Upland 7A-Y - View facing southeast

Upland 7A-Y - Soils

Segment 11 – Package 7A

SITE PHOTOGRAPHS

Champlain Hudson Power Express

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

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

Project/Site: CHPE City/County: Catskill / Greene County Sampling Date: 9/30/2022

Applicant/Owner: TDI State: NY Sampling Point: Wet_7A-Z-5

Investigator(s): C. Scrivner & K. Shumacher Section, Township, Range:

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope %: 2

Subregion (LRR or MLRA): LRR R Lat: 42.14353°N Long: -73.90843°W Datum: WGS84

Soil Map Unit Name: Mh - Medisaprists-Hydraquents, tidal marsh NWI classification: PSS1

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

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

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

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

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**
Hydric Soil Present?	Yes X	No ____	**within a Wetland?** **Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID: Near flag 7A-Z-5

Remarks: (Explain alternative procedures here or in a separate report.)
Palustrine scrub shrub wetland.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

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

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

Remarks:
Adjacent to the Hudson River.

VEGETATION – Use scientific names of plants.

Sampling Point: Wet_7A-Z-5

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus deltoides*	10	Yes	FAC
2. *Salix alba*	5	Yes	FACW
3.			
4.			
5.			
6.			
7.			
	15	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15')			
1. *Rhamnus cathartica*	45	Yes	FAC
2. *Viburnum cassinoides*	25	Yes	FACW
3.			
4.			
5.			
6.			
7.			
	70	=Total Cover	
Herb Stratum (Plot size: 5')			
1. *Carex intumescens*	35	Yes	FACW
2. *Fraxinus pennsylvanica*	15	Yes	FACW
3. *Lysimachia nummularia*	8	No	FACW
4. *Acer rubrum*	5	No	FAC
5. *Toxicodendron radicans*	5	No	FAC
6. *Equisetum arvense*	3	No	FAC
7.			
8.			
9.			
10.			
11.			
12.			
	71	=Total Cover	
Woody Vine Stratum (Plot size: 30')			
1. *Celastrus orbiculatus*	5	Yes	FACU
2. *Parthenocissus quinquefolia*	3	Yes	FACU
3.			
4.			
	8	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	88	x 2 =	176
FAC species	68	x 3 =	204
FACU species	8	x 4 =	32
UPL species	0	x 5 =	0
Column Totals:	164 (A)		412 (B)

Prevalence Index = B/A = 2.51

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

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

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

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

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

SOIL

Sampling Point: Wet_7A-Z-5

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 2/1	100					Sandy	organics
3-6	10YR 2/2	90	10YR 4/6	10	C	M	Sandy	Prominent redox concentrations
6-12	2.5Y 3/1	70	10YR 4/6	30	C	M	Sandy	Prominent redox concentrations

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

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

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Roots

Depth (inches): 12

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

Remarks:

Wetland 7A-Z - View facing west

Wetland 7A-Z - Soils

Segment 11 – Package 7A	**SITE PHOTOGRAPHS**
	Champlain Hudson Power Express

U.S. Army Corps of Engineers **WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region** See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R	***OMB Control #: 0710-0024, Exp: 11/30/2024*** ***Requirement Control Symbol EXEMPT:*** ***(Authority: AR 335-15, paragraph 5-2a)***

Project/Site: CHPE City/County: Catskill / Greene County Sampling Date: 9/30/2022

Applicant/Owner: TDI State: NY Sampling Point: Upl_7A-Z-5

Investigator(s): C. Scrivner & K. Shumacher Section, Township, Range:

Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope %: 10

Subregion (LRR or MLRA): LRR R Lat: 42.14358°N Long: --73.90819°W Datum: WGS84

Soil Map Unit Name: Mh - Medisaprists-Hydraquents, tidal marsh NWI classification: NA

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

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

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

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

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area**
Hydric Soil Present?	Yes ____	No X	**within a Wetland?** **Yes** ____ **No** X
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)
Successional shrubland / hillslope.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

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

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

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: Upl_7A-Z-5

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15')			
1. *Rhamnus cathartica*	75	Yes	FAC
2. *Viburnum cassinoides*	5	No	FACW
3.			
4.			
5.			
6.			
7.			
	80 =Total Cover		
Herb Stratum (Plot size: 5')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	=Total Cover		
Woody Vine Stratum (Plot size: 30')			
1. *Vitis aestivalis*	10	Yes	FACU
2. *Celastrus orbiculatus*	10	Yes	FACU
3.			
4.			
	20 =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	5	x 2 =	10
FAC species	75	x 3 =	225
FACU species	20	x 4 =	80
UPL species	0	x 5 =	0
Column Totals:	100 (A)		315 (B)

Prevalence Index = B/A = 3.15

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

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

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

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

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

SOIL

Sampling Point: Upl_7A-Z-5

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/3	100					Sandy	organics
3-8	10YR 4/2	100					Sandy	

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

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

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Roots/Rocks

Depth (inches): 8

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

Remarks:

Upland 7A-Z - View facing east

Upland 7A-Z - Soils

Segment 11 – Package 7A

SITE PHOTOGRAPHS

Champlain Hudson Power Express

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

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

Project/Site: CHPE City/County: Catskill / Greene County Sampling Date: 9/30/2022

Applicant/Owner: TDI State: NY Sampling Point: Wet_7A-Z-17

Investigator(s): C. Scrivner & K. Shumacher Section, Township, Range:

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope %: 3

Subregion (LRR or MLRA): LRR R Lat: 42.14418°N Long: -73.90944°W Datum: WGS84

Soil Map Unit Name: Mh - Medisaprists-Hydraquents, tidal marsh NWI classification: PFO1

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

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

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

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

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**
Hydric Soil Present?	Yes X	No ____	**within a Wetland?** **Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID: Near flag 7A-Z-17

Remarks: (Explain alternative procedures here or in a separate report.)
Palustrine forested wetland. Hardwood swamp.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes X	No ____	Depth (inches): 16
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 4

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

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

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: Wet_7A-Z-17

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus deltoides*	40	Yes	FAC
2. *Salix alba*	20	Yes	FACW
3. *Ulmus americana*	10	No	FACW
4. *Fraxinus pennsylvanica*	5	No	FACW
5.			
6.			
7.			
	75	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15')			
1. *Viburnum cassinoides*	35	Yes	FACW
2. *Rhamnus cathartica*	20	Yes	FAC
3. *Fraxinus pennsylvanica*	10	No	FACW
4. *Salix alba*	5	No	FACW
5.			
6.			
7.			
	70	=Total Cover	
Herb Stratum (Plot size: 5')			
1. *Fraxinus pennsylvanica*	20	Yes	FACW
2. *Bidens frondosa*	5	No	FACW
3. *Equisetum arvense*	5	No	FAC
4. *Phragmites australis*	3	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	33	=Total Cover	
Woody Vine Stratum (Plot size: 30')			
1. *Celastrus orbiculatus*	10	Yes	FACU
2. *Toxicodendron radicans*	5	Yes	FAC
3.			
4.			
	15	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 85.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	113	x 2 =	226
FAC species	70	x 3 =	210
FACU species	10	x 4 =	40
UPL species	0	x 5 =	0
Column Totals:	193 (A)		476 (B)

Prevalence Index = B/A = 2.47

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

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

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

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

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

SOIL

Sampling Point: Wet_7A-Z-17

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 2/2	100					Sandy	organics
4-10	10YR 3/1	80	10YR 4/4	15	C	PL/M	Sandy	Distinct redox concentrations
			5YR 3/4	5	C	PL		Prominent redox concentrations
10-20	10YR 4/1	75	5YR 3/4	25	C	M	Sandy	Prominent redox concentrations

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

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

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

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

Remarks:

Wetland 7A-Z - View facing south/southwest

Wetland 7A-Z - Soils

Segment 11 – Package 7A	**SITE PHOTOGRAPHS**
	Champlain Hudson Power Express

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

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

Project/Site: CHPE City/County: Catskill / Greene County Sampling Date: 9/30/2022

Applicant/Owner: TDI State: NY Sampling Point: Upl_7A-Z-17

Investigator(s): C. Scrivner & K. Shumacher Section, Township, Range:

Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope %: 3

Subregion (LRR or MLRA): LRR R Lat: 42.14438° Long: -73.90921°W Datum: WGS84

Soil Map Unit Name: Ur - Udorthents, loamy NWI classification: NA

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

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

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

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

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**
Hydric Soil Present?	Yes ____	No X	**within a Wetland?** **Yes** ____ **No** X
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID:

Remarks: (Explain alternative procedures here or in a separate report.)
Successional shrubland / hillslope.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

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

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

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: Upl_7A-Z-17

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer negundo*	10	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
	10	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15')			
1. *Viburnum cassinoides*	45	Yes	FACW
2. *Rhamnus cathartica*	15	Yes	FAC
3. *Acer negundo*	10	No	FAC
4.			
5.			
6.			
7.			
	70	=Total Cover	
Herb Stratum (Plot size: 5')			
1. *Parthenocissus quinquefolia*	20	Yes	FACU
2. *Toxicodendron radicans*	10	Yes	FAC
3. *Viburnum cassinoides*	10	Yes	FACW
4. *Oxalis stricta*	5	No	FACU
5. *Rhamnus cathartica*	3	No	FAC
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	48	=Total Cover	
Woody Vine Stratum (Plot size: 30')			
1. *Parthenocissus quinquefolia*	5	Yes	FACU
2. *Celastrus orbiculatus*	5	Yes	FACU
3. *Toxicodendron radicans*	5	Yes	FAC
4.			
	15	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 9 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	55	x 2 =	110
FAC species	53	x 3 =	159
FACU species	35	x 4 =	140
UPL species	0	x 5 =	0
Column Totals:	143 (A)		409 (B)

Prevalence Index = B/A = 2.86

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

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

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

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

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

SOIL

Sampling Point: Upl_7A-Z-17

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

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 3/3	100					Loamy/Clayey	

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

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

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Red Parent Material (F21) **(outside MLRA 145)**
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 12

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

Remarks:

Upland 7A-Z - View facing west/northwest

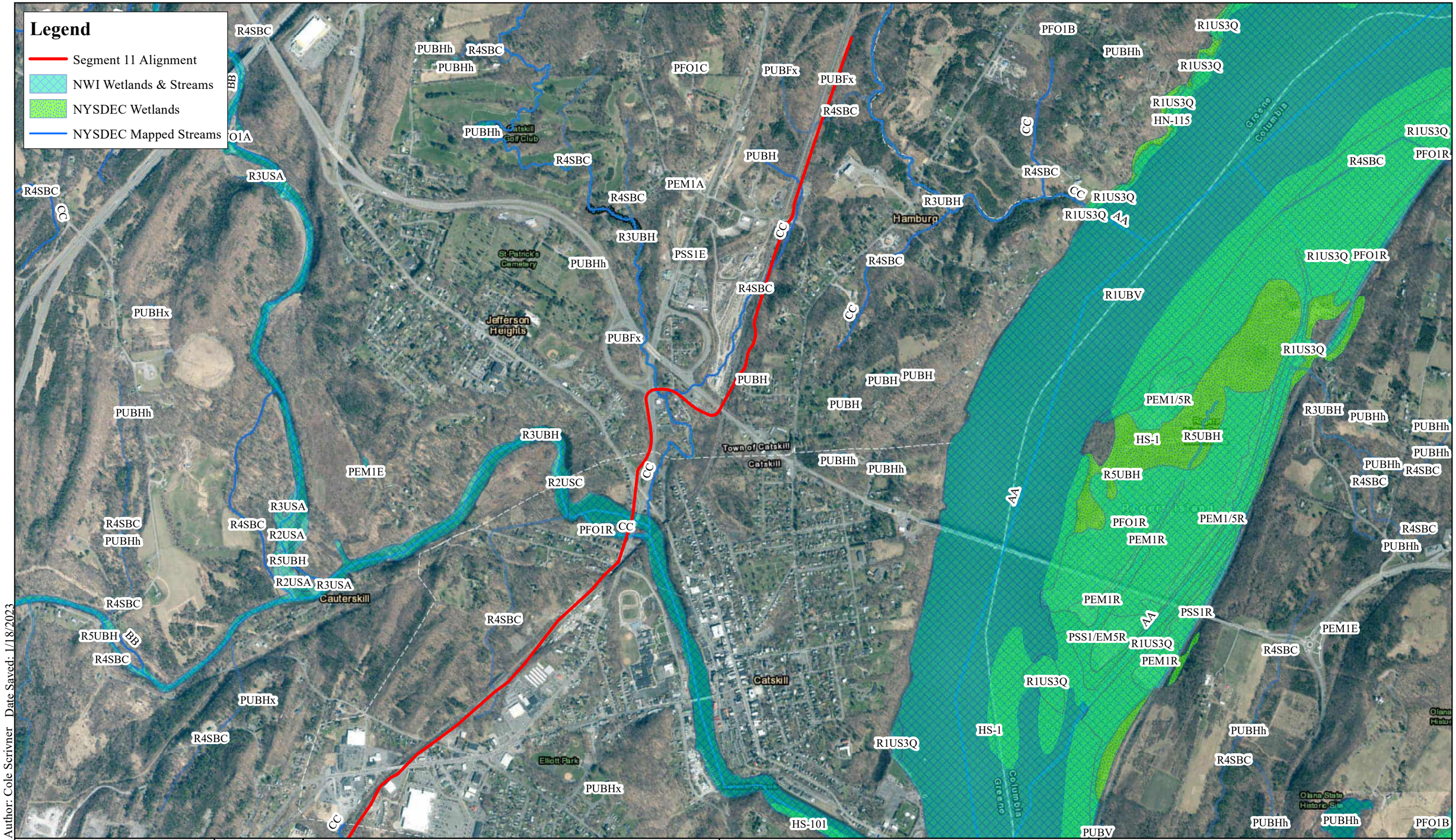
Upland 7A-Z - Soils

Segment 11 – Package 7A

SITE PHOTOGRAPHS

Champlain Hudson Power Express

ATTACHMENT 2
NWI & NYSDEC WETLAND & STREAM MAPS



Author: Cole Scrivner Date Saved: 1/18/2023

CHA

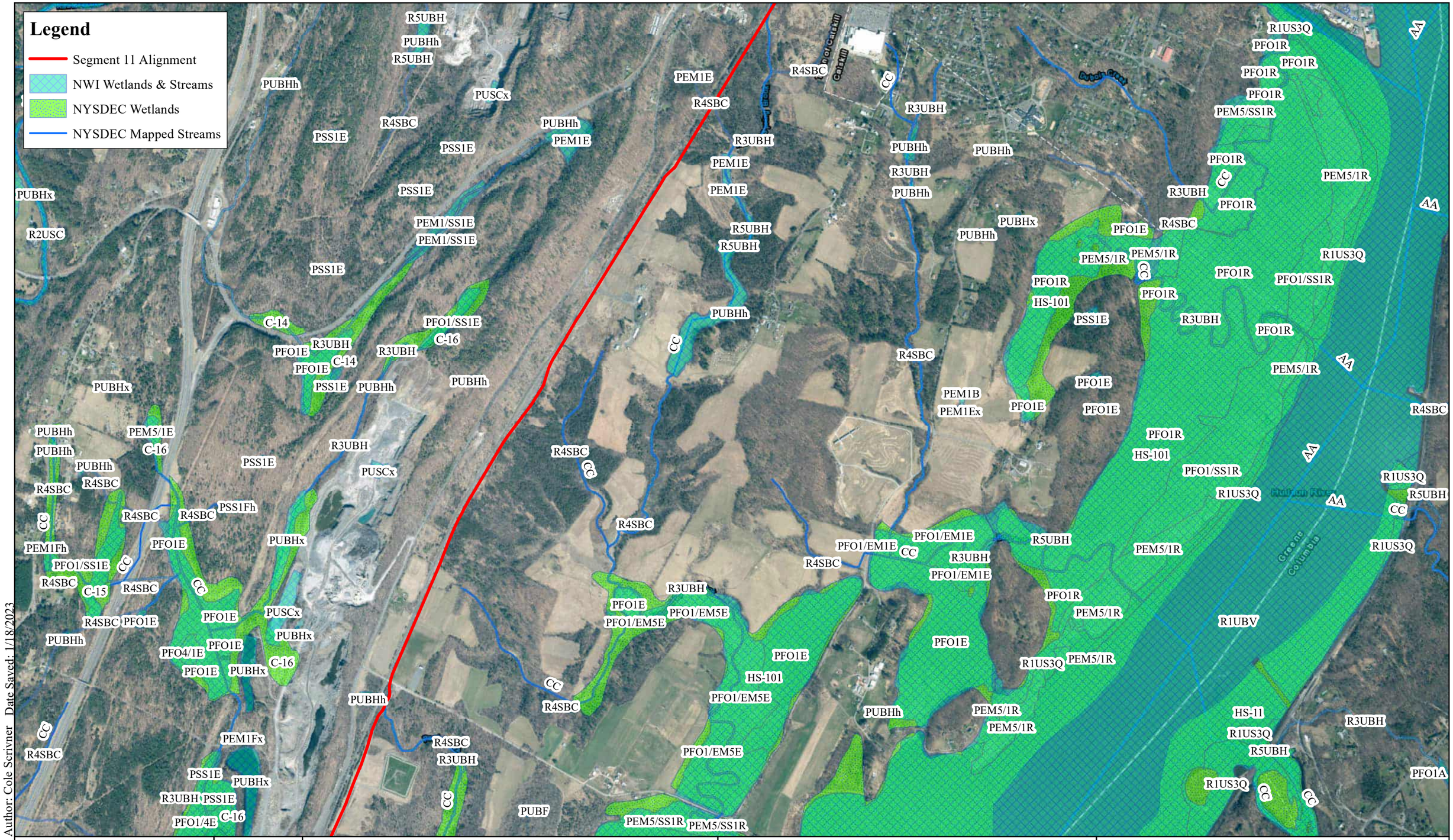
N

Page 1 of 3

0 0.5 1 Miles

Champlain Hudson Power Express
Segment 11-Package 7A 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



Author: Cole Scrivner Date Saved: 1/18/2023

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Page 2 of 3

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Champlain Hudson Power Express
Segment 11-Package 7A Wetland & Stream Map
(NWI and NYSDEC)

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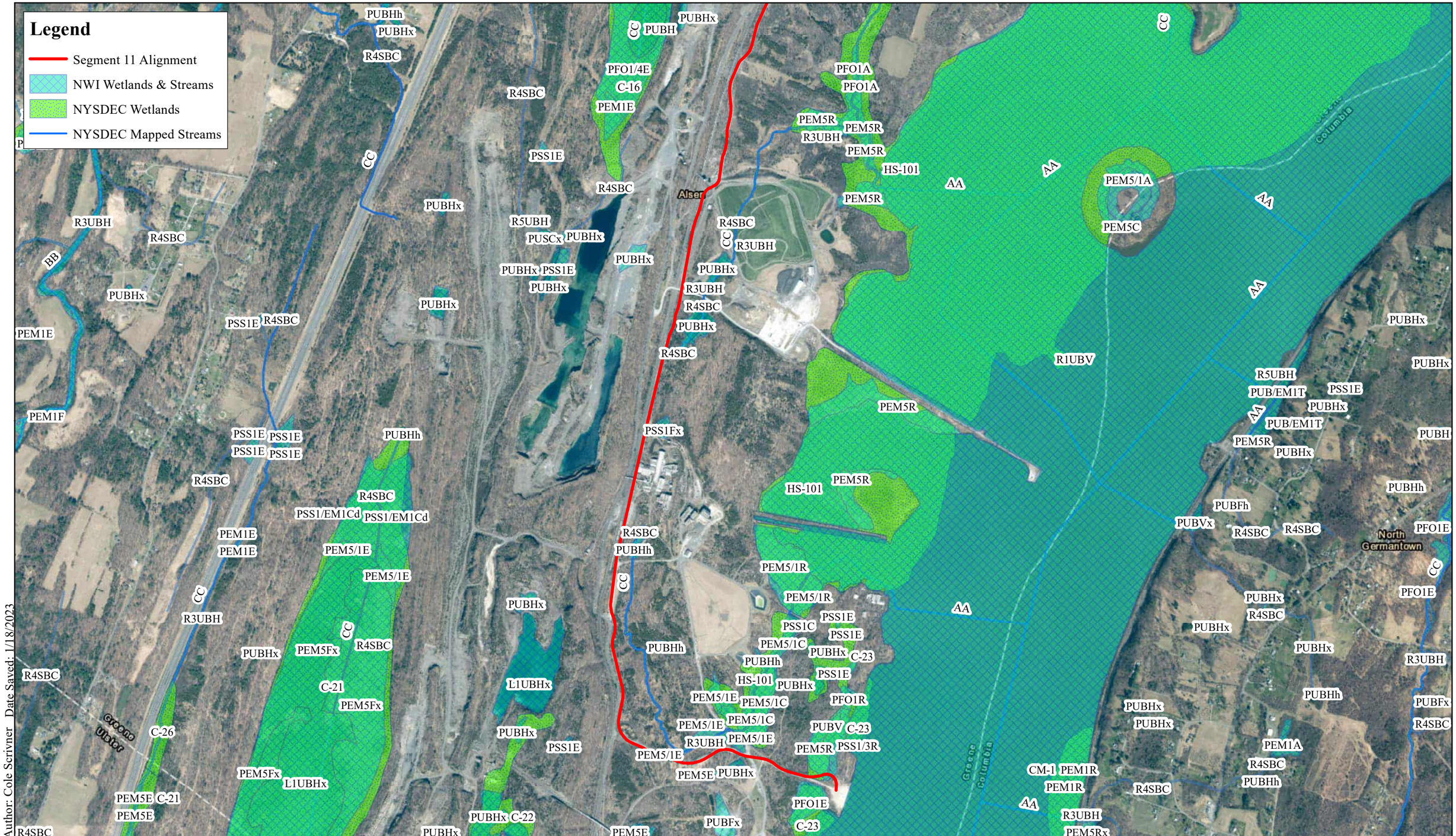
Wetland layers obtained from USFWS NWI and NYSDEC



Author: Cole Scrivner Date Saved: 1/18/2023

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Page 3 of 3

Champlain Hudson Power Express
Segment 11-Package 7A Wetland & Stream Map
(NWI and NYSDEC)

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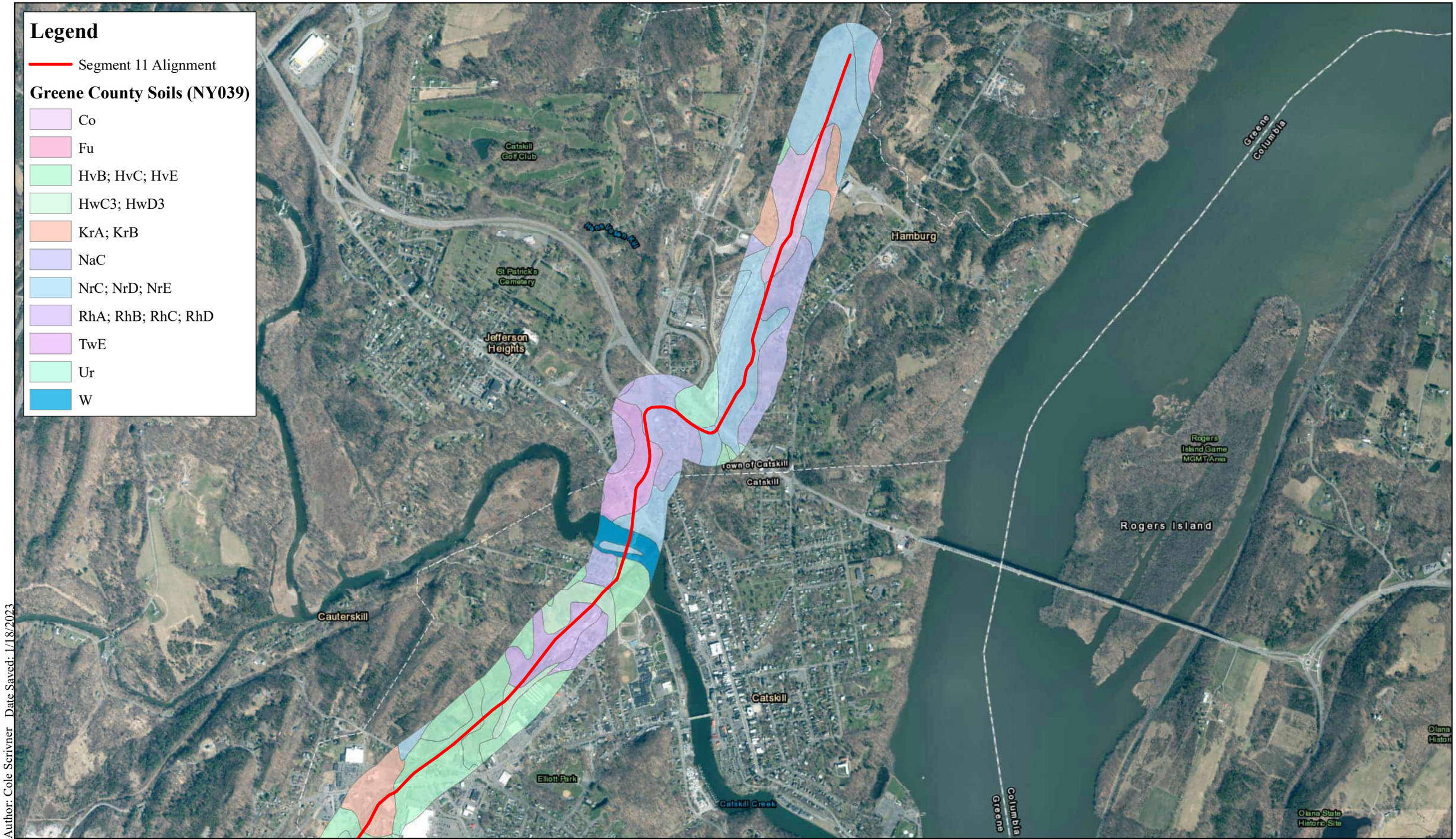
Wetland layers obtained from USFWS NWI and NYSDEC

ATTACHMENT 3
NRCS SOIL MAPS



Author: Cole Scrivner Date Saved: 1/18/2023

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Page 1 of 3

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Champlain Hudson Power Express
Segment 11-Package 7A NRCS Soil Map

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Author: Cole Scrivner Date Saved: 1/18/2023

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Champlain Hudson Power Express
Segment 11-Package 7A NRCS Soil Map

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
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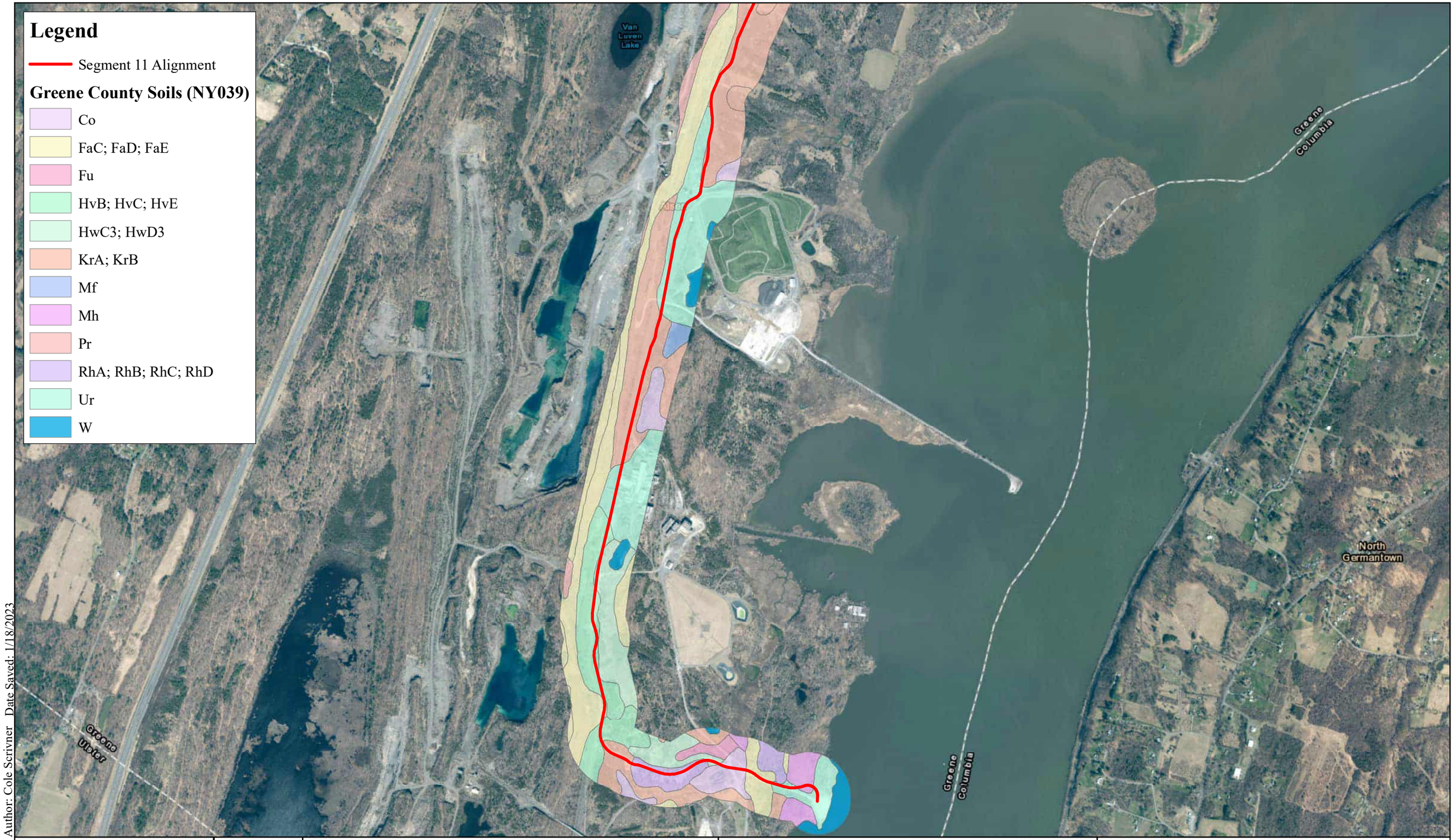
Legend

Segment 11 Alignment

Greene County Soils (NY039)

- Co
- FaC; FaD; FaE
- Fu
- HvB; HvC; HvE
- HwC3; HwD3
- KrA; KrB
- Mf
- Mh
- Pr
- RhA; RhB; RhC; RhD
- Ur
- W



Author: Cole Scrivner Date Saved: 1/18/2023

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Page 3 of 3

0 0.5 1 Miles

Champlain Hudson Power Express
Segment 11-Package 7A NRCS Soil Map

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
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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)
70008+00 (C-101)	7A-W	PEM	Corlaer Kill	3,328	USACE	42.244557, -73.858789
		PFO		23,423		
70011+00 (C-101-103)	FA-AP, AO, AN	PEM	Corlaer Kill	128,837	USACE	42.241043, -73.860591
		PSS		106,085		
		PFO		48,686		
70032+00 (C-103-104)	AC	PEM	Unnamed Tributary to Hudson River (38)	585	USACE	42.235033, -73.863237
		PFO		63,652		
		PUB		8,288		
70058+00 (C-105)	BC	PEM	Unnamed Tributary to Hudson River	9,993	USACE	42.229184, -73.865645
		PSS		16,370		
70059+00	FA-6N	PEM	Drains to Catskill Creek	292	USACE	42.229305, -73.867082
70060+50 (C-105)	GN	PEM	Unnamed Tributary to Hudson River	14,381	USACE	42.229111, -73.866092
70061+00 (C-105)	M-1	PEM	Hans Vosen Kill (S-3)	0	USACE	42.228397, -73.86697
70061+25 (C-105)	GQ	PFO	Unnamed Tributary to Hudson River	0	USACE	42.228558, -73.865448
70160+50 (C-111)	CC	PSS	Unnamed Tributary to Hudson River (42)	29,552	USACE	42.210604, -73.887593
70162+00 (C-111)	GO	PFO	Unnamed Tributary to Hudson River (42)	2,152	USACE	42.210070, -73.886207
70186+00 (C-113)	DC	PEM	Unnamed Tributary to Hudson River	16,249	USACE	42.204503, -73.892862
		PFO		1,221		
70204+00 (C-114)	EC	PEM	Unnamed Tributary to Hudson River	166,237	USACE	42.199067, -73.897135
70209+00 (C-114)	GD	PEM	Unnamed Tributary to Hudson River	1,224	USACE	42.199891, -73.897246
70227+00 (C-116)	FA-TD	PSS	Unnamed Tributary to Hudson River	14,911	USACE	42.195511, -73.899937
70232+00 (C-116-118)	FC/FA-FC	PSS	Unnamed Tributary to Hudson River	143,390	USACE	42.189994, -73.904347
		PFO		78,479		
70258+00 (C-118)	GR	PEM	Unnamed Tributary to Hudson River	20,406	USACE	42.188276, -73.906324

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)**
70278+00 (C-119-120)	TB/FA-TB	PSS	Unnamed Tributary to Hudson River	5,288	USACE	42.181009, -73.908867
70280+00 (C-119-121)	GC	PEM	Post Creek (47)	60,675	USACE	42.179533, -73.910472
		PSS		92,906		
		PFO		6,714		
70289+00 (C-120-121)	TC/FA-TC	PEM	Post Creek (47)	26,635	USACE	42.179047, -73.910161
		PFO		7,537		
70307+50 (C-121)	HC	PEM	Unnamed Tributary to Hudson River	20,651	USACE	42.174732, -73.913022
70319+00 (C-122)	TF	PFO	Unnamed Tributary to Hudson River	35,689	USACE	42.170568, -73.913913
70323+00 (C-122)	IC	PEM	Unnamed Tributary to Hudson River (49)	2,705	USACE	42.171447, -73.914034
70335+00 (C-123)	JC	PEM	Unnamed Tributary to Hudson River	43,313	USACE	42.167695, -73.915718
70346+00 (C-124-125)	KC	PEM	Unnamed Tributary to Hudson River (50)	23,655	USACE	42.161808, -73.917468
		PFO		43,658		
70348+00 (C-124)	G-P7-13	PFO	Unnamed Tributary to Hudson River (50)	30,110	USACE	42.163577, -73.916617
70388+00 (C-126-127)	LC	PEM	Unnamed Tributary to Hudson River	12,696	USACE	42.153977, -73.919912
		PFO		4,191		
70393+00 (C-127)	MC	PEM	Unnamed Tributary to Hudson River	26,059	USACE	42.15224, -73.920688
70399+00 (C-127)	O-1	PSS	Unnamed Tributary to Hudson River	8,009	USACE	42.15086, -73.920742
70435+00 (C-129-130)	P-1	PEM	Unnamed Tributary to Hudson River	3,780	USACE	42.145868, -73.913472
		PSS		189		
70438+50 (C-130)	E	PEM	Unnamed Tributary to Hudson River	3117	USACE	42.14562, -73.912571
70449+00 (C-130-131)	7A-Y	PSS	Hudson River	189	USACE NYSDEC (C-23)	42.227125, -73.869037
70450+00 (C-130-131)	7A-Z	PEM	Hudson River	20,997		42.227125, -73.869037
		PSS1R		189		

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)**
		PFO1R		5,574	USACE NYSDEC (C-23)	

[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)**
70009+00 (C-101)	Unnamed Tributary to Hudson River	Unmapped	S51	Intermittent	Cobble-gravel/silt	15	0.75	0	42.241703, -73.859364
70009+50 (C-101)	Unnamed Tributary to Hudson River	Unmapped	S52	Intermittent	Cobble-gravel/silt	3	0.75	273	42.242023, -73.859516
70033+00 (C-103)	Unnamed Tributary to Hudson River	C/C	TG 863-103	Intermittent	Cobble-gravel/silt	5	0.5	235	42.236681, -73.861784
70037+25 (C-104)	Unnamed Tributary to Hudson River	C/C	38 863-103	Perennial	Cobble-gravel/silt	8	2	269	42.235001, -73.863301
70049+00 (C-104)	Unnamed Tributary to Hudson River	C/C	GP7A-S3 863-103	Intermittent	Cobble-gravel/silt	3	0.5	331	42.231944, -73.864167
70092+00 (C-107)	Catskill Creek	C/C	Catskill Creek 863-94	Perennial	Cobble-gravel/silt/ sand	224	15	250	42.224749, -73.871138
70095+00 (C-107)	Catskill Creek	C/C	Catskill Creek 863-94	Perennial	Cobble-gravel/silt/ sand	100	15		42.223947, -73.871635
70133+00 (C-109)	Unnamed Tributary to Hudson River	Unmapped	41	Perennial	Cobble-gravel/silt	3	1.5	237	42.217394, -73.878412
70134+00 (C-109)	Unnamed Tributary to Hudson River	Unmapped	41A	Perennial	Silt	8	2.5	65	42.216239, -73.88067
70155+00 (C-111)	Unnamed Tributary to	C/C	42 863-1	Perennial	Cobble-gravel/silt	4	1	310	42.210888, -73.887398

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)**
	Hudson River								
70223+50 (C-115)	Unnamed Tributary to Hudson River	Unmapped	43	Intermittent	Silt	4	1	215	42.196194, -73.899554
70229+00 (C-116)	Unnamed Tributary to Hudson River	Unmapped	FA-S-TA	Intermittent	Cobble-gravel/silt	4	0.5	65	42.194741, -73.900219
70246+50 (C-117)	Unnamed Tributary to Hudson River	Unmapped	44	Perennial	Silt	4	1	78	42.190882, -73.903962
70261+25 (C-118)	Unnamed Tributary to Hudson River	C/C	45 863-1	Perennial	Cobble-gravel/silt	5	1.5	87	42.18715, -73.906231
70280+00 (C-119)	Post Creek	C/C	46 (Post Creek) 863-1	Perennial	Cobble-gravel/silt	4	0.5	178	42.182438, -73.908918
70283+00 (C-119)	Unnamed Tributary to Hudson River	Unmapped	47A	Intermittent	Silt	1	0.5	291	42.181531, -73.909288
70306+00 (C-121)	Unnamed Tributary to Hudson River	Unmapped	48	Intermittent	Silt	4	0.5	301	42.176197, -73.912254

[1] Bankfull width and bankfull depth measurements are approximate.

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
Greene	Medisaprist, inundated	Mf	0-1	Y	Very Poorly Drained
Greene	Medisaprist-Hydraquents, tidal marsh	Mh	0-1	Y	Very Poorly Drained
Non-hydric Soils					
Greene	Farmington gravelly silt loam, rolling, rocky	FaC	8-15	N	Well Drained
Greene	Farmington gravelly silt loam, hilly, rocky	FaD	15-25	N	Well Drained
Greene	Farmington gravelly silt loam, steep, rocky	FaE	15-25	N	Somewhat Excessively 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	HwC3	8-15	N	Moderately Well Drained
Greene	Hudson and Vergennes silty clay loams	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
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

Table 4-3 Soil Description Summary					
County	**Soil Name**	**Symbol**	**% Slopes**	**Hydric (y/n)**	**Drainage Class**
Greene	Nassau channery silt loam, steep, very rocky	NrE	25-45	N	Somewhat Excessively Drained
Greene	Pits, quarry	Pr	-	-	-
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
Greene	Tunkhannock and Chenango gravelly loams	TwE	25-50	N	Well Drained
Greene	Udorthents, loamy	Ur	0-8	N	Somewhat Excessively 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. 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

- 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 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

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).

- EXIST. WETLANDS
- EXIST. WETLAND FLAG
- 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
- VEG. CLEARING – TYPE I – HAND CUTTING
- VEG. CLEARING – TYPE II – MECHANICAL CLEARING
- VEG. CLEARING – TYPE II – MOWING
- VEG. CLEARING – TYPE IV – MECHANICAL WHOLE–TREE FELLING
- FLOODWAY BOUNDARY
- 1% ANNUAL CHANCE FLOODWAY BOUNDARY
- 0.2% ANNUAL CHANCE FLOODWAY BOUNDARY
- JD BOUNDARY
- PROP. WETLAND PROTECTION FENCE
- PROP. COMPOST FILTER SOCK (OR SILT SOCK)
- 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 ACCESS ROAD OR OFF SITE ACCESS ROAD
- PROP. TEMP TIMBER MATTING OR TEMP GEOTEXTILE FABRIC AND STONE (SEE DETAILS 1&2/c-6XX)
- PROP. MILLING & RESURFACING
- PROP. SPLICE LOCATION
- PROP. SPLICE VAULT
- PROP. LINK BOX HANDHOLE
- PROP. FIBER SPLICE HANDHOLE
- PROP. BORING LOCATION
- 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. TEMP SHORING/SHEETING
- PROP. TEMP EASEMENT
- PROP. PERM EASEMENT
- PROP. TEMP ACCESS EASEMENT
- SPLICE LOCATION POLE MARKER
- UNDERGROUND POWER CABLE POLE MARKER
- PROP. TRANSITION BOX MANHOLE

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
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

CHPE Champlain Hudson Power Express

Kiewit

TETRA TECH

TETRA TECH ENGINEERING AND SURVEYING P.C.
(A NEW YORK PROFESSIONAL CORPORATION)

No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP
F	3/17/2023	FINAL SUBMISSION	RB	JL
E	01/24/2023	DRAFT FINAL SUBMISSION	RB	JL
D	11/16/2022	PRELIMINARY DRAFT FINAL SUBMISSION	RB	JL
C	04/29/2022	60% DESIGN SUBMISSION	RB	JL
B	03/22/2022	PRELIMINARY DESIGN DEVELOPMENT	BV	TK
A	02/14/2022	PRELIMINARY PROGRESS	BV	TK

CHAMPLAIN HUDSON POWER EXPRESS
SEGMENT 11 (PACKAGE 7A) - CSX: CATSKILL
LEGEND & ABBREVIATIONS

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KIEWIT PROJECT NO. 21162
TT PROJECT NO. 204-3701
DRAWING NO. **G-003**

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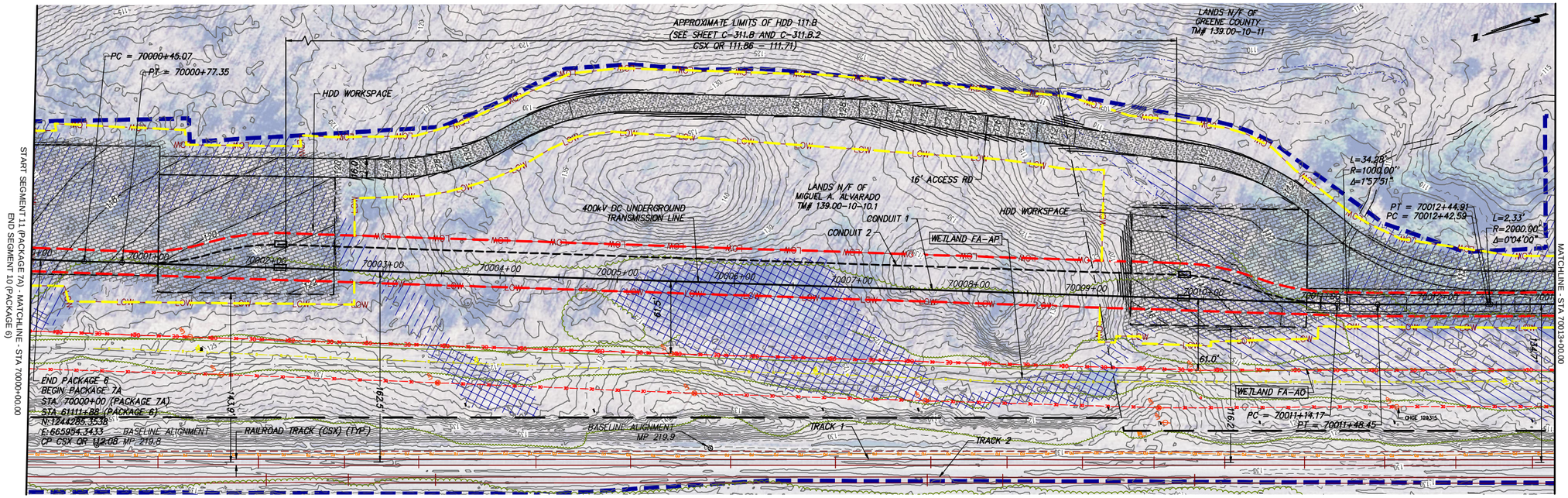

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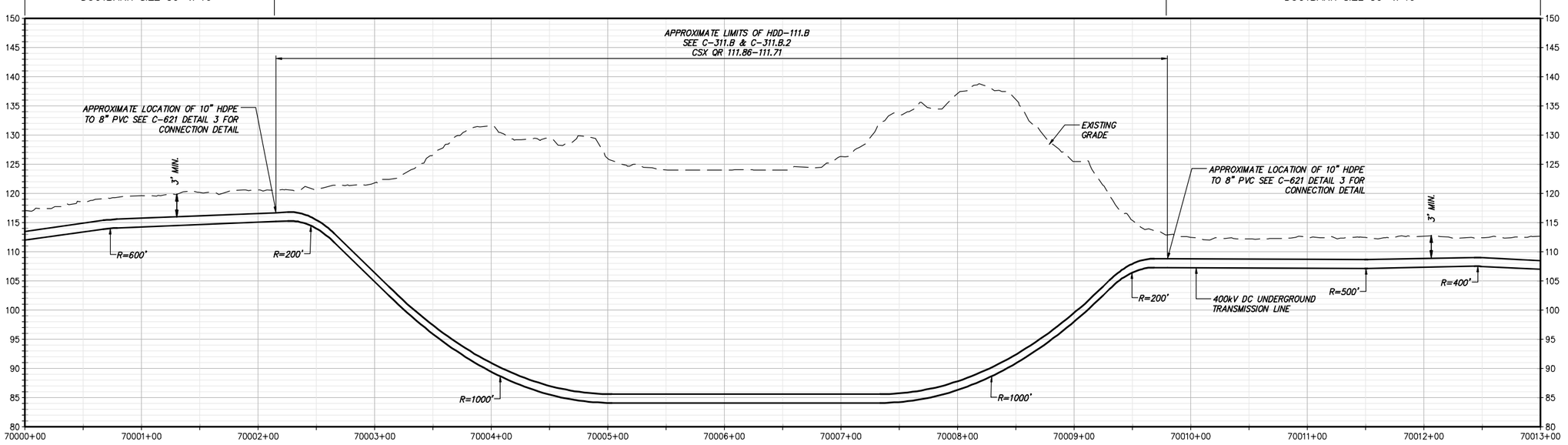

STA. 70000+00 TO STA. 70013+00 PROFILE VIEW

SCALE: H:1" = 50' V:1" = 10'

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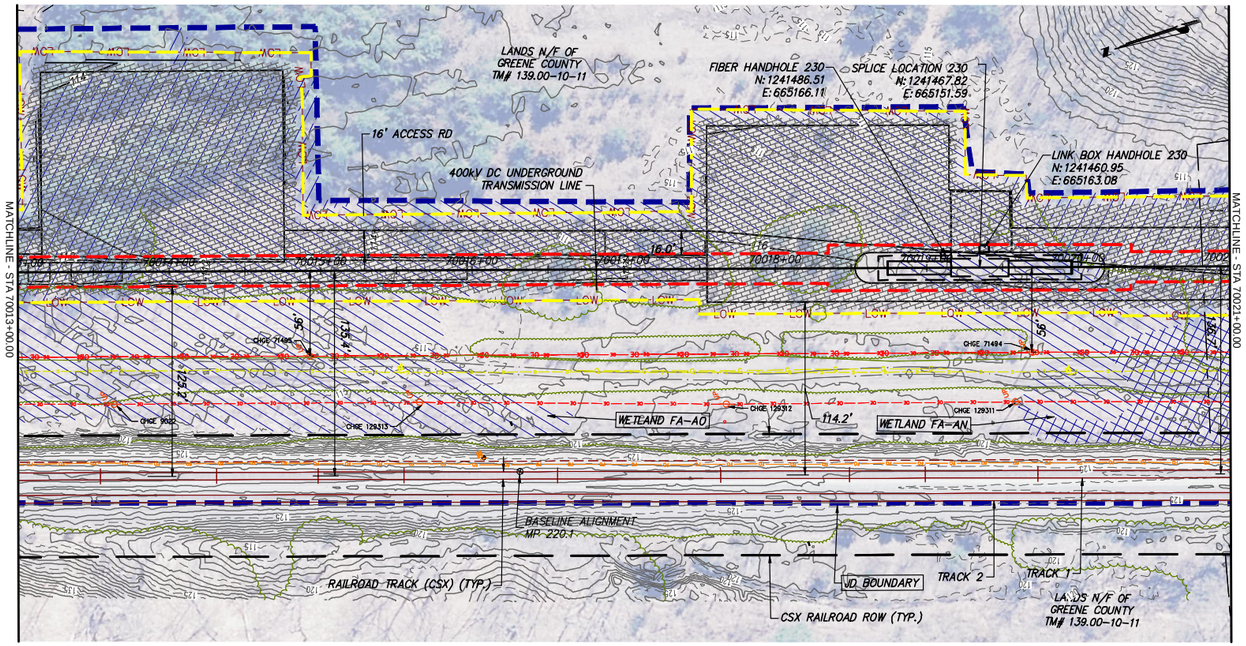
DATE	03/17/2023
SH.NO.	-- OF



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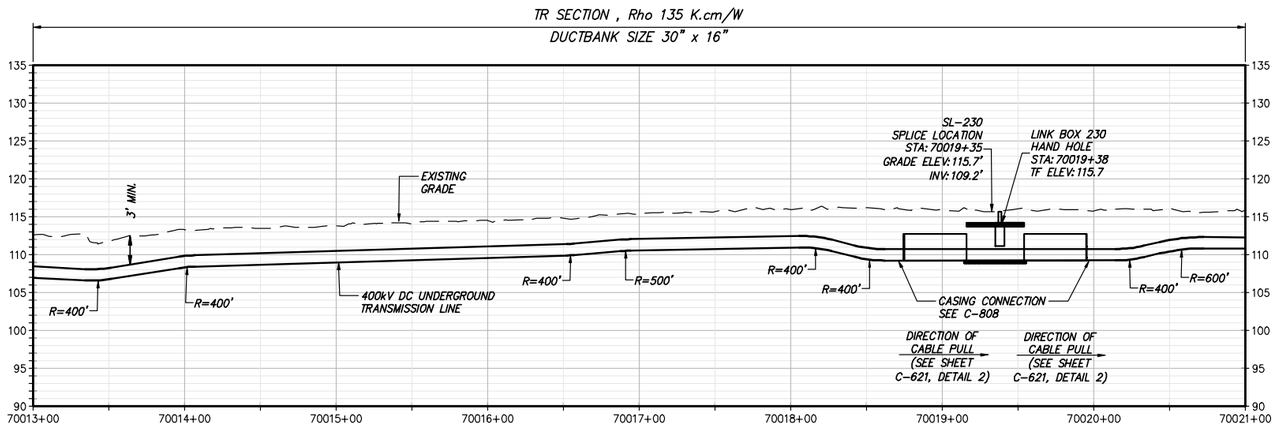

STA. 70013+00 TO STA. 70021+00 PROFILE VIEW

SCALE: H:1" = 50' V:1" = 10'

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CHAMPLAIN HUDSON POWER EXPRESS
SEGMENT 11 (PACKAGE 7A) - CSX: CATSKILL
STA. 70013+00 to STA. 70021+00

KIEWIT PROJECT NO.	21162
TT PROJECT NO.	204-3701
DRAWING NO.	C-102

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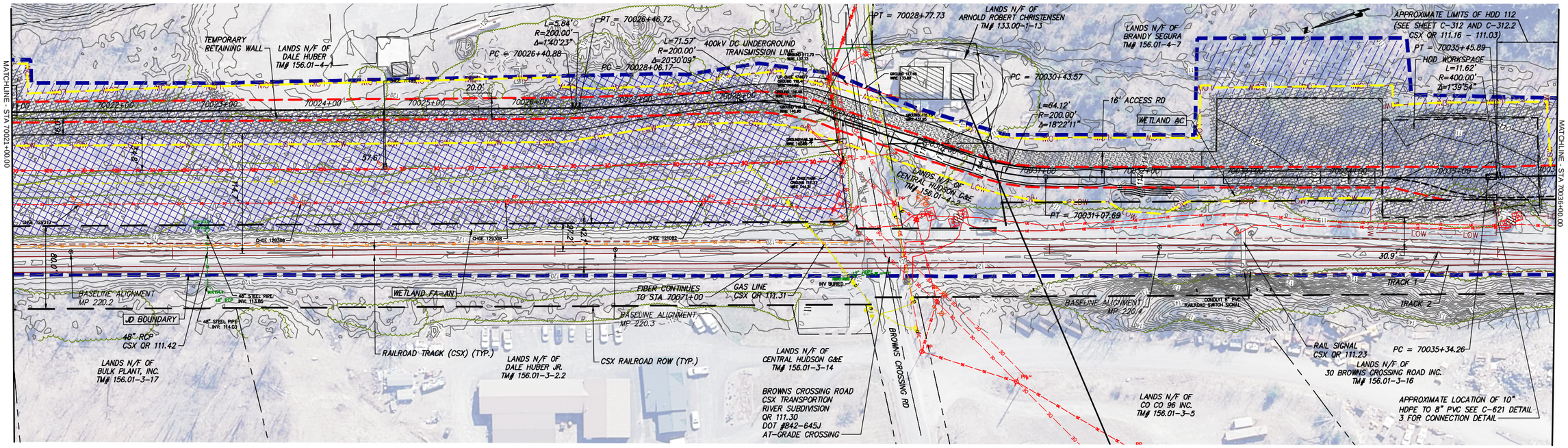

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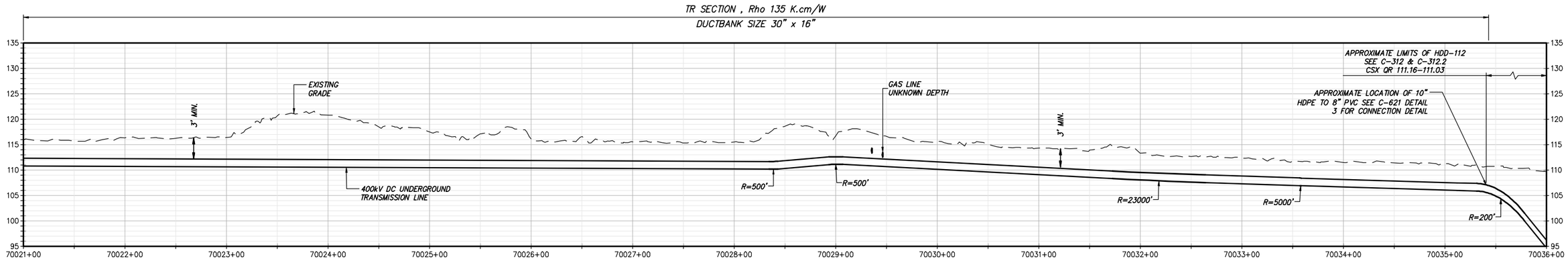

STA. 70021+00 TO STA. 70036+00 PROFILE VIEW

SCALE: H:1" = 50' V:1" = 10'

A

B

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A	02/14/2022	PRELIMINARY PROGRESS	BV	TK

CHAMPLAIN HUDSON POWER EXPRESS

SEGMENT 11 (PACKAGE 7A) - CSX: CATSKILL

STA. 70021+00.00 TO STA. 70036+00.00

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DATE	03/17/2023
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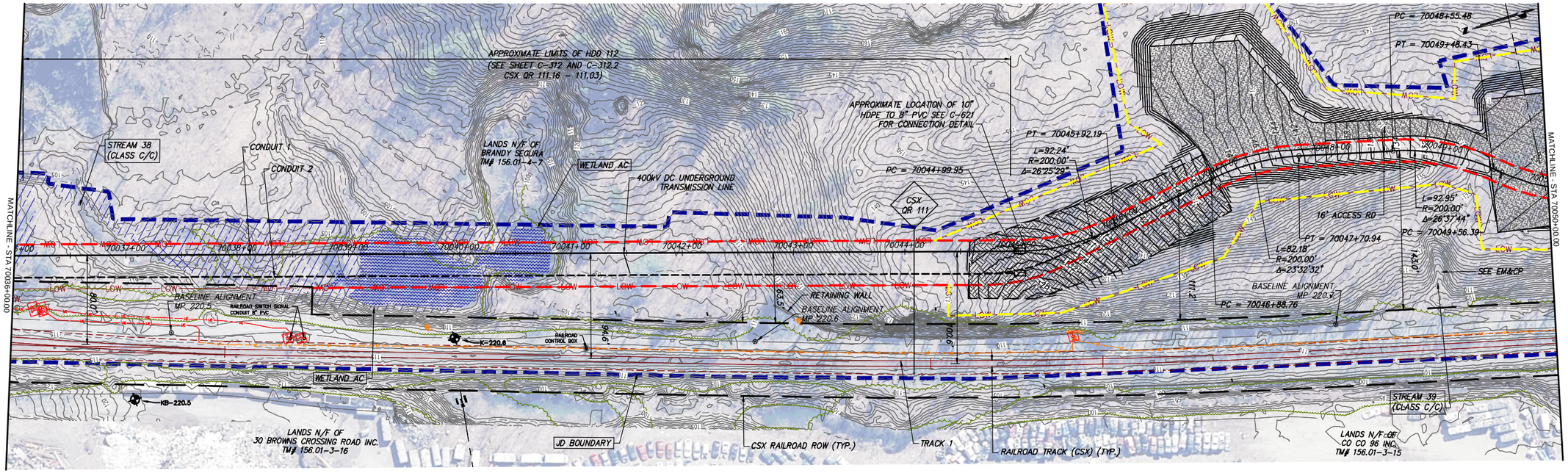

STA. 70036+00.00 TO STA. 70050+00.00 PLAN VIEW

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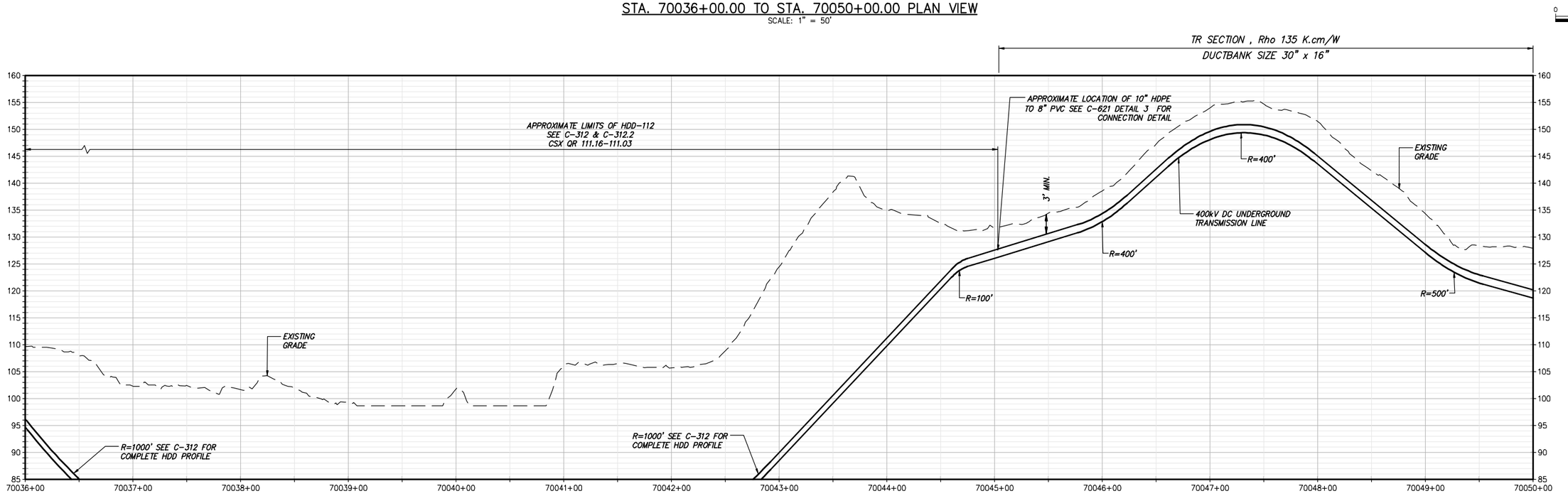
Scale in feet



STA. 70036+00 TO STA. 70050+00 PROFILE VIEW

SCALE: H:1" = 50' V:1" = 10'

CHPE Champlain Hudson Power Express

Kiewit

TETRA TECH

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No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP
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D	11/16/2022	PRELIMINARY DRAFT FINAL SUBMISSION	RB	JL
C	04/29/2022	60% DESIGN SUBMISSION	RB	JL
B	03/22/2022	PRELIMINARY DESIGN DEVELOPMENT	BV	TK
A	02/14/2022	PRELIMINARY PROGRESS	BV	TK

CHAMPLAIN HUDSON POWER EXPRESS
SEGMENT 11 (PACKAGE 7A) - CSX: CATSKILL
STA. 70036+00.00 TO STA. 70050+00.00

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KIEWIT PROJECT NO. 21162
TT PROJECT NO. 204-3701
DRAWING NO. C-104

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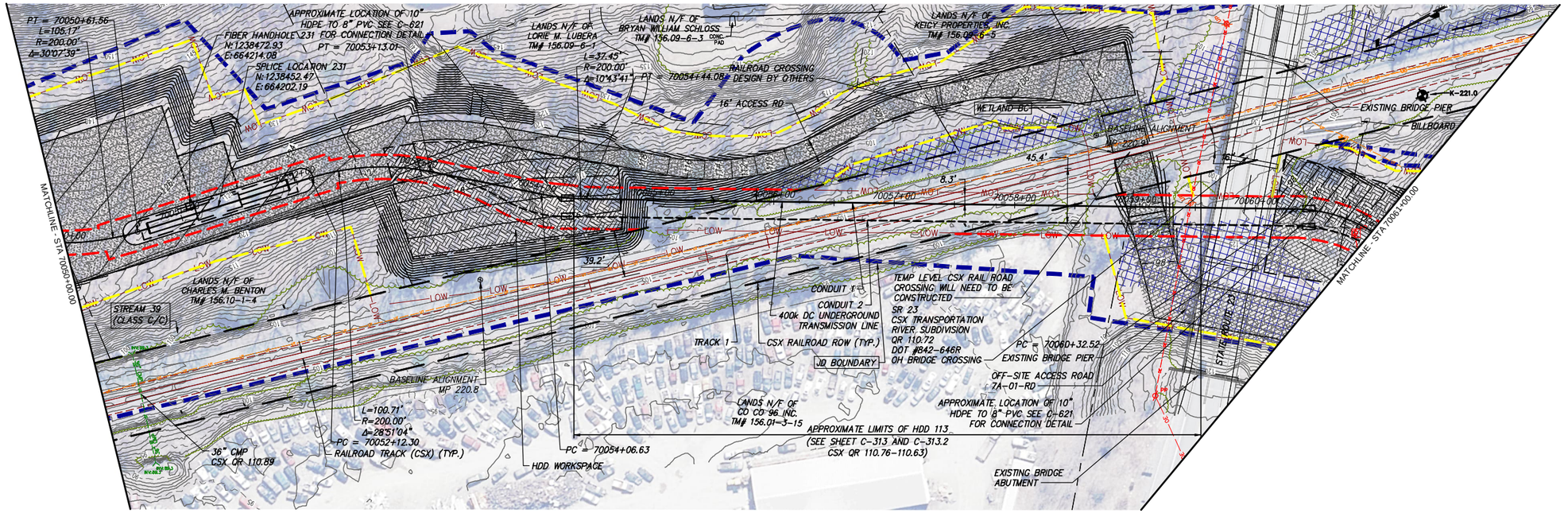

STA. 70050+00.00 TO STA. 70061+00.00 PLAN VIEW

SCALE: 1" = 50'

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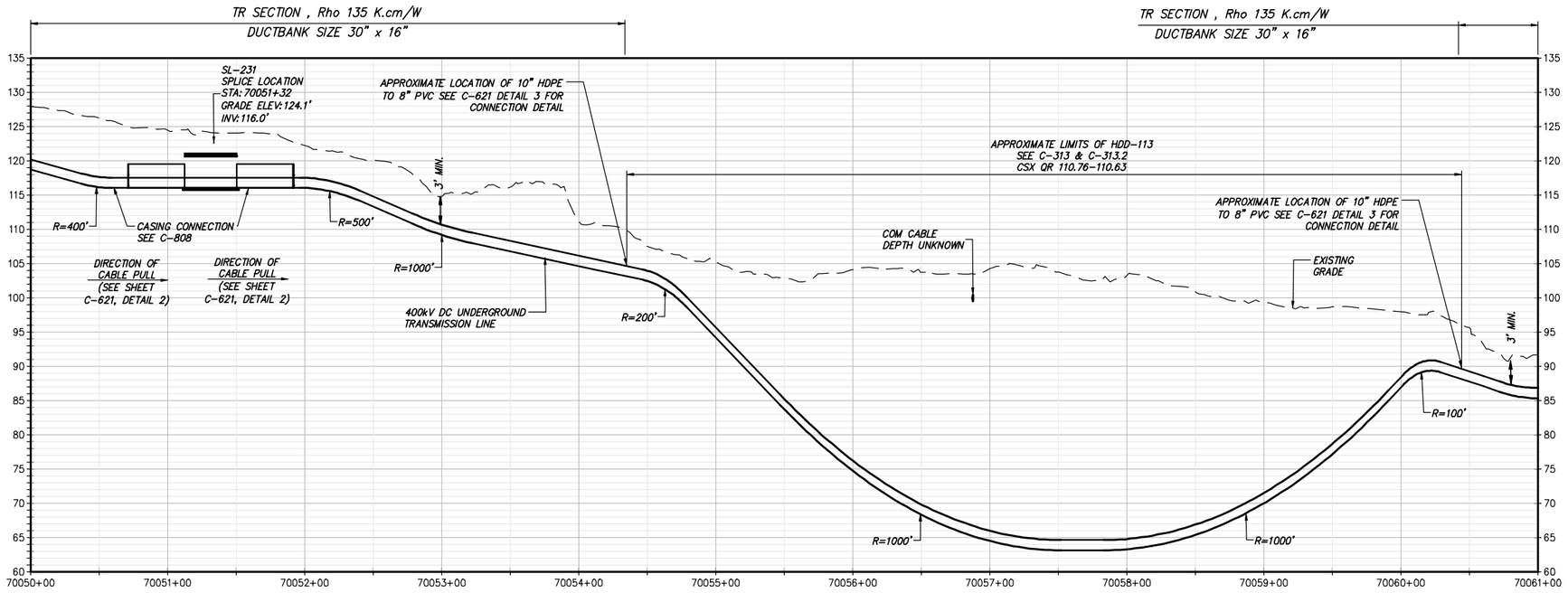
Scale in feet



STA. 70050+00 TO STA. 70061+00 PROFILE VIEW

SCALE: H: 1" = 50' V: 1" = 10'

No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP
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E	01/24/2023	DRAFT FINAL SUBMISSION	RB	JL
D	11/16/2022	PRELIMINARY DRAFT FINAL SUBMISSION	RB	JL
C	04/29/2022	60% DESIGN SUBMISSION	RB	JL
B	03/22/2022	PRELIMINARY DESIGN DEVELOPMENT	BV	TK
A	02/14/2022	PRELIMINARY PROGRESS	BV	TK

CHAMPLAIN HUDSON POWER EXPRESS
SEGMENT 11 (PACKAGE 7A) - CSX: CATSKILL
STA. 70050+00.00 TO STA. 70061+00.00

KIEWIT PROJECT NO.	21162
TT PROJECT NO.	204-3701
DRAWING NO.	C-105

DRAWN BY: RB | DESIGNED BY: AC | APPROVED BY: JL | SCALE AS SHOWN | DATE 03/17/2023 | REV. NO. F | SH.NO. 11 OF

CHPE Champlain Hudson Power Express

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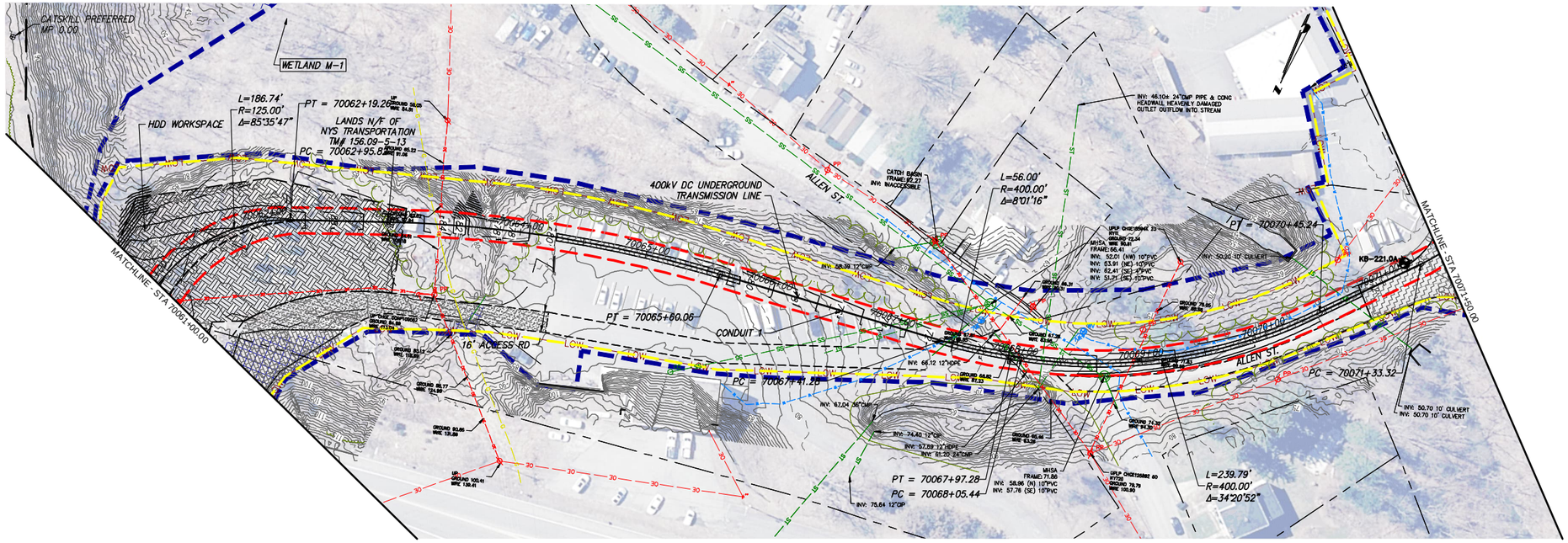
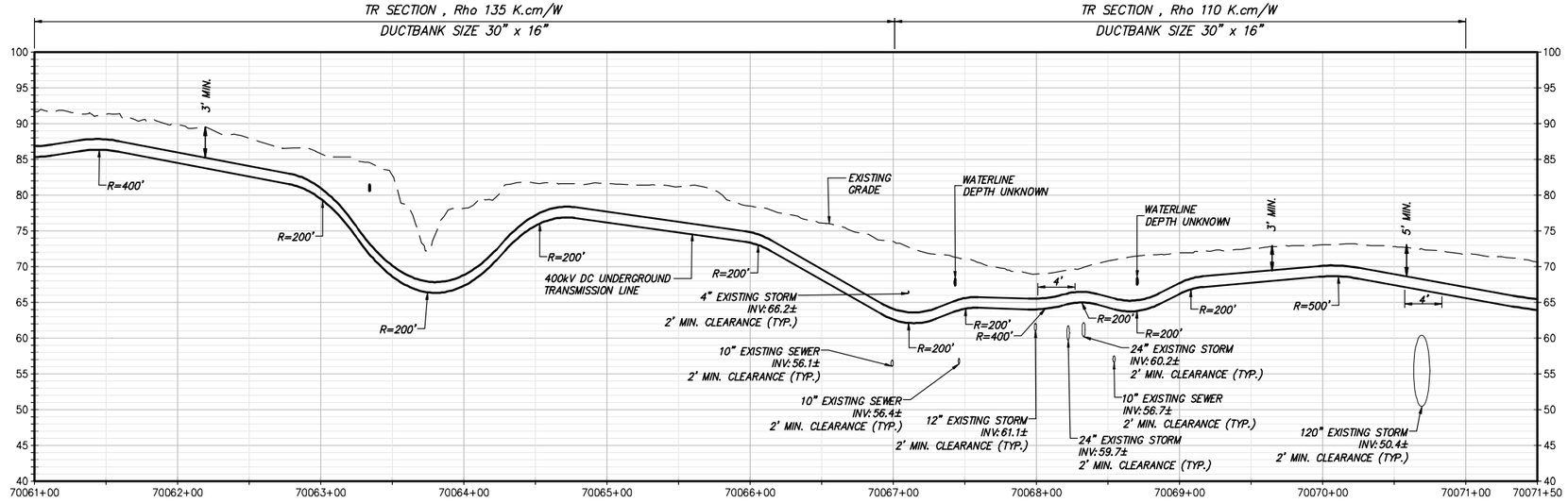


STA. 70061+00.00 TO STA. 70071+50.00 PLAN VIEW

SCALE: 1" = 50'

0 50 100
Scale in feet



STA. 70061+00 TO STA. 70071+50 PROFILE VIEW

SCALE: H:1" = 50' V:1" = 10'

No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP
F	3/17/2023	FINAL SUBMISSION	RB	JL
E	01/24/2023	DRAFT FINAL SUBMISSION	RB	JL
D	11/16/2022	PRELIMINARY DRAFT FINAL SUBMISSION	RB	JL
C	04/29/2022	60% DESIGN SUBMISSION	RB	JL
B	03/22/2022	PRELIMINARY DESIGN DEVELOPMENT	BV	TK
A	02/14/2022	PRELIMINARY PROGRESS	BV	TK

CHAMPLAIN HUDSON POWER EXPRESS
SEGMENT 11 (PACKAGE 7A) - CSX: CATSKILL
STA. 70061+00.00 TO STA. 70071+50.00

DRAWN BY: RB | DESIGNED BY: AC | APPROVED BY: JL | SCALE AS SHOWN | REV. NO. F | DATE 03/17/2023 | SH.NO. OF

KIEWIT PROJECT NO. 21162
TT PROJECT NO. 204-3701
DRAWING NO. C-105.1

CHPE Champlain Hudson Power Express

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TETRA TECH
TETRA TECH ENGINEERING AND SURVEYING P.C.
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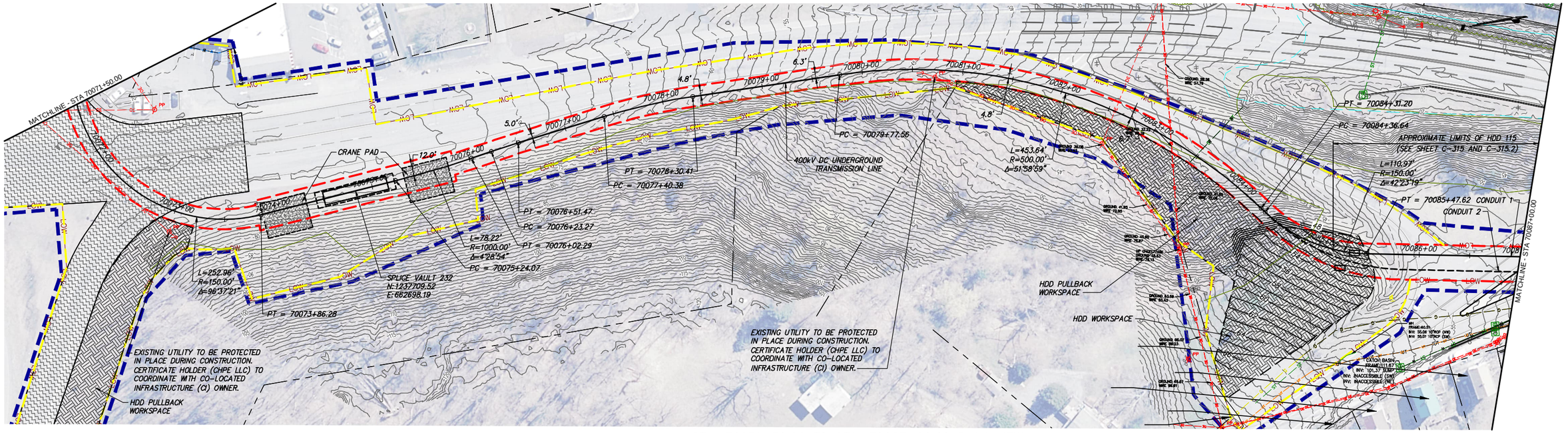
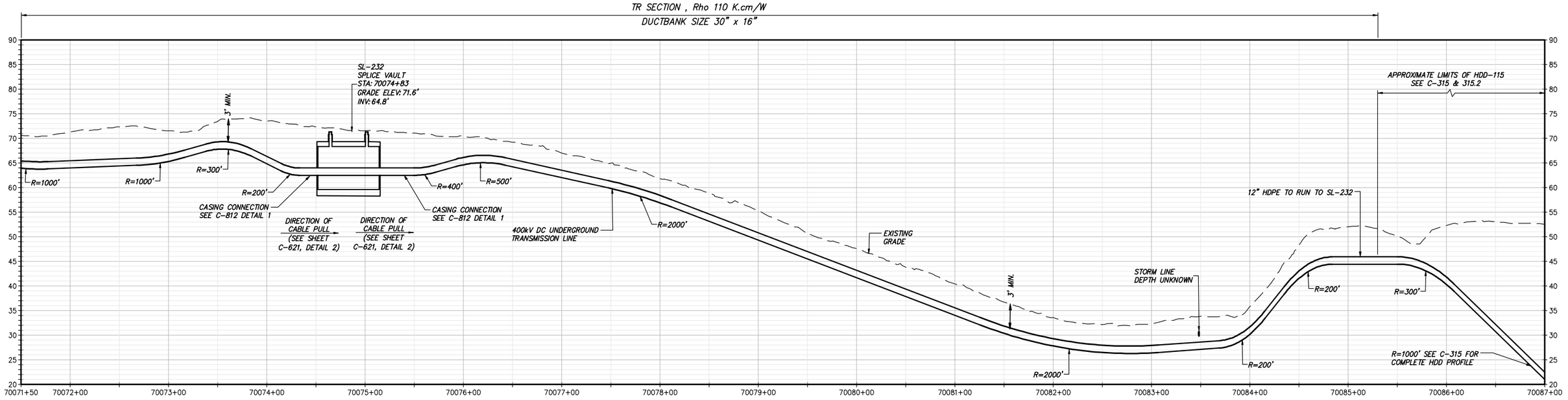


STA. 70071+50.00 TO STA. 70087+00.00 PLAN VIEW

SCALE: 1" = 50'

0 50 100

Scale in feet



STA. 70071+50 TO STA. 70087+00 PROFILE VIEW

SCALE: H:1" = 50' V:1" = 10'

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C	04/29/2022	60% DESIGN SUBMISSION	RB	JL
B	03/22/2022	PRELIMINARY DESIGN DEVELOPMENT	BV	TK
A	02/14/2022	PRELIMINARY PROGRESS	BV	TK

CHAMPLAIN HUDSON POWER EXPRESS
SEGMENT 11 (PACKAGE 7A) - CSX: CATSKILL
STA. 70071+50.00 TO STA. 70087+00.00

DRAWN BY: RB | DESIGNED BY: AC | APPROVED BY: JL | SCALE AS SHOWN | REV. NO. F | DATE 03/17/2023 | SH.NO. | OF

KIEWIT PROJECT NO. 21162
TT PROJECT NO. 204-3701
DRAWING NO. C-106

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STA. 70087+00.00 TO STA. 70101+50.00 PLAN VIEW

SCALE: 1" = 50'

STA. 70087+00.00 TO STA. 70101+50.00 PROFILE VIEW

SCALE: H:1" = 50' V:1" = 10'

CHPE Champlain Hudson Power Express

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(A NEW YORK PROFESSIONAL CORPORATION)

No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP
F	3/17/2023	FINAL SUBMISSION	RB	JL
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D	11/16/2022	PRELIMINARY DRAFT FINAL SUBMISSION	RB	JL
C	04/29/2022	60% DESIGN SUBMISSION	RB	JL
B	03/22/2022	PRELIMINARY DESIGN DEVELOPMENT	BV	TK
A	02/14/2022	PRELIMINARY PROGRESS	BV	TK

CHAMPLAIN HUDSON POWER EXPRESS

SEGMENT 11 (PACKAGE 7A) - CSX: CATSKILL

STA. 70087+00.00 TO STA. 70101+50.00

DRAWN BY: RB | DESIGNED BY: AC | APPROVED BY: JL | SCALE AS SHOWN | REV. NO. F

KIEWIT PROJECT NO.	21162
TT PROJECT NO.	204-3701
DRAWING NO.	C-107
DATE	03/17/2023
SH.NO.	OF

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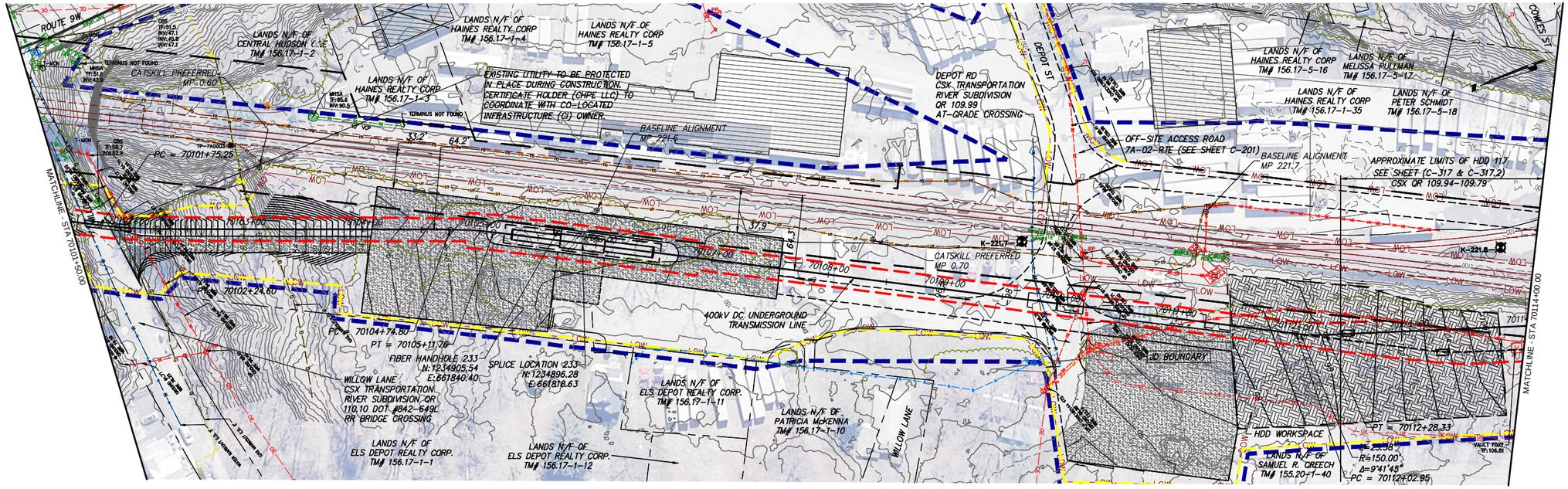
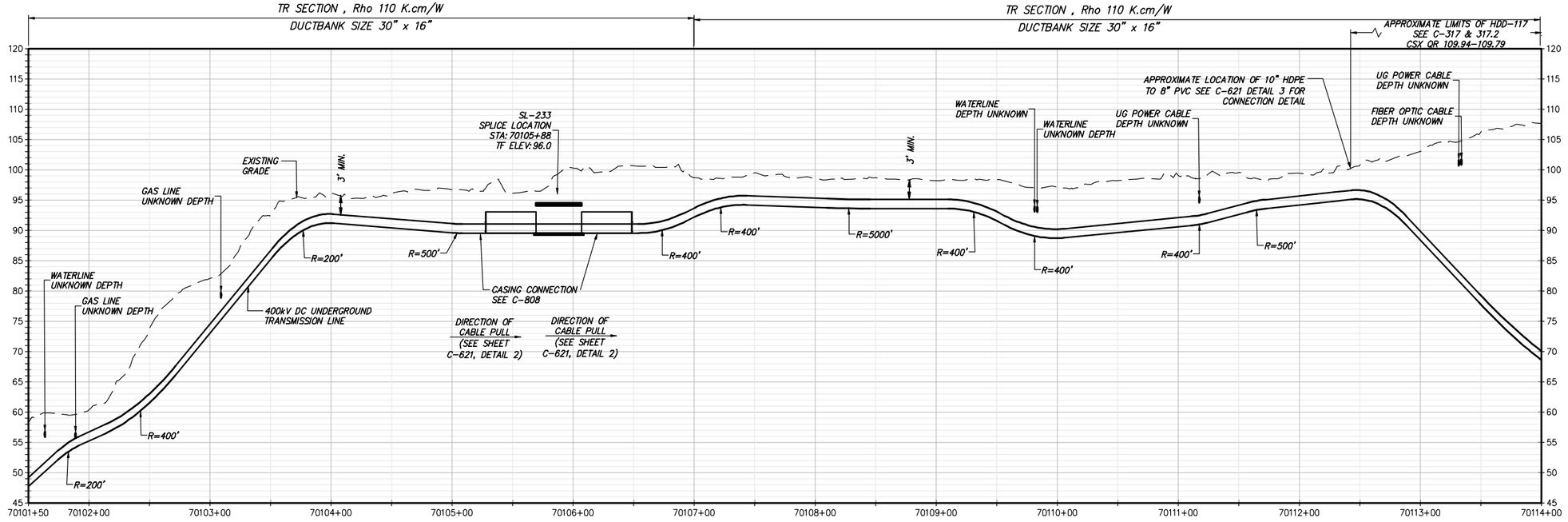


STA. 70101+50.00 TO STA. 70114+00.00 PLAN VIEW

SCALE: 1" = 50'

0 50 100

Scale in feet



STA. 70101+50 TO STA. 70114+00 PROFILE VIEW

SCALE: H:1" = 50' V:1" = 10'

CHPE Champlain Hudson Power Express

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TETRA TECH

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No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP
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B	03/22/2022	PRELIMINARY DESIGN DEVELOPMENT	BV	TK
A	02/14/2022	PRELIMINARY PROGRESS	BV	TK

CHAMPLAIN HUDSON POWER EXPRESS

SEGMENT 11 (PACKAGE 7A) - CSX: CATSKILL

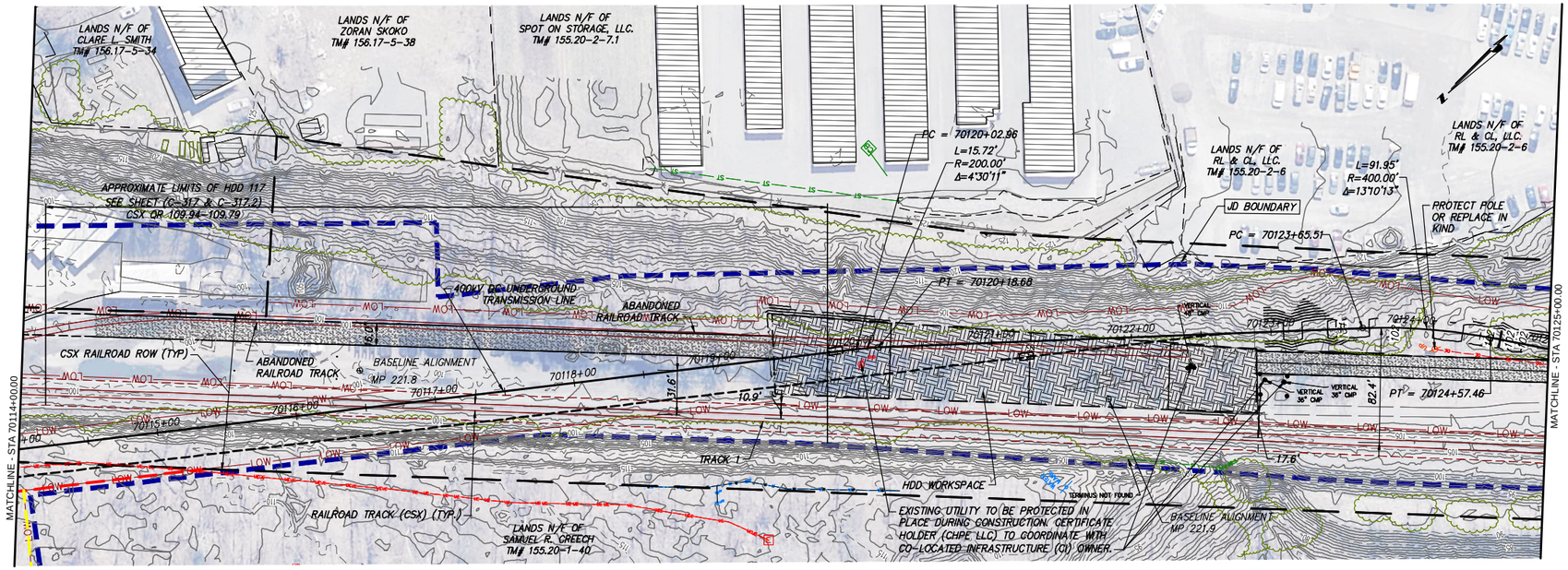
STA. 70101+50.00 TO STA. 70114+00.00

DRAWN BY: RB | DESIGNED BY: AC | APPROVED BY: JL | SCALE AS SHOWN | REV. NO. F | DATE 03/17/2023 | SH.NO. OF

KIEWIT PROJECT NO. 21162

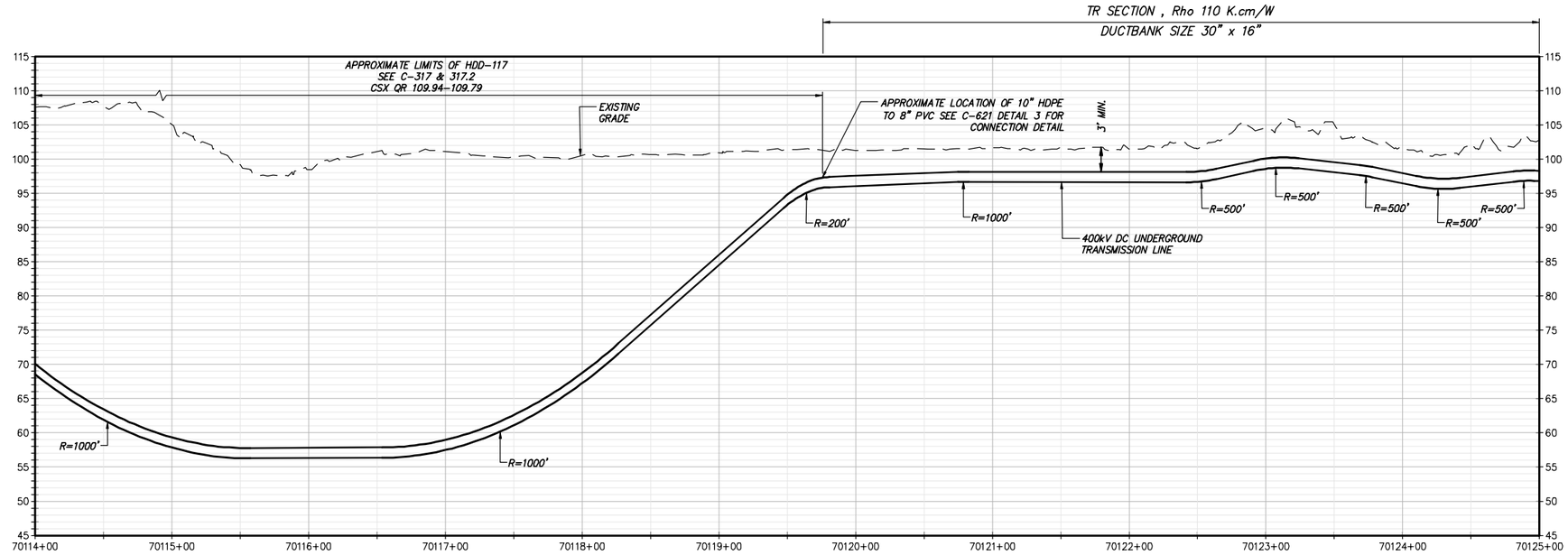
TT PROJECT NO. 204-3701

DRAWING NO. 107.1



STA. 70114+00.00 TO STA. 70125+00.00 PLAN VIEW
SCALE: 1" = 50'

0 50 100
Scale in feet



STA. 70114+00 TO STA. 70125+00 PROFILE VIEW
SCALE: H:1" = 50' V:1" = 10'

CHPE Champlain Hudson Power Express

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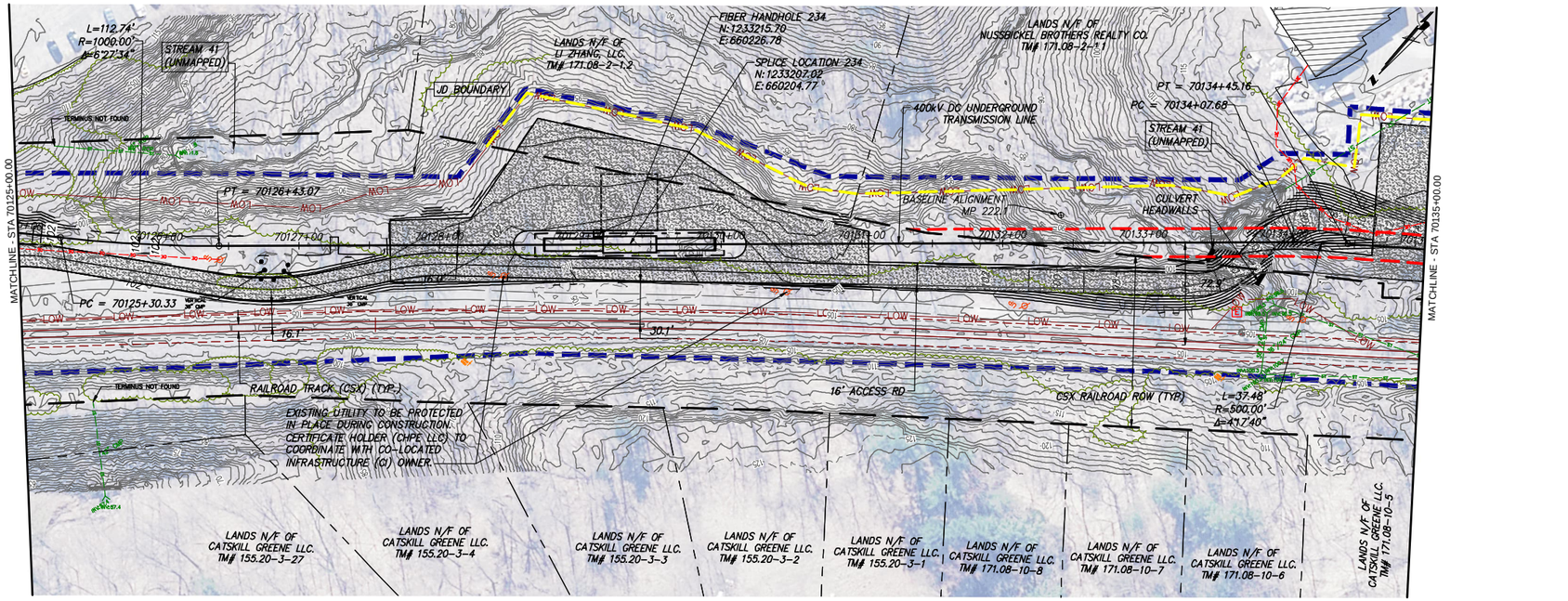
B	03/22/2022	PRELIMINARY DESIGN DEVELOPMENT	BV	TK
A	02/14/2022	PRELIMINARY PROGRESS	BV	TK

CHAMPLAIN HUDSON POWER EXPRESS
SEGMENT 11 (PACKAGE 7A) - CSX: CATSKILL
STA. 70114+00.00 TO STA. 70125+00.00

KIEWIT PROJECT NO.	21162
TT PROJECT NO.	204-3701
DRAWING NO.	C-108

DRAWN BY: RB | DESIGNED BY: AC | APPROVED BY: JL | SCALE AS SHOWN | REV. NO. F | DATE 03/17/2023 | SH.NO. OF

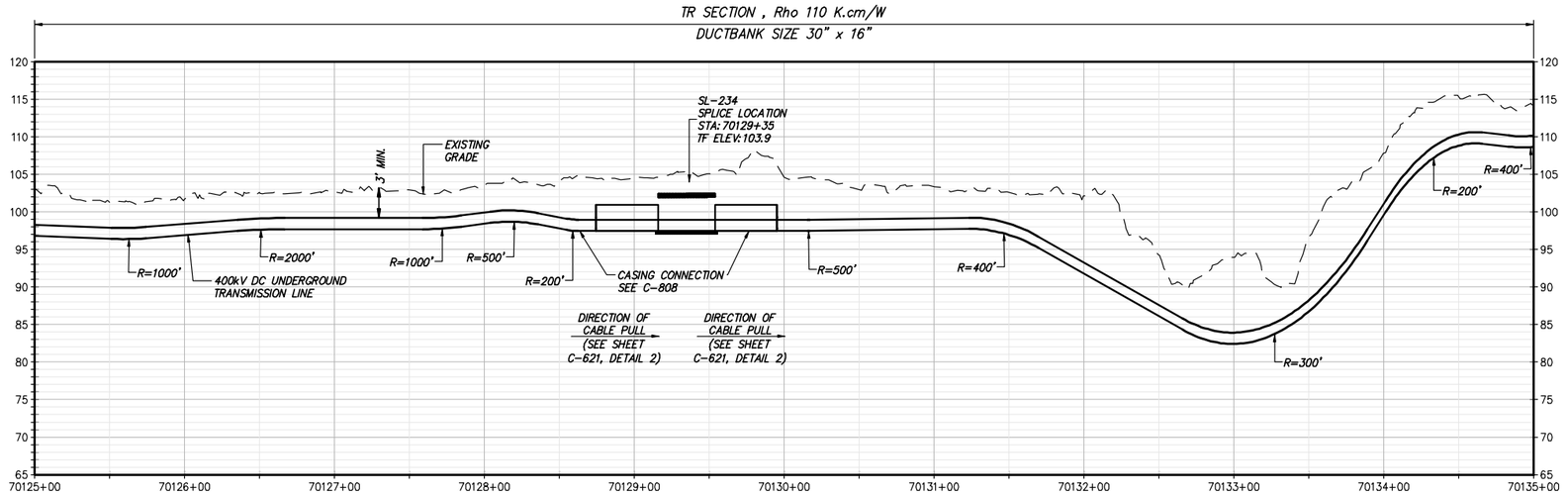


STA. 70125+00.00 TO STA. 70135+00.00 PLAN VIEW

SCALE: 1" = 50'

0 50 100

Scale in feet



STA. 70125+00 TO STA. 70135+00 PROFILE VIEW

SCALE: H:1" = 50' V:1" = 10'

CHPE Champlain Hudson Power Express

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A	02/14/2022	PRELIMINARY PROGRESS	BV	TK

CHAMPLAIN HUDSON POWER EXPRESS

SEGMENT 11 (PACKAGE 7A) - CSX: CATSKILL

STA. 70125+00.00 TO STA. 70135+00.00

KIEWIT PROJECT NO.	21162
TT PROJECT NO.	204-3701
DRAWING NO.	C-109

DRAWN BY: RB | DESIGNED BY: AC | APPROVED BY: JL | SCALE AS SHOWN | REV. NO. F | DATE 03/17/2023 | SH.NO. OF

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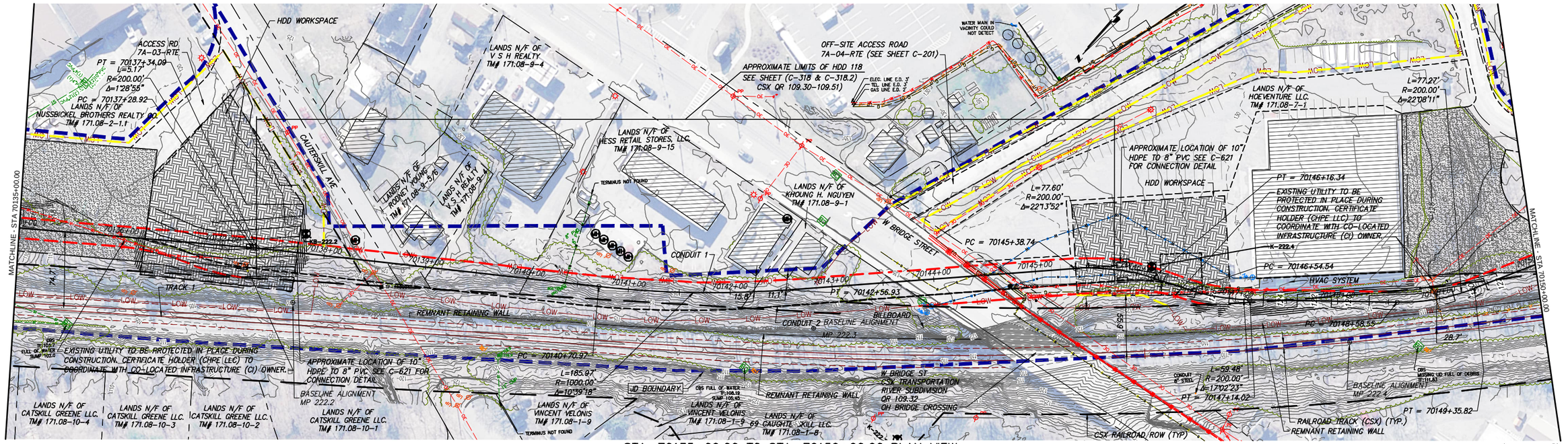
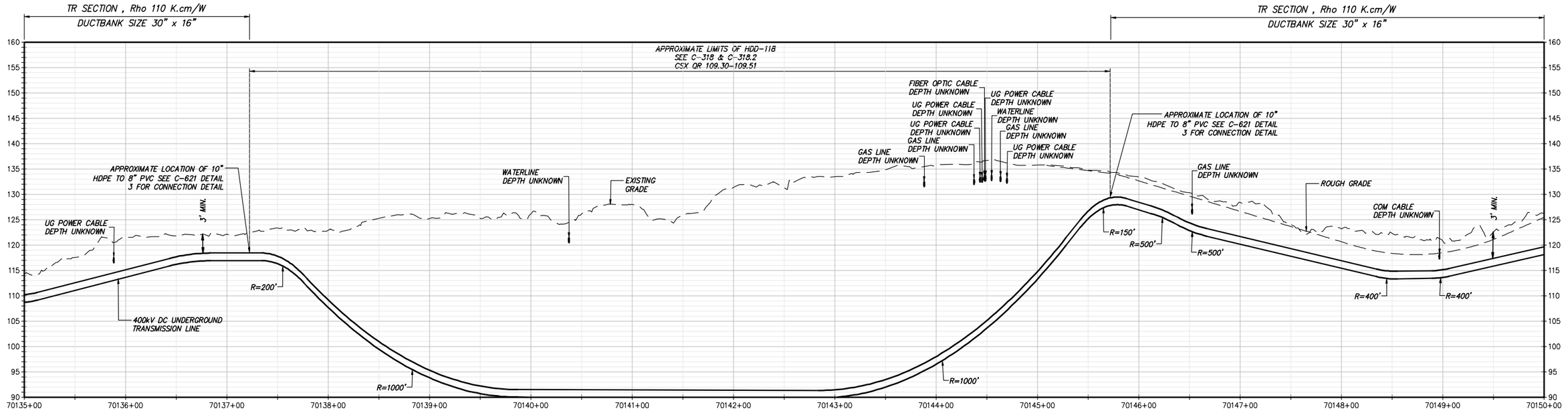


STA. 70135+00.00 TO STA. 70150+00.00 PLAN VIEW

SCALE: 1" = 50'



STA. 70135+00 TO STA. 70150+00 PROFILE VIEW

SCALE: H:1" = 50' V:1" = 10'

CHPE Champlain Hudson Power Express

Kiewit

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C	04/29/2022	60% DESIGN SUBMISSION	RB	JL
B	03/22/2022	PRELIMINARY DESIGN DEVELOPMENT	BV	TK
A	02/14/2022	PRELIMINARY PROGRESS	BV	TK

CHAMPLAIN HUDSON POWER EXPRESS
SEGMENT 11 (PACKAGE 7A) - CSX: CATSKILL
STA. 70135+00.00 TO STA. 70150+00.00

KIEWIT PROJECT NO.	21162
TT PROJECT NO.	204-3701
DRAWING NO.	C-110

DRAWN BY: RB | DESIGNED BY: AC | APPROVED BY: JL | SCALE AS SHOWN | REV. NO. F | DATE 03/17/2023 | SH.NO. OF

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