC)
Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community.
Wetland layers obtained from USFWS NWI and NYSDEC

ATTACHMENT 3
NRCS SOIL MAPS



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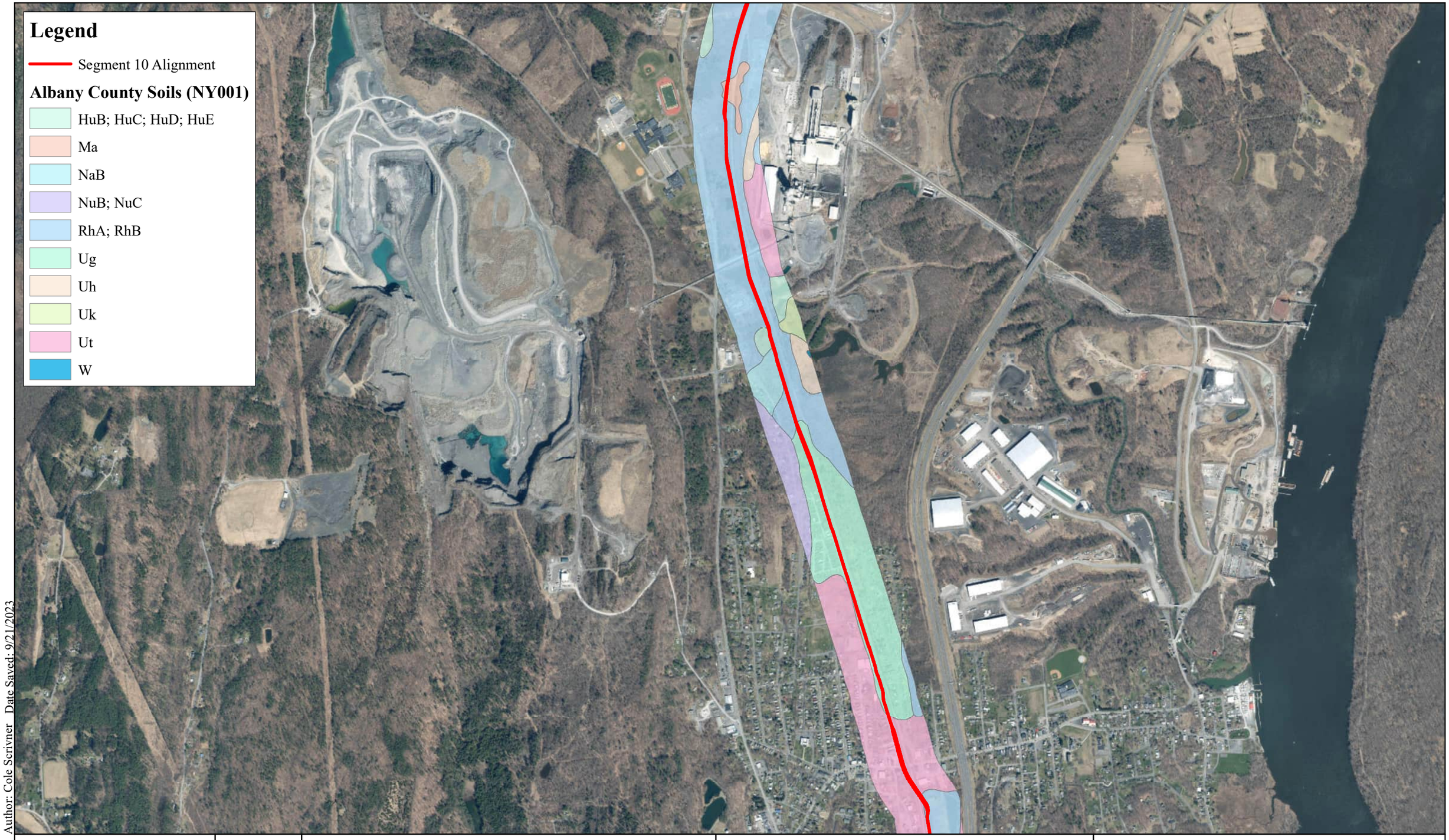
Page 1 of 9

0 0.5 1 Miles

Champlain Hudson Power Express
Segment 10 Package 6 NRCS Soil Map

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community. Soil data was obtained from the NRCS.



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Page 2 of 9

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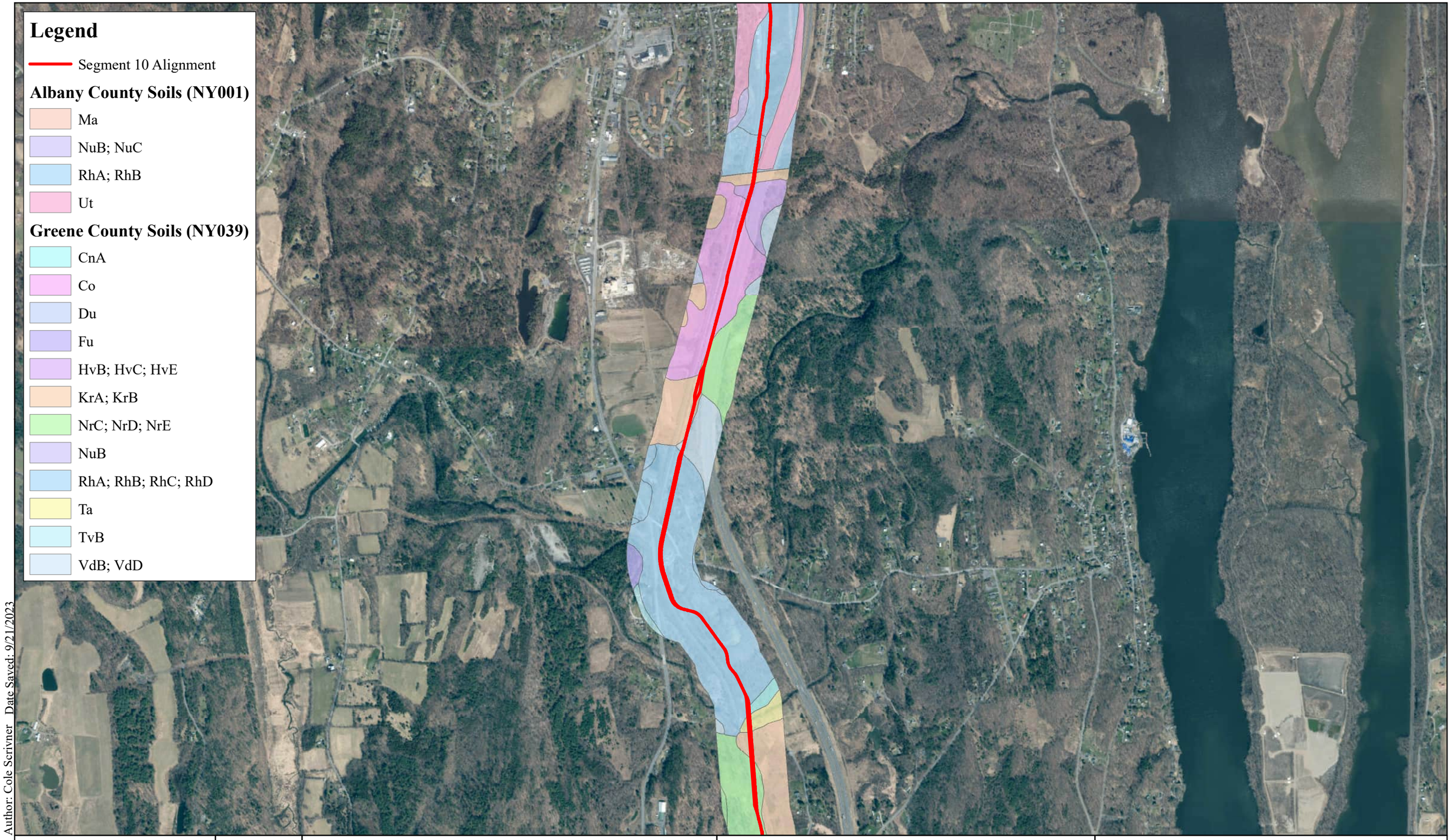
Champlain Hudson Power Express
Segment 10 Package 6 NRCS Soil Map

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community. Soil data was obtained from the NRCS.



Author: Cole Scrivner Date Saved: 9/21/2023

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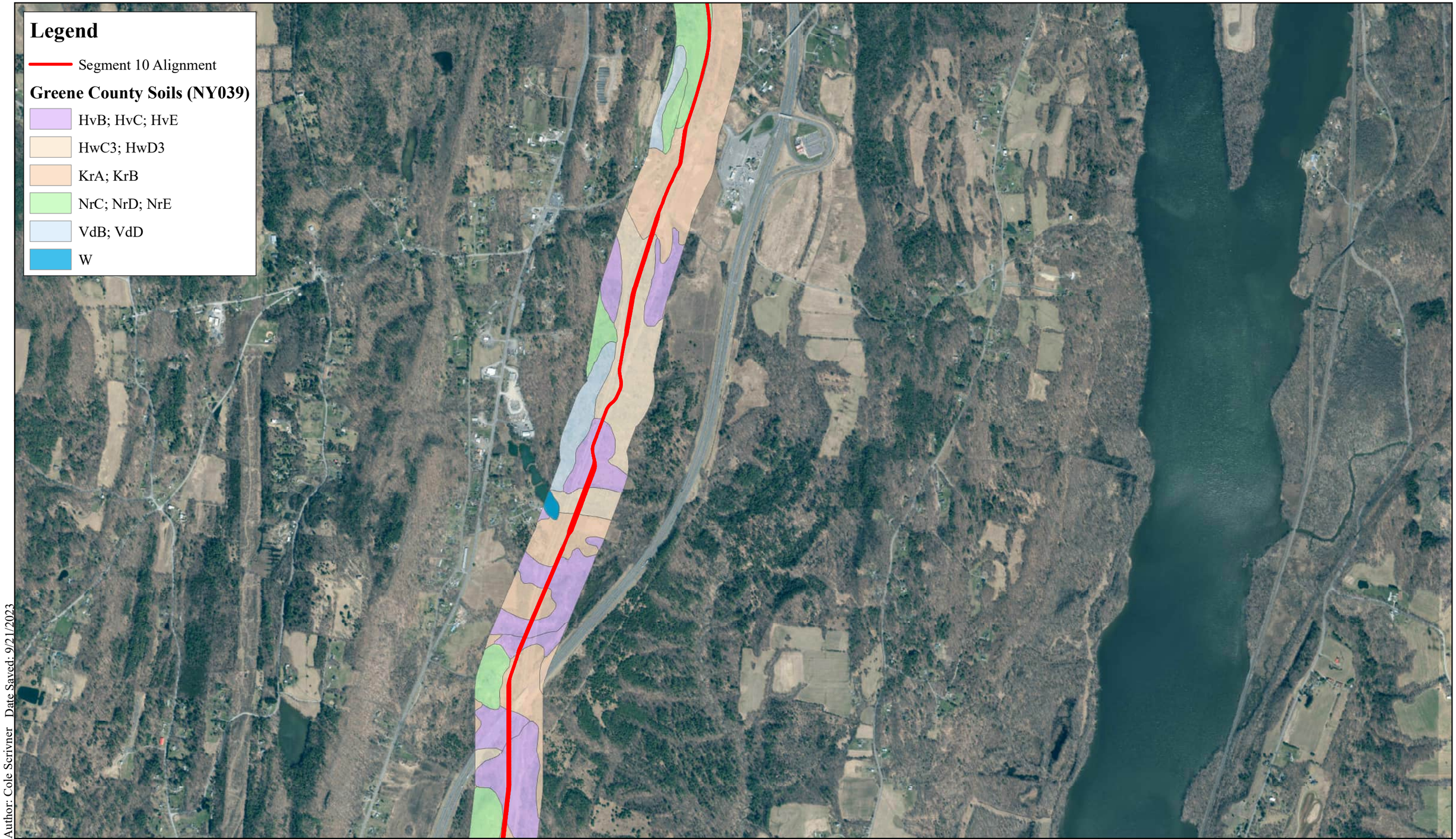
Champlain Hudson Power Express
Segment 10 Package 6 NRCS Soil Map

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community. Soil data was obtained from the NRCS.



Author: Cole Scrivner Date Saved: 9/21/2023

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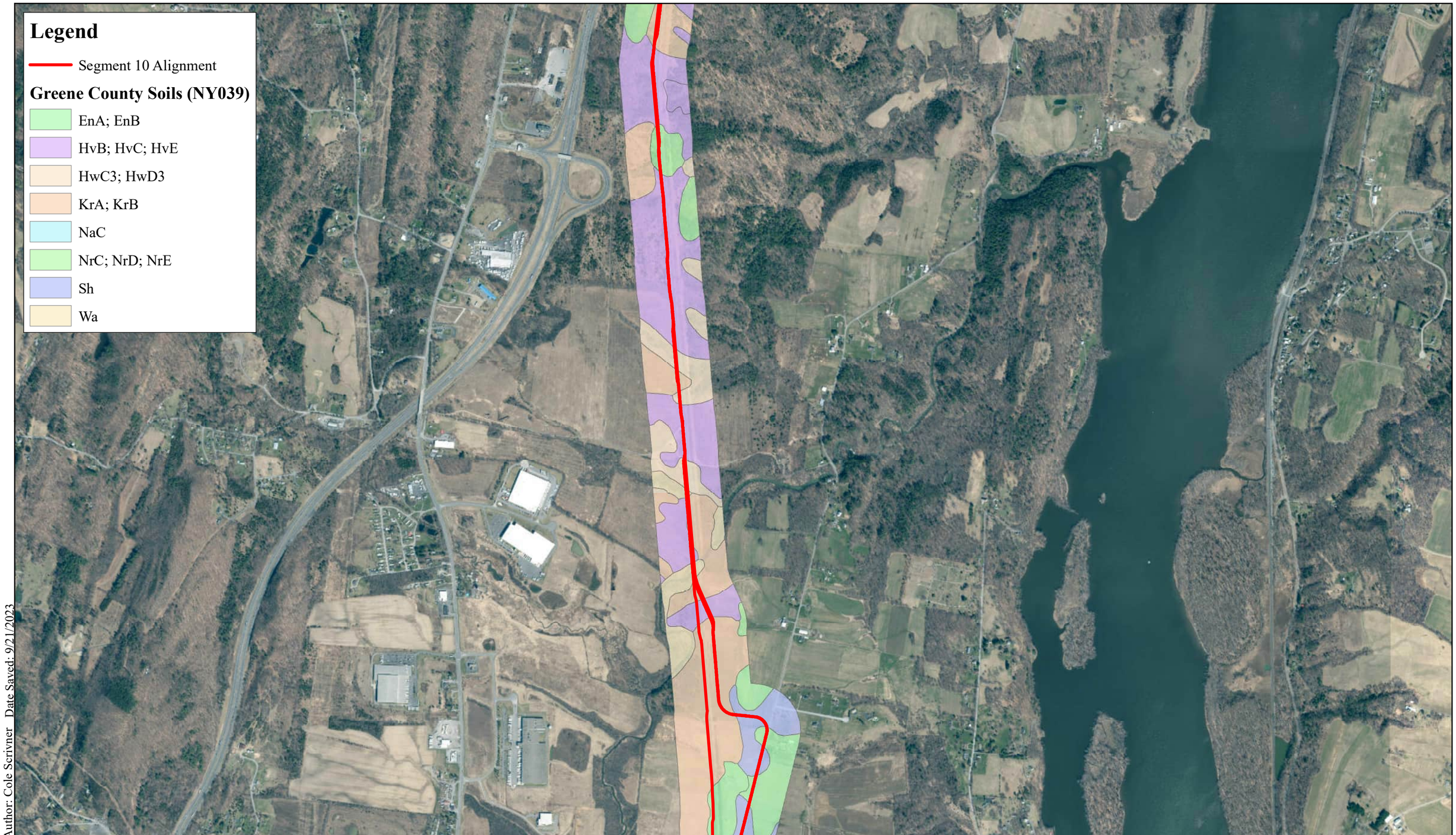
Champlain Hudson Power Express
Segment 10 Package 6 NRCS Soil Map

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community. Soil data was obtained from the NRCS.



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Page 5 of 9

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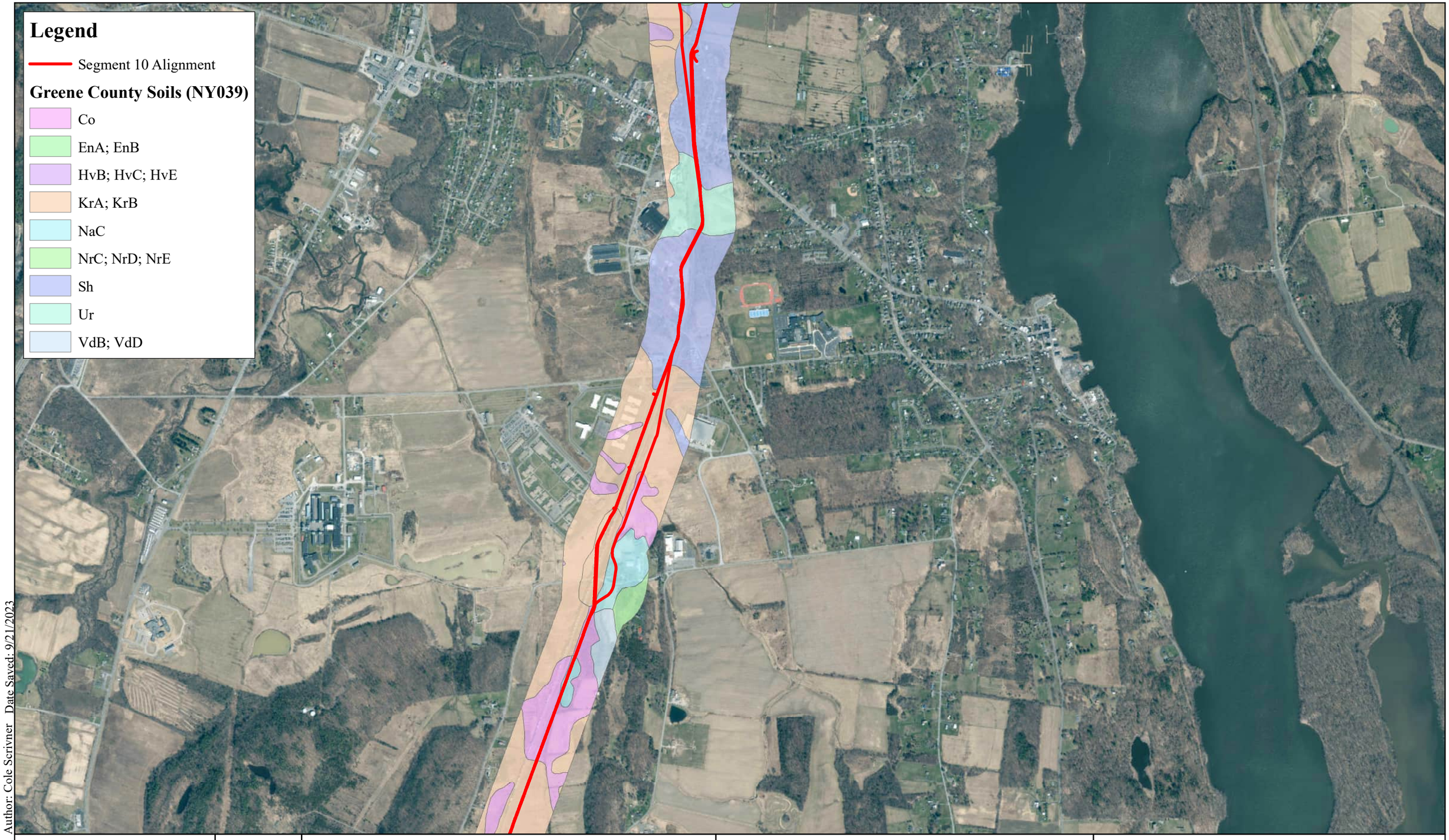
Champlain Hudson Power Express
Segment 10 Package 6 NRCS Soil Map

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community. Soil data was obtained from the NRCS.



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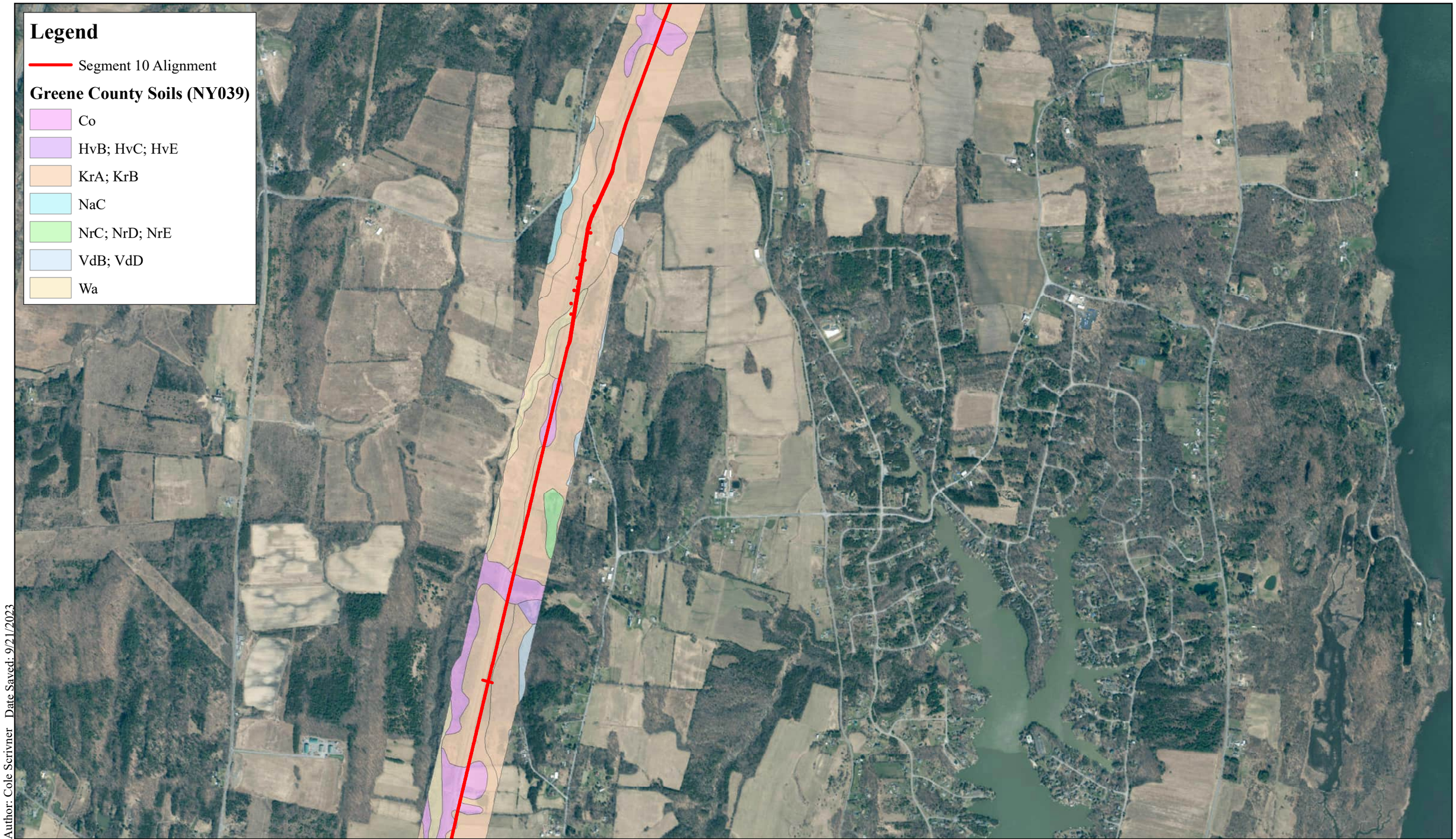
Champlain Hudson Power Express
Segment 10 Package 6 NRCS Soil Map

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community. Soil data was obtained from the NRCS.



Author: Cole Scrivner Date Saved: 9/21/2023

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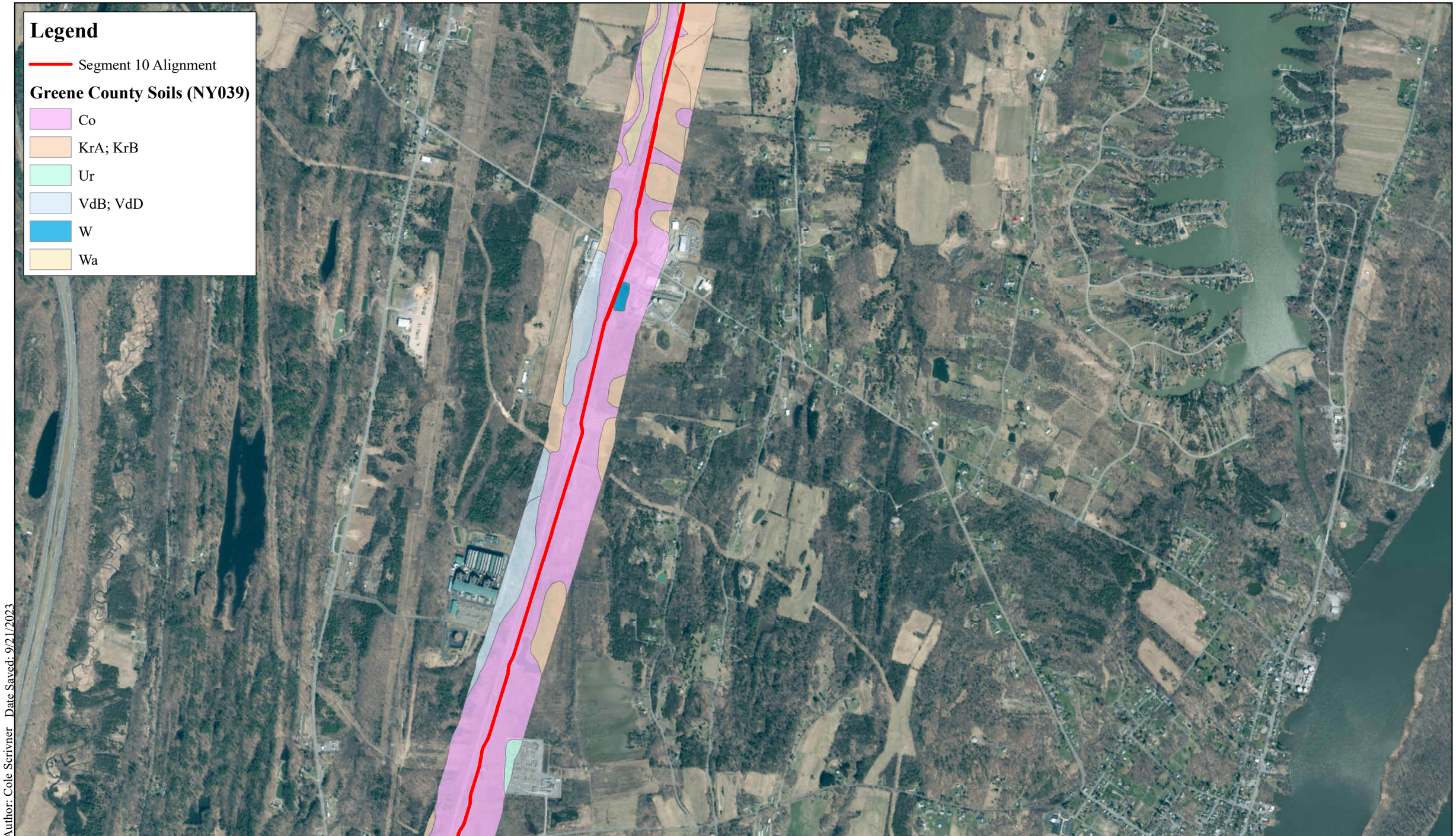
0 0.5 1 Miles

Champlain Hudson Power Express
Segment 10 Package 6 NRCS Soil Map

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community. Soil data was obtained from the NRCS.



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Champlain Hudson Power Express
Segment 10 Package 6 NRCS Soil Map

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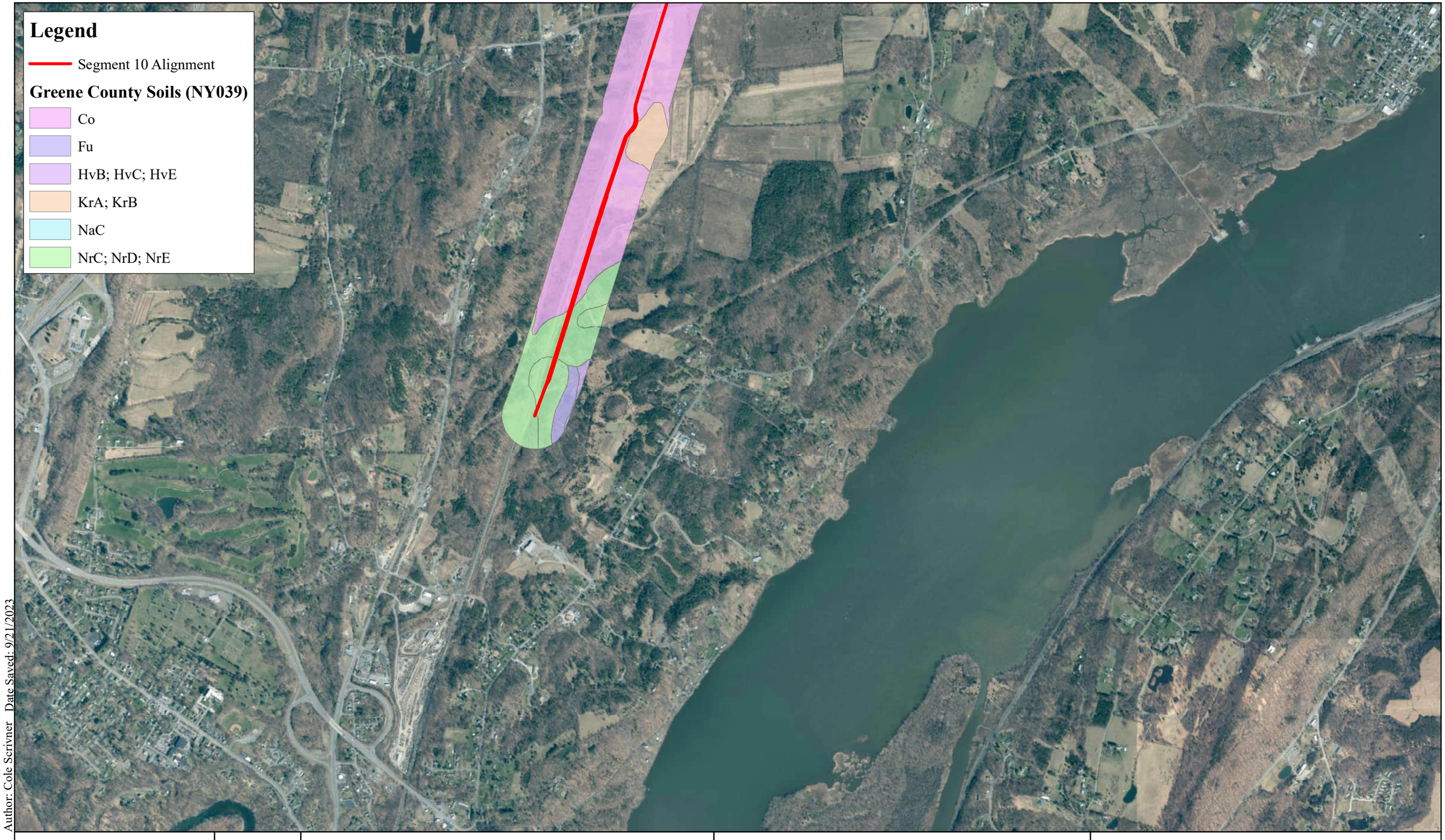

Author: Cole Scrivner Date Saved: 9/21/2023

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Champlain Hudson Power Express
Segment 10 Package 6 NRCS Soil Map

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community. Soil data was obtained from the NRCS.

Map Unit Description

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this report, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named, soils that are similar to the named components, and some minor components that differ in use and management from the major soils.

Most of the soils similar to the major components have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Some minor components, however, have properties and behavior characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. All the soils of a series have major horizons that are similar in composition, thickness, and arrangement. Soils of a given series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Additional information about the map units described in this report is available in other soil reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the soil reports define some of the properties included in the map unit descriptions.

Report—Map Unit Description

Albany County, New York

CIA—Claverack loamy fine sand, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 9pf9
Elevation: 600 to 1,800 feet

Mean annual precipitation: 36 to 41 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 100 to 170 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Claverack and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Claverack

Setting

Landform: Lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Sandy glaciolacustrine deposits, derived primarily from non-calcareous sandstone or granite, that overlie clayey glaciolacustrine deposits

Typical profile

H1 - 0 to 9 inches: loamy fine sand
H2 - 9 to 26 inches: loamy fine sand
H3 - 26 to 60 inches: silty clay

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 20 to 40 inches to strongly contrasting textural stratification
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 18 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Available water supply, 0 to 60 inches: Very low (about 1.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C/D
Ecological site: F101XY006NY - Moist Outwash
Hydric soil rating: No

Minor Components

Cosad

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

Elmridge
Percent of map unit: 2 percent
Hydric soil rating: No

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

Unnamed soils
Percent of map unit: 1 percent

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

CIB—Claverack loamy fine sand, 3 to 8 percent slopes

Map Unit Setting
National map unit symbol: 9pfb
Elevation: 600 to 1,800 feet
Mean annual precipitation: 36 to 41 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 100 to 170 days
Farmland classification: All areas are prime farmland

Map Unit Composition
Claverack and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Claverack

Setting
Landform: Lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Sandy glaciolacustrine deposits, derived primarily from non-calcareous sandstone or granite, that overlie clayey glaciolacustrine deposits

Typical profile
H1 - 0 to 9 inches: loamy fine sand
H2 - 9 to 26 inches: loamy fine sand
H3 - 26 to 60 inches: silty clay

Properties and qualities
Slope: 3 to 8 percent
Depth to restrictive feature: 20 to 40 inches to strongly contrasting textural stratification
Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 18 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Available water supply, 0 to 60 inches: Very low (about 1.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C/D
Ecological site: F101XY006NY - Moist Outwash
Hydric soil rating: No

Minor Components

Elnora

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

Colonie

Percent of map unit: 3 percent
Hydric soil rating: No

Elmridge

Percent of map unit: 2 percent
Hydric soil rating: No

Unnamed soils

Percent of map unit: 2 percent

Cosad

Percent of map unit: 2 percent
Hydric soil rating: No

Stafford

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

CoB—Colonie loamy fine sand, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9pfd
Elevation: 150 to 1,000 feet
Mean annual precipitation: 36 to 41 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 100 to 170 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Colonie and similar soils: 85 percent
Minor components: 15 percent

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

Description of Colonie

Setting

Landform: Deltas, beach ridges
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Sandy glaciofluvial or eolian deposits

Typical profile

H1 - 0 to 7 inches: loamy fine sand
H2 - 7 to 68 inches: loamy fine sand
H3 - 68 to 74 inches: loamy fine sand

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (1.98 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2s
Hydrologic Soil Group: A
Ecological site: F101XY009NY - Moist Lake Plain
Hydric soil rating: No

Minor Components

Unnamed soils

Percent of map unit: 7 percent

Elnora

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

Claverack

Percent of map unit: 3 percent
Hydric soil rating: No

ElA—Elmridge fine sandy loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 9pfl
Elevation: 80 to 330 feet

Mean annual precipitation: 36 to 41 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 100 to 170 days
Farmland classification: All areas are prime farmland

Map Unit Composition

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

Description of Elmridge

Setting

Landform: Lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Loamy over clayey glaciolacustrine or marine deposits

Typical profile

H1 - 0 to 9 inches: fine sandy loam
H2 - 9 to 20 inches: fine sandy loam
H3 - 20 to 60 inches: clay

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 18 to 40 inches to strongly contrasting textural stratification
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 18 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 1 percent
Available water supply, 0 to 60 inches: Low (about 3.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: B
Ecological site: F144AY018NY - Moist Lake Plain
Hydric soil rating: No

Minor Components

Shaker, somewhat poorly drained

Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: No

Unnamed soils
Percent of map unit: 4 percent

Claverack
Percent of map unit: 3 percent
Hydric soil rating: No

Shaker, poorly drained
Percent of map unit: 2 percent
Hydric soil rating: Yes

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

EnA—Elnora loamy fine sand, 0 to 3 percent slopes

Map Unit Setting
National map unit symbol: 9pfn
Elevation: 50 to 430 feet
Mean annual precipitation: 36 to 41 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 100 to 170 days
Farmland classification: All areas are prime farmland

Map Unit Composition
Elnora and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Elnora

Setting
Landform: Deltas, beach ridges
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Sandy glaciofluvial, eolian, or deltaic deposits

Typical profile
H1 - 0 to 11 inches: loamy fine sand
H2 - 11 to 27 inches: fine sand
H3 - 27 to 65 inches: loamy fine sand

Properties and qualities
Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: About 18 to 24 inches

Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: A/D
Ecological site: F101XY006NY - Moist Outwash
Hydric soil rating: No

Minor Components

Stafford

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

Colonie

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

Unnamed soils

Percent of map unit: 4 percent

Granby

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

Fx—Fluvaquents-Udifluvents complex, frequently flooded

Map Unit Setting

National map unit symbol: 9pfw
Elevation: 100 to 3,000 feet
Mean annual precipitation: 36 to 41 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 100 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

Fluvaquents, frequently flooded, and similar soils: 45 percent
Udifluvents, frequently flooded, and similar soils: 35 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Fluvaquents, Frequently Flooded

Setting

Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave

Parent material: Alluvium with highly variable texture

Typical profile

H1 - 0 to 5 inches: gravelly silt loam
H2 - 5 to 70 inches: very gravelly sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to very high (0.06 to 19.98 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: NoneFrequent
Frequency of ponding: Frequent
Calcium carbonate, maximum content: 15 percent
Available water supply, 0 to 60 inches: Moderate (about 6.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: A/D
Ecological site: F101XY003NY - Low Floodplain Depression
Hydric soil rating: Yes

Description of Udifluvents, Frequently Flooded

Setting

Landform: Flood plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Talf
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Alluvium with a wide range of texture

Typical profile

H1 - 0 to 4 inches: loam
H2 - 4 to 70 inches: gravelly loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.06 to 5.95 in/hr)
Depth to water table: About 24 to 72 inches
Frequency of flooding: FrequentNone
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Available water supply, 0 to 60 inches: Moderate (about 6.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: A
Ecological site: F101XY002NY - Low Floodplain
Hydric soil rating: No

Minor Components

Unnamed soils
Percent of map unit: 10 percent

Medihemists
Percent of map unit: 5 percent
Landform: Marshes, swamps
Hydric soil rating: Yes

Hydraquents
Percent of map unit: 4 percent
Landform: Marshes
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Unnamed soils, shallow
Percent of map unit: 1 percent

HuB—Hudson silt loam, 3 to 8 percent slopes

Map Unit Setting
National map unit symbol: 9pg5
Elevation: 300 to 1,800 feet
Mean annual precipitation: 36 to 41 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 100 to 170 days
Farmland classification: All areas are prime farmland

Map Unit Composition
Hudson and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hudson

Setting
Landform: Lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Clayey and silty glaciolacustrine deposits

Typical profile

H1 - 0 to 11 inches: silt loam
H2 - 11 to 16 inches: silty clay loam
H3 - 16 to 31 inches: silty clay
H4 - 31 to 60 inches: clay

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 18 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Available water supply, 0 to 60 inches: High (about 9.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C/D
Ecological site: F144AY018NY - Moist Lake Plain
Hydric soil rating: No

Minor Components

Rhinebeck

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

Unnamed soils

Percent of map unit: 2 percent

Madalin

Percent of map unit: 2 percent
Landform: Depressions
Hydric soil rating: Yes

Claverack

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

HuC—Hudson silt loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 9pg6
Elevation: 300 to 1,800 feet
Mean annual precipitation: 36 to 41 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 100 to 170 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Hudson and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hudson

Setting

Landform: Lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Clayey and silty glaciolacustrine deposits

Typical profile

H1 - 0 to 11 inches: silt loam
H2 - 11 to 16 inches: silty clay loam
H3 - 16 to 31 inches: silty clay
H4 - 31 to 60 inches: clay

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 18 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Available water supply, 0 to 60 inches: High (about 9.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C/D
Ecological site: F144AY018NY - Moist Lake Plain
Hydric soil rating: No

Minor Components

Rhinebeck

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

Unnamed soils

Percent of map unit: 4 percent

Madalin

Percent of map unit: 2 percent
Landform: Depressions
Hydric soil rating: Yes

HuD—Hudson silt loam, hilly

Map Unit Setting

National map unit symbol: 9pg7
Elevation: 300 to 1,800 feet
Mean annual precipitation: 36 to 41 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 100 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

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

Description of Hudson, Hilly

Setting

Landform: Lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Riser
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Clayey and silty glaciolacustrine deposits

Typical profile

H1 - 0 to 11 inches: silt loam
H2 - 11 to 16 inches: silty clay loam
H3 - 16 to 31 inches: silty clay
H4 - 31 to 60 inches: clay

Properties and qualities

Slope: 15 to 25 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 18 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Available water supply, 0 to 60 inches: High (about 9.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C/D
Ecological site: F144AY018NY - Moist Lake Plain
Hydric soil rating: No

Minor Components

Unnamed soils
Percent of map unit: 6 percent

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

Unnamed soils, eroded
Percent of map unit: 4 percent

HuE—Hudson silt loam, 25 to 45 percent slopes

Map Unit Setting
National map unit symbol: 9pg8
Elevation: 300 to 1,800 feet
Mean annual precipitation: 36 to 41 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 100 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition
Hudson and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hudson

Setting
Landform: Lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Riser
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Clayey and silty glaciolacustrine deposits

Typical profile
H1 - 0 to 11 inches: silt loam
H2 - 11 to 16 inches: silty clay loam
H3 - 16 to 31 inches: silty clay
H4 - 31 to 60 inches: clay

Properties and qualities
Slope: 25 to 45 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 18 to 24 inches
Frequency of flooding: None
Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent
Available water supply, 0 to 60 inches: High (about 9.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C/D
Ecological site: F144AY018NY - Moist Lake Plain
Hydric soil rating: No

Minor Components

Unadilla

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

Unnamed soils

Percent of map unit: 5 percent

Colonie

Percent of map unit: 3 percent
Hydric soil rating: No

Udifluvents

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

Fluvaquents

Percent of map unit: 1 percent
Landform: Flood plains
Hydric soil rating: Yes

Ma—Madalin silt loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2spk0
Elevation: 230 to 930 feet
Mean annual precipitation: 31 to 57 inches
Mean annual air temperature: 41 to 50 degrees F
Frost-free period: 100 to 190 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

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

Description of Madalin

Setting

Landform: Depressions
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread

Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Brown clayey glaciolacustrine deposits derived from calcareous shale

Typical profile

Ap - 0 to 8 inches: silt loam
Btg1 - 8 to 16 inches: silty clay loam
Btg2 - 16 to 25 inches: silty clay
Btg3 - 25 to 33 inches: silty clay
C - 33 to 79 inches: stratified silt to clay

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.20 in/hr)
Depth to water table: About 0 to 8 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 25 percent
Available water supply, 0 to 60 inches: High (about 9.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: C/D
Ecological site: F101XY010NY - Wet Lake Plain Depression
Hydric soil rating: Yes

Minor Components

Rhinebeck

Percent of map unit: 5 percent
Landform: Lake plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

Canandaigua

Percent of map unit: 4 percent
Landform: Depressions
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Fonda

Percent of map unit: 4 percent

Landform: Depressions
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Cosad

Percent of map unit: 2 percent
Landform: Lake plains
Landform position (two-dimensional): Summit, shoulder
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

NaB—Nassau channery silt loam, undulating

Map Unit Setting

National map unit symbol: 9pgy
Elevation: 600 to 1,800 feet
Mean annual precipitation: 36 to 41 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 100 to 170 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Nassau, undulating, and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Nassau, Undulating

Setting

Landform: Till plains, ridges, benches
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Channery loamy till derived mainly from local slate or shale

Typical profile

H1 - 0 to 8 inches: channery silt loam
H2 - 8 to 16 inches: very channery silt loam
H3 - 16 to 20 inches: unweathered bedrock

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Drainage class: Somewhat excessively drained

Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 1.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: D
Ecological site: F144AY033MA - Shallow Dry Till Uplands
Hydric soil rating: No

Minor Components

Manlius

Percent of map unit: 8 percent
Hydric soil rating: No

Greene

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

Unnamed soils

Percent of map unit: 3 percent

Hornell

Percent of map unit: 2 percent
Hydric soil rating: No

Lordstown

Percent of map unit: 2 percent
Hydric soil rating: No

Rock outcrop

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

NuB—Nunda silt loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9ph2
Elevation: 400 to 1,600 feet
Mean annual precipitation: 36 to 41 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 100 to 170 days
Farmland classification: All areas are prime farmland

Map Unit Composition

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

Description of Nunda

Setting

Landform: Till plains, hills, drumlinoid ridges
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Crest
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: A silty mantle over loamy till derived from calcareous shale and siltstone

Typical profile

H1 - 0 to 10 inches: silt loam
H2 - 10 to 20 inches: silt loam
2B/E - 20 to 28 inches: silt loam
2Bt - 28 to 44 inches: silty clay loam
2C - 44 to 64 inches: clay loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.03 to 0.20 in/hr)
Depth to water table: About 18 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Available water supply, 0 to 60 inches: Moderate (about 7.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C/D
Ecological site: F101XY013NY - Moist Till
Hydric soil rating: No

Minor Components

Unnamed soils

Percent of map unit: 5 percent

Burdett

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

Angola

Percent of map unit: 3 percent
Hydric soil rating: No

Ilion

Percent of map unit: 2 percent
Landform: Depressions

Hydric soil rating: Yes

NuC—Nunda silt loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 9ph3
Elevation: 400 to 1,600 feet
Mean annual precipitation: 36 to 41 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 100 to 170 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Nunda and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Nunda

Setting

Landform: Till plains, hills, drumlinoid ridges
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Crest
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: A silty mantle over loamy till derived from calcareous shale and siltstone

Typical profile

H1 - 0 to 10 inches: silt loam
H2 - 10 to 20 inches: silt loam
2B/E - 20 to 28 inches: silt loam
2Bt - 28 to 44 inches: silty clay loam
2C - 44 to 64 inches: clay loam

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.03 to 0.20 in/hr)
Depth to water table: About 18 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Available water supply, 0 to 60 inches: Moderate (about 7.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C/D

Ecological site: F101XY013NY - Moist Till
Hydric soil rating: No

Minor Components

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

Angola
Percent of map unit: 3 percent
Hydric soil rating: No

Unnamed soils
Percent of map unit: 1 percent

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

Ra—Raynham very fine sandy loam

Map Unit Setting
National map unit symbol: 9phg
Elevation: 50 to 500 feet
Mean annual precipitation: 36 to 41 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 100 to 170 days
Farmland classification: Prime farmland if drained

Map Unit Composition
Raynham, poorly drained, and similar soils: 50 percent
Raynham, somewhat poorly drained, and similar soils: 30 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Raynham, Poorly Drained

Setting
Landform: Depressions
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Glaciolacustrine, eolian, or old alluvial deposits, comprised mainly of silt and very fine sand

Typical profile
H1 - 0 to 11 inches: very fine sandy loam
H2 - 11 to 24 inches: very fine sandy loam
H3 - 24 to 60 inches: very fine sandy loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Available water supply, 0 to 60 inches: High (about 11.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Ecological site: F101XY010NY - Wet Lake Plain Depression
Hydric soil rating: Yes

Description of Raynham, Somewhat Poorly Drained

Setting

Landform: Depressions
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Glaciolacustrine, eolian, or old alluvial deposits, comprised mainly of silt and very fine sand

Typical profile

H1 - 0 to 11 inches: very fine sandy loam
H2 - 11 to 24 inches: very fine sandy loam
H3 - 24 to 60 inches: very fine sandy loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 6 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Available water supply, 0 to 60 inches: High (about 11.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Ecological site: F101XY010NY - Wet Lake Plain Depression
Hydric soil rating: No

Minor Components

Unnamed soils, somewhat poorly drained
Percent of map unit: 8 percent

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

Birdsall
Percent of map unit: 2 percent
Landform: Depressions
Hydric soil rating: Yes

Unnamed soils
Percent of map unit: 2 percent

Shaker
Percent of map unit: 2 percent
Landform: Depressions
Hydric soil rating: Yes

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

RhA—Rhinebeck silty clay loam, 0 to 3 percent slopes

Map Unit Setting
National map unit symbol: 9phh
Elevation: 80 to 1,000 feet
Mean annual precipitation: 36 to 41 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 100 to 170 days
Farmland classification: Prime farmland if drained

Map Unit Composition
Rhinebeck and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Rhinebeck

Setting
Landform: Lake plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Clayey and silty glaciolacustrine deposits

Typical profile
H1 - 0 to 7 inches: silty clay loam

H2 - 7 to 34 inches: silty clay
H3 - 34 to 64 inches: silty clay

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Available water supply, 0 to 60 inches: Moderate (about 8.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Ecological site: F144AY018NY - Moist Lake Plain
Hydric soil rating: No

Minor Components

Madalin

Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

Raynham

Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

RhB—Rhinebeck silty clay loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9phj
Elevation: 80 to 1,000 feet
Mean annual precipitation: 36 to 41 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 100 to 170 days
Farmland classification: Prime farmland if drained

Map Unit Composition

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

Description of Rhinebeck

Setting

Landform: Lake plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Clayey and silty glaciolacustrine deposits

Typical profile

H1 - 0 to 7 inches: silty clay loam
H2 - 7 to 34 inches: silty clay
H3 - 34 to 64 inches: silty clay

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Available water supply, 0 to 60 inches: Moderate (about 8.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Ecological site: F144AY018NY - Moist Lake Plain
Hydric soil rating: No

Minor Components

Raynham

Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

Madalin

Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

Claverack

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

Sh—Shaker fine sandy loam

Map Unit Setting

National map unit symbol: 9phq
Elevation: 130 to 1,310 feet
Mean annual precipitation: 36 to 41 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 100 to 170 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Shaker, poorly drained, and similar soils: 50 percent
Shaker, somewhat poorly drained, and similar soils: 30 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Shaker, Poorly Drained

Setting

Landform: Depressions
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Loamy over clayey glaciolacustrine or glaciomarine deposits

Typical profile

H1 - 0 to 11 inches: fine sandy loam
H2 - 11 to 31 inches: fine sandy loam
H3 - 31 to 62 inches: clay

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 18 to 40 inches to strongly contrasting textural stratification
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 1 percent
Available water supply, 0 to 60 inches: Low (about 5.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Ecological site: F101XY010NY - Wet Lake Plain Depression
Hydric soil rating: Yes

Description of Shaker, Somewhat Poorly Drained

Setting

Landform: Depressions
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Loamy over clayey glaciolacustrine or glaciomarine deposits

Typical profile

H1 - 0 to 11 inches: fine sandy loam
H2 - 11 to 31 inches: fine sandy loam
H3 - 31 to 62 inches: clay

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 18 to 40 inches to strongly contrasting textural stratification
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 1 percent
Available water supply, 0 to 60 inches: Low (about 5.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Ecological site: F101XY010NY - Wet Lake Plain Depression
Hydric soil rating: No

Minor Components

Cosad

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

Elmridge

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

Claverack

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

Unnamed soils

Percent of map unit: 5 percent

St—Stafford loamy fine sand

Map Unit Setting

National map unit symbol: 9phr
Elevation: 130 to 430 feet
Mean annual precipitation: 36 to 41 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 100 to 170 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Stafford and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Stafford

Setting

Landform: Beach ridges, deltas
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Sandy glaciofluvial or glaciolacustrine deposits

Typical profile

H1 - 0 to 12 inches: loamy fine sand
H2 - 12 to 30 inches: loamy fine sand
H3 - 30 to 60 inches: fine sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (1.98 to 19.98 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: A/D
Ecological site: F101XY006NY - Moist Outwash
Hydric soil rating: No

Minor Components

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

Granby
Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

Unnamed soils
Percent of map unit: 5 percent

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

Ud—Udipsamments, smoothed

Map Unit Setting
National map unit symbol: 9phy
Elevation: 100 to 410 feet
Mean annual precipitation: 36 to 41 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 100 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition
Udipsamments, smoothed, and similar soils: 70 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Udipsamments, Smoothed

Typical profile
H1 - 0 to 70 inches: coarse sand

Properties and qualities
Slope: 0 to 45 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very high (19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.6 inches)

Minor Components

Unnamed soils
Percent of map unit: 10 percent

Urban land
Percent of map unit: 10 percent
Hydric soil rating: Unranked

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

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

Uf—Udipsamments-Urban land complex

Map Unit Setting
National map unit symbol: 9pj0
Elevation: 70 to 440 feet
Mean annual precipitation: 36 to 41 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 100 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition
Udipsamments and similar soils: 50 percent
Urban land: 30 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Udipsamments

Typical profile
H1 - 0 to 70 inches: coarse sand

Properties and qualities
Slope: 0 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Very high (19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.6 inches)

Description of Urban Land

Typical profile

H1 - 0 to 6 inches: variable

Minor Components

Unnamed soils

Percent of map unit: 10 percent

Psammaquents

Percent of map unit: 10 percent
Landform: Depressions
Hydric soil rating: Yes

Ug—Udorthents, loamy

Map Unit Setting

National map unit symbol: 9pj1
Elevation: 0 to 1,640 feet
Mean annual precipitation: 36 to 41 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 100 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

Udorthents, loamy, and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Udorthents, Loamy

Typical profile

H1 - 0 to 4 inches: loam
H2 - 4 to 70 inches: channery loam

Properties and qualities

Slope: 0 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.06 to 5.95 in/hr)
Depth to water table: About 36 to 72 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Available water supply, 0 to 60 inches: Low (about 5.5 inches)

Minor Components

Unnamed soils

Percent of map unit: 10 percent

Uh—Udorthents, clayey-Urban land complex

Map Unit Setting

National map unit symbol: 9pj2
Elevation: 20 to 310 feet
Mean annual precipitation: 36 to 41 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 100 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

Udorthents, clayey, and similar soils: 40 percent
Urban land: 30 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Udorthents, Clayey

Typical profile

H1 - 0 to 18 inches: silty clay
H2 - 18 to 72 inches: stratified silt loam to clay

Properties and qualities

Slope: 0 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 8.2 inches)

Description of Urban Land

Typical profile

H1 - 0 to 6 inches: variable

Minor Components

Scio

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

Hudson

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

Rhinebeck

Percent of map unit: 7 percent
Hydric soil rating: No

Madalin

Percent of map unit: 3 percent
Landform: Depressions
Hydric soil rating: Yes

Uk—Udorthents, loamy-Urban land complex

Map Unit Setting

National map unit symbol: 9pj3
Elevation: 0 to 1,440 feet
Mean annual precipitation: 36 to 41 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 100 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

Udorthents, loamy, and similar soils: 40 percent
Urban land: 30 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Udorthents, Loamy

Typical profile

H1 - 0 to 4 inches: loam
H2 - 4 to 70 inches: channery loam

Properties and qualities

Slope: 0 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.06 to 5.95 in/hr)
Depth to water table: About 36 to 72 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Available water supply, 0 to 60 inches: Low (about 5.5 inches)

Minor Components

Nunda

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

Valois

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

Riverhead

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

Ilion

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

UnD—Unadilla silt loam, 15 to 25 percent slopes

Map Unit Setting

National map unit symbol: 9pj7
Elevation: 600 to 1,800 feet
Mean annual precipitation: 36 to 41 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 100 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

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

Description of Unadilla

Setting

Landform: Lake plains
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Riser
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Glaciolacustrine deposits, eolian deposits, or old alluvium, comprised mainly of silt and very fine sand

Typical profile

H1 - 0 to 9 inches: silt loam
H2 - 9 to 64 inches: silt loam

Properties and qualities

Slope: 15 to 25 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 11.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: B
Ecological site: F144AY024NY - Well Drained Eolian Outwash

Hydric soil rating: No

Minor Components

Hudson
Percent of map unit: 8 percent
Hydric soil rating: No

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

Riverhead
Percent of map unit: 3 percent
Hydric soil rating: No

Ut—Urban land-Udorthents complex, 0 to 8 percent slopes

Map Unit Setting
National map unit symbol: 9pjb
Elevation: 0 to 460 feet
Mean annual precipitation: 36 to 41 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 100 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition
Urban land: 50 percent
Udorthents and similar soils: 30 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Urban Land

Typical profile
H1 - 0 to 6 inches: variable

Description of Udorthents

Typical profile
H1 - 0 to 4 inches: channery loam
H2 - 4 to 70 inches: channery loam

Properties and qualities
Slope: 0 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.06 to 5.95 in/hr)
Depth to water table: About 36 to 72 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent

Available water supply, 0 to 60 inches: Low (about 5.4 inches)

Minor Components

Unnamed soils, poorly
Percent of map unit: 10 percent

Unnamed soils, moderately well
Percent of map unit: 10 percent

W—Water

Map Unit Composition
Water: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Wa—Wakeland silt loam

Map Unit Setting
National map unit symbol: 9pjh
Elevation: 340 to 950 feet
Mean annual precipitation: 36 to 41 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 100 to 170 days
Farmland classification: Prime farmland if drained

Map Unit Composition
Wakeland and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Wakeland

Setting
Landform: Flood plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Talf
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Silty alluvium

Typical profile
H1 - 0 to 9 inches: silt loam
H2 - 9 to 62 inches: silt loam

Properties and qualities
Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)

Depth to water table: About 12 to 36 inches
Frequency of flooding: OccasionalNone
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very high (about 12.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C
Ecological site: F144AY015NY - Wet Silty Low Floodplain
Hydric soil rating: No

Minor Components

Wayland

Percent of map unit: 5 percent
Landform: Flood plains
Hydric soil rating: Yes

Teel

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

Raynham

Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

Unnamed soils

Percent of map unit: 3 percent

Rhinebeck

Percent of map unit: 2 percent
Hydric soil rating: No

Greene County, New York

CnA—Chenango gravelly loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 9sfy
Elevation: 600 to 1,800 feet
Mean annual precipitation: 36 to 44 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 135 to 170 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Chenango and similar soils: 75 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Chenango

Setting

Landform: Valley trains, terraces
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Gravelly loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits, derived mainly from sandstone, shale, and siltstone

Typical profile

H1 - 0 to 4 inches: gravelly loam
H2 - 4 to 11 inches: gravelly loam
H3 - 11 to 26 inches: very gravelly loam
H4 - 26 to 60 inches: stratified sand to gravel

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 1 percent
Available water supply, 0 to 60 inches: Low (about 3.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2s
Hydrologic Soil Group: A
Ecological site: F140XY021NY - Dry Outwash
Hydric soil rating: No

Minor Components

Tunkhannock

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

Valois

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

Unnamed soils

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

Tioga

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

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

Co—Covington and Madalin soils

Map Unit Setting
National map unit symbol: 9sg1
Elevation: 50 to 1,970 feet
Mean annual precipitation: 36 to 44 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 135 to 170 days
Farmland classification: Farmland of statewide importance

Map Unit Composition
Covington and similar soils: 45 percent
Madalin and similar soils: 30 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Covington

Setting
Landform: Depressions
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Calcareous clayey glaciolacustrine deposits or glaciomarine deposits

Typical profile
H1 - 0 to 7 inches: silty clay
H2 - 7 to 28 inches: clay
H3 - 28 to 60 inches: silty clay

Properties and qualities
Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Available water supply, 0 to 60 inches: Low (about 5.9 inches)

Interpretive groups
Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 5w

Hydrologic Soil Group: D
Ecological site: F142XB007VT - Wet Clayplain Depression
Hydric soil rating: Yes

Description of Madalin

Setting

Landform: Depressions
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Clayey and silty glaciolacustrine deposits

Typical profile

H1 - 0 to 9 inches: silt loam
H2 - 9 to 30 inches: silty clay
H3 - 30 to 60 inches: silty clay

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 0 to 6 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Calcium carbonate, maximum content: 15 percent
Available water supply, 0 to 60 inches: Moderate (about 8.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: C/D
Ecological site: F144AY019NH - Wet Lake Plain
Hydric soil rating: Yes

Minor Components

Vergennes

Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: No

Rhinebeck

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

Hudson

Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: No

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

Canandaigua
Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

Du—Dumps, landfill

Map Unit Setting
National map unit symbol: 9sg2
Elevation: 100 to 1,600 feet
Mean annual precipitation: 36 to 44 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 135 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition
Dumps, landfill: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Dumps, Landfill

Typical profile
H1 - 0 to 24 inches: silt loam
H2 - 24 to 70 inches: variable

Interpretive groups
Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydric soil rating: No

Minor Components

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

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

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

Canandaigua
Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

EnA—Elmridge very fine sandy loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 9sg9
Elevation: 330 to 2,460 feet
Mean annual precipitation: 36 to 44 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 135 to 170 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Elmridge and similar soils: 75 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Elmridge

Setting

Landform: Lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Loamy over clayey glaciolacustrine or marine deposits

Typical profile

H1 - 0 to 9 inches: very fine sandy loam
H2 - 9 to 28 inches: fine sandy loam
H3 - 28 to 60 inches: silty clay

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 18 to 40 inches to strongly contrasting textural stratification
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 16 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 1 percent
Available water supply, 0 to 60 inches: Low (about 4.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C/D
Ecological site: F144AY018NY - Moist Lake Plain
Hydric soil rating: No

Minor Components

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

Shaker
Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

Madalin
Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

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

Covington
Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

EnB—Elmridge very fine sandy loam, 3 to 8 percent slopes

Map Unit Setting
National map unit symbol: 9sgb
Elevation: 330 to 2,460 feet
Mean annual precipitation: 36 to 44 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 135 to 170 days
Farmland classification: All areas are prime farmland

Map Unit Composition
Elmridge and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Elmridge

Setting
Landform: Lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Loamy over clayey glaciolacustrine or marine deposits

Typical profile

H1 - 0 to 9 inches: very fine sandy loam
H2 - 9 to 28 inches: fine sandy loam
H3 - 28 to 60 inches: silty clay

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: 18 to 40 inches to strongly contrasting textural stratification
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 16 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 1 percent
Available water supply, 0 to 60 inches: Low (about 4.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C/D
Ecological site: F144AY018NY - Moist Lake Plain
Hydric soil rating: No

Minor Components

Shaker

Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

Madalin

Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

Nassau

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

Rhinebeck

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

Fu—Fluvaquents-Udifluvents complex, frequently flooded

Map Unit Setting

National map unit symbol: 9sgg
Elevation: 100 to 3,000 feet
Mean annual precipitation: 36 to 44 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 135 to 170 days

Farmland classification: Not prime farmland

Map Unit Composition

Fluvaquents and similar soils: 45 percent
Udifluvents and similar soils: 30 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Fluvaquents

Setting

Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Alluvium with highly variable texture

Typical profile

H1 - 0 to 5 inches: gravelly silt loam
H2 - 5 to 70 inches: gravelly silt loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to very high (0.06 to 19.98 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: FrequentNone
Frequency of ponding: Frequent
Calcium carbonate, maximum content: 15 percent
Available water supply, 0 to 60 inches: Moderate (about 6.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: C/D
Ecological site: F140XY015NY - Wet Low Floodplain
Hydric soil rating: Yes

Description of Udifluvents

Setting

Landform: Flood plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Rise
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Alluvium with a wide range of texture

Typical profile

H1 - 0 to 4 inches: gravelly loam
H2 - 4 to 70 inches: gravelly sandy loam

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.06 to 5.95 in/hr)
Depth to water table: About 24 to 72 inches
Frequency of flooding: FrequentNone
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Available water supply, 0 to 60 inches: Moderate (about 6.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: A
Ecological site: F140XY014NY - Low Floodplain
Hydric soil rating: No

Minor Components

Ochrepts

Percent of map unit: 5 percent
Landform: Flood plains
Hydric soil rating: Yes

Medisaprists

Percent of map unit: 5 percent
Landform: Marshes, swamps
Hydric soil rating: Yes

Carlisle

Percent of map unit: 5 percent
Landform: Marshes, swamps
Hydric soil rating: Yes

Basher

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

Wayland

Percent of map unit: 5 percent
Landform: Flood plains
Hydric soil rating: Yes

HvB—Hudson and Vergennes soils, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9sgr

Elevation: 50 to 1,800 feet
Mean annual precipitation: 36 to 44 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 135 to 170 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Hudson and similar soils: 40 percent
Vergennes and similar soils: 35 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hudson

Setting

Landform: Lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Clayey and silty glaciolacustrine deposits

Typical profile

H1 - 0 to 4 inches: silt loam
H2 - 4 to 13 inches: silt loam
H3 - 13 to 30 inches: silty clay loam
H4 - 30 to 60 inches: silty clay

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 18 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 20 percent
Available water supply, 0 to 60 inches: High (about 9.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C/D
Ecological site: F144AY018NY - Moist Lake Plain
Hydric soil rating: No

Description of Vergennes

Setting

Landform: Lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread

Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Clayey calcareous glaciolacustrine, glaciomarine, or estuarine deposits

Typical profile

H1 - 0 to 10 inches: loam
H2 - 10 to 17 inches: clay loam
H3 - 17 to 34 inches: clay
H4 - 34 to 60 inches: stratified silty clay to silty clay loam to silt loam to very fine sandy loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 12 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Available water supply, 0 to 60 inches: Moderate (about 7.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: D
Ecological site: F142XB005VT - Clayplain
Hydric soil rating: No

Minor Components

Kingsbury

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

Madalin

Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

Rhinebeck

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

Elmridge

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

Nunda

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

HvC—Hudson and Vergennes soils, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 9sgs
Elevation: 50 to 1,800 feet
Mean annual precipitation: 36 to 44 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 135 to 170 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Hudson and similar soils: 40 percent
Vergennes and similar soils: 35 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hudson

Setting

Landform: Lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Clayey and silty glaciolacustrine deposits

Typical profile

H1 - 0 to 4 inches: silt loam
H2 - 4 to 13 inches: silt loam
H3 - 13 to 30 inches: silty clay loam
H4 - 30 to 60 inches: silty clay

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 18 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 20 percent
Available water supply, 0 to 60 inches: High (about 9.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C/D
Ecological site: F144AY018NY - Moist Lake Plain
Hydric soil rating: No

Description of Vergennes

Setting

Landform: Lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Clayey calcareous glaciolacustrine, glaciomarine, or estuarine deposits

Typical profile

H1 - 0 to 10 inches: loam
H2 - 10 to 17 inches: clay loam
H3 - 17 to 34 inches: clay
H4 - 34 to 60 inches: stratified silty clay to silty clay loam to silt loam to very fine sandy loam

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 12 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Available water supply, 0 to 60 inches: Moderate (about 7.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: D
Ecological site: F142XB005VT - Clayplain
Hydric soil rating: No

Minor Components

Kingsbury

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

Rhinebeck

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

Elmridge

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

Madalin

Percent of map unit: 5 percent

Landform: Depressions
Hydric soil rating: Yes

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

HvE—Hudson and Vergennes soils, 25 to 50 percent slopes

Map Unit Setting
National map unit symbol: 9sgt
Elevation: 50 to 1,800 feet
Mean annual precipitation: 36 to 44 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 135 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition
Hudson and similar soils: 45 percent
Vergennes and similar soils: 30 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hudson

Setting
Landform: Lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Riser
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Clayey and silty glaciolacustrine deposits

Typical profile
H1 - 0 to 4 inches: silt loam
H2 - 4 to 13 inches: silt loam
H3 - 13 to 30 inches: silty clay loam
H4 - 30 to 60 inches: silty clay

Properties and qualities
Slope: 25 to 50 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 18 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 20 percent
Available water supply, 0 to 60 inches: High (about 9.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C/D
Ecological site: F144AY018NY - Moist Lake Plain
Hydric soil rating: No

Description of Vergennes

Setting

Landform: Lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Riser
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Clayey calcareous glaciolacustrine, glaciomarine, or estuarine deposits

Typical profile

H1 - 0 to 10 inches: loam
H2 - 10 to 17 inches: clay loam
H3 - 17 to 34 inches: clay
H4 - 34 to 60 inches: stratified silty clay to silty clay loam to silt loam to very fine sandy loam

Properties and qualities

Slope: 25 to 50 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 12 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Available water supply, 0 to 60 inches: Moderate (about 7.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: D
Ecological site: F142XB005VT - Clayplain
Hydric soil rating: No

Minor Components

Rhinebeck

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

Kingsbury

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

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

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

Shaker
Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

HwC3—Hudson and Vergennes silty clay loams, 8 to 15 percent slopes, severely eroded

Map Unit Setting
National map unit symbol: 9sgv
Elevation: 50 to 1,800 feet
Mean annual precipitation: 36 to 44 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 135 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition
Hudson and similar soils: 45 percent
Vergennes and similar soils: 30 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hudson

Setting
Landform: Lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Clayey and silty glaciolacustrine deposits

Typical profile
H1 - 0 to 7 inches: silty clay loam
H2 - 7 to 30 inches: silty clay loam
H3 - 30 to 60 inches: silty clay

Properties and qualities
Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 18 to 24 inches

Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 20 percent
Available water supply, 0 to 60 inches: High (about 9.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C/D
Ecological site: F144AY018NY - Moist Lake Plain
Hydric soil rating: No

Description of Vergennes

Setting

Landform: Lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Clayey calcareous glaciolacustrine, glaciomarine, or estuarine deposits

Typical profile

H1 - 0 to 6 inches: silty clay loam
H2 - 6 to 34 inches: clay
H3 - 34 to 60 inches: stratified silty clay to silty clay loam to silt loam to very fine sandy loam

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 12 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Available water supply, 0 to 60 inches: Low (about 5.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: D
Ecological site: F142XB005VT - Clayplain
Hydric soil rating: No

Minor Components

Kingsbury

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

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

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

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

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

HwD3—Hudson and Vergennes silty clay loams, 15 to 25 percent slopes, severely eroded

Map Unit Setting
National map unit symbol: 9sgw
Elevation: 50 to 1,800 feet
Mean annual precipitation: 36 to 44 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 135 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition
Hudson and similar soils: 50 percent
Vergennes and similar soils: 30 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hudson

Setting
Landform: Lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Riser
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Clayey and silty glaciolacustrine deposits

Typical profile
H1 - 0 to 7 inches: silty clay loam
H2 - 7 to 30 inches: silty clay loam
H3 - 30 to 60 inches: silty clay

Properties and qualities
Slope: 15 to 25 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 18 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 20 percent
Available water supply, 0 to 60 inches: High (about 9.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C/D
Ecological site: F144AY018NY - Moist Lake Plain
Hydric soil rating: No

Description of Vergennes

Setting

Landform: Lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Riser
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Clayey calcareous glaciolacustrine, glaciomarine, or estuarine deposits

Typical profile

H1 - 0 to 6 inches: silty clay loam
H2 - 6 to 34 inches: clay
H3 - 34 to 60 inches: stratified silty clay to silty clay loam to silt loam to very fine sandy loam

Properties and qualities

Slope: 15 to 25 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 12 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Available water supply, 0 to 60 inches: Low (about 5.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: D
Ecological site: F142XB005VT - Clayplain
Hydric soil rating: No

Minor Components

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

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

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

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

KrA—Kingsbury and Rhinebeck soils, 0 to 3 percent slopes

Map Unit Setting
National map unit symbol: 9sgx
Elevation: 80 to 1,000 feet
Mean annual precipitation: 36 to 44 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 135 to 170 days
Farmland classification: Farmland of statewide importance

Map Unit Composition
Kingsbury and similar soils: 40 percent
Rhinebeck and similar soils: 30 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Kingsbury

Setting
Landform: Lake plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Calcareous, clayey glaciomarine deposits or glaciolacustrine deposits

Typical profile
H1 - 0 to 7 inches: clay loam
H2 - 7 to 14 inches: silty clay loam
H3 - 14 to 36 inches: clay
H4 - 36 to 70 inches: stratified silty clay loam to silt loam to very fine sandy loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Available water supply, 0 to 60 inches: Moderate (about 8.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: D
Ecological site: F144AY018NY - Moist Lake Plain
Hydric soil rating: No

Description of Rhinebeck

Setting

Landform: Lake plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Clayey and silty glaciolacustrine deposits

Typical profile

H1 - 0 to 7 inches: silt loam
H2 - 7 to 19 inches: silty clay loam
H3 - 19 to 32 inches: silty clay
H4 - 32 to 60 inches: silty clay

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Available water supply, 0 to 60 inches: Moderate (about 8.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D

Ecological site: F144AY018NY - Moist Lake Plain
Hydric soil rating: No

Minor Components

Madalin
Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

Covington
Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

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

Shaker
Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

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

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

KrB—Kingsbury and Rhinebeck soils, 3 to 8 percent slopes

Map Unit Setting
National map unit symbol: 9sgy
Elevation: 80 to 1,000 feet
Mean annual precipitation: 36 to 44 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 135 to 170 days
Farmland classification: Farmland of statewide importance

Map Unit Composition
Kingsbury and similar soils: 45 percent
Rhinebeck and similar soils: 30 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Kingsbury

Setting
Landform: Lake plains
Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Calcareous, clayey glaciomarine deposits or glaciolacustrine deposits

Typical profile

H1 - 0 to 7 inches: clay loam
H2 - 7 to 14 inches: silty clay loam
H3 - 14 to 36 inches: clay
H4 - 36 to 70 inches: stratified silty clay loam to silt loam to very fine sandy loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Available water supply, 0 to 60 inches: Moderate (about 8.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: D
Ecological site: F144AY018NY - Moist Lake Plain
Hydric soil rating: No

Description of Rhinebeck

Setting

Landform: Lake plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Clayey and silty glaciolacustrine deposits

Typical profile

H1 - 0 to 7 inches: silt loam
H2 - 7 to 19 inches: silty clay loam
H3 - 19 to 32 inches: silty clay
H4 - 32 to 60 inches: silty clay

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Available water supply, 0 to 60 inches: Moderate (about 8.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Ecological site: F144AY018NY - Moist Lake Plain
Hydric soil rating: No

Minor Components

Covington

Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

Elmridge

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

Hudson

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

Vergennes

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

Madalin

Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

NaC—Nassau channery silt loam, rolling

Map Unit Setting

National map unit symbol: 9sj5
Elevation: 600 to 1,800 feet
Mean annual precipitation: 36 to 44 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 135 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

Nassau and similar soils: 80 percent
Minor components: 20 percent

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

Description of Nassau

Setting

Landform: Benches, till plains, ridges
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Channery loamy till derived mainly from local slate or shale

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
H1 - 1 to 4 inches: channery silt loam
H2 - 4 to 19 inches: extremely channery silt loam
H3 - 19 to 23 inches: unweathered bedrock

Properties and qualities

Slope: 5 to 15 percent
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 2.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: D
Ecological site: F144AY033MA - Shallow Dry Till Uplands
Hydric soil rating: No

Minor Components

Lordstown

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

Arnot

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

Oquaga

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

Tuller

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

NrC—Nassau channery silt loam, rolling, very rocky

Map Unit Setting

National map unit symbol: 9sj6
Elevation: 600 to 1,800 feet
Mean annual precipitation: 36 to 44 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 135 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

Nassau and similar soils: 70 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Nassau

Setting

Landform: Benches, till plains, ridges
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Channery loamy till derived mainly from local slate or shale

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
H1 - 1 to 4 inches: channery silt loam
H2 - 4 to 19 inches: extremely channery silt loam
H3 - 19 to 23 inches: unweathered bedrock

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 2.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: D
Ecological site: F144AY033MA - Shallow Dry Till Uplands
Hydric soil rating: No

Minor Components

Rock outcrop
Percent of map unit: 10 percent
Hydric soil rating: Unranked

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

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

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

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

NrD—Nassau channery silt loam, hilly, very rocky

Map Unit Setting
National map unit symbol: 9sj7
Elevation: 600 to 1,800 feet
Mean annual precipitation: 36 to 44 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 135 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition
Nassau and similar soils: 70 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Nassau

Setting
Landform: Benches, till plains, ridges
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Channery loamy till derived mainly from local slate or shale

Typical profile
Oi - 0 to 1 inches: slightly decomposed plant material
H1 - 1 to 4 inches: channery silt loam
H2 - 4 to 19 inches: extremely channery silt loam

H3 - 19 to 23 inches: unweathered bedrock

Properties and qualities

Slope: 15 to 25 percent
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 2.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: D
Ecological site: F144AY033MA - Shallow Dry Till Uplands
Hydric soil rating: No

Minor Components

Valois

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

Lordstown

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

Arnot

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

Rock outcrop

Percent of map unit: 5 percent
Hydric soil rating: Unranked

Tuller

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

Oquaga

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

NrE—Nassau channery silt loam, steep, very rocky

Map Unit Setting

National map unit symbol: 9sj8
Elevation: 600 to 1,800 feet
Mean annual precipitation: 36 to 44 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 135 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

Nassau and similar soils: 70 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Nassau

Setting

Landform: Benches, till plains, ridges
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Channery loamy till derived mainly from local slate or shale

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
H1 - 1 to 4 inches: channery silt loam
H2 - 4 to 19 inches: extremely channery silt loam
H3 - 19 to 23 inches: unweathered bedrock

Properties and qualities

Slope: 25 to 45 percent
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 2.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D
Ecological site: F144AY033MA - Shallow Dry Till Uplands
Hydric soil rating: No

Minor Components

Rock outcrop

Percent of map unit: 10 percent
Hydric soil rating: Unranked

Lordstown

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

Arnot

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

Oquaga

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

Tuller

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

NuB—Nunda silt loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9sj9
Elevation: 400 to 1,600 feet
Mean annual precipitation: 36 to 44 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 135 to 170 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Nunda and similar soils: 75 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Nunda

Setting

Landform: Hills, drumlinoid ridges, till plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Crest
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: A silty mantle over loamy till derived from calcareous shale and siltstone

Typical profile

H1 - 0 to 8 inches: silt loam
H2 - 8 to 15 inches: silt loam
H3 - 15 to 40 inches: gravelly silty clay loam
H4 - 40 to 65 inches: silt loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 18 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent

Available water supply, 0 to 60 inches: Moderate (about 7.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C/D
Ecological site: F140XY025NY - Rich Till Uplands
Hydric soil rating: No

Minor Components

Burdett

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

Hudson

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

Mardin

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

Volusia

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

RhA—Riverhead loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 9sjx
Elevation: 590 to 1,970 feet
Mean annual precipitation: 36 to 44 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 135 to 170 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Riverhead and similar soils: 75 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Riverhead

Setting

Landform: Deltas, terraces
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy glaciofluvial deposits overlying stratified sand and gravel

Typical profile

H1 - 0 to 8 inches: loam
H2 - 8 to 24 inches: sandy loam
H3 - 24 to 60 inches: loamy sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2s
Hydrologic Soil Group: A
Ecological site: F144AY023CT - Well Drained Outwash
Hydric soil rating: No

Minor Components

Tioga

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

Udifluvents

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

Chenango

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

Elmridge

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

Hudson

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

RhB—Riverhead loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9sjy
Elevation: 590 to 1,970 feet
Mean annual precipitation: 36 to 44 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 135 to 170 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Riverhead and similar soils: 75 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Riverhead

Setting

Landform: Deltas, terraces
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy glaciofluvial deposits overlying stratified sand and gravel

Typical profile

H1 - 0 to 8 inches: loam
H2 - 8 to 24 inches: sandy loam
H3 - 24 to 60 inches: loamy sand

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2s
Hydrologic Soil Group: A
Ecological site: F140XY021NY - Dry Outwash
Hydric soil rating: No

Minor Components

Elmridge

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

Tioga

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

Hudson

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

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

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

RhC—Riverhead loam, rolling

Map Unit Setting
National map unit symbol: 9sjz
Elevation: 590 to 1,970 feet
Mean annual precipitation: 36 to 44 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 135 to 170 days
Farmland classification: Farmland of statewide importance

Map Unit Composition
Riverhead and similar soils: 75 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Riverhead

Setting
Landform: Deltas, terraces
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy glaciofluvial deposits overlying stratified sand and gravel

Typical profile
H1 - 0 to 8 inches: loam
H2 - 8 to 24 inches: sandy loam
H3 - 24 to 60 inches: loamy sand

Properties and qualities
Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.2 inches)

Interpretive groups
Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: A
Ecological site: F144AY023CT - Well Drained Outwash
Hydric soil rating: No

Minor Components

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

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

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

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

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

RhD—Riverhead loam, hilly

Map Unit Setting
National map unit symbol: 9sk0
Elevation: 590 to 1,970 feet
Mean annual precipitation: 36 to 44 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 135 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition
Riverhead and similar soils: 75 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Riverhead

Setting
Landform: Deltas, terraces
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Riser
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy glaciofluvial deposits overlying stratified sand and gravel

Typical profile

H1 - 0 to 8 inches: loam
H2 - 8 to 24 inches: sandy loam
H3 - 24 to 60 inches: loamy sand

Properties and qualities

Slope: 15 to 25 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: A
Ecological site: F144AY023CT - Well Drained Outwash
Hydric soil rating: No

Minor Components

Udifluvents

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

Valois

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

Chenango

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

Hudson

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

Elmridge

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

Sh—Shaker very fine sandy loam

Map Unit Setting

National map unit symbol: 9sk1
Elevation: 330 to 2,460 feet
Mean annual precipitation: 36 to 44 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 135 to 170 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Shaker and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Shaker

Setting

Landform: Depressions
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Loamy over clayey glaciolacustrine or glaciomarine deposits

Typical profile

H1 - 0 to 8 inches: very fine sandy loam
H2 - 8 to 20 inches: fine sandy loam
H3 - 20 to 31 inches: silty clay loam
H4 - 31 to 60 inches: silty clay

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 18 to 40 inches to strongly contrasting textural stratification
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 0 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 1 percent
Available water supply, 0 to 60 inches: Low (about 3.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Ecological site: F144AY019NH - Wet Lake Plain
Hydric soil rating: No

Minor Components

Rhinebeck

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

Alden

Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

Canandaigua
Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

Madalin
Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

Ta—Tioga loam

Map Unit Setting
National map unit symbol: 9sk3
Elevation: 600 to 1,800 feet
Mean annual precipitation: 36 to 44 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 135 to 170 days
Farmland classification: All areas are prime farmland

Map Unit Composition
Tioga and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tioga

Setting
Landform: Flood plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Rise
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy alluvium

Typical profile
H1 - 0 to 10 inches: loam
H2 - 10 to 34 inches: fine sandy loam
H3 - 34 to 44 inches: loamy fine sand
H4 - 44 to 60 inches: stratified gravel to loamy sand

Properties and qualities
Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 5.95 in/hr)
Depth to water table: About 36 to 72 inches
Frequency of flooding: OccasionalNone
Frequency of ponding: None
Calcium carbonate, maximum content: 1 percent

Available water supply, 0 to 60 inches: Moderate (about 8.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 1
Hydrologic Soil Group: A
Ecological site: F140XY013PA - High Floodplain
Hydric soil rating: No

Minor Components

Middlebury

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

Udifluvents

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

Chenango

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

TvB—Tunkhannock gravelly loam, fan, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9skd
Elevation: 160 to 1,970 feet
Mean annual precipitation: 36 to 44 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 135 to 170 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Tunkhannock and similar soils: 75 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tunkhannock

Setting

Landform: Valley trains, terraces
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Gravelly loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits, derived mainly from reddish sandstone, siltstone, and shale

Typical profile

H1 - 0 to 7 inches: gravelly loam

H2 - 7 to 25 inches: very gravelly loam
H3 - 25 to 60 inches: stratified extremely gravelly sand

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: About 36 to 72 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2s
Hydrologic Soil Group: A
Ecological site: F140XY021NY - Dry Outwash
Hydric soil rating: No

Minor Components

Basher

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

Barbour

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

Valois

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

Wellsboro

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

Lackawanna

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

Ur—Udorthents, loamy

Map Unit Setting

National map unit symbol: 9skh
Elevation: 160 to 1,970 feet
Mean annual precipitation: 36 to 44 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 135 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

Udorthents and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Udorthents

Typical profile

H1 - 0 to 4 inches: gravelly silt loam
H2 - 4 to 70 inches: gravelly silt loam

Properties and qualities

Slope: 0 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.06 to 5.95 in/hr)
Depth to water table: About 36 to 72 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Available water supply, 0 to 60 inches: Low (about 5.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Wellsboro

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

Valois

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

Volusia

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

Tunkhannock

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

VdB—Valois-Nassau complex, undulating

Map Unit Setting

National map unit symbol: 9skq
Elevation: 600 to 1,800 feet

Mean annual precipitation: 36 to 44 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 135 to 170 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Valois and similar soils: 50 percent
Nassau and similar soils: 30 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Valois

Setting

Landform: Valley sides, lateral moraines, end moraines
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy till derived mainly from sandstone, siltstone, and shale

Typical profile

H1 - 0 to 8 inches: gravelly loam
H2 - 8 to 34 inches: gravelly loam
H3 - 34 to 60 inches: gravelly silt loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 2 percent
Available water supply, 0 to 60 inches: Low (about 5.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: B
Ecological site: F140XY027NY - Well Drained Till Uplands
Hydric soil rating: No

Description of Nassau

Setting

Landform: Benches, till plains, ridges
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Crest
Down-slope shape: Convex

Across-slope shape: Convex
Parent material: Channery loamy till derived mainly from local slate or shale

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
H1 - 1 to 4 inches: channery silt loam
H2 - 4 to 19 inches: extremely channery silt loam
H3 - 19 to 23 inches: unweathered bedrock

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 2.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: D
Ecological site: F144AY033MA - Shallow Dry Till Uplands
Hydric soil rating: No

Minor Components

Manlius

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

Wellsboro

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

Chenango

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

Mardin

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

VdD—Valois-Nassau complex, hilly

Map Unit Setting

National map unit symbol: 9skr
Elevation: 600 to 1,800 feet
Mean annual precipitation: 36 to 44 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 135 to 170 days

Farmland classification: Not prime farmland

Map Unit Composition

Valois and similar soils: 41 percent
Nassau and similar soils: 39 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Valois

Setting

Landform: End moraines, lateral moraines, valley sides
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy till derived mainly from sandstone, siltstone, and shale

Typical profile

H1 - 0 to 8 inches: gravelly loam
H2 - 8 to 34 inches: gravelly loam
H3 - 34 to 60 inches: gravelly silt loam

Properties and qualities

Slope: 15 to 25 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 2 percent
Available water supply, 0 to 60 inches: Low (about 5.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: B
Ecological site: F140XY027NY - Well Drained Till Uplands
Hydric soil rating: No

Description of Nassau

Setting

Landform: Benches, till plains, ridges
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Channery loamy till derived mainly from local slate or shale

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
H1 - 1 to 4 inches: channery silt loam
H2 - 4 to 19 inches: extremely channery silt loam
H3 - 19 to 23 inches: unweathered bedrock

Properties and qualities

Slope: 15 to 25 percent
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 2.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: D
Ecological site: F144AY033MA - Shallow Dry Till Uplands
Hydric soil rating: No

Minor Components

Rock outcrop

Percent of map unit: 5 percent
Hydric soil rating: Unranked

Chenango

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

Lordstown

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

Mardin

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

W—Water

Map Unit Setting

National map unit symbol: 9sl3
Mean annual precipitation: 36 to 44 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 135 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

Water: 100 percent

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

Wa—Wayland soils complex, non-calcareous substratum, 0 to 3 percent slopes, frequently flooded

Map Unit Setting

National map unit symbol: 2srgt
Elevation: 160 to 1,970 feet
Mean annual precipitation: 31 to 70 inches
Mean annual air temperature: 43 to 52 degrees F
Frost-free period: 105 to 180 days
Farmland classification: Not prime farmland

Map Unit Composition

Wayland and similar soils: 60 percent
Wayland, very poorly drained, and similar soils: 30 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Wayland

Setting

Landform: Flood plains
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Silty and clayey alluvium derived from interbedded sedimentary rock

Typical profile

Ap - 0 to 9 inches: silt loam
Bg - 9 to 21 inches: silt loam
Cg1 - 21 to 28 inches: silt loam
Cg2 - 28 to 47 inches: silt loam
Cg3 - 47 to 54 inches: silt loam
Cg4 - 54 to 60 inches: silt loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.14 to 14.17 in/hr)
Depth to water table: About 0 to 6 inches
Frequency of flooding: FrequentNone
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Very high (about 13.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: B/D
Ecological site: F140XY015NY - Wet Low Floodplain
Hydric soil rating: Yes

Description of Wayland, Very Poorly Drained

Setting

Landform: Flood plains
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Silty and clayey alluvium derived from interbedded sedimentary rock

Typical profile

A - 0 to 9 inches: mucky silt loam
Bg - 9 to 21 inches: silt loam
Cg1 - 21 to 28 inches: silt loam
Cg2 - 28 to 47 inches: silt loam
Cg3 - 47 to 54 inches: silt loam
Cg4 - 54 to 60 inches: silt loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.14 to 14.17 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: FrequentNone
Frequency of ponding: Frequent
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Very high (about 13.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: B/D
Ecological site: F140XY015NY - Wet Low Floodplain
Hydric soil rating: Yes

Minor Components

Holderton

Percent of map unit: 10 percent
Landform: Flood plains
Landform position (three-dimensional): Tread
Down-slope shape: Linear

Across-slope shape: Linear
Hydric soil rating: No

Data Source Information

Soil Survey Area: Albany County, New York
Survey Area Data: Version 20, Sep 10, 2022

Soil Survey Area: Greene County, New York
Survey Area Data: Version 21, Sep 10, 2022

ATTACHMENT 4
TABLES

Table 4-1 Summary of Wetlands Within the Project Corridor[1]						
Approximate Station & Dwg. No.	**Wetland ID**	**Cowardin Classification[2]**	**Associated Water Course**	**Area w/in JD Limits Square Feet (sf)**	**USACE & NYSDEC Jurisdiction**	**Coordinates (Lat., Long.)**
CSX Rail						
60000+00 C-401	P5-Y	PFO	Unnamed Tributary to Hudson River	0	USACE	42.77969, -73.99071
60010+00 C-401	IA	PEM	Unnamed Tributary to Hudson River	0	USACE	42.53193556, -73.8048908
60026+00 C-401	P6-C	PFO	Unnamed Tributary to Hudson River	10	USACE	42.5299347, -73.8044631
60029+50 C-401	JA/P6-B	PFO	Unnamed Tributary to Hudson River	5,140	USACE	42.52878739, -73.8047234
60032+00 C-402	P6-A	PFO	Unnamed Tributary to Hudson River	9,150	USACE	42.528341, -73.804957
60034+25 C-402	P6-D	PEM	Unnamed Tributary to Hudson River	24,667	USACE	42.527551, -73.805376
		PFO		5,162		
60036+25 C-402	KA	PEM	Unnamed Tributary to Hudson River	2,125	USACE	42.52715067, -73.80518674
60042+75 C-402	LA	PFO	Unnamed Tributary to Hudson River	13,488	USACE	42.52544162, -73.80638895
60045+25 C-402	MA	PFO	Unnamed Tributary to Hudson River	26,859	USACE	42.52460064, -73.80680153
		PEM		1,990		

Table 4-1 Summary of Wetlands Within the Project Corridor[1]						
Approximate Station & Dwg. No.	**Wetland ID**	**Cowardin Classification[2]**	**Associated Water Course**	**Area w/in JD Limits Square Feet (sf)**	**USACE & NYSDEC Jurisdiction**	**Coordinates (Lat., Long.)**
60047+00 C-402	AED-A/NA/ G-NM-A/G-NM-A4	PSS	Unnamed Tributary to Hudson River	106,644	USACE	42.52089501, -73.80876244
		PUB		1,335		
		PEM		15,710		
		PFO		40,346		
60075+75 C-402	G-TP-A	PFO	Unnamed Tributary to Hudson River	957	USACE	42.517223, -73.810827
60082+50 C-403	OA	PFO	Unnamed Tributary to Hudson River	67,203	USACE	42.51424927, -73.8124489
60097+00 C-404	PA	PFO	Unnamed Tributary to Hudson River (Stream S-10 & Stream S-11 (Coeymans Creek))	43,842	USACE	42.51162374, -73.81431317
		PEM		0		
60102+50 C-404	CP6-B	PFO	Unnamed Tributary to Hudson River	12,584	USACE	42.510326, -73.815307
60107+25 C-404	CP6-A	PSS	Unnamed Tributary to Hudson River	10,657	USACE	42.509032, -73.815278
60109+15 C-404	P6-I	PSS	Unnamed Tributary to Hudson River	1,182	USACE	42.50889, -73.815757

Table 4-1 Summary of Wetlands Within the Project Corridor[1]						
Approximate Station & Dwg. No.	**Wetland ID**	**Cowardin Classification[2]**	**Associated Water Course**	**Area w/in JD Limits Square Feet (sf)**	**USACE & NYSDEC Jurisdiction**	**Coordinates (Lat., Long.)**
60111+00 C-404	P6-H	PSS	Unnamed Tributary to Hudson River	1,567	USACE	42.508465, -73.815847
60111+75 C-404	P6-G	PSS	Unnamed Tributary to Hudson River (Stream 13N)	2,480	USACE	42.50801, -73.815765
60115+25 C-404	QA	PSS	Unnamed Tributary to Hudson River (Stream S-14)	14,413	USACE	42.50713897, -73.8163841
		PEM		0		
60125+50 C-405	P6-RA	PFO	Unnamed Tributary to Hudson River	8,299	USACE	42.504535, -73.817996
60127+75 C-405 & C-225	RA/P6-F	PFO	Unnamed Tributary to Hudson River	284,665	USACE	42.49917939, -73.81861149
		PSS		2,445		
60128+00 Access Road C-225	P6-E	PFO	Unnamed Tributary to Hudson River (P6-S1)	0	USACE	42.504693, -73.819913
60169+00 C-406	SA	PEM	Unnamed Tributary to Hudson River	10,357	USACE	42.49195368, -73.81759957
		PSS		57,472		
60178+00 C-406	TA/CP6-C	PEM	Unnamed Tributary to Hudson River	20,989	USACE	42.48873628, -73.81621392
		PFO		772		

Table 4-1 Summary of Wetlands Within the Project Corridor[1]						
Approximate Station & Dwg. No.	**Wetland ID**	**Cowardin Classification[2]**	**Associated Water Course**	**Area w/in JD Limits Square Feet (sf)**	**USACE & NYSDEC Jurisdiction**	**Coordinates (Lat., Long.)**
Access Road 60193+50 C-407	W-A	PFO	Unnamed Tributary to Hudson River	7,018	USACE	42.486651, -73.816056
60194+50 C-407	UA	PEM	Unnamed Tributary to Hudson River	887	USACE	42.48634763, -73.81517216
60203+50 C-407	VA	PEM	Unnamed Tributary to Hudson River	34,181	USACE	42.48288622, -73.81377198
Access Road 60219+25 C-226	FL-A	PFO	Unnamed Tributary to Hudson River	0	USACE	42.479462, -73.814788
Access Road 60219+25 C-226	FL-B	PEM	Unnamed Tributary to Hudson River	0	USACE	42.479572, -73.813394
Access Road 60219+25 C-408 & C-226	FL-C	PEM	Unnamed Tributary to Hudson River	229	USACE	42.479830, -73.812659
60224+50 C-408	WA	PEM	Unnamed Tributary to Hudson River	1,711	USACE	42.47837521, -73.81183736
60229+75 C-408	XA	PEM	Unnamed Tributary to Hudson River	682	USACE	42.47705628, -73.81122173
60231+25 C-408	P6-J	PEM	Unnamed Tributary to Hudson River	0	USACE	42.476719, -73.811793

Table 4-1 Summary of Wetlands Within the Project Corridor[1]						
Approximate Station & Dwg. No.	**Wetland ID**	**Cowardin Classification[2]**	**Associated Water Course**	**Area w/in JD Limits Square Feet (sf)**	**USACE & NYSDEC Jurisdiction**	**Coordinates (Lat., Long.)**
61254+00 C-409	YA/G-R1	PFO	Unnamed Tributary to Hudson River (Stream S-18)	29,296	USACE	42.47063063, -73.80811094
		PSS		13,344		
61260+00 C-409	ZA/ G-R2/AB	PSS	Unnamed Tributary to Hudson River	98,985	USACE	42.46709999, -73.80783416
61279+25 C-410	G-R-3	PFO	Unnamed Tributary to Hudson River	20,142	USACE	42.463783, -73.807965
		PEM		9,977		
61284+00 C-410	G-R-4	PEM	Unnamed Tributary to Hudson River	6,739	USACE	42.462581, -73.80848
61295+25 C-410	BB/TC-B	PSS	Unnamed Tributary to Hudson River	101,769	USACE	42.45509463, -73.81139017
		PEM		16,737		
61302+25 C-411	G-R5	PFO	Unnamed Tributary to Hudson River	24,258	USACE	42.457341, -73.810311
61329+50 C-411	CB/TC-A	PSS	Unnamed Tributary to Hudson River	33,051	USACE	42.44987523, -73.81310274
		PEM		51,033		
		PFO		12,178		
61337+50 C-412	DB/TC-C	PSS	Unnamed Tributary to Hudson River	6,879	USACE	42.44839547, -73.81365269
		PFO		19,539		
61351+90 C-412	EB	PEM	Unnamed Tributary to Hudson River	2,850	USACE	42.4445917, -73.81333576

Table 4-1 Summary of Wetlands Within the Project Corridor[1]						
Approximate Station & Dwg. No.	**Wetland ID**	**Cowardin Classification[2]**	**Associated Water Course**	**Area w/in JD Limits Square Feet (sf)**	**USACE & NYSDEC Jurisdiction**	**Coordinates (Lat., Long.)**
Access Road C-209	P6-K	PEM	Unnamed Tributary to Hudson River	0	USACE	42.444989, -73.811529
		PFO		1,728		
61358+00 C-412	FB/P6-L	PEM	Unnamed Tributary to Hudson River	1,028	USACE	42.44365423, -73.81264753
		PSS		2,838		
		PFO		5,339		
Access Road C-209	P6-M	PFO	Unnamed Tributary to Hudson River	10	USACE	42.444292, -73.811669
61391+75 C-414	G-SF-A	PEM	Unnamed Tributary to Hudson River	8,194	USACE	42.434695, -73.808806
61410+90 C-414	GB	PSS	Unnamed Tributary to Hudson River	23,249	USACE	42.42978886, -73.80923549
		PEM		23,177		
61414+50 C-414	G-P6-C	PEM	Unnamed Tributary to Hudson River	25,373	USACE	42.428607, -73.809239
61416+00 C-414	G-P6-D	PEM	Unnamed Tributary to Hudson River	274	USACE	42.428603, -73.808747
61417+00 C-414	G-P6-B	PEM	Unnamed Tributary to Hudson River	58	USACE	42.427194, -73.809526
62429+25 C-415	G-P6-A	PEM	Unnamed Tributary to Hudson River	3,540	USACE	42.425063, -73.81066

Table 4-1 Summary of Wetlands Within the Project Corridor[1]						
Approximate Station & Dwg. No.	**Wetland ID**	**Cowardin Classification[2]**	**Associated Water Course**	**Area w/in JD Limits Square Feet (sf)**	**USACE & NYSDEC Jurisdiction**	**Coordinates (Lat., Long.)**
62477+00 C-416	K-A	PSS	Unnamed Tributary to Hudson River	12,221	USACE	42.412852, -73.815813
Access Road (Kreitmeir Road) 62477+00 C-211	Pond	PUB	Unnamed Tributary to Hudson River	0	USACE	42.413346, -73.816742
Access Road (Kreitmeir Road) 62477+00 C-211	G-K	PEM	Unnamed Tributary to Hudson River	0	USACE	42.413627, -73.817807
62478+50 C-416	HB	PEM	Unnamed Tributary to Hudson River	6,238	USACE	42.41206942, -73.81675932
62487+00 C-417	IB	PEM	Unnamed Tributary to Hudson River	7,634	USACE	42.40980028, -73.81769262
62489+50 C-417	JB	PEM	Unnamed Tributary to Hudson River	0	USACE	42.409816, -73.817948
62495+65 C-417	KB/G-HW-C	PEM	Unnamed Tributary to Hudson River	14,511	USACE	42.40626818, -73.818715
		PFO		121,862		
62501+50 Access Road	G-HW-A	PSS	Unnamed Tributary to Hudson River	4,541	USACE	42.406944, -73.822478
62501+50 Access Road	G-HW-B	PEM	Unnamed Tributary to Hudson River	1,065	USACE	42.406978, -73.821958

Table 4-1 Summary of Wetlands Within the Project Corridor[1]						
Approximate Station & Dwg. No.	**Wetland ID**	**Cowardin Classification[2]**	**Associated Water Course**	**Area w/in JD Limits Square Feet (sf)**	**USACE & NYSDEC Jurisdiction**	**Coordinates (Lat., Long.)**
62507+50 C-417	A	PEM	Unnamed Tributary to Hudson River	7,077	USACE	42.40484663, -73.8191061
62518+50 C-418	LB	PEM	Unnamed Tributary to Hudson River	1,534	USACE	42.40193109, -73.81932276
62530+00 C-418	MB	PEM	Unnamed Tributary to Hudson River	11,818	USACE	42.39821408 -73.81975639
62537+25 C-418	NB/VG-1	PEM PFO	Unnamed Tributary to Hudson River (Stream S-31)	19,076 131,780	USACE	42.39572734, -73.81978355
62564+25 C-419, C-213, C-214, C-217	OB	PEM PSS	Unnamed Tributary to Hudson River (Stream S-32B)	215,364 67,548	USACE, NYSDEC (HN-101)	42.38348308, -73.81838822
Access Road (Van Gurpin Lane) C-213, C-214, C-217	VGB	PSS PEM	Unnamed Tributary to Hudson River	24,711 27,065	USACE, NYSDEC (HN-101)	42.387879, -73.822546
Access Road (Van Gurpin Lane) C-216	VG-I	PEM	Unnamed Tributary to Hudson River	1,246	USACE, NYSDEC (HN-101)	42.383228, -73.832704
Access Road (Van Gurpin Lane) C-216	VG-E	PEM	Unnamed Tributary to Hudson River	1,157	USACE, NYSDEC (HN-101)	42.383264, -73.832398

Table 4-1 Summary of Wetlands Within the Project Corridor[1]						
Approximate Station & Dwg. No.	**Wetland ID**	**Cowardin Classification[2]**	**Associated Water Course**	**Area w/in JD Limits Square Feet (sf)**	**USACE & NYSDEC Jurisdiction**	**Coordinates (Lat., Long.)**
Access Road (Van Gurpin Lane) C-216	VG-F	PEM	Unnamed Tributary to Hudson River	8,157	USACE, NYSDEC (HN-101)	42.382951, -73.831529
Access Road (Van Gurpin Lane) C-216	VG-D	PEM	Unnamed Tributary to Hudson River	5,408	USACE, NYSDEC (HN-101)	42.383276, -73.830837
Access Road (Van Gurpin Lane) C-216 & C-217	VG-G	PEM	Unnamed Tributary to Hudson River	9,292	USACE, NYSDEC (HN-101)	42.382820, -73.829185
Access Road (Van Gurpin Lane) C-216 & C-217	VG-C	PEM	Unnamed Tributary to Hudson River	6,623	USACE, NYSDEC (HN-101)	42.382776, -73.828590
Access Road (Van Gurpin Lane) C-217	VG-H	PEM	Unnamed Tributary to Hudson River	1,124	USACE, NYSDEC (HN-101)	42.382047, -73.823756
62590+25 C-420	VGA	PEM	Unnamed Tributary to Hudson River	15,345	USACE, NYSDEC (HN-101)	42.381841, -73.818521
		PSS		14,281		
62592+50 C-420 & C-218	PB	PEM	Unnamed Tributary to Hudson River (Stream S-33)	21,841	USACE, NYSDEC (HN-101)	42.38041597 -73.81816486
		PSS		18,932		
62606+45 C-421	QB	PEM	Unnamed Tributary to Hudson River	32,131	USACE, NYSDEC (HN-101)	42.37739352, -73.81784191
62612+00 C-421	RB/GL-1	PFO	Unnamed Tributary to Hudson River	11,136	USACE, NYSDEC (HN-101)	42.37603836, -73.81764213

Table 4-1 Summary of Wetlands Within the Project Corridor[1]						
Approximate Station & Dwg. No.	**Wetland ID**	**Cowardin Classification[2]**	**Associated Water Course**	**Area w/in JD Limits Square Feet (sf)**	**USACE & NYSDEC Jurisdiction**	**Coordinates (Lat., Long.)**
62615+50 C-421	RR-F	PEM	Unnamed Tributary to Hudson River	0	USACE	42.369453, -73.0138331
62617+25 C-421	RR-E	PEM	Unnamed Tributary to Hudson River	9,862	USACE	42.375068, -73.817078
62619+00 C-421	SB	PEM	Unnamed Tributary to Hudson River	0	USACE	42.37401573, -73.81730725
62621+00 C-421	RR-D	PEM	Unnamed Tributary to Hudson River	0	USACE	42.374036, -73.817008
62626+25 C-421	RR-C	PEM	Unnamed Tributary to Hudson River	0	USACE	42.371942, -73.816739
62629+00 C-421	TB	PEM	Unnamed Tributary to Hudson River	0	USACE	42.37193081, -73.81708618
62641+00 C-422	RR-A	PEM	Unnamed Tributary to Hudson River	1,993	USACE	42.370424, -73.813444
62641+50 C-422	G-P6-F/RR-G	PEM	Unnamed Tributary to Hudson River	12,178	USACE	42.369453, -73.0138331
62645+50 C-422	RR-L	PEM	Unnamed Tributary to Hudson River	2,105	USACE	42.364385, -73.815385

Table 4-1 Summary of Wetlands Within the Project Corridor[1]						
Approximate Station & Dwg. No.	**Wetland ID**	**Cowardin Classification[2]**	**Associated Water Course**	**Area w/in JD Limits Square Feet (sf)**	**USACE & NYSDEC Jurisdiction**	**Coordinates (Lat., Long.)**
62653+00 C-422	G-P6-H/G-P6-G/ RR-H	PEM	Unnamed Tributary to Hudson River	5,475	USACE	42.3675, -73.815278
60652+50 C-422	VB	PEM	Unnamed Tributary to Hudson River	0	USACE	42.36408947, -73.81640227
62662+00 C-423	G-P6-E	PEM	Unnamed Tributary to Hudson River	0	USACE	42.364722, -73.8225
62663+50 C-423	GP6JJ/RR-I	PEM	Unnamed Tributary to Hudson River	934	USACE	42.36406, -73.815643
62665+00 C-423	RR-K	PEM	Unnamed Tributary to Hudson River	976	USACE	42.362836, -73.01595
62666+25 C-423	WB/G-P6-I	PEM	Unnamed Tributary to Hudson River	11,937	USACE	42.36301716, -73.81602946
62688+75 C-423	4B/G-CX-A	PSS	Unnamed Tributary to Hudson River	17,321	USACE	42.35671407, -73.81570691
		PFO		35,755		
62689+25 C-423	XB/G-P6-K	PEM	Unnamed Tributary to Hudson River	137,711	USACE	42.352766, -73.816239
Access Road C-220	G-J2	PEM	Unnamed Tributary to Hudson River	15,326	USACE	42.355539, -73.817692

Table 4-1 Summary of Wetlands Within the Project Corridor[1]						
Approximate Station & Dwg. No.	**Wetland ID**	**Cowardin Classification[2]**	**Associated Water Course**	**Area w/in JD Limits Square Feet (sf)**	**USACE & NYSDEC Jurisdiction**	**Coordinates (Lat., Long.)**
Access Road C-220	G-J1	PEM	Unnamed Tributary to Hudson River	1,210	USACE	42.355563, -73.819164
62710+00 C-424	XB/P-A	PEM	Unnamed Tributary to Hudson River	37,471	USACE	42.35380174, -73.81630889
62711+00 C-424	ZB2	PEM	Unnamed Tributary to Hudson River	197,745	USACE, NYSDEC (HN-118)	42.346426, -73.818410
62749+50 C-425	ZB/G-FM-3/G-P6-FL1	PEM	Unnamed Tributary to Hudson River (Stream S-36)	329,159	USACE	42.33322144, -73.82538059
		PSS		231,515		
		PFO		73,718		
62801+75 C-428	G-P6-FL2	PEM	Unnamed Tributary to Hudson River	10,232	USACE	42.326435, -73.828328
63808+75 C-428	G-P6-FL3	PEM	Unnamed Tributary to Hudson River	17,798	USACE	42.324427, -73.829123
63819+50 C-428	FA-BK	PEM	Unnamed Tributary to Hudson River	9,177	USACE	42.321731, -73.830619

Table 4-1 Summary of Wetlands Within the Project Corridor[1]						
Approximate Station & Dwg. No.	**Wetland ID**	**Cowardin Classification[2]**	**Associated Water Course**	**Area w/in JD Limits Square Feet (sf)**	**USACE & NYSDEC Jurisdiction**	**Coordinates (Lat., Long.)**
63824+00 C-428	FA-BI/G-P6-M	PSS	Unnamed Tributary to Hudson River (FA-D-BJ & FA-S-BH) (G-P6-N is an upland island within the wetland)	124,858	USACE, NYSDEC (HN-108)	42.317343, -73.831617
63847+00 C-429	FA-BM/ P6-FA-IM	PEM	Unnamed Tributary to Hudson River (FA-D-BN, FA-D-BO, and FA-D-BG)	190,757	USACE	42.315086, -73.832755
63851+75 C-429	P6-FA-IP/ G-IJ/GP6-R	PSS	Unnamed Tributary to Hudson River	71,367	USACE	42.311815, -73.833481
63864+25 C-430	G-FL8	PSS	Unnamed Tributary to Hudson River	58,397	USACE	42.309278, -73.834316
63874+50 C-430	P6-FA-IC	PSS	Unnamed Tributary to Hudson River	9,477	USACE	42.306647, -73.835232
63880+50 C-430	P6-FA-IF/ G-FL-5	PSS	Unnamed Tributary to Hudson River	27,259	USACE	42.304236, -73.836043

Table 4-1 Summary of Wetlands Within the Project Corridor[1]						
Approximate Station & Dwg. No.	**Wetland ID**	**Cowardin Classification[2]**	**Associated Water Course**	**Area w/in JD Limits Square Feet (sf)**	**USACE & NYSDEC Jurisdiction**	**Coordinates (Lat., Long.)**
63892+75 C-431	FA-BF/ FA-BD/G-FL-4	PSS	Unnamed Tributary to Hudson River (FA-D-BG & FA-D-BE)	104,841	USACE	42.301805, -73.837101
		PFO		11,453		
63918+25 C-432	FA-BC/P6-FA-IV/G-IV/P6-FA-IY/P6-FA-JB	PEM	Unnamed Tributary to Hudson River	360,313	USACE, NYSDEC (HN-108)	42.291073, -73.840449
		PSS		39,431		
		PFO		112,428		
63953+25 C-433	P6-FA-JB2	PEM	Unnamed Tributary to Hudson River	1,724	USACE	42.286266, -73.841705
63954+25 C-433	FA-BB/G-P6-O	PEM	Unnamed Tributary to Hudson River	4,424	USACE	42.286004, -73.842095
60954+25 C-433	G-P6-P	PEM	Unnamed Tributary to Hudson River	11,259	USACE	42.2859520, -73.8416474
63958+50 C-433	G-P6-Q	PEM	Unnamed Tributary to Hudson River	20,152	USACE, NYSDEC (HN-108)	42.284046, -73.842217
63963+50 C-432	FA-AX/G-P6-R	PFO	Unnamed Tributary to Hudson River	5,666	USACE, NYSDEC (HN-108)	42.277082, -73.844626
		PEM		2,073,564		
		PUB		43,348		
61047+00 C-435	P6-O	PEM	Unnamed Tributary to Hudson River (P6-S2 (Corlaer Kill),	951,197	USACE, NYSDEC (HN-108)	42.281446, -73.842985
		PSS		63,894		

Table 4-1 Summary of Wetlands Within the Project Corridor[1]						
Approximate Station & Dwg. No.	**Wetland ID**	**Cowardin Classification[2]**	**Associated Water Course**	**Area w/in JD Limits Square Feet (sf)**	**USACE & NYSDEC Jurisdiction**	**Coordinates (Lat., Long.)**
			FA-D-BA & FA-S-AV,)			
64088+00 C-437	P6-N	PEM	Unnamed Tributary to Hudson River	38,524	USACE	42.250654, -73.855531
64096+00 C-438	FA-AS	PEM	Unnamed Tributary to Hudson River	169,908	USACE, NYSDEC (HN-108)	42.251952, -73.855833
		PFO		5,116		
64108+00 C-438	P6-Q	PEM	Unnamed Tributary to Hudson River	2,841	USACE	42.245656, -73.857379
		PSS		3,426		
64109+00 C-438	P6-P	PSS	Unnamed Tributary to Hudson River	732	USACE	42.245511, -73.858002
64110+75 C-438	7A-W	PEM	Unnamed Tributary to Hudson River	9,879	USACE	42.244763, -73.858036
		PFO		65,906		
End of Segment 10/ Package 6 C-438	7A-X	PEM	Unnamed Tributary to Hudson River	9,119	USACE	42.241043, -73.860591

[1] Wetlands identified include both wetlands that are directly crossed by the overland transmission cable corridor as well as wetlands that are adjacent to the Project Corridor that were delineated during field surveys.

[2]Cowardin et al. 1979 categories include: Palustrine Emergent (PEM), Palustrine Forested (PFO), Palustrine Scrub-Shrub (PSS), and palustrine unconsolidated bottom (PUB).

Table 4-2 Summary of Waterbodies within the Project Corridor									
Approximate Station & Dwg. No.	**Waterbody Name**	**NYSDEC Classification**	**Waterbody Field ID & NYSDEC Regulation**	**Flow Status**	**Substrate**	**Width (ft.)[1]**	**Depth (ft.)[1]**	**Length w/in JD Boundary**	**Coordinates (Lat., Long.)**
CSX Rail									
60094+00 C-404	Unnamed Tributary to Hudson River	Unmapped	S-10	Intermittent	Mineral soil	8	2	340	42.512401, -73.813644
60101+25 C-404	Coeymans Creek	C/C(TS)	CP6-S3/ S-11 863-543	Perennial	Silt/ cobble	36	6	280	42.510797, -73.814678
60104+00 C-404	Unnamed Tributary to Hudson River	Unmapped	S-12	Intermittent	Silt/ cobble	5	0.5	167	42.510159, -73.815013
60105+00 C-404	Unnamed Tributary to Hudson River	Unmapped	CP6-S2	Intermittent	Silt	5	3	254	42.509763, -73.815335
60108+25 C-404	Unnamed Tributary to Hudson River	Unmapped	CP6-S1	Intermittent	Silt	3	1.5	350	42.509584, -73.816677
60113+25 C-404	Unnamed Tributary to Hudson River	Unmapped	S-13/13N	Intermittent	Mineral soil	3	1	119	42.50778, -73.816103
60117+50 C-404	Unnamed Tributary to Hudson River	Unmapped	S-14/SRA	Intermittent	Cobble/ Gravel/ Muck	6	1.5	482	42.505787, -73.816911
Access Road C-405	Unnamed Tributary to Hudson River	Unmapped	P6-S1	Intermittent	Sand/ Cobble	5	1	0	42.504963, -73.819401

Table 4-2 Summary of Waterbodies within the Project Corridor									
Approximate Station & Dwg. No.	**Waterbody Name**	**NYSDEC Classification**	**Waterbody Field ID & NYSDEC Regulation**	**Flow Status**	**Substrate**	**Width (ft.)[1]**	**Depth (ft.)[1]**	**Length w/in JD Boundary**	**Coordinates (Lat., Long.)**
60174+50 C-406	Unnamed Tributary to Hudson River	Unmapped	S-15/ CP6-S4	Intermittent	Mineral soil	8	2	132	42.491584, -73.817505
60178+25 C-406	Unnamed Tributary to Hudson River	Unmapped	S-16/E	Intermittent	Cobble/ gravel	10	1.5	174	42.510159, -73.815013
Access Road 60193+50 C-407	Unnamed Tributary to Hudson River	Unmapped	W-S1	Intermittent	Cobble/ gravel	3.5	0.5	0	42.486927, -73.816412
60221+25 C-408	Unnamed Tributary to Hudson River	Unmapped	S-17	Intermittent	Mineral soil	6	0.5	292	42.47911, -73.812127
61253+25 C-409	Unnamed Tributary to Hudson River	C/C	S-18 863-538	Intermittent	Cobble/ gravel/ riprap	10	2	617	42.471038, -73.808329
61288+50 C-410	Unnamed Tributary to Hudson River	C/C	S-19 863-538	Intermittent	Cobble/ gravel	10	2	222	42.46168, -73.808934
61292+50 C-410	Unnamed Tributary to Hudson River	Unmapped	S-20	Intermittent	Cobble/ gravel	9	1.5	127	42.460532, -73.809231
61310+00 C-411	Unnamed Tributary to Hudson River	C/C	G-S3 863-538	Perennial	Mineral soil	5	2	138	42.455898, -73.810862
61332+25 C-412	Unnamed Tributary to Hudson River	Unmapped	S-21/TC-S1	Intermittent	Silt/ cobble	4	1	215	42.450021, -73.813019

Table 4-2 Summary of Waterbodies within the Project Corridor									
Approximate Station & Dwg. No.	**Waterbody Name**	**NYSDEC Classification**	**Waterbody Field ID & NYSDEC Regulation**	**Flow Status**	**Substrate**	**Width (ft.)[1]**	**Depth (ft.)[1]**	**Length w/in JD Boundary**	**Coordinates (Lat., Long.)**
61338+00 C-412	Unnamed Tributary to Hudson River	Unmapped	S-22/TC-S2	Intermittent	Mineral soil	6	0.5	185	42.448556, -73.813539
61339+00 C-412	Unnamed Tributary to Hudson River	Unmapped	TC-S3	Intermittent	Silt	5	1	160	42.448267, -73.813358
61376+15 C-413	Hannacrois Creek	C/C(T)	S-23a 863-535	Perennial	Cobble	20	2	114	42.439461, -73.808877
61389+50 C-413	Unnamed Tributary to Hudson River	Unmapped	G-SF-S2	Perennial	Mineral soil/ cobble	3	1	73	42.435722, -73.808667
61392+00 C-414	Unnamed Tributary to Hudson River	Unmapped	G-SF-S1	Intermittent	-	-	-	43	42.435053, -73.808525
62427+00 C-211	Sickles Creek	C/C	GP6-S3 863-504	Perennial	Mineral soil	5	2	112	42.425577, -73.810176
62429+25 C-415	Sickles Creek	C/C	S-23 863-504	Perennial	Cobble/ gravel	5	1	265	42.425214, -73.811261
62432+00 C-415	Sickles Creek	C/C	G-S-37 863-504	Perennial	Cobble/ Gravel	-	-	779	42.42412, -73.811123
62442+50 C-415	Unnamed Tributary to Hudson River	Unmapped	S-24/G-S-38	Intermittent	Cobble/ Gravel	7	2	109	42.421741, -73.812259
62455+50 C-416	Unnamed Tributary to Hudson River	Unmapped	S-25/G-38	Intermittent	Cobble/ Gravel	3	0.5	182	42.418404, -73.813304

Table 4-2 Summary of Waterbodies within the Project Corridor									
Approximate Station & Dwg. No.	**Waterbody Name**	**NYSDEC Classification**	**Waterbody Field ID & NYSDEC Regulation**	**Flow Status**	**Substrate**	**Width (ft.)[1]**	**Depth (ft.)[1]**	**Length w/in JD Boundary**	**Coordinates (Lat., Long.)**
62465+75 C-416	Unnamed Tributary to Hudson River	Unmapped	S-26/K-S1	Intermittent	Mineral soil	3	0.5	143	42.415801, -73.814616
62472+50 C-416	Unnamed Tributary to Hudson River	C/C	S-27a/K-S2 863-504	Perennial	Cobble/ gravel	10	2	188	42.414095, -73.815434
Access Road (Kreitmeir Road) 62477+00 C-211	Unnamed Tributary to Hudson River	Unmapped	G-S-K	Perennial	Mineral soil	10	2	0	42.413100, -73.819583
62482+00 C-416	Unnamed Tributary to Hudson River	Unmapped	K-S3	Intermittent	Mineral soil	1	0.2	86	42.410167, -73.817275
62485+00 C-416	Unnamed Tributary to Hudson River	Unmapped	K-S4	Intermittent	Mineral soil/ cobble	4	1	59	42.409925, -73.817378
62493+50 C-417	Unnamed Tributary to Hudson River	C/C	S-27b 863-504	Intermittent	Mineral soil	2.5	1.5	41	42.408828, -73.818446
62509+50 C-417	Unnamed Tributary to Hudson River	Unmapped	S-28	Intermittent	Cobble/ gravel	3	0.5	279	42.403852, -73.819031
62514+00 C-418	Unnamed Tributary to Hudson River	C/C	S-29 863-504	Intermittent	Cobble/ gravel	7	1.0	137	42.403109, -73.819397

Table 4-2 Summary of Waterbodies within the Project Corridor									
Approximate Station & Dwg. No.	**Waterbody Name**	**NYSDEC Classification**	**Waterbody Field ID & NYSDEC Regulation**	**Flow Status**	**Substrate**	**Width (ft.)[1]**	**Depth (ft.)[1]**	**Length w/in JD Boundary**	**Coordinates (Lat., Long.)**
62537+00 C-418	Unnamed Tributary to Hudson River	Unmapped	S-32a/ VG-S2	Intermittent	Mineral soil	3	0.5	906	42.39705, -73.820025
62539+00 C-418	Unnamed Tributary to Hudson River	Unmapped	VG-S1	Intermittent	Mineral soil/ gravel	3	2	89	42.396377, -73.820298
62579+25 C-420	Unnamed Tributary to Hudson River	Unmapped	S-32B	Intermittent	Cobble/ gravel	4	2	95	42.385447, -73.818807
Access Road (Van Gurpin Lane) C-217	Unnamed Tributary to Hudson River	C/C	VG-S 863-504	Perennial	Mineral soil	3	1	19	42.382214, -73.824286
62599+25 C-420	Unnamed Tributary to Hudson River	Unmapped	S-33	Intermittent	Mineral soil/ silt	12	1.5	33	42.379895, -73.818141
62610+75 C-421	Coxsackie Creek	C/C	S-34 863-502	Perennial	Cobble/ gravel boulder	30	3	209	42.376677, -73.817653
62688+00 C-423	Unnamed Tributary to Hudson River	Unmapped	G-CS-S1	Intermittent	-	-	-	92	42.357448, -73.815481
63790+25 C-427	Unnamed Tributary to Hudson River	Unmapped	S-36	Intermittent	Mineral soil/ Cobble	3	0.5	178	42.329563, -73.827178

Table 4-2 Summary of Waterbodies within the Project Corridor									
Approximate Station & Dwg. No.	**Waterbody Name**	**NYSDEC Classification**	**Waterbody Field ID & NYSDEC Regulation**	**Flow Status**	**Substrate**	**Width (ft.)[1]**	**Depth (ft.)[1]**	**Length w/in JD Boundary**	**Coordinates (Lat., Long.)**
63822+25 C-428	Unnamed Tributary to Hudson River	Unmapped	FA-D-BJ	Intermittent	Silt	7	0.5	277	42.320919, -73.831053
63833+25 C-428	Murderers Creek	C/C	FA-S-BH 863-259.1	Perennial	Silt/cobble	55	4	1,352	42.317927, -73.831859
63860+50 C-429	Unnamed Tributary to Hudson River	Unmapped	FA-D-BN	Intermittent	Silt/cobble	5	0.5	63	42.310976, -73.834255
63868+00 C-429	Unnamed Tributary to Hudson River	Unmapped	FA-D-BO	Intermittent	Silt	5	0.5	568	42.308298, -73.835107
63873+25 C-430	Unnamed Tributary to Hudson River	Unmapped	P6-FA-S1	Intermittent	-	-	-	135	42.307577, -73.834808
63877+00 C-430	Unnamed Tributary to Hudson River	Unmapped	FA-D-BG	Intermittent	Silt/cobble	6	1	960	42.302991, -73.836822
63887+50 C-430	Unnamed Tributary to Hudson River	Unmapped	FA-S-BL/ P6-FA-S2	Intermittent	Silt	3	0.5	317	42.303719, -73.835764
63900+00 C-431	Unnamed Tributary to Hudson River	Unmapped	FA-D-BE	Intermittent	Silt/cobble	5	0.5	0	-
63960+50 C-433	Unnamed Tributary to Hudson River	Unmapped	FA-D-AY	Intermittent	Silt/cobble	4	0.5	282	42.284099, -73.842808

Table 4-2 Summary of Waterbodies within the Project Corridor									
Approximate Station & Dwg. No.	**Waterbody Name**	**NYSDEC Classification**	**Waterbody Field ID & NYSDEC Regulation**	**Flow Status**	**Substrate**	**Width (ft.)[1]**	**Depth (ft.)[1]**	**Length w/in JD Boundary**	**Coordinates (Lat., Long.)**
64047+50 C-436	Unnamed Tributary to Hudson River	Unmapped	FA-D-BA	Intermittent	Silt	5	0.5	448	42.261479, -73.851709
64061+00 C-436	Unnamed Tributary to Hudson River	Unmapped	P6-S3	Perennial	Silt	4	0.5	299	42.258026, -73.852642
6408+25 C-437	Corlaer Kill	C/C	P6-S2 863-256	Perennial	Silt/cobble	14	2	1,592	42.250986, -73.855957
64109+00 C-438	Unnamed Tributary to Hudson River	Unmapped	P6-S4	Intermittent	Cobble/ gravel	2	1	78	42.245503, -73.857996
64109+50 C-438	Unnamed Tributary to Hudson River	Unmapped	FA-S-AQ	Intermittent	Cobble-gravel/silt	10	0.5	162	42.245593, -73.858556

[1] Bankfull width and bankfull depth measurements were estimated in the field.

Table 4-3 Soil Description Summary					
County	**Soil Name**	**Symbol**	**% Slopes**	**Hydric (y/n)**	**Drainage Class**
Hydric Soils					
Greene	Covington and Madalin soils	Co	0-3	Y	Poorly Drained
Greene	Fluvaquents-Udifluvents complex, frequently flooded	Fu	0-3	Y	Poorly Drained
Albany	Fluvaquents-Udifluvents complex, frequently flooded	Fx	0-3	Y	Poorly Drained
Albany	Madalin silt loam	Ma	0-3	Y	Poorly Drained
Albany	Raynham very fine sandy loam	Ra	0-3	Y	Poorly Drained
Albany & Greene	Shaker fine sandy loam	Sh	0-3	Y	Poorly Drained
Greene	Wayland soils complex, non-calcareous substratum, frequently flooded	Wa	0-3	Y	Poorly Drained
Non-hydric Soils					
Greene	Chenango gravelly loam	CnA	0-3	N	Well Drained
Albany	Claverack loamy fine sand	ClA	0-3	N	Moderately Well Drained
Albany	Claverack loamy fine sand	ClB	3-8	N	Moderately Well Drained
Albany	Colonie loamy fine sand	CoB	3-8	N	Well Drained
Greene	Dumps, landfill	Du	0-25	N	Well Drained
Albany	Elmridge fine sandy loam	EIA	0-3	N	Moderately Well Drained
Greene	Elmridge very fine sandy loam	EnA	0-3	N	Moderately Well Drained
Greene	Elmridge very fine sandy loam	EnB	3-8	N	Moderately Well Drained
Albany	Elnora loamy fine sand	EnA	0-3	N	Moderately Well Drained
Albany	Hudson silt loam	HuB	3-8	N	Moderately Well Drained
Albany	Hudson silt loam	HuC	8-15	N	Moderately Well Drained
Albany	Hudson silt loam, hilly	HuD	15-25	N	Moderately Well Drained

Table 4-3 Soil Description Summary					
County	**Soil Name**	**Symbol**	**% Slopes**	**Hydric (y/n)**	**Drainage Class**
Albany	Hudson silt loam	HuE	25-45	N	Moderately Well Drained
Greene	Hudson and Vergennes soils	HvB	3-8	N	Moderately Well Drained
Greene	Hudson and Vergennes soils	HvC	8-15	N	Moderately Well Drained
Greene	Hudson and Vergennes soils	HvE	25-50	N	Moderately Well Drained
Greene	Hudson and Vergennes silty clay loams, severely eroded	HwC3	8-15	N	Moderately Well Drained
Greene	Hudson and Vergennes silty clay loams, severely eroded	HwD3	15-25	N	Moderately Well Drained
Greene	Kingsbury and Rhinebeck soils	KrA	0-3	N	Somewhat Poorly Drained
Greene	Kingsbury and Rhinebeck soils	KrB	3-8	N	Somewhat Poorly Drained
Albany	Nassau channery silt loam	NaB	3-8	N	Somewhat Excessively Drained
Greene	Nassau channery silt loam, rolling	NaC	5-15	N	Somewhat Excessively Drained
Greene	Nassau channery silt loam, rolling, very rocky	NrC	8-15	N	Somewhat Excessively Drained
Greene	Nassau channery silt loam, hilly, very rocky	NrD	15-25	N	Somewhat Excessively Drained
Greene	Nassau channery silt loam, steep, very rocky	NrE	25-45	N	Somewhat Excessively Drained
Albany & Greene	Nunda silt loam	NuB	3-8	N	Moderately Well Drained
Albany	Nunda silt loam	NuC	8-15	N	Moderately Well Drained
Albany	Rhinebeck silty clay loam	RhA	0-3	N	Somewhat Poorly Drained
Albany	Rhinebeck silty clay loam	RhB	3-8	N	Somewhat Poorly Drained
Greene	Riverhead loam	RhA	0-3	N	Well Drained
Greene	Riverhead loam	RhB	3-8	N	Well Drained
Greene	Riverhead loam, rolling	RhC	8-15	N	Well Drained
Greene	Riverhead loam, hilly	RhD	15-25	N	Well Drained
Albany & Greene	Shaker very fine sandy loam	Sh	0-3	N	Somewhat Poorly Drained

Table 4-3 Soil Description Summary					
County	**Soil Name**	**Symbol**	**% Slopes**	**Hydric (y/n)**	**Drainage Class**
Albany	Stafford loamy fine sand	St	0-3	N	Somewhat Poorly Drained
Greene	Tioga loam	Ta	0-3	N	Well Drained
Greene	Tunkhannock gravelly loam, fan	TvB	3-8	N	Well Drained
Albany	Udipsamments, smoothed	Ud	0-45	N	Well Drained
Albany	Udipsamments-Urban land complex	Uf	0-8	N	Somewhat Excessively Drained
Albany	Udorthents, loamy	Ug	0-8	N	Moderately Well Drained
Albany	Unadilla silt loam	UnD	15-25	N	Well Drained
Greene	Udorthents, loamy	Ur	0-8	N	Somewhat Excessively Drained
Albany	Udorthents, clayey-urban land complex	Uh	0-8	N	Moderately Well Drained
Albany	Udorthents, lomay-urban land complex	Uk	0-8	N	Well Drained
Albany	Urban land-Udorthents complex	Ut	0-8	N	Moderately Well Drained
Greene	Valois-Nassau complex, undulating	VdB	3-8	N	Well Drained
Greene	Valois-Nassau complex, hilly	VdD	15-25	N	Well Drained
Albany	Wakeland silt loam	Wa	0-3	N	Somewhat Poorly Drained

ATTACHMENT 5
WETLANDS AND WATERBODIES DELINEATION MAPPING

LEGEND & ABBREVIATIONS

- EXIST. FIBER OPTIC LINE HANDHOLE
- EXIST. FIBER OPTIC LINE PEDESTAL
- EXIST. FIBER OPTIC LINE DOGHOUSE
- EXIST. FIBER OPTIC LINE MANHOLE
- EXIST. FIBER OPTIC LINE VAULT
- EXIST. FIBER OPTIC LINE BORE PIT
- EXIST. FIBER OPTIC LOCK BOX
- EXIST. GROUND ROD
- EXIST. FIBER OPTIC MARKER POST
- EXIST. FIBER OPTIC BOX
- EXIST. FIBER STORAGE
- EXIST. FIRE HYDRANT
- EXIST. WATER VALVE
- EXIST. WATER MANHOLE
- EXIST. WATER MARKER
- EXIST. SANITARY SEWER MANHOLE
- EXIST. SANITARY SEWER VENT
- EXIST. STORM SEWER MANHOLE
- EXIST. STORM SEWER CATCH BASIN
- EXIST. CULVERT INVERT
- EXIST. GAS MANHOLE
- EXIST. GAS VALVE
- EXIST. GAS MARKER
- EXIST. GAS PIPELINE VENT
- EXIST. LIGHT POLE
- EXIST. UTILITY POLE
- EXIST. ELEC. POLE
- EXIST. ELEC. TOWER
- EXIST. TRAFFIC LIGHT
- EXIST. ELEC. METER
- EXIST. ELEC. MANHOLE
- EXIST. ELEC. TRANSFORMER
- EXIST. ELEC. VAULT
- EXIST. ELEC. HANDHOLE
- EXIST. ELEC. PEDESTAL/BOX
- EXIST. ELEC. MARKER POST
- EXIST. ELEC. GUY ANCHOR/WIRE
- EXIST. TELE. RISER/BOX
- EXIST. TELE. MANHOLE
- EXIST. TELE. HANDHOLE
- EXIST. TELE. VAULT
- EXIST. TELE. PEDESTAL
- EXIST. TELE. DOGHOUSE
- EXIST. TELE. MARKER POST
- EXIST. TELE. JUNCTION BOX
- EXIST. TRAFFIC SIGNAL BOX
- EXIST. CELL TOWER
- EXIST. CABLE BOX
- EXISTING MANHOLE UNKNOWN
- EXISTING UTILITY BOX UNKNOWN
- EXISTING ANTENNA
- EXISTING CAPPED IRON ROD
- EXISTING IRON PIPE
- EXISTING CONCRETE MONUMENT
- EXISTING POST
- EXISTING REFLECTOR MARKER
- EXISTING SYMBOL (SYM.)

- EXISTING SIGN
- EXIST. STRUCTURE POST
- EXIST. STRUCTURE MAILBOX
- EXIST. GAS LINE
- EXIST. UNDERGROUND TELE.
- EXIST. FIBER OPTIC
- EXIST. OVERHEAD TELE.
- EXIST. UNDERGROUND ELEC.
- EXIST. OVERHEAD ELEC.
- EXIST. CULVERT
- EXIST. SANITARY SEWER
- EXIST. STORM SEWER
- EXIST. POTABLE WATER LINE
- EXIST. FUEL LINE
- EXIST. RAILROAD TRACK
- CERTIFIED ROUTE PROVIDED BY CHPE KMZ
- RANDALL PREFERRED PROVIDED BY CHPE KMZ
- EXIST. CONTOUR, INDEX
- EXIST. CONTOUR, DEPRESSION INDEX
- EXIST. CONTOUR, INTERMEDIATE
- EXIST. CONTOUR, DEPRESSION INTERMEDIATE
- EXIST. SPOT ELEVATION
- EXIST. DEBRIS
- EXIST. FIELD LINE
- EXIST. LANDSCAPE AREA
- EXIST. PILE
- EXIST. STORAGE AREA
- EXIST. NATURAL BOULDER
- EXIST. NATURAL SHRUB LINE
- EXIST. NATURAL TREE LINE
- EXIST. NATURAL SINGLE TREE/BUSH
- EXIST. STRUCTURAL BUILDING
- EXIST. PAVED DRIVE
- EXIST. PAVED ROAD
- EXIST. PAVED SHOULDER
- EXIST. PAVED SIDEWALK
- EXIST. GUARDRAIL
- EXIST. TRAIL
- EXIST. FENCE
- EXIST. WALL
- EXIST. RETAINING WALL
- EXIST. MILEPOST NUMBER
- EXIST. MAPPING BOUNDARY
- EXIST. GROUND CONTROL
- EXIST. RIGHT-OF-WAY
- EXIST. ABUTTER
- EXIST. WETLAND FLAG
- EXIST. WETLANDS
- EXIST. WATERBODY, STREAM, OR STREAM BANK

- PEM – PALUSTRINE EMERGENT
- PSS – PALUSTRINE SCRUB-SHRUB
- PFO – PALUSTRINE FORESTED
- PUB – PALUSTRINE UNCONSOLIDATED BOTTOM
- L1 – LACUSTRINE LIMNETIC
- L2 – LACUSTRINE LITTORAL
- NYSDEC FWW 100-FOOT ADJACENT BUFFER AREA
- ESTIMATED WETLAND BOUNDARY
- ESTIMATED AGRICULTURAL LAND BOUNDARY
- FLOODWAY BOUNDARY
- 1% ANNUAL CHANCE FLOODPLAIN BOUNDARY
- 0.2% ANNUAL CHANCE FLOODPLAIN BOUNDARY
- JD BOUNDARY
- APPROX. USACE FEDERAL CHANNEL BOUNDARY (TYP.)

- VEG. CLEARING – TYPE I – HAND CUTTING
- VEG. CLEARING – TYPE II – MECHANICAL CLEARING
- VEG. CLEARING – TYPE III – MOWING
- VEG. CLEARING – TYPE IV – MECHANICAL WHOLE-TREE FELLING
- PROP. WETLAND PROTECTION FENCE
- PROP. COMPOST FILTER SOCK (OR SILT SOCK)
- CHECK DAM
- SURFACE WATER FLOW
- PROP. TEMPORARY SWALE
- STABILIZED CONSTRUCTION ENTRANCE (TYP.)
- PROP. TEMP MAJOR CONTOUR
- PROP. TEMP MINOR CONTOUR
- PROP. LIMITS OF WORK/DISTURBANCE
- PROP. LIMITS OF CLEARING/LIMITS OF WORK IN CLEARING AREAS
- PROP. CONCRETE WASHOUT
- PROP. TEMP ACCESS ROAD RTE (EXISTING ROAD OR SURFACE)
- PROP. TEMP REFURBISHED ACCESS ROAD
- PROP. TEMP SHOULDER WIDENING
- PROP. TEMP ACCESS ROAD OR OFF SITE ACCESS ROAD
- PROP. WETLAND OR AGRICULTURAL LAND* WORKING SURFACE (SEE SHEET C-613) (*AGRICULTURAL LANDS MAY USE WETLAND WORKING SURFACE OR OTHER APPROVED MITIGATION METHODS)
- PROP. MILLING & RESURFACING
- PROP. SPLICE LOCATION
- PROP. SPLICE VAULT
- PROP. LINK BOX HANDHOLE
- PROP. FIBER SPLICE HANDHOLE
- PROP. BORING LOCATION
- XXXXX+XX PROP. ALIGNMENT STATIONING
- PROP. ALIGNMENT CENTERLINE
- PROP. LAYDOWN YARDS, PARKING, STORAGE & MUSTER AREA
- PROP. WORK AREAS
- 7' FOUL ZONE: NO VEHICLES, MATERIALS, DISTURBANCE, PERSONNEL, OR WORK SHALL ENCROACH THE ZONE WITHIN 7FT OF THE NEAREST RAIL WITHOUT CSX COORDINATION AND APPROVAL
- PROP. SHORING/SHEETING
- PROP. TEMP EASEMENT
- PROP. PERM EASEMENT
- PROP. TEMP ACCESS EASEMENT
- SL PM SPLICE LOCATION POLE MARKER
- UPC PM UNDERGROUND POWER CABLE POLE MARKER
- PROP. TRANSITION BOX MANHOLE
- A (-) B (+) DC CABLE IDENTIFICATION TAGS. SEE SHEET C-807 FOR MORE DETAILS

APP	APPROVED
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CONC	CONCRETE
DB	DESIGNED BY
DEC	NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DEG	DEGREES
DR	DRIVE
DZ	DEVIATION ZONE
E	EASTING
ELECTRIC	ELECTRIC CABLE
ELEV	ELEVATION
EQNAHD	STATION EQUATION AHEAD
EQNBK	STATION EQUATION BACK
EXIST	EXISTING
FIBER	FIBER OPTIC CABLE
FT	FEET
GAS	GAS PIPE
H	HORIZONTAL
HDD	HORIZONTAL DIRECTIONAL DRILLING
HVDC	HIGH-VOLTAGE DIRECT CURRENT TRANSMISSION LINE
INV	INVERT ELEVATION
LOW	LIMITS OF WORK
LT	LEFT
MAX	MAXIMUM
MIN	MINIMUM
N	NORTHING
NO	NUMBER
NY	NEW YORK
NYCDEP	NEW YORK CITY DEPT. OF ENVIRONMENT PROTECTION
NYCDOT	NEW YORK CITY DEPT. OF TRANSPORTATION
NYDPR	NEW YORK CITY DEPT. OF PARKS AND RECREATION
P#	PACKAGE #
PERM	PERMANENT
PROP.	PROPOSED
PVC	POLYVINYL CHLORIDE
PVI	POINT OF VERTICAL INTERSECTION
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
REV	REVISION
ROW	RIGHT-OF-WAY
RT	RIGHT
RTE	ROUTE
SEWER	SANITARY SEWER PIPE
SH	SHEET
ST	STREET
STA	STATION
STORM	STORM DRAIN PIPE
TELECOM	TELECOMMUNICATIONS CABLE
TEMP	TEMPORARY
TR	THERMAL RESISTIVITY
TYP	TYPICAL
V	VERTICAL
WATER	WATERLINE

NOTES:

1. LIMIT OF WORK (LOW) – THE BOUNDARY IN WHICH ALL CONSTRUCTION ACTIVITIES, STOCKPILES MATERIAL, EQUIPMENT STORAGE, ACCESS, PARKING, GRADING, LANDSCAPING, RESTORATION, AND ANY OTHER CONSTRUCTION RELATED ACTIVITIES SHALL OCCUR. ADDITIONALLY, THE LOW IS THE BOUNDARY FOR ALL POTENTIAL DISTURBANCE DURING CONSTRUCTION. UNLESS OTHERWISE SPECIFIED, WHEN THE LIMIT OF CLEARING AND GRUBBING IS SHOWN ON THE PLANS, IT SHALL ALSO BE THE LOW. THE LOW INCLUDES THE AREA THAT WOULD BE CONSIDERED THE LIMIT OF DISTURBANCE (LOD).

CHPE Champlain Hudson Power Express

Kiewit

STATE OF NEW YORK · THOMAS A. KELLY · LICENSED PROFESSIONAL ENGINEER · 095838 · 2023-09-29

No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP
0	09/29/2023	ISSUED FOR CONSTRUCTION SUBMISSION	BV	TK

DRAWN BY: AR | DESIGNED BY: BV | APPROVED BY: TK

CHAMPLAIN HUDSON POWER EXPRESS

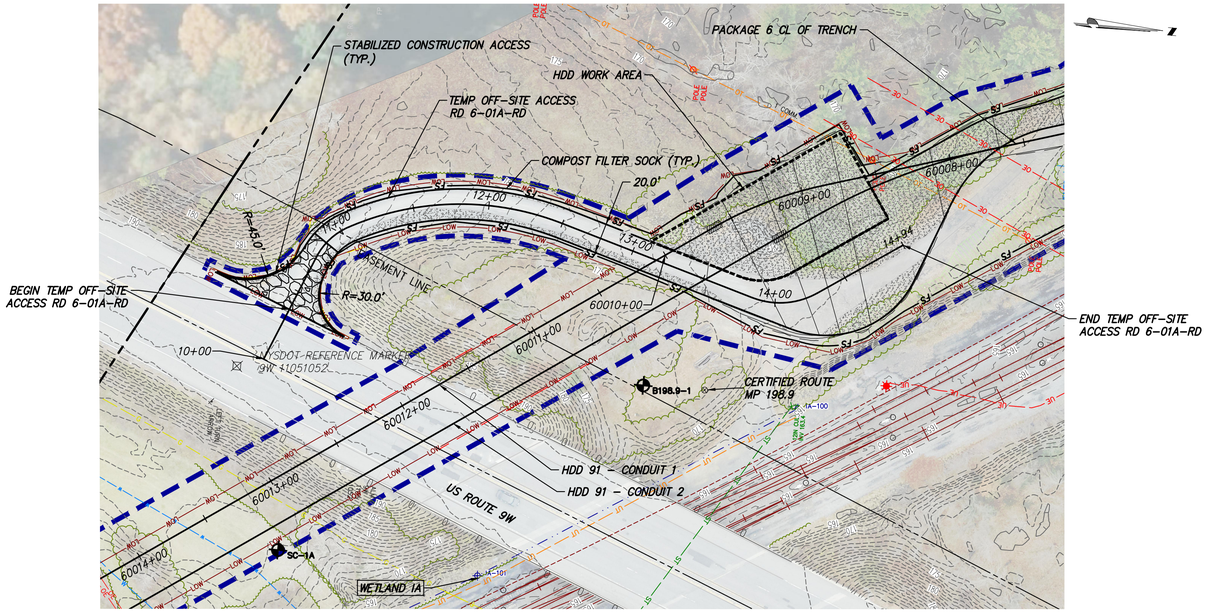
SEGMENT 10 (PACKAGE 6) - SELKIRK RAIL YARD BYPASS TO CATSKILL

LEGEND AND ABBREVIATIONS

KIEWIT PROJECT NO. 21162

DRAWING NO. G-005

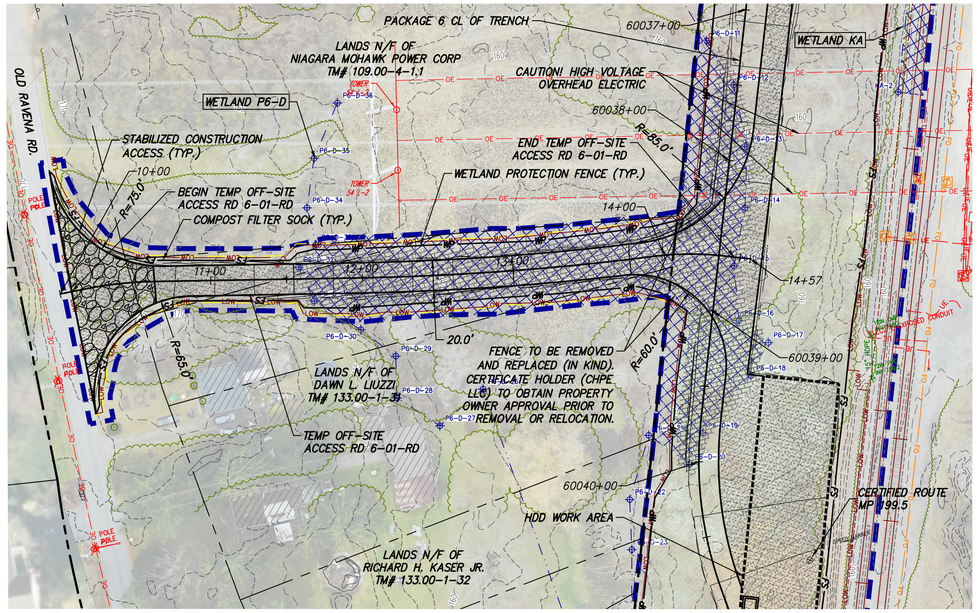
SCALE AS SHOWN | DATE 09/29/2023 | REV. NO. 0 | SH.NO. 6 OF XXX



TEMP OFF-SITE ACCESS RD 6-01A-RD PLAN VIEW

STA. 10+00 TO STA. 14+94
SCALE: 1" = 50'

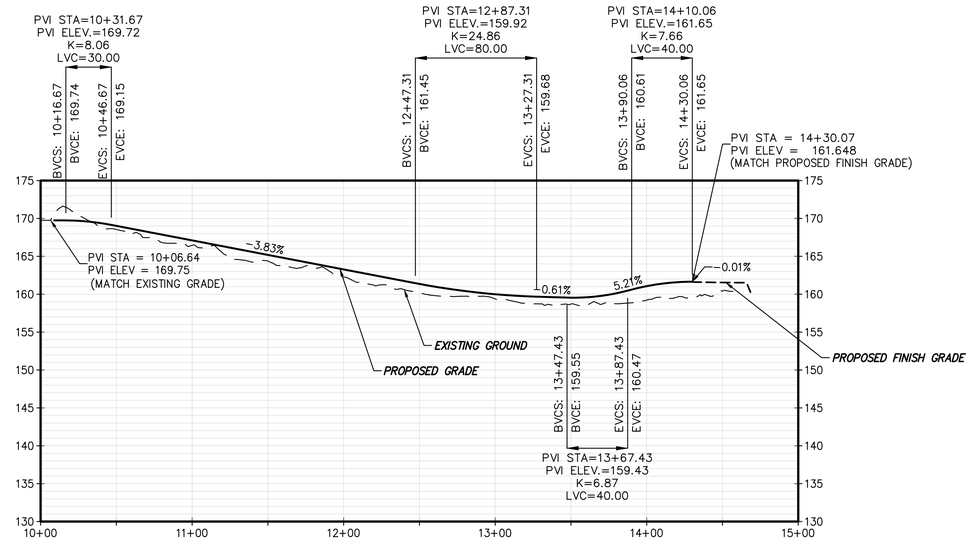
0 50 100
Scale in feet



TEMP OFF-SITE ACCESS RD 6-01-RD PLAN VIEW

STA. 10+00 TO STA. 14+57
SCALE: 1" = 50'

0 50 100
Scale in feet



TEMP OFF-SITE ACCESS RD 6-01-RD PROFILE

STA. 10+06.64 TO STA. 14+30.07
SCALE: H: 1" = 50' V: 1" = 10'

CHPE Champlain Hudson Power Express

Kiewit

STATE OF NEW YORK · MICHAEL DALE HAVENER · 103692 · LICENSED PROFESSIONAL ENGINEER

STATE OF NEW YORK · THOMAS A. KELLY · 106585 · LICENSED PROFESSIONAL ENGINEER · 2023-09-29

No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP
0	09/29/2023	ISSUED FOR CONSTRUCTION SUBMISSION	BV	TK

CHAMPLAIN HUDSON POWER EXPRESS

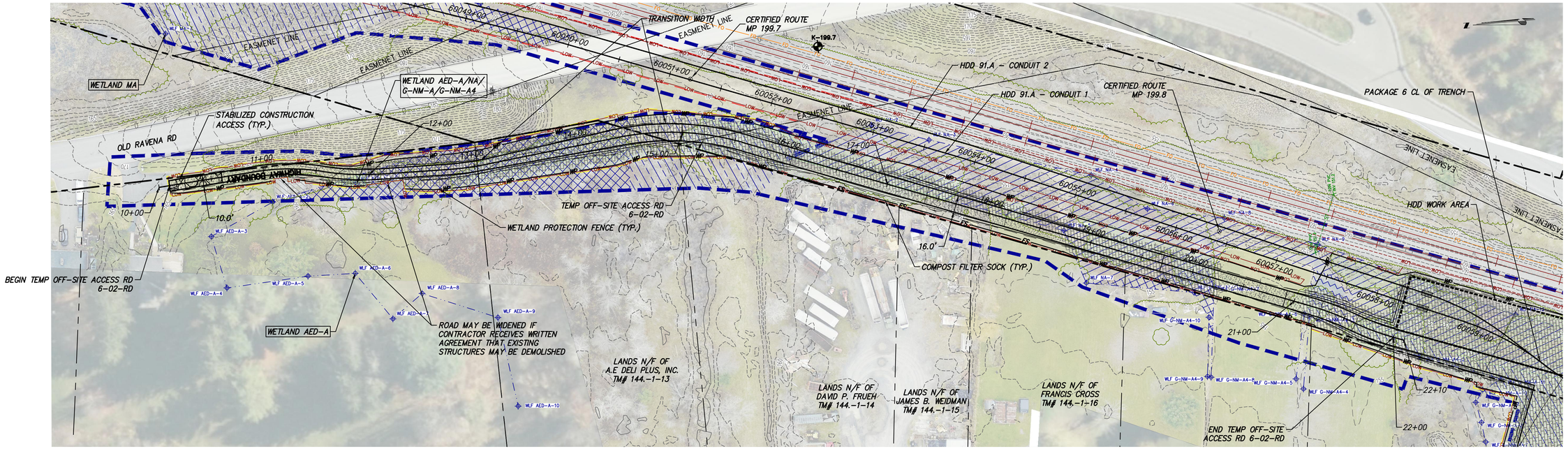
SEGMENT 10 (PACKAGE 6) - SELKIRK RAIL YARD BYPASS TO CATSKILL

TEMP OFF-SITE ACCESS ROADS (6-01A-RD & 6-01-RD)

KIEWIT PROJECT NO. 21162

DRAWING NO. **C-201**

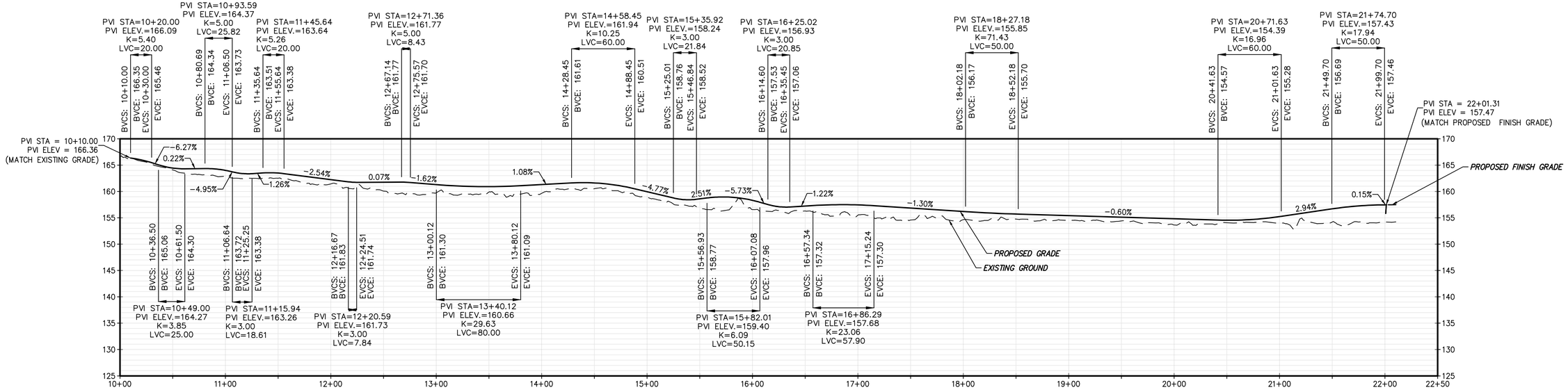
DRAWN BY: AR | DESIGNED BY: BV | APPROVED BY: TK | SCALE AS SHOWN | DATE 09/29/2023 | REV. NO. 0 | SH.NO. 93 OF XXX



TEMP OFF-SITE ACCESS RD 6-02-RD PLAN VIEW

STA. 10+00 TO STA. 22+10
SCALE: 1" = 50'

0 50 100
Scale in feet



TEMP OFF-SITE ACCESS RD 6-02-RD PROFILE

STA. 10+10.00 TO STA. 22+01.32
SCALE: H: 1" = 50' V: 1" = 10'

CHPE Champlain Hudson Power Express

Kiewit

STATE OF NEW YORK · NATHANIEL DALE HAVENER · LICENSED PROFESSIONAL ENGINEER · 103692

STATE OF NEW YORK · THOMAS A. KELLY · LICENSED PROFESSIONAL ENGINEER · 108569 · 2023-09-29

No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP
0	09/29/2023	ISSUED FOR CONSTRUCTION SUBMISSION	BV	TK

CHAMPLAIN HUDSON POWER EXPRESS

SEGMENT 10 (PACKAGE 6) - SELKIRK RAIL YARD BYPASS TO CATSKILL

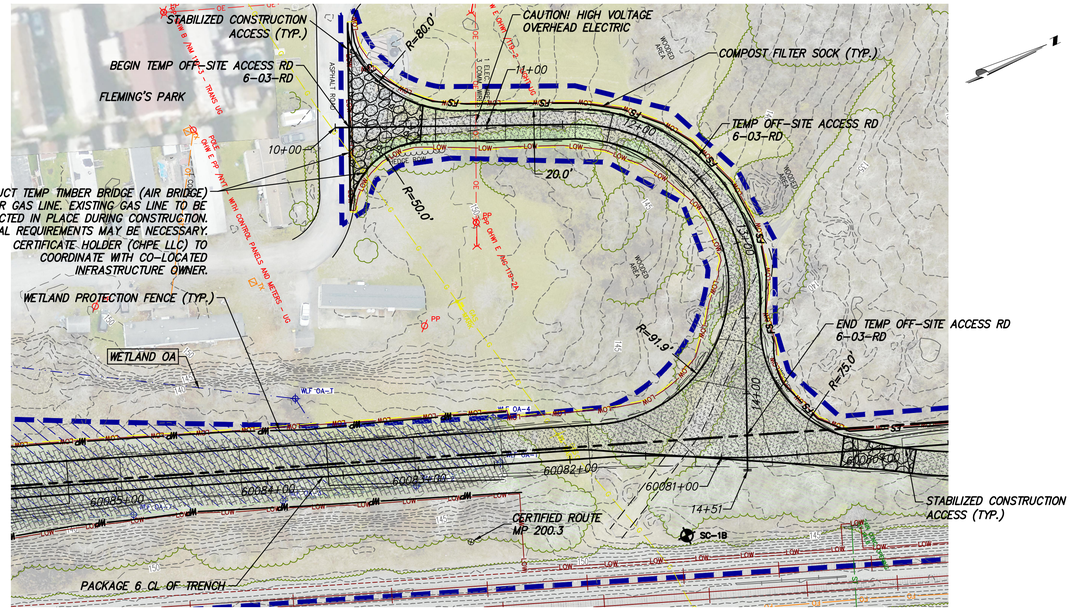
TEMP OFF-SITE ACCESS ROADS (6-02-RD)

KIEWIT PROJECT NO. 21162

DRAWING NO. C-202

DRAWN BY: AR | DESIGNED BY: BV | APPROVED BY: TK | SCALE AS SHOWN | DATE 09/29/2023 | REV. NO. 0 | SH.NO. 94 OF XXX

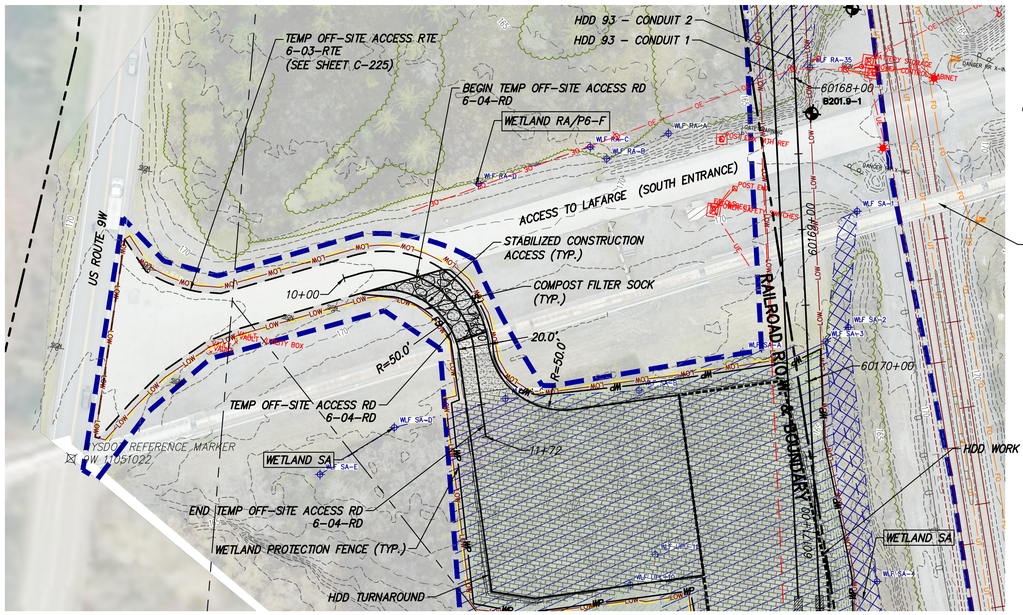
File: P:\PROJECTS\KIE_CHPE\3-DES\02 ROW\SHTS\P6\21162_6_C_AR_201-202.DWG Saved: 9/28/2023 2:47:35 PM Plotted: 9/28/2023 2:48:16 PM Current User: Mariana.Lugo LastSavedBy: Mariana.Lugo



TEMP OFF-SITE ACCESS RD 6-03-RD PLAN VIEW

STA. 10+00 TO STA. 14+51
SCALE: 1" = 50'

0 50 100
Scale in feet

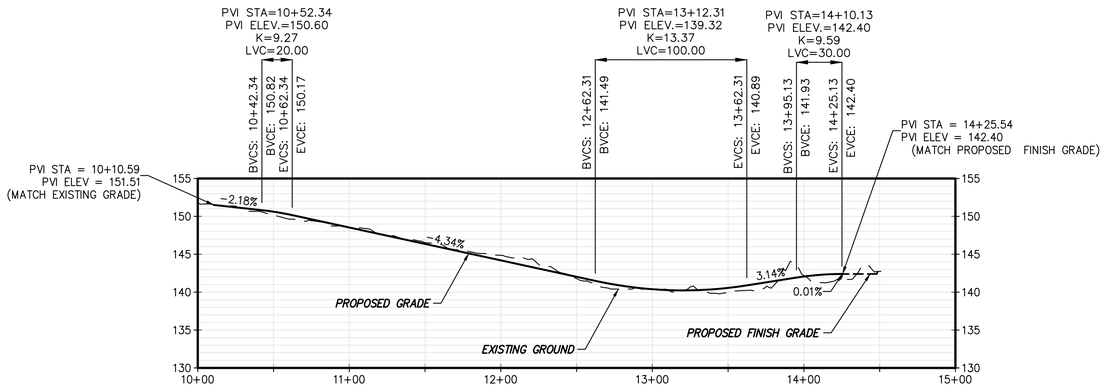


TEMP OFF-SITE ACCESS RD 6-04-RD PLAN VIEW

STA. 10+00 TO STA.11+72
SCALE: 1" = 50'

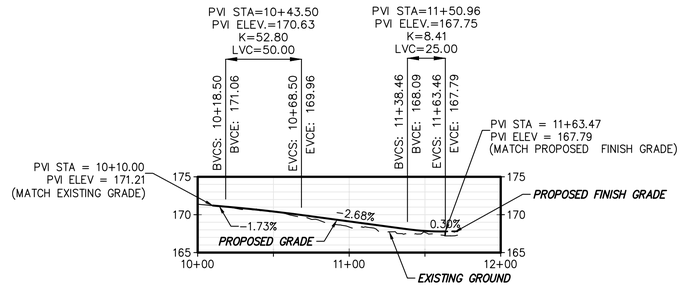
0 50 100
Scale in feet

ACCESS ROAD IS NOT LOCATED WITHIN CSX PROPERTY



TEMP OFF-SITE ACCESS RD 6-03-RD PROFILE

STA. 10+10.59 TO STA. 14+25.54
SCALE: H: 1" = 50' V: 1" = 10'



TEMP OFF-SITE ACCESS RD 6-04-RD PROFILE

STA. 10+10.00 TO STA. 11+63.47
SCALE: H: 1" = 50' V: 1" = 10'

CHPE Champlain Hudson Power Express

Kiewit

STATE OF NEW YORK · NATHANIEL DALE HAVENER · 103692 · LICENSED PROFESSIONAL ENGINEER

STATE OF NEW YORK · THOMAS A. KELLY · 2023-09-29 · 106559 · LICENSED PROFESSIONAL ENGINEER

No.	DATE	SUBMITTAL / REVISION DESCRIPTION	BY	APP
0	09/29/2023	ISSUED FOR CONSTRUCTION SUBMISSION	BV	TK

CHAMPLAIN HUDSON POWER EXPRESS

SEGMENT 10 (PACKAGE 6) - SELKIRK RAIL YARD BYPASS TO CATSKILL

TEMP OFF-SITE ACCESS ROADS (6-03-RD & 6-04-RD)

KIEWIT PROJECT NO. 21162

DRAWING NO. **C-203**

DRAWN BY: AR | DESIGNED BY: BV | APPROVED BY: TK | SCALE AS SHOWN | REV. NO. 0 | DATE 09/29/2023 | SH.NO. 95 OF XXX