

Wetland GA- Soils

Phase 5

SITE PHOTOGRAPHS

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE Phase 5	City/County: <u>Selki</u>	rk	Sampling Date: 11/18/21
Applicant/Owner: <u>CHA</u>		State: <u>NY</u>	Sampling Point: <u>HA-101</u>
Investigator(s): Nick Dominic, Justn Williams			
Landform (hillslope, terrace, etc.):	Local relief (concave,	convex, none):	Slope (%):
Subregion (LRR or MLRA): <u>LRR R</u>	Lat: <u>42.53838</u>	Long: <u>-73.81717</u>	Datum: NAD83
Soil Map Unit Name:		NWI classific	cation: PFO
Are climatic / hydrologic conditions on the site typic	cal for this time of year? YesN	√o (If no, explain in F	Remarks.)
Are Vegetation NO, Soil NO, or Hydrology	NO significantly disturbed?	Are "Normal Circumstances" լ	present? Yes 🗵 No 🔲
Are Vegetation NO , Soil NO , or Hydrology		(If needed, explain any answe	
SUMMARY OF FINDINGS – Attach sit	e map showing sampling poi	nt locations, transects	, important features, etc.
, 5,	No If yes, optio		No 🗆
Remarks: (Explain alternative procedures here of Wetland HA	r in a separate report.)		
HYDROLOGY			
Wetland Hydrology Indicators:	ale a ale all the steer makes		ators (minimum of two required)
Primary Indicators (minimum of one is required; of Surface Water (A1)	Water-Stained Leaves (B9)	<u>U</u> Surface Soil Drainage Pa	
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim L	
Saturation (A3)	Marl Deposits (B15)		Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Bur	
Sediment Deposits (B2)	Oxidized Rhizospheres on Living F	Roots (C3) $\; {\color{red} $	isible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)		tressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled So		Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	☐ M:	
Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)	U Other (Explain in Remarks)	☐ Microtopogra	aphic Relief (D4)
Field Observations:		FAC-Neutral	Test (D5)
Surface Water Present? Yes No	Depth (inches): 1		
Water Table Present? Yes 🗵 No	Depth (inches): 5		
Saturation Present? Yes X No	Depth (inches): 3	Wetland Hydrology Preser	nt? Yes 🗵 No 🗌
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitor	ing well, aerial photos, previous inspect	ions), ii avaliable.	
Remarks:			

Tree Stratum (Plot size: 30)			Sampling Point: <u>HA-101</u>
1100 GRAGATI (1 100 6120:	Absolute % Cover	Dominant Indicator Species? Status	Dominance Test worksheet:
1. <u>Fraxinus americana</u>	35	YES ▼ FACU ▼	Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)
2			
3			Total Number of Dominant Species Across All Strata: _4(B)
4			、,
			Percent of Dominant Species That Are OBL, FACW, or FAC: _75(A/B)
5			
6			Prevalence Index worksheet:
7			Total % Cover of: Multiply by:
_		= Total Cover	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15)			FACW species x 2 =
1. <u>Cornus sericea</u>	60	YES ▼ FACW ▼	FAC species x 3 = FACU species x 4 =
2		_ ▼	UPL species x 5 =
3		<u>-</u>	Column Totals: (A) (B)
4			(5)
5		<u> </u>	Prevalence Index = B/A =
6			Hydrophytic Vegetation Indicators:
7			1 - Rapid Test for Hydrophytic Vegetation
·		= Total Cover	2 - Dominance Test is >50%
Herb Stratum (Plot size: 5)		Total Gover	3 - Prevalence Index is ≤3.0 ¹
1. Solidago spp.	40	YES FAC ▼	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
2Equisetum spp.	25	YES ▼ FACW ▼	Problematic Hydrophytic Vegetation ¹ (Explain)
3			¹Indicators of hydric soil and wetland hydrology must
4		<u>-</u>	be present, unless disturbed or problematic.
5		<u> </u>	Definitions of Vegetation Strata:
6		<u> </u>	Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7		<u> </u>	at breast height (DBH), regardless of height.
8		<u> </u>	Sapling/shrub – Woody plants less than 3 in. DBH
9			and greater than or equal to 3.28 ft (1 m) tall.
10.			Herb – All herbaceous (non-woody) plants, regardless of
11			size, and woody plants less than 3.28 ft tall.
12.			Woody vines – All woody vines greater than 3.28 ft in
12	100	= Total Cover	height.
	100	- Total Cover	
March Via Chatara (Distance 20			
,			
1			Hydrophytic
1			Hydrophytic Vegetation
Woody Vine Stratum (Plot size:30) 1 2 3			1 , , ,
1		· · · · · · · · · · · · · · · · · · ·	Vegetation

SOIL Sampling Point: <u>HA-101</u>

Profile Desc	ription: (Describe	to the de	th needed to docur	nent the i	ndicator	or confirm	the absence	of indicators.)
Depth	Matrix		Redo	x Feature:	<u>s</u>			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-16	10YR/3/2	90	7.5yr/4/6	10			SiLo	Prominent redox
					_	_		
					-	-		
					<u>-</u>	<u>-</u>		
					<u>-</u>	<u>-</u>		
					_	_		
					-	=		
					-	-		
·					-			
I								
¹ Type: C=Cd	oncentration, D=Dep	letion, RM	=Reduced Matrix, M	S=Masked	l Sand Gr	ains.	² Location	n: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators:						Indicators	for Problematic Hydric Soils ³ :
Histosol	` '		Polyvalue Belov		(S8) (LR	R R,		Muck (A10) (LRR K, L, MLRA 149B)
	pipedon (A2)		MLRA 149B	,		- 		Prairie Redox (A16) (LRR K, L, R)
Black His			Thin Dark Surfa					Mucky Peat or Peat (S3) (LRR K, L, R)
	n Sulfide (A4)		Loamy Mucky N			k, L)		Surface (S7) (LRR K, L, M)
	l Layers (A5) l Below Dark Surfac	o (A11)	Loamy Gleyed Depleted Matrix)			alue Below Surface (S8) (LRR K, L) Park Surface (S9) (LRR K, L)
	ark Surface (A12)	C (A11)	Redox Dark Su	. ,			_	langanese Masses (F12) (LRR K, L, R)
_	lucky Mineral (S1)		Depleted Dark					ont Floodplain Soils (F19) (MLRA 149B)
	leyed Matrix (S4)		Redox Depress		.,		_	Spodic (TA6) (MLRA 144A, 145, 149B)
	edox (S5)		<u> </u>	()				arent Material (F21)
	Matrix (S6)						_	Shallow Dark Surface (TF12)
	rface (S7) (LRR R, N	ILRA 149	B)					(Explain in Remarks)
³ Indicators of	hydrophytic vegetal	tion and w	etland hydrology mus	st be prese	ent, unles	s disturbed	or problemation	c .
	ayer (if observed):		, 0,				T .	
Type:								
Depth (inc	ches):						Hydric Soil	Present? Yes 🗵 No 🔲
Remarks:								



Wetland HA - View facing northeast.

SITE PHOTOGRAPHS

Segment 9 – Package 5B



Wetland HA- Soils

Phase 5

SITE PHOTOGRAPHS

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

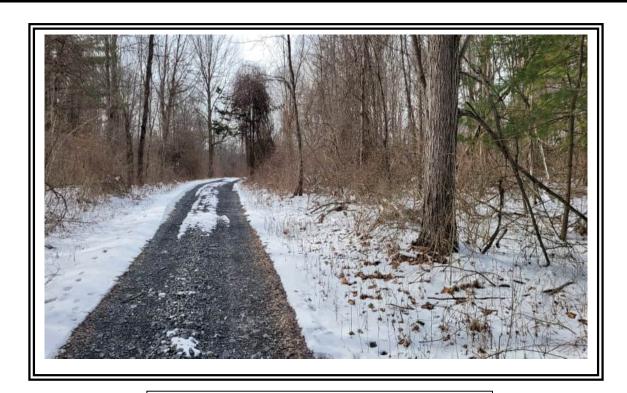
Project/Site: CHPE Phase 5	City/County: Selkirk Sampling Date: 11/18/2021
Applicant/Owner: CHA	State: NY Sampling Point: GA-7/HA-101
Investigator(s): Nick Dominic/Justin Williams	Section, Township, Range:
Landform (hillside, terrace, etc.):	relief (concave, convex, none): Slope %:
	Long: -73.8173 Datum: NAD83
Soil Map Unit Name:	NWI classification: Upland
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 Hydrologysignificantly distur	
Are Vegetation , Soil , or Hydrology naturally problems	
SUMMARY OF FINDINGS – Attach site map showing sam	
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:
Upland test site between WL GA/HA. They are approximately 50 yards apa	art
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (I	B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor ((C1) Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres	on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced Iro	on (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)Recent Iron Reduction in	n Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remar	
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No X Depth (inches):	: <u></u> _
Water Table Present? Yes No X Depth (inches):	: <u> </u>
Saturation Present? Yes No X Depth (inches):	: Wetland Hydrology Present? Yes No X
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:
Remarks:	

True Charles (Plataine)	Absolute	Dominant	Indicator	Burling Test adults to
<u>Tree Stratum</u> (Plot size:30)	% Cover	Species?	Status	Dominance Test worksheet:
1. Fagus gandolfia	60	Yes	FACU	Number of Dominant Species
2. Populus tremuloides	30	Yes	FACu	That Are OBL, FACW, or FAC:1 (A)
3				Total Number of Dominant
4				Species Across All Strata: 5 (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 20.0% (A/B)
7				Prevalence Index worksheet:
	90	=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15)		-		OBL species 0 x 1 = 0
1. Lonicera spp.	20	Yes	FACU	FACW species 0 x 2 = 0
2.				FAC species 20 x 3 = 60
2				FACU species 120 x 4 = 480
1				UPL species 0 x 5 = 0
-				Column Totals: 140 (A) 540 (B)
6.				(/
		· ——		Prevalence Index = B/A = 3.86
7		T. () O		Hydrophytic Vegetation Indicators:
	20	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5)				2 - Dominance Test is >50%
1. Galium spp.	10	Yes	FACU	3 - Prevalence Index is ≤3.0 ¹
2. Solidago spp.	20	Yes	<u>FAC</u>	4 - Morphological Adaptations ¹ (Provide supporting
3				data in Remarks or on a separate sheet)
4				Problematic Hydrophytic Vegetation ¹ (Explain)
5				¹ Indicators of hydric soil and wetland hydrology must
6.				be present, unless disturbed or problematic.
7				Definitions of Vegetation Strata:
8.				Tree – Woody plants 3 in. (7.6 cm) or more in
9.				diameter at breast height (DBH), regardless of height.
10.				
11.				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
12.		·		
· ·	30	=Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size: 30)				
				Woody vines – All woody vines greater than 3.28 ft in height.
0				neight.
2				Hydrophytic
3.				Vegetation
4		·		Present?
		=Total Cover		
Remarks: (Include photo numbers here or on a separate	rate sheet.)			

Sampling Point: GA-7/HA-101

SOIL Sampling Point GA-7/HA-101

Profile Desc Depth	ription: (Describe t Matrix	to the de	-	ıment t l k Featur		itor or co	onfirm the absence of in	dicators.)	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-16	10yr 4/3	100					Loamy/Clayey		
0 10	10y1 +10	100					Loamy/Glayey		
									-
	oncentration, D=Depl	etion, RN	M=Reduced Matrix, M	1S=Mas	ked San	d Grains.		Pore Lining, M=Matrix.	
Hydric Soil								Problematic Hydric So	
Histosol			Polyvalue Belo		ce (S8) (l	LRR R,		(A10) (LRR K, L, MLR	
	pipedon (A2)		MLRA 149B					e Redox (A16) (LRR K	· ·
Black Hi			Thin Dark Surfa					Peat or Peat (S3) (LR	
	n Sulfide (A4)		High Chroma S			-		elow Surface (S8) (LR	
	l Layers (A5)	(411)	Loamy Mucky I			K K, L)		urface (S9) (LRR K, L	
	d Below Dark Surface	e (A11)	Loamy Gleyed		F2)			nese Masses (F12) (Li	
	ark Surface (A12) lucky Mineral (S1)		Depleted Matrix Redox Dark Su		:6)			loodplain Soils (F19) (I ic (TA6) (MLRA 144A ,	
	sleyed Matrix (S4)		Depleted Dark					Material (F21)	, 143, 1430)
	ledox (S5)		Redox Depress					w Dark Surface (F22)	
	Matrix (S6)		Marl (F10) (LR		-,			ain in Remarks)	
	rface (S7)			, ,				,	
	,								
³ Indicators o	f hydrophytic vegetat	ion and v	vetland hydrology mu	ıst be pı	resent, ur	nless dist	urbed or problematic.		
Restrictive	Layer (if observed):								
Type:									
Depth (ir	nches):						Hydric Soil Present?	Yes	No X
Remarks:	<u> </u>						-		
Nemarks.									



Upland GA & HA - View facing east.

SITE PHOTOGRAPHS

Segment 9 – Package 5B



Upland GA/HA – Soils

Phase 5

SITE PHOTOGRAPHS

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: Selkirk/	Albany	Sampling Date: 10/6/22
Applicant/Owner: TDI			State: NY	Sampling Point: P5-Z-10 Wet
Investigator(s): C. Einstein & N. Frazer		Section, To	wnship, Range:	_ ·
Landform (hillside, terrace, etc.): depressio	n Local re	elief (concave, conve	· · ·	Slope %: 0
Subregion (LRR or MLRA): LRR R	Lat: 42-32-16.43N		73-48-56.47W	Datum: WGS84
Soil Map Unit Name: Hudson silt loam (HuB			NWI classification:	PFO
Are climatic / hydrologic conditions on the site	,	Vac v		explain in Remarks.)
		Yes X	` ` `	,
Are Vegetation, Soil, or Hydro			nal Circumstances" prese	
Are Vegetation, Soil, or Hydro	' <u></u>		d, explain any answers in	·
SUMMARY OF FINDINGS – Attach	site map showing samp	pling point loca	tions, transects, im	portant features, etc.
Hydrophytic Vegetation Present?	Yes X No	Is the Sampled A	rea	
Hydric Soil Present?	Yes X No	within a Wetland	? Yes X	No
Wetland Hydrology Present?	Yes X No	If yes, optional We	etland Site ID:	
Remarks: (Explain alternative procedures he Red Maple Hardwood Swamp	ere or in a separate report.)			
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indicators (n	ninimum of two required)
Primary Indicators (minimum of one is requir			Surface Soil Cracks	
Surface Water (A1)	X Water-Stained Leaves (B	9)	Drainage Patterns (· ·
High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B	•
Saturation (A3)	Marl Deposits (B15)	-	Dry-Season Water	
Water Marks (B1)	Hydrogen Sulfide Odor (C	•	Crayfish Burrows (C	•
Sediment Deposits (B2)	Oxidized Rhizospheres or			n Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron		Stunted or Stressed	` '
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Solis (Co)	X Geomorphic Position	
Iron Deposits (B5)	Thin Muck Surface (C7)	·a\	Shallow Aquitard (D Microtopographic R	·
Inundation Visible on Aerial Imagery (B7 Sparsely Vegetated Concave Surface (B	· — · · · ·	is)	FAC-Neutral Test (I	` '
Field Observations:			FAC-Neutial Test (I	55)
Surface Water Present? Yes	No x Depth (inches):			
Water Table Present? Yes	No x Depth (inches):			
Saturation Present? Yes	No x Depth (inches):		d Hydrology Present?	Yes X No
(includes capillary fringe)	Мо		a rijarologj i rece	700 //
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos, prev	vious inspections), if	available:	
,		• ,		
Remarks:				

EGETATION – Use scientific names of pla				Sampling Point: P5-Z-10 Wet		
ree Stratum (Plot size:30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:		
Populus deltoides	45	Yes	FAC	Number of Dominant Species		
Quercus rubra	15	Yes	FACU	That Are OBL, FACW, or FAC:5 (A)		
Pinus strobus	2	No	FACU	Total Number of Dominant		
				Species Across All Strata: 7 (B)		
· <u></u>				Percent of Dominant Species		
				That Are OBL, FACW, or FAC: 71.4% (A/B		
				Prevalence Index worksheet:		
	62	=Total Cover		Total % Cover of: Multiply by:		
apling/Shrub Stratum (Plot size: 15')				OBL species 0 x 1 = 0		
Rhamnus cathartica	15	Yes	FAC	FACW species 52 x 2 = 104		
Cornus amomum	25	Yes	FACW	FAC species 85 x 3 = 255		
				FACU species 27 x 4 = 108		
				UPL species 0 x 5 = 0		
				Column Totals: 164 (A) 467 (B		
				Prevalence Index = B/A = 2.85		
				Hydrophytic Vegetation Indicators:		
	40	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation		
erb Stratum (Plot size: 5')		- Total Govel		X 2 - Dominance Test is >50%		
·	O.E.	Vaa	EACW	X 3 - Prevalence Index is ≤3.0 ¹		
Cornus amomum Toxicodendron radicans	25	Yes	FACW	- 		
Toxicodendron radicans	20	Yes	FAC	4 - Morphological Adaptations ¹ (Provide supportine data in Remarks or on a separate sheet)		
Onoclea sensibilis Viburnum dentatum	2	No	<u>FACW</u>	·		
Viburnum dentatum	5	No	<u>FAC</u>	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		
l				and greater than or equal to 3.28 ft (1 m) tall.		
2.		<u> </u>		Herb – All herbaceous (non-woody) plants, regardles		
	52	=Total Cover		of size, and woody plants less than 3.28 ft tall.		
<u>/oody Vine Stratum</u> (Plot size: 30')				Woody vines – All woody vines greater than 3.28 ft in		
Parthenocissus quinquefolia	10	Yes	FACU	height.		
				Hydrophytic		
		·		Vegetation Present? Yes X No		
	10	=Total Cover				
temarks: (Include photo numbers here or on a sepa		•				

SOIL Sampling Point P5-Z-10 Wet

Profile Desc Depth	ription: (Describe t Matrix	o the de	-	ument th x Featur		ator or co	onfirm the absence of	f indicators.)	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-7	10YR 2/1	100			- 7		Loamy/Clayey		
7-16	10YR 4/1	80	10YR 5/6	20				Prominent redox conce	ntrations
7-10	10114 4/1		10113/0		<u>C</u>	M	Loamy/Clayey	Prominent redox conce	ntrations
¹Type: C=Co	oncentration, D=Deple	etion RI	M=Reduced Matrix M	 //S=Mas	ked San		² I ocation: P	L=Pore Lining, M=Matrix.	
Hydric Soil I		ouon, ru	vi rtoddocd ividirix, iv	no mas	itou ourit	a Graino.		or Problematic Hydric Soi	ils ³ :
Histosol (Dark Surface (S7)				ick (A10) (LRR K, L, MLRA	
	ipedon (A2)		Polyvalue Belo		ce (S8) (LRR R,		rairie Redox (A16) (LRR K ,	•
Black His			MLRA 149B		. , ,			cky Peat or Peat (S3) (LRI	*
Hydroger	n Sulfide (A4)		Thin Dark Surf	ace (S9)	(LRR R	, MLRA 1	I 49B) Polyvalu	e Below Surface (S8) (LRF	R K, L)
Stratified	Layers (A5)		High Chroma S	Sands (S	311) (LR I	R K, L)	Thin Dar	k Surface (S9) (LRR K, L)	
X Depleted	Below Dark Surface	(A11)	Loamy Mucky	Mineral	(F1) (LR	R K, L)	Iron-Mar	nganese Masses (F12) (LR	R K, L, R)
	rk Surface (A12)		Loamy Gleyed	Matrix (F2)		Piedmon	nt Floodplain Soils (F19) (M	ILRA 149B)
Mesic Sp	oodic (A17)		X Depleted Matri					ent Material (F21) (outside	MLRA 145)
	A 144A, 145, 149B)		Redox Dark Su					allow Dark Surface (F22)	
	ucky Mineral (S1)		Depleted Dark				Other (E	xplain in Remarks)	
	leyed Matrix (S4)		Redox Depress		3)		31		
	edox (S5) Matrix (S6)		Marl (F10) (LR		24) /8/11	3A 44E)		rs of hydrophytic vegetation	
Suipped	Matrix (50)		Red Parent Ma	ateriai (F	∠ 1) (WILI	KA 145)		d hydrology must be prese disturbed or problematic.	rit,
Restrictive I	.ayer (if observed):						uniess	disturbed of problematic.	
Type:	none	9							
Depth (in							Hydric Soil Preser	nt? Yes X N	lo
							Tiyunc Jon Freser	163 <u>X</u>	<u> </u>
Remarks:									



Wetland P5-Z-10- View facing east



Wetland P5-Z-10- Soils

Segment 9- Package 5B

SITE PHOTOGRAPHS

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: Selkirk	'Albany	Sampling Date: 10/6/22			
Applicant/Owner: TDI		·	State: NY	Sampling Point: P5-Z-10 Upl			
Investigator(s): C. Einstein & N. Frazer		Section, To	——— wnship, Range:				
Landform (hillside, terrace, etc.): flat	Local re	elief (concave, conve		Slope %: 0			
Subregion (LRR or MLRA): LRR R	Lat: 42-32-16.43N	•	73-48-56.47W	Datum: WGS84			
Soil Map Unit Name: Hudson silt loam (HuB)		Long.	NWI classification:	n/a			
Are climatic / hydrologic conditions on the site		Yes x		explain in Remarks.)			
Are Vegetation, Soil, or Hydrol			nal Circumstances" prese	ent? Yes x No			
Are Vegetation, Soil, or Hydrol	ogynaturally problemati	ic? (If needed	d, explain any answers in	Remarks.)			
SUMMARY OF FINDINGS – Attach	site map showing samp	oling point loca	tions, transects, im	portant features, etc.			
Hydrophytic Vegetation Present?	Yes No X	Is the Sampled A	rea				
Hydric Soil Present?	Yes No X	within a Wetland	? Yes	No X			
Wetland Hydrology Present?	Yes No X	If yes, optional We	tland Site ID:				
Remarks: (Explain alternative procedures he	re or in a separate report.)						
forested upland							
HYDROLOGY							
Wetland Hydrology Indicators:			Secondary Indicators (m	ninimum of two required)			
Primary Indicators (minimum of one is require	ed; check all that apply)		Surface Soil Cracks	s (B6)			
Surface Water (A1)	Water-Stained Leaves (B9	9)	Drainage Patterns (I	·			
High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B	·			
Saturation (A3)	Marl Deposits (B15)		Dry-Season Water 1				
Water Marks (B1)	Hydrogen Sulfide Odor (C	•	Crayfish Burrows (C	,			
Sediment Deposits (B2)	Oxidized Rhizospheres or Presence of Reduced Iron			n Aerial Imagery (C9)			
Drift Deposits (B3) Algal Mat or Crust (B4)	Recent Iron Reduction in		Stunted or Stressed Plants (D1) (C6) Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	Tilled Oolis (Oo)	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7)		s)	Microtopographic Re	•			
Sparsely Vegetated Concave Surface (Bi	′ ` '	5)	FAC-Neutral Test (D				
Field Observations:	/		· ·				
	No x Depth (inches):						
Water Table Present? Yes	No x Depth (inches):						
Saturation Present? Yes	No x Depth (inches): No x Depth (inches): No x Depth (inches):	Wetlan	d Hydrology Present?	Yes No X			
(includes capillary fringe)							
Describe Recorded Data (stream gauge, mor	nitoring well, aerial photos, prev	/ious inspections), if	available:				
Remarks:							

Tree Stratum (Dietaine, 201	Absolute	Dominant	Indicator	Dominanaa Taat waxkabaat		
Tree Stratum (Plot size: 30')	% Cover	Species?	Status	Dominance Test worksheet:		
1. Hamamelis virginiana	5	No No	FACU	Number of Dominant Species		
2. Quercus rubra	90	Yes	FACU	That Are OBL, FACW, or FAC: 2 (A)		
Fagus grandifolia 4.	5	No	FACU	Total Number of Dominant Species Across All Strata:5(B)		
5.6.				Percent of Dominant Species That Are OBL, FACW, or FAC: 40.0% (A/B)		
7.				Prevalence Index worksheet:		
	100	=Total Cover		Total % Cover of: Multiply by:		
Sapling/Shrub Stratum (Plot size: 15')	- 100	•		OBL species 0 x1 = 0		
Carpinus caroliniana	20	Yes	FAC	FACW species 0 x 2 = 0		
Hamamelis virginiana	5	Yes	FACU	FAC species 28 x 3 = 84		
3.			17.00	FACU species 117 x 4 = 468		
<u></u>				UPL species 0 x 5 = 0		
				Column Totals: 145 (A) 552 (B)		
				Prevalence Index = B/A = 3.81		
7.				Hydrophytic Vegetation Indicators:		
<i>'</i>	 25	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation		
Harb Stratum (Diataiza: 5')		- Total Cover		2 - Dominance Test is >50%		
Herb Stratum (Plot size: 5')	0	Vaa	FAC	3 - Prevalence Index is ≤3.0 ¹		
1. Carpinus caroliniana	8	Yes				
2. Aralia nudicaulis	10	Yes	FACU	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)		
Hamamelis virginiana 4.	2	No	<u>FACU</u>	Problematic Hydrophytic Vegetation ¹ (Explain)		
				 		
6.				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
7				Definitions of Vegetation Strata:		
8. 9.				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.		
10.				Sapling/shrub – Woody plants less than 3 in. DBH		
11				and greater than or equal to 3.28 ft (1 m) tall.		
12				Herb – All herbaceous (non-woody) plants, regardless		
	20	=Total Cover		of size, and woody plants less than 3.28 ft tall.		
Woody Vine Stratum (Plot size: 30')				Woody vines – All woody vines greater than 3.28 ft in		
1.				height.		
2.				Hydrophytic		
3.		·		Vegetation		
4.		·		Present? Yes No _X		
		=Total Cover				
Remarks: (Include photo numbers here or on a separ	ate sheet.)					

Sampling Point: P5-Z-10 Upl

SOIL Sampling Point P5-Z-10 Upl

Profile Desc Depth	ription: (Describe to Matrix	o the de		ument tl x Featur		ator or co	onfirm the absence of indicators	s.)
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-3	10YR 2/1	100					Loamy/Clayey	
3-16	10YR 5/3	100					Loamy/Clayey	
							<u> </u>	
								_
			_				_	_
1Type: C=Ce	oncentration, D=Deple		I-Doduced Metrix N		Lod Sono		² Location: PL=Pore Lin	ing M-Matrix
Hydric Soil I		elion, ixiv	i-Reduced Matrix, IV	IO-IVIASI	Keu Sanc	d Grains.	Indicators for Problem	
Histosol			Dark Surface (S7)				.RR K, L, MLRA 149B)
	ipedon (A2)		Polyvalue Belo	•	ce (S8) (I	LRR R,		(A16) (LRR K, L, R)
Black His			MLRA 149B					Peat (S3) (LRR K, L, R)
Hydroger	n Sulfide (A4)		Thin Dark Surfa	ace (S9)) (LRR R	, MLRA 1	49B) Polyvalue Below Su	ırface (S8) (LRR K, L)
Stratified	Layers (A5)		High Chroma S	3ands (S	611) (LRF	R K, L)	Thin Dark Surface (S9) (LRR K, L)
	Below Dark Surface	(A11)	Loamy Mucky	Mineral	(F1) (LRI	R K, L)	Iron-Manganese Ma	asses (F12) (LRR K, L, R)
	rk Surface (A12)		Loamy Gleyed		F2)			n Soils (F19) (MLRA 149B)
	oodic (A17)		Depleted Matri		-0)			(F21) (outside MLRA 145)
	A 144A, 145, 149B)		Redox Dark Su Depleted Dark	-	-		Very Shallow Dark	
	ucky Mineral (S1) leyed Matrix (S4)		Redox Depress		` '		Other (Explain in Re	emarks)
	edox (S5)		Marl (F10) (LR		0)		³ Indicators of hydro	phytic vegetation and
	Matrix (S6)		Red Parent Ma		21) (MLF	RA 145)	- · · · · · · · · · · · · · · · · · · ·	must be present,
``	,			`	, ,	,	unless disturbed	•
Restrictive L	ayer (if observed):							
Type:	none	9						
Depth (in	nches):						Hydric Soil Present?	Yes No _X_
Remarks:								



Upland P5-Z-10- View facing northwest



Upland P5-Z-10- Soils

Segment 9- Package 5B

SITE PHOTOGRAPHS

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: Selkirk/	Albany	Sampling Date: 10/6/22
Applicant/Owner: TDI			State: NY	Sampling Point: P5-BB-3 Wet
Investigator(s): C. Einstein & N. Frazer		Section, To	wnship, Range:	<u> </u>
Landform (hillside, terrace, etc.): depression	n Local re	elief (concave, conve	ex. none): concave	Slope %: 0
Subregion (LRR or MLRA): LRR R	Lat: 42-32-16.41N	•	73-48-51.02W	Datum: WGS84
Soil Map Unit Name: Hudson silt loam (HuB)			NWI classification:	PEM
Are climatic / hydrologic conditions on the site	•	Vec v		explain in Remarks.)
		Yes x	` ` `	,
Are Vegetation, Soil, or Hydro			nal Circumstances" prese 	
Are Vegetation, Soil, or Hydro	<u> </u>		d, explain any answers in	•
SUMMARY OF FINDINGS – Attach	site map showing samp	oling point loca	tions, transects, im	portant features, etc.
Hydrophytic Vegetation Present?	Yes X No	Is the Sampled A	rea	
Hydric Soil Present?	Yes X No	within a Wetland	? Yes X	No
Wetland Hydrology Present?	Yes X No	If yes, optional We	tland Site ID:	
Remarks: (Explain alternative procedures he Common reed marsh.	ere or in a separate report.)			
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indicators (m	ninimum of two required)
Primary Indicators (minimum of one is requir	ed: check all that apply)		Surface Soil Cracks	
Surface Water (A1)	Water-Stained Leaves (B	9)	Drainage Patterns (I	
High Water Table (A2)	Aquatic Fauna (B13)	5 /	Moss Trim Lines (B	•
Saturation (A3)	Marl Deposits (B15)		Dry-Season Water	·
Water Marks (B1)	Hydrogen Sulfide Odor (C) 1)	Crayfish Burrows (C	(8)
Sediment Deposits (B2)	X Oxidized Rhizospheres or	n Living Roots (C3)	Saturation Visible or	n Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron		Stunted or Stressed	Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (C6)	X Geomorphic Positio	
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquitard (D	·
Inundation Visible on Aerial Imagery (B7	· ——	s)	Microtopographic Re	` '
Sparsely Vegetated Concave Surface (B	8)		X FAC-Neutral Test (D	05)
Field Observations:	No. 1			
Surface Water Present? Yes Yes	No x Depth (inches): _ No x Depth (inches):			
Saturation Present? Yes	No x Depth (inches): _ No x Depth (inches): _		d Hydrology Present?	Yes X No
(includes capillary fringe)	NO х Берит (шолоз)	***	u nyurorogy r resem:	162 <u>V</u> 140
Describe Recorded Data (stream gauge, mor	 nitoring well, aerial photos, prev	vious inspections), if	available:	
, , ,		' ,		
Remarks:				
Nelliains.				

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:30') 1.	% Covei	Species:	Status	Dominance rest worksneet.
2.				Number of Dominant Species That Are OBL, FACW, or FAC:3(A)
3				Total Number of Dominant
4				Species Across All Strata: 4 (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC:75.0%(A/B)
7		<u> </u>		Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size:15')				OBL species15 x 1 =15
1. Fraxinus pennsylvanica	10	Yes	FACW	FACW species113 x 2 =226
2.				FAC species15 x 3 =45
3				FACU species 8 x 4 = 32
4				UPL species 0 x 5 = 0
5				Column Totals: 151 (A) 318 (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	10	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size:5')				X 2 - Dominance Test is >50%
1. Phragmites australis	65	Yes	FACW	X 3 - Prevalence Index is ≤3.0 ¹
2. Impatiens capensis	30	Yes	FACW	4 - Morphological Adaptations ¹ (Provide supporting
3. Lythrum salicaria	10	No	OBL	data in Remarks or on a separate sheet)
4. Onoclea sensibilis	8	No	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
5. Microstegium vimineum	15	No	FAC	¹ Indicators of hydric soil and wetland hydrology must
6. Persicaria sagittata	5	No	OBL	be present, unless disturbed or problematic.
7				Definitions of Vegetation Strata:
8				Tree – Woody plants 3 in. (7.6 cm) or more in
9.				diameter at breast height (DBH), regardless of height.
10				Sapling/shrub – Woody plants less than 3 in. DBH
11.				and greater than or equal to 3.28 ft (1 m) tall.
12.				Herb – All herbaceous (non-woody) plants, regardless
	133	=Total Cover		of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size: 30')				Woody vines – All woody vines greater than 3.28 ft in
1. Vitis aestivalis	8	Yes	FACU	height.
2				
3.				Hydrophytic Vegetation
4.				Present? Yes X No
	8	=Total Cover		
Remarks: (Include photo numbers here or on a separ	ate sheet.)	-		1
· ·	,			

Sampling Point: P5-BB-3 Wet

SOIL Sampling Point P5-BB-3 Wet

Profile Desc Depth	ription: (Describe t Matrix	o the de	-	ument tl x Featur		ator or co	onfirm the absence of it	ndicators.)
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-6	10YR 2/1	95	10YR 4/6	5	С	PL	Loamy/Clayey	Prominent redox concentrations
6-11	10YR 4/1	80	10YR 5/6	20	C	M	Loamy/Clayey	Prominent redox concentrations
11-16	10YR 4/2	65	10YR 5/8	30	C	M	Loamy/Clayey	Prominent redox concentrations
			10YR 3/1	5	<u> </u>	M		Faint redox concentrations
		etion, RI	M=Reduced Matrix, M	1S=Mas	ked San	d Grains.		Pore Lining, M=Matrix.
Hydric Soil I			Dank Confees (C7)				Problematic Hydric Soils ³ :
— Histosol	(AT) ipedon (A2)		Dark Surface (\$		aa (CO) (I DD D		(A10) (LRR K, L, MLRA 149B)
Black His			Polyvalue Belo		ce (So) (LKK K,		rie Redox (A16) (LRR K, L, R) xy Peat or Peat (S3) (LRR K, L, R)
	n Sulfide (A4)		Thin Dark Surfa	,	(LRR R	. MLRA 1		Below Surface (S8) (LRR K, L)
	Layers (A5)		High Chroma S					Surface (S9) (LRR K, L)
	Below Dark Surface	(A11)	Loamy Mucky I					anese Masses (F12) (LRR K, L, R)
Thick Da	rk Surface (A12)		Loamy Gleyed	Matrix (F2)		Piedmont I	Floodplain Soils (F19) (MLRA 149B)
Mesic Sp	oodic (A17)		X Depleted Matrix	x (F3)			Red Paren	t Material (F21) (outside MLRA 145)
(MLR	A 144A, 145, 149B)		X Redox Dark Su	ırface (F	6)		Very Shallo	ow Dark Surface (F22)
	ucky Mineral (S1)		Depleted Dark				Other (Exp	olain in Remarks)
	leyed Matrix (S4)		Redox Depress		8)		2	
	edox (S5)		Marl (F10) (LR					of hydrophytic vegetation and
Stripped	Matrix (S6)		Red Parent Ma	₁terial (F	21) (MLI	RA 145)		hydrology must be present, listurbed or problematic.
Restrictive L	ayer (if observed):							
Type:	none	e						
Depth (in	nches):						Hydric Soil Present?	? Yes X No
Remarks:								



Wetland BB-3- View facing north



Wetland BB-3- Soils

Segment 9- Package 5B

SITE PHOTOGRAPHS

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

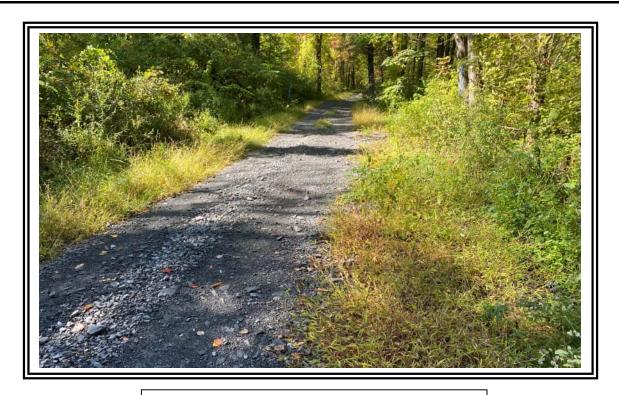
OMB Control #: 0710-0024, Exp: 11/30/2024 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

Project/Site: CHPE		City/County: Selkirk/	Albany	Sampling Date: 10/6/22			
Applicant/Owner: TDI			State: NY	Sampling Point: P5-BB-3 Upl			
Investigator(s): C. Einstein & N. Frazer		Section, To	vnship, Range:				
Landform (hillside, terrace, etc.): flat	Local re	elief (concave, conve	x, none): none	Slope %: 0			
Subregion (LRR or MLRA): LRR R	Lat: 42-32-16.41N	•	73-48-51.02W	Datum: WGS84			
Soil Map Unit Name: Hudson silt loam (HuB			NWI classification:				
Are climatic / hydrologic conditions on the site		Voc v					
		Yes X	· — `	explain in Remarks.)			
Are Vegetation, Soil, or Hydro			nal Circumstances" prese				
Are Vegetation, Soil, or Hydro			, explain any answers in	•			
SUMMARY OF FINDINGS – Attach	site map showing samp	oling point loca	ions, transects, in	nportant features, etc.			
Hydrophytic Vegetation Present?	Yes X No	Is the Sampled A	ea				
Hydric Soil Present?	Yes No X	within a Wetland	Yes	No X			
Wetland Hydrology Present?	Yes No X	If yes, optional We	tland Site ID:				
Gravel roadside data points for P5-BB-3 Upl	and P5-CC-6 Upi.						
HYDROLOGY							
Wetland Hydrology Indicators:			Secondary Indicators (r	minimum of two required)			
Primary Indicators (minimum of one is require	red; check all that apply)		Surface Soil Crack	s (B6)			
Surface Water (A1)	Water-Stained Leaves (B	9)	Drainage Patterns	•			
High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B16)				
Saturation (A3)	Marl Deposits (B15)		Dry-Season Water				
Water Marks (B1)	Hydrogen Sulfide Odor (C	•	Crayfish Burrows (0	′			
Sediment Deposits (B2)	Oxidized Rhizospheres or			on Aerial Imagery (C9)			
Drift Deposits (B3) Algal Mat or Crust (B4)	Presence of Reduced Iron Recent Iron Reduction in		Stunted or Stressed Geomorphic Position				
Iron Deposits (B5)	Thin Muck Surface (C7)	Tilled Solis (So)	Shallow Aquitard (
Inundation Visible on Aerial Imagery (B7		rs)	Microtopographic R	·			
Sparsely Vegetated Concave Surface (E	· · · · ·	.5)	X FAC-Neutral Test (
Field Observations:				-,			
Surface Water Present? Yes	No x Depth (inches):						
Water Table Present? Yes	No x Depth (inches):						
Saturation Present? Yes	No x Depth (inches):	Wetlan	d Hydrology Present?	Yes No _X_			
(includes capillary fringe)							
Describe Recorded Data (stream gauge, mo	onitoring well, aerial photos, prev	vious inspections), if	available:				
Demonstration							
Remarks:							

tal Cover	Indicator Status	Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A) Total Number of Dominant Species Across All Strata: 1 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/I Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x1 = 0 FACW species 1 x2 = 2 FAC species 80 x3 = 240 FACU species 0 x4 = 0 UPL species 0 x5 = 0 Column Totals: 81 (A) 242 (II Prevalence Index = B/A = 2.99 Hydrophytic Vegetation Indicators:
tal Cover		That Are OBL, FACW, or FAC: 1 (A) Total Number of Dominant Species Across All Strata: 1 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/I Prevalence Index worksheet: Multiply by: OBL species 0 x 1 = 0 FACW species 1 x 2 = 2 2 FAC species 80 x 3 = 240 FACU species 0 x 4 = 0 0 UPL species 0 x 5 = 0 0 Column Totals: 81 (A) 242 (I Prevalence Index B/A = 2.99 2.99 1
tal Cover		That Are OBL, FACW, or FAC: 1 (A) Total Number of Dominant Species Across All Strata: 1 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/I Prevalence Index worksheet: Multiply by: OBL species 0 x 1 = 0 FACW species 1 x 2 = 2 2 FAC species 80 x 3 = 240 FACU species 0 x 4 = 0 0 UPL species 0 x 5 = 0 0 Column Totals: 81 (A) 242 (I Prevalence Index B/A = 2.99 2.99 1
tal Cover		Total Number of Dominant Species Across All Strata: 1 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
tal Cover		Species Across All Strata: 1 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/I Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 1 x 2 = 2 FAC species 80 x 3 = 240 FACU species 0 x 4 = 0 UPL species 0 x 5 = 0 Column Totals: 81 (A) 242 Prevalence Index = B/A = 2.99
tal Cover		Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/I Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 1 x 2 = 2 FAC species 80 x 3 = 240 FACU species 0 x 4 = 0 UPL species 0 x 5 = 0 Column Totals: 81 (A) 242 Prevalence Index = B/A = 2.99
tal Cover		That Are OBL, FACW, or FAC: 100.0% (A/II) Prevalence Index worksheet: Total % Cover of: 0BL species 0 x 1 = 0 Multiply by: 0BL species 0 x 2 = 2 FACW species 1 x 2 = 2 2 FAC species 80 x 3 = 240 240 FACU species 0 x 4 = 0 0 UPL species 0 x 5 = 0 0 Column Totals: 81 (A) 242 (II) 0 Prevalence Index = B/A = 2.99 0
tal Cover		Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 1 x 2 = 2 FAC species 80 x 3 = 240 FACU species 0 x 4 = 0 UPL species 0 x 5 = 0 Column Totals: 81 (A) 242 Prevalence Index = B/A = 2.99
tal Cover		Total % Cover of: Multiply by: OBL species 0 x 1 = 0 FACW species 1 x 2 = 2 FAC species 80 x 3 = 240 FACU species 0 x 4 = 0 UPL species 0 x 5 = 0 Column Totals: 81 (A) 242 Prevalence Index = B/A = 2.99
tal Cover		OBL species 0 x 1 = 0 FACW species 1 x 2 = 2 FAC species 80 x 3 = 240 FACU species 0 x 4 = 0 UPL species 0 x 5 = 0 Column Totals: 81 (A) 242 (I Prevalence Index = B/A = 2.99
		FACW species 1 x 2 = 2 FAC species 80 x 3 = 240 FACU species 0 x 4 = 0 UPL species 0 x 5 = 0 Column Totals: 81 (A) 242 (I Prevalence Index = B/A = 2.99
		FACW species 1 x 2 = 2 FAC species 80 x 3 = 240 FACU species 0 x 4 = 0 UPL species 0 x 5 = 0 Column Totals: 81 (A) 242 (I Prevalence Index = B/A = 2.99
		FAC species 80 x 3 = 240 FACU species 0 x 4 = 0 UPL species 0 x 5 = 0 Column Totals: 81 (A) 242 (I Prevalence Index = B/A = 2.99
		FACU species 0 x 4 = 0 UPL species 0 x 5 = 0 Column Totals: 81 (A) 242 (I Prevalence Index = B/A = 2.99
		UPL species 0 x 5 = 0 Column Totals: 81 (A) 242 (I Prevalence Index = B/A = 2.99
		Column Totals: 81 (A) 242 (I Prevalence Index = B/A = 2.99
		Prevalence Index = B/A = 2.99
		Hydrophytic Vegetation Indicators:
		1 , , ,
		1 - Rapid Test for Hydrophytic Vegetation
Yes		X 2 - Dominance Test is >50%
Yes		
	FAC_	3 - Prevalence Index is ≤3.0 ¹
No	FACW	4 - Morphological Adaptations ¹ (Provide support
		data in Remarks or on a separate sheet)
		Problematic Hydrophytic Vegetation ¹ (Explain)
		1
-		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
		Definitions of Vegetation Strata:
		Deminitions of Vegetation Strata.
		Tree – Woody plants 3 in. (7.6 cm) or more in
		diameter at breast height (DBH), regardless of heigh
		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, regardle:
tal Cover		of size, and woody plants less than 3.28 ft tall.
		Woody vines – All woody vines greater than 3.28 ft
		height.
		Hydrophytic
		Vegetation
		Present? Yes X No
tal Cover		
	al Cover	

SOIL Sampling Point P5-BB-3 Upl

Depth	Matrix	o the de	•	x Featur		ator or co	onfirm the absence	oi indica	iors.)		
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Rem	arks	
	, ,										
¹ Type: C=Co	ncentration, D=Depl	etion, RN	/I=Reduced Matrix, I	√S=Mas	ked Sand	d Grains.	² Location:	PL=Pore	Lining, M=N	/latrix.	
Hydric Soil Ir	ndicators:						Indicators	for Prob	lematic Hyd	Iric Soils ³ :	
Histosol (A1)		Dark Surface	(S7)			2 cm M	uck (A10) (LRR K, L	, MLRA 14	9B)
Histic Epi	pedon (A2)		Polyvalue Beld	ow Surfa	ce (S8) (LRR R,	Coast F	Prairie Re	dox (A16) (LRR K, L, I	R)
Black His	tic (A3)		MLRA 149E	3)			5 cm M	ucky Pea	nt or Peat (S	3) (LRR K ,	, L, R)
— Hydrogen	Sulfide (A4)		Thin Dark Sur	face (S9)	(LRR R	, MLRA 1			Surface (S		
	Layers (A5)		High Chroma						ce (S9) (LR I		_,
	Below Dark Surface	(Δ11)	Loamy Mucky						Masses (F	-	I R)
	k Surface (A12)	(/(11)	Loamy Gleyed			it it, =/		-	olain Soils (I		
	odic (A17)		Depleted Matr		1 2)				erial (F21) (
					-6)						-NA 143)
	A 144A, 145, 149B)		Redox Dark S						rk Surface (₍ F22)	
	ucky Mineral (S1)		Depleted Dark		, ,		Other (Explain ir	Remarks)		
	eyed Matrix (S4)		Redox Depres	•	8)		3, ,,				
Sandy Re			Marl (F10) (LF						drophytic ve		nd
Stripped I	Matrix (S6)		Red Parent Ma	aterial (F	21) (ML F	RA 145)			logy must b		
							unles	s disturb	ed or proble	matic.	
Restrictive L	ayer (if observed):										
Type: _	grav	el									
Depth (in	ches):	0					Hydric Soil Prese	ent?	Yes	No	Χ
							,		_		
Remarks:	da wa asila wwasawt										
Gravel roadsi	de- no soils present.										



Upland BB-3- View facing west

Segment 9- Package 5B

SITE PHOTOGRAPHS



Upland CC-6- View facing west

Segment 9- Package 5B

SITE PHOTOGRAPHS

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: Selkirk/	Albany	Sampling Date: 10/6/22
Applicant/Owner: TDI			State: NY	Sampling Point: P5-CC-6 Wet
Investigator(s): C. Einstein & N. Frazer		Section, To	——— wnship, Range:	<u> </u>
Landform (hillside, terrace, etc.): flat	Local re	elief (concave, conve	· · · ·	Slope %: 0
Subregion (LRR or MLRA): LRR R	Lat: 42-32-15.46N	-	73-48-45.75W	Datum: WGS84
Soil Map Unit Name: Hudson silt loam (HuB)			NWI classification:	
	,	Vac v		
Are climatic / hydrologic conditions on the site		Yes x	`	, explain in Remarks.)
Are Vegetation, Soil, or Hydrol			nal Circumstances" pres	
Are Vegetation, Soil, or Hydrol	<u> </u>		d, explain any answers i	
SUMMARY OF FINDINGS – Attach	site map showing samp	pling point loca	tions, transects, ir	mportant features, etc.
Hydrophytic Vegetation Present?	Yes X No	Is the Sampled A	rea	
Hydric Soil Present?	Yes X No	within a Wetland	? Yes X	No
Wetland Hydrology Present?	Yes X No	If yes, optional We	tland Site ID:	
Remarks: (Explain alternative procedures he	ere or in a separate report.)			
Shrub swamp.				
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indicators ((minimum of two required)
Primary Indicators (minimum of one is require	ed; check all that apply)		Surface Soil Crack	ks (B6)
Surface Water (A1)	Water-Stained Leaves (B	9)	Drainage Patterns	
— High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (·
Saturation (A3)	Marl Deposits (B15)		Dry-Season Water	
Water Marks (B1)	Hydrogen Sulfide Odor (C	•	Crayfish Burrows (
Sediment Deposits (B2)	X Oxidized Rhizospheres or			on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron		Stunted or Stresse	·
Algal Mat or Crust (B4) Iron Deposits (B5)	Recent Iron Reduction in Thin Muck Surface (C7)	Tilled Solis (Co)	Geomorphic Positi Shallow Aquitard (
Inundation Visible on Aerial Imagery (B7		re)	Microtopographic I	
Sparsely Vegetated Concave Surface (B	· 	.3)	X FAC-Neutral Test	, ,
Field Observations:			<u></u>	(,
Surface Water Present? Yes	No x Depth (inches):			
Water Table Present? Yes	No x Depth (inches):			
Saturation Present? Yes	No x Depth (inches):		d Hydrology Present?	Yes _ X _ No
(includes capillary fringe)				
Describe Recorded Data (stream gauge, mor	nitoring well, aerial photos, prev	vious inspections), if	available:	
Remarks:				

	Absolute	Dominant	Indicator	
ree Stratum (Plot size:)	% Cover	Species?	Status	Dominance Test worksheet:
Acer rubrum	25	Yes	FAC	Number of Dominant Species
				That Are OBL, FACW, or FAC:5 (A)
				Total Number of Dominant
				Species Across All Strata: 7 (B)
				Percent of Dominant Species
·				That Are OBL, FACW, or FAC: 71.4% (A/B
				Prevalence Index worksheet:
	25	=Total Cover		Total % Cover of: Multiply by:
apling/Shrub Stratum (Plot size:)				OBL species0 x 1 =0
Fraxinus pennsylvanica	25	Yes	FACW	FACW species 105 x 2 = 210
Quercus rubra	5	No	FACU	FAC species33 x 3 =99
Cornus racemosa	8	Yes	FAC	FACU species 30 x 4 = 120
				UPL species 0 x 5 = 0
				Column Totals: 168 (A) 429 (B
				Prevalence Index = B/A = 2.55
				Hydrophytic Vegetation Indicators:
	38	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5')		•		X 2 - Dominance Test is >50%
Onoclea sensibilis	50	Yes	FACW	X 3 - Prevalence Index is ≤3.0 ¹
2. Impatiens capensis	25	Yes	FACW	4 - Morphological Adaptations ¹ (Provide supporting
3. Rosa multiflora	10	No	FACU	data in Remarks or on a separate sheet)
. Cornus amomum	5	No	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
i. Comus amomum			17011	
). S				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
,		_		Definitions of Vegetation Strata:
3.				Tree – Woody plants 3 in. (7.6 cm) or more in
).				diameter at breast height (DBH), regardless of height
10.		·		Sapling/shrub – Woody plants less than 3 in. DBH
11.				and greater than or equal to 3.28 ft (1 m) tall.
12.				All hards are sure (non woods) plants, regardles
	90	=Total Cover		Herb – All herbaceous (non-woody) plants, regardles of size, and woody plants less than 3.28 ft tall.
Noody Vine Stratum (Plot size: 30')		-		
. Vitis aestivalis	5	Yes	FACU	Woody vines – All woody vines greater than 3.28 ft height.
2. Celastrus orbiculatus	10	Yes	FACU	- Notice -
3.		-		Hydrophytic
4.		-		Vegetation Present? Yes X No
	 15	=Total Cover		1100
	10			

SOIL Sampling Point P5-CC-6 Wet

	•	o the de	-			ator or co	onfirm the absence of	f indicators.)
Depth (inches)	Matrix Color (moist)	0/:		x Featur		Loc ²	Toyturo	Domarka
(inches)	Color (moist)		Color (moist)		Type ¹	Loc	Texture	Remarks
0-6	10YR 2/1	100					Loamy/Clayey	
6-16	10YR 3/1	80	10YR 3/6		<u>C</u>	PL/M	Loamy/Clayey	Prominent redox concentrations
								_
			-					
		etion, RI	M=Reduced Matrix, N	/IS=Mas	ked San	d Grains.		L=Pore Lining, M=Matrix.
Hydric Soil In			5 . 6	o=\				or Problematic Hydric Soils ³ :
— Histosol (•		Dark Surface (•	(00) (ick (A10) (LRR K, L, MLRA 149B)
Black His	pedon (A2)		Polyvalue Belo		ce (So) (LKK K,		rairie Redox (A16) (LRR K, L, R) ucky Peat or Peat (S3) (LRR K, L, R)
	Sulfide (A4)		Thin Dark Surf	•	(LRR R	. MLRA 1		e Below Surface (S8) (LRR K, L)
	Layers (A5)		High Chroma S					k Surface (S9) (LRR K, L)
	Below Dark Surface	(A11)	Loamy Mucky					nganese Masses (F12) (LRR K, L, R)
Thick Dar	k Surface (A12)		Loamy Gleyed	Matrix (F2)	-		nt Floodplain Soils (F19) (MLRA 149B)
Mesic Sp	odic (A17)		Depleted Matri	x (F3)			Red Par	ent Material (F21) (outside MLRA 145)
-	A 144A, 145, 149B)		X Redox Dark Su					allow Dark Surface (F22)
I —	ucky Mineral (S1)		Depleted Dark		• •		Other (E	xplain in Remarks)
	eyed Matrix (S4)		Redox Depress	,	8)		31	un af budunubudin un matatinu aud
Sandy Re	Matrix (S6)		Marl (F10) (LR Red Parent Ma		21) (ML I	PA 145)		ors of hydrophytic vegetation and and hydrology must be present,
Ottipped i	Matrix (00)		RCGT architime	itoriai (i	21) (IVILI	(A 140)		s disturbed or problematic.
Restrictive L	ayer (if observed):							·
Type:	none	e						
Depth (in	ches):						Hydric Soil Preser	nt? Yes X No
Remarks:							•	



Wetland CC-6- View facing west



Wetland CC-6- Soils

Segment 9- Package 5B

SITE PHOTOGRAPHS

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE Phase 5	City/County: <u>Selki</u>	rk	Sampling Date: 11/18/21
Applicant/Owner: <u>CHA</u>		State: <u>NY</u>	Sampling Point: <u>IA-</u> 2
Investigator(s): Nick Dominic, Justn Williams			
Landform (hillslope, terrace, etc.):	Local relief (concave,	convex, none):	Slope (%):
Subregion (LRR or MLRA): LRR R I	_at: _42.53657	Long: <u>-73.80861</u>	Datum: NAD83
Soil Map Unit Name:		NWI classific	cation: PFM
Are climatic / hydrologic conditions on the site typical	al for this time of year? Yes <u> </u>	No (If no, explain in F	Remarks.)
Are Vegetation NO, Soil YES ▼ , or Hydrology N	Significantly disturbed?	Are "Normal Circumstances"	present? Yes 🗵 No 🔲
Are Vegetation NO , Soil NO , or Hydrology N		(If needed, explain any answe	
SUMMARY OF FINDINGS – Attach site	map showing sampling poi	nt locations, transects	s, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes	No No If yes, optio		<u></u> No □
Remarks: (Explain alternative procedures here or Wetland IA, drainage on side of railway	in a coparato roporti,		
HYDROLOGY			
Wetland Hydrology Indicators:			ators (minimum of two required)
Primary Indicators (minimum of one is required; ch			Cracks (B6)
Surface Water (A1) High Water Table (A2)	Water-Stained Leaves (B9) Aquatic Fauna (B13)	<u> </u>	
Saturation (A3)	Marl Deposits (B15)	-	Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Bur	
Sediment Deposits (B2)	Oxidized Rhizospheres on Living F	Roots (C3) 🔲 Saturation V	ʻisib l e on Aerial Imagery (C9)
☐ Drift Deposits (B3)	Presence of Reduced Iron (C4)	-	Stressed Plants (D1)
☐ Algal Mat or Crust (B4)☐ Iron Deposits (B5)☐ ☐	Recent Iron Reduction in Tilled So	-	Position (D2)
Inundation Visible on Aerial Imagery (B7)	Thin Muck Surface (C7) Other (Explain in Remarks)	Shallow Aqu	aphic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	= other (Explain in Remaine)	FAC-Neutral	
Field Observations:		<u> </u>	
Surface Water Present? Yes X	Depth (inches): 7		
Water Table Present? Yes No	Depth (inches):		
Saturation Present? Yes No	Depth (inches):	Wetland Hydrology Preser	nt? Yes 🗵 No 🗌
(includes capillary fringe) Describe Recorded Data (stream gauge, monitorir		tions), if available:	
Remarks:			

	•		Sampling Point: <u>IA-2</u>
Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Indicator Species? Status	Dominance Test worksheet:
1			Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2		_ = =	
3			Total Number of Dominant Species Across All Strata: (B)
4			
5			Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6			Prevalence Index worksheet:
7			Total % Cover of: Multiply by:
- 1		= Total Cover	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15			FACW species x 2 = FAC species x 3 =
1,		= =	FACU species x 4 =
2			UPL species x 5 =
3			Column Totals: (A) (B)
4		<u> </u>	
5		<u>-</u> -	Prevalence Index = B/A =
6		<u>-</u>	Hydrophytic Vegetation Indicators:
7		<u>-</u> -	☐ 1 - Rapid Test for Hydrophytic Vegetation
		= Total Cover	2 - Dominance Test is >50%
Herb Stratum (Plot size: 5)			☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ 4 - Morphological Adaptations ¹ (Provide supporting
1. <u>Phragmites australis</u>			data in Remarks or on a separate sheet)
2		__	Problematic Hydrophytic Vegetation¹ (Explain)
3			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4			Definitions of Vegetation Strata:
5			
6			Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
7			Sapling/shrub – Woody plants less than 3 in. DBH
8 9			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.
11			Woody vines – All woody vines greater than 3.28 ft in
12	100		height.
	100	= Total Cover	
Woody Vine Stratum (Plat size: 20			
,			
1			Hydrophytic
Woody Vine Stratum (Plot size:			Vegetation
1			• • •
1			Vegetation

SOIL Sampling Point: <u>IA-2</u>

Profile Desc	ription: (Describe t	o the dep	th needed to docu	ment the i	ndicator	or confirm	the absence of indicators.)
Depth	Matrix			x Features	<u>s</u>	0	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	<u>Loc²</u>	Texture Remarks
					_	_	
						-	
					-	-	
						-	
					-	-	
						-	
					-	-	
					-	-	
					-		
					-	-	
						<u> </u>	
	oncentration, D=Depl	etion, RM	=Reduced Matrix, M	S=Masked	Sand Gra	ains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil I			_				Indicators for Problematic Hydric Soils ³ :
Histosol			Polyvalue Belo		(S8) (LRF	₹R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)
_	ipedon (A2)		MLRA 149B	,			Coast Prairie Redox (A16) (LRR K, L, R)
Black His			Thin Dark Surfa				
	n Sulfide (A4)		Loamy Mucky I			, L)	Dark Surface (S7) (LRR K, L, M)
	Layers (A5)		Loamy Gleyed		:)		Polyvalue Below Surface (S8) (LRR K , L)
	l Below Dark Surface	(A11)	Depleted Matrix				Thin Dark Surface (S9) (LRR K, L)
	rk Surface (A12)		Redox Dark Su				Iron-Manganese Masses (F12) (LRR K , L , R)
	ucky Mineral (S1)		Depleted Dark	•	7)		Piedmont Floodplain Soils (F19) (MLRA 149B)
	leyed Matrix (S4)		Redox Depress	sions (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
	edox (S5)						Red Parent Material (F21)
Stripped	Matrix (S6)						
Dark Sur	face (S7) (LRR R, M	LRA 149	B)				U Other (Explain in Remarks)
_							
	hydrophytic vegetati	on and w	etland hydrology mus	st be prese	ent, unless	disturbed	or problematic.
Restrictive L	.ayer (if observed):						
Type: <u>Gra</u> v	vel						
Depth (inc	:hes): <u>0</u>						Hydric Soil Present? Yes 🔲 No 🗵
Remarks:							
	st created restrictive la	aver					
Rain oud band	st Greated restrictive to	iye.					



Wetland IA- View facing south



Wetland IA- Soils

Segment 10

SITE PHOTOGRAPHS

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE Package 5B	City/County: Selkirk Sampling Date: 11/18/2021					
Applicant/Owner: CHA	State: NY Sampling Point: 14-109 JA-4 Uplanc					
Investigator(s): Nick Dominic/Justin Williams	Section, Township, Range:					
- , ,	relief (concave, convex, none): Slope %:					
· · · · · · · · · · · · · · · · · · ·	Long: -73.80407 Datum: NAD83					
Soil Map Unit Name:	NWI classification: Upland					
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 Hydrologysignificantly disturb						
Are Vegetation, Soil, or Hydrologynaturally problema	tic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sam	pling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area					
Hydrophytic Vegetation Present? Yes No X 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.)						
(
Upland adjacent to IA						
HYDROLOGY						
 	Connectors (minimum of two required)					
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6)					
Surface Water (A1) Water-Stained Leaves (E						
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen Sulfide Odor (
Sediment Deposits (B2) Oxidized Rhizospheres of						
Drift Deposits (B3) Presence of Reduced Iro						
Algal Mat or Crust (B4) Recent Iron Reduction in	Tilled Soils (C6) Geomorphic Position (D2)					
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remark	Microtopographic Relief (D4)					
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)					
Field Observations:						
Surface Water Present? Yes No X Depth (inches):						
Water Table Present? Yes No X Depth (inches):						
Saturation Present? Yes No _X Depth (inches):	Wetland Hydrology Present? Yes No _X					
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	vious inspections), if available:					
Remarks:						

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. Quercus rubra	30	Yes	FACU	Dominance rest worksheet.
Juniperus virginiana	40	Yes	FACU	Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
2		163	1700	That Ale Obt., I AOW, OF AC.
1	•			Total Number of Dominant Species Across All Strata: 5 (B)
				Openies Across Air Otrata.
				Percent of Dominant Species That Are OBL, FACW, or FAC: 20.0% (A/B)
7				Prevalence Index worksheet:
<i>1.</i>	70	=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15)	70	- Total Gover		OBL species 0 x 1 = 0
A	20	Yes	FACU	FACW species 0 x 2 = 0
Lonicera spp. Rhamnus cathartica	30	Yes	FACU	FAC species 30 x 3 = 90
3.		100	17.00	FACU species 120 x 4 = 480
4.				UPL species 0 x 5 = 0
5				Column Totals: 150 (A) 570 (B)
6				Prevalence Index = B/A = 3.80
7.				Hydrophytic Vegetation Indicators:
· ——	50	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5)				2 - Dominance Test is >50%
1. Solidago spp.	30	Yes	FAC	3 - Prevalence Index is ≤3.0 ¹
2.				4 - Morphological Adaptations (Provide supporting)
3.				data in Remarks or on a separate sheet)
4.				Problematic Hydrophytic Vegetation ¹ (Explain)
5				¹ Indicators of hydric soil and wetland hydrology must
6				be present, unless disturbed or problematic.
7.				Definitions of Vegetation Strata:
8.				Tree – Woody plants 3 in. (7.6 cm) or more in
9.				diameter at breast height (DBH), regardless of height.
10				Sapling/shrub – Woody plants less than 3 in. DBH
11				and greater than or equal to 3.28 ft (1 m) tall.
12				Herb – All herbaceous (non-woody) plants, regardless
	30	=Total Cover		of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size:)				Woody vines – All woody vines greater than 3.28 ft in
1				height.
2				Hodge ob 4:-
3.				Hydrophytic Vegetation
4.				Present?
		=Total Cover		
Remarks: (Include photo numbers here or on a separate	ate sheet.)			

Sampling Point: -109 JA-4 Upla

SOIL Sampling Point\-109 JA-4 Uplar

		the de				itor or co	onfirm the absence of in	dicators.)
Depth	Matrix			x Featur		. 2	- .	
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-10	10yr 4/2	100					Loamy/Clayey	
								_
								_
1 _{Type:} C=C	oncentration, D=Deple	tion DA	4-Reduced Metrix N		kod Son		21 continue DI =	Pore Lining, M=Matrix.
Hydric Soil		elion, ixiv	n-Reduced Matrix, i	vio-ivias	keu Sant	J Grains.		roblematic Hydric Soils ³ :
Histosol			Polyvalue Belo	w Surfa	00 (58) /	DD D		A10) (LRR K, L, MLRA 149B)
	ipedon (A2)		MLRA 149B		Ce (36) (I	LKK K,		e Redox (A16) (LRR K, L, R)
Black Hi			Thin Dark Surf	•	(I DD D	MIDA		
	n Sulfide (A4)		High Chroma S					Peat or Peat (S3) (LRR K, L, R)
	l Layers (A5)		Loamy Mucky			-		elow Surface (S8) (LRR K, L) urface (S9) (LRR K, L)
		(411)				Κ Κ , L)		
	Below Dark Surface	(A11)	Loamy Gleyed		F2)			nese Masses (F12) (LRR K, L, R)
	rk Surface (A12)		Depleted Matri Redox Dark St		-0)			oodplain Soils (F19) (MLRA 149B)
	lucky Mineral (S1)							ic (TA6) (MLRA 144A, 145, 149B)
	leyed Matrix (S4)		Depleted Dark					Material (F21)
	edox (S5)		Redox Depres		0)			w Dark Surface (F22) ain in Remarks)
	Matrix (S6)		Marl (F10) (LR	K K, L)			Other (Expla	an in Remarks)
— Dark Sui	face (S7)							
3Indicators of	hudrophytic vogotatic	on and u	otland budgalagu m	ict ho ni	rooont ur	alooo diat	urbad ar problematic	
	hydrophytic vegetation	on and v	vetiand hydrology mi	ust be pi	esent, ur	iless dist	urbed or problematic.	
	_ayer (ii observed).							
Type:								
Depth (ir	nches):						Hydric Soil Present?	Yes No _X_
Remarks:								



Upland IA (left side of photo)- view facing south



Upland IA - Soils

Segment 10

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: Selkirk/	Albany County	Sampling Date: 10.5.22
Applicant/Owner: TDI			State: NY	Sampling Point: Wet P5-Y-13
Investigator(s): C. Scrivner & J. Greaves		Section, To	wnship, Range:	<u> </u>
Landform (hillside, terrace, etc.): Depressio	n Local re	elief (concave, conve	ex, none): Concave	Slope %: 2
Subregion (LRR or MLRA): LRR R	Lat: 42 32' 00"N	•	-73 48' 28"W	' Datum: WGS84
Soil Map Unit Name: EnA - Elmridge fine sar			NWI classification:	
Are climatic / hydrologic conditions on the site				explain in Remarks.)
		Yes X	 `	,
Are Vegetation, Soil, or Hydrol			nal Circumstances" prese	
Are Vegetation, Soil, or Hydrol			d, explain any answers in	
SUMMARY OF FINDINGS – Attach	site map showing samp	oling point loca	tions, transects, im	portant features, etc.
Hydrophytic Vegetation Present?	Yes X No	Is the Sampled A	rea	
Hydric Soil Present?	Yes X No	within a Wetland	? Yes <u>X</u>	No
Wetland Hydrology Present?	Yes X No	If yes, optional We	etland Site ID: Wetland	P5-Y near flag P5-Y-13
Remarks: (Explain alternative procedures he	ere or in a separate report.)	<u> </u>		
Red maple hardwood swamp.				
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indicators (n	ninimum of two required)
Primary Indicators (minimum of one is require			Surface Soil Cracks	
Surface Water (A1)	Water-Stained Leaves (B	9)	Drainage Patterns (•
High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B	·
Saturation (A3)	Marl Deposits (B15)	-	Dry-Season Water	
Water Marks (B1)	Hydrogen Sulfide Odor (C	•	Crayfish Burrows (C	·
Sediment Deposits (B2)	Oxidized Rhizospheres or			n Aerial Imagery (C9)
Drift Deposits (B3) Algal Mat or Crust (B4)	Presence of Reduced Iron Recent Iron Reduction in		Stunted or Stressed x Geomorphic Position	· ·
Iron Deposits (B5)	Thin Muck Surface (C7)	Illieu Solis (So)	Shallow Aquitard (D	
Inundation Visible on Aerial Imagery (B7		(s)	Microtopographic R	•
Sparsely Vegetated Concave Surface (B	· 	٥,	X FAC-Neutral Test (I	
Field Observations:	·		_	,
Surface Water Present? Yes	No x Depth (inches):	_		
Water Table Present? Yes	No x Depth (inches):			
Saturation Present? Yes x	No Depth (inches):	0 Wetlan	d Hydrology Present?	Yes X No
(includes capillary fringe)				
Describe Recorded Data (stream gauge, mor	nitoring well, aerial photos, prev	vious inspections), if	available:	
Remarks:				
Tromano.				

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. Ulmus americana	35	Yes	FACW	
2. Acer rubrum	25	Yes	FAC	Number of Dominant Species That Are OBL, FACW, or FAC: 9 (A)
3. Pinus strobus	10	No	FACU	Total Number of Dominant
4.				Species Across All Strata: 12 (B)
5.				Percent of Dominant Species
6.				That Are OBL, FACW, or FAC: 75.0% (A/B)
7.				Prevalence Index worksheet:
	70	=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15')		•		OBL species 5 x 1 = 5
1. Lindera benzoin	15	Yes	FACW	FACW species 115 x 2 = 230
2. Ilex verticillata	15	Yes	FACW	FAC species 55 x 3 = 165
3. Rosa multiflora	10	Yes	FACU	FACU species 45 x 4 = 180
4. Quercus rubra	5	No	FACU	UPL species 0 x 5 = 0
5.				Column Totals: 220 (A) 580 (B)
6.				Prevalence Index = B/A = 2.64
7.				Hydrophytic Vegetation Indicators:
	45	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5')		-		X 2 - Dominance Test is >50%
1. Onoclea sensibilis	25	Yes	FACW	X 3 - Prevalence Index is ≤3.0 ¹
2. Impatiens capensis	15	Yes	FACW	4 - Morphological Adaptations ¹ (Provide supporting
3. Matteuccia struthiopteris	10	Yes	FAC	data in Remarks or on a separate sheet)
4. Toxicodendron radicans	10	Yes	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
5. Celastrus orbiculatus	10	Yes	FACU	Indicators of hydric call and watland hydrology must
6. Osmunda spectabilis	5	No	OBL	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7. Geum aleppicum	5	No	FAC	Definitions of Vegetation Strata:
8. Rosa multiflora	5	No	FACU	Tree – Woody plants 3 in. (7.6 cm) or more in
9. Fraxinus pennsylvanica	5	No	FACW	diameter at breast height (DBH), regardless of height.
10. Lindera benzoin	5	No	FACW	Sapling/shrub – Woody plants less than 3 in. DBH
11. Parthenocissus quinquefolia			FACU	and greater than or equal to 3.28 ft (1 m) tall.
12.				Herb – All herbaceous (non-woody) plants, regardless
	95	=Total Cover		of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size:30')				Woody vines – All woody vines greater than 3.28 ft in
1. Celastrus orbiculatus	5	Yes	FACU	height.
2. Toxicodendron radicans	5	Yes	FAC	
3.				Hydrophytic Vegetation
4.				Present? Yes X No No
	10	=Total Cover		
Remarks: (Include photo numbers here or on a sepa	rate sheet.)			1

Sampling Point: Wet P5-Y-13

SOIL Sampling Point Wet P5-Y-13

	ription: (Describe t	o the de				ator or co	onfirm the absence of	f indicators.)
Depth	Matrix			Featur				
(inches)	Color (moist)		Color (moist)		Type ¹	Loc ²	Texture	Remarks
0-10	2.5Y 2.5/1	85	10YR 4/3	5	<u> </u>	<u>m</u>	Loamy/Clayey	Distinct redox concentrations
			10YR 5/6	10	<u> </u>	<u>m</u>		Prominent redox concentrations
10-15	2.5Y 4/1	60	10YR 2/1	10	<u> </u>	<u>m</u>	Sandy	Distinct redox concentrations
			10YR 4/3	10	<u> </u>	<u>m</u>		Distinct redox concentrations
			10YR 4/6	_20_	c	<u>m</u>		Prominent redox concentrations
15-18	10YR 2/1	95	10YR 5/3	5	c	<u>m</u>	Sandy	Distinct redox concentrations
	-							
		etion, RN	∕/I=Reduced Matrix, M	S=Mas	ked Sand	d Grains.		L=Pore Lining, M=Matrix.
Hydric Soil I			Dark Surface (S	27)				or Problematic Hydric Soils ³ : lck (A10) (LRR K, L, MLRA 149B)
	ipedon (A2)		Polyvalue Belov		ce (S8) (I RR R		rairie Redox (A16) (LRR K, L, R)
Black His			MLRA 149B)		(00) (LIXIX IX,		cky Peat or Peat (S3) (LRR K, L, R)
	n Sulfide (A4)		Thin Dark Surfa		(LRR R	. MLRA		e Below Surface (S8) (LRR K, L)
	Layers (A5)		High Chroma S					k Surface (S9) (LRR K, L)
	Below Dark Surface	(A11)	Loamy Mucky N					nganese Masses (F12) (LRR K, L, R)
Thick Da	rk Surface (A12)		Loamy Gleyed	Matrix (F2)		—— Piedmor	nt Floodplain Soils (F19) (MLRA 149B)
Mesic Sp	odic (A17)		Depleted Matrix	(F3)			Red Pare	ent Material (F21) (outside MLRA 145)
(MLR	A 144A, 145, 149B)		X Redox Dark Su	rface (F	6)		Very Sha	allow Dark Surface (F22)
Sandy M	ucky Mineral (S1)		Depleted Dark	Surface	(F7)		Other (E	xplain in Remarks)
	eyed Matrix (S4)		Redox Depress	ions (F	8)			
	edox (S5)		Marl (F10) (LRI					rs of hydrophytic vegetation and
Stripped	Matrix (S6)		Red Parent Ma	terial (F	21) (ML F	RA 145)		d hydrology must be present,
Restrictive L	.ayer (if observed):						unless	disturbed or problematic.
Type:								
Depth (in	ches):						Hydric Soil Preser	nt? Yes X No
Remarks:								



Wetland P5-Y-13- View of wetland



Wetland P5-Y-13- Soils

Segment 9- Package 5B

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: Bethleh	nem/Albany County	Sampling Date: 10.5.22			
Applicant/Owner: TDI			State: NY	Sampling Point: Upl P5-Y-13			
Investigator(s): C. Scrivner & J. Greaves		Section, To	wnship, Range:				
Landform (hillside, terrace, etc.): Hillslope	Local re	elief (concave, conve	ex, none): Convex	Slope %: 5			
Subregion (LRR or MLRA): LRR R	Lat: 42 32' 00"N	•	-73 48' 28"W	 Datum: WGS84			
Soil Map Unit Name: EnA - Elmridge fine sar			NWI classification:				
Are climatic / hydrologic conditions on the site		Yes x		explain in Remarks.)			
			` ` `	,			
Are Vegetation, Soil, or Hydrol			mal Circumstances" prese				
Are Vegetation, Soil, or Hydrol			d, explain any answers in	·			
SUMMARY OF FINDINGS – Attach	site map snowing samp	pling point loca	tions, transects, iii	iportant reatures, etc.			
Hydrophytic Vegetation Present?	Yes No _X_	Is the Sampled A	rea				
Hydric Soil Present?	Yes No X	within a Wetland		No X			
Wetland Hydrology Present?	Yes No _X	If yes, optional We	etland Site ID: Upland a	ndjacent to Wetland P5-Y			
Remarks: (Explain alternative procedures he	re or in a separate report.)						
Deciduous forest.							
LIVEROLOCY							
HYDROLOGY							
Wetland Hydrology Indicators:				ninimum of two required)			
Primary Indicators (minimum of one is require		•••	Surface Soil Cracks				
Surface Water (A1)	Water-Stained Leaves (B9	19)	Drainage Patterns (
High Water Table (A2) Saturation (A3)	Aquatic Fauna (B13) Marl Deposits (B15)	Moss Trim Lines (B16) Dry-Season Water Table (C2)					
Water Marks (B1)	Hydrogen Sulfide Odor (C	~1)	Crayfish Burrows (C				
Sediment Deposits (B2)	Oxidized Rhizospheres or	•		n Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron		Stunted or Stressed	=			
Algal Mat or Crust (B4)	Recent Iron Reduction in						
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks	(s)	Microtopographic R	telief (D4)			
Sparsely Vegetated Concave Surface (B	8)		FAC-Neutral Test ([D5)			
Field Observations:							
Surface Water Present? Yes	No x Depth (inches):						
Water Table Present? Yes	No x Depth (inches):						
Saturation Present? Yes	No x Depth (inches):	Wetlar	nd Hydrology Present?	Yes No _X			
(includes capillary fringe)	9 decreed sodel photos pro-	!tiona) if					
Describe Recorded Data (stream gauge, mor	litoring well, aerial priolos, prev	vious inspections), ii	avaliable:				
Remarks:							

VEGETATION – Use scientific names of plants.

VEGETATION – Use scientific names of pl	ants.			Sampling Point: Upl P5	-Y-13
Tree Stratum (Plot size:30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. Acer rubrum	45	Yes	FAC	Number of Dominant Species	
2. Populus deltoides	15	No	FAC	That Are OBL, FACW, or FAC: 2	(A)
3. Quercus rubra	5	No	FACU	Total Number of Dominant	
4. Liriodendron tulipifera	5	No	FACU	Species Across All Strata: 7	(B)
5. Quercus alba	5	No	FACU	Percent of Dominant Species	_
6. Acer platanoides	5	No	UPL	That Are OBL, FACW, or FAC: 28.6%	(A/B)
7.				Prevalence Index worksheet:	
	80	=Total Cover		Total % Cover of: Multiply by	: :
Sapling/Shrub Stratum (Plot size: 15')		•		OBL species 0 $x = 0$	
1. Quercus rubra	20	Yes	FACU_	FACW species 5 x 2 = 10	
2. Ostrya virginiana	15	Yes	FACU	FAC species63 x 3 =189	
3. Quercus alba	10	No	FACU	FACU species166 x 4 =664	
4. Rosa multiflora	10	No	FACU	UPL species 10 x 5 = 50	
5. Lindera benzoin	5	No	FACW	Column Totals: 244 (A) 913	(B)
6.				Prevalence Index = B/A = 3.74	
7.	'			Hydrophytic Vegetation Indicators:	
	60	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation	
Herb Stratum (Plot size:5')	'	•		2 - Dominance Test is >50%	
1. Celastrus orbiculatus	60	Yes	FACU	3 - Prevalence Index is ≤3.0 ¹	
2. Rosa multiflora	15	No	FACU	4 - Morphological Adaptations ¹ (Provide su	pporting
3. Parthenocissus quinquefolia	5	No	FACU	data in Remarks or on a separate shee	t)
4. Quercus rubra	5	No	FACU	Problematic Hydrophytic Vegetation ¹ (Exp	lain)
5. Quercus alba	5	No	FACU	¹ Indicators of hydric soil and wetland hydrolog	v muet
6. Acer platanoides	5	No	UPL	be present, unless disturbed or problematic.	/ IIIust
7.				Definitions of Vegetation Strata:	
8.				Tree – Woody plants 3 in. (7.6 cm) or more in	
9.				diameter at breast height (DBH), regardless of	height.
10				Sapling/shrub – Woody plants less than 3 in.	DBH
11				and greater than or equal to 3.28 ft (1 m) tall.	55
12				Herb – All herbaceous (non-woody) plants, re	andlace
	95	=Total Cover		of size, and woody plants less than 3.28 ft tall.	
Woody Vine Stratum (Plot size:30')				Woody vines – All woody vines greater than 3	3 28 ft in
1. Celastrus orbiculatus	3	Yes	FACU	height.	7.20 It III
2. Parthenocissus quinquefolia	3	Yes	FACU		
3. Toxicodendron radicans	3	Yes	FAC	Hydrophytic Vegetation	
4.				Present? Yes No X	
	9	=Total Cover			
Remarks: (Include photo numbers here or on a sepa	arate sheet.)			•	

SOIL Sampling Point Upl P5-Y-13

Depth	Matrix			x Featur			onfirm the absence o	· · · · · · · · · · · · · · · · · · ·	J.,		
(inches)	Color (moist)	<u>%</u>	Color (moist)	%_	Type ¹	Loc ²	Texture		Remar	ks	
0-9	10YR 3/2	100					Loamy/Clayey				
9-18	10YR 4/3		10YR 5/3	30	c	<u>m</u>	Loamy/Clayey	Faint	redox con	centrations	<u>. </u>
-											
	-										
¹Type: C=Co	oncentration, D=Depl	etion, RM	=Reduced Matrix, N	 IS=Mas	ked Sand	——d Grains.	² Location: F	L=Pore Lin	ing, M=Ma	trix.	
Hydric Soil I			Davida Ossefa a a /	0.7\			Indicators f		-		•
— Histosol	(AT) pipedon (A2)		Dark Surface (Polyvalue Belo	,	ce (S8) (I RR R		uck (A10) (L rairie Redox			
Black His			MLRA 149B		00 (00) (Littit it,		ucky Peat o		-	
	n Sulfide (A4)		Thin Dark Surf	,) (LRR R	, MLRA 1		ie Below Su			
	Layers (A5)		— High Chroma S					rk Surface (,
	l Below Dark Surface	(A11)	Loamy Mucky	-				nganese Ma		-	_, R)
	rk Surface (A12)	,	Loamy Gleyed			, ,		nt Floodplai			-
	oodic (A17)		Depleted Matri		,			ent Materia	-		
	A 144A, 145, 149B)		Redox Dark Su		- 6)			allow Dark			,
	lucky Mineral (S1)		— Depleted Dark		-			Explain in Re	-	,	
	leyed Matrix (S4)		Redox Depress						,		
	edox (S5)		Marl (F10) (LR		,		³ Indicato	ors of hydro	phytic vege	etation and	
	Matrix (S6)		Red Parent Ma	. ,	21) (MLF	RA 145)		nd hydrology			
Postrictivo I	_ayer (if observed):						unless	s disturbed	or problema	atic.	
Type:	Layer (II Observed).										
Depth (ir	nches):						Hydric Soil Prese	nt?	Yes	No _X	<u> </u>
Remarks:											



Upland P5-Y-13- View of upland



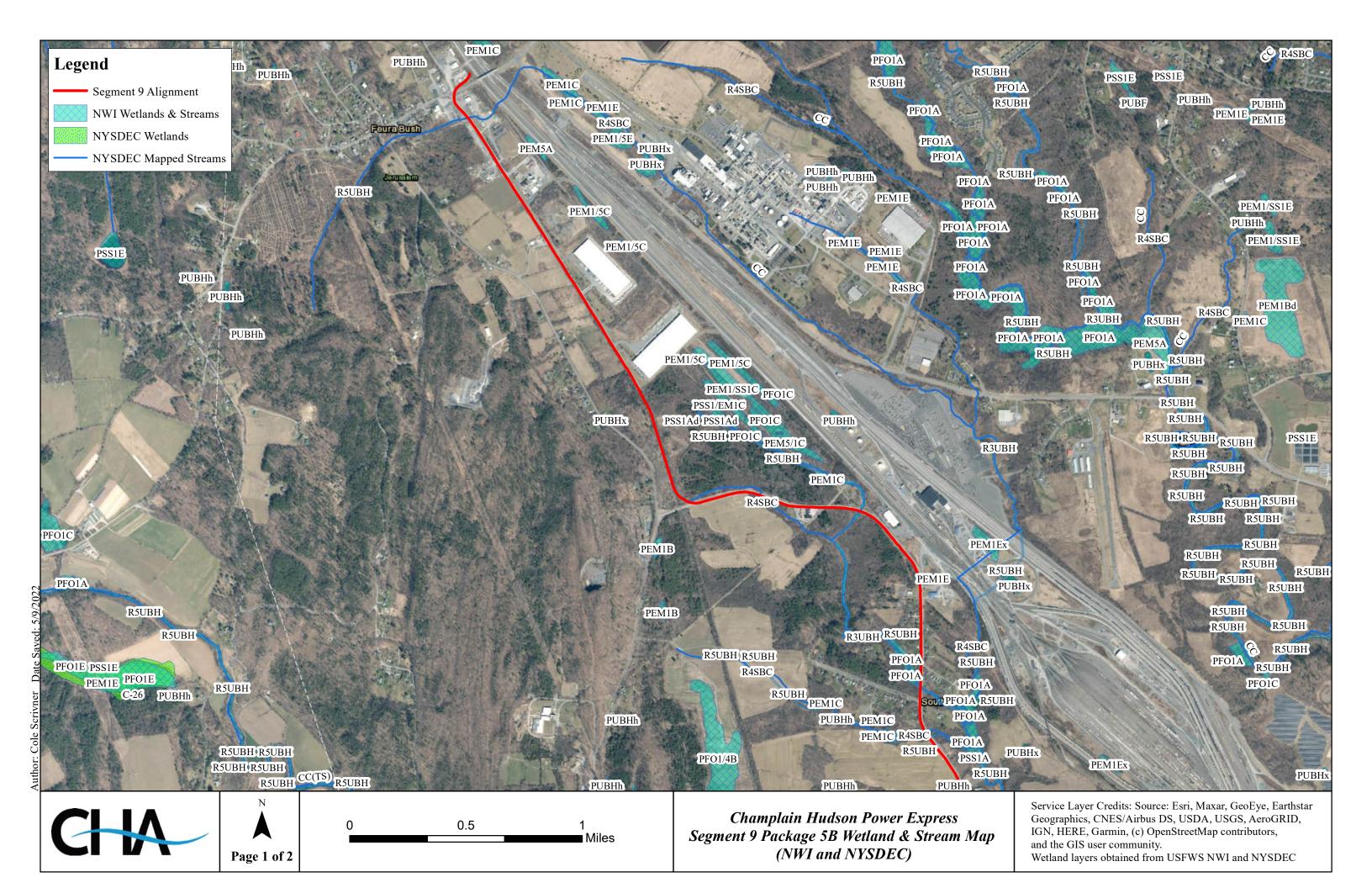
Upland P5-Y-13- Soils

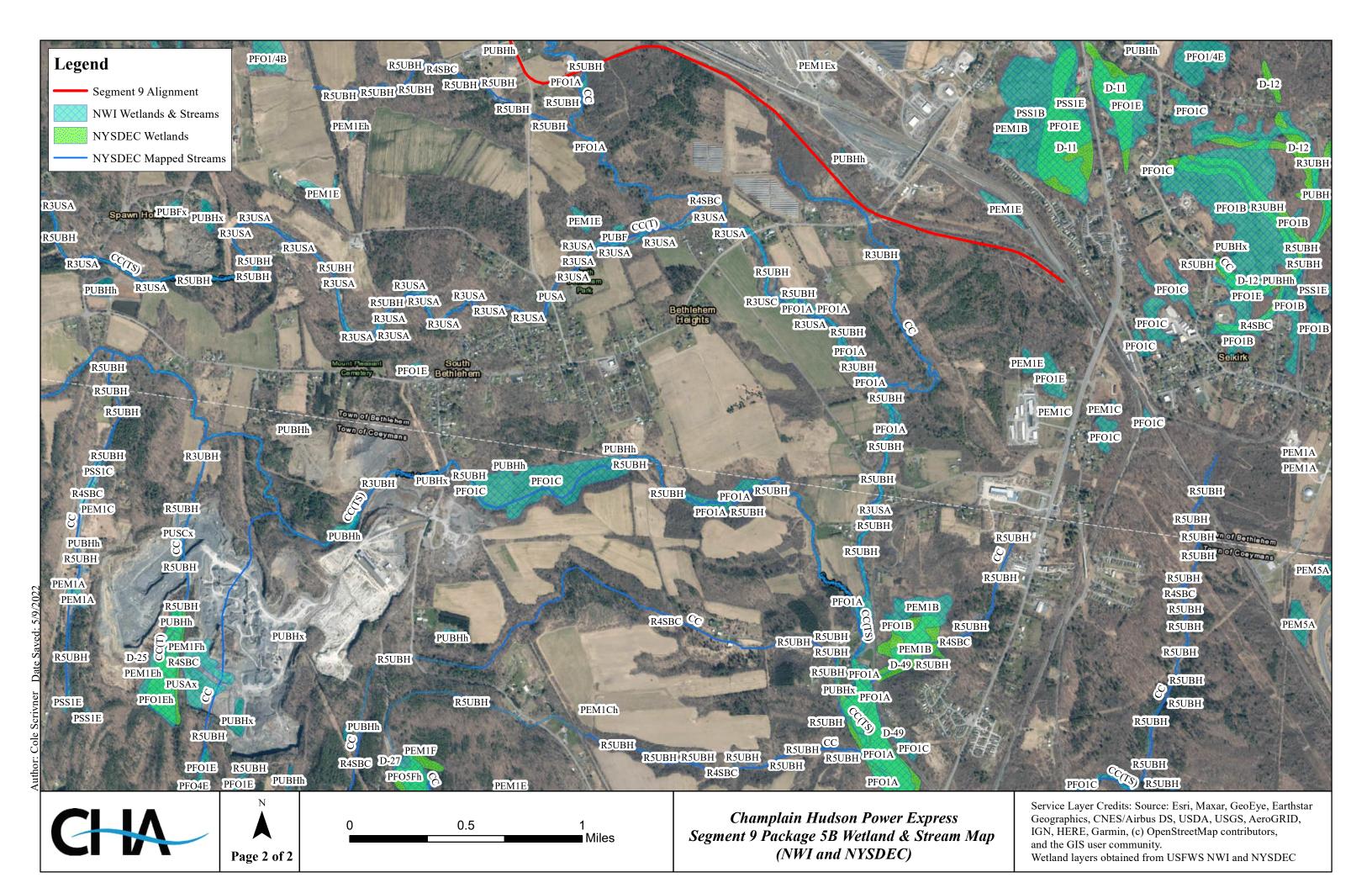
Segment 9- Package 5B

SITE PHOTOGRAPHS

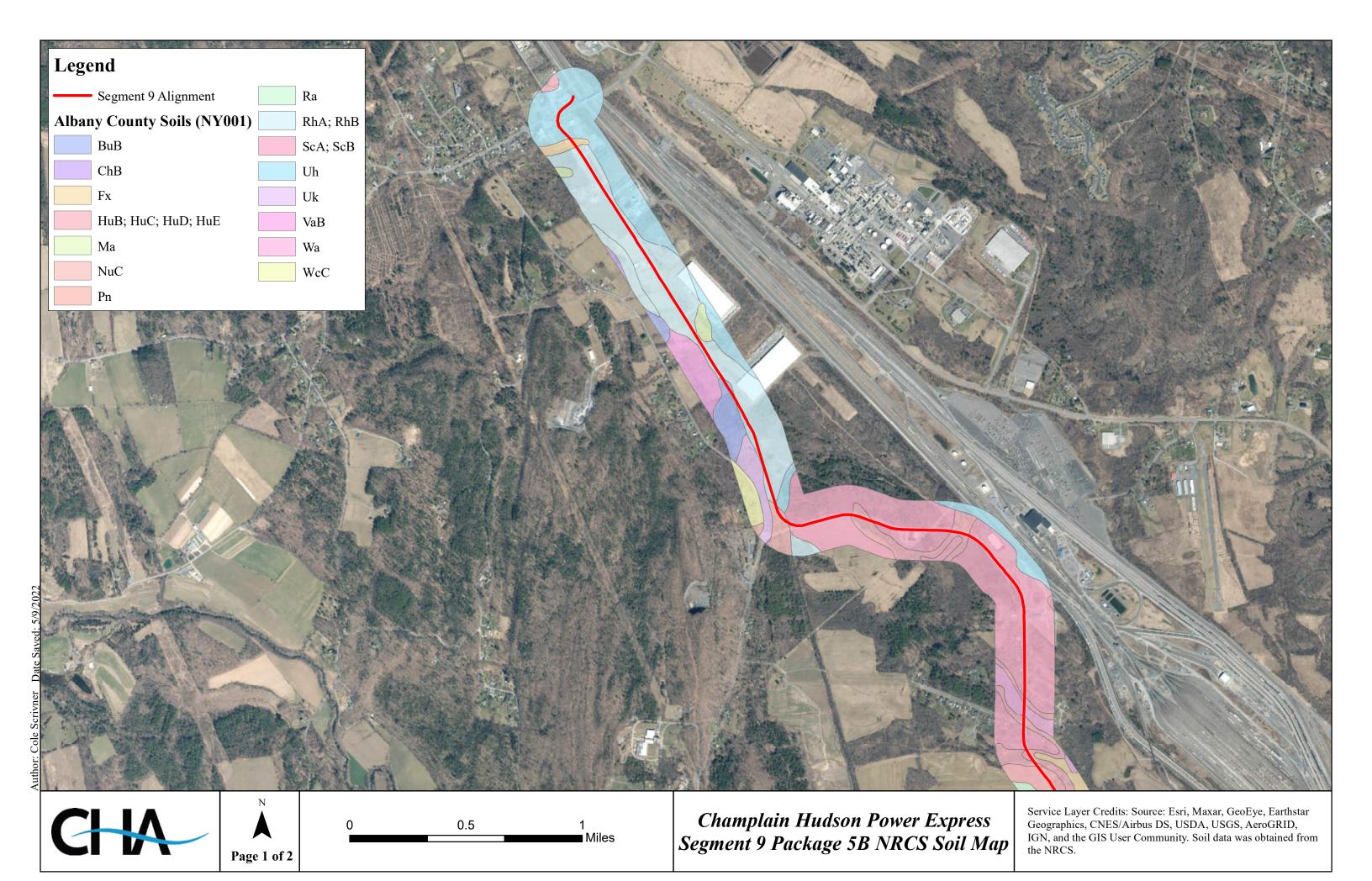
Champlain Hudson Power Express

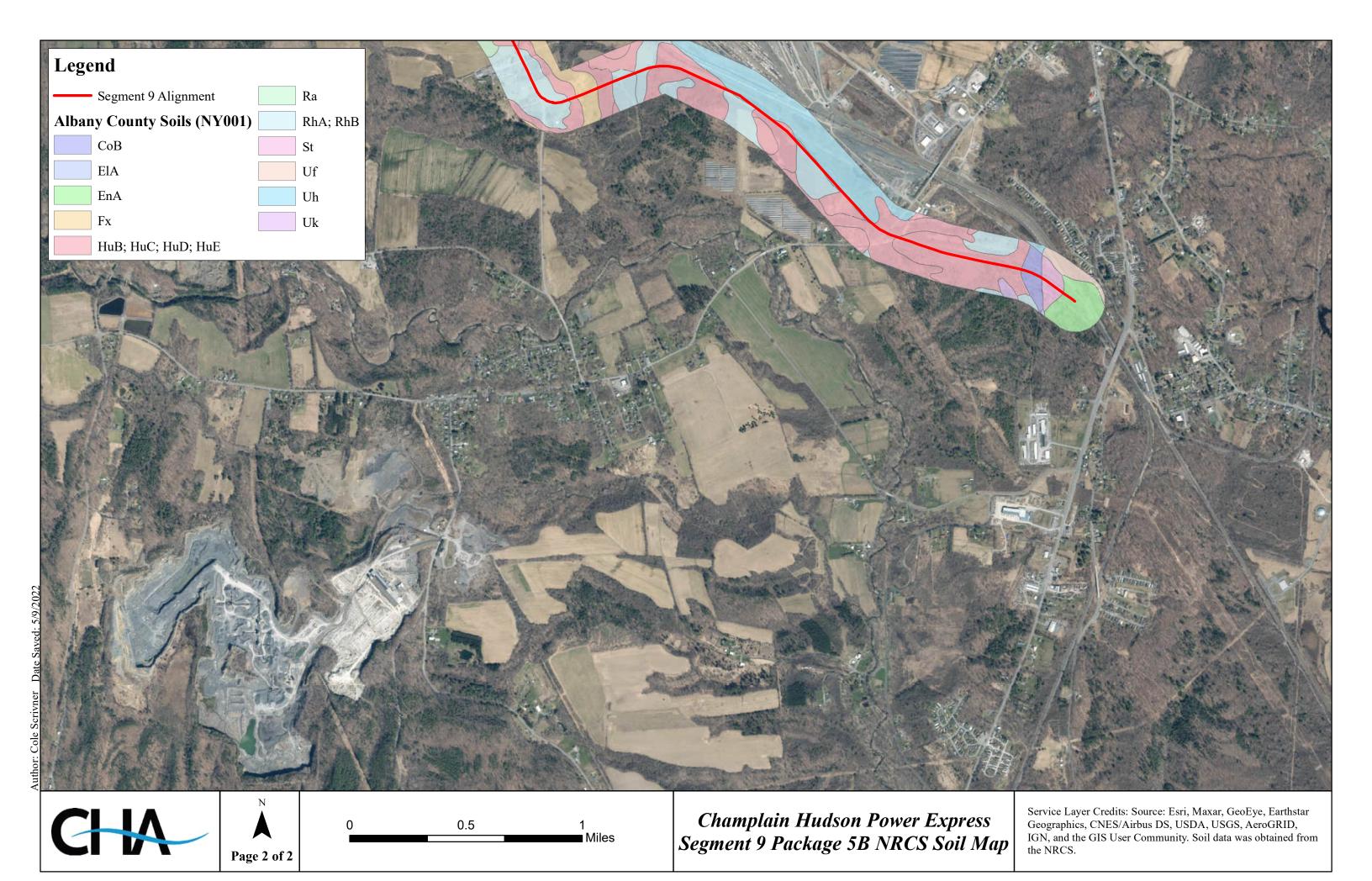
ATTACHMENT 2 NWI & NYSDEC WETLAND & STREAM MAPS





ATTACHMENT 3 NRCS SOIL MAPS





ATTACHMENT 4 TABLES



Table 4-1								
	1	Summary of We	etlands Within the		dor 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)		
51002+00 C-401	B-1	PEM	Unnamed Tributary to Hudson River	1,410	USACE	42.579734, -73.874209		
51006+25 C-401	C-1	PEM	Unnamed Tributary to Hudson River	1,339	USACE	42.578542, -73.874115		
51008+00 C-401	C-2	PEM	Unnamed Tributary to Hudson River	3,016	USACE	42.578374, -73.8739		
51027+00 C-402	D-1	PSS	Unnamed Tributary to Hudson River (5B-S2 & 5B-S3)	88,499	USACE	42.569806, -73.866473		
51065+00		PEM	Unnamed	91,001	USACE	42.56281,		
C-403 & C-404	5B-J	PFO	Tributary to Hudson River	27,248		-73.8602		
		PSS		30,984				
51084+00 C-403 & C-404	5B-L	PEM	Unnamed Tributary to Hudson River	14,470	USACE	42.561096, -73.856916		
51097+25	5B-MN	PEM	Unnamed Tributary to	42	USACE	42.560783,		
C-404	DD-IVIIN	PSS	Hudson River (5B-S5)	226	USACE	-73.855161		
51108+00	50.0	PEM	Unnamed Tributary to	352	HOAGE	42.560353,		
C-404	5B-O	PFO	Hudson River (5B-S4)	1,797	USACE	-73.851360		
51113+00 C-404	5B-K	PEM	Unnamed Tributary to Hudson River (5B-S4)	7,507	USACE	42.560180, -73.849180		
51124+00 C-405	H-1	PEM	Unnamed Tributary to Hudson River	50,562	USACE	42.55838, -73.846253		



		_	Table 4-1			
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)
51128+00 C-405	I-1	PEM	Unnamed Tributary to Hudson River	2,302	USACE	42.557324, -73.84578
51134+00 C-405	G-1	PEM PFO	Unnamed Tributary to Hudson River	6,133	USACE	42.555576, -73.845367
51155+00 C-406	E-1	PEM	Unnamed Tributary to Hudson River (5B-S7)	6,235	USACE	42.549772, -73.844625
51158+00 C-406	F	PEM	Unnamed Tributary to Hudson River	3,615	USACE	42.549435, -73.844541
51164+00 C-407	5B-P	PEM	Unnamed Tributary to Hudson River (5B-S8)	2,873	USACE	
Access Road at 51166+75 Road station: 13+50 C-201	5B-A	PEM	Unnamed Tributary to Hudson River	327	USACE	42.548096, -73.841684
Access Road at 51166+75 Road station: 16+00 C-201	5B-B	PEM	Unnamed Tributary to Hudson River	534	USACE	42.548408, -73.840895
Access Road at 51166+75 Road station: 16+00 C-201	5B-C	PEM	Unnamed Tributary to Hudson River	111	USACE	42.548191, -73.840616
Access Road at 51166+75 Road station: 20+25 C-201_	5B-D	PSS	Unnamed Tributary to Hudson River	0	USACE	42.548975, -73.840164

		Summany of We	Table 4-1	Ducinet Couri	dou1	
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 at 51166+75 Road station: 10+00 C-201	P5-DD	PEM	Unnamed Tributary to Hudson River	658	USACE	42.551220, -73.839469
Access Road at 51166+75 Road station: 23+00 C-201	5B-E	PUB	Unnamed Tributary to Hudson River	644	USACE	42.549155, -73.839143
Access Road at 51166+75	5B-F	PSS	Unnamed	8	USACE	42.548958,
Road station: 31+50 C-201	Э Б- Г	PEM	Tributary to Hudson River	2		-73.839076
Access Road		PSS		2,980		
at 51166+75 Road station: 29+00 C-202	5B-G	PEM	Unnamed Tributary to Hudson River	4,503	USACE	42.549043, -73.837214
51173+00		PEM	Unnamed	211,883		42.545628,
C-112 & C-407	5B-I	PSS	Tributary to Hudson River	11,325	USACE	-73.841544
		PEM		432,177		
51191+00		PSS	Unnamed	303,494	110.4.05	42.54437,
C-407	FA	FA PFO	- Tributary to Hudson River	237,535	USACE	-73.828821
Access Road at 51226+00 Road station: 25+00 C-205	P5B-Z	PEM	Unnamed Tributary to Hudson River	0	USACE	42.54386, -73.82464

		Summary of We	Table 4-1	Project Corri	idor¹	
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 at 51226+00 Road station: 20+50 C-204	P5B-Y	PEM	Unnamed Tributary to Hudson River	0	USACE	42.54.509, -73.82632
51248+00 C-409	C-409 P5-AA PSS		Unnamed Tributary to Hudson River	1,296	USACE	42.538825, -73.819139
51250+00 C-409			Unnamed Tributary to Hudson River	39,550	USACE	42.538925, -73.818573
51254+00 C-409	НА	PFO	Unnamed Tributary to Hudson River	299,347	USACE	42.538158, -73.814288
51258+00 C-409	P5-Z	PFO	Unnamed Tributary to Hudson River	0	USACE	42.537897, -73.815686
51264+25 C-409	P5-BB	PEM	-	0	USACE	42.537892, 73.814172
51267+00 C-410	P5-CC	PSS	Unnamed Tributary to Hudson River	0	USACE	42.537628, -73.812708
51268+00	IA	PEM	Unnamed Tributary to	15,503	USACE	42.537154,
C-410		PFO	Hudson River	98,306		-73.810181
51268+00 C-410	P5-Y	PFO	Unnamed Tributary to Hudson River	0	USACE	42.77969, -73.99071

¹Wetlands 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.

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

				Table 4-2					
		Summ	ary of Water	bodies within	the Project	Corridor			
Approx. Station & DWG No.	Waterbody NYSDEC Name Classification		Waterbody Field ID & NYSDEC Regulation	Flow Status	Substrate	Width (ft.) ¹	Depth (ft.) ¹	Length w/in JD Boundary (If)	Coordinates (lat., long)
51010 C-401	Unnamed Tributary to Hudson River	C/C	S7 863-543.1	Intermittent	NA	5	NA	80	42.578147, -73.873648
51068+00 C-403	Unnamed Tributary to Hudson River	C/C	5B-S2	Perennial	Mineral soil	3	1	178	42.565763, -73.863019
51070+00 C-403	Unnamed Tributary to Hudson River	Unmapped	5B-S3	Intermittent	Cobble/ gravel	3	0.5	65	42.564665, -73.862488
51095+15 C-404	Unnamed Tributary to Hudson River	C/C	S8 863-561	Intermittent	Cobble/ gravel	5	1	270	42.561088, -73.856165
51097+00	Unnamed Tributary to Hudson River	C/C	5B-S5 863-561	Intermittent	Mineral soil/ gravel	4	0.5	132	42.56099, -73.85544
51114+00 C-404	Unnamed Tributary to Hudson River	C/C	5B-S4 863-561	Perennial	Cobble/ gravel	16	2	69	42.56026, -73.84933

				Table 4-2					
		Summ	ary of Water	bodies within	the Project (Corridor	•		
Approx. Station & DWG No.	Waterbody NYSDEC I Name Classification		Waterbody Field ID & NYSDEC Regulation	Flow Status	Substrate	Width (ft.) ¹	Depth (ft.) ¹	Length w/in JD Boundary (If)	Coordinates (lat., long)
51148+25 C-406	Unnamed Tributary to Hudson River	C/C	5B-S6 863-561	Perennial	Cobble/ boulder	12	2	144	42.5604, -73.8505
51155+50 C-406	Unnamed Tributary to Hudson River	C/C	5B-S7 863-561	Perennial	Cobble/ gravel	6	1	152	42.55246, -73.84556
51165+00 C-406	Unnamed Tributary to Hudson River	Unmapped	5B-S8	Intermittent	Cobble/ gravel	4	1.5	1	42.548064, -73.843072
Access Road at 51166+75 Road station: 20+50 C-204	Coeymans Creek	C/C	5B-S1 863-543.1	Perennial	Mud/ silt	16	3	64	42.548064, -73.841516
51185+50 C-407	Coeymans Creek	C/C	5B-S9 863-543.1	Perennial	Mud/ silt	16	6	242	42.546098, -73.838141
51243+50 C-409	Unnamed Tributary to Hudson River	ributary to C/C \$9 Hudson		Perennial	Cobble/ gravel/bo ulder	10	2	45	42.539469, -73.820774
51253+75 C-117	Unnamed Tributary to Hudson River	Unmapped	P5-S1	Intermittent	Silt	4.5	0.25	0	42.538259, -73.817433

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								
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	Shaker fine sandy loam	Sh	0-3	Υ	Poorly Drained					
		Non-hydric Soi	ls							
Albany	Burdett silt loam	BuA	0-3	N	Somewhat Poorly Drained					
Albany	Albany Burdett silt loam Chenango gravelly silt loam, loamy substratum		3-8	N	Somewhat Poorly Drained					
Albany			3-8	N	Well Drained					
Albany	Chenango gravelly silt loam, loamy substratum, rolling	ChC	8-15	N	Well Drained					
Albany	Chenango gravelly silt loam, loamy substratum, hilly	ChD	15-25	N	Well Drained					
Albany	Claverack loamy fine sand	CIA	0-3	N	Moderately Well Drained					
Albany	Claverack loamy fine sand	CIB	3-8	N	Moderately Well Drained					
Albany	Colonie loamy fine sand	СоВ	3-8	N	Well Drained					
Albany	Colonie loamy fine sand, rolling	CoC	8-15	N	Somewhat Excessively Drained					
Albany	Colonie loamy fine sand, hilly	CoD	15-25	N	Somewhat Excessively Drained					
Albany	Elmridge fine sandy loam	EIA	0-3	N	Moderately Well Drained					
Albany	Elmridge fine sandy loam	EIB	0-3	N	Moderately Well Drained					
Albany	Elnora loamy fine sand	EnA	0-3	N	Moderately Well Drained					

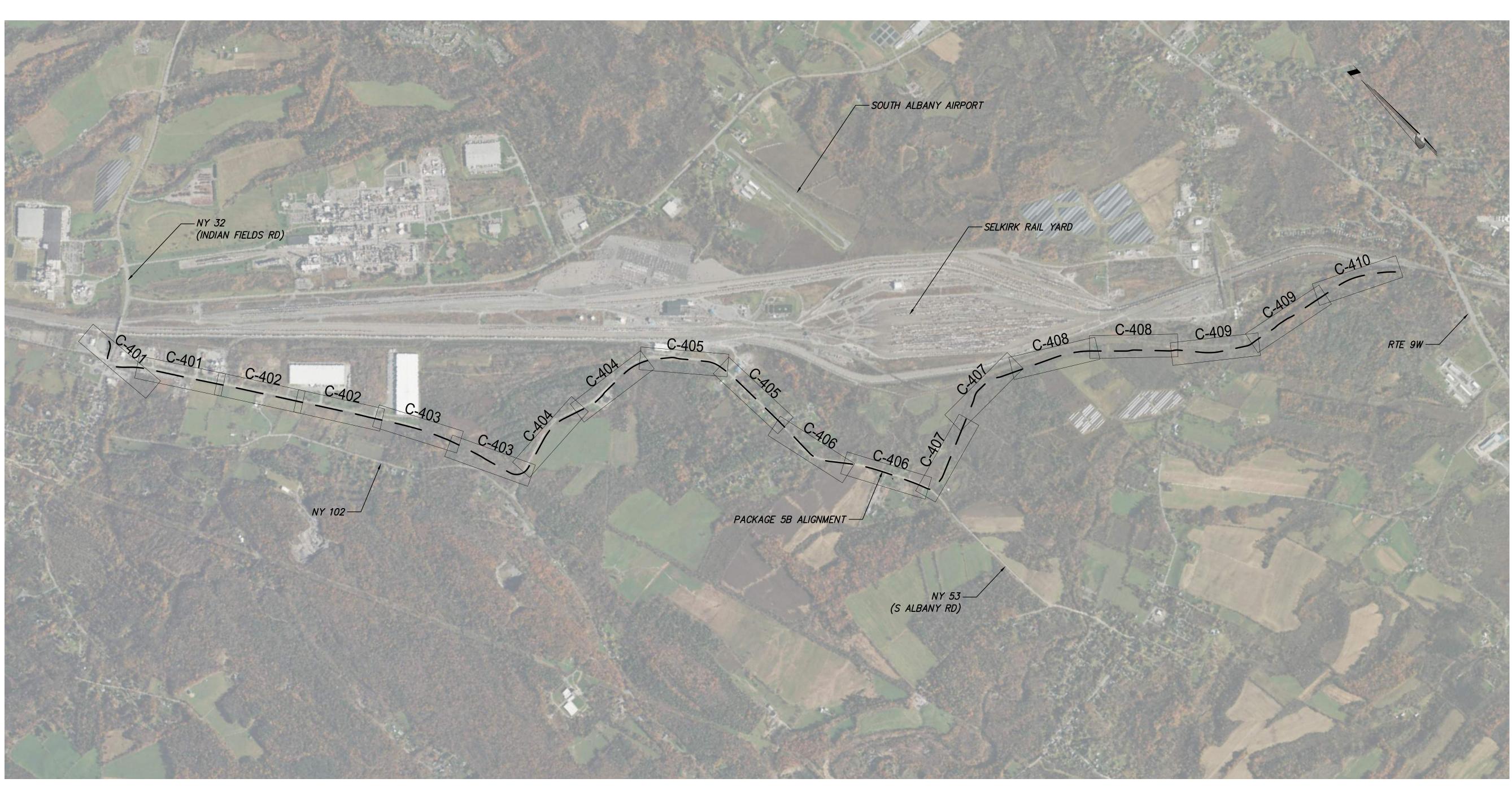


	Table 4-3 Soil Description Summary									
County	Soil Name	Symbol	% Slopes	Hydric (y/n)	Drainage Class					
Albany	Elnora loamy fine sand	EnB	3-8	N	Moderately Well Drained					
Albany	Hudson silt loam	HuB	3-8	N	Moderately Well Drained					
Albany	Hudson silt loam	HuC	8-15	N	Moderately Well Drained					
Albany	Hudson silt loam, hilly	HuD	15-25	N	Moderately Well Drained					
Albany	Hudson silt loam	HuE	25-45	N	Moderately Well Drained					
Albany	Nunda silt loam	NuB	3-8	N	Moderately Well Drained					
Albany	Nunda silt loam	NuC	8-15	N	Moderately Well Drained					
Albany	Nunda silt loam	NuD	15-25	N	Moderately Well Drained					
Albany	Nunda silt loam	NuE	25-35	N	Moderately Well Drained					
Albany	Pits, quarry	Pn	-	-	-					
Albany	Rhinebeck silty clay loam	RhA	0-3	N	Somewhat Poorly Drained					
Albany	Rhinebeck silty clay loam	RhB	3-8	N	Somewhat Poorly Drained					
Albany	Scio silt loam	ScA	0-3	N	Moderately Well Drained					
Albany	Scio silt loam	ScB	3-8	N	Moderately Well Drained					
Albany	Stafford loamy fine sand	St	0-3	N	Somewhat Poorly Drained					
Albany	Udipsamments, smoothed	Ud	0-45	-	Well Drained					
Albany	Udipsamments-Urban land complex	Uf	0-8	-	Somewhat Excessively Drained					
Albany	Udorthents, clayey-Urban land complex	Uh	0-8	-	Moderately Well Drained					
Albany	Udorthents, loamy-Urban land complex	Uk	0-8	-	Well Drained					
Albany	Valois gravelly loam	VaB	3-8	N	Well Drained					
Albany	Valois gravelly loam	VaC	8-15	N	Well Drained					



Table 4-3 Soil Description Summary									
County	Soil Name	Symbol	% Slopes	Hydric (y/n)	Drainage Class				
Albany	Wakeland silt loam	Wa	0-3	N	Somewhat Poorly Drained				
Albany	Wassaic silt loam	WcB	3-8	N	Moderately Well Drained				
Albany	Wassaic silt loam	WcC	8-15	N	Moderately Well Drained				

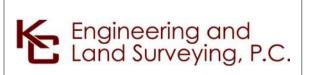
ATTACHMENT 5 WETLANDS AND WATERBODIES DELINEATION MAPPING



E&SC KEY PLAN
SCALE: 1" = 1000'









IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED
PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR TO ALTER AN ITEM IN ANY WAY, IF AN
ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE
ARCHITECT OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY
THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

							KIEWI	IT PROJECT NO.
						CHAMPLAIN HUDSON POWER EXPRESS		21162
						SEGMENT 9 (PACKAGE 5B) - CSX: SELKIRK RAIL YARD BYPASS	KC !	PROJECT NO.
						OLOMETT O (17 TOTATOL OB)		120174
_							DF	RAWING NO.
						E&SC KEY PLAN		
								400
							G	-400
	0	06/09/2023	ISSUED FOR CONSTRUCTION SUBMISSION	MK/AT	NH			
	Na	DATE	OURMITTAL / DEVICION DECORIDATION	DD	4 DD		DATE	6/2/20
	No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP	DRAWN BY: DESIGNED BY: MK APPROVED BY: NH REV. NO. 0	SH.NO.	XXX OF

6/2/2023 XXX OF

EXIST. STRUCTURE MAILBOX — — UT — — UT — — F0 — F0 — — — ot — — ot — — — UE — — UE — — OE — OE — — — ST — — ST — — — ss — — ss — — — ST — — ST — — — w — — w — ⊗ CERTIFIED ROUTE MP XX ⊗ RANDALL PREFERRED MP XX 140 -^---- $\times^{139.7}$ ______ \bigcirc \bigcirc \bigcirc 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 △ 154.3550 202 EXIST. GROUND CONTROL EXIST. RIGHT-OF-WAY

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

EXISTING SIGN

EXIST. STRUCTURE POST

______ **→**XX-##

EXIST. WETLAND FLAG EXIST. WETLANDS

EXIST. WATERBODY, STREAM, OR STREAM BANK

NOTES:

EXISTING UTILITY BOX UNKNOWN

EXISTING CAPPED IRON ROD

EXISTING CONCRETE MONUMENT

EXISTING REFLECTOR MARKER

EXISTING ANTENNA

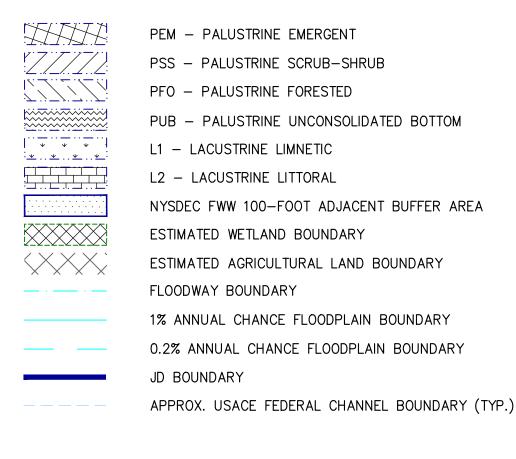
EXISTING IRON PIPE

EXISTING POST

EXISTING SYMBOL

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. ABUTTER



VEG. CLEARING - TYPE I - HAND CUTTING APPROVED CENTERLINE VEG. CLEARING - TYPE II - MECHANICAL CLEARING CORRUGATED METAL PIPE CMP VEG. CLEARING - TYPE III - MOWING CONC CONCRETE VEG. CLEARING — TYPE IV — MECHANICAL WHOLE—TREE FELLING DB DESIGNED BY PROP. WETLAND PROTECTION FENCE DEC NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION PROP. COMPOST FILTER SOCK (OR SILT SOCK) DEG DEGREES CHECK DAM DR DRIVE SURFACE WATER FLOW DΖ DEVIATION ZONE $\leftrightarrow\sim$ EASTING PROP. TEMPORARY SWALE **ELECTRIC** ELECTRIC CABLE STABILIZED CONSTRUCTION ENTRANCE (TYP.) ELEV ELEVATION PROP. TEMP MAJOR CONTOUR STATION EQUATION AHEAD EQNAHD PROP. TEMP MINOR CONTOUR EQNBK STATION EQUATION BACK PROP. LIMITS OF WORK/DISTURBANCE ----LOW-----EXIST EXISTING PROP. LIMITS OF CLEARING/LIMITS OF WORK IN CLEARING AREAS \sim **FIBER** FIBER OPTIC CABLE PROP. CONCRETE WASHOUT FT FEET ____ PROP. TEMP ACCESS ROAD RTE (EXISTING ROAD OR SURFACE) GAS GAS PIPE PROP. TEMP REFURBISHED ACCESS ROAD HORIZONTAL HORIZONTAL DIRECTIONAL DRILLING HDD PROP. TEMP ACCESS ROAD OR OFF SITE ACCESS ROAD PROP. WETLAND OR AGRICULTURAL LAND* WORKING SURFACE HIGH-VOLTAGE DIRECT CURRENT TRANSMISSION LINE HVDC (SEE SHEET C-613) (*AGRICULTURAL LANDS MAY USE WETLAND INVERT ELEVATION INV WORKING SURFACE OR OTHER APPROVED MITIGATION METHODS) LIMITS OF WORK LOW PROP. MILLING & RESURFACING r - -LT LEFT PROP. SPLICE LOCATION MAXMAXIMUM PROP. SPLICE VAULT MINIMUM PROP. LINK BOX HANDHOLE NORTHING PROP. FIBER SPLICE HANDHOLE NUMBER PROP. BORING LOCATION NEW YORK XXXXX+XX PROP. ALIGNMENT STATIONING NYCDEP NEW YORK CITY DEPT. OF ENVIRONMENT PROTECTION PROP. ALIGNMENT CENTERLINE NYCDOT NEW YORK CITY DEPT. OF TRANSPORTATION PROP. LAYDOWN YARDS, PARKING, STORAGE & MUSTER AREA NYDPR NEW YORK CITY DEPT. OF PARKS AND RECREATION PROP. WORK AREAS PACKAGE # PERM PERMANENT 7' FOUL ZONE: NO VEHICLES, MATERIALS, DISTURBANCE PERSONNEL, OR WORK SHALL ENCROACH THE ZONE WITHIN 7FT OF PROP. PROPOSED THE NEAREST RAIL WITHOUT CSX COORDINATION AND APPROVAL POLYVINYL CHLORIDE PROP. SHORING/SHEETING ΡVI POINT OF VERTICAL INTERSECTION PROP. TEMP EASEMENT RADIUS REINFORCED CONCRETE PIPE PROP. PERM EASEMENT RD ROAD PROP. TEMP ACCESS EASEMENT REV REVISION SPLICE LOCATION POLE MARKER RIGHT-OF-WAY ROW RIGHT UNDERGROUND POWER CABLE POLE MARKER RTE ROUTE **SEWER** SANITARY SEWER PIPE PROP. TRANSITION BOX MANHOLE SH SHEET DC CABLE IDENTIFICATION TAGS. SEE SHEET C-807 FOR MORE DETAILS ST STREET |A (-)| |B (+)| STA STATION STORM STORM DRAIN PIPE TELECOM TELECOMMUNICATIONS CABLE TEMP TEMPORARY TR THERMAL RESISTIVITY **TYPICAL** TYP VERTICAL WATER WATERLINE



_ CAPPED IRON ROD

CONCRETE BOUNDARY

O IRON PIPE





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					СНАМР	LAIN HUDS	SON POV	/FR F	XPRESS	KIE	WIT PROJECT NO.		
						CHAMPLAIN HUDSON POWER EXPRESS SEGMENT 9 (PACKAGE 5B) - CSX: SELKIRK RAIL YARD BYPASS LEGEND AND ABBREVIATIONS							
0	06/09/2023	ISSUED FOR CONSTRUCTION SUBMISSION	BV	TK									
No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP	DRAWN BY: AR	DESIGNED BY: BV	APPROVED BY:	TK SCALE REV. NO.	AS SHOWN 0	DATE SH.NO.	06/09/2023 6 OF		

