

APPENDIX M
CASE 10-T-0139
WATERBODY INVENTORY (114A) & WETLAND
DELINEATION REPORT

Wetland & Waterbodies Delineation Report



Champlain Hudson Power Express Segment 7-Package 4B

Schenectady, New York

CHA Project Number: 066076

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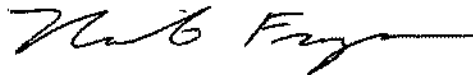
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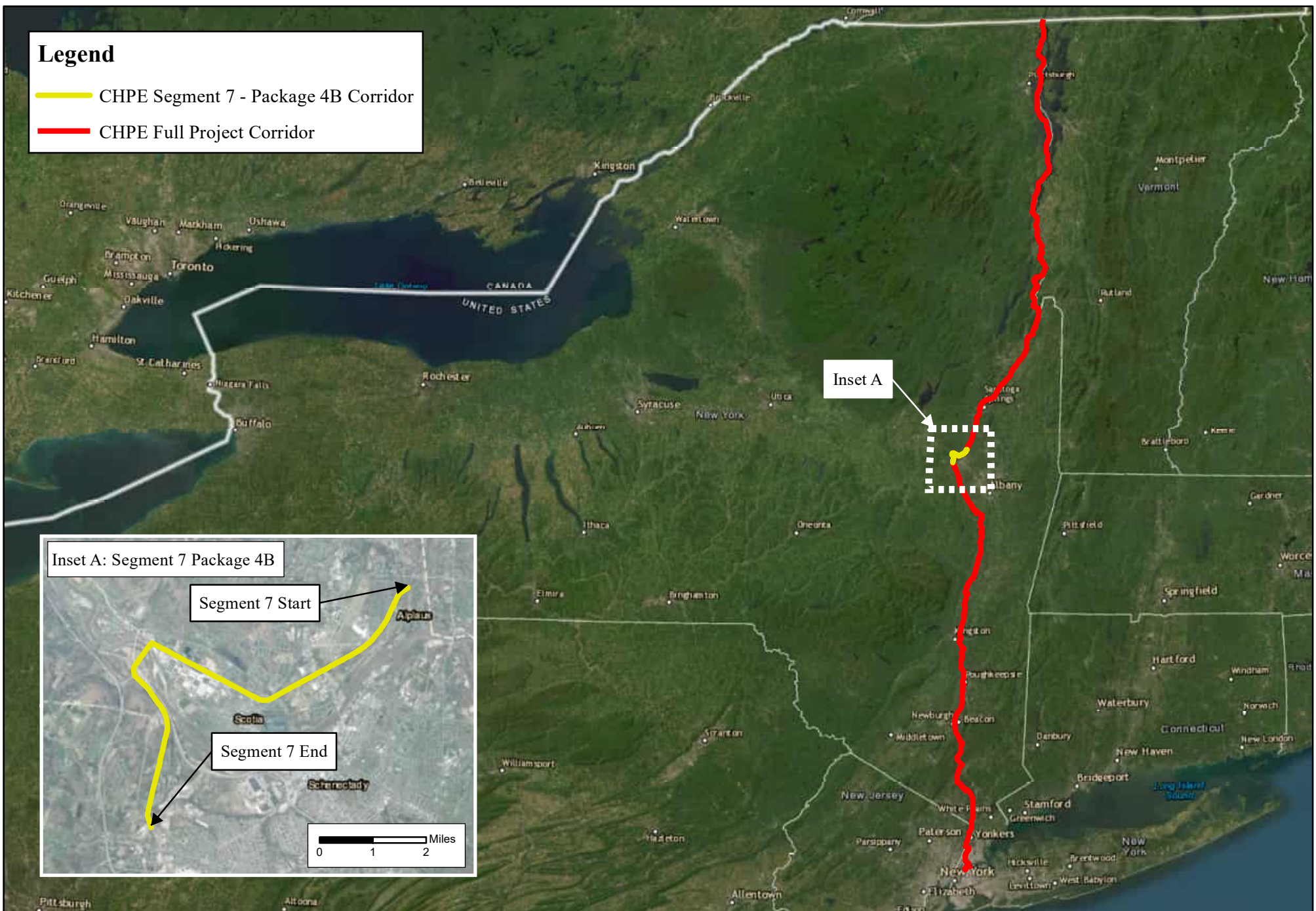
1.0 INTRODUCTION

CHA Consulting, Inc. (“CHA”) has prepared this wetland delineation report on behalf of Champlain Hudson Power Express, Inc. (“CHPE”) and Kiewit Construction (Kiewit) for the Champlain Hudson Power Express Project (Project). CHA was retained by Kiewit to identify and delineate jurisdictional wetlands and waterbodies regulated under Section 404 of the Clean Water Act (CWA), Section 10 of the Rivers and Harbors Act of 1899, Article 24 Freshwater Wetlands Act (FWW) & Article 15 (Protection of Waters) of the Environmental Conservation Law along the overland transmission cable route that follows roadway, Pan Am railroad, and CSX railroad rights-of-way (“ROW”), herein referred to as the Project Corridor. Delineations were conducted with the objective of verifying and updating previous wetland delineations performed for the Project Corridor to complete the Article VII and Section 10/404 permitting processes. This report describes the wetland delineation methodology and the existing wetland and waterbody resources that were identified in the Project Corridor (also defined as the Jurisdictional Determination [JD] limits) during field surveys for the overland portions of the Project.

2.0 SEGMENT 7-PACKAGE 4B CORRIDOR OVERVIEW

The entire Project Corridor is approximately 339 miles from Montreal, Quebec, Canada to New York City, New York, USA. Figure 1 below shows the route from the Canadian border to New York City and highlights the approximately 9.6 miles of the Segment 7-Package 4B Project Corridor that was investigated for wetlands and waterbodies.

Segment 7-Package 4B begins where Segment 6-Package 4A ends (Station 45000+00) and extends along Pan Am railroad. The Project Corridor then crosses the Mohawk River, continues through the I-890 interchange, and follows CSX railroad in Schenectady, NY, ending at Station 45495+69.



3.0 WETLAND DELINEATION METHODOLOGY

To determine the potential for wetland impacts from construction of the Project, CHA assessed the Segment 7-Package 4B Project Corridor in the field for the presence of federal (Section 404 CWA & Section 10 of the Rivers and Harbors Act of 1899) and state (Article 24 FWW & Article 15 Protection of Waters) jurisdictional wetlands and waterbodies. Shumaker Consulting Inc. (Shumaker), Fisher Associates (Fisher) and Greenman-Pedersen, Inc. (GPI) assisted with the field work. Wetland scientists conducted wetland delineations in December 2021, November 2022, February 2023, April 2023, May 2023 and July 2023. The delineation criteria and methodology were performed in accordance with the *1987 Corps of Engineers Wetland Delineation Manual*, the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region* Version 2.0 (January 2012), as well as the *New York State Freshwater Wetlands Delineation Manual* (Browne et. al., 1995).

The Project Corridor for the surveyed portions of the project included the lands within the existing road and railroad ROW and adjacent properties. The wetland delineation limits were approximately 50 feet from the edge of pavement and approximately 100 feet from the outside edge of rail, limited to the side of the road or railroad corridor on which the alignment follows and primarily within the ROW of the aforementioned roads and railroad. Where the alignment, work areas, and access roads cross adjacent properties, the area investigated was based on the proposed Limits of Work (LOW).

In accordance with the procedures provided in the *Corps of Engineers Wetland Delineation Manual* (1987), and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region*, Version 2.0 (January 2012), the "Routine Wetland Determination" method was used to delineate wetland boundaries.

The wetland boundaries were determined in the field based on the three-parameter approach, whereby an area is a wetland if it exhibits vegetation adapted to wet conditions (hydrophytes), hydric soils, and the presence or evidence of water at or near the soil surface during the growing season (hydrology).

Coded surveyor's ribbons (e.g. flag code A-1, A-2, etc.) were placed along the wetland boundaries based on observations of vegetation, soils and hydrologic conditions. Data points were recorded along the wetland boundaries at various locations across different vegetative community types correlating to each wetland. At each location a wetland data point and an upland data point were recorded to show the difference between the wetland and upland habitats. At a minimum, one data point set (wetland and upland) was collected for each wetland. Additional data points were collected for large wetlands and for changes in vegetative communities. Wetland Determination Data Sheets corresponding to each point can be found in Attachment 1.

Wetlands within the Project Corridor fall under the jurisdiction of the USACE and/or the New York State Department of Environmental Conservation (NYSDEC). The New York State methodology similarly recognizes the three parameters of vegetation, soils, and hydrology; however, under the New York State method the hydrophytic vegetation criterion is mandatory, while the other two parameters are not (Browne et. al. 1995). Wetlands regulated by NYSDEC must be at least 12.4 acres (5 hectares) in size, unless they are deemed to have unusual local importance (Article 24 FWW). The NYSDEC publishes maps of wetland areas under state jurisdiction; however, both agencies use field delineations to determine the precise boundaries of these wetland areas.

Prior to field delineations for wetland resources, CHA reviewed USGS 7.5-minute topographic maps, aerial photographs, National Wetland Inventory (NWI) mapping, United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soil mapping, and NYSDEC freshwater wetlands mapping to identify potential wetland features present within the Project Corridor. More importantly, CHA used the previous wetland delineation prepared for this Project Corridor for the purposes of verifying and modifying the previous delineation. Refer to Attachment 2 for NWI and NYSDEC Freshwater Wetlands & Stream Mapping and Attachment 3 for NRCS Soil Mapping.

Ditches that met the three wetland parameters (i.e., presence of hydrology, hydric soils, and hydrophytic vegetation) were identified as a wetland community. Those that did not, but carried stream flow from off-site (redirecting flow through the ditch), were categorized as streams.

Waterbodies within the Project Corridor were identified by the presence of an ordinary high-water mark (OHWM) or stream channel. Delineation and flagging were completed to identify the OHWM for most perennial and intermittent streams. Bankfull width and depth were estimated in the field.

This report documents the wetlands and waterbodies potentially under federal and state jurisdiction that were identified in the Project Corridor along the current proposed underground transmission cable route. Wetland determination data forms and photographic documentation of the wetlands are included in Attachment 1. Summaries of wetlands that were identified are provided in Table 4-1 in Attachment 4. Wetlands and Waterbodies Delineation Mapping is included in Attachment 5.

4.0 WETLAND & WATERBODIES DELINEATION RESULTS

A total of 22 wetland areas were delineated within Segment 7-Package 4B with approximately 3.41 acres of wetland occurring within the Project Corridor (also defined as the Jurisdiction Determination limits). Table 4-1 in Attachment 4 provides a summary of the wetlands identified along the Project Corridor, including their classification in accordance with Cowardin et al. (1979) and their state or federal jurisdiction. One wetland delineated along the Project Corridor corresponds with NYSDEC mapped wetland S-105.

Narrative descriptions of wetland vegetation, hydrology, and soils observed within the Project Corridor are presented in the following sections. The wetlands and waterbodies delineated within the surveyed areas are summarized in Table 4-1 and Table 4-2. Table 4-3 provides the soil information. Refer to Attachment 4 for each of these tables. The Wetlands and Waterbodies Delineation Mapping provided in Attachment 5 shows the locations of delineated wetlands and waterbodies. Photographs of the waterbodies can be found in Attachment 6.

4.1 VEGETATION

Vegetative communities within wetlands are described according to *Ecological Communities of New York State, Second Edition* (Edinger 2014)¹ and *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin 1979)². Using this hierarchical wetland classification system three primary cover types were identified for vegetated wetlands in the Project Corridor: palustrine emergent (PEM), palustrine scrub-shrub (PSS), and palustrine forested (PFO) wetlands. Some wetlands contained co-dominant emergent, scrub-shrub, or forested vegetation.

4.1.1 Palustrine Emergent Wetland

The palustrine emergent wetland cover type is characterized by erect, rooted, herbaceous hydrophytes, excluding mosses and lichens (Cowardin et. al., 1979). The freshwater emergent wetlands along the Project Corridor primarily include shallow emergent marshes, common reed marshes and purple loosestrife marshes (Edinger et. al., 2014). PEM wetlands occur as a single dominant wetland cover type, and as a co-dominant wetland type when other plant community types exist within the wetland.

Shallow emergent marshes occur on mineral soils or deep muck soils that are permanently saturated and seasonally flooded. Water depths range from six inches to 3.3 feet during flood stages (Edinger et. al., 2014). Characteristic vegetation of shallow emergent marshes within the Project Corridor includes cattails (*Typha* spp.), jewelweed (*Impatiens capensis*), sensitive fern (*Onoclea sensibilis*), goldenrods (*Solidago* spp.), soft rush (*Juncus effusus*), common flat-topped goldenrod (*Euthamia graminifolia*), fox sedge (*Carex vulpinoidea*), field horsetail (*Equisetum arvense*) and soft stem bulrush (*Schoenoplectus tabernaemontani*). Invasive species observed within the shallow emergent marshes include common reed (*Phragmites australis*), common buckthorn (*Rhamnus cathartica*), oriental bittersweet (*Celastrus orbiculatus*), morrow's honeysuckle

¹ Edinger, G. J., D. J. Evans, S. Gebauer, T. G. Howard, D. M. Hunt, and A. M. Olivero (editors). 2014. *Ecological Communities of New York State*. Second Edition. A revised and expanded edition of Carol Reshke's *Ecological Communities of New York State*. New York Natural Heritage Program, New York State Department of Environmental Conservation, Albany, NY.

² Cowardin, L. M., V. Carter, F. C. Golet, E. T. LaRoe, 1979. *Classification of wetlands and deepwater habitats of the United States*. U. S. Department of the Interior, Fish and Wildlife Service, Washington, D.C.

(*Lonicera morrowii*), reed canary grass (*Phalaris arundinacea*) and purple loosestrife (*Lythrum salicaria*).

Common reed marsh and purple loosestrife marshes consist of disturbed marshes where common reed or purple loosestrife has become dominant (Edinger et. al., 2014). This community was commonly found within disturbed areas adjacent to the rail bed.

Linear wetland ditches, which have been constructed for drainage, are commonly found along the railroad and road ROW. Vegetation within the ditches typically includes invasive species such as common reed, purple loosestrife, cattail and reed canary grass..

4.1.2 Palustrine Scrub-Shrub Wetland

The scrub-shrub wetland cover type includes areas that are dominated by saplings and shrubs that are less than six meters in height (Cowardin et. al., 1979). Scrub-shrub wetlands along the Project Corridor are dominated by white willow (*Salix alba*) and meadowsweet (*Spiraea alba*). Invasive species observed within scrub-shrub wetlands includes purple loosestrife, morrow's honeysuckle, purple loosestrife and common buckthorn. PSS wetlands occur as a single dominant wetland cover type, and as a co-dominant wetland type when other plant community types exist within the wetland.

4.1.3 Palustrine Forested Wetland

Forested wetland cover types are dominated by trees and shrubs that have developed a tolerance to a seasonal high-water table. In order to be characterized as forested, a wetland must be dominated by trees and shrubs that are at least six meters tall (Cowardin et. al., 1979). Forested wetlands typically have a mature tree canopy, and depending upon the species and density, can have a broad range of understory and groundcover community components. Forested wetland communities along the Project Corridor include red maple hardwood swamps (Edinger et al., 2014). PFO wetlands occur as a single dominant wetland cover type, and as a co-dominant wetland type when other plant community types exist within the wetland.

Red maple-hardwood swamps occur in poorly drained depressions, usually on inorganic soils. Red maple is either the only dominant tree species or is codominant with one or more hardwoods

(Edinger et. al, 2014). Hardwood species observed within this community type within the Project Corridor include American elm (*Ulmus americana*), Eastern cottonwood (*Populus deltoides*), American hornbeam (*Carpinus caroliniana*) and common buckthorn. Shrub species commonly observed within red maple-hardwood swamps include dogwoods (*Cornus* spp.), arrow-wood (*Viburnum dentatum*), Eastern cottonwood, white willow and common buckthorn. The herbaceous layer typically includes sensitive fern, field horsetail and goldenrods. Invasive species observed within red maple-hardwood forests include common buckthorn.

4.2 HYDROLOGY

4.2.1 Streams

Table 4-2 lists 21 streams (perennial [6], intermittent [15]) identified within the Project Corridor. The overland transmission cable route for the Project Corridor is located within the Mohawk River Basin.

The Mohawk River Basin watershed originates in the valley between the western Adirondacks and the Tug Hill Plateau. It flows east where it joins the Hudson River (NYSDEC 2022). Perennial streams within the Project Corridor in the Mohawk River Basin include the Mohawk River as well as unnamed tributaries connected to these watersheds identified on USGS Topographic Maps and/or identified during the field delineation.

4.2.2 Wetlands

Site hydrology was examined within each wetland and adjacent upland areas. Indicators of wetland hydrology include surface water (A1), high water table (A2), saturation (A3), sediment deposits (B2), inundation visible on aerial imagery (B7), sparsely vegetated concave surface (B8), water-stained leaves (B9), drainage patterns (B10), moss trim lines (B16), oxidized rhizospheres (C3), saturation visible on aerial imagery (C9), geomorphic position (D2), shallow aquitard (D3), microtopographic relief (D4) and FAC-neutral test (D5) (see Attachment 1). Hydrologic factors contributing to the presence of wetland hydrology within wetlands in the Project Corridor include inundation with stream water, temporarily ponded runoff, and seasonally to permanently shallow groundwater tables.

Hydrology along the Project Corridor has been historically altered by road and railroad drainage ditches. These ditches were inspected for the presence or absence of wetland indicators and hydrologic connectivity to wetlands or streams. Ditches that met the three parameters for wetland delineation (i.e., presence of hydrology, hydric soils, and hydrophytic vegetation) were identified as a wetland community.

4.3 SOILS

The NRCS soil map units for the Project Corridor are provided in Attachment 3. Indicators of hydric soils include muck or evidence of gleyed colors. Hydric soil indicators include histic epipedon (A2), black histic (A3), depleted below dark surface (A11), sandy mucky mineral (S1), sandy redox (S5), loamy gleyed matrix (F2), depleted matrix (F3), redox dark surface (F6) and redox depressions (F8) (Attachment 1). Within the Project Corridor, a total of 52 different soil types are mapped by the NRCS. The mapped soil types range from excessively drained to very poorly drained soils. According to the soil map descriptions (Attachment 3), eight (8) of the soils mapped within the Project Corridor are rated as hydric soils (Cheektowaga fine sandy loam, Fluvaquents loamy, Fredon silt loam, Granby loamy fine sand, Junius loamy fine sand, Madalin silty clay loam, Saprists and Aquents and Wayland soils complex). Hydric soils are defined as soils “*that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part of the soil*” (Federal Register, 1994). Table 4-3 summarizes the soil series in the Project Corridor and lists the soils that are classified as hydric (or associated with wetland hydrology).

Many soils within the Project Corridor are formed from glacial parent materials including outwash, dense till, loose till, and glaciomarine deposits. In active floodplains, soils are formed in recent alluvium. Anthropogenically disturbed soils, associated with road and railroad construction and operation, are common within the Project Corridor. These soils consist of disturbed natural deposits or human transported materials.

4.4 NATURAL RESOURCE CONSERVATION SERVICE SOIL SERIES DESCRIPTIONS

The following are the abbreviated descriptions of each of the relevant soil types taken from the USDA Web Soil Survey (NRCS 2022). Soil survey mapping and additional information regarding relevant soil characteristics are provided in Attachment 3.

Arnot Series (AZF)

This series consists of shallow, somewhat excessively to moderately well drained soils that were formed in loamy till. Bedrock is at depths of 10 to 20 inches. Slope ranges from zero to 70 percent. The A horizon is typically a dark grayish brown channery silt loam with weak fine granular structure, extending zero to six inches deep. The B horizon generally is yellowish brown or light olive brown very channery silt loam with moderate medium and weak medium subangular blocky structure. The C horizon is gray thin-bedded, fine-grained sandstone bedrock extending from 17 to 27 inches.

Burdett Series (BvA and BvB)

These very deep, somewhat poorly drained soils formed in till that is dominated by shale. The soils formed in silty mantles that overlie till that is strongly influenced by shale. Slopes range from zero to 25 percent. The A horizon is dark grayish brown silt loam and is from zero to nine inches. The structure is granular. An E horizon is sometimes present. The B horizon is brown, grayish brown or yellowish brown. The texture is silt loam and the structure is very weak fine subangular blocky. The C horizon is typically a dark grayish or olive gray brown channery silty clay loam extending from 28 to 72 inches.

Cheektowaga Series (Ce)

These are very deep, poorly drained, and very poorly drained soils formed in sandy deposits overlying clayey lacustrine sediments. They are nearly level soils occurring on lake plains. Slope ranges from zero to three percent. Typically, the A horizon consists of a fine sandy loam and is usually a black color, with moderate very fine granular structure, extending zero to nine inches. Occurring after the A horizon is typically an E horizon that is gray loamy fine sand, with very

weak very fine granular structure, extending nine to 15 inches. The B horizon consists of a loamy fine sand and is normally grayish brown to brown, with very weak fine subangular blocky structure. The C horizon is a varved silty clay loam that is brown to reddish brown, with weak medium plate-like divisions, typically extending from 26 to 60 inches.

Colonie Series (CoA, CoC & CPE)

These very deep, well drained to excessively drained soils formed in glaciolacustrine, glaciofluvial, or eolian deposits dominated by fine sand and very fine sand. These soils can be found on nearly level to steeply dissected slopes on Wisconsinan age lake plains, outwash plains, beach ridges, dunes, and deltas. Slopes range from zero to 60 percent. The A horizon is dark grayish brown loamy fine sand with weak fine and very fine granular structure extending zero to eight inches. An E horizon is sometimes present. The texture is dominantly fine sand or loamy fine sand. The B horizon is a brown fine sand. The C horizon is brown fine sand extending 63 to 80 inches. Some pedons have redoximorphic features below 40 inches.

Elnora Series (En)

These soils are very deep and moderately well drained. These soils formed in sandy glacial lake, deltaic and eolian sediments. Slopes range from zero to eight percent. The A horizon is dark grayish brown loamy fine sand with weak fine granular structure. The A horizon extends from zero to 10 inches. The B horizon is brown fine sand. The structure is weak coarse subangular blocky. The C horizon is grayish brown or brown fine sand extending 32 to 72 inches. The material is massive or single grain, or structure is weak platy.

Fluvaquents (FL)

These are deep, level or nearly level, moderately well drained, low lime, sandy soils formed in glacial outwash. The available water capacity is low to moderate. Permeability is rapid.

Fredon Series (Fr)

These very deep, poorly drained and somewhat poorly drained soils formed in glaciofluvial materials. They are found on outwash terraces and outwash plains. Slopes range from zero to eight

percent. The A horizon is very dark gray loam, fine sandy loam, very fine sandy loam, or silt loam with weak fine granular structure. The B horizon is grayish brown loam, fine sandy loam, very fine sandy loam, or silt loam. Its structure is weak or moderate subangular blocky, weak coarse prismatic, or moderate coarse platy. The C horizon is dark grayish brown coarse sand to loamy fine sand and is commonly stratified. It may be calcareous or noncalcareous.

Granby Series (Gr)

These very deep, poorly drained to very poorly drained soils formed in sandy glaciolacustrine or sandy outwash on outwash plains. Slopes range from zero to three percent. The A horizon is black loamy sand with weak medium granular structure. The B horizon is dark gray or light brownish gray sand with weak coarse subangular blocky structure. The C horizon is light gray sand.

Hamlin Series (Ha)

These very deep, well drained soils formed in alluvium on flood plains and high bottoms. Slopes range from zero to three percent. The A horizon is dark gray silt loam with moderate coarse and medium granular structure. The B horizon is dark grayish brown or brown silt loam with weak or moderate granular, subangular blocky or prismatic structure. The C horizon is dark grayish brown silt loam and is massive or it has weak platy structure from fine stratification.

Hornell Series (HoB & HoC)

These moderately deep, somewhat poorly drained soils formed in till overlying shale or siltstone. Slopes range from three to 50 percent. The A horizon is dark grayish brown silt loam with weak medium granular structure. The B horizon is yellowish brown or strong brown silty clay loam and has subangular blocky or angular blocky structure. The C horizon is olive gray channery silty clay. The material is massive or has plate-like divisions inherited from the rock structure. The R or 2R horizon is shale or siltstone bedrock that weathers readily in the upper part and can be cut easily with hand tools in the upper few inches.

Howard Series (HTF, HrA, HrB & HrD)

These very deep, well drained and somewhat excessively drained soils formed in medium textured

glacial outwash deposits. They are found on outwash plains, kame moraines, valley terraces, and eskers. Slopes range from zero to 70 percent. The A horizon is generally dark brown gravelly loam with weak fine granular structure. The E horizon is brown very gravelly loam with weak fine subangular blocky structure. The B/E horizon is brown and pale brown very gravelly loam. The B horizon is brown very gravelly loam. Its structure is weak fine and medium subangular blocky. The C horizon is grayish brown stratified extremely gravelly sand.

Hudson Series (HuB & HuC)

These are very deep, moderately well drained soils formed in clayey and silty lacustrine sediments. These soils are in convex lake plains, lacustrine capped uplands, and on lower valley side-slopes. Slopes can range from zero to 60 percent. The A horizon is typically brown silt loam and silty clay loam, with granular structure, extending five to 12 inches deep. The E horizon, when present, consists of faintly mottled brown, very fine sandy loam or silt loam with blocky or platy structure. The B horizon generally is firm yellowish brown to brown silty clay with moderate or strong blocky structure and may have medium to very coarse prisms. Low and high-chroma redoximorphic features are present but may be faint or absent in the shallower portions. The C horizon is mixed grayish brown and light olive brown silty clay, with massive structure, or plate-like divisions.

Junius Series (Ju)

These are very deep, poorly drained soils on lake plains. Slopes range from zero to three percent. The A horizon is a very dark grayish brown loamy fine sand with weak fine granular structure. The B horizon is brown loamy fine sand or grayish brown fine sand with weak fine granular structure in the upper part. The C horizon is grayish brown stratified fine and medium sand with faint gray and yellowish brown redoximorphic features.

Lordstown Series (LoB & LoD)

These moderately deep, well drained soils formed in till and cryoturbated material derived from siltstone and sandstone on bedrock-controlled landforms of glaciated dissected plateaus. Slopes range from zero to 90 percent. The A horizon is a dark grayish brown channery silt loam with weak fine granular structure. The B horizon is yellowish brown channery silt loam with weak fine

subangular blocky structure. The C horizon is grayish brown very channery loam with or without redoximorphic features.

Madalin Series (Ma)

These are very deep, poorly drained soils formed in water-deposited materials. They occur on lake plains and depressions in the uplands. Slopes range from zero to three percent. The A horizon is very dark gray silt loam with dry, moderate medium granular structure, extending zero to eight inches. The B horizon is composed of a dark grayish brown silty clay with strong to weak medium subangular blocky structure. The C horizon is a grayish brown stratified silt to clay with moderate medium platy structure.

Manlius Series (MnB & MPE)

These are moderately deep, well drained to excessively drained soils formed in channery till derived from acid shale and slate. They are nearly level to very steep soils that overlie shale bedrock at depths of 20 to 40 inches. They are found on foot slopes, summits, shoulders, and backslopes of ridges and hills on glaciated uplands. Slopes range from zero to 70 percent. The A horizon is dark grayish brown channery silt loam with dry, moderate fine granular structure to a depth of three inches. The B horizon is composed of a yellowish-brown to olive brown channery to extremely channery silt loam with moderate fine and medium subangular blocky structure. The C horizon is a light olive brown extremely channery silt loam with 60 to 95 percent rock fragments, extending 20 to 36 inches. The R horizon is very dark gray thinly bedded and highly fractured shale and siltstone bedrock starting at 36 inches.

Mardin Series (MrB)

These very deep, moderately well drained soils are found on glaciated uplands, mostly on broad hilltops, shoulder slopes, and backslopes. Slopes range from zero to 50 percent. The A horizon is brown channery silt loam with moderate fine granular structure. The B horizon is yellowish brown channery silt loam with subangular blocky or granular structure. The E horizon, where present, is light olive brown with subangular blocky or platy structure. The C horizon is olive brown channery silt loam. This horizon is massive or has weak plate-like divisions.

Nassau Series (NaB & NaD)

These shallow, somewhat excessively drained soils formed in channery till derived from acid shale and slate. These soils are nearly level to very steep and overlie shale bedrock at depths of approximately 10 to 20 inches. The soils can be found on shoulders, summits, backslopes of ridges and hills on glaciated uplands. Slopes range from three to 70 percent. The A horizon is dark brown channery silt loam with weak fine granular structure. The B horizon is yellowish brown very channery silt loam with weak fine subangular blocky structure. The C horizon, if present, is thin with similar texture to the B horizon.

Nunda Series (NuB, NuC, NVF & NWC)

These deep and very deep, moderately well drained soils formed in a silty mantles that overlie till derived from clayey shale. They are generally found on upland till plains. Slopes range from zero to 35 percent. The A horizon is dark grayish brown silt loam with medium granular structure from zero to nine inches. The E horizon, where present, is grayish brown silt loam with weak or moderate, thin or medium platy structure. The B horizon is brown silt loam with weak fine subangular blocky structure. The C horizon is gray channery silty clay loam. The structure is massive or has plate like divisions. The C horizon extends from 45 to 72 inches.

Otisville Series (OtB)

These are very deep, excessively drained soils that were formed in outwash on Wisconsinan age terraces, beaches, eskers and kames. Slopes range from zero to 60 percent. The A horizon is dark grayish brown gravelly sandy loam with weak fine granular structure. The B horizon is yellowish brown loamy with texture ranges from loamy fine sand to coarse sand fine. The structure is very weak or weak, very fine to coarse, granular or subangular blocky, or is single grain. The C horizon is typically grayish brown with a very gravelly sand texture.

Phelps Series (Pr)

These very deep, moderately well drained soils formed in glacial outwash. These soils are nearly level and gently sloping soils formed in loamy material overlying calcareous, stratified gravel and sand. Slopes range from zero to eight percent. The A horizon is very dark grayish brown gravelly

loam with moderate medium granular structure. The E horizon is dark yellowish brown gravelly loam with moderate medium subangular blocky structure. The B and BC horizons are dark reddish brown gravelly clay loam with moderate, medium or coarse subangular blocky or platy structure. The C horizon is brown stratified gravel and sand.

Plainfield Series (PsA & PsB)

These very deep, excessively drained soils formed in sandy drift on outwash plains, valley trains, glacial lake basins, stream terraces, and moraines and other upland areas. Slopes range from zero to 70 percent. The A horizon is dark brown with weak medium granular structure. Its texture is sand. The E horizon, where present, is sand, loamy sand or coarse sand. The B and BC horizons are brown sand with weak coarse subangular blocky structure. The C horizon is yellowish brown sand, coarse sand, or gravelly analogs.

Raynham Series (Ra)

These are very deep and poorly drained soils formed in silty estuarine or glaciolacustrine deposits on glacial lake plains and marine terraces. Slopes range from zero to 12 percent. The A horizon is dark grayish brown silt loam with moderate fine and medium granular structure, extending zero to six inches. The B horizon is composed of an olive gray to olive brown silt loam with weak or moderate, very fine through medium granular or subangular blocky structure. The C horizon is an olive gray to olive silt loam with massive or plate-like divisions.

Rhinebeck Series (RhA & RhB)

These are very deep, somewhat poorly drained soils formed in clayey lacustrine sediments. They occur on glacial lake plains and uplands mantled with lake sediments. Slopes range from zero to 15 percent. The A horizon is very dark grayish brown silt loam with moderate medium granular structure to a depth of 9 inches. The E horizon, when present, is grayish brown silty clay loam with weak medium subangular blocky structure, extending from nine to 14 inches. The B horizon is olive brown silty clay to silty clay loam with weak to strong prismatic or subangular blocky structure, extending to a depth of 32 inches. The C horizon is typically brown silty clay loam to varved silt and clay with massive or varved very coarse prismatic structure. The C horizon may extend to a depth of 72 inches.

Saprists and Aquents (SA)

These soils consist of low-lying, level deposits of organic and mineral soil material that is ponded with shallow water most of the year. They are mainly found around the edges of lakes and ponds.

Scio Series (ScA & ScB)

These are very deep, moderately well drained soils formed in eolian, lacustrine, or alluvial sediments dominated by silt and very fine sand. These soils occur on terraces, old alluvial fans, lake plains, outwash plains and lakebeds. Slopes range from zero to 25 percent. The A horizon is dark grayish brown silt loam with moderate fine granular structure extending from zero to nine inches. The B horizon is yellowish brown silt loam with weak fine to medium subangular blocky structure. The C horizon is typically brown to grayish brown silt to very gravelly loamy sand. This horizon is massive or single grain and may have plate-like divisions.

Sun Series (Sn)

These are very deep, poorly drained soils formed in till derived primarily from limestone and sandstone with smaller amounts of schist, shale, and granite in some areas. These soils occur in low areas or depressions on till plains. Slopes range from zero to three percent. The A horizon is very dark gray loam with weak coarse granular structure extending from zero to nine inches. The B horizon is gray to brown gravelly fine sandy loam with weak medium subangular blocky structure. The C horizon is brown gravelly fine sandy loam with 30 percent rock fragments; common medium and fine faint yellowish-brown masses of iron accumulation extending from depths of 36 to 72 inches.

Teel Series (Te)

These are very deep, moderately well drained soils formed in nearly level, silty alluvial deposits. They occur on floodplains. Slopes range from zero to three percent. The A horizon is very dark grayish brown silt loam with moderate medium granular structure from depths of zero to 10 inches. The B horizon is dark grayish brown to brown silt loam with weak or moderate subangular blocky

or prismatic structure. The C horizon is dark grayish brown silt loam with massive or plate like divisions from fine stratification extending from depths of 38 to 72 inches.

Tuller Series (TvA & TvB)

These shallow, somewhat poorly drained soils formed in thin deposits of till over acid sandstone, shale bedrock or siltstone. These soils are found in depressional areas of flatter hilltops and benched side slopes of dissected uplands. Slope ranges from zero to eight percent. The depth to bedrock is 10 to 20 inches. Typically, the A horizon is very dark grayish brown channery silt loam with moderate fine and medium granular structure. The B horizon is grayish brown channery silt loam that has weak or moderate medium and fine subangular blocky, moderate medium prismatic or platy structure. The C horizon is thin and is massive or has plate-like divisions and occurs in some pedons.

Urban Land (UR)

Urban land consists of nearly level to strongly sloping areas where asphalt, concrete, buildings, or other impervious materials cover more than 85 percent of the surface. Slopes range from zero to 15 percent. This map unit includes very few areas of soil material, and those areas which are used mainly as lawns or landscaping have been disturbed by adjacent building activities.

Unadilla Series (UnB)

These are deep and very deep, well drained soils formed in silty, lacustrine sediments or old alluvial deposits. They typically are found occurring on valley terraces and lacustrine plains. Slopes range from zero to 50 percent. The A horizon is brown silt loam with moderate fine and very fine granular structure extending from zero to eight inches. The B horizon is yellowish brown silt loam with moderate medium subangular blocky structure. The C horizon is dark grayish brown stratified very gravelly sand. The C horizon has massive, single grain, weak to moderate plate-like divisions extending from 42 to 65 inches.

Wayland Series (Wy)

These very deep, poorly drained and very poorly drained, nearly level soils formed in recent alluvium. These soils are found in low areas or slackwater areas on flood plains. Slope ranges from

zero to three percent. Typically, the A horizon is very dark brown silty loam with a fine to coarse granular or subangular blocky structure. The B horizon is grayish brown silt loam that has weak fine and medium subangular blocky structure. The C horizon is gray silt loam and is massive.

5.0 SUMMARY

Wetlands identified along the Segment 7-Package 4B Project Corridor include shallow emergent marshes, common reed marshes, purple loosestrife marshes, scrub-shrub wetland, and forested wetlands such as red maple-hardwood swamps. Artificial ditches and watercourses, including small intermittent streams, occur within the Project Corridor.

Land use in the Project Corridor ranges from undeveloped to residential to commercial and industrial areas. In general, because most of the Project is routed along existing railroad corridors and roadway, many wetlands within the Project Corridor are characterized by previous anthropogenic disturbance and/or the presence of invasive plant species. The Project Corridor frequently is located along the edge between the disturbed railroad or highway ROW and more natural vegetated wetland communities that are present adjacent to the railroad and highway ROW. The wetland boundaries in the Project Corridor are most often defined by the edge of the soil fill for the railroad and roadway embankments but some incursions into adjacent private lands was also required.

Confirmation of the wetland boundaries are the responsibility of the involved regulatory agencies with jurisdiction over wetlands and waterbodies within this Phase of the overall project. As previously noted, wetlands and streams within Segment 7-Package 4B Project Corridor are assumed to be regulated by USACE (Section 10/404) and/or the NYSDEC (Article 24). Streams with a State water quality classification of C and Standard of C(T) or higher (as noted in Table 4-2) are also regulated by NYSDEC (Article 15). Based on review of the NYSDEC wetland mapping, one delineated wetland area is identified as regulated under Article 24. This wetland corresponds to mapped wetland S-105 and is regulated by NYSDEC. It is anticipated that USACE will take jurisdiction over all the delineated wetlands within the Project Corridor and NYSDEC

will take jurisdiction over the one wetland associated with the NYSDEC freshwater wetland. Final jurisdictional determinations will be made by the respective agencies.

6.0 REFERENCES

- Browne, S. et. al. 1995. New York State Freshwater Wetlands Delineation Manual. New York State Department of Environmental Conservation, Division of Fish and Wildlife, Bureau of Habitat, Albany, NY.
- Cowardin, L. M., V. Carter, F. C. Golet, E. T. LaRoe, 1979. *Classification of wetlands and deepwater habitats of the United States*. U. S. Department of the Interior, Fish and Wildlife Service, Washington, D.C.
- Edinger, G. J., D. J. Evans, S. Gebauer, T. G. Howard, D. M. Hunt, and A. M. Olivero (editors). 2014. *Ecological Communities of New York State*. Second Edition. A revised and expanded edition of Carol Reshke's *Ecological Communities of New York State*. New York Natural Heritage Program, New York State Department of Environmental Conservation, Albany, NY.
- Federal Register. July 13, 1994. Changes in hydric soils of the United States.
- Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Map Unit Descriptions. Accessed online March 3, 2022 and May 23, 2022: <https://websoilsurvey.nrcs.usda.gov/app/>.
- New York State Department of Environmental Conservation. Lakes and Rivers. Accessed online March 14, 2022: <https://www.dec.ny.gov/lands/95817.html>.
- United States Army Corps of Engineers. 1987 Wetland Delineation Manual. Technical Report Y-87-1. Experimental Laboratory, Vicksburg, MS.
- United States Army Corps of Engineers. 2012. *Regional Supplement to the Corps of Engineers Wetland Manual: Northcentral and Northeast Region (Version 2.0)*. ERDC/EL TR-12-1. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

ATTACHMENT 1
WETLAND DETERMINATION DATA SHEETS AND
WETLAND PHOTOGRAPHS

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Champlain Hudson Express City/County: Schenectady Sampling Date: February 22, 2023

Applicant/Owner: CHA State: NY Sampling Point: DP-XU

Investigator(s): Tristen Peterson Section, Township, Range: Schenectady

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 1

Subregion (LRR or MLRA): LRR R Lat: 42.864336°N Long: 73.904967°W Datum: NAD83

Soil Map Unit Name: Ra - Raynham silt loam NWI classification: Not Mapped

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

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

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

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

Hydrophytic Vegetation Present?	Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>	

If yes, optional Wetland Site ID: XU

Remarks: (Explain alternative procedures here or in a separate report.)
PFO Wetland located in NYSDEC Mapped wetland in a depression within wooded area

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<u> </u> Surface Water (A1)	<u>X</u> Water-Stained Leaves (B9)	<u> </u> Surface Soil Cracks (B6)
<u> </u> High Water Table (A2)	<u> </u> Aquatic Fauna (B13)	<u>X</u> Drainage Patterns (B10)
<u> </u> Saturation (A3)	<u> </u> Marl Deposits (B15)	<u> </u> Moss Trim Lines (B16)
<u> </u> Water Marks (B1)	<u> </u> Hydrogen Sulfide Odor (C1)	<u> </u> Dry-Season Water Table (C2)
<u> </u> Sediment Deposits (B2)	<u> </u> Oxidized Rhizospheres on Living Roots (C3)	<u> </u> Crayfish Burrows (C8)
<u> </u> Drift Deposits (B3)	<u> </u> Presence of Reduced Iron (C4)	<u> </u> Saturation Visible on Aerial Imagery (C9)
<u> </u> Algal Mat or Crust (B4)	<u> </u> Recent Iron Reduction in Tilled Soils (C6)	<u> </u> Stunted or Stressed Plants (D1)
<u> </u> Iron Deposits (B5)	<u> </u> Thin Muck Surface (C7)	<u>X</u> Geomorphic Position (D2)
<u> </u> Inundation Visible on Aerial Imagery (B7)	<u> </u> Other (Explain in Remarks)	<u> </u> Shallow Aquitard (D3)
<u> </u> Sparsely Vegetated Concave Surface (B8)		<u>X</u> Microtopographic Relief (D4)
		<u> </u> FAC-Neutral Test (D5)

Field Observations: Surface Water Present? Yes <u> </u> No <u>X</u> Depth (inches): Water Table Present? Yes <u> </u> No <u>X</u> Depth (inches): Saturation Present? Yes <u> </u> No <u>X</u> Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
--	---

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

Remarks:
Wetland hydrology present at data point

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-XU

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Populus deltoides</u>	30	Yes	FAC	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)														
2. _____																		
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
	<u>30</u>	= Total Cover		Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>15</u></td> <td>x 2 = <u>30</u></td> </tr> <tr> <td>FAC species <u>105</u></td> <td>x 3 = <u>315</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>120</u> (A)</td> <td><u>345</u> (B)</td> </tr> </table> Prevalence Index = B/A = 2.87	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>15</u>	x 2 = <u>30</u>	FAC species <u>105</u>	x 3 = <u>315</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>120</u> (A)	<u>345</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>15</u>	x 2 = <u>30</u>																	
FAC species <u>105</u>	x 3 = <u>315</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>120</u> (A)	<u>345</u> (B)																	
Sapling/Shrub Stratum (Plot size: 15 ft.)																		
1. <u>Cornus racemosa</u>	45	Yes	FAC															
2. <u>Crataegus douglasii</u>	15	Yes	FAC															
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
	<u>60</u>	= Total Cover																
Herb Stratum (Plot size: 5 ft.)																		
1. <u>Onoclea sensibilis</u>	15	Yes	FACW	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <u>Cornus racemosa</u>	15	Yes	FAC															
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
8. _____																		
9. _____																		
10. _____																		
11. _____																		
12. _____																		
	<u>30</u>	= Total Cover																
Woody Vine Stratum (Plot size: 30 ft.)																		
1. _____				Hydrophytic Vegetation Present? Yes <u>X</u> No _____														
2. _____																		
3. _____																		
4. _____																		
	<u>0</u>	= Total Cover																
Remarks: (Include photo numbers here or on a separate sheet.) Hydrophytic vegetation found at data point																		

SOIL

Sampling Point: DP-XU

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

[illegible]

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

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R ,
<input type="checkbox"/> Histic Epipedon (A2)	MLRA 149B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B)	

Indicators for Problematic Hydric Soils³:

☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L, M**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches):

Hydric Soil Present?	Yes	X	No
----------------------	-----	---	----

Remarks:

Hydric soils present at data point



Wetland FA-XU- View Facing North



Wetland FA-XU- Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-XU-Upland

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status																
1. <u>Acer saccharum</u>	60	Yes	FACU	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)															
2. <u>Prunus serotina</u>	20	Yes	FACU																
3. _____																			
4. _____																			
5. _____																			
6. _____																			
7. _____																			
	80	= Total Cover		Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>95</u></td> <td>x 4 = <u>380</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>95</u> (A)</td> <td><u>380</u> (B)</td> </tr> </table> Prevalence Index = B/A = 4		Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>95</u>	x 4 = <u>380</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>95</u> (A)	<u>380</u> (B)
Total % Cover of:	Multiply by:																		
OBL species <u>0</u>	x 1 = <u>0</u>																		
FACW species <u>0</u>	x 2 = <u>0</u>																		
FAC species <u>0</u>	x 3 = <u>0</u>																		
FACU species <u>95</u>	x 4 = <u>380</u>																		
UPL species <u>0</u>	x 5 = <u>0</u>																		
Column Totals: <u>95</u> (A)	<u>380</u> (B)																		
Sapling/Shrub Stratum (Plot size: 15 ft.)																			
1. <u>Acer saccharum</u>	15	Yes	FACU																
2. _____																			
3. _____																			
4. _____																			
5. _____																			
6. _____																			
7. _____																			
	15	= Total Cover		Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.															
Herb Stratum (Plot size: 5 ft.)																			
1. _____																			
2. _____																			
3. _____																			
4. _____																			
5. _____																			
6. _____																			
7. _____																			
8. _____																			
9. _____																			
10. _____																			
11. _____																			
12. _____																			
	0	= Total Cover		Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.															
Woody Vine Stratum (Plot size: 30 ft.)																			
1. _____																			
2. _____																			
3. _____																			
4. _____																			
	0	= Total Cover																	
Remarks: (Include photo numbers here or on a separate sheet.) No hydrophytic vegetation found at data point				Hydrophytic Vegetation Present? <table style="width: 100%;"> <tr> <td style="width: 33%;">Yes</td> <td style="width: 33%; text-align: center;">_____</td> <td style="width: 33%;">No</td> <td style="width: 33%; text-align: center;">_____ X _____</td> </tr> </table>		Yes	_____	No	_____ X _____										
Yes	_____	No	_____ X _____																

Upland

Upland

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

[illegible]¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R , |
| <input type="checkbox"/> Histic Epipedon (A2) | MLRA 149B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L, M**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches):

Hydric Soil Present? Yes No **X**

Remarks:

No hydric soils present at data point



Upland FA-XU- View Facing South



Upland FA-XU- Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: East Glenville/Schenectady Sampling Date: 12/8/21
Applicant/Owner: TDI State: NY Sampling Point: C-PA-D-33 Wet
Investigator(s): J. Greaves & N. Frazer Section, Township, Range: _____
Landform (hillside, terrace, etc.): Linear depression Local relief (concave, convex, none): Concave Slope %: 10
Subregion (LRR or MLRA): LRR R Lat: 42-51-00N Long: 73-55-04W Datum: WGS84
Soil Map Unit Name: HoB - Hornell silt loam, 3 to 8 percent slopes NWI classification: PEM1
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	
Remarks: (Explain alternative procedures here or in a separate report.) Common reed marsh within a roadside ditch.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <u>X</u> Surface Water (A1) _____ Water-Stained Leaves (B9) <u>X</u> High Water Table (A2) _____ Aquatic Fauna (B13) <u>X</u> Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)		<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) <u>X</u> Geomorphic Position (D2) <u>X</u> Shallow Aquitard (D3) _____ Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <u>X</u> No _____ Depth (inches): <u>1</u> Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>6</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION – Use scientific names of plants.

 Sampling Point: C-PA-D-33 We

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B) Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>15</u></td> <td>x 1 = <u>15</u></td> </tr> <tr> <td>FACW species <u>75</u></td> <td>x 2 = <u>150</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>90</u> (A)</td> <td><u>165</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>1.83</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>15</u>	x 1 = <u>15</u>	FACW species <u>75</u>	x 2 = <u>150</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>90</u> (A)	<u>165</u> (B)	Prevalence Index = B/A = <u>1.83</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>15</u>	x 1 = <u>15</u>																			
FACW species <u>75</u>	x 2 = <u>150</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>90</u> (A)	<u>165</u> (B)																			
Prevalence Index = B/A = <u>1.83</u>																				
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Phragmites australis</u>	<u>60</u>	<u>Yes</u>	<u>FACW</u>	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																
2. <u>Phalaris arundinacea</u>	<u>15</u>	<u>No</u>	<u>FACW</u>																	
3. <u>Lythrum salicaria</u>	<u>15</u>	<u>No</u>	<u>OBL</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		90 =Total Cover																		
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		=Total Cover																		

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

SOIL

Sampling Point C-PA-D-33 Wet

[illegible]



Wetland C-PA-D-33 - View facing southwest.



Wetland C-PA-D-33 - Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: East Glenville/Schenectady Sampling Date: 12/8/21
Applicant/Owner: TDI State: NY Sampling Point: C-PA-D-33 Upl
Investigator(s): J. Greaves & N. Frazer Section, Township, Range: _____
Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope %: 15
Subregion (LRR or MLRA): LRR R Lat: 42-51-00N Long: 73-55-04W Datum: WGS84
Soil Map Unit Name: HoB - Hornell silt loam, 3 to 8 percent slopes NWI classification: _____
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks: (Explain alternative procedures here or in a separate report.) Mowed roadside.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ____ Surface Water (A1) ____ Water-Stained Leaves (B9) ____ High Water Table (A2) ____ Aquatic Fauna (B13) ____ Saturation (A3) ____ Marl Deposits (B15) ____ Water Marks (B1) ____ Hydrogen Sulfide Odor (C1) ____ Sediment Deposits (B2) ____ Oxidized Rhizospheres on Living Roots (C3) ____ Drift Deposits (B3) ____ Presence of Reduced Iron (C4) ____ Algal Mat or Crust (B4) ____ Recent Iron Reduction in Tilled Soils (C6) ____ Iron Deposits (B5) ____ Thin Muck Surface (C7) ____ Inundation Visible on Aerial Imagery (B7) ____ Other (Explain in Remarks) ____ Sparsely Vegetated Concave Surface (B8)		<u>Secondary Indicators (minimum of two required)</u> ____ Surface Soil Cracks (B6) ____ Drainage Patterns (B10) ____ Moss Trim Lines (B16) ____ Dry-Season Water Table (C2) ____ Crayfish Burrows (C8) ____ Saturation Visible on Aerial Imagery (C9) ____ Stunted or Stressed Plants (D1) ____ Geomorphic Position (D2) ____ ? Shallow Aquitard (D3) ____ Microtopographic Relief (D4) ____ FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)		Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

Sampling Point: C-PA-D-33 Upl

Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
5.				
6.				
7.				
		=Total Cover		
Sapling/Shrub Stratum (Plot size: 15')				
1.				
2.				
3.				
4.				
5.				
6.				
7.				
		=Total Cover		
Herb Stratum (Plot size: 5')				
1.	<i>Poa pratensis</i>	60	Yes	FACU
2.	<i>Trifolium pratense</i>	20	Yes	FACU
3.	<i>Daucus carota</i>	10	No	UPL
4.	<i>Setaria pumila</i>	10	No	FAC
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
		100	=Total Cover	
Woody Vine Stratum (Plot size: 30')				
1.				
2.				
3.				
4.				
		=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species 0	x 1 = 0
FACW species 0	x 2 = 0
FAC species 10	x 3 = 30
FACU species 80	x 4 = 320
UPL species 10	x 5 = 50
Column Totals: 100 (A)	400 (B)
Prevalence Index = B/A = 4.00	

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation¹ (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes No X

SOIL

Sampling Point C-PA-D-33 Upl

[illegible]



Upland C-PA-D-33 - View facing south.



Upland C-PA-D-33 - Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Champlain Hudson Express City/County: Schenectady Sampling Date: February 22, 2023
 Applicant/Owner: CHA State: NY Sampling Point: DP-XT
 Investigator(s): Tristen Peterson Section, Township, Range: Schenectady
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 1
 Subregion (LRR or MLRA): LRR R Lat: 42.849597°N Long: 73.918831°W Datum: NAD83
 Soil Map Unit Name: HoB - Hogansburg loam; 3 to 8 percent slopes NWI classification: Not Mapped

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>		
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>		If yes, optional Wetland Site ID: <u>XT</u>
Remarks: (Explain alternative procedures here or in a separate report.) PEM Wetland Data Point located in a Phragmites stand adjacent to railroad			

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<u>X</u> Surface Water (A1)	<u> </u> Water-Stained Leaves (B9)	<u> </u> Surface Soil Cracks (B6)
<u> </u> High Water Table (A2)	<u> </u> Aquatic Fauna (B13)	<u>X</u> Drainage Patterns (B10)
<u> </u> Saturation (A3)	<u> </u> Marl Deposits (B15)	<u> </u> Moss Trim Lines (B16)
<u> </u> Water Marks (B1)	<u> </u> Hydrogen Sulfide Odor (C1)	<u> </u> Dry-Season Water Table (C2)
<u> </u> Sediment Deposits (B2)	<u> </u> Oxidized Rhizospheres on Living Roots (C3)	<u> </u> Crayfish Burrows (C8)
<u> </u> Drift Deposits (B3)	<u> </u> Presence of Reduced Iron (C4)	<u> </u> Saturation Visible on Aerial Imagery (C9)
<u> </u> Algal Mat or Crust (B4)	<u> </u> Recent Iron Reduction in Tilled Soils (C6)	<u> </u> Stunted or Stressed Plants (D1)
<u> </u> Iron Deposits (B5)	<u> </u> Thin Muck Surface (C7)	<u>X</u> Geomorphic Position (D2)
<u> </u> Inundation Visible on Aerial Imagery (B7)	<u> </u> Other (Explain in Remarks)	<u> </u> Shallow Aquitard (D3)
<u> </u> Sparsely Vegetated Concave Surface (B8)		<u> </u> Microtopographic Relief (D4)
		<u>X</u> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <u>X</u> No <u> </u> Depth (inches): 1 Water Table Present? Yes <u> </u> No <u> </u> Depth (inches): Saturation Present? Yes <u> </u> No <u> </u> Depth (inches): (includes capillary fringe)		Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: Wetland hydrology present at data point		

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-XT

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Sapling/Shrub Stratum (Plot size: 15 ft.)				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>100</u></td> <td>x 2 = <u>200</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>200</u> (B)</td> </tr> </table> Prevalence Index = B/A = 2	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>100</u>	x 2 = <u>200</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u> (A)	<u>200</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>100</u>	x 2 = <u>200</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>100</u> (A)	<u>200</u> (B)																	
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Herb Stratum (Plot size: 5 ft.)				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
1. <u>Phragmites australis</u>	<u>100</u>	<u>Yes</u>	<u>FACW</u>															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>100</u> = Total Cover																		
Woody Vine Stratum (Plot size: 30 ft.)				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.														
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.) Hydrophytic vegetation found at data point				Hydrophytic Vegetation Present? Yes <u>X</u> No _____														

SOIL

Sampling Point: DP-XT

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

[illegible]

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

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (**LRR R, MLRA 149B**)

- ☐ Polyvalue Below Surface (S8) (**LRR R**, **MLRA 149B**)
- ☐ Thin Dark Surface (S9) (**LRR R**, **MLRA 149B**)
- ☐ Loamy Mucky Mineral (F1) (**LRR K**, **L**)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☒ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L, M**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Clay

Depth (inches): 8

Hydric Soil Present?	Yes	X	No
----------------------	-----	---	----

Remarks:

Remarks:
Could not dig past 8 inches due to rock refusal, hydric soils present at data point



Wetland FA-XT- View Facing North



Wetland FA-XT- Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Upl FA-XT

Project/Site: Champlain Hudson Express City/County: Schenectady Sampling Date: February 22, 2023
 Applicant/Owner: CHA State: NY Sampling Point: DP-XT-Upland
 Investigator(s): Tristen Peterson Section, Township, Range: Schenectady
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Convex Slope (%): 1
 Subregion (LRR or MLRA): LRR R Lat: 42.849599°N Long: 73.918826°W Datum: NAD83
 Soil Map Unit Name: HoB - Hogansburg loam; 3 to 8 percent slopes NWI classification: Not Mapped

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation X, Soil X, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes No X
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>		
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>		If yes, optional Wetland Site ID: <u> </u>
Remarks: (Explain alternative procedures here or in a separate report.) Upland Data Point for Wetland XT located on gravel along railroad. Could not dig soils.			

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<u> </u> Surface Water (A1)	<u> </u> Water-Stained Leaves (B9)	<u> </u> Surface Soil Cracks (B6)
<u> </u> High Water Table (A2)	<u> </u> Aquatic Fauna (B13)	<u> </u> Drainage Patterns (B10)
<u> </u> Saturation (A3)	<u> </u> Marl Deposits (B15)	<u> </u> Moss Trim Lines (B16)
<u> </u> Water Marks (B1)	<u> </u> Hydrogen Sulfide Odor (C1)	<u> </u> Dry-Season Water Table (C2)
<u> </u> Sediment Deposits (B2)	<u> </u> Oxidized Rhizospheres on Living Roots (C3)	<u> </u> Crayfish Burrows (C8)
<u> </u> Drift Deposits (B3)	<u> </u> Presence of Reduced Iron (C4)	<u> </u> Saturation Visible on Aerial Imagery (C9)
<u> </u> Algal Mat or Crust (B4)	<u> </u> Recent Iron Reduction in Tilled Soils (C6)	<u> </u> Stunted or Stressed Plants (D1)
<u> </u> Iron Deposits (B5)	<u> </u> Thin Muck Surface (C7)	<u> </u> Geomorphic Position (D2)
<u> </u> Inundation Visible on Aerial Imagery (B7)	<u> </u> Other (Explain in Remarks)	<u> </u> Shallow Aquitard (D3)
<u> </u> Sparsely Vegetated Concave Surface (B8)		<u> </u> Microtopographic Relief (D4)
		<u> </u> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Water Table Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Saturation Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> (includes capillary fringe)		Wetland Hydrology Present? Yes <u> </u> No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No wetland hydrology present at data point		

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-XT-Upland

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>0</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: 15 ft.)				Prevalence Index worksheet: <div style="display: flex; justify-content: space-between;"> Total % Cover of: Multiply by: </div> OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>0</u> (A) <u>0</u> (B) Prevalence Index = B/A = _____
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Herb Stratum (Plot size: 5 ft.)				Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Woody Vine Stratum (Plot size: 30 ft.)				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.) Data Point located on gravel along railroad, vegetation within data point				Hydrophytic Vegetation Present? <div style="display: flex; align-items: center; gap: 10px;"> Yes No <u>X</u> </div>

SOIL

Sampling Point: DP-XT-Upland

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

[illegible]

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

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R , |
| <input type="checkbox"/> Histic Epipedon (A2) | MLRA 149B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L, M**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches):

Hydric Soil Present? Yes No **X**

Remarks:

Remarks:
Could not dig on gravel/ rock along railroad



Upland FA-XT- View Facing North



Upland FA-XT- Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: East Glenville/Schenectady Sampling Date: 12/8/21
Applicant/Owner: TDI State: NY Sampling Point: C-PA-C-3 Wet
Investigator(s): J. Greaves & N. Frazer Section, Township, Range: _____
Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope %: 5
Subregion (LRR or MLRA): LRR R Lat: 42-50-39N Long: 73-55-46W Datum: WGS84
Soil Map Unit Name: PsA - Plainfield loamy sand, 0 to 3 percent slopes NWI classification: PEM1
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	
Remarks: (Explain alternative procedures here or in a separate report.) Shallow emergent marsh.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <u> </u> Surface Water (A1) <u> </u> Water-Stained Leaves (B9) <u>X</u> High Water Table (A2) <u> </u> Aquatic Fauna (B13) <u>X</u> Saturation (A3) <u> </u> Marl Deposits (B15) <u> </u> Water Marks (B1) <u> </u> Hydrogen Sulfide Odor (C1) <u> </u> Sediment Deposits (B2) <u> </u> Oxidized Rhizospheres on Living Roots (C3) <u> </u> Drift Deposits (B3) <u> </u> Presence of Reduced Iron (C4) <u> </u> Algal Mat or Crust (B4) <u> </u> Recent Iron Reduction in Tilled Soils (C6) <u> </u> Iron Deposits (B5) <u> </u> Thin Muck Surface (C7) <u> </u> Inundation Visible on Aerial Imagery (B7) <u> </u> Other (Explain in Remarks) <u> </u> Sparsely Vegetated Concave Surface (B8)		<u>Secondary Indicators (minimum of two required)</u> <u> </u> Surface Soil Cracks (B6) <u> </u> Drainage Patterns (B10) <u> </u> Moss Trim Lines (B16) <u> </u> Dry-Season Water Table (C2) <u> </u> Crayfish Burrows (C8) <u> </u> Saturation Visible on Aerial Imagery (C9) <u> </u> Stunted or Stressed Plants (D1) <u>X</u> Geomorphic Position (D2) <u> </u> Shallow Aquitard (D3) <u> </u> Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>6</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION – Use scientific names of plants.

Sampling Point: C-PA-C-3 Wet

Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
5.				
6.				
7.				
		=Total Cover		
Sapling/Shrub Stratum (Plot size: 15')				
1.				
2.				
3.				
4.				
5.				
6.				
7.				
		=Total Cover		
Herb Stratum (Plot size: 5')				
1.	<i>Impatiens capensis</i>	60	Yes	FACW
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
		60	=Total Cover	
Woody Vine Stratum (Plot size: 30')				
1.				
2.				
3.				
4.				
		=Total Cover		

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 1 (B)

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	60	x 2 =	120
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	60 (A)		120 (B)
Prevalence Index = B/A =		2.00	

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0¹

4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation¹ (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes X No

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

SOIL

Sampling Point C-PA-C-3 Wet

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-5	10YR 2/1	72	7.5YR 3/4	20	c	m	Sandy	Prominent redox concentrations
			10YR 4/6	8	c	m		Prominent redox concentrations
5-13	10YR 3/1	55	7.5YR 3/4	35	c	m	Sandy	Prominent redox concentrations
			7.5YR 4/6	10	c	m		Prominent redox concentrations
13-17	7.5YR 2.5/1	95	7.5YR 5/1	5	d	m	Muck	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators:**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> High Chroma Sands (S11) (LRR K, L)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)
<input checked="" type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Marl (F10) (LRR K, L)
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 149B)
<input type="checkbox"/> ? Coast Prairie Redox (A16) (LRR K, L, R)
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L)
<input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L)
<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)
<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149B)
<input type="checkbox"/> Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if observed):**

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐**Remarks:**

This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)



Wetland C-PA-C-3 - View facing northeast.



Wetland C-PA-C-3 - Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: East Glenville/Schenectady Sampling Date: 12/8/21
Applicant/Owner: TDI State: NY Sampling Point: C-PA-C-3 Upl
Investigator(s): J. Greaves & N. Frazer Section, Township, Range: _____
Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope %: 55
Subregion (LRR or MLRA): LRR R Lat: 42-50-39N Long: 73-55-47W Datum: WGS84
Soil Map Unit Name: PsA - Plainfield loamy sand, 0 to 3 percent slopes NWI classification: _____
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks: (Explain alternative procedures here or in a separate report.) Successional shrubland.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ____ Surface Water (A1) ____ Water-Stained Leaves (B9) ____ High Water Table (A2) ____ Aquatic Fauna (B13) ____ Saturation (A3) ____ Marl Deposits (B15) ____ Water Marks (B1) ____ Hydrogen Sulfide Odor (C1) ____ Sediment Deposits (B2) ____ Oxidized Rhizospheres on Living Roots (C3) ____ Drift Deposits (B3) ____ Presence of Reduced Iron (C4) ____ Algal Mat or Crust (B4) ____ Recent Iron Reduction in Tilled Soils (C6) ____ Iron Deposits (B5) ____ Thin Muck Surface (C7) ____ Inundation Visible on Aerial Imagery (B7) ____ Other (Explain in Remarks) ____ Sparsely Vegetated Concave Surface (B8)		<u>Secondary Indicators (minimum of two required)</u> ____ Surface Soil Cracks (B6) ____ Drainage Patterns (B10) ____ Moss Trim Lines (B16) ____ Dry-Season Water Table (C2) ____ Crayfish Burrows (C8) ____ Saturation Visible on Aerial Imagery (C9) ____ Stunted or Stressed Plants (D1) ____ Geomorphic Position (D2) ____ ? Shallow Aquitard (D3) ____ Microtopographic Relief (D4) ____ FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION – Use scientific names of plants.

 Sampling Point: C-PA-C-3 Upl

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Quercus rubra</u>	<u>25</u>	<u>Yes</u>	<u>FACU</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B) Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>165</u></td> <td>x 4 = <u>660</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>165</u> (A)</td> <td><u>660</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>4.00</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>165</u>	x 4 = <u>660</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>165</u> (A)	<u>660</u> (B)	Prevalence Index = B/A = <u>4.00</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>0</u>	x 2 = <u>0</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>165</u>	x 4 = <u>660</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>165</u> (A)	<u>660</u> (B)																			
Prevalence Index = B/A = <u>4.00</u>																				
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>25</u>	=Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. <u>Lonicera morrowii</u>	<u>65</u>	<u>Yes</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>65</u>	=Total Cover																		
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Solidago canadensis</u>	<u>35</u>	<u>Yes</u>	<u>FACU</u>	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>																
2. <u>Ageratina altissima</u>	<u>35</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Lonicera morrowii</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
	<u>75</u>	=Total Cover																		
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
	_____	=Total Cover																		

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

SOIL

Sampling Point C-PA-C-3 Upl

[illegible]



Upland C-PA-C-3 - View facing west.



Upland C-PA-C-3 - Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: East Glensville/Schenectady Sampling Date: 12/8/21
 Applicant/Owner: TDI State: NY Sampling Point: C-PA-B-7 Wet
 Investigator(s): J. Greaves & N. Frazer Section, Township, Range: _____
 Landform (hillside, terrace, etc.): Linear depression Local relief (concave, convex, none): Concave Slope %: 1
 Subregion (LRR or MLRA): LRR R Lat: 42-50-35N Long: 73-55-55W Datum: WGS84
 Soil Map Unit Name: PsA - Plainfield loamy sand, 0 to 3 percent slopes NWI classification: PFO1
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: _____
Hydric Soil Present?	Yes <u>X</u> No _____	
Wetland Hydrology Present?	Yes <u>X</u> No _____	
Remarks: (Explain alternative procedures here or in a separate report.) Red maple hardwood swamp.		

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) <u>X</u> Water-Stained Leaves (B9) <u>X</u> High Water Table (A2) _____ Aquatic Fauna (B13) <u>X</u> Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)		<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) <u>X</u> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)		Wetland Hydrology Present? Yes <u>X</u> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION – Use scientific names of plants.

 Sampling Point: C-PA-B-7 Wet

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <u>Populus deltoides</u>	50	Yes	FAC	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B) Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;">Total % Cover of:</th> <th style="width: 20%;"></th> <th style="width: 20%;">Multiply by:</th> <th style="width: 20%;"></th> </tr> </thead> <tbody> <tr> <td>OBL species</td> <td style="text-align: center;">0</td> <td>x 1 =</td> <td style="text-align: center;">0</td> </tr> <tr> <td>FACW species</td> <td style="text-align: center;">70</td> <td>x 2 =</td> <td style="text-align: center;">140</td> </tr> <tr> <td>FAC species</td> <td style="text-align: center;">70</td> <td>x 3 =</td> <td style="text-align: center;">210</td> </tr> <tr> <td>FACU species</td> <td style="text-align: center;">0</td> <td>x 4 =</td> <td style="text-align: center;">0</td> </tr> <tr> <td>UPL species</td> <td style="text-align: center;">0</td> <td>x 5 =</td> <td style="text-align: center;">0</td> </tr> <tr> <td>Column Totals:</td> <td style="text-align: center;">140</td> <td>(A)</td> <td style="text-align: center;">350 (B)</td> </tr> <tr> <td colspan="3">Prevalence Index = B/A =</td> <td style="text-align: center;"><u>2.50</u></td> </tr> </tbody> </table>	Total % Cover of:		Multiply by:		OBL species	0	x 1 =	0	FACW species	70	x 2 =	140	FAC species	70	x 3 =	210	FACU species	0	x 4 =	0	UPL species	0	x 5 =	0	Column Totals:	140	(A)	350 (B)	Prevalence Index = B/A =			<u>2.50</u>
Total % Cover of:		Multiply by:																																		
OBL species	0	x 1 =	0																																	
FACW species	70	x 2 =	140																																	
FAC species	70	x 3 =	210																																	
FACU species	0	x 4 =	0																																	
UPL species	0	x 5 =	0																																	
Column Totals:	140	(A)	350 (B)																																	
Prevalence Index = B/A =			<u>2.50</u>																																	
2. <u>Ulmus americana</u>	20	Yes	FACW																																	
3. <u>Carpinus caroliniana</u>	10	No	FAC																																	
4. _____	_____	_____	_____																																	
5. _____	_____	_____	_____																																	
6. _____	_____	_____	_____																																	
7. _____	_____	_____	_____																																	
80 =Total Cover																																				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																																				
1. <u>Carpinus caroliniana</u>	10	Yes	FAC	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> X </u> 2 - Dominance Test is >50% <u> X </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																
2. _____	_____	_____	_____																																	
3. _____	_____	_____	_____																																	
4. _____	_____	_____	_____																																	
5. _____	_____	_____	_____																																	
6. _____	_____	_____	_____																																	
7. _____	_____	_____	_____																																	
10 =Total Cover																																				
Herb Stratum (Plot size: <u>5'</u>)																																				
1. <u>Onoclea sensibilis</u>	50	Yes	FACW	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes <u> X </u> No <u> </u>																																
2. _____	_____	_____	_____																																	
3. _____	_____	_____	_____																																	
4. _____	_____	_____	_____																																	
5. _____	_____	_____	_____																																	
6. _____	_____	_____	_____																																	
7. _____	_____	_____	_____																																	
8. _____	_____	_____	_____																																	
9. _____	_____	_____	_____																																	
10. _____	_____	_____	_____																																	
11. _____	_____	_____	_____																																	
12. _____	_____	_____	_____																																	
50 =Total Cover																																				
Woody Vine Stratum (Plot size: <u>30'</u>)																																				
1. _____	_____	_____	_____																																	
2. _____	_____	_____	_____																																	
3. _____	_____	_____	_____																																	
4. _____	_____	_____	_____																																	
_____ =Total Cover																																				

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

SOIL

Sampling Point C-PA-B-7 Wet

[illegible]



Wetland C-PA-B-7 - View facing southwest.



Wetland C-PA-B-7 - Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: East Glenville/Schenectady Sampling Date: 12/8/21
 Applicant/Owner: TDI State: NY Sampling Point: C-PA-B-7 Upl
 Investigator(s): J. Greaves & N. Frazer Section, Township, Range: _____
 Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): None Slope %: _____
 Subregion (LRR or MLRA): LRR R Lat: 42-50-36N Long: 73-55-56W Datum: WGS84
 Soil Map Unit Name: PsA - Plainfield loamy sand, 0 to 3 percent slopes NWI classification: _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes _____ No <u>X</u> Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) Successional shrubland.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ Water-Stained Leaves (B9) _____ High Water Table (A2) _____ Aquatic Fauna (B13) _____ Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) _____ Geomorphic Position (D2) _____ ? Shallow Aquitard (D3) _____ Microtopographic Relief (D4) _____ FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

VEGETATION – Use scientific names of plants.

 Sampling Point: C-PA-B-7 Upl

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B) Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: right;">Total % Cover of:</td> <td style="width: 50%; text-align: left;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>135</u></td> <td>x 4 = <u>540</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>135</u> (A)</td> <td><u>540</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>4.00</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>135</u>	x 4 = <u>540</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>135</u> (A)	<u>540</u> (B)	Prevalence Index = B/A = <u>4.00</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>0</u>	x 2 = <u>0</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>135</u>	x 4 = <u>540</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>135</u> (A)	<u>540</u> (B)																			
Prevalence Index = B/A = <u>4.00</u>																				
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. <u>Lonicera morrowii</u>	75	Yes	FACU																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Solidago canadensis</u>	50	Yes	FACU	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Lonicera morrowii</u>	10	No	FACU																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		=Total Cover																		
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. _____	_____	_____	_____	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		=Total Cover																		

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

SOIL

Sampling Point C-PA-B-7 Upl

[illegible]



Upland C-PA-B-7 - View facing southwest.



Upland C-PA-B-7 - Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: East Glenville/Schenectady Sampling Date: 12/8/21
 Applicant/Owner: TDI State: NY Sampling Point: C-PA-A-3 Wet
 Investigator(s): J. Greaves & N. Frazer Section, Township, Range: _____
 Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope %: 4
 Subregion (LRR or MLRA): LRR R Lat: 42-50-30N Long: 73-56-08W Datum: WGS84
 Soil Map Unit Name: PsA - Plainfield loamy sand, 0 to 3 percent slopes NWI classification: PFO1
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) Red maple hardwood swamp.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ Water-Stained Leaves (B9) <u>X</u> High Water Table (A2) _____ Aquatic Fauna (B13) <u>X</u> Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)		<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) <u>X</u> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>6</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)		Wetland Hydrology Present? Yes <u>X</u> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION – Use scientific names of plants.

 Sampling Point: C-PA-A-3 Wet

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Populus deltoides</u>	<u>75</u>	<u>Yes</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B) Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>95</u></td> <td>x 2 = <u>190</u></td> </tr> <tr> <td>FAC species <u>135</u></td> <td>x 3 = <u>405</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>230</u> (A)</td> <td><u>595</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.59</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>95</u>	x 2 = <u>190</u>	FAC species <u>135</u>	x 3 = <u>405</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>230</u> (A)	<u>595</u> (B)	Prevalence Index = B/A = <u>2.59</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>95</u>	x 2 = <u>190</u>																			
FAC species <u>135</u>	x 3 = <u>405</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>230</u> (A)	<u>595</u> (B)																			
Prevalence Index = B/A = <u>2.59</u>																				
2. <u>Rhamnus cathartica</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
<u>80</u> =Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. <u>Cornus alba</u>	<u>35</u>	<u>Yes</u>	<u>FACW</u>	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Populus deltoides</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>																	
3. <u>Viburnum dentatum</u>	<u>10</u>	<u>No</u>	<u>FAC</u>																	
4. <u>Rhamnus cathartica</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
<u>65</u> =Total Cover																				
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Onoclea sensibilis</u>	<u>60</u>	<u>Yes</u>	<u>FACW</u>	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																
2. <u>Equisetum arvense</u>	<u>25</u>	<u>Yes</u>	<u>FAC</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
<u>85</u> =Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

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

SOIL

Sampling Point C-PA-A-3 Wet

[illegible]



Wetland C-PA-A-3- View facing east.



Wetland C-PA-A-3 - Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: East Glenville/Schenectady Sampling Date: 12/8/21
Applicant/Owner: TDI State: NY Sampling Point: C-PA-A-3 Upl
Investigator(s): J. Greaves & N. Frazer Section, Township, Range: _____
Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope %: 20
Subregion (LRR or MLRA): LRR R Lat: 42-50-31N Long: 73-56-08W Datum: WGS84
Soil Map Unit Name: PsA - Plainfield loamy sand, 0 to 3 percent slopes NWI classification: _____
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks: (Explain alternative procedures here or in a separate report.) Successional Shrubland.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ____ Surface Water (A1) ____ Water-Stained Leaves (B9) ____ High Water Table (A2) ____ Aquatic Fauna (B13) ____ Saturation (A3) ____ Marl Deposits (B15) ____ Water Marks (B1) ____ Hydrogen Sulfide Odor (C1) ____ Sediment Deposits (B2) ____ Oxidized Rhizospheres on Living Roots (C3) ____ Drift Deposits (B3) ____ Presence of Reduced Iron (C4) ____ Algal Mat or Crust (B4) ____ Recent Iron Reduction in Tilled Soils (C6) ____ Iron Deposits (B5) ____ Thin Muck Surface (C7) ____ Inundation Visible on Aerial Imagery (B7) ____ Other (Explain in Remarks) ____ Sparsely Vegetated Concave Surface (B8)		<u>Secondary Indicators (minimum of two required)</u> ____ Surface Soil Cracks (B6) ____ Drainage Patterns (B10) ____ Moss Trim Lines (B16) ____ Dry-Season Water Table (C2) ____ Crayfish Burrows (C8) ____ Saturation Visible on Aerial Imagery (C9) ____ Stunted or Stressed Plants (D1) ____ Geomorphic Position (D2) ____ ? Shallow Aquitard (D3) ____ Microtopographic Relief (D4) ____ FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION – Use scientific names of plants.

 Sampling Point: C-PA-A-3 Upl

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Betula populifolia</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>60.0%</u> (A/B) Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>30</u></td> <td>x 2 = <u>60</u></td> </tr> <tr> <td>FAC species <u>22</u></td> <td>x 3 = <u>66</u></td> </tr> <tr> <td>FACU species <u>105</u></td> <td>x 4 = <u>420</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>157</u> (A)</td> <td><u>546</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.48</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>30</u>	x 2 = <u>60</u>	FAC species <u>22</u>	x 3 = <u>66</u>	FACU species <u>105</u>	x 4 = <u>420</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>157</u> (A)	<u>546</u> (B)	Prevalence Index = B/A = <u>3.48</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>30</u>	x 2 = <u>60</u>																			
FAC species <u>22</u>	x 3 = <u>66</u>																			
FACU species <u>105</u>	x 4 = <u>420</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>157</u> (A)	<u>546</u> (B)																			
Prevalence Index = B/A = <u>3.48</u>																				
2. <u>Rhamnus cathartica</u>	<u>2</u>	<u>Yes</u>	<u>FAC</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
<u>7</u> =Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. <u>Lonicera morrowii</u>	<u>65</u>	<u>Yes</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Betula populifolia</u>	<u>10</u>	<u>No</u>	<u>FAC</u>																	
3. <u>Populus deltoides</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
<u>80</u> =Total Cover																				
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Solidago canadensis</u>	<u>40</u>	<u>Yes</u>	<u>FACU</u>	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																
2. <u>Onoclea sensibilis</u>	<u>30</u>	<u>Yes</u>	<u>FACW</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
<u>70</u> =Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

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

SOIL

Sampling Point C-PA-A-3 Upl

[illegible]



Upland C-PA-A-3 - View facing west.



Upland C-PA-A-3 - Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Glenville/ Schenectady Sampling Date: 12/9/21
 Applicant/Owner: TDI State: NY Sampling Point: C-PA-E-1 Wet
 Investigator(s): N. Frazer, J. Greaves Section, Township, Range: _____
 Landform (hillside, terrace, etc.): ditch Local relief (concave, convex, none): concave Slope %: 0-1
 Subregion (LRR or MLRA): LRR R Lat: 42-50-26N Long: 73-56-21W Datum: WGS84
 Soil Map Unit Name: Elnora loamy fine sand (En) NWI classification: PEM
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil x, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>x</u> No _____ If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes <u>X</u> No _____	
Remarks: (Explain alternative procedures here or in a separate report.) Common reed marsh/ ditch along the railroad. Disturbed.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <u>X</u> Surface Water (A1) _____ Water-Stained Leaves (B9) <u>X</u> High Water Table (A2) _____ Aquatic Fauna (B13) <u>X</u> Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)		<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) <u>X</u> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <u>x</u> No _____ Depth (inches): <u>0.5</u> Water Table Present? Yes <u>x</u> No _____ Depth (inches): <u>6</u> Saturation Present? Yes <u>x</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)		Wetland Hydrology Present? Yes <u>X</u> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION – Use scientific names of plants.

 Sampling Point: C-PA-E-1 Wet

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B) Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>3</u></td> <td>x 1 = <u>3</u></td> </tr> <tr> <td>FACW species <u>95</u></td> <td>x 2 = <u>190</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>98</u> (A)</td> <td><u>193</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>1.97</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>3</u>	x 1 = <u>3</u>	FACW species <u>95</u>	x 2 = <u>190</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>98</u> (A)	<u>193</u> (B)	Prevalence Index = B/A = <u>1.97</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>3</u>	x 1 = <u>3</u>																			
FACW species <u>95</u>	x 2 = <u>190</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>98</u> (A)	<u>193</u> (B)																			
Prevalence Index = B/A = <u>1.97</u>																				
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Phragmites australis</u>	<u>95</u>	<u>Yes</u>	<u>FACW</u>	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																
2. <u>Lythrum salicaria</u>	<u>2</u>	<u>No</u>	<u>OBL</u>																	
3. <u>Typha latifolia</u>	<u>1</u>	<u>No</u>	<u>OBL</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		98 =Total Cover																		
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		=Total Cover																		

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

SOIL

Sampling Point C-PA-E-1 Wet

[illegible]



Wetland C-PA-E-1- View facing west



Wetland C-PA-E-1- Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Glenville/ Schenectady Sampling Date: 12/9/21
 Applicant/Owner: TDI State: NY Sampling Point: C-PA-E-1 Upl
 Investigator(s): N. Frazer, J. Greaves Section, Township, Range: _____
 Landform (hillside, terrace, etc.): flat Local relief (concave, convex, none): none Slope %: 0
 Subregion (LRR or MLRA): LRR R Lat: 42-50-26N Long: 73-56-21W Datum: WGS84
 Soil Map Unit Name: Elnora loamy fine sand (En) NWI classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Hydric Soil Present?	Yes _____ No <u>X</u>	
Wetland Hydrology Present?	Yes _____ No <u>X</u>	
Remarks: (Explain alternative procedures here or in a separate report.) Successional old field.		

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ Water-Stained Leaves (B9) _____ High Water Table (A2) _____ Aquatic Fauna (B13) _____ Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)		<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) _____ Geomorphic Position (D2) _____ ? Shallow Aquitard (D3) _____ Microtopographic Relief (D4) _____ FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>x</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>x</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>x</u> Depth (inches): _____ (includes capillary fringe)		Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION – Use scientific names of plants.

 Sampling Point: C-PA-E-1 Upl

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B) Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>50</u></td> <td>x 4 = <u>200</u></td> </tr> <tr> <td>UPL species <u>40</u></td> <td>x 5 = <u>200</u></td> </tr> <tr> <td>Column Totals: <u>90</u> (A)</td> <td><u>400</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>4.44</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>50</u>	x 4 = <u>200</u>	UPL species <u>40</u>	x 5 = <u>200</u>	Column Totals: <u>90</u> (A)	<u>400</u> (B)	Prevalence Index = B/A = <u>4.44</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>0</u>	x 2 = <u>0</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>50</u>	x 4 = <u>200</u>																			
UPL species <u>40</u>	x 5 = <u>200</u>																			
Column Totals: <u>90</u> (A)	<u>400</u> (B)																			
Prevalence Index = B/A = <u>4.44</u>																				
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Solidago canadensis</u>	<u>50</u>	<u>Yes</u>	<u>FACU</u>	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>																
2. <u>Daucus carota</u>	<u>10</u>	<u>No</u>	<u>UPL</u>																	
3. <u>Centaurea stoebe</u>	<u>30</u>	<u>Yes</u>	<u>UPL</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		90 =Total Cover																		
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		=Total Cover																		

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

SOIL

Sampling Point C-PA-E-1 Upd

[illegible]



Upland C-PA-E-1- View facing southwest



Upland C-PA-E-1- Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Champlain Hudson Express City/County: Schenectady Sampling Date: February 22, 2023

Applicant/Owner: CHA State: NY Sampling Point: DP-XQ

Investigator(s): Tristen Peterson Section, Township, Range: Schenectady

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 1

Subregion (LRR or MLRA): LRR R Lat: 42.839431°N Long: 73.941300°W Datum: NAD83

Soil Map Unit Name: Coa - Croghan loamy sand over clay; 0 to 3 percent slopes NWI classification: Not Mapped

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

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

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

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

Hydrophytic Vegetation Present?	Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>		
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>		If yes, optional Wetland Site ID: <u>XQ</u>

Remarks: (Explain alternative procedures here or in a separate report.)
PEM Wetland Data Point in a depression at the edge of corn field

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<u> </u> Surface Water (A1)	<u> </u> Water-Stained Leaves (B9)	<u> </u> Surface Soil Cracks (B6)
<u>X</u> High Water Table (A2)	<u> </u> Aquatic Fauna (B13)	<u>X</u> Drainage Patterns (B10)
<u>X</u> Saturation (A3)	<u> </u> Marl Deposits (B15)	<u> </u> Moss Trim Lines (B16)
<u> </u> Water Marks (B1)	<u> </u> Hydrogen Sulfide Odor (C1)	<u> </u> Dry-Season Water Table (C2)
<u> </u> Sediment Deposits (B2)	<u> </u> Oxidized Rhizospheres on Living Roots (C3)	<u>X</u> Crayfish Burrows (C8)
<u> </u> Drift Deposits (B3)	<u> </u> Presence of Reduced Iron (C4)	<u> </u> Saturation Visible on Aerial Imagery (C9)
<u> </u> Algal Mat or Crust (B4)	<u> </u> Recent Iron Reduction in Tilled Soils (C6)	<u> </u> Stunted or Stressed Plants (D1)
<u> </u> Iron Deposits (B5)	<u> </u> Thin Muck Surface (C7)	<u>X</u> Geomorphic Position (D2)
<u> </u> Inundation Visible on Aerial Imagery (B7)	<u> </u> Other (Explain in Remarks)	<u> </u> Shallow Aquitard (D3)
<u> </u> Sparsely Vegetated Concave Surface (B8)		<u> </u> Microtopographic Relief (D4)
		<u>X</u> FAC-Neutral Test (D5)

Field Observations: Surface Water Present? Yes <u> </u> No <u>X</u> Depth (inches): Water Table Present? Yes <u>X</u> No <u> </u> Depth (inches): 7 Saturation Present? Yes <u>X</u> No <u> </u> Depth (inches): 3 (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Wetland hydrology present at data point

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-XQ

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Sapling/Shrub Stratum (Plot size: 15 ft.)				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>20</u></td> <td>x 1 = <u>20</u></td> </tr> <tr> <td>FACW species <u>80</u></td> <td>x 2 = <u>160</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>180</u> (B)</td> </tr> </table> Prevalence Index = B/A = 1.8	Total % Cover of:	Multiply by:	OBL species <u>20</u>	x 1 = <u>20</u>	FACW species <u>80</u>	x 2 = <u>160</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u> (A)	<u>180</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>20</u>	x 1 = <u>20</u>																	
FACW species <u>80</u>	x 2 = <u>160</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>100</u> (A)	<u>180</u> (B)																	
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Herb Stratum (Plot size: 5 ft.)				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
1. <u>Phragmites australis</u>	<u>80</u>	<u>Yes</u>	<u>FACW</u>															
2. <u>Lythrum salicaria</u>	<u>20</u>	<u>Yes</u>	<u>OBL</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>100</u> = Total Cover																		
Woody Vine Stratum (Plot size: 30 ft.)				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.														
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.) Hydrophytic vegetation found at data point				Hydrophytic Vegetation Present? Yes <u>X</u> No _____														

SOIL

Sampling Point: DP-XQ

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

[illegible]

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

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (**LRR R, MLRA 149B**)

- ☐ Polyvalue Below Surface (S8) (**LRR R**, **MLRA 149B**)
- ☐ Thin Dark Surface (S9) (**LRR R**, **MLRA 149B**)
- ☐ Loamy Mucky Mineral (F1) (**LRR K**, **L**)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L, M**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches):

Hydric Soil Present?	Yes	X	No
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Remarks:

Hydric soils present at data point



Wetland FA-XQ- View Facing North



Wetland FA-XQ- Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-XQ-Upland

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>0</u> = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>15</u></td> <td>x 5 = <u>75</u></td> </tr> <tr> <td>Column Totals: <u>15</u> (A)</td> <td><u>75</u> (B)</td> </tr> </table> Prevalence Index = B/A = 5	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>15</u>	x 5 = <u>75</u>	Column Totals: <u>15</u> (A)	<u>75</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>15</u>	x 5 = <u>75</u>																	
Column Totals: <u>15</u> (A)	<u>75</u> (B)																	
Sapling/Shrub Stratum (Plot size: 15 ft.)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
<u>0</u> = Total Cover																		
Herb Stratum (Plot size: 5 ft.)																		
1. <u>Zea mays</u>	<u>15</u>	<u>Yes</u>	<u>UPL</u>															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.														
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>15</u> = Total Cover																		
Woody Vine Stratum (Plot size: 30 ft.)																		
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.)																		
No hydrophytic vegetation found at data point																		

Upland

Sampling Point: DP-XQ-

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

[illegible]¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R ,
<input type="checkbox"/> Histic Epipedon (A2)	MLRA 149B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B)	

Indicators for Problematic Hydric Soils³:

☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L, M**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches):

Hydric Soil Present? Yes No **X**

Remarks:

Remarks:
No hydric soils present at data point



Upland FA-XQ- View Facing South



Upland FA-XQ- Soils

Segment 7-Package 4B

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)
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Project/Site: CHPE City/County: East Glenville/Schenectady Sampling Date: 4/7/23

Applicant/Owner: TDI State: NY Sampling Point: C-4B-B Wet

Investigator(s): J. Greaves & C. Scrivner Section, Township, Range: _____

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

Subregion (LRR or MLRA): LRR R Lat: 42.836616 Long: -73.947181 Datum: NAD83

Soil Map Unit Name: CoC - Colonie loamy fine sand, 3 to 15 percent slopes NWI classification: PEM2

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

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

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

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

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Wetland C-4B-B</u>
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Remarks: (Explain alternative procedures here or in a separate report.)
 Shallow emergent marsh.

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators</u> (minimum of one is required; check all that apply)	<u>Secondary Indicators</u> (minimum of two required)
<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> _____ Surface Water (A1) <u>X</u> _____ High Water Table (A2) <u>X</u> _____ Saturation (A3) _____ Water Marks (B1) _____ Sediment Deposits (B2) _____ Drift Deposits (B3) _____ Algal Mat or Crust (B4) _____ Iron Deposits (B5) _____ Inundation Visible on Aerial Imagery (B7) _____ Sparsely Vegetated Concave Surface (B8) </div> <div style="width: 48%;"> _____ Water-Stained Leaves (B9) _____ Aquatic Fauna (B13) _____ Marl Deposits (B15) _____ Hydrogen Sulfide Odor (C1) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Presence of Reduced Iron (C4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Thin Muck Surface (C7) _____ Other (Explain in Remarks) </div> </div>	_____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) _____ Geomorphic Position (D2) _____ Shallow Aquitard (D3) <u>X</u> _____ Microtopographic Relief (D4) <u>X</u> _____ FAC-Neutral Test (D5)

Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>10</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No _____
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

 Sampling Point: C-4B-B Wet

<u>Tree Stratum</u> (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B) Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>25</u></td> <td>x 1 = <u>25</u></td> </tr> <tr> <td>FACW species <u>75</u></td> <td>x 2 = <u>150</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>175</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>1.75</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>25</u>	x 1 = <u>25</u>	FACW species <u>75</u>	x 2 = <u>150</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u> (A)	<u>175</u> (B)	Prevalence Index = B/A = <u>1.75</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>25</u>	x 1 = <u>25</u>																			
FACW species <u>75</u>	x 2 = <u>150</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>100</u> (A)	<u>175</u> (B)																			
Prevalence Index = B/A = <u>1.75</u>																				
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
<u>Herb Stratum</u> (Plot size: <u>5'</u>)																				
1. <u>Phalaris arundinacea</u>	<u>75</u>	<u>Yes</u>	<u>FACW</u>																	
2. <u>Lythrum salicaria</u>	<u>25</u>	<u>Yes</u>	<u>OBL</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		100 =Total Cover																		
<u>Woody Vine Stratum</u> (Plot size: <u>30'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		=Total Cover																		

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

Hydrophytic Vegetation Indicators:

 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0¹

 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

 Problematic Hydrophytic Vegetation¹ (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes X No

SOIL

Sampling Point: C-4B-B Wet

[illegible]



Wetland C-4B-B - View facing west



Wetland C-4B-B - Soils

Segment 7 – Package 4B

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)
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Project/Site: CHPE City/County: East Glensville/Schenectady Sampling Date: 4/7/23
Applicant/Owner: TDI State: NY Sampling Point: C-4B-B Upl
Investigator(s): J. Greaves & C. Scrivner Section, Township, Range: _____
Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope %: 5
Subregion (LRR or MLRA): LRR R Lat: 42.836404 Long: -73.946187 Datum: NAD83
Soil Map Unit Name: CoC - Colonie loamy fine sand, 3 to 15 percent slopes NWI classification: _____
Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: <u>Upland adjacent to Wetland C-4B-B</u>
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes _____ No <u>X</u>	

Remarks: (Explain alternative procedures here or in a separate report.)
Mowed lawn.

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators</u> (minimum of one is required; check all that apply) ____ Surface Water (A1) ____ Water-Stained Leaves (B9) ____ High Water Table (A2) ____ Aquatic Fauna (B13) ____ Saturation (A3) ____ Marl Deposits (B15) ____ Water Marks (B1) ____ Hydrogen Sulfide Odor (C1) ____ Sediment Deposits (B2) ____ Oxidized Rhizospheres on Living Roots (C3) ____ Drift Deposits (B3) ____ Presence of Reduced Iron (C4) ____ Algal Mat or Crust (B4) ____ Recent Iron Reduction in Tilled Soils (C6) ____ Iron Deposits (B5) ____ Thin Muck Surface (C7) ____ Inundation Visible on Aerial Imagery (B7) ____ Other (Explain in Remarks) ____ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators</u> (minimum of two required) ____ Surface Soil Cracks (B6) ____ Drainage Patterns (B10) ____ Moss Trim Lines (B16) ____ Dry-Season Water Table (C2) ____ Crayfish Burrows (C8) ____ Saturation Visible on Aerial Imagery (C9) ____ Stunted or Stressed Plants (D1) ____ Geomorphic Position (D2) ____ Shallow Aquitard (D3) ____ Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

VEGETATION – Use scientific names of plants.

 Sampling Point: C-4B-B Upl

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>90</u></td> <td>x 2 = <u>180</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>10</u></td> <td>x 4 = <u>40</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>220</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>2.20</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>90</u>	x 2 = <u>180</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>10</u>	x 4 = <u>40</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u> (A)	<u>220</u> (B)	Prevalence Index = B/A = <u>2.20</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>90</u>	x 2 = <u>180</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>10</u>	x 4 = <u>40</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>100</u> (A)	<u>220</u> (B)																			
Prevalence Index = B/A = <u>2.20</u>																				
_____ =Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover																				
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Phalaris arundinacea</u>	<u>90</u>	<u>Yes</u>	<u>FACW</u>	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Taraxacum officinale</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
3. <u>Glechoma hederacea</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
_____ =Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

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

Hydrophytic Vegetation Present? Yes X No _____

SOIL

Sampling Point: C-4B-B Upl

[illegible]



Upland C-4B-B - View facing east



Upland C-4B-B - Soils

Segment 7 – Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Glenville/ Schenectady Sampling Date: 12/9/21
Applicant/Owner: TDI State: NY Sampling Point: C-PA-F-2 Wet
Investigator(s): N. Frazer, J. Greaves Section, Township, Range: _____
Landform (hillside, terrace, etc.): hillslope Local relief (concave, convex, none): none Slope %: 0
Subregion (LRR or MLRA): LRR R Lat: 42-50-13N Long: 73-56-52W Datum: WGS84
Soil Map Unit Name: Nassau channery silt loam (NaB) NWI classification: PFO/PSS
Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	
Remarks: (Explain alternative procedures here or in a separate report.)	

HYDROLOGY

Wetland Hydrology Indicators:		<u>Secondary Indicators (minimum of two required)</u>	
<u>Primary Indicators (minimum of one is required; check all that apply)</u>			
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Microtopographic Relief (D4)	
		<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
Field Observations:		Wetland Hydrology Present? Yes <u>X</u> No _____	
Surface Water Present? Yes <u>x</u> No _____ Depth (inches): <u>0.5</u>			
Water Table Present? Yes <u>x</u> No _____ Depth (inches): <u>12</u>			
Saturation Present? Yes <u>x</u> No _____ Depth (inches): <u>8</u>			
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION – Use scientific names of plants.

 Sampling Point: C-PA-F-2 Wet

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u><i>Ulmus americana</i></u>	<u>55</u>	<u>Yes</u>	<u>FACW</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>80.0%</u> (A/B) Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> <tr> <td>OBL species <u>5</u></td> <td>x 1 = <u>5</u></td> </tr> <tr> <td>FACW species <u>55</u></td> <td>x 2 = <u>110</u></td> </tr> <tr> <td>FAC species <u>76</u></td> <td>x 3 = <u>228</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>15</u></td> <td>x 5 = <u>75</u></td> </tr> <tr> <td>Column Totals: <u>151</u> (A)</td> <td><u>418</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.77</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>5</u>	x 1 = <u>5</u>	FACW species <u>55</u>	x 2 = <u>110</u>	FAC species <u>76</u>	x 3 = <u>228</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>15</u>	x 5 = <u>75</u>	Column Totals: <u>151</u> (A)	<u>418</u> (B)	Prevalence Index = B/A = <u>2.77</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>5</u>	x 1 = <u>5</u>																			
FACW species <u>55</u>	x 2 = <u>110</u>																			
FAC species <u>76</u>	x 3 = <u>228</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>15</u>	x 5 = <u>75</u>																			
Column Totals: <u>151</u> (A)	<u>418</u> (B)																			
Prevalence Index = B/A = <u>2.77</u>																				
2. <u><i>Rhamnus cathartica</i></u>	<u>40</u>	<u>Yes</u>	<u>FAC</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		<u>95</u> =Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. <u><i>Rhamnus cathartica</i></u>	<u>35</u>	<u>Yes</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		<u>35</u> =Total Cover																		
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u><i>Lythrum salicaria</i></u>	<u>5</u>	<u>Yes</u>	<u>OBL</u>	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes <u>X</u> No _____																
2. <u><i>Rhamnus cathartica</i></u>	<u>1</u>	<u>No</u>	<u>FAC</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		<u>6</u> =Total Cover																		
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. <u><i>Celastrus orbiculatus</i></u>	<u>15</u>	<u>Yes</u>	<u>UPL</u>																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		<u>15</u> =Total Cover																		

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

SOIL

Sampling Point C-PA-F-2 Wet

[illegible]



Wetland C-PA-F-2- View facing south



Wetland C-PA-F-2- Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Glenville/ Schenectady Sampling Date: 12/9/21
Applicant/Owner: TDI State: NY Sampling Point: C-PA-F-2 Upl
Investigator(s): N. Frazer, J. Greaves Section, Township, Range: _____
Landform (hillside, terrace, etc.): flat Local relief (concave, convex, none): none Slope %: 0
Subregion (LRR or MLRA): LRR R Lat: 42-50-13N Long: 73-56-52W Datum: WGS84
Soil Map Unit Name: Nassau channery silt loam (NaB) NWI classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks: (Explain alternative procedures here or in a separate report.) Railroad embankment.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ____ Surface Water (A1) ____ Water-Stained Leaves (B9) ____ High Water Table (A2) ____ Aquatic Fauna (B13) ____ Saturation (A3) ____ Marl Deposits (B15) ____ Water Marks (B1) ____ Hydrogen Sulfide Odor (C1) ____ Sediment Deposits (B2) ____ Oxidized Rhizospheres on Living Roots (C3) ____ Drift Deposits (B3) ____ Presence of Reduced Iron (C4) ____ Algal Mat or Crust (B4) ____ Recent Iron Reduction in Tilled Soils (C6) ____ Iron Deposits (B5) ____ Thin Muck Surface (C7) ____ Inundation Visible on Aerial Imagery (B7) ____ Other (Explain in Remarks) ____ Sparsely Vegetated Concave Surface (B8)		<u>Secondary Indicators (minimum of two required)</u> ____ Surface Soil Cracks (B6) ____ Drainage Patterns (B10) ____ Moss Trim Lines (B16) ____ Dry-Season Water Table (C2) ____ Crayfish Burrows (C8) ____ Saturation Visible on Aerial Imagery (C9) ____ Stunted or Stressed Plants (D1) ____ Geomorphic Position (D2) ____ Shallow Aquitard (D3) ____ Microtopographic Relief (D4) ____ FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>x</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>x</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>x</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION – Use scientific names of plants.

 Sampling Point: C-PA-F-2 Upl

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33.3%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>8</u></td> <td>x 3 = <u>24</u></td> </tr> <tr> <td>FACU species <u>25</u></td> <td>x 4 = <u>100</u></td> </tr> <tr> <td>UPL species <u>25</u></td> <td>x 5 = <u>125</u></td> </tr> <tr> <td>Column Totals: <u>58</u> (A)</td> <td><u>249</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>4.29</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>8</u>	x 3 = <u>24</u>	FACU species <u>25</u>	x 4 = <u>100</u>	UPL species <u>25</u>	x 5 = <u>125</u>	Column Totals: <u>58</u> (A)	<u>249</u> (B)	Prevalence Index = B/A = <u>4.29</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>0</u>	x 2 = <u>0</u>																			
FAC species <u>8</u>	x 3 = <u>24</u>																			
FACU species <u>25</u>	x 4 = <u>100</u>																			
UPL species <u>25</u>	x 5 = <u>125</u>																			
Column Totals: <u>58</u> (A)	<u>249</u> (B)																			
Prevalence Index = B/A = <u>4.29</u>																				
=Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. <u>Rhamnus cathartica</u>	<u>8</u>	<u>Yes</u>	<u>FAC</u>																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover				Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
=Total Cover																				
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Schizachyrium scoparium</u>	<u>25</u>	<u>Yes</u>	<u>FACU</u>																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
=Total Cover				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.																
=Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. <u>Celastrus orbiculatus</u>	<u>25</u>	<u>Yes</u>	<u>UPL</u>																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
=Total Cover				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>																
=Total Cover																				

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

SOIL

Sampling Point C-PA-F-2 Upl

[illegible]



Upland C-PA-F-2- View facing east



Upland C-PA-F-2- Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Champlain Hudson Express City/County: Schenectady Sampling Date: February 22, 2023

Applicant/Owner: CHA State: NY Sampling Point: DP-XP

Investigator(s): Tristen Peterson Section, Township, Range: Schenectady

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 1

Subregion (LRR or MLRA): LRR R Lat: 42.834665°N Long: 73.952283°W Datum: NAD83

Soil Map Unit Name: Wy - Wayland soils complex; 0 to 3 percent slopes; frequently flooded NWI classification: PFO1E

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

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

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

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

Hydrophytic Vegetation Present?	Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>		
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>		If yes, optional Wetland Site ID: <u>XP</u>

Remarks: (Explain alternative procedures here or in a separate report.)
PFO Wetland Data Point located in a depression within a open forested area mixed with Shrubs within understory

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<u> </u> Surface Water (A1)	<u>X</u> Water-Stained Leaves (B9)	<u> </u> Surface Soil Cracks (B6)
<u> </u> High Water Table (A2)	<u> </u> Aquatic Fauna (B13)	<u>X</u> Drainage Patterns (B10)
<u> </u> Saturation (A3)	<u> </u> Marl Deposits (B15)	<u>X</u> Moss Trim Lines (B16)
<u> </u> Water Marks (B1)	<u> </u> Hydrogen Sulfide Odor (C1)	<u> </u> Dry-Season Water Table (C2)
<u> </u> Sediment Deposits (B2)	<u> </u> Oxidized Rhizospheres on Living Roots (C3)	<u> </u> Crayfish Burrows (C8)
<u> </u> Drift Deposits (B3)	<u> </u> Presence of Reduced Iron (C4)	<u> </u> Saturation Visible on Aerial Imagery (C9)
<u> </u> Algal Mat or Crust (B4)	<u> </u> Recent Iron Reduction in Tilled Soils (C6)	<u> </u> Stunted or Stressed Plants (D1)
<u> </u> Iron Deposits (B5)	<u> </u> Thin Muck Surface (C7)	<u>X</u> Geomorphic Position (D2)
<u> </u> Inundation Visible on Aerial Imagery (B7)	<u> </u> Other (Explain in Remarks)	<u> </u> Shallow Aquitard (D3)
<u> </u> Sparsely Vegetated Concave Surface (B8)		<u> </u> Microtopographic Relief (D4)
		<u> </u> FAC-Neutral Test (D5)

Field Observations: Surface Water Present? Yes <u> </u> No <u>X</u> Depth (inches): Water Table Present? Yes <u> </u> No <u>X</u> Depth (inches): Saturation Present? Yes <u> </u> No <u>X</u> Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Wetland hydrology present at data point

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-XP

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status																
1. <u>Populus deltoides</u>	40	Yes	FAC	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75</u> (A/B)															
2. <u>Quercus rubra</u>	10	Yes	FACU																
3. _____																			
4. _____																			
5. _____																			
6. _____																			
7. _____																			
	50	= Total Cover		Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>115</u></td> <td>x 3 = <u>345</u></td> </tr> <tr> <td>FACU species <u>10</u></td> <td>x 4 = <u>40</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>125</u> (A)</td> <td><u>385</u> (B)</td> </tr> </table> Prevalence Index = B/A = 3.08		Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>115</u>	x 3 = <u>345</u>	FACU species <u>10</u>	x 4 = <u>40</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>125</u> (A)	<u>385</u> (B)
Total % Cover of:	Multiply by:																		
OBL species <u>0</u>	x 1 = <u>0</u>																		
FACW species <u>0</u>	x 2 = <u>0</u>																		
FAC species <u>115</u>	x 3 = <u>345</u>																		
FACU species <u>10</u>	x 4 = <u>40</u>																		
UPL species <u>0</u>	x 5 = <u>0</u>																		
Column Totals: <u>125</u> (A)	<u>385</u> (B)																		
Sapling/Shrub Stratum (Plot size: 15 ft.)																			
1. <u>Frangula alnus</u>	40	Yes	FAC																
2. <u>Crataegus douglasii</u>	35	Yes	FAC																
3. _____																			
4. _____																			
5. _____																			
6. _____																			
7. _____																			
	75	= Total Cover		Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> X</u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.															
Herb Stratum (Plot size: 5 ft.)																			
1. _____																			
2. _____																			
3. _____																			
4. _____																			
5. _____																			
6. _____																			
7. _____																			
8. _____																			
9. _____																			
10. _____																			
11. _____																			
12. _____																			
	0	= Total Cover		Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.															
Woody Vine Stratum (Plot size: 30 ft.)																			
1. _____																			
2. _____																			
3. _____																			
4. _____																			
	0	= Total Cover																	
Hydrophytic Vegetation Present? Yes <u> X </u> No _____																			
Remarks: (Include photo numbers here or on a separate sheet.) Hydrophytic vegetation found at data point																			

SOIL

Sampling Point: DP-XP

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

[illegible]

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

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R , |
| <input type="checkbox"/> Histic Epipedon (A2) | MLRA 149B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input checked="" type="checkbox"/> X Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L, M**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches):

Hydric Soil Present?	Yes	X	No
----------------------	-----	---	----

Remarks:

Hydric soils present at data point



Wetland FA-XP- View Facing North



Wetland FA-XP- Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-XP-Upland

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Acer saccharum</u>	25	Yes	FACU	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>20</u> (A/B)
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
<u>25</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: 15 ft.)				
1. <u>Lonicera morrowii</u>	60	Yes	FACU	Prevalence Index worksheet: <div style="display: flex; justify-content: space-between;"> Total % Cover of: Multiply by: </div> OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>15</u> x 3 = <u>45</u> FACU species <u>115</u> x 4 = <u>460</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>130</u> (A) <u>505</u> (B) Prevalence Index = B/A = 3.88
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
<u>60</u> = Total Cover				
Herb Stratum (Plot size: 5 ft.)				
1. <u>Rosa multiflora</u>	20	Yes	FACU	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> X</u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Alliaria petiolata</u>	30	Yes	FACU	
3. <u>Toxicodendron radicans</u>	15	No	FAC	
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
12. _____				
<u>65</u> = Total Cover				
Woody Vine Stratum (Plot size: 30 ft.)				
1. _____				Hydrophytic Vegetation Present? Yes <u> </u> <u>X</u> No <u> </u>
2. _____				
3. _____				
4. _____				
<u>0</u> = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: DP-XP-Upland

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

[illegible]

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

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> MLRA 149B |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L, M**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches):

Hydric Soil Present? Yes No **X**

Remarks:

Remarks:
Could not dig past 6 inches due to root refusal, no hydric soils present at data point



Upland FA-XP- View Facing South



Upland FA-XP- Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Rotterdam/Schenectady Sampling Date: 12/10/21
 Applicant/Owner: TDI State: NY Sampling Point: C-4B-A-4 Wet
 Investigator(s): J. Greaves & C. Einstein Section, Township, Range: _____
 Landform (hillside, terrace, etc.): Depression/basin Local relief (concave, convex, none): Concave Slope %: 2
 Subregion (LRR or MLRA): LRR R Lat: 42-50-37N Long: 74-00-16W Datum: WGS84
 Soil Map Unit Name: UnB - Unadilla silt loam, 0 to 8 percent slopes NWI classification: PEM1
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes <u>X</u>	No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: _____
Hydric Soil Present?	Yes <u>X</u>	No _____	
Wetland Hydrology Present?	Yes <u>X</u>	No _____	
Remarks: (Explain alternative procedures here or in a separate report.) Shallow emergent marsh.			

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input checked="" type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <u>X</u> No _____ Depth (inches): <u>2</u> Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>6</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)		Wetland Hydrology Present? Yes <u>X</u> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION – Use scientific names of plants.

 Sampling Point: C-4B-A-4 Wet

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u><i>Alnus incana</i></u>	<u>5</u>	<u>Yes</u>	<u>FACW</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B) Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;">Total % Cover of:</th> <th style="width: 60%;">Multiply by:</th> </tr> </thead> <tbody> <tr> <td>OBL species <u>96</u></td> <td>x 1 = <u>96</u></td> </tr> <tr> <td>FACW species <u>14</u></td> <td>x 2 = <u>28</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>110</u> (A)</td> <td><u>124</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>1.13</u></td> </tr> </tbody> </table>	Total % Cover of:	Multiply by:	OBL species <u>96</u>	x 1 = <u>96</u>	FACW species <u>14</u>	x 2 = <u>28</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>110</u> (A)	<u>124</u> (B)	Prevalence Index = B/A = <u>1.13</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>96</u>	x 1 = <u>96</u>																			
FACW species <u>14</u>	x 2 = <u>28</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>110</u> (A)	<u>124</u> (B)																			
Prevalence Index = B/A = <u>1.13</u>																				
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>5</u>	<u>=Total Cover</u>																		
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. <u><i>Salix alba</i></u>	<u>5</u>	<u>Yes</u>	<u>FACW</u>	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>5</u>	<u>=Total Cover</u>																		
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u><i>Schoenoplectus tabernaemontani</i></u>	<u>90</u>	<u>Yes</u>	<u>OBL</u>	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes <u>X</u> No _____																
2. <u><i>Phragmites australis</i></u>	<u>4</u>	<u>No</u>	<u>FACW</u>																	
3. <u><i>Lythrum salicaria</i></u>	<u>3</u>	<u>No</u>	<u>OBL</u>																	
4. <u><i>Typha latifolia</i></u>	<u>3</u>	<u>No</u>	<u>OBL</u>																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
	<u>100</u>	<u>=Total Cover</u>																		
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
	_____	<u>=Total Cover</u>																		

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

SOIL

Sampling Point C-4B-A-4 Wet

[illegible]



Wetland C-4B-A-4 - View facing south.



Wetland C-4B-A-4 - Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Rotterdam/Schenectady Sampling Date: 12/10/21
Applicant/Owner: TDI State: NY Sampling Point: C-4B-A-4 Upl
Investigator(s): J. Greaves & C. Einstein Section, Township, Range: _____
Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope %: 35
Subregion (LRR or MLRA): LRR R Lat: 42-50-38N Long: 74-00-16W Datum: WGS84
Soil Map Unit Name: UnB - Unadilla silt loam, 0 to 8 percent slopes NWI classification: _____
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks: (Explain alternative procedures here or in a separate report.) Successional old field.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ____ Surface Water (A1) ____ Water-Stained Leaves (B9) ____ High Water Table (A2) ____ Aquatic Fauna (B13) ____ Saturation (A3) ____ Marl Deposits (B15) ____ Water Marks (B1) ____ Hydrogen Sulfide Odor (C1) ____ Sediment Deposits (B2) ____ Oxidized Rhizospheres on Living Roots (C3) ____ Drift Deposits (B3) ____ Presence of Reduced Iron (C4) ____ Algal Mat or Crust (B4) ____ Recent Iron Reduction in Tilled Soils (C6) ____ Iron Deposits (B5) ____ Thin Muck Surface (C7) ____ Inundation Visible on Aerial Imagery (B7) ____ Other (Explain in Remarks) ____ Sparsely Vegetated Concave Surface (B8)		<u>Secondary Indicators (minimum of two required)</u> ____ Surface Soil Cracks (B6) ____ Drainage Patterns (B10) ____ Moss Trim Lines (B16) ____ Dry-Season Water Table (C2) ____ Crayfish Burrows (C8) ____ Saturation Visible on Aerial Imagery (C9) ____ Stunted or Stressed Plants (D1) ____ Geomorphic Position (D2) ____ ? Shallow Aquitard (D3) ____ Microtopographic Relief (D4) ____ FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)		Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION – Use scientific names of plants.

 Sampling Point: C-4B-A-4 Upl

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>20.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>15</u></td> <td>x 3 = <u>45</u></td> </tr> <tr> <td>FACU species <u>65</u></td> <td>x 4 = <u>260</u></td> </tr> <tr> <td>UPL species <u>20</u></td> <td>x 5 = <u>100</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>405</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>4.05</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>15</u>	x 3 = <u>45</u>	FACU species <u>65</u>	x 4 = <u>260</u>	UPL species <u>20</u>	x 5 = <u>100</u>	Column Totals: <u>100</u> (A)	<u>405</u> (B)	Prevalence Index = B/A = <u>4.05</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>0</u>	x 2 = <u>0</u>																			
FAC species <u>15</u>	x 3 = <u>45</u>																			
FACU species <u>65</u>	x 4 = <u>260</u>																			
UPL species <u>20</u>	x 5 = <u>100</u>																			
Column Totals: <u>100</u> (A)	<u>405</u> (B)																			
Prevalence Index = B/A = <u>4.05</u>																				
=Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover																				
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Vicia cracca</u>	<u>20</u>	<u>Yes</u>	<u>UPL</u>	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Cirsium arvense</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Alliaria petiolata</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>																	
4. <u>Panicum capillare</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>																	
5. <u>Symphotrichum ericoides</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>																	
6. <u>Monarda fistulosa</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
7. <u>Andropogon gerardii</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
8. <u>Schizachyrium scoparium</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
100 =Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
=Total Cover																				

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

SOIL

Sampling Point C-4B-A-4 Upd

[illegible]



Upland C-4B-A-4 - View facing northwest.



Upland C-4B-A-4 - Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Rotterdam/ Schenectady Sampling Date: 1/6/22
 Applicant/Owner: TDI State: NY Sampling Point: I-890 A-1 Wet
 Investigator(s): C. Einstein Section, Township, Range: _____
 Landform (hillside, terrace, etc.): embankment Local relief (concave, convex, none): _____ Slope %: _____
 Subregion (LRR or MLRA): LRR R Lat: 42-50-31.49N Long: 74-0-19.66W Datum: _____
 Soil Map Unit Name: Teel sile loam (Te) NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes <u>X</u>	No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: _____
Hydric Soil Present?	Yes <u>X</u>	No _____	
Wetland Hydrology Present?	Yes <u>X</u>	No _____	
Remarks: (Explain alternative procedures here or in a separate report.)			

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ Water-Stained Leaves (B9) _____ High Water Table (A2) _____ Aquatic Fauna (B13) <u>X</u> Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)		<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) _____ Geomorphic Position (D2) ? Shallow Aquitard (D3) _____ Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>x</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>x</u> Depth (inches): _____ Saturation Present? Yes <u>x</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)		Wetland Hydrology Present? Yes <u>X</u> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION – Use scientific names of plants.

 Sampling Point: I-890 A-1 Wet

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Salix alba</u>	<u>30</u>	<u>Yes</u>	<u>FACW</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B) Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> <tr> <td>OBL species <u>30</u></td> <td>x 1 = <u>30</u></td> </tr> <tr> <td>FACW species <u>90</u></td> <td>x 2 = <u>180</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>5</u></td> <td>x 4 = <u>20</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>125</u> (A)</td> <td><u>230</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>1.84</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>30</u>	x 1 = <u>30</u>	FACW species <u>90</u>	x 2 = <u>180</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>5</u>	x 4 = <u>20</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>125</u> (A)	<u>230</u> (B)	Prevalence Index = B/A = <u>1.84</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>30</u>	x 1 = <u>30</u>																			
FACW species <u>90</u>	x 2 = <u>180</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>5</u>	x 4 = <u>20</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>125</u> (A)	<u>230</u> (B)																			
Prevalence Index = B/A = <u>1.84</u>																				
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>30</u>	<u>=Total Cover</u>																		
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. <u>Salix alba</u>	<u>20</u>	<u>Yes</u>	<u>FACW</u>	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>20</u>	<u>=Total Cover</u>																		
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Phragmites australis</u>	<u>40</u>	<u>Yes</u>	<u>FACW</u>	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																
2. <u>Lythrum salicaria</u>	<u>30</u>	<u>Yes</u>	<u>OBL</u>																	
3. <u>Solidago canadensis</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
	<u>75</u>	<u>=Total Cover</u>																		
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
	_____	<u>=Total Cover</u>																		

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

SOIL

Sampling Point I-890 A-1 Wet

[illegible]



Wetland I-890-A-1- View facing east



Wetland I-890-A-1- Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE City/County: Rotterdam/Schenectady Sampling Date: 1/6/22
 Applicant/Owner: TDI State: NY Sampling Point: I-890-A-1 Upl
 Investigator(s): C. Einstein Section, Township, Range: _____
 Landform (hillside, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope %: _____
 Subregion (LRR or MLRA): LRR R Lat: 42-50-31.56N Long: 74-0-20.18W Datum: _____
 Soil Map Unit Name: Teel silt loam (Te) NWI classification: n/a

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes _____ No <u>X</u> Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.)	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ Water-Stained Leaves (B9) _____ High Water Table (A2) _____ Aquatic Fauna (B13) _____ Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) _____ Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) _____ FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>x</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>x</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>x</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

Sampling Point: I-890-A-1 Upl

Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status
1.	<i>Pinus strobus</i>	20	Yes	FACU
2.	<i>Prunus serotina</i>	10	Yes	FACU
3.				
4.				
5.				
6.				
7.				
		30	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15')				
1.	<i>Rhus typhina</i>	20	Yes	UPL
2.				
3.				
4.				
5.				
6.				
7.				
		20	=Total Cover	
Herb Stratum (Plot size: 5')				
1.	<i>Solidago canadensis</i>	90	Yes	FACU
2.	<i>Asclepias incarnata</i>	5	No	OBL
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
		95	=Total Cover	
Woody Vine Stratum (Plot size: 30')				
1.				
2.				
3.				
4.				
			=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species 5	x 1 = 5
FACW species 0	x 2 = 0
FAC species 0	x 3 = 0
FACU species 120	x 4 = 480
UPL species 20	x 5 = 100
Column Totals: 145 (A)	585 (B)
Prevalence Index = B/A = 4.03	

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation¹ (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes No X

SOIL

Sampling Point I-890-A-1 Upd

[illegible]



Upland I-890- A-1- View facing east



Upland I-890- A-1- Soils

Segment 7-Package 4B

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)
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Project/Site: CHPE City/County: Rotterdam/Schenectady Sampling Date: 5/15/23
Applicant/Owner: TDI State: NY Sampling Point: Wet NGA
Investigator(s): J. Greaves & C. Einstein Section, Township, Range: _____
Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope %: 3
Subregion (LRR or MLRA): LRR R Lat: 42.837621 Long: -74.006253 Datum: NAD83
Soil Map Unit Name: HoC - Hornell silt loam, 8 to 15 percent slopes NWI classification: PEM2
Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Wetland NGA near flag 18</u>
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Remarks: (Explain alternative procedures here or in a separate report.)
Shallow emergent marsh.

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators</u> (minimum of one is required; check all that apply) ____ Surface Water (A1) ____ Water-Stained Leaves (B9) ____ High Water Table (A2) ____ Aquatic Fauna (B13) ____ Saturation (A3) ____ Marl Deposits (B15) ____ Water Marks (B1) ____ Hydrogen Sulfide Odor (C1) ____ Sediment Deposits (B2) <u>X</u> Oxidized Rhizospheres on Living Roots (C3) ____ Drift Deposits (B3) ____ Presence of Reduced Iron (C4) ____ Algal Mat or Crust (B4) ____ Recent Iron Reduction in Tilled Soils (C6) ____ Iron Deposits (B5) ____ Thin Muck Surface (C7) ____ Inundation Visible on Aerial Imagery (B7) ____ Other (Explain in Remarks) ____ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators</u> (minimum of two required) ____ Surface Soil Cracks (B6) ____ Drainage Patterns (B10) ____ Moss Trim Lines (B16) ____ Dry-Season Water Table (C2) ____ Crayfish Burrows (C8) ____ Saturation Visible on Aerial Imagery (C9) ____ Stunted or Stressed Plants (D1) <u>X</u> Geomorphic Position (D2) ____ Shallow Aquitard (D3) ____ Microtopographic Relief (D4) ____ FAC-Neutral Test (D5)
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Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No _____
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

 Sampling Point: Wet NGA

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.7%</u> (A/B) Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>65</u></td> <td>x 2 = <u>130</u></td> </tr> <tr> <td>FAC species <u>32</u></td> <td>x 3 = <u>96</u></td> </tr> <tr> <td>FACU species <u>11</u></td> <td>x 4 = <u>44</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>108</u> (A)</td> <td><u>270</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.50</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>65</u>	x 2 = <u>130</u>	FAC species <u>32</u>	x 3 = <u>96</u>	FACU species <u>11</u>	x 4 = <u>44</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>108</u> (A)	<u>270</u> (B)	Prevalence Index = B/A = <u>2.50</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>65</u>	x 2 = <u>130</u>																			
FAC species <u>32</u>	x 3 = <u>96</u>																			
FACU species <u>11</u>	x 4 = <u>44</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>108</u> (A)	<u>270</u> (B)																			
Prevalence Index = B/A = <u>2.50</u>																				
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. <u>Lonicera morrowii</u>	<u>3</u>	<u>Yes</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Rubus allegheniensis</u>	<u>3</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Cornus racemosa</u>	<u>2</u>	<u>Yes</u>	<u>FAC</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Onoclea sensibilis</u>	<u>50</u>	<u>Yes</u>	<u>FACW</u>	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes <u>X</u> No _____																
2. <u>Solidago gigantea</u>	<u>15</u>	<u>Yes</u>	<u>FACW</u>																	
3. <u>Euthamia graminifolia</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>																	
4. <u>Solidago rugosa</u>	<u>10</u>	<u>No</u>	<u>FAC</u>																	
5. <u>Cornus racemosa</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
6. <u>Rubus allegheniensis</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		=Total Cover																		
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		=Total Cover																		

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

SOIL

Sampling Point: Wet NGA

[illegible]



Wetland NGA- View facing south



Wetland NGA- Soils

Segment 7-Package 4B

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)
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Project/Site: CHPE City/County: Rotterdam/Schenectady Sampling Date: 5/15/23
Applicant/Owner: TDI State: NY Sampling Point: NGA Upl
Investigator(s): J. Greaves & C. Einstein Section, Township, Range: _____
Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope %: 5
Subregion (LRR or MLRA): LRR R Lat: 42.837499 Long: -74.006162 Datum: NAD83
Soil Map Unit Name: HoC - Hornell silt loam, 8 to 15 percent slopes NWI classification: _____
Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are “Normal Circumstances” present? Yes x No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes _____ No <u>X</u> Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: <u>Upland adjacent to Wetland NGA</u>
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Remarks: (Explain alternative procedures here or in a separate report.)
Successional old field.

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators</u> (minimum of one is required; check all that apply) ____ Surface Water (A1) ____ Water-Stained Leaves (B9) ____ High Water Table (A2) ____ Aquatic Fauna (B13) ____ Saturation (A3) ____ Marl Deposits (B15) ____ Water Marks (B1) ____ Hydrogen Sulfide Odor (C1) ____ Sediment Deposits (B2) ____ Oxidized Rhizospheres on Living Roots (C3) ____ Drift Deposits (B3) ____ Presence of Reduced Iron (C4) ____ Algal Mat or Crust (B4) ____ Recent Iron Reduction in Tilled Soils (C6) ____ Iron Deposits (B5) ____ Thin Muck Surface (C7) ____ Inundation Visible on Aerial Imagery (B7) ____ Other (Explain in Remarks) ____ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators</u> (minimum of two required) ____ Surface Soil Cracks (B6) ____ Drainage Patterns (B10) ____ Moss Trim Lines (B16) ____ Dry-Season Water Table (C2) ____ Crayfish Burrows (C8) ____ Saturation Visible on Aerial Imagery (C9) ____ Stunted or Stressed Plants (D1) ____ Geomorphic Position (D2) ____ Shallow Aquitard (D3) ____ Microtopographic Relief (D4) ____ FAC-Neutral Test (D5)
---	--

Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
--	---

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

Remarks:

VEGETATION – Use scientific names of plants.

 Sampling Point: NGA Upl

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u><i>Pinus strobus</i></u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
	<u>10</u>	<u>=Total Cover</u>		Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>5</u></td> <td>x 3 = <u>15</u></td> </tr> <tr> <td>FACU species <u>90</u></td> <td>x 4 = <u>360</u></td> </tr> <tr> <td>UPL species <u>15</u></td> <td>x 5 = <u>75</u></td> </tr> <tr> <td>Column Totals: <u>110</u> (A)</td> <td><u>450</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>4.09</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>5</u>	x 3 = <u>15</u>	FACU species <u>90</u>	x 4 = <u>360</u>	UPL species <u>15</u>	x 5 = <u>75</u>	Column Totals: <u>110</u> (A)	<u>450</u> (B)	Prevalence Index = B/A = <u>4.09</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>0</u>	x 2 = <u>0</u>																			
FAC species <u>5</u>	x 3 = <u>15</u>																			
FACU species <u>90</u>	x 4 = <u>360</u>																			
UPL species <u>15</u>	x 5 = <u>75</u>																			
Column Totals: <u>110</u> (A)	<u>450</u> (B)																			
Prevalence Index = B/A = <u>4.09</u>																				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		<u>=Total Cover</u>																		
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u><i>Poa pratensis</i></u>	<u>45</u>	<u>Yes</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u>Problematic Hydrophytic Vegetation</u> ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u><i>Potentilla simplex</i></u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u><i>Hypericum perforatum</i></u>	<u>10</u>	<u>No</u>	<u>UPL</u>																	
4. <u><i>Verbascum thapsus</i></u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
5. <u><i>Fragaria virginiana</i></u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
6. <u><i>Aralia nudicaulis</i></u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
7. <u><i>Quercus rubra</i></u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
8. <u><i>Plantago major</i></u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
9. <u><i>Euthamia graminifolia</i></u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
	<u>100</u>	<u>=Total Cover</u>																		
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		<u>=Total Cover</u>																		

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

SOIL

Sampling Point: NGA Upl

[illegible]



Upland NGA- View facing north



Upland NGA- Soils

Segment 7-Package 4B

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)
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Project/Site: CHPE City/County: Rotterdam/Schenectady Sampling Date: 5/15/23
Applicant/Owner: TDI State: NY Sampling Point: NGB Wet
Investigator(s): J. Greaves & C. Einstein Section, Township, Range: _____
Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope %: 10
Subregion (LRR or MLRA): LRR R Lat: 42.835195 Long: -74.007218 Datum: NAD83
Soil Map Unit Name: HoC - Hornell silt loam, 8 to 15 percent slopes NWI classification: PEM2
Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are “Normal Circumstances” present? Yes x No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Wetland NGB near flag 15</u>
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Remarks: (Explain alternative procedures here or in a separate report.)
Shallow emergent marsh.

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ____ Surface Water (A1) ____ Water-Stained Leaves (B9) ____ High Water Table (A2) ____ Aquatic Fauna (B13) ____ Saturation (A3) ____ Marl Deposits (B15) ____ Water Marks (B1) ____ Hydrogen Sulfide Odor (C1) ____ Sediment Deposits (B2) <u>X</u> Oxidized Rhizospheres on Living Roots (C3) ____ Drift Deposits (B3) ____ Presence of Reduced Iron (C4) ____ Algal Mat or Crust (B4) ____ Recent Iron Reduction in Tilled Soils (C6) ____ Iron Deposits (B5) ____ Thin Muck Surface (C7) ____ Inundation Visible on Aerial Imagery (B7) ____ Other (Explain in Remarks) ____ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> ____ Surface Soil Cracks (B6) ____ Drainage Patterns (B10) ____ Moss Trim Lines (B16) ____ Dry-Season Water Table (C2) ____ Crayfish Burrows (C8) ____ Saturation Visible on Aerial Imagery (C9) ____ Stunted or Stressed Plants (D1) ____ Geomorphic Position (D2) ____ Shallow Aquitard (D3) ____ Microtopographic Relief (D4) ____ FAC-Neutral Test (D5)
--	--

Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No _____
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

 Sampling Point: NGB Wet

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>5</u></td> <td>x 1 = <u>5</u></td> </tr> <tr> <td>FACW species <u>75</u></td> <td>x 2 = <u>150</u></td> </tr> <tr> <td>FAC species <u>30</u></td> <td>x 3 = <u>90</u></td> </tr> <tr> <td>FACU species <u>20</u></td> <td>x 4 = <u>80</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>130</u> (A)</td> <td><u>325</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>2.50</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>5</u>	x 1 = <u>5</u>	FACW species <u>75</u>	x 2 = <u>150</u>	FAC species <u>30</u>	x 3 = <u>90</u>	FACU species <u>20</u>	x 4 = <u>80</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>130</u> (A)	<u>325</u> (B)	Prevalence Index = B/A = <u>2.50</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>5</u>	x 1 = <u>5</u>																			
FACW species <u>75</u>	x 2 = <u>150</u>																			
FAC species <u>30</u>	x 3 = <u>90</u>																			
FACU species <u>20</u>	x 4 = <u>80</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>130</u> (A)	<u>325</u> (B)																			
Prevalence Index = B/A = <u>2.50</u>																				
=Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. <u>Lonicera morrowii</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u>Cornus racemosa</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover																				
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Onoclea sensibilis</u>	<u>60</u>	<u>Yes</u>	<u>FACW</u>																	
2. <u>Solidago gigantea</u>	<u>15</u>	<u>No</u>	<u>FACW</u>																	
3. <u>Solidago rugosa</u>	<u>15</u>	<u>No</u>	<u>FAC</u>																	
4. <u>Cornus racemosa</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
5. <u>Asclepias incarnata</u>	<u>5</u>	<u>No</u>	<u>OBL</u>																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
=Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. <u>Celastrus orbiculatus</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
=Total Cover																				

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

Hydrophytic Vegetation Indicators:

 1 - Rapid Test for Hydrophytic Vegetation

 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0¹

 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

 Problematic Hydrophytic Vegetation¹ (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes X No

SOIL

Sampling Point NGB Wet**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-5	10YR 3/1	100					Loamy/Clayey	
5-11	10YR 4/1	80	10YR 5/4	10	c	m	Loamy/Clayey	Distinct redox concentrations
			10YR 6/6	5	c	m		Prominent redox concentrations
			10YR 3/6	5	c	PL		Prominent redox concentrations
11-16	2.5Y 6/2	60	10YR 5/8	40	c	m	Loamy/Clayey	Prominent redox concentrations

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators:**

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

Indicators for Problematic Hydric Soils³:

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

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if observed):**Type: Depth (inches): Hydric Soil Present? Yes X No

Remarks:



Wetland NGB- View facing west



Wetland NGB- Soils

Segment 7-Package 4B

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)
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Project/Site: CHPE City/County: Rotterdam/Schenectady Sampling Date: 5/15/23

Applicant/Owner: TDI State: NY Sampling Point: NGC Wet

Investigator(s): J. Greaves & C. Einstein Section, Township, Range: _____

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

Subregion (LRR or MLRA): LRR R Lat: 42.833890 Long: -74.007757 Datum: NAD83

Soil Map Unit Name: LoD - Lordstown gravelly silt loam, 15 to 25 percent slopes. NWI classification: PEM2

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

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

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

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

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Wetland NGC near flag 4</u>
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Remarks: (Explain alternative procedures here or in a separate report.)
 Shallow emergent marsh.

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators</u> (minimum of one is required; check all that apply)	<u>Secondary Indicators</u> (minimum of two required)
<div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> _____ Surface Water (A1) _____ High Water Table (A2) _____ Saturation (A3) _____ Water Marks (B1) <u>X</u> Sediment Deposits (B2) _____ Drift Deposits (B3) _____ Algal Mat or Crust (B4) _____ Iron Deposits (B5) _____ Inundation Visible on Aerial Imagery (B7) _____ Sparsely Vegetated Concave Surface (B8) </div> <div style="width: 50%;"> _____ Water-Stained Leaves (B9) _____ Aquatic Fauna (B13) _____ Marl Deposits (B15) _____ Hydrogen Sulfide Odor (C1) <u>X</u> Oxidized Rhizospheres on Living Roots (C3) _____ Presence of Reduced Iron (C4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Thin Muck Surface (C7) _____ Other (Explain in Remarks) </div> </div>	<div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) _____ Geomorphic Position (D2) <u>X</u> Shallow Aquitard (D3) _____ Microtopographic Relief (D4) </div> <div style="width: 50%;"> _____ FAC-Neutral Test (D5) </div> </div>

Field Observations: Surface Water Present? Yes _____ No _____ Depth (inches): _____ Water Table Present? Yes _____ No _____ Depth (inches): _____ Saturation Present? Yes _____ No _____ Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No _____
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

 Sampling Point: NGC Wet

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>85.7%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>20</u></td> <td>x 1 = <u>20</u></td> </tr> <tr> <td>FACW species <u>25</u></td> <td>x 2 = <u>50</u></td> </tr> <tr> <td>FAC species <u>27</u></td> <td>x 3 = <u>81</u></td> </tr> <tr> <td>FACU species <u>12</u></td> <td>x 4 = <u>48</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>84</u> (A)</td> <td><u>199</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>2.37</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>20</u>	x 1 = <u>20</u>	FACW species <u>25</u>	x 2 = <u>50</u>	FAC species <u>27</u>	x 3 = <u>81</u>	FACU species <u>12</u>	x 4 = <u>48</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>84</u> (A)	<u>199</u> (B)	Prevalence Index = B/A = <u>2.37</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>20</u>	x 1 = <u>20</u>																			
FACW species <u>25</u>	x 2 = <u>50</u>																			
FAC species <u>27</u>	x 3 = <u>81</u>																			
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UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>84</u> (A)	<u>199</u> (B)																			
Prevalence Index = B/A = <u>2.37</u>																				
=Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. <u>Lonicera morrowii</u>	<u>2</u>	<u>No</u>	<u>FACU</u>																	
2. <u>Cornus racemosa</u>	<u>2</u>	<u>No</u>	<u>FAC</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover																				
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Euthamia graminifolia</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>																	
2. <u>Solidago gigantea</u>	<u>15</u>	<u>Yes</u>	<u>FACW</u>																	
3. <u>Cornus racemosa</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>																	
4. <u>Juncus effusus</u>	<u>10</u>	<u>Yes</u>	<u>OBL</u>																	
5. <u>Lythrum salicaria</u>	<u>10</u>	<u>Yes</u>	<u>OBL</u>																	
6. <u>Fragaria virginiana</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>																	
7. <u>Lysimachia ciliata</u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
=Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
=Total Cover																				

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

Hydrophytic Vegetation Indicators:

 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0¹

 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

 Problematic Hydrophytic Vegetation¹ (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation

Present? Yes X No

SOIL

Sampling Point: NGC Wet

[illegible]



Wetland NGC- View facing west



Wetland NGC- Soils

Segment 7-Package 4B

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)
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Project/Site: CHPE City/County: Rotterdam/Schenectady Sampling Date: 5/15/23
Applicant/Owner: TDI State: NY Sampling Point: NGB & NGC Upl
Investigator(s): J. Greaves & C. Einstein Section, Township, Range: _____
Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope %: 35
Subregion (LRR or MLRA): LRR R Lat: 42.834942 Long: -74.007166 Datum: NAD83
Soil Map Unit Name: NaB - Nassau channery silt loam, 0 to 8 percent slopes NWI classification: _____
Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: <u>Upl adjacent to Wetlands NGB & NGC</u>
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes _____ No <u>X</u>	

Remarks: (Explain alternative procedures here or in a separate report.)
Successional old field/maintained ROW. Shared upland point for wetlands NGB and NGC due to homogeneity of the area.

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ____ Surface Water (A1) ____ Water-Stained Leaves (B9) ____ High Water Table (A2) ____ Aquatic Fauna (B13) ____ Saturation (A3) ____ Marl Deposits (B15) ____ Water Marks (B1) ____ Hydrogen Sulfide Odor (C1) ____ Sediment Deposits (B2) ____ Oxidized Rhizospheres on Living Roots (C3) ____ Drift Deposits (B3) ____ Presence of Reduced Iron (C4) ____ Algal Mat or Crust (B4) ____ Recent Iron Reduction in Tilled Soils (C6) ____ Iron Deposits (B5) ____ Thin Muck Surface (C7) ____ Inundation Visible on Aerial Imagery (B7) ____ Other (Explain in Remarks) ____ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> ____ Surface Soil Cracks (B6) ____ Drainage Patterns (B10) ____ Moss Trim Lines (B16) ____ Dry-Season Water Table (C2) ____ Crayfish Burrows (C8) ____ Saturation Visible on Aerial Imagery (C9) ____ Stunted or Stressed Plants (D1) ____ Geomorphic Position (D2) ____ Shallow Aquitard (D3) ____ Microtopographic Relief (D4) ____ FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

VEGETATION – Use scientific names of plants.

 Sampling Point: NGB & NGC Upl

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B) Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>5</u></td> <td>x 2 = <u>10</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>87</u></td> <td>x 4 = <u>348</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>92</u> (A)</td> <td><u>358</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.89</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>5</u>	x 2 = <u>10</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>87</u>	x 4 = <u>348</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>92</u> (A)	<u>358</u> (B)	Prevalence Index = B/A = <u>3.89</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>5</u>	x 2 = <u>10</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
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UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>92</u> (A)	<u>358</u> (B)																			
Prevalence Index = B/A = <u>3.89</u>																				
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. <u>Rubus allegheniensis</u>	<u>8</u>	<u>Yes</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u>Problematic Hydrophytic Vegetation</u> ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Lonicera morrowii</u>	<u>3</u>	<u>Yes</u>	<u>FACU</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Poa pratensis</u>	<u>35</u>	<u>Yes</u>	<u>FACU</u>	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>																
2. <u>Lotus corniculatus</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Maianthemum canadense</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>																	
4. <u>Rubus allegheniensis</u>	<u>8</u>	<u>No</u>	<u>FACU</u>																	
5. <u>Quercus rubra</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
6. <u>Ostrya virginiana</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
7. <u>Solidago gigantea</u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
8. <u>Polygala paucifolia</u>	<u>3</u>	<u>No</u>	<u>FACU</u>																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		=Total Cover																		
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		=Total Cover																		

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

SOIL

Sampling Point: NGB & NGC Upl

[illegible]



Upland NGB and NGC- View facing south



Upland NGB and NGC- Soils

Segment 7-Package 4B

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)
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Project/Site: CHPE City/County: Rotterdam/Schenectady Sampling Date: 5/15/23
Applicant/Owner: TDI State: NY Sampling Point: NGD Wet
Investigator(s): J. Greaves & C. Einstein Section, Township, Range: _____
Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope %: 10
Subregion (LRR or MLRA): LRR R Lat: 42.833882 Long: -74.007783 Datum: NAD83
Soil Map Unit Name: LoD - Lordstown gravelly silt loam, 15 to 25 percent slopes NWI classification: PEM2
Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are “Normal Circumstances” present? Yes x No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Wetland NGD</u>
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	

Remarks: (Explain alternative procedures here or in a separate report.)
Shallow emergent marsh.

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators</u> (minimum of one is required; check all that apply) ____ Surface Water (A1) ____ Water-Stained Leaves (B9) <u>X</u> High Water Table (A2) ____ Aquatic Fauna (B13) <u>X</u> Saturation (A3) ____ Marl Deposits (B15) ____ Water Marks (B1) ____ Hydrogen Sulfide Odor (C1) ____ Sediment Deposits (B2) ____ Oxidized Rhizospheres on Living Roots (C3) ____ Drift Deposits (B3) ____ Presence of Reduced Iron (C4) ____ Algal Mat or Crust (B4) ____ Recent Iron Reduction in Tilled Soils (C6) ____ Iron Deposits (B5) ____ Thin Muck Surface (C7) ____ Inundation Visible on Aerial Imagery (B7) ____ Other (Explain in Remarks) ____ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators</u> (minimum of two required) ____ Surface Soil Cracks (B6) ____ Drainage Patterns (B10) ____ Moss Trim Lines (B16) ____ Dry-Season Water Table (C2) ____ Crayfish Burrows (C8) ____ Saturation Visible on Aerial Imagery (C9) ____ Stunted or Stressed Plants (D1) <u>X</u> Geomorphic Position (D2) <u>X</u> Shallow Aquitard (D3) ____ Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>12</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

VEGETATION – Use scientific names of plants.

 Sampling Point: NGD Wet

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
		=Total Cover		
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>Lonicera morrowii</u>	2	No	FACU	
2. <u>Rubus allegheniensis</u>	2	No	FACU	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
		4 =Total Cover		
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Onoclea sensibilis</u>	70	Yes	FACW	
2. <u>Solidago gigantea</u>	10	No	FACW	
3. <u>Solidago rugosa</u>	10	No	FAC	
4. <u>Lysimachia ciliata</u>	5	No	FACW	
5. <u>Scirpus atrovirens</u>	5	No	OBL	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
		100 =Total Cover		
Woody Vine Stratum (Plot size: <u>30'</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
		=Total Cover		

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
 Total Number of Dominant Species Across All Strata: 1 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>5</u>	x 1 = <u>5</u>
FACW species <u>85</u>	x 2 = <u>170</u>
FAC species <u>10</u>	x 3 = <u>30</u>
FACU species <u>4</u>	x 4 = <u>16</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>104</u> (A)	<u>221</u> (B)
Prevalence Index = B/A = <u>2.13</u>	

Hydrophytic Vegetation Indicators:
 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0¹
 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:
Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes X No

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

SOIL

Sampling Point: NGD Wet

[illegible]



Wetland NGD- View facing west



Wetland NGD- Soils

Segment 7-Package 4B

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)
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Project/Site: CHPE City/County: Rotterdam/Schenectady Sampling Date: 5/15/23
Applicant/Owner: TDI State: NY Sampling Point: NGE Wet
Investigator(s): C. Scrivner & C. Einstein Section, Township, Range: _____
Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope %: 2
Subregion (LRR or MLRA): LRR R Lat: 42.832754 Long: -74.008319 Datum: NAD83
Soil Map Unit Name: NaB - Nassau channery silt loam, 0 to 8 percent slopes NWI classification: PEM2
Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Wetland NGE near flag 2</u>
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Remarks: (Explain alternative procedures here or in a separate report.)
Shallow emergent marsh.

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators</u> (minimum of one is required; check all that apply) ____ Surface Water (A1) ____ Water-Stained Leaves (B9) ____ High Water Table (A2) ____ Aquatic Fauna (B13) ____ Saturation (A3) ____ Marl Deposits (B15) ____ Water Marks (B1) ____ Hydrogen Sulfide Odor (C1) ____ Sediment Deposits (B2) ____ Oxidized Rhizospheres on Living Roots (C3) ____ Drift Deposits (B3) ____ Presence of Reduced Iron (C4) ____ Algal Mat or Crust (B4) ____ Recent Iron Reduction in Tilled Soils (C6) ____ Iron Deposits (B5) ____ Thin Muck Surface (C7) ____ Inundation Visible on Aerial Imagery (B7) ____ Other (Explain in Remarks) ____ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators</u> (minimum of two required) ____ Surface Soil Cracks (B6) <u>X</u> Drainage Patterns (B10) ____ Moss Trim Lines (B16) ____ Dry-Season Water Table (C2) ____ Crayfish Burrows (C8) ____ Saturation Visible on Aerial Imagery (C9) ____ Stunted or Stressed Plants (D1) ____ Geomorphic Position (D2) <u>x</u> Shallow Aquitard (D3) ____ Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
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Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>9</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No _____
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

 Sampling Point: NGE Wet

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.7%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>5</u></td> <td>x 1 = <u>5</u></td> </tr> <tr> <td>FACW species <u>55</u></td> <td>x 2 = <u>110</u></td> </tr> <tr> <td>FAC species <u>8</u></td> <td>x 3 = <u>24</u></td> </tr> <tr> <td>FACU species <u>20</u></td> <td>x 4 = <u>80</u></td> </tr> <tr> <td>UPL species <u>30</u></td> <td>x 5 = <u>150</u></td> </tr> <tr> <td>Column Totals: <u>118</u> (A)</td> <td><u>369</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.13</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>5</u>	x 1 = <u>5</u>	FACW species <u>55</u>	x 2 = <u>110</u>	FAC species <u>8</u>	x 3 = <u>24</u>	FACU species <u>20</u>	x 4 = <u>80</u>	UPL species <u>30</u>	x 5 = <u>150</u>	Column Totals: <u>118</u> (A)	<u>369</u> (B)	Prevalence Index = B/A = <u>3.13</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>5</u>	x 1 = <u>5</u>																			
FACW species <u>55</u>	x 2 = <u>110</u>																			
FAC species <u>8</u>	x 3 = <u>24</u>																			
FACU species <u>20</u>	x 4 = <u>80</u>																			
UPL species <u>30</u>	x 5 = <u>150</u>																			
Column Totals: <u>118</u> (A)	<u>369</u> (B)																			
Prevalence Index = B/A = <u>3.13</u>																				
=Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. <u>Cornus racemosa</u>	<u>8</u>	<u>Yes</u>	<u>FAC</u>																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover																				
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Onoclea sensibilis</u>	<u>50</u>	<u>Yes</u>	<u>FACW</u>																	
2. <u>Artemisia vulgaris</u>	<u>30</u>	<u>Yes</u>	<u>UPL</u>																	
3. <u>Poa pratensis</u>	<u>20</u>	<u>No</u>	<u>FACU</u>																	
4. <u>Solidago gigantea</u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
5. <u>Carex stricta</u>	<u>5</u>	<u>No</u>	<u>OBL</u>																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
=Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
=Total Cover																				

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

Hydrophytic Vegetation Indicators:

 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

 3 - Prevalence Index is ≤3.0¹

 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

 Problematic Hydrophytic Vegetation¹ (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes X No

SOIL

Sampling Point: NGE Wet

[illegible]



Wetland NGE- View facing east



Wetland NGE- Soils

Segment 7-Package 4B

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)
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Project/Site: <u>CHPE</u>	City/County: <u>Rotterdam/Schenectady</u>	Sampling Date: <u>5/15/23</u>
Applicant/Owner: <u>TDI</u>	State: <u>NY</u>	Sampling Point: <u>NGD & NGE Upl</u>
Investigator(s): <u>J. Greaves & C. Einstein</u> Section, Township, Range: _____		
Landform (hillside, terrace, etc.): <u>Hillslope</u>	Local relief (concave, convex, none): <u>Convex</u>	Slope %: <u>5</u>
Subregion (LRR or MLRA): <u>LRR R</u>	Lat: <u>42.833987</u>	Long: <u>-74.007584</u> Datum: <u>NAD83</u>
Soil Map Unit Name: <u>NaB - Nassau channery silt loam, 0 to 8 percent slopes</u>		NWI classification: _____
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <u>x</u> No _____ (If no, explain in Remarks.)		
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes <u>x</u> No _____		
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)		

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

Hydrophytic Vegetation Present? Yes _____ No <u>X</u> Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: <u>Upland adjacent to Wetlands NJD & NJE</u>
Remarks: (Explain alternative procedures here or in a separate report.) Successional old field. Shared upland point for Wetlands NGD and NGE due to homogeneity of the area.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) </div> <div style="width: 33%;"> <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks) </div> </div>	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>x</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:	

Sampling Point: NGD & NGE Up1

Tree Stratum (Plot size: 30')		Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
5.				
6.				
7.				
		=Total Cover		
Sapling/Shrub Stratum (Plot size: 15')				
1.				
2.				
3.				
4.				
5.				
6.				
7.				
		=Total Cover		
Herb Stratum (Plot size: 5')				
1.	<i>Poa pratensis</i>	60	Yes	FACU
2.	<i>Fragaria virginiana</i>	5	No	FACU
3.	<i>Artemisia vulgaris</i>	5	No	UPL
4.	<i>Antennaria neglecta</i>	5	No	UPL
5.	<i>Potentilla simplex</i>	5	No	FACU
6.	<i>Plantago major</i>	5	No	FACU
7.				
8.				
9.				
10.				
11.				
12.				
		85	=Total Cover	
Woody Vine Stratum (Plot size: 30')				
1.				
2.				
3.				
4.				
		=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species 0	x 1 = 0
FACW species 0	x 2 = 0
FAC species 0	x 3 = 0
FACU species 75	x 4 = 300
UPL species 10	x 5 = 50
Column Totals: 85 (A)	350 (B)
Prevalence Index = B/A = 4.12	

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation¹ (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes No X

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

SOIL

Sampling Point: NGD & NGE UpI

[illegible]



Upland NGD and NGE- View facing south



Upland NGD and NGE- Soils

Segment 7-Package 4B

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)
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Project/Site: CHPE City/County: Rotterdam/Schenectady Sampling Date: 5/15/23

Applicant/Owner: TDI State: NY Sampling Point: NGF Wet

Investigator(s): C. Scrivner & J. Greaves Section, Township, Range: _____

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

Subregion (LRR or MLRA): LRR R Lat: 42.830444 Long: -74.004817 Datum: NAD83

Soil Map Unit Name: NaB - Nassau channery silt loam, 0 to 8 percent slopes NWI classification: PSS1

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

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

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

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

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Wetland NGF</u>
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Remarks: (Explain alternative procedures here or in a separate report.)
 Shrub swamp.

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators</u> (minimum of one is required; check all that apply) <table style="width:100%;"> <tr> <td><u>X</u> Surface Water (A1)</td> <td><u>X</u> Water-Stained Leaves (B9)</td> </tr> <tr> <td><u>X</u> High Water Table (A2)</td> <td><u> </u> Aquatic Fauna (B13)</td> </tr> <tr> <td><u>X</u> Saturation (A3)</td> <td><u> </u> Marl Deposits (B15)</td> </tr> <tr> <td><u> </u> Water Marks (B1)</td> <td><u> </u> Hydrogen Sulfide Odor (C1)</td> </tr> <tr> <td><u>X</u> Sediment Deposits (B2)</td> <td><u>X</u> Oxidized Rhizospheres on Living Roots (C3)</td> </tr> <tr> <td><u> </u> Drift Deposits (B3)</td> <td><u> </u> Presence of Reduced Iron (C4)</td> </tr> <tr> <td><u> </u> Algal Mat or Crust (B4)</td> <td><u> </u> Recent Iron Reduction in Tilled Soils (C6)</td> </tr> <tr> <td><u> </u> Iron Deposits (B5)</td> <td><u> </u> Thin Muck Surface (C7)</td> </tr> <tr> <td><u> </u> Inundation Visible on Aerial Imagery (B7)</td> <td><u> </u> Other (Explain in Remarks)</td> </tr> <tr> <td><u>X</u> Sparsely Vegetated Concave Surface (B8)</td> <td></td> </tr> </table>	<u>X</u> Surface Water (A1)	<u>X</u> Water-Stained Leaves (B9)	<u>X</u> High Water Table (A2)	<u> </u> Aquatic Fauna (B13)	<u>X</u> Saturation (A3)	<u> </u> Marl Deposits (B15)	<u> </u> Water Marks (B1)	<u> </u> Hydrogen Sulfide Odor (C1)	<u>X</u> Sediment Deposits (B2)	<u>X</u> Oxidized Rhizospheres on Living Roots (C3)	<u> </u> Drift Deposits (B3)	<u> </u> Presence of Reduced Iron (C4)	<u> </u> Algal Mat or Crust (B4)	<u> </u> Recent Iron Reduction in Tilled Soils (C6)	<u> </u> Iron Deposits (B5)	<u> </u> Thin Muck Surface (C7)	<u> </u> Inundation Visible on Aerial Imagery (B7)	<u> </u> Other (Explain in Remarks)	<u>X</u> Sparsely Vegetated Concave Surface (B8)		<u>Secondary Indicators</u> (minimum of two required) <table style="width:100%;"> <tr><td><u> </u> Surface Soil Cracks (B6)</td></tr> <tr><td><u> </u> Drainage Patterns (B10)</td></tr> <tr><td><u> </u> Moss Trim Lines (B16)</td></tr> <tr><td><u> </u> Dry-Season Water Table (C2)</td></tr> <tr><td><u> </u> Crayfish Burrows (C8)</td></tr> <tr><td><u> </u> Saturation Visible on Aerial Imagery (C9)</td></tr> <tr><td><u> </u> Stunted or Stressed Plants (D1)</td></tr> <tr><td><u>X</u> Geomorphic Position (D2)</td></tr> <tr><td><u> </u> Shallow Aquitard (D3)</td></tr> <tr><td><u>X</u> Microtopographic Relief (D4)</td></tr> <tr><td><u>X</u> FAC-Neutral Test (D5)</td></tr> </table>	<u> </u> Surface Soil Cracks (B6)	<u> </u> Drainage Patterns (B10)	<u> </u> Moss Trim Lines (B16)	<u> </u> Dry-Season Water Table (C2)	<u> </u> Crayfish Burrows (C8)	<u> </u> Saturation Visible on Aerial Imagery (C9)	<u> </u> Stunted or Stressed Plants (D1)	<u>X</u> Geomorphic Position (D2)	<u> </u> Shallow Aquitard (D3)	<u>X</u> Microtopographic Relief (D4)	<u>X</u> FAC-Neutral Test (D5)
<u>X</u> Surface Water (A1)	<u>X</u> Water-Stained Leaves (B9)																															
<u>X</u> High Water Table (A2)	<u> </u> Aquatic Fauna (B13)																															
<u>X</u> Saturation (A3)	<u> </u> Marl Deposits (B15)																															
<u> </u> Water Marks (B1)	<u> </u> Hydrogen Sulfide Odor (C1)																															
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<u>X</u> Microtopographic Relief (D4)																																
<u>X</u> FAC-Neutral Test (D5)																																

Field Observations: Surface Water Present? Yes <u>X</u> No _____ Depth (inches): <u>1</u> Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>6</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No _____
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

 Sampling Point: NGF Wet

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B) Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>33</u></td> <td>x 1 = <u>33</u></td> </tr> <tr> <td>FACW species <u>88</u></td> <td>x 2 = <u>176</u></td> </tr> <tr> <td>FAC species <u>10</u></td> <td>x 3 = <u>30</u></td> </tr> <tr> <td>FACU species <u>5</u></td> <td>x 4 = <u>20</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>136</u> (A)</td> <td><u>259</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>1.90</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>33</u>	x 1 = <u>33</u>	FACW species <u>88</u>	x 2 = <u>176</u>	FAC species <u>10</u>	x 3 = <u>30</u>	FACU species <u>5</u>	x 4 = <u>20</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>136</u> (A)	<u>259</u> (B)	Prevalence Index = B/A = <u>1.90</u>	
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2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. <u>Spiraea alba</u>	<u>65</u>	<u>Yes</u>	<u>FACW</u>	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Lonicera morrowii</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
3. <u>Populus deltoides</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
4. <u>Ilex verticillata</u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
5. <u>Cornus racemosa</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Lythrum salicaria</u>	<u>25</u>	<u>Yes</u>	<u>OBL</u>	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes <u>X</u> No _____																
2. <u>Solidago gigantea</u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>																	
3. <u>Scirpus atrovirens</u>	<u>8</u>	<u>No</u>	<u>OBL</u>																	
4. <u>Spiraea alba</u>	<u>8</u>	<u>No</u>	<u>FACW</u>																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		=Total Cover																		
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		=Total Cover																		

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

SOIL

Sampling Point: NGF Wet

[illegible]



Wetland NGF- View facing north



Wetland NGF- Soils

Segment 7-Package 4B

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)
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Project/Site: CHPE City/County: Rotterdam/Schenectady Sampling Date: 5/15/23

Applicant/Owner: TDI State: NY Sampling Point: NGG Wet

Investigator(s): J. Greaves & C. Scrivner Section, Township, Range: _____

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

Subregion (LRR or MLRA): LRR R Lat: 42.830257 Long: -74.004936 Datum: NAD83

Soil Map Unit Name: NaB - Nassau channery silt loam, 0 to 8 percent slopes NWI classification: PEM1

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

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

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

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

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Wetland NGG</u>
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Remarks: (Explain alternative procedures here or in a separate report.)
 Shallow emergent marsh.

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators</u> (minimum of one is required; check all that apply) <div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8) </div> <div style="width: 33%;"> <input checked="" type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks) </div> </div>	<u>Secondary Indicators</u> (minimum of two required) <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) </div> <div style="width: 50%;"> <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) </div> </div>
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Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No _____
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

 Sampling Point: NGG Wet

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B) Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>90</u></td> <td>x 2 = <u>180</u></td> </tr> <tr> <td>FAC species <u>27</u></td> <td>x 3 = <u>81</u></td> </tr> <tr> <td>FACU species <u>7</u></td> <td>x 4 = <u>28</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>124</u> (A)</td> <td><u>289</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.33</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>90</u>	x 2 = <u>180</u>	FAC species <u>27</u>	x 3 = <u>81</u>	FACU species <u>7</u>	x 4 = <u>28</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>124</u> (A)	<u>289</u> (B)	Prevalence Index = B/A = <u>2.33</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>90</u>	x 2 = <u>180</u>																			
FAC species <u>27</u>	x 3 = <u>81</u>																			
FACU species <u>7</u>	x 4 = <u>28</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>124</u> (A)	<u>289</u> (B)																			
Prevalence Index = B/A = <u>2.33</u>																				
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. <u>Spiraea alba</u>	<u>20</u>	<u>Yes</u>	<u>FACW</u>	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Sambucus canadensis</u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
3. <u>Viburnum lentago</u>	<u>2</u>	<u>No</u>	<u>FAC</u>																	
4. <u>Lonicera morrowii</u>	<u>2</u>	<u>No</u>	<u>FACU</u>																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Phalaris arundinacea</u>	<u>30</u>	<u>Yes</u>	<u>FACW</u>	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes <u>X</u> No _____																
2. <u>Onoclea sensibilis</u>	<u>15</u>	<u>Yes</u>	<u>FACW</u>																	
3. <u>Spiraea alba</u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>																	
4. <u>Solidago rugosa</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>																	
5. <u>Solidago gigantea</u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>																	
6. <u>Geranium maculatum</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
7. <u>Euthamia graminifolia</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
8. <u>Viburnum dentatum</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
9. <u>Viburnum lentago</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		=Total Cover																		
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		=Total Cover																		

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

SOIL

Sampling Point: NGG Wet

[illegible]



Wetland NGG- View facing northeast



Wetland NGG- Soils

Segment 7-Package 4B

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)
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Project/Site: CHPE City/County: Rotterdam/Schenectady Sampling Date: 5/15/23
Applicant/Owner: TDI State: NY Sampling Point: NGF & NGG Upl
Investigator(s): J. Greaves & C. Einstein Section, Township, Range: _____
Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope %: 5
Subregion (LRR or MLRA): LRR R Lat: 42.830323 Long: -74.004587 Datum: NAD83
Soil Map Unit Name: NaB - Nassau channery silt loam, 0 to 8 percent slopes NWI classification: _____
Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: <u>Upland adjacent to Wetlands NGF & NGG</u>
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes _____ No <u>X</u>	

Remarks: (Explain alternative procedures here or in a separate report.)
Successional old field.

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ____ Surface Water (A1) ____ Water-Stained Leaves (B9) ____ High Water Table (A2) ____ Aquatic Fauna (B13) ____ Saturation (A3) ____ Marl Deposits (B15) ____ Water Marks (B1) ____ Hydrogen Sulfide Odor (C1) ____ Sediment Deposits (B2) ____ Oxidized Rhizospheres on Living Roots (C3) ____ Drift Deposits (B3) ____ Presence of Reduced Iron (C4) ____ Algal Mat or Crust (B4) ____ Recent Iron Reduction in Tilled Soils (C6) ____ Iron Deposits (B5) ____ Thin Muck Surface (C7) ____ Inundation Visible on Aerial Imagery (B7) ____ Other (Explain in Remarks) ____ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> ____ Surface Soil Cracks (B6) ____ Drainage Patterns (B10) ____ Moss Trim Lines (B16) ____ Dry-Season Water Table (C2) ____ Crayfish Burrows (C8) ____ Saturation Visible on Aerial Imagery (C9) ____ Stunted or Stressed Plants (D1) ____ Geomorphic Position (D2) ____ Shallow Aquitard (D3) ____ Microtopographic Relief (D4) ____ FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

VEGETATION – Use scientific names of plants.

 Sampling Point: NGF & NGG Upl

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>9</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33.3%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>20</u></td> <td>x 2 = <u>40</u></td> </tr> <tr> <td>FAC species <u>25</u></td> <td>x 3 = <u>75</u></td> </tr> <tr> <td>FACU species <u>85</u></td> <td>x 4 = <u>340</u></td> </tr> <tr> <td>UPL species <u>10</u></td> <td>x 5 = <u>50</u></td> </tr> <tr> <td>Column Totals: <u>140</u> (A)</td> <td><u>505</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.61</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>20</u>	x 2 = <u>40</u>	FAC species <u>25</u>	x 3 = <u>75</u>	FACU species <u>85</u>	x 4 = <u>340</u>	UPL species <u>10</u>	x 5 = <u>50</u>	Column Totals: <u>140</u> (A)	<u>505</u> (B)	Prevalence Index = B/A = <u>3.61</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>20</u>	x 2 = <u>40</u>																			
FAC species <u>25</u>	x 3 = <u>75</u>																			
FACU species <u>85</u>	x 4 = <u>340</u>																			
UPL species <u>10</u>	x 5 = <u>50</u>																			
Column Totals: <u>140</u> (A)	<u>505</u> (B)																			
Prevalence Index = B/A = <u>3.61</u>																				
=Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. <u>Lonicera morrowii</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u>Cornus racemosa</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>																	
3. <u>Pinus strobus</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
4. <u>Salix alba</u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
5. <u>Cornus amomum</u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover																				
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Poa pratensis</u>	<u>35</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u>Solidago rugosa</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>																	
3. <u>Rumex acetosa</u>	<u>10</u>	<u>Yes</u>	<u>UPL</u>																	
4. <u>Fragaria virginiana</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>																	
5. <u>Lonicera morrowii</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>																	
6. <u>Rubus hispidus</u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>																	
7. <u>Comandra umbellata</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
=Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
=Total Cover																				

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

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0¹

___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation¹ (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes No X

SOIL

Sampling Point: NGF & NGG UpI

[illegible]



Upland NGF and NGG- View facing west



Upland NGF and NGG- Soils

Segment 7-Package 4B

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)
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Project/Site: CHPE City/County: Rotterdam/Schenectady Sampling Date: 5/15/23

Applicant/Owner: TDI State: NY Sampling Point: NGH Wet

Investigator(s): J. Greaves & C. Scrivner Section, Township, Range: _____

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

Subregion (LRR or MLRA): LRR R Lat: 42.830004 Long: -74.003119 Datum: NAD83

Soil Map Unit Name: NaB - Nassau channery silt loam, 0 to 8 percent slopes NWI classification: PSS1

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

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

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

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

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Wetland NGH</u>
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Remarks: (Explain alternative procedures here or in a separate report.)
 Shrub swamp.

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators</u> (minimum of one is required; check all that apply)	<u>Secondary Indicators</u> (minimum of two required)
<div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> _____ Surface Water (A1) _____ High Water Table (A2) _____ Saturation (A3) _____ Water Marks (B1) <u>X</u> Sediment Deposits (B2) _____ Drift Deposits (B3) _____ Algal Mat or Crust (B4) _____ Iron Deposits (B5) _____ Inundation Visible on Aerial Imagery (B7) <u>X</u> Sparsely Vegetated Concave Surface (B8) </div> <div style="width: 50%;"> <u>X</u> Water-Stained Leaves (B9) _____ Aquatic Fauna (B13) _____ Marl Deposits (B15) _____ Hydrogen Sulfide Odor (C1) <u>X</u> Oxidized Rhizospheres on Living Roots (C3) _____ Presence of Reduced Iron (C4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Thin Muck Surface (C7) _____ Other (Explain in Remarks) </div> </div>	_____ Surface Soil Cracks (B6) <u>X</u> Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) <u>X</u> Geomorphic Position (D2) _____ Shallow Aquitard (D3) <u>X</u> Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)

Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No _____
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

 Sampling Point: NGH Wet

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Quercus bicolor</u>	<u>2</u>	<u>No</u>	<u>FACW</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B) Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> <tr> <td>OBL species <u>15</u></td> <td>x 1 = <u>15</u></td> </tr> <tr> <td>FACW species <u>108</u></td> <td>x 2 = <u>216</u></td> </tr> <tr> <td>FAC species <u>33</u></td> <td>x 3 = <u>99</u></td> </tr> <tr> <td>FACU species <u>12</u></td> <td>x 4 = <u>48</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>168</u> (A)</td> <td><u>378</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.25</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>15</u>	x 1 = <u>15</u>	FACW species <u>108</u>	x 2 = <u>216</u>	FAC species <u>33</u>	x 3 = <u>99</u>	FACU species <u>12</u>	x 4 = <u>48</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>168</u> (A)	<u>378</u> (B)	Prevalence Index = B/A = <u>2.25</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>15</u>	x 1 = <u>15</u>																			
FACW species <u>108</u>	x 2 = <u>216</u>																			
FAC species <u>33</u>	x 3 = <u>99</u>																			
FACU species <u>12</u>	x 4 = <u>48</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>168</u> (A)	<u>378</u> (B)																			
Prevalence Index = B/A = <u>2.25</u>																				
2. <u>Fraxinus pennsylvanica</u>	<u>2</u>	<u>No</u>	<u>FACW</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		<u>4</u> =Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. <u>Spiraea alba</u>	<u>60</u>	<u>Yes</u>	<u>FACW</u>	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Viburnum lentago</u>	<u>3</u>	<u>No</u>	<u>FAC</u>																	
3. <u>Viburnum dentatum</u>	<u>3</u>	<u>No</u>	<u>FAC</u>																	
4. <u>Lonicera morrowii</u>	<u>2</u>	<u>No</u>	<u>FACU</u>																	
5. <u>Populus deltoides</u>	<u>2</u>	<u>No</u>	<u>FAC</u>																	
6. <u>Ilex verticillata</u>	<u>1</u>	<u>No</u>	<u>FACW</u>																	
7. _____	_____	_____	_____																	
		<u>71</u> =Total Cover																		
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Spiraea alba</u>	<u>25</u>	<u>Yes</u>	<u>FACW</u>	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes <u>X</u> No _____																
2. <u>Juncus effusus</u>	<u>10</u>	<u>Yes</u>	<u>OBL</u>																	
3. <u>Solidago gigantea</u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>																	
4. <u>Solidago rugosa</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>																	
5. <u>Euthamia graminifolia</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>																	
6. <u>Lysimachia ciliata</u>	<u>8</u>	<u>No</u>	<u>FACW</u>																	
7. <u>Comandra umbellata</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
8. <u>Populus tremuloides</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
9. <u>Lythrum salicaria</u>	<u>5</u>	<u>No</u>	<u>OBL</u>																	
10. <u>Populus deltoides</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		<u>93</u> =Total Cover																		
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		_____ =Total Cover																		

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

SOIL

Sampling Point: NGH Wet

[illegible]



Wetland NGH- View facing south



Wetland NGH- Soils

Segment 7-Package 4B

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)
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Project/Site: CHPE City/County: Rotterdam/Schenectady Sampling Date: 5/15/23

Applicant/Owner: TDI State: NY Sampling Point: NGH Upl

Investigator(s): J. Greaves & C. Scrivner Section, Township, Range: _____

Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope %: 5

Subregion (LRR or MLRA): LRR R Lat: 42.829950 Long: -74.002957 Datum: NAD83

Soil Map Unit Name: NaB - Nassau channery silt loam, 0 to 8 percent slopes NWI classification: _____

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

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

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

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

Hydrophytic Vegetation Present? Yes _____ No <u>X</u> Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: <u>Upland adjacent to Wetland NGH</u>
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Remarks: (Explain alternative procedures here or in a separate report.)
 Successional old field.

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ Water-Stained Leaves (B9) _____ High Water Table (A2) _____ Aquatic Fauna (B13) _____ Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) _____ Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) _____ FAC-Neutral Test (D5)
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Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

 Sampling Point: NGH Upl

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>5</u></td> <td>x 3 = <u>15</u></td> </tr> <tr> <td>FACU species <u>85</u></td> <td>x 4 = <u>340</u></td> </tr> <tr> <td>UPL species <u>10</u></td> <td>x 5 = <u>50</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>405</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>4.05</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>5</u>	x 3 = <u>15</u>	FACU species <u>85</u>	x 4 = <u>340</u>	UPL species <u>10</u>	x 5 = <u>50</u>	Column Totals: <u>100</u> (A)	<u>405</u> (B)	Prevalence Index = B/A = <u>4.05</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>0</u>	x 2 = <u>0</u>																			
FAC species <u>5</u>	x 3 = <u>15</u>																			
FACU species <u>85</u>	x 4 = <u>340</u>																			
UPL species <u>10</u>	x 5 = <u>50</u>																			
Column Totals: <u>100</u> (A)	<u>405</u> (B)																			
Prevalence Index = B/A = <u>4.05</u>																				
=Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover				Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
=Total Cover																				
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Poa pratensis</u>	<u>55</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u>Populus tremuloides</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
3. <u>Comandra umbellata</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
4. <u>Centaurea stoebe</u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
5. <u>Euthamia graminifolia</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
6. <u>Rumex acetosella</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
7. <u>Potentilla simplex</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
8. <u>Asclepias syriaca</u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
100 =Total Cover				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.																
=Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
=Total Cover																				

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

SOIL

Sampling Point: NGH Up1

[illegible]



Upland NGH- View facing east



Upland NGH- Soils

Segment 7-Package 4B

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)
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Project/Site: CHPE City/County: Rotterdam/Schenectady Sampling Date: 5/16/23
Applicant/Owner: TDI State: NY Sampling Point: NGI Wet
Investigator(s): J. Greaves & C. Einstein Section, Township, Range: _____
Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope %: 3
Subregion (LRR or MLRA): LRR R Lat: 42.829906 Long: -74.003131 Datum: NAD83
Soil Map Unit Name: NaB - Nassau channery silt loam, 0 to 8 percent slopes NWI classification: PSS1
Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Wetland NGI</u>
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	

Remarks: (Explain alternative procedures here or in a separate report.)
Shrub swamp.

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators</u> (minimum of one is required; check all that apply) <u>X</u> Surface Water (A1) <u>X</u> Water-Stained Leaves (B9) ____ High Water Table (A2) _____ Aquatic Fauna (B13) ____ Saturation (A3) _____ Marl Deposits (B15) ____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) <u>X</u> Sediment Deposits (B2) <u>X</u> Oxidized Rhizospheres on Living Roots (C3) ____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) ____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) ____ Iron Deposits (B5) _____ Thin Muck Surface (C7) ____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) ____ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators</u> (minimum of two required) ____ Surface Soil Cracks (B6) ____ Drainage Patterns (B10) ____ Moss Trim Lines (B16) ____ Dry-Season Water Table (C2) ____ Crayfish Burrows (C8) ____ Saturation Visible on Aerial Imagery (C9) ____ Stunted or Stressed Plants (D1) <u>X</u> Geomorphic Position (D2) ____ Shallow Aquitard (D3) <u>X</u> Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
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Field Observations: Surface Water Present? Yes <u>X</u> No _____ Depth (inches): <u>1</u> Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No _____
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

 Sampling Point: NGI Wet

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>7</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B) Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>25</u></td> <td>x 1 = <u>25</u></td> </tr> <tr> <td>FACW species <u>100</u></td> <td>x 2 = <u>200</u></td> </tr> <tr> <td>FAC species <u>30</u></td> <td>x 3 = <u>90</u></td> </tr> <tr> <td>FACU species <u>10</u></td> <td>x 4 = <u>40</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>165</u> (A)</td> <td><u>355</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.15</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>25</u>	x 1 = <u>25</u>	FACW species <u>100</u>	x 2 = <u>200</u>	FAC species <u>30</u>	x 3 = <u>90</u>	FACU species <u>10</u>	x 4 = <u>40</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>165</u> (A)	<u>355</u> (B)	Prevalence Index = B/A = <u>2.15</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>25</u>	x 1 = <u>25</u>																			
FACW species <u>100</u>	x 2 = <u>200</u>																			
FAC species <u>30</u>	x 3 = <u>90</u>																			
FACU species <u>10</u>	x 4 = <u>40</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>165</u> (A)	<u>355</u> (B)																			
Prevalence Index = B/A = <u>2.15</u>																				
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. <u>Spiraea alba</u>	<u>60</u>	<u>Yes</u>	<u>FACW</u>	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Viburnum dentatum</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
3. <u>Lonicera morrowii</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Spiraea alba</u>	<u>30</u>	<u>Yes</u>	<u>FACW</u>	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes <u>X</u> No _____																
2. <u>Juncus effusus</u>	<u>15</u>	<u>Yes</u>	<u>OBL</u>																	
3. <u>Lythrum salicaria</u>	<u>10</u>	<u>Yes</u>	<u>OBL</u>																	
4. <u>Solidago gigantea</u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>																	
5. <u>Solidago rugosa</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>																	
6. <u>Euthamia graminifolia</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>																	
7. <u>Acer rubrum</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
8. <u>Lonicera morrowii</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		=Total Cover																		
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		=Total Cover																		

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

SOIL

Sampling Point: NGI Wet

[illegible]



Wetland NGI- View facing south



Wetland NGI- Soils

Segment 7-Package 4B

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)
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Project/Site: CHPE City/County: Rotterdam/Schenectady Sampling Date: 5/16/23
Applicant/Owner: TDI State: NY Sampling Point: NGI Upl
Investigator(s): J. Greaves & C. Einstein Section, Township, Range: _____
Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope %: 10
Subregion (LRR or MLRA): LRR R Lat: 42.829840 Long: -74.002954 Datum: NAD83
Soil Map Unit Name: NaB - Nassau channery silt loam, 0 to 8 percent slopes NWI classification: _____
Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: <u>Upland adjacent to Wetland NGI</u>
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Remarks: (Explain alternative procedures here or in a separate report.)
Successional old field.

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators</u> (minimum of one is required; check all that apply) ____ Surface Water (A1) ____ Water-Stained Leaves (B9) ____ High Water Table (A2) ____ Aquatic Fauna (B13) ____ Saturation (A3) ____ Marl Deposits (B15) ____ Water Marks (B1) ____ Hydrogen Sulfide Odor (C1) ____ Sediment Deposits (B2) ____ Oxidized Rhizospheres on Living Roots (C3) ____ Drift Deposits (B3) ____ Presence of Reduced Iron (C4) ____ Algal Mat or Crust (B4) ____ Recent Iron Reduction in Tilled Soils (C6) ____ Iron Deposits (B5) ____ Thin Muck Surface (C7) ____ Inundation Visible on Aerial Imagery (B7) ____ Other (Explain in Remarks) ____ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators</u> (minimum of two required) ____ Surface Soil Cracks (B6) ____ Drainage Patterns (B10) ____ Moss Trim Lines (B16) ____ Dry-Season Water Table (C2) ____ Crayfish Burrows (C8) ____ Saturation Visible on Aerial Imagery (C9) ____ Stunted or Stressed Plants (D1) ____ Geomorphic Position (D2) ____ Shallow Aquitard (D3) ____ Microtopographic Relief (D4) ____ FAC-Neutral Test (D5)
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Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

 Sampling Point: NGI Upl

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>60.0%</u> (A/B) Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>55</u></td> <td>x 2 = <u>110</u></td> </tr> <tr> <td>FAC species <u>15</u></td> <td>x 3 = <u>45</u></td> </tr> <tr> <td>FACU species <u>85</u></td> <td>x 4 = <u>340</u></td> </tr> <tr> <td>UPL species <u>10</u></td> <td>x 5 = <u>50</u></td> </tr> <tr> <td>Column Totals: <u>165</u> (A)</td> <td><u>545</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.30</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>55</u>	x 2 = <u>110</u>	FAC species <u>15</u>	x 3 = <u>45</u>	FACU species <u>85</u>	x 4 = <u>340</u>	UPL species <u>10</u>	x 5 = <u>50</u>	Column Totals: <u>165</u> (A)	<u>545</u> (B)	Prevalence Index = B/A = <u>3.30</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>55</u>	x 2 = <u>110</u>																			
FAC species <u>15</u>	x 3 = <u>45</u>																			
FACU species <u>85</u>	x 4 = <u>340</u>																			
UPL species <u>10</u>	x 5 = <u>50</u>																			
Column Totals: <u>165</u> (A)	<u>545</u> (B)																			
Prevalence Index = B/A = <u>3.30</u>																				
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. <u>Spiraea alba</u>	<u>30</u>	<u>Yes</u>	<u>FACW</u>																	
2. <u>Lonicera morrowii</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Cornus racemosa</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>																	
4. <u>Rubus allegheniensis</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
5. <u>Prunus serotina</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Solidago canadensis</u>	<u>40</u>	<u>Yes</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </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 and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes <u>X</u> No _____																
2. <u>Spiraea alba</u>	<u>25</u>	<u>Yes</u>	<u>FACW</u>																	
3. <u>Potentilla simplex</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
4. <u>Monarda punctata</u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
5. <u>Fragaria virginiana</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
6. <u>Comptonia peregrina</u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
7. <u>Comandra umbellata</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		=Total Cover																		
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		=Total Cover																		

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

SOIL

Sampling Point: NGI Up

[illegible]



Upland NGI- View facing west



Upland NGI- Soils

Segment 7-Package 4B

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)
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Project/Site: <u>CHPE</u>	City/County: <u>Rotterdam/Schenectady</u>	Sampling Date: <u>5/16/23</u>
Applicant/Owner: <u>TDI</u>	State: <u>NY</u>	Sampling Point: <u>NGJ Wet</u>
Investigator(s): <u>J. Greaves & C. Einstein</u> Section, Township, Range: _____		
Landform (hillside, terrace, etc.): <u>Hillslope</u>	Local relief (concave, convex, none): <u>Concave</u>	Slope %: <u>25</u>
Subregion (LRR or MLRA): <u>LRR R</u>	Lat: <u>42.829818</u>	Long: <u>-74.002927</u> Datum: <u>NAD83</u>
Soil Map Unit Name: <u>NaB - Nassau channery silt loam, 0 to 8 percent slopes</u>		NWI classification: <u>PEM2</u>
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <u>x</u> No _____ (If no, explain in Remarks.)		
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes <u>x</u> No _____		
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)		

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

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Wetland NGJ</u>
Remarks: (Explain alternative procedures here or in a separate report.) Shallow emergent marsh.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) </div> <div style="width: 50%;"> <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks) </div> </div>	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

VEGETATION – Use scientific names of plants.

 Sampling Point: NGJ Wet

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75.0%</u> (A/B) Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>5</u></td> <td>x 1 = <u>5</u></td> </tr> <tr> <td>FACW species <u>65</u></td> <td>x 2 = <u>130</u></td> </tr> <tr> <td>FAC species <u>45</u></td> <td>x 3 = <u>135</u></td> </tr> <tr> <td>FACU species <u>15</u></td> <td>x 4 = <u>60</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>130</u> (A)</td> <td><u>330</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.54</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>5</u>	x 1 = <u>5</u>	FACW species <u>65</u>	x 2 = <u>130</u>	FAC species <u>45</u>	x 3 = <u>135</u>	FACU species <u>15</u>	x 4 = <u>60</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>130</u> (A)	<u>330</u> (B)	Prevalence Index = B/A = <u>2.54</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>5</u>	x 1 = <u>5</u>																			
FACW species <u>65</u>	x 2 = <u>130</u>																			
FAC species <u>45</u>	x 3 = <u>135</u>																			
FACU species <u>15</u>	x 4 = <u>60</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>130</u> (A)	<u>330</u> (B)																			
Prevalence Index = B/A = <u>2.54</u>																				
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. <u>Spiraea alba</u>	<u>20</u>	<u>Yes</u>	<u>FACW</u>	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Lonicera morrowii</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Euthamia graminifolia</u>	<u>40</u>	<u>Yes</u>	<u>FAC</u>	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes <u>X</u> No _____																
2. <u>Phalaris arundinacea</u>	<u>30</u>	<u>Yes</u>	<u>FACW</u>																	
3. <u>Spiraea alba</u>	<u>10</u>	<u>No</u>	<u>FACW</u>																	
4. <u>Geranium maculatum</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
5. <u>Lysimachia ciliata</u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
6. <u>Lythrum salicaria</u>	<u>5</u>	<u>No</u>	<u>OBL</u>																	
7. <u>Cornus racemosa</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		=Total Cover																		
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		=Total Cover																		

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

SOIL

Sampling Point NGJ Wet**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	10YR 4/2	90	10YR 4/6	10	c	PL	Loamy/Clayey	Prominent redox concentrations
6-10	10YR 5/1	80	10YR 4/4	20	c	m	Loamy/Clayey	Distinct redox concentrations
10-16	10YR 6/1	70	10YR 5/6	30	c	m	Loamy/Clayey	Prominent redox concentrations

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators:**

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

Indicators for Problematic Hydric Soils³:

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

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if observed):**

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:



Wetland NGJ- View facing south



Wetland NGJ- Soils

Segment 7-Package 4B

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)
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Project/Site: CHPE City/County: Rotterdam/Schenectady Sampling Date: 5/16/23

Applicant/Owner: TDI State: NY Sampling Point: NGK Wet

Investigator(s): J. Greaves & C. Einstein Section, Township, Range: _____

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope %: 5

Subregion (LRR or MLRA): LRR R Lat: 42.829974 Long: -74.002494 Datum: NAD83

Soil Map Unit Name: LoD - Lordstown gravelly silt loam, 15 to 25 percent slopes NWI classification: PEM2

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

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

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

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

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Wetland NGK</u>
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Remarks: (Explain alternative procedures here or in a separate report.)
 Shallow emergent marsh swale.

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators</u> (minimum of one is required; check all that apply) <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> _____ Surface Water (A1) _____ High Water Table (A2) _____ Saturation (A3) _____ Water Marks (B1) _____ Sediment Deposits (B2) _____ Drift Deposits (B3) _____ Algal Mat or Crust (B4) _____ Iron Deposits (B5) _____ Inundation Visible on Aerial Imagery (B7) _____ Sparsely Vegetated Concave Surface (B8) </div> <div style="width: 48%;"> _____ Water-Stained Leaves (B9) _____ Aquatic Fauna (B13) _____ Marl Deposits (B15) _____ Hydrogen Sulfide Odor (C1) <u>X</u> Oxidized Rhizospheres on Living Roots (C3) _____ Presence of Reduced Iron (C4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Thin Muck Surface (C7) _____ Other (Explain in Remarks) </div> </div>	<u>Secondary Indicators</u> (minimum of two required) <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> _____ Surface Soil Cracks (B6) <u>X</u> Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) _____ Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) </div> <div style="width: 48%;"> _____ FAC-Neutral Test (D5) </div> </div>
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Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No _____
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

 Sampling Point: NGK Wet

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B) Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>20</u></td> <td>x 1 = <u>20</u></td> </tr> <tr> <td>FACW species <u>80</u></td> <td>x 2 = <u>160</u></td> </tr> <tr> <td>FAC species <u>20</u></td> <td>x 3 = <u>60</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>120</u> (A)</td> <td><u>240</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.00</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>20</u>	x 1 = <u>20</u>	FACW species <u>80</u>	x 2 = <u>160</u>	FAC species <u>20</u>	x 3 = <u>60</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>120</u> (A)	<u>240</u> (B)	Prevalence Index = B/A = <u>2.00</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>20</u>	x 1 = <u>20</u>																			
FACW species <u>80</u>	x 2 = <u>160</u>																			
FAC species <u>20</u>	x 3 = <u>60</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>120</u> (A)	<u>240</u> (B)																			
Prevalence Index = B/A = <u>2.00</u>																				
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. <u>Spiraea alba</u>	<u>20</u>	<u>Yes</u>	<u>FACW</u>																	
2. <u>Populus deltoides</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
		<u>25</u>																		
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Phalaris arundinacea</u>	<u>35</u>	<u>Yes</u>	<u>FACW</u>	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </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 and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes <u>X</u> No _____																
2. <u>Spiraea alba</u>	<u>20</u>	<u>Yes</u>	<u>FACW</u>																	
3. <u>Lythrum salicaria</u>	<u>15</u>	<u>No</u>	<u>OBL</u>																	
4. <u>Euthamia graminifolia</u>	<u>15</u>	<u>No</u>	<u>FAC</u>																	
5. <u>Fraxinus pennsylvanica</u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
6. <u>Carex vulpinoidea</u>	<u>5</u>	<u>No</u>	<u>OBL</u>																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		=Total Cover																		
		<u>95</u>																		
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		=Total Cover																		

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

SOIL

Sampling Point: NGK Wet

[illegible]



Wetland NGK- View facing east



Wetland NGK- Soils

Segment 7-Package 4B

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)
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Project/Site: CHPE City/County: Rotterdam/Schenectady Sampling Date: 5/16/23
Applicant/Owner: TDI State: NY Sampling Point: NGJ & NGK Upl
Investigator(s): J. Greaves & C. Einstein Section, Township, Range: _____
Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope %: 30
Subregion (LRR or MLRA): LRR R Lat: 42.829846 Long: -74.002953 Datum: _____
Soil Map Unit Name: NaB - Nassau channery silt loam, 0 to 8 percent slopes NWI classification: _____
Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: <u>Upland adj to Wetlands NGJ & NGK</u>
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes _____ No <u>X</u>	

Remarks: (Explain alternative procedures here or in a separate report.)
Successional old field. Shared upland plot for Wetlands NGJ and NGK due to heterogeneity of community.

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ____ Surface Water (A1) ____ Water-Stained Leaves (B9) ____ High Water Table (A2) ____ Aquatic Fauna (B13) ____ Saturation (A3) ____ Marl Deposits (B15) ____ Water Marks (B1) ____ Hydrogen Sulfide Odor (C1) ____ Sediment Deposits (B2) ____ Oxidized Rhizospheres on Living Roots (C3) ____ Drift Deposits (B3) ____ Presence of Reduced Iron (C4) ____ Algal Mat or Crust (B4) ____ Recent Iron Reduction in Tilled Soils (C6) ____ Iron Deposits (B5) ____ Thin Muck Surface (C7) ____ Inundation Visible on Aerial Imagery (B7) ____ Other (Explain in Remarks) ____ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> ____ Surface Soil Cracks (B6) ____ Drainage Patterns (B10) ____ Moss Trim Lines (B16) ____ Dry-Season Water Table (C2) ____ Crayfish Burrows (C8) ____ Saturation Visible on Aerial Imagery (C9) ____ Stunted or Stressed Plants (D1) ____ Geomorphic Position (D2) ____ Shallow Aquitard (D3) ____ Microtopographic Relief (D4) ____ FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

VEGETATION – Use scientific names of plants.

 Sampling Point: NGJ & NGK Upl

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>40.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>30</u></td> <td>x 2 = <u>60</u></td> </tr> <tr> <td>FAC species <u>10</u></td> <td>x 3 = <u>30</u></td> </tr> <tr> <td>FACU species <u>65</u></td> <td>x 4 = <u>260</u></td> </tr> <tr> <td>UPL species <u>25</u></td> <td>x 5 = <u>125</u></td> </tr> <tr> <td>Column Totals: <u>130</u> (A)</td> <td><u>475</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.65</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>30</u>	x 2 = <u>60</u>	FAC species <u>10</u>	x 3 = <u>30</u>	FACU species <u>65</u>	x 4 = <u>260</u>	UPL species <u>25</u>	x 5 = <u>125</u>	Column Totals: <u>130</u> (A)	<u>475</u> (B)	Prevalence Index = B/A = <u>3.65</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>30</u>	x 2 = <u>60</u>																			
FAC species <u>10</u>	x 3 = <u>30</u>																			
FACU species <u>65</u>	x 4 = <u>260</u>																			
UPL species <u>25</u>	x 5 = <u>125</u>																			
Column Totals: <u>130</u> (A)	<u>475</u> (B)																			
Prevalence Index = B/A = <u>3.65</u>																				
=Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. <u>Rubus allegheniensis</u>	<u>20</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u>Cornus racemosa</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover																				
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Poa pratensis</u>	<u>20</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u>Phalaris arundinacea</u>	<u>20</u>	<u>Yes</u>	<u>FACW</u>																	
3. <u>Monarda punctata</u>	<u>15</u>	<u>Yes</u>	<u>UPL</u>																	
4. <u>Centaurea stoebe</u>	<u>10</u>	<u>No</u>	<u>UPL</u>																	
5. <u>Solidago canadensis</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
6. <u>Lysimachia ciliata</u>	<u>10</u>	<u>No</u>	<u>FACW</u>																	
7. <u>Rubus flagellaris</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
8. <u>Cirsium arvense</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
=Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
=Total Cover																				

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation
 Present? Yes No X

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

SOIL

Sampling Point: NGJ & NGK UpI

[illegible]



Upland NGJ and NGK- View facing south



Upland NGJ and NGK- Soils

Segment 7-Package 4B

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)
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Project/Site: CHPE City/County: Rotterdam/Schenectady Sampling Date: 5/16/23
Applicant/Owner: TDI State: NY Sampling Point: NGL Wet
Investigator(s): J. Greaves & C. Einstein Section, Township, Range: _____
Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope %: 5
Subregion (LRR or MLRA): LRR R Lat: 42.829791 Long: -73.999515 Datum: NAD83
Soil Map Unit Name: TvB - Tuller-Brockport complex, 3 to 8 percent slopes NWI classification: PEM2
Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes x No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Wetland NGL</u>
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	

Remarks: (Explain alternative procedures here or in a separate report.)
Shallow emergent marsh.

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators</u> (minimum of one is required; check all that apply) <u>X</u> Surface Water (A1) _____ Water-Stained Leaves (B9) _____ High Water Table (A2) _____ Aquatic Fauna (B13) _____ Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) <u>X</u> Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators</u> (minimum of two required) _____ Surface Soil Cracks (B6) <u>X</u> Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) <u>X</u> Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
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Field Observations: Surface Water Present? Yes <u>X</u> No _____ Depth (inches): <u>1</u> Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No _____
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

 Sampling Point: NGL Wet

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>7</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B) Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>35</u></td> <td>x 1 = <u>35</u></td> </tr> <tr> <td>FACW species <u>20</u></td> <td>x 2 = <u>40</u></td> </tr> <tr> <td>FAC species <u>40</u></td> <td>x 3 = <u>120</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>95</u> (A)</td> <td><u>195</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>2.05</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>35</u>	x 1 = <u>35</u>	FACW species <u>20</u>	x 2 = <u>40</u>	FAC species <u>40</u>	x 3 = <u>120</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>95</u> (A)	<u>195</u> (B)	Prevalence Index = B/A = <u>2.05</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>35</u>	x 1 = <u>35</u>																			
FACW species <u>20</u>	x 2 = <u>40</u>																			
FAC species <u>40</u>	x 3 = <u>120</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>95</u> (A)	<u>195</u> (B)																			
Prevalence Index = B/A = <u>2.05</u>																				
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Euthamia graminifolia</u>	<u>30</u>	<u>Yes</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Juncus effusus</u>	<u>10</u>	<u>Yes</u>	<u>OBL</u>																	
3. <u>Carex vulpinoidea</u>	<u>10</u>	<u>Yes</u>	<u>OBL</u>																	
4. <u>Onoclea sensibilis</u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>																	
5. <u>Lythrum salicaria</u>	<u>10</u>	<u>Yes</u>	<u>OBL</u>																	
6. <u>Equisetum arvense</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>																	
7. <u>Solidago gigantea</u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>																	
8. <u>Typha latifolia</u>	<u>5</u>	<u>No</u>	<u>OBL</u>																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		95 =Total Cover																		
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. _____	_____	_____	_____	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		=Total Cover																		

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

SOIL

Sampling Point: NGL Wet

[illegible]



Wetland NGL- View facing north



Wetland NGL- Soils

Segment 7-Package 4B

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)
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Project/Site: CHPE City/County: Rotterdam/Schenectady Sampling Date: 5/16/23

Applicant/Owner: TDI State: NY Sampling Point: NGM Wet

Investigator(s): J. Greaves & C. Einstein Section, Township, Range: _____

Landform (hillside, terrace, etc.): Depression/hill Local relief (concave, convex, none): Concave Slope %: 5

Subregion (LRR or MLRA): LRR R Lat: 42.829122 Long: -74.000230 Datum: NAD83

Soil Map Unit Name: AZF - Arnot-Rock outcrop association, very steep NWI classification: PEM2

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

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

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

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

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>Wetland NGM</u>
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Remarks: (Explain alternative procedures here or in a separate report.)
 Shallow emergent marsh.

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ Water-Stained Leaves (B9) _____ High Water Table (A2) _____ Aquatic Fauna (B13) _____ Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) <u>X</u> Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) <u>X</u> Geomorphic Position (D2) <u>X</u> Shallow Aquitard (D3) <u>X</u> Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
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Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No _____
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

 Sampling Point: NGM Wet

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.7%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>85</u></td> <td>x 2 = <u>170</u></td> </tr> <tr> <td>FAC species <u>20</u></td> <td>x 3 = <u>60</u></td> </tr> <tr> <td>FACU species <u>5</u></td> <td>x 4 = <u>20</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>110</u> (A)</td> <td><u>250</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>2.27</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>85</u>	x 2 = <u>170</u>	FAC species <u>20</u>	x 3 = <u>60</u>	FACU species <u>5</u>	x 4 = <u>20</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>110</u> (A)	<u>250</u> (B)	Prevalence Index = B/A = <u>2.27</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>85</u>	x 2 = <u>170</u>																			
FAC species <u>20</u>	x 3 = <u>60</u>																			
FACU species <u>5</u>	x 4 = <u>20</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>110</u> (A)	<u>250</u> (B)																			
Prevalence Index = B/A = <u>2.27</u>																				
_____ =Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. <u>Cornus amomum</u>	<u>5</u>	<u>Yes</u>	<u>FACW</u>																	
2. <u>Lonicera morrowii</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
_____ =Total Cover																				
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Onoclea sensibilis</u>	<u>75</u>	<u>Yes</u>	<u>FACW</u>																	
2. <u>Equisetum arvense</u>	<u>15</u>	<u>No</u>	<u>FAC</u>																	
3. <u>Solidago rugosa</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
4. <u>Solidago gigantea</u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
_____ =Total Cover				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.																
_____ =Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				
Hydrophytic Vegetation Present? Yes <u>X</u> No _____																				

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

SOIL

Sampling Point: NGM Wet

[illegible]



Wetland NGM- View facing southeast



Wetland NMG- Soils

Segment 7-Package 4B

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)
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Project/Site: CHPE City/County: Rotterdam/Schenectady Sampling Date: 5/16/23

Applicant/Owner: TDI State: NY Sampling Point: NGL & NGM Upl

Investigator(s): J. Greaves & C. Einstein Section, Township, Range: _____

Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope %: 25

Subregion (LRR or MLRA): LRR R Lat: 42.829646 Long: -74.000370 Datum: NAD83

Soil Map Unit Name: TvB - Tuller-Brockport complex, 3 to 8 percent slopes NWI classification: _____

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

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

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

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

Hydrophytic Vegetation Present? Yes _____ No <u>X</u> Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: <u>Upland adj to Wetlands NGL & NGM</u>
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Remarks: (Explain alternative procedures here or in a separate report.)
 Successional old field. Shared upland plot for Wetlands NGL & NGM due to homogeneity of the area.

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ Water-Stained Leaves (B9) _____ High Water Table (A2) _____ Aquatic Fauna (B13) _____ Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) _____ Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) _____ FAC-Neutral Test (D5)
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Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

 Sampling Point: NGL & NGM Upl

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33.3%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>20</u></td> <td>x 2 = <u>40</u></td> </tr> <tr> <td>FAC species <u>10</u></td> <td>x 3 = <u>30</u></td> </tr> <tr> <td>FACU species <u>70</u></td> <td>x 4 = <u>280</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>350</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.50</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>20</u>	x 2 = <u>40</u>	FAC species <u>10</u>	x 3 = <u>30</u>	FACU species <u>70</u>	x 4 = <u>280</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u> (A)	<u>350</u> (B)	Prevalence Index = B/A = <u>3.50</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>20</u>	x 2 = <u>40</u>																			
FAC species <u>10</u>	x 3 = <u>30</u>																			
FACU species <u>70</u>	x 4 = <u>280</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>100</u> (A)	<u>350</u> (B)																			
Prevalence Index = B/A = <u>3.50</u>																				
_____ =Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u>_____</u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Poa pratensis</u>	<u>25</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u>Phalaris arundinacea</u>	<u>20</u>	<u>Yes</u>	<u>FACW</u>																	
3. <u>Rubus flagellaris</u>	<u>20</u>	<u>Yes</u>	<u>FACU</u>																	
4. <u>Solidago canadensis</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
5. <u>Galium boreale</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
6. <u>Barbarea vulgaris</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
7. <u>Digitaria ciliaris</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
8. <u>Geranium maculatum</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
9. <u>Trifolium pratense</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
<u>100</u> =Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u>)				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.																
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				

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

SOIL

Sampling Point: NGL & NGM UpI

[illegible]



Upland NGL and NGM- View facing east



Upland NGL and NGM- Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Champlain Hudson Express City/County: Schenectady Sampling Date: February 21, 2023

Applicant/Owner: CHA State: NY Sampling Point: DP-XH

Investigator(s): Tristen Peterson Section, Township, Range: Schenectady

Landform (hillslope, terrace, etc.): Drainageway Local relief (concave, convex, none): Concave Slope (%): 1

Subregion (LRR or MLRA): LRR R Lat: 42.831607°N Long: 73.996648°W Datum: NAD83

Soil Map Unit Name: TvA - Tuller-Brockport complex; 0 to 3 percent slopes NWI classification: Not Mapped

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

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

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

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

Hydrophytic Vegetation Present?	Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>		
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>		If yes, optional Wetland Site ID: <u>XH</u>

Remarks: (Explain alternative procedures here or in a separate report.)
 PEM Wetland Data Point located in a drainageway that is adjacent to train track

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<u>X</u> Surface Water (A1)	<u> </u> Water-Stained Leaves (B9)	<u> </u> Surface Soil Cracks (B6)
<u> </u> High Water Table (A2)	<u> </u> Aquatic Fauna (B13)	<u>X</u> Drainage Patterns (B10)
<u> </u> Saturation (A3)	<u> </u> Marl Deposits (B15)	<u> </u> Moss Trim Lines (B16)
<u> </u> Water Marks (B1)	<u> </u> Hydrogen Sulfide Odor (C1)	<u> </u> Dry-Season Water Table (C2)
<u> </u> Sediment Deposits (B2)	<u> </u> Oxidized Rhizospheres on Living Roots (C3)	<u> </u> Crayfish Burrows (C8)
<u> </u> Drift Deposits (B3)	<u> </u> Presence of Reduced Iron (C4)	<u> </u> Saturation Visible on Aerial Imagery (C9)
<u> </u> Algal Mat or Crust (B4)	<u> </u> Recent Iron Reduction in Tilled Soils (C6)	<u> </u> Stunted or Stressed Plants (D1)
<u> </u> Iron Deposits (B5)	<u> </u> Thin Muck Surface (C7)	<u>X</u> Geomorphic Position (D2)
<u> </u> Inundation Visible on Aerial Imagery (B7)	<u> </u> Other (Explain in Remarks)	<u> </u> Shallow Aquitard (D3)
<u> </u> Sparsely Vegetated Concave Surface (B8)		<u> </u> Microtopographic Relief (D4)
		<u>X</u> FAC-Neutral Test (D5)

Field Observations: Surface Water Present? Yes <u>X</u> No <u> </u> Depth (inches): 1 Water Table Present? Yes <u> </u> No <u> </u> Depth (inches): Saturation Present? Yes <u> </u> No <u> </u> Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
--	---

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

Remarks:
 Wetland hydrology present at data point

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-XH

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Sapling/Shrub Stratum (Plot size: 15 ft.)				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>20</u></td> <td>x 1 = <u>20</u></td> </tr> <tr> <td>FACW species <u>70</u></td> <td>x 2 = <u>140</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>90</u> (A)</td> <td><u>160</u> (B)</td> </tr> </table> Prevalence Index = B/A = 1.77	Total % Cover of:	Multiply by:	OBL species <u>20</u>	x 1 = <u>20</u>	FACW species <u>70</u>	x 2 = <u>140</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>90</u> (A)	<u>160</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>20</u>	x 1 = <u>20</u>																	
FACW species <u>70</u>	x 2 = <u>140</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>90</u> (A)	<u>160</u> (B)																	
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Herb Stratum (Plot size: 5 ft.)				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
1. <u>Phragmites australis</u>	<u>70</u>	<u>Yes</u>	<u>FACW</u>															
2. <u>Lythrum salicaria</u>	<u>20</u>	<u>Yes</u>	<u>OBL</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>90</u> = Total Cover																		
Woody Vine Stratum (Plot size: 30 ft.)				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.														
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.) Hydrophytic vegetation found at data point				Hydrophytic Vegetation Present? Yes <u>X</u> No _____														

SOIL

Sampling Point: DP-XH

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

[illegible]¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R , |
| <input type="checkbox"/> Histic Epipedon (A2) | MLRA 149B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input checked="" type="checkbox"/> X Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L, M**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches):

Hydric Soil Present?	Yes	X	No
----------------------	-----	---	----

Remarks:

Remarks:
Could not dig past 10 inches due to rock refusal, hydric soils present at data point



Wetland FA-XH- View Facing North



Wetland FA-XH- Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-XH-Upland

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>0</u> = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>50</u></td> <td>x 4 = <u>200</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>50</u> (A)</td> <td><u>200</u> (B)</td> </tr> </table> Prevalence Index = B/A = 4	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>50</u>	x 4 = <u>200</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>50</u> (A)	<u>200</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>50</u>	x 4 = <u>200</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>50</u> (A)	<u>200</u> (B)																	
Sapling/Shrub Stratum (Plot size: 15 ft.)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 ¹ ___ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
<u>0</u> = Total Cover																		
Herb Stratum (Plot size: 5 ft.)																		
1. <u>Lolium perenne</u>	<u>50</u>	<u>Yes</u>	<u>FACU</u>															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.														
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>50</u> = Total Cover																		
Woody Vine Stratum (Plot size: 30 ft.)																		
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <u> </u> No <u> X </u>														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.)																		
No hydrophytic vegetation found at data point																		

SOIL

Sampling Point: DP-XH-Upland

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

[illegible]¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L, M**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches):

Hydric Soil Present? Yes No **X**

Remarks:

Remarks:
Could not dig past 4 inches due to gravel refusal, no hydric soils present at data point



Upland FA-XH- View Facing North



Upland FA-XH- Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE Phase 5 City/County: Schenectady Sampling Date: 12/08/2021
 Applicant/Owner: CHA State: NY Sampling Point: 12/8 A-5
 Investigator(s): J. L. Williams, N. G. Dominic Section, Township, Range: _____
 Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Concave Slope %: _____
 Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: 42.83132 Long: -73.99583 Datum: NAD83
 Soil Map Unit Name: _____ NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>12/8 Wetland A</u>
Remarks: (Explain alternative procedures here or in a separate report.)	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <u>X</u> No _____ Depth (inches): <u>2</u> Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>3</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:	

VEGETATION – Use scientific names of plants.

 Sampling Point: 12/8 A-5

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>110</u></td> <td>x 2 = <u>220</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>110</u> (A)</td> <td><u>220</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>2.00</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>110</u>	x 2 = <u>220</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>110</u> (A)	<u>220</u> (B)	Prevalence Index = B/A = <u>2.00</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>110</u>	x 2 = <u>220</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>110</u> (A)	<u>220</u> (B)																			
Prevalence Index = B/A = <u>2.00</u>																				
=Total Cover																				
Sapling/Shrub Stratum (Plot size: _____)																				
1. <u>Cornus alba</u>	<u>20</u>	<u>Yes</u>	<u>FACW</u>																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover				Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
=Total Cover																				
Herb Stratum (Plot size: _____)																				
1. <u>Phragmites australis</u>	<u>90</u>	<u>Yes</u>	<u>FACW</u>																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
=Total Cover				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.																
=Total Cover																				
Woody Vine Stratum (Plot size: _____)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
=Total Cover																				
Hydrophytic Vegetation Present? Yes <u>X</u> No _____																				

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

SOIL

Sampling Point 12/8 A-5

[illegible]



Wetland 12.8-A- Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE Phase 5 City/County: Schenectady Sampling Date: 12/08/2021
 Applicant/Owner: CHA State: NY Sampling Point: 12/8 A-4 Upland
 Investigator(s): J. L. Williams, N. G. Dominic Section, Township, Range: _____
 Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Concave Slope %: _____
 Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: 42.83134 Long: -73.99578 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 Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes _____ No <u>X</u> Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.)	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ Water-Stained Leaves (B9) _____ High Water Table (A2) _____ Aquatic Fauna (B13) _____ Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) _____ Geomorphic Position (D2) _____ ? Shallow Aquitard (D3) _____ Microtopographic Relief (D4) _____ FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:	

VEGETATION – Use scientific names of plants.

 Sampling Point: 12/8 A-4 Upland

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>20.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="width: 40%;">Total % Cover of:</th> <th style="width: 60%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>30</u></td> <td>x 3 = <u>90</u></td> </tr> <tr> <td>FACU species <u>30</u></td> <td>x 4 = <u>120</u></td> </tr> <tr> <td>UPL species <u>45</u></td> <td>x 5 = <u>225</u></td> </tr> <tr> <td>Column Totals: <u>105</u> (A)</td> <td><u>435</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>4.14</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>30</u>	x 3 = <u>90</u>	FACU species <u>30</u>	x 4 = <u>120</u>	UPL species <u>45</u>	x 5 = <u>225</u>	Column Totals: <u>105</u> (A)	<u>435</u> (B)	Prevalence Index = B/A = <u>4.14</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>0</u>	x 2 = <u>0</u>																			
FAC species <u>30</u>	x 3 = <u>90</u>																			
FACU species <u>30</u>	x 4 = <u>120</u>																			
UPL species <u>45</u>	x 5 = <u>225</u>																			
Column Totals: <u>105</u> (A)	<u>435</u> (B)																			
Prevalence Index = B/A = <u>4.14</u>																				
=Total Cover																				
Sapling/Shrub Stratum (Plot size: _____)																				
1. <u>Lonicera spp.</u>	<u>20</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u>Rosa multiflora</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover																				
=Total Cover				Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
=Total Cover																				
Herb Stratum (Plot size: _____)																				
1. <u>Solidago spp.</u>	<u>30</u>	<u>Yes</u>	<u>FAC</u>																	
2. <u>Daucus carota</u>	<u>25</u>	<u>Yes</u>	<u>UPL</u>																	
3. <u>Securigera varia</u>	<u>20</u>	<u>Yes</u>	<u>UPL</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
=Total Cover																				
=Total Cover				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.																
Woody Vine Stratum (Plot size: _____)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
=Total Cover																				
=Total Cover				Hydrophytic Vegetation Present? Yes <u> </u> No <u> X </u>																

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

SOIL

Sampling Point 12/8 A-4 Upland

[illegible]



Upland of wetland 12.8-A- Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Champlain Hudson Express City/County: Schenectady Sampling Date: February 21, 2023

Applicant/Owner: CHA State: NY Sampling Point: DP-XL

Investigator(s): Tristen Peterson Section, Township, Range: Schenectady

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 1

Subregion (LRR or MLRA): LRR R Lat: 42.829227°N Long: 73.995571°W Datum: NAD83

Soil Map Unit Name: TvA - Tuller-Brockport complex; 0 to 3 percent slopes NWI classification: Not Mapped

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

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

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

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

Hydrophytic Vegetation Present?	Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>		
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>		If yes, optional Wetland Site ID: <u>XL</u>
Remarks: (Explain alternative procedures here or in a separate report.) PEM Wetland Data Point located in a depression area adjacent to access road and railroad			

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<u> </u> Surface Water (A1)	<u> </u> Water-Stained Leaves (B9)	<u> </u> Surface Soil Cracks (B6)
<u>X</u> High Water Table (A2)	<u> </u> Aquatic Fauna (B13)	<u>X</u> Drainage Patterns (B10)
<u>X</u> Saturation (A3)	<u> </u> Marl Deposits (B15)	<u> </u> Moss Trim Lines (B16)
<u> </u> Water Marks (B1)	<u> </u> Hydrogen Sulfide Odor (C1)	<u> </u> Dry-Season Water Table (C2)
<u> </u> Sediment Deposits (B2)	<u> </u> Oxidized Rhizospheres on Living Roots (C3)	<u> </u> Crayfish Burrows (C8)
<u> </u> Drift Deposits (B3)	<u> </u> Presence of Reduced Iron (C4)	<u> </u> Saturation Visible on Aerial Imagery (C9)
<u> </u> Algal Mat or Crust (B4)	<u> </u> Recent Iron Reduction in Tilled Soils (C6)	<u> </u> Stunted or Stressed Plants (D1)
<u> </u> Iron Deposits (B5)	<u> </u> Thin Muck Surface (C7)	<u>X</u> Geomorphic Position (D2)
<u> </u> Inundation Visible on Aerial Imagery (B7)	<u> </u> Other (Explain in Remarks)	<u> </u> Shallow Aquitard (D3)
<u> </u> Sparsely Vegetated Concave Surface (B8)		<u> </u> Microtopographic Relief (D4)
		<u>X</u> FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present?	Yes <u> </u> No <u>X</u> Depth (inches):	Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
Water Table Present?	Yes <u>X</u> No <u> </u> Depth (inches): 8	
Saturation Present?	Yes <u>X</u> No <u> </u> Depth (inches): 2 (includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: Wetland hydrology present at data point		

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-XL

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>0</u> = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>100</u></td> <td>x 2 = <u>200</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>200</u> (B)</td> </tr> </table> Prevalence Index = B/A = 2	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>100</u>	x 2 = <u>200</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u> (A)	<u>200</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>100</u>	x 2 = <u>200</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>100</u> (A)	<u>200</u> (B)																	
Sapling/Shrub Stratum (Plot size: 15 ft.)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
<u>0</u> = Total Cover																		
Herb Stratum (Plot size: 5 ft.)																		
1. <u>Phragmites australis</u>	<u>100</u>	<u>Yes</u>	<u>FACW</u>															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.														
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>100</u> = Total Cover																		
Woody Vine Stratum (Plot size: 30 ft.)																		
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <u>X</u> No _____														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.) Hydrophytic vegetation found at data point																		

SOIL

Sampling Point: DP-XL

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

[illegible]

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

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R , |
| <input type="checkbox"/> Histic Epipedon (A2) | MLRA 149B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input checked="" type="checkbox"/> X Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L, M**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches):

Hydric Soil Present?	Yes	X	No
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Remarks:

Hydric soils present at data point



Wetland FA-XL- View Facing North



Wetland FA-XL- Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Upl FA-XL

Project/Site: Champlain Hudson Express City/County: Schenectady Sampling Date: February 21, 2023
 Applicant/Owner: CHA State: NY Sampling Point: DP-XL-Upland
 Investigator(s): Tristen Peterson Section, Township, Range: Schenectady
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Convex Slope (%): 1
 Subregion (LRR or MLRA): LRR R Lat: 42.829344°N Long: 73.995622°W Datum: NAD83
 Soil Map Unit Name: TvA - Tuller-Brockport complex; 0 to 3 percent slopes NWI classification: Not Mapped

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>	

If yes, optional Wetland Site ID:

Remarks: (Explain alternative procedures here or in a separate report.)
 Upland Data Point for Wetland XL located in a shrub shrub area adjacent to access road

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<u> </u> Surface Water (A1)	<u> </u> Water-Stained Leaves (B9)	<u> </u> Surface Soil Cracks (B6)
<u> </u> High Water Table (A2)	<u> </u> Aquatic Fauna (B13)	<u> </u> Drainage Patterns (B10)
<u> </u> Saturation (A3)	<u> </u> Marl Deposits (B15)	<u> </u> Moss Trim Lines (B16)
<u> </u> Water Marks (B1)	<u> </u> Hydrogen Sulfide Odor (C1)	<u> </u> Dry-Season Water Table (C2)
<u> </u> Sediment Deposits (B2)	<u> </u> Oxidized Rhizospheres on Living Roots (C3)	<u> </u> Crayfish Burrows (C8)
<u> </u> Drift Deposits (B3)	<u> </u> Presence of Reduced Iron (C4)	<u> </u> Saturation Visible on Aerial Imagery (C9)
<u> </u> Algal Mat or Crust (B4)	<u> </u> Recent Iron Reduction in Tilled Soils (C6)	<u> </u> Stunted or Stressed Plants (D1)
<u> </u> Iron Deposits (B5)	<u> </u> Thin Muck Surface (C7)	<u> </u> Geomorphic Position (D2)
<u> </u> Inundation Visible on Aerial Imagery (B7)	<u> </u> Other (Explain in Remarks)	<u> </u> Shallow Aquitard (D3)
<u> </u> Sparsely Vegetated Concave Surface (B8)		<u> </u> Microtopographic Relief (D4)
		<u> </u> FAC-Neutral Test (D5)

Field Observations: Surface Water Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Water Table Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Saturation Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u> </u> No <u>X</u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
 No wetland hydrology present at data point

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-XL-Upland

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>0</u> = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>95</u></td> <td>x 4 = <u>380</u></td> </tr> <tr> <td>UPL species <u>5</u></td> <td>x 5 = <u>25</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>405</u> (B)</td> </tr> </table> Prevalence Index = B/A = 4.05	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>95</u>	x 4 = <u>380</u>	UPL species <u>5</u>	x 5 = <u>25</u>	Column Totals: <u>100</u> (A)	<u>405</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>95</u>	x 4 = <u>380</u>																	
UPL species <u>5</u>	x 5 = <u>25</u>																	
Column Totals: <u>100</u> (A)	<u>405</u> (B)																	
Sapling/Shrub Stratum (Plot size: 15 ft.)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
<u>0</u> = Total Cover																		
Herb Stratum (Plot size: 5 ft.)																		
1. <u>Solidago canadensis</u>	<u>80</u>	<u>Yes</u>	<u>FACU</u>															
2. <u>Dactylis glomerata</u>	<u>10</u>	<u>No</u>	<u>FACU</u>															
3. <u>Daucus carota</u>	<u>5</u>	<u>No</u>	<u>UPL</u>															
4. <u>Lolium perenne</u>	<u>5</u>	<u>No</u>	<u>FACU</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.														
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>100</u> = Total Cover																		
Woody Vine Stratum (Plot size: 30 ft.)																		
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.)																		
No hydrophytic vegetation found at data point																		

SOIL

Sampling Point: DP-XL-Upland

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

[illegible]

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

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R , |
| <input type="checkbox"/> Histic Epipedon (A2) | MLRA 149B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L, M**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches):

Hydric Soil Present? Yes No **X**

Remarks:

Remarks:
Could not dig past 6 inches due to rock refusal, no hydric soils present at data point



Upland FA-XL- View Facing East



Upland FA-XL- Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Champlain Hudson Express City/County: Schenectady Sampling Date: February 21, 2023
 Applicant/Owner: CHA State: NY Sampling Point: DP-XI
 Investigator(s): Tristen Peterson Section, Township, Range: Schenectady
 Landform (hillslope, terrace, etc.): Drainageway Local relief (concave, convex, none): Concave Slope (%): 1
 Subregion (LRR or MLRA): LRR R Lat: 42.828377°N Long: 73.995653°W Datum: NAD83
 Soil Map Unit Name: TvA - Tuller-Brockport complex; 0 to 3 percent slopes NWI classification: Not Mapped

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>		
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>		If yes, optional Wetland Site ID: <u>XI</u>
Remarks: (Explain alternative procedures here or in a separate report.) PEM Wetland Data Point located in a drainageway along rail track			

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<u>X</u> Surface Water (A1)	<u> </u> Water-Stained Leaves (B9)	<u> </u> Surface Soil Cracks (B6)
<u> </u> High Water Table (A2)	<u> </u> Aquatic Fauna (B13)	<u>X</u> Drainage Patterns (B10)
<u> </u> Saturation (A3)	<u> </u> Marl Deposits (B15)	<u> </u> Moss Trim Lines (B16)
<u> </u> Water Marks (B1)	<u> </u> Hydrogen Sulfide Odor (C1)	<u> </u> Dry-Season Water Table (C2)
<u> </u> Sediment Deposits (B2)	<u> </u> Oxidized Rhizospheres on Living Roots (C3)	<u> </u> Crayfish Burrows (C8)
<u> </u> Drift Deposits (B3)	<u> </u> Presence of Reduced Iron (C4)	<u> </u> Saturation Visible on Aerial Imagery (C9)
<u> </u> Algal Mat or Crust (B4)	<u> </u> Recent Iron Reduction in Tilled Soils (C6)	<u> </u> Stunted or Stressed Plants (D1)
<u> </u> Iron Deposits (B5)	<u> </u> Thin Muck Surface (C7)	<u>X</u> Geomorphic Position (D2)
<u> </u> Inundation Visible on Aerial Imagery (B7)	<u> </u> Other (Explain in Remarks)	<u> </u> Shallow Aquitard (D3)
<u> </u> Sparsely Vegetated Concave Surface (B8)		<u> </u> Microtopographic Relief (D4)
		<u> </u> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <u>X</u> No <u> </u> Depth (inches): 1 Water Table Present? Yes <u> </u> No <u> </u> Depth (inches): Saturation Present? Yes <u> </u> No <u> </u> Depth (inches): (includes capillary fringe)		Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: Wetland hydrology present at data point		

Sampling Point: DP-XI

Tree Stratum (Plot size: 30 ft.)		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1.					Number of Dominant Species That Are OBL, FACW, or FAC:	2 (A)
2.					Total Number of Dominant Species Across All Strata:	2 (B)
3.					Percent of Dominant Species That Are OBL, FACW, or FAC:	100 (A/B)
4.						
5.						
6.						
7.						
		0 = Total Cover				
Sapling/Shrub Stratum (Plot size: 15 ft.)					Prevalence Index worksheet:	
1.					Total % Cover of:	Multiply by:
2.					OBL species 90	x 1 = 90
3.					FACW species 0	x 2 = 0
4.					FAC species 0	x 3 = 0
5.					FACU species 10	x 4 = 40
6.					UPL species 0	x 5 = 0
7.					Column Totals: 100 (A)	130 (B)
		0 = Total Cover			Prevalence Index = B/A = 1.3	
Herb Stratum (Plot size: 5 ft.)					Hydrophytic Vegetation Indicators:	
1. <u>Typha angustifolia</u>	70	Yes	OBL	<input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)		
2. <u>Lythrum salicaria</u>	20	Yes	OBL	<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)		
3. <u>Solidago canadensis</u>	10	No	FACU	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
		100 = Total Cover			Definitions of Vegetation Strata:	
					Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.	
Woody Vine Stratum (Plot size: 30 ft.)					Hydrophytic Vegetation	
1.					Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2.						
3.						
4.						
		0 = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.)						

SOIL

Sampling Point: DP-XI

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

[illegible]¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input checked="" type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L, M**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches):

Hydric Soil Present?	Yes	X	No
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Remarks:

Hydric soils present at data point



Wetland FA-XI- View Facing North



Wetland FA-XI- Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Upl FA-XI

Project/Site: Champlain Hudson Express City/County: Schenectady Sampling Date: February 21, 2023
 Applicant/Owner: CHA State: NY Sampling Point: DP-XI-Upland
 Investigator(s): Tristen Peterson Section, Township, Range: Schenectady
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Convex Slope (%): 2
 Subregion (LRR or MLRA): LRR R Lat: 42.828250°N Long: 73.995733°W Datum: NAD83
 Soil Map Unit Name: TvA - Tuller-Brockport complex; 0 to 3 percent slopes NWI classification: Not Mapped

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>		
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>		If yes, optional Wetland Site ID: <u> </u>
Remarks: (Explain alternative procedures here or in a separate report.) Upland Data Point for Wetland XI located on a upland mound adjacent to railroad			

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<u> </u> Surface Water (A1)	<u> </u> Water-Stained Leaves (B9)	<u> </u> Surface Soil Cracks (B6)
<u> </u> High Water Table (A2)	<u> </u> Aquatic Fauna (B13)	<u> </u> Drainage Patterns (B10)
<u> </u> Saturation (A3)	<u> </u> Marl Deposits (B15)	<u> </u> Moss Trim Lines (B16)
<u> </u> Water Marks (B1)	<u> </u> Hydrogen Sulfide Odor (C1)	<u> </u> Dry-Season Water Table (C2)
<u> </u> Sediment Deposits (B2)	<u> </u> Oxidized Rhizospheres on Living Roots (C3)	<u> </u> Crayfish Burrows (C8)
<u> </u> Drift Deposits (B3)	<u> </u> Presence of Reduced Iron (C4)	<u> </u> Saturation Visible on Aerial Imagery (C9)
<u> </u> Algal Mat or Crust (B4)	<u> </u> Recent Iron Reduction in Tilled Soils (C6)	<u> </u> Stunted or Stressed Plants (D1)
<u> </u> Iron Deposits (B5)	<u> </u> Thin Muck Surface (C7)	<u> </u> Geomorphic Position (D2)
<u> </u> Inundation Visible on Aerial Imagery (B7)	<u> </u> Other (Explain in Remarks)	<u> </u> Shallow Aquitard (D3)
<u> </u> Sparsely Vegetated Concave Surface (B8)		<u> </u> Microtopographic Relief (D4)
		<u> </u> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Water Table Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Saturation Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> (includes capillary fringe)		Wetland Hydrology Present? Yes <u> </u> No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: No wetland hydrology present at data point		

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-XI-Upland

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: 15 ft.)				Prevalence Index worksheet: <div style="display: flex; justify-content: space-between;"> Total % Cover of: Multiply by: </div> OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>30</u> x 4 = <u>120</u> UPL species <u>10</u> x 5 = <u>50</u> Column Totals: <u>40</u> (A) <u>170</u> (B) Prevalence Index = B/A = 4.25
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Herb Stratum (Plot size: 5 ft.)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Solidago canadensis</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>	
2. <u>Lolium perenne</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>	
3. <u>Daucus carota</u>	<u>10</u>	<u>Yes</u>	<u>UPL</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>40</u> = Total Cover				
Woody Vine Stratum (Plot size: 30 ft.)				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.) No hydrophytic vegetation found at data point				Hydrophytic Vegetation Present? <div style="display: flex; align-items: center; gap: 20px;"> Yes No <u>X</u> </div>

SOIL

Sampling Point: DP-XI-Upland

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

[illegible]¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R , |
| <input type="checkbox"/> Histic Epipedon (A2) | MLRA 149B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L, M**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches):

Hydric Soil Present? Yes No **X**

Remarks:

Remarks:
Could not dig past 5 inches due to gravel refusal, no hydric soils present at data point



Upland FA-XI- View Facing South



Upland FA-XI- Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Champlain Hudson Express City/County: Schenectady Sampling Date: February 21, 2023

Applicant/Owner: CHA State: NY Sampling Point: DP-XJ

Investigator(s): Tristen Peterson Section, Township, Range: Schenectady

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

Subregion (LRR or MLRA): LRR R Lat: 42.827371°N Long: 73.995452°W Datum: NAD83

Soil Map Unit Name: TvA - Tuller-Brockport complex; 0 to 3 percent slopes NWI classification: Not Mapped

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

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

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

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

Hydrophytic Vegetation Present?	Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>		
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>		If yes, optional Wetland Site ID: <u>XJ</u>
Remarks: (Explain alternative procedures here or in a separate report.) PEM Wetland located within a drainageway adjacent to railroad tracks			

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<u>X</u> Surface Water (A1)	<u> </u> Water-Stained Leaves (B9)	<u> </u> Surface Soil Cracks (B6)
<u> </u> High Water Table (A2)	<u> </u> Aquatic Fauna (B13)	<u>X</u> Drainage Patterns (B10)
<u> </u> Saturation (A3)	<u> </u> Marl Deposits (B15)	<u> </u> Moss Trim Lines (B16)
<u> </u> Water Marks (B1)	<u> </u> Hydrogen Sulfide Odor (C1)	<u> </u> Dry-Season Water Table (C2)
<u> </u> Sediment Deposits (B2)	<u> </u> Oxidized Rhizospheres on Living Roots (C3)	<u> </u> Crayfish Burrows (C8)
<u> </u> Drift Deposits (B3)	<u> </u> Presence of Reduced Iron (C4)	<u> </u> Saturation Visible on Aerial Imagery (C9)
<u> </u> Algal Mat or Crust (B4)	<u> </u> Recent Iron Reduction in Tilled Soils (C6)	<u> </u> Stunted or Stressed Plants (D1)
<u> </u> Iron Deposits (B5)	<u> </u> Thin Muck Surface (C7)	<u>X</u> Geomorphic Position (D2)
<u> </u> Inundation Visible on Aerial Imagery (B7)	<u> </u> Other (Explain in Remarks)	<u> </u> Shallow Aquitard (D3)
<u> </u> Sparsely Vegetated Concave Surface (B8)		<u> </u> Microtopographic Relief (D4)
		<u> </u> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <u>X</u> No <u> </u> Depth (inches): 1 Water Table Present? Yes <u> </u> No <u> </u> Depth (inches): Saturation Present? Yes <u> </u> No <u> </u> Depth (inches): (includes capillary fringe)		Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: Wetland hydrology present at data point		

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-XJ

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Sapling/Shrub Stratum (Plot size: 15 ft.)				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>10</u></td> <td>x 1 = <u>10</u></td> </tr> <tr> <td>FACW species <u>90</u></td> <td>x 2 = <u>180</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>190</u> (B)</td> </tr> </table> Prevalence Index = B/A = 190	Total % Cover of:	Multiply by:	OBL species <u>10</u>	x 1 = <u>10</u>	FACW species <u>90</u>	x 2 = <u>180</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u> (A)	<u>190</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>10</u>	x 1 = <u>10</u>																	
FACW species <u>90</u>	x 2 = <u>180</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>100</u> (A)	<u>190</u> (B)																	
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Herb Stratum (Plot size: 5 ft.)				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
1. <u>Typha latifolia</u>	<u>10</u>	<u>No</u>	<u>OBL</u>															
2. <u>Phragmites australis</u>	<u>90</u>	<u>Yes</u>	<u>FACW</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>100</u> = Total Cover																		
Woody Vine Stratum (Plot size: 30 ft.)				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.														
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.) Hydrophytic vegetation found at data point				Hydrophytic Vegetation Present? Yes <u>X</u> No _____														

SOIL

Sampling Point: DP-XJ

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

[illegible]¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R , |
| <input type="checkbox"/> Histic Epipedon (A2) | MLRA 149B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input checked="" type="checkbox"/> X Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L, M**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches):

Hydric Soil Present?	Yes	X	No
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Remarks:

Hydric soils present at data point, could not dig past 8 inches dues to rock refusal



Wetland FA-XJ- View Facing North



Wetland FA-XJ- Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site:	<u>Champlain Hudson Express</u>	City/County:	<u>Schenectady</u>	Sampling Date:	<u>February 21, 2023</u>
Applicant/Owner:	<u>CHA</u>	State:	<u>NY</u>	Sampling Point:	<u>DP-XJ-Upland</u>
Investigator(s):	<u>Tristen Peterson</u>	Section, Township, Range:	<u>Schenectady</u>		
Landform (hillslope, terrace, etc.):	<u>Hillslope</u>	Local relief (concave, convex, none):	<u>Convex</u>	Slope (%):	<u>3</u>
Subregion (LRR or MLRA):	<u>LRR R</u>	Lat:	<u>42.827063°N</u>	Long:	<u>73.995469°W</u>
				Datum:	<u>NAD83</u>
Soil Map Unit Name:	<u>TvA - Tuller-Brockport complex: 0 to 3 percent slopes</u>			NWI classification:	<u>Not Mapped</u>

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

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

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

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

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Remarks: (Explain alternative procedures here or in a separate report.) Upland Data Point for Wetland XJ located on a slight hillslope adjacent to road			If yes, optional Wetland Site ID: _____

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)	
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): (includes capillary fringe)		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: No wetland hydrology present at data point			

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-XJ-Upland

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Sapling/Shrub Stratum (Plot size: 15 ft.)				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>75</u></td> <td>x 4 = <u>300</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>75</u> (A)</td> <td><u>300</u> (B)</td> </tr> </table> Prevalence Index = B/A = 4	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>75</u>	x 4 = <u>300</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>75</u> (A)	<u>300</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>75</u>	x 4 = <u>300</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>75</u> (A)	<u>300</u> (B)																	
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Herb Stratum (Plot size: 5 ft.)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
1. <u>Solidago canadensis</u>	<u>60</u>	<u>Yes</u>	<u>FACU</u>															
2. <u>Rubus idaeus</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>75</u> = Total Cover																		
Woody Vine Stratum (Plot size: 30 ft.)				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.														
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.) No hydrophytic vegetation found at data point				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>														

SOIL

Sampling Point: DP-XJ-Upland

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

[illegible]¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R , |
| <input type="checkbox"/> Histic Epipedon (A2) | MLRA 149B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L, M**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches):

Hydric Soil Present? Yes No **X**

Remarks:

Remarks:
No hydric soils present at data point



Upland FA-XJ- View Facing North



Upland FA-XJ- Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Champlain Hudson Express City/County: Schenectady Sampling Date: February 21, 2023

Applicant/Owner: CHA State: NY Sampling Point: DP-XE

Investigator(s): Tristen Peterson Section, Township, Range: Schenectady

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 1

Subregion (LRR or MLRA): LRR R Lat: 42.829114°N Long: 73.994532°W Datum: NAD83

Soil Map Unit Name: TvB - Tuller-Brockport complex; 3 to 8 percent slopes NWI classification: Not Mapped

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

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

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

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

Hydrophytic Vegetation Present?	Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>	

If yes, optional Wetland Site ID: XE

Remarks: (Explain alternative procedures here or in a separate report.)
 PEM Wetland Data Point located in a depression area adjacent to transmission ROW

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<u> </u> Surface Water (A1)	<u> </u> Water-Stained Leaves (B9)	<u> </u> Surface Soil Cracks (B6)
<u>X</u> High Water Table (A2)	<u> </u> Aquatic Fauna (B13)	<u>X</u> Drainage Patterns (B10)
<u>X</u> Saturation (A3)	<u> </u> Marl Deposits (B15)	<u> </u> Moss Trim Lines (B16)
<u> </u> Water Marks (B1)	<u> </u> Hydrogen Sulfide Odor (C1)	<u> </u> Dry-Season Water Table (C2)
<u> </u> Sediment Deposits (B2)	<u> </u> Oxidized Rhizospheres on Living Roots (C3)	<u> </u> Crayfish Burrows (C8)
<u> </u> Drift Deposits (B3)	<u> </u> Presence of Reduced Iron (C4)	<u> </u> Saturation Visible on Aerial Imagery (C9)
<u> </u> Algal Mat or Crust (B4)	<u> </u> Recent Iron Reduction in Tilled Soils (C6)	<u> </u> Stunted or Stressed Plants (D1)
<u> </u> Iron Deposits (B5)	<u> </u> Thin Muck Surface (C7)	<u>X</u> Geomorphic Position (D2)
<u> </u> Inundation Visible on Aerial Imagery (B7)	<u> </u> Other (Explain in Remarks)	<u> </u> Shallow Aquitard (D3)
<u> </u> Sparsely Vegetated Concave Surface (B8)		<u> </u> Microtopographic Relief (D4)
		<u>X</u> FAC-Neutral Test (D5)

Field Observations: Surface Water Present? Yes <u> </u> No <u>X</u> Depth (inches): Water Table Present? Yes <u>X</u> No <u> </u> Depth (inches): 9 Saturation Present? Yes <u>X</u> No <u> </u> Depth (inches): 7 (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
--	---

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

Remarks:
 Wetland hydrology present at data point

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-XE

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.6</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>0</u> = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>90</u></td> <td>x 2 = <u>180</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>20</u></td> <td>x 4 = <u>80</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>110</u> (A)</td> <td><u>260</u> (B)</td> </tr> </table> Prevalence Index = B/A = 2.36	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>90</u>	x 2 = <u>180</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>20</u>	x 4 = <u>80</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>110</u> (A)	<u>260</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>90</u>	x 2 = <u>180</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>20</u>	x 4 = <u>80</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>110</u> (A)	<u>260</u> (B)																	
Sapling/Shrub Stratum (Plot size: 15 ft.)																		
1. <u>Cornus amomum</u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
<u>10</u> = Total Cover																		
Herb Stratum (Plot size: 5 ft.)																		
1. <u>Phragmites australis</u>	<u>80</u>	<u>Yes</u>	<u>FACW</u>															
2. <u>Solidago canadensis</u>	<u>20</u>	<u>Yes</u>	<u>FACU</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.														
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>100</u> = Total Cover																		
Woody Vine Stratum (Plot size: 30 ft.)																		
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <u>X</u> No _____														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.)																		
Hydrophytic vegetation found at data point																		

SOIL

Sampling Point: DP-XE

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

[illegible]¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R , |
| <input type="checkbox"/> Histic Epipedon (A2) | MLRA 149B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input checked="" type="checkbox"/> X Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L, M**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches):

Hydric Soil Present?	Yes	X	No
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Remarks:

Hydric soils present at data point



Wetland FA-XE- View Facing North



Wetland FA-XE- Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site:	Champlain Hudson Express	City/County:	Schenectady	Sampling Date:	February 21, 2023
Applicant/Owner:	CHA	State:	NY	Sampling Point:	DP-XE-Upland
Investigator(s):	Tristen Peterson	Section, Township, Range:	Schenectady		
Landform (hillslope, terrace, etc.):	Terrace	Local relief (concave, convex, none):	Convex	Slope (%):	1
Subregion (LRR or MLRA):	LRR R	Lat: 42.829270°N	Long: 73.994557°W	Datum:	NAD83
Soil Map Unit Name:	TvB - Tuller-Brockport complex; 3 to 8 percent slopes			NWI classification:	Not Mapped

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

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

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

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

Hydrophytic Vegetation Present?	Yes _____	No <u> X </u>	Is the Sampled Area within a Wetland? Yes _____ No <u> X </u> If yes, optional Wetland Site ID: _____
Hydric Soil Present?	Yes _____	No <u> X </u>	
Wetland Hydrology Present?	Yes _____	No <u> X </u>	
Remarks: (Explain alternative procedures here or in a separate report.) Upland Data Point for Wetland XE located in on a upland mound adjacent to transmission ROW			

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Microtopographic Relief (D4)	
		<input type="checkbox"/> FAC-Neutral Test (D5)	
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): (includes capillary fringe)		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks: No wetland hydrology present at data point			

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-XE-Upland

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: 15 ft.)				Prevalence Index worksheet: <div style="display: flex; justify-content: space-between;"> Total % Cover of: Multiply by: </div> OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>70</u> x 4 = <u>280</u> UPL species <u>35</u> x 5 = <u>175</u> Column Totals: <u>105</u> (A) <u>455</u> (B) Prevalence Index = B/A = 4.33
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Herb Stratum (Plot size: 5 ft.)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Centaurea stoebe</u>	<u>35</u>	<u>Yes</u>	<u>UPL</u>	
2. <u>Solidago canadensis</u>	<u>40</u>	<u>Yes</u>	<u>FACU</u>	
3. <u>Lolium perenne</u>	<u>30</u>	<u>Yes</u>	<u>FACU</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>105</u> = Total Cover				
Woody Vine Stratum (Plot size: 30 ft.)				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>0</u> = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.) No hydrophytic vegetation found at data point				Hydrophytic Vegetation Present? <div style="display: flex; align-items: center; gap: 10px;"> Yes _____ No _____ X </div>

SOIL

Sampling Point: DP-XE-Upland

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

[illegible]¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L, M**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches):

Hydric Soil Present? Yes No **X**

Remarks:

Remarks:
No hydric soils present at data point



Upland FA-XE- View Facing North



Upland FA-XE- Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Champlain Hudson Express City/County: Schenectady Sampling Date: February 21, 2023

Applicant/Owner: CHA State: NY Sampling Point: DP-XK

Investigator(s): Tristen Peterson Section, Township, Range: Schenectady

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 1

Subregion (LRR or MLRA): LRR R Lat: 42.827828°N Long: 73.995108°W Datum: NAD83

Soil Map Unit Name: TvA - Tuller-Brockport complex; 0 to 3 percent slopes NWI classification: PEM1E

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

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

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

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

Hydrophytic Vegetation Present?	Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>		
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>		If yes, optional Wetland Site ID: <u>XK</u>

Remarks: (Explain alternative procedures here or in a separate report.)
 PEM Wetland Data Point located in a open depression area mixed with Phragmites / Cattail

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<u> </u> Surface Water (A1)	<u> </u> Water-Stained Leaves (B9)	<u> </u> Surface Soil Cracks (B6)
<u>X</u> High Water Table (A2)	<u> </u> Aquatic Fauna (B13)	<u>X</u> Drainage Patterns (B10)
<u>X</u> Saturation (A3)	<u> </u> Marl Deposits (B15)	<u> </u> Moss Trim Lines (B16)
<u> </u> Water Marks (B1)	<u> </u> Hydrogen Sulfide Odor (C1)	<u> </u> Dry-Season Water Table (C2)
<u> </u> Sediment Deposits (B2)	<u> </u> Oxidized Rhizospheres on Living Roots (C3)	<u>X</u> Crayfish Burrows (C8)
<u> </u> Drift Deposits (B3)	<u> </u> Presence of Reduced Iron (C4)	<u> </u> Saturation Visible on Aerial Imagery (C9)
<u> </u> Algal Mat or Crust (B4)	<u> </u> Recent Iron Reduction in Tilled Soils (C6)	<u> </u> Stunted or Stressed Plants (D1)
<u> </u> Iron Deposits (B5)	<u> </u> Thin Muck Surface (C7)	<u>X</u> Geomorphic Position (D2)
<u>X</u> Inundation Visible on Aerial Imagery (B7)	<u> </u> Other (Explain in Remarks)	<u> </u> Shallow Aquitard (D3)
<u> </u> Sparsely Vegetated Concave Surface (B8)		<u> </u> Microtopographic Relief (D4)
		<u>X</u> FAC-Neutral Test (D5)

Field Observations: Surface Water Present? Yes <u> </u> No <u>X</u> Depth (inches): Water Table Present? Yes <u>X</u> No <u> </u> Depth (inches): 9 Saturation Present? Yes <u>X</u> No <u> </u> Depth (inches): 6 (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
--	---

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

Remarks:
 Wetland hydrology present at data point

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-XK

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Sapling/Shrub Stratum (Plot size: 15 ft.)				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>70</u></td> <td>x 1 = <u>70</u></td> </tr> <tr> <td>FACW species <u>20</u></td> <td>x 2 = <u>40</u></td> </tr> <tr> <td>FAC species <u>10</u></td> <td>x 3 = <u>30</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>140</u> (B)</td> </tr> </table> Prevalence Index = B/A = 1.4	Total % Cover of:	Multiply by:	OBL species <u>70</u>	x 1 = <u>70</u>	FACW species <u>20</u>	x 2 = <u>40</u>	FAC species <u>10</u>	x 3 = <u>30</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>100</u> (A)	<u>140</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>70</u>	x 1 = <u>70</u>																	
FACW species <u>20</u>	x 2 = <u>40</u>																	
FAC species <u>10</u>	x 3 = <u>30</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>100</u> (A)	<u>140</u> (B)																	
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Herb Stratum (Plot size: 5 ft.)				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
1. <u>Typha angustifolia</u>	<u>60</u>	<u>Yes</u>	<u>OBL</u>															
2. <u>Phragmites australis</u>	<u>20</u>	<u>Yes</u>	<u>FACW</u>															
3. <u>Juncus pylaei</u>	<u>10</u>	<u>No</u>	<u>OBL</u>															
4. <u>Solidago rugosa</u>	<u>10</u>	<u>No</u>	<u>FAC</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>100</u> = Total Cover																		
Woody Vine Stratum (Plot size: 30 ft.)				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.														
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.) Hydrophytic vegetation found at data point				Hydrophytic Vegetation Present? Yes <u>X</u> No _____														

SOIL

Sampling Point: DP-XK

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

[illegible]

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

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, |
| <input type="checkbox"/> Histic Epipedon (A2) | MLRA 149B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input checked="" type="checkbox"/> X Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L, M**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches):

Hydric Soil Present?	Yes	X	No
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Remarks:

Hydric soils present at data point



Wetland FA-XK- View Facing West



Wetland FA-XK- Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

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

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

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

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

Hydrophytic Vegetation Present?	Yes _____	No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Hydric Soil Present?	Yes _____	No <u>X</u>	
Wetland Hydrology Present?	Yes _____	No <u>X</u>	
Remarks: (Explain alternative procedures here or in a separate report.) Upland Data Point for Wetland XK located along a access road within upland mound			

HYDROLOGY

Wetland Hydrology Indicators:			Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)				
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)		
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)		
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Moss Trim Lines (B16)		
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)		
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Crayfish Burrows (C8)		
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)		
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Stunted or Stressed Plants (D1)		
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Geomorphic Position (D2)		
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Microtopographic Relief (D4)		
		<input type="checkbox"/> FAC-Neutral Test (D5)		
Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): (includes capillary fringe)			Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks: No wetland hydrology present at data point				

VEGETATION – Use scientific names of plants.

 Sampling Point: DP-XK-Upland

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Sapling/Shrub Stratum (Plot size: 15 ft.)				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>85</u></td> <td>x 4 = <u>340</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>85</u> (A)</td> <td><u>340</u> (B)</td> </tr> </table> Prevalence Index = B/A = 4	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>85</u>	x 4 = <u>340</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>85</u> (A)	<u>340</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>0</u>	x 3 = <u>0</u>																	
FACU species <u>85</u>	x 4 = <u>340</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>85</u> (A)	<u>340</u> (B)																	
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Herb Stratum (Plot size: 5 ft.)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
1. <u>Solidago canadensis</u>	45	Yes	FACU															
2. <u>Lolium perenne</u>	20	Yes	FACU															
3. <u>Rubus idaeus</u>	20	Yes	FACU															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>85</u> = Total Cover																		
Woody Vine Stratum (Plot size: 30 ft.)				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.														
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
<u>0</u> = Total Cover																		
Remarks: (Include photo numbers here or on a separate sheet.) No hydrophytic vegetation found at data point				Hydrophytic Vegetation Present? <table style="display: inline-table; vertical-align: middle;"> <tr> <td style="width: 50px;">Yes</td> <td style="width: 50px;">No</td> <td style="width: 50px;">X</td> </tr> </table>	Yes	No	X											
Yes	No	X																

SOIL

Sampling Point: DP-XK-Upland

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

[illegible]

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

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R , |
| <input type="checkbox"/> Histic Epipedon (A2) | MLRA 149B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L, M**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: None

Depth (inches):

Hydric Soil Present? Yes No **X**

Remarks:

Remarks: Could not dig past 4 inches due to gravel refusal, no hydric soils present at data point



Upland FA-XK- View Facing North



Upland FA-XK- Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE Phase 5 City/County: Schenectady Sampling Date: 12/08/2021
 Applicant/Owner: CHA State: NY Sampling Point: 12/8 B-1
 Investigator(s): J. L. Williams, N. G. Dominic Section, Township, Range: _____
 Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Concave Slope %: _____
 Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: 42.82652 Long: -73.99393 Datum: NAD83
 Soil Map Unit Name: _____ NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>12/8 B</u>
Remarks: (Explain alternative procedures here or in a separate report.) along railroad	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) _____ Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) _____ Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) _____ Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) _____ Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) _____ Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input checked="" type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <u>X</u> No _____ Depth (inches): <u>6</u> Water Table Present? Yes <u>X</u> No _____ Depth (inches): _____ Saturation Present? Yes <u>X</u> No _____ Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

Sampling Point: 12/8 B-1

Tree Stratum (Plot size: _____)		Absolute % Cover	Dominant Species?	Indicator Status
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____
5.	_____	_____	_____	_____
6.	_____	_____	_____	_____
7.	_____	_____	_____	_____
		_____	=Total Cover	
Sapling/Shrub Stratum (Plot size: _____)				
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____
5.	_____	_____	_____	_____
6.	_____	_____	_____	_____
7.	_____	_____	_____	_____
		_____	=Total Cover	
Herb Stratum (Plot size: _____)				
1.	<i>Phragmites australis</i>	60	Yes	FACW
2.	<i>Typha angustifolia</i>	10	No	OBL
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____
5.	_____	_____	_____	_____
6.	_____	_____	_____	_____
7.	_____	_____	_____	_____
8.	_____	_____	_____	_____
9.	_____	_____	_____	_____
10.	_____	_____	_____	_____
11.	_____	_____	_____	_____
12.	_____	_____	_____	_____
		70	=Total Cover	
Woody Vine Stratum (Plot size: _____)				
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____
		_____	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 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/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	<u>10</u>	x 1 =	<u>10</u>
FACW species	<u>60</u>	x 2 =	<u>120</u>
FAC species	<u>0</u>	x 3 =	<u>0</u>
FACU species	<u>0</u>	x 4 =	<u>0</u>
UPL species	<u>0</u>	x 5 =	<u>0</u>
Column Totals:	<u>70</u> (A)		<u>130</u> (B)
Prevalence Index = B/A =		<u>1.86</u>	

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0¹

4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

 Problematic Hydrophytic Vegetation¹ (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes X No

SOIL

Sampling Point 12/8 B-1

[illegible]



Wetland 12.8-B- Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE Phase 5 City/County: Schenectady Sampling Date: 12/08/2021
 Applicant/Owner: CHA State: NY Sampling Point: 12/8 B-3 Upland
 Investigator(s): J. L. Williams, N. G. Dominic Section, Township, Range: _____
 Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Concave Slope %: _____
 Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: 42.82674 Long: -73.99418 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 Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes _____ No <u>X</u> Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) along railroad	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ Water-Stained Leaves (B9) _____ High Water Table (A2) _____ Aquatic Fauna (B13) _____ Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ ? Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) _____ Geomorphic Position (D2) _____ ? Shallow Aquitard (D3) _____ Microtopographic Relief (D4) _____ FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

VEGETATION – Use scientific names of plants.

 Sampling Point: 12/8 B-3 Upland

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status																																									
1. <u>Quercus rubra</u>	40	Yes	FACU	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33.3%</u> (A/B)																																								
2. <u>Pinus strobus</u>	30	Yes	FACU																																									
3. _____																																												
4. _____																																												
5. _____																																												
6. _____																																												
7. _____																																												
	70	=Total Cover																																										
Sapling/Shrub Stratum (Plot size: _____)																																												
1. <u>Rosa multiflora</u>	10	Yes	FAC	Prevalence Index worksheet: <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;">Total % Cover of:</th> <th style="width: 10%;"></th> <th style="width: 10%;">Multiply by:</th> <th style="width: 10%;"></th> <th style="width: 10%;"></th> </tr> </thead> <tbody> <tr> <td>OBL species</td> <td style="text-align: center;">0</td> <td>x 1 =</td> <td style="text-align: center;">0</td> <td></td> </tr> <tr> <td>FACW species</td> <td style="text-align: center;">0</td> <td>x 2 =</td> <td style="text-align: center;">0</td> <td></td> </tr> <tr> <td>FAC species</td> <td style="text-align: center;">10</td> <td>x 3 =</td> <td style="text-align: center;">30</td> <td></td> </tr> <tr> <td>FACU species</td> <td style="text-align: center;">70</td> <td>x 4 =</td> <td style="text-align: center;">280</td> <td></td> </tr> <tr> <td>UPL species</td> <td style="text-align: center;">0</td> <td>x 5 =</td> <td style="text-align: center;">0</td> <td></td> </tr> <tr> <td>Column Totals:</td> <td style="text-align: center;">80</td> <td>(A)</td> <td style="text-align: center;">310</td> <td>(B)</td> </tr> <tr> <td colspan="5" style="text-align: center;">Prevalence Index = B/A = <u>3.88</u></td> </tr> </tbody> </table>	Total % Cover of:		Multiply by:			OBL species	0	x 1 =	0		FACW species	0	x 2 =	0		FAC species	10	x 3 =	30		FACU species	70	x 4 =	280		UPL species	0	x 5 =	0		Column Totals:	80	(A)	310	(B)	Prevalence Index = B/A = <u>3.88</u>				
Total % Cover of:		Multiply by:																																										
OBL species	0	x 1 =	0																																									
FACW species	0	x 2 =	0																																									
FAC species	10	x 3 =	30																																									
FACU species	70	x 4 =	280																																									
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Column Totals:	80	(A)	310	(B)																																								
Prevalence Index = B/A = <u>3.88</u>																																												
2. _____																																												
3. _____																																												
4. _____																																												
5. _____																																												
6. _____																																												
7. _____																																												
	10	=Total Cover																																										
Herb Stratum (Plot size: _____)																																												
1. _____				Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																								
2. _____																																												
3. _____																																												
4. _____																																												
5. _____																																												
6. _____																																												
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10. _____																																												
11. _____																																												
12. _____																																												
		=Total Cover																																										
Woody Vine Stratum (Plot size: _____)																																												
1. _____				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.																																								
2. _____																																												
3. _____																																												
4. _____																																												
		=Total Cover																																										

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

SOIL

Sampling Point 12/8 B-3 Upland

[illegible]



12.8 B Upland- Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE Phase 5 City/County: Schenectady Sampling Date: 12/08/2021
 Applicant/Owner: CHA State: NY Sampling Point: 12/8 C-1
 Investigator(s): J. L. Williams, N. G. Dominic Section, Township, Range: _____
 Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Concave Slope %: _____
 Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: 42.82056 Long: -73.99602 Datum: NAD83
 Soil Map Unit Name: _____ NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>12.8 C-1</u>
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	
Remarks: (Explain alternative procedures here or in a separate report.) along railroad	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input checked="" type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <u>X</u> No _____ Depth (inches): <u>12</u> Water Table Present? Yes <u>X</u> No _____ Depth (inches): _____ Saturation Present? Yes <u>X</u> No _____ Depth (inches): _____ (includes capillary fringe)		Wetland Hydrology Present? Yes <u>X</u> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION – Use scientific names of plants.

 Sampling Point: 12/8 C-1

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
_____ =Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>30</u></td> <td>x 1 = <u>30</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>30</u> (A)</td> <td><u>30</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>1.00</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>30</u>	x 1 = <u>30</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>30</u> (A)	<u>30</u> (B)	Prevalence Index = B/A = <u>1.00</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>30</u>	x 1 = <u>30</u>																			
FACW species <u>0</u>	x 2 = <u>0</u>																			
FAC species <u>0</u>	x 3 = <u>0</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>30</u> (A)	<u>30</u> (B)																			
Prevalence Index = B/A = <u>1.00</u>																				
_____ =Total Cover																				
_____ =Total Cover																				
_____ =Total Cover																				
_____ =Total Cover																				
_____ =Total Cover																				
_____ =Total Cover				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
_____ =Total Cover																				
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_____ =Total Cover																				
_____ =Total Cover																				
_____ =Total Cover																				
_____ =Total Cover																				
_____ =Total Cover				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>																
_____ =Total Cover																				
_____ =Total Cover																				
_____ =Total Cover																				

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

SOIL

Sampling Point 12/8 C-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	10YR 3/1	100					Mucky Loam/Clay	standing water

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

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:						Indicators for Problematic Hydric Soils³:						
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R,	<input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 149B)										
<input type="checkbox"/> Histic Epipedon (A2)	<input checked="" type="checkbox"/> MLRA 149B)	<input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R)										
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B)	<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)										
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> High Chroma Sands (S11) (LRR K, L)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L)										
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L)										
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)										
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149B)										
<input checked="" type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Mesic Spodic (TA6) (MLRA 144A, 145, 149B)										
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Red Parent Material (F21)										
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Very Shallow Dark Surface (F22)										
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Marl (F10) (LRR K, L)	<input type="checkbox"/> Other (Explain in Remarks)										
<input type="checkbox"/> Dark Surface (S7)												

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

Restrictive Layer (if observed):			
Type:	water/rock balast		
Depth (inches):	12	Hydric Soil Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Remarks:
This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)



Wetland 12.8-C- Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE Phase 5 City/County: Schenectady Sampling Date: 12/08/2021
 Applicant/Owner: CHA State: NY Sampling Point: 12/8 C-3 Upland
 Investigator(s): J. L. Williams, N. G. Dominic Section, Township, Range: _____
 Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Concave Slope %: _____
 Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: 42.82043 Long: -73.99605 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 Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes _____ No <u>X</u> Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) along railroad	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ Water-Stained Leaves (B9) _____ High Water Table (A2) _____ Aquatic Fauna (B13) _____ Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)		<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) _____ Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) _____ FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)		Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

Sampling Point: 12/8 C-3 Upland

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

SOIL

Sampling Point 12/8 C-3 Upland

[illegible]



12.8 C Upland- Soils

Segment 7-Package 4B

SITE PHOTOGRAPHS

Champlain Hudson Power Express

ATTACHMENT 2
NWI AND NYSDEC WETLAND & STREAM MAPS

Author: Cole Scrivner Date Saved: 5/24/2022

Legend

Segment 7 Alignment

NWI Wetlands & Streams

NYSDEC Wetlands

NYSDEC Mapped Streams

An aerial photograph of a landscape featuring a network of wetlands and streams. A red line, representing the Segment 7 Alignment, runs diagonally from the upper right towards the bottom right. Wetlands are highlighted in green with a cross-hatch pattern, while streams are shown as blue lines. Numerous labels are scattered across the map, including 'PUS', 'CC', 'R4SBC', 'R5UBH', 'PUBHx', 'PUBFx', 'PEMIE', 'PEM1Ex', 'PFO1Cx', 'L1UBHh', 'PEM1/SS1Ch', 'DR5UBH', 'PEM1Ah', 'AA', 'R5UBH', 'R4SBC', 'R5UBH', 'R4SBC', 'R5UBH', 'R4SBC', 'PEMIE', 'PFO1/SS1C', 'PFO1/SS1E', and 'Isle of Oneida'. Some labels are enclosed in small white boxes.

The logo for the Champlain Hudson Power Express project, featuring the letters 'CIA' in a bold, black, sans-serif font. A stylized blue wave graphic is positioned behind the letters, extending from the 'C' and 'H'.

N

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A horizontal scale bar with a black background and white markings. It is divided into three segments labeled '0', '0.5', and '1' followed by the word 'Miles'.

*Champlain Hudson Power Express
Segment 7 Package 4B Wetland & Stream Map
(NWI and NYSDEC)*

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

ATTACHMENT 3
NRCS SOIL MAPS

Author: Cole Scrivner Date Saved: 5/24/2022

Legend

Segment 7 Alignment

Schenectady County Soils (NY093)

BvA; BvB

CPE

Ce

CoA; CoC

Cu

En

FL

Gr

Gv

HTF

HoB; HoC

HrA; HrB; HrD

HuB; HuC

Ju

MPE

Ma

MnB

MrB

NVF

NaB; NaD

NuB; NuC

OtB

PsA; PsB

Ra

RhA; RhB

ScA; ScB

TvA; TvB

UR

W

Wy

N

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*Champlain Hudson Power Express
Segment 7 Package 4B NRCS Soil Map*

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

Legend

Segment 7 Alignment

Schenectady County Soils (NY093)

AZF

BvA; BvB

CPE

CoA; CoC

Cu

Fr

Gr

Gv

HTF

Ha

HoB; HoC

HrA; HrB; HrD

LoB; LoD

Mg

NWC

NaB; NaD

NuB; NuC

Pr

RhA; RhB

SA

Te

TvA; TvB

UnB

W

Wy

Author: Cole Scrivner Date Saved: 5/24/2022

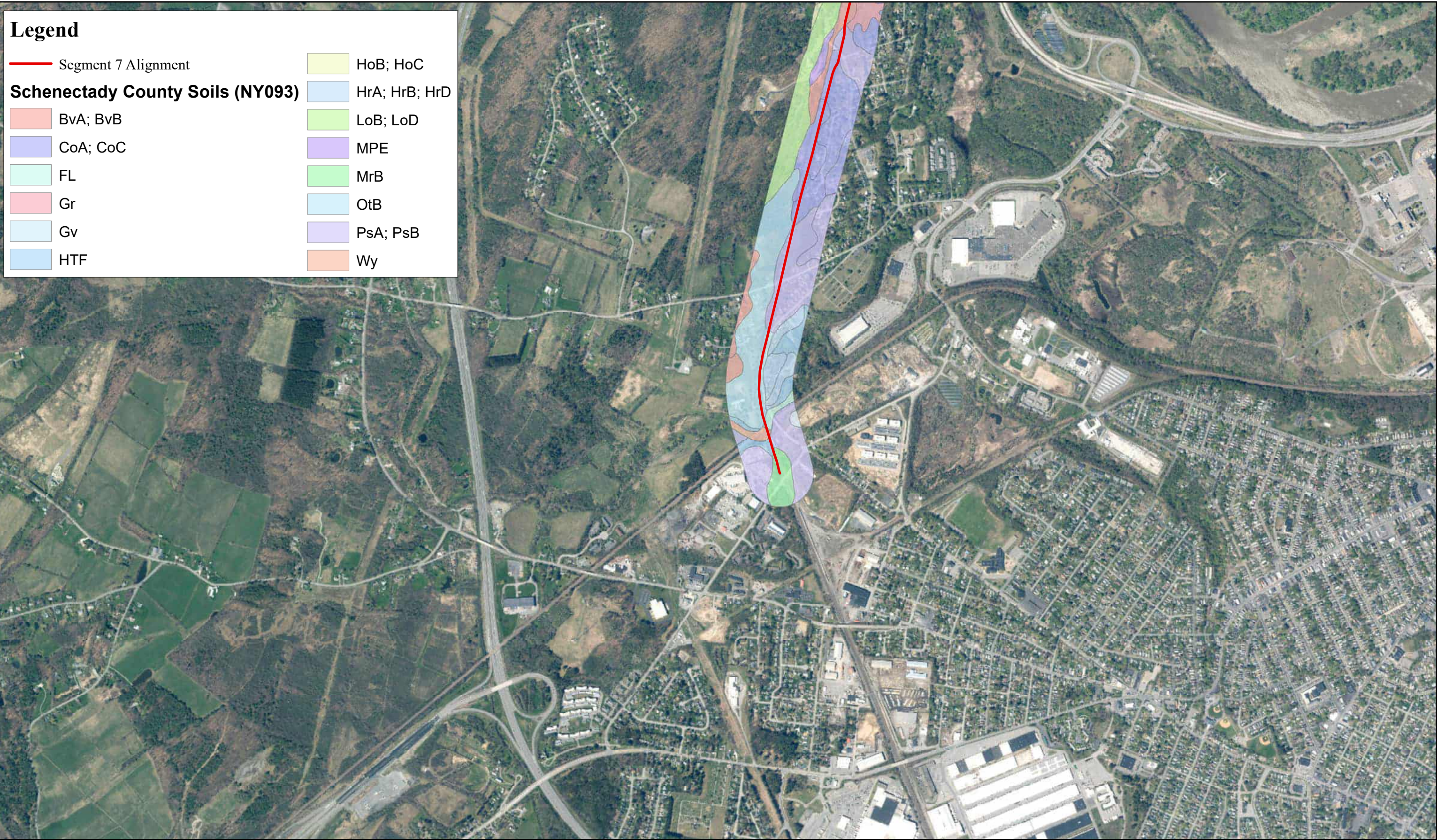
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Page 2 of 3

Champlain Hudson Power Express
Segment 7 Package 4B NRCS Soil Map

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

Author: Cole Scrivner Date Saved: 5/24/2022



W—Water

Map Unit Setting

National map unit symbol: 9wd3

Mean annual precipitation: 36 to 48 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 125 to 160 days

Farmland classification: Not prime farmland

Map Unit Composition

Water: 100 percent

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

Schenectady County, New York

BvA—Burdett-Scriba channery silt loams, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: bd3h

Elevation: 210 to 1,600 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Prime farmland if drained

Map Unit Composition

Burdett and similar soils: 50 percent

Scriba and similar soils: 30 percent

Minor components: 20 percent

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

Description of Burdett

Setting

Landform: Till plains, hills, drumlinoid ridges

Landform position (two-dimensional): Footslope, summit

Landform position (three-dimensional): Base slope

Down-slope shape: Concave

Across-slope shape: Linear

Parent material: A thin silt mantle overlying till that is strongly influenced by shale

Typical profile

H1 - 0 to 9 inches: channery silt loam

H2 - 9 to 16 inches: channery silt loam

H3 - 16 to 44 inches: very gravelly silty clay loam

H4 - 44 to 60 inches: very gravelly silty clay loam

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat poorly drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 6 to 18 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 10 percent

Available water supply, 0 to 60 inches: Moderate (about 7.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: C/D

Ecological site: F101XY013NY - Moist Till

Hydric soil rating: No

Description of Scriba

Setting

Landform: Till plains, drumlins

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Base slope

Down-slope shape: Concave

Across-slope shape: Linear

Parent material: Loamy till dominated by sandstone, with lesser amounts of limestone and shale

Typical profile

H1 - 0 to 7 inches: channery silt loam

H2 - 7 to 15 inches: channery silt loam

Bx - 15 to 43 inches: very gravelly loam

C - 43 to 60 inches: very gravelly loam

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: 12 to 18 inches to fragipan

Drainage class: Somewhat poorly drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 6 to 18 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Available water supply, 0 to 60 inches: Very low (about 1.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Angola

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

Varick

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

Ilion

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

Darien

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

BvB—Burdett-Scriba channery silt loams, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: bd3j
Elevation: 200 to 1,600 feet
Mean annual precipitation: 38 to 44 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 110 to 170 days
Farmland classification: Prime farmland if drained

Map Unit Composition

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

Description of Burdett

Setting

Landform: Till plains, hills, drumlinoid ridges
Landform position (two-dimensional): Footslope, summit
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: A thin silt mantle overlying till that is strongly influenced by shale

Typical profile

H1 - 0 to 9 inches: channery silt loam

H2 - 9 to 16 inches: channery silt loam
H3 - 16 to 44 inches: very gravelly silty clay loam
H4 - 44 to 60 inches: very gravelly silty clay loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water
(Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Available water supply, 0 to 60 inches: Moderate (about 7.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Ecological site: F101XY013NY - Moist Till
Hydric soil rating: No

Description of Scriba**Setting**

Landform: Till plains, drumlins
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Loamy till dominated by sandstone, with lesser amounts of limestone and shale

Typical profile

H1 - 0 to 7 inches: channery silt loam
H2 - 7 to 15 inches: channery silt loam
Bx - 15 to 43 inches: very gravelly loam
C - 43 to 60 inches: very gravelly loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: 12 to 18 inches to fragipan
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water
(Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Available water supply, 0 to 60 inches: Very low (about 1.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: D

Hydric soil rating: No

Minor Components**Darien**

Percent of map unit: 5 percent

Hydric soil rating: No

Ilion

Percent of map unit: 5 percent

Landform: Depressions

Hydric soil rating: Yes

Varick

Percent of map unit: 5 percent

Landform: Depressions

Hydric soil rating: Yes

Angola

Percent of map unit: 5 percent

Hydric soil rating: No

Ce—Cheektowaga fine sandy loam**Map Unit Setting**

National map unit symbol: bd3p

Elevation: 200 to 800 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Cheektowaga and similar soils: 75 percent

Minor components: 25 percent

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

Description of Cheektowaga**Setting**

Landform: Depressions

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Tread

Down-slope shape: Concave

Across-slope shape: Concave

Parent material: Sandy deltaic deposits over clayey glaciolacustrine deposits

Typical profile

H1 - 0 to 9 inches: fine sandy loam
H2 - 9 to 18 inches: loamy fine sand
H3 - 18 to 26 inches: loamy fine sand
H4 - 26 to 60 inches: silty clay

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 20 to 40 inches to strongly contrasting textural stratification
Drainage class: Very poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 0 to 6 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Calcium carbonate, maximum content: 10 percent
Available water supply, 0 to 60 inches: Very low (about 2.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: C/D
Ecological site: F101XY007NY - Wet Outwash
Hydric soil rating: Yes

Minor Components**Madalin**

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

Junius

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

Claverack

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

Granby

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

Palms

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

CoA—Colonie loamy fine sand, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: bd3v

Elevation: 150 to 1,000 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Colonie and similar soils: 75 percent

Minor components: 25 percent

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

Description of Colonie

Setting

Landform: Deltas, beach ridges

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Tread

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Sandy glaciofluvial or eolian deposits

Typical profile

H1 - 0 to 6 inches: loamy fine sand

H2 - 6 to 70 inches: fine sand

H3 - 70 to 110 inches: fine sand

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): High to very high (1.98 to 19.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2s

Hydrologic Soil Group: A

Ecological site: F101XY005NY - Dry Outwash

Hydric soil rating: No

Minor Components**Plainfield**

Percent of map unit: 5 percent

Hydric soil rating: No

Elnora

Percent of map unit: 5 percent

Hydric soil rating: No

Howard

Percent of map unit: 5 percent

Hydric soil rating: No

Unadilla

Percent of map unit: 5 percent

Hydric soil rating: No

Junius

Percent of map unit: 5 percent

Hydric soil rating: No

CoC—Colonie loamy fine sand, 3 to 15 percent slopes**Map Unit Setting**

National map unit symbol: 1qcvw

Elevation: 150 to 1,000 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Colonie and similar soils: 75 percent

Minor components: 25 percent

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

Description of Colonie**Setting**

Landform: Deltas, beach ridges

Landform position (two-dimensional): Shoulder

Landform position (three-dimensional): Tread

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Sandy glaciofluvial or eolian deposits

Typical profile

H1 - 0 to 6 inches: loamy fine sand

H2 - 6 to 70 inches: fine sand

H3 - 70 to 110 inches: fine sand

Properties and qualities

Slope: 3 to 15 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): High to very high (1.98 to 19.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: A

Ecological site: F101XY005NY - Dry Outwash

Hydric soil rating: No

Minor Components**Plainfield**

Percent of map unit: 5 percent

Hydric soil rating: No

Elnora

Percent of map unit: 5 percent

Hydric soil rating: No

Howard

Percent of map unit: 5 percent

Hydric soil rating: No

Nunda

Percent of map unit: 5 percent

Hydric soil rating: No

Junius

Percent of map unit: 5 percent

Hydric soil rating: No

CPE—Colonie and Plainfield soils, steep**Map Unit Setting**

National map unit symbol: bd3x

Elevation: 150 to 1,150 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Not prime farmland

Map Unit Composition

Colonie and similar soils: 45 percent

Plainfield and similar soils: 35 percent

Minor components: 20 percent

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

Description of Colonie

Setting

Landform: Deltas, beach ridges

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Riser

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Sandy glaciofluvial or eolian deposits

Typical profile

H1 - 0 to 6 inches: loamy fine sand

H2 - 6 to 70 inches: fine sand

H3 - 70 to 110 inches: fine sand

Properties and qualities

Slope: 15 to 50 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): High to very high (1.98 to 19.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: A

Ecological site: F101XY005NY - Dry Outwash

Hydric soil rating: No

Description of Plainfield

Setting

Landform: Terraces, outwash plains, deltas

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Riser

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Sandy glaciofluvial or deltaic deposits

Typical profile

H1 - 0 to 8 inches: loamy sand

H2 - 8 to 32 inches: coarse sand

H3 - 32 to 78 inches: coarse sand

Properties and qualities

Slope: 15 to 50 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components**Hudson**

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

Junius

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

Howard

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

Elnora

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

Cu—Cut and fill land**Map Unit Setting**

National map unit symbol: 1vggp
Elevation: 180 to 1,380 feet
Mean annual precipitation: 38 to 44 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 110 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

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

Description of Udorthents**Typical profile**

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

Properties and qualities

Slope: 0 to 15 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat excessively drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to high (0.06 to 5.95 in/hr)

Depth to water table: About 36 to 72 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

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

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: A

Hydric soil rating: No

Minor Components**Angola**

Percent of map unit: 5 percent

Hydric soil rating: No

Sun

Percent of map unit: 5 percent

Landform: Depressions

Hydric soil rating: Yes

Ilion

Percent of map unit: 5 percent

Landform: Depressions

Hydric soil rating: Yes

Raynham

Percent of map unit: 5 percent

Hydric soil rating: No

Hudson

Percent of map unit: 5 percent

Hydric soil rating: No

Alton

Percent of map unit: 5 percent

Hydric soil rating: No

En—Elnora loamy fine sand**Map Unit Setting**

National map unit symbol: bd42

Elevation: 230 to 620 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Elnora and similar soils: 75 percent

Minor components: 25 percent

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

Description of Elnora**Setting**

Landform: Deltas, beach ridges

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Tread

Down-slope shape: Concave

Across-slope shape: Convex

Parent material: Sandy glaciofluvial, eolian, or deltaic deposits

Typical profile

H1 - 0 to 9 inches: loamy fine sand

H2 - 9 to 48 inches: loamy fine sand

H3 - 48 to 60 inches: loamy fine sand

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): High
(1.98 to 5.95 in/hr)

Depth to water table: About 14 to 24 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 4.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2w

Hydrologic Soil Group: A/D

Hydric soil rating: No

Minor Components**Plainfield**

Percent of map unit: 5 percent

Hydric soil rating: No

Junius

Percent of map unit: 5 percent

Hydric soil rating: No

Phelps

Percent of map unit: 5 percent

Hydric soil rating: No

Claverack

Percent of map unit: 5 percent

Hydric soil rating: No

Colonie

Percent of map unit: 5 percent

Hydric soil rating: No

FL—Fluvaquents, loamy**Map Unit Setting**

National map unit symbol: bd44

Elevation: 300 to 1,800 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Not prime farmland

Map Unit Composition

Fluvaquents and similar soils: 75 percent

Minor components: 25 percent

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

Description of Fluvaquents**Setting**

Landform: Flood plains

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Dip

Down-slope shape: Concave

Across-slope shape: Concave

Parent material: Alluvium with highly variable texture

Typical profile

H1 - 0 to 5 inches: gravelly silt loam

H2 - 5 to 70 inches: very gravelly silt loam

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to very high (0.06 to 19.98 in/hr)

Depth to water table: About 0 to 12 inches

Frequency of flooding: NoneFrequent

Frequency of ponding: Frequent

Calcium carbonate, maximum content: 15 percent

Available water supply, 0 to 60 inches: Moderate (about 6.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 5w

Hydrologic Soil Group: B/D

Hydric soil rating: Yes

Minor Components

Granby

Percent of map unit: 5 percent

Landform: Depressions

Hydric soil rating: Yes

Hamlin

Percent of map unit: 5 percent

Hydric soil rating: No

Wayland

Percent of map unit: 5 percent

Landform: Flood plains

Hydric soil rating: Yes

Teel

Percent of map unit: 5 percent

Hydric soil rating: No

Saprists

Percent of map unit: 3 percent

Landform: Swamps, marshes

Hydric soil rating: Yes

Aquents

Percent of map unit: 2 percent

Landform: Flood plains

Hydric soil rating: Yes

Fr—Fredon silt loam

Map Unit Setting

National map unit symbol: bd47

Elevation: 250 to 1,200 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Prime farmland if drained

Map Unit Composition

Fredon, poorly drained, and similar soils: 50 percent

Fredon, somewhat poorly drained, and similar soils: 25 percent

Minor components: 25 percent

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

Description of Fredon, Poorly Drained**Setting**

Landform: Depressions

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Tread

Down-slope shape: Concave

Across-slope shape: Linear

Parent material: Loamy over sandy and gravelly glaciofluvial deposits

Typical profile

Ap - 0 to 9 inches: silt loam

B21 - 9 to 19 inches: gravelly silt loam

B22 - 19 to 31 inches: very gravelly loam

2C - 31 to 45 inches: stratified very gravelly sand

3C - 45 to 60 inches: stratified silt loam to very fine sand

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately high to high (0.20 to 1.98 in/hr)

Depth to water table: About 0 to 6 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Available water supply, 0 to 60 inches: Moderate (about 7.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: B/D

Hydric soil rating: Yes

Description of Fredon, Somewhat Poorly Drained**Setting**

Landform: Depressions

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Tread

Down-slope shape: Concave

Across-slope shape: Linear

Parent material: Loamy over sandy and gravelly glaciofluvial deposits

Typical profile

Ap - 0 to 9 inches: silt loam

B21 - 9 to 19 inches: gravelly silt loam

B22 - 19 to 31 inches: very gravelly loam

2C - 31 to 45 inches: stratified very gravelly sand

3C - 45 to 60 inches: stratified silt loam to very fine sand

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat poorly drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately high to high (0.20 to 1.98 in/hr)

Depth to water table: About 6 to 18 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Available water supply, 0 to 60 inches: Moderate (about 7.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: B/D

Hydric soil rating: No

Minor Components**Madalin**

Percent of map unit: 5 percent

Landform: Depressions

Hydric soil rating: Yes

Phelps

Percent of map unit: 5 percent

Hydric soil rating: No

Howard

Percent of map unit: 5 percent

Hydric soil rating: No

Raynham

Percent of map unit: 5 percent

Hydric soil rating: No

Ilion

Percent of map unit: 5 percent

Landform: Depressions

Hydric soil rating: Yes

Gr—Granby loamy fine sand**Map Unit Setting**

National map unit symbol: bd49

Elevation: 600 to 1,000 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Not prime farmland

Map Unit Composition

Granby and similar soils: 75 percent

Minor components: 25 percent

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

Description of Granby**Setting**

Landform: Depressions

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Tread

Down-slope shape: Concave

Across-slope shape: Concave

Parent material: Sandy glaciofluvial deposits or sandy glaciolacustrine deposits

Typical profile

H1 - 0 to 11 inches: loamy fine sand

H2 - 11 to 26 inches: loamy fine sand

H3 - 26 to 60 inches: sand

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)

Depth to water table: About 0 inches

Frequency of flooding: None

Frequency of ponding: Frequent

Calcium carbonate, maximum content: 15 percent

Available water supply, 0 to 60 inches: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 5w

Hydrologic Soil Group: A/D

Hydric soil rating: Yes

Minor Components**Cheektowaga**

Percent of map unit: 5 percent

Landform: Depressions

Hydric soil rating: Yes

Palms

Percent of map unit: 5 percent

Landform: Marshes, swamps

Hydric soil rating: Yes

Junius

Percent of map unit: 5 percent

Hydric soil rating: No

Elnora

Percent of map unit: 5 percent

Hydric soil rating: No

Plainfield

Percent of map unit: 5 percent

Hydric soil rating: No

Gv—Gravel pits

Map Unit Setting

National map unit symbol: 1vggq

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Not prime farmland

Map Unit Composition

Gravel pits: 70 percent

Minor components: 30 percent

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

Description of Gravel Pits

Typical profile

H1 - 0 to 6 inches: very gravelly sand

H2 - 6 to 60 inches: very gravelly coarse sand

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8s

Hydric soil rating: Unranked

Minor Components

Herkimer

Percent of map unit: 5 percent

Hydric soil rating: No

Ilion

Percent of map unit: 5 percent

Landform: Depressions

Hydric soil rating: Yes

Howard

Percent of map unit: 5 percent

Hydric soil rating: No

Palmyra

Percent of map unit: 5 percent

Hydric soil rating: No

Fredon

Percent of map unit: 5 percent

Landform: Depressions

Hydric soil rating: Yes

Farmington

Percent of map unit: 5 percent

Hydric soil rating: No

Ha—Hamlin silt loam**Map Unit Setting**

National map unit symbol: bd4f

Elevation: 180 to 800 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Hamlin and similar soils: 75 percent

Minor components: 25 percent

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

Description of Hamlin**Setting**

Landform: Flood plains

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Rise

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Silty alluvium mainly from areas of siltstone, shale, and limestone

Typical profile

H1 - 0 to 10 inches: silt loam

H2 - 10 to 24 inches: silt loam

H3 - 24 to 37 inches: silt loam

H4 - 37 to 70 inches: silt loam

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately high to high (0.57 to 1.98 in/hr)

Depth to water table: About 36 to 72 inches

Frequency of flooding: OccasionalNone

Frequency of ponding: None

Calcium carbonate, maximum content: 1 percent

Available water supply, 0 to 60 inches: High (about 11.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 1

Hydrologic Soil Group: B

Hydric soil rating: No

Minor Components**Teel**

Percent of map unit: 8 percent

Hydric soil rating: No

Howard

Percent of map unit: 5 percent

Hydric soil rating: No

Copake

Percent of map unit: 5 percent

Hydric soil rating: No

Scio

Percent of map unit: 5 percent

Hydric soil rating: No

Unnamed soils

Percent of map unit: 2 percent

HoB—Hornell silt loam, 3 to 8 percent slopes**Map Unit Setting**

National map unit symbol: bd4j

Elevation: 600 to 1,800 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Hornell and similar soils: 75 percent

Minor components: 25 percent

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

Description of Hornell**Setting**

Landform: Till plains, ridges, benches

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Base slope

Down-slope shape: Concave

Across-slope shape: Linear

Parent material: Clayey till, or till and residuum, derived from acid shale and siltstone

Typical profile

H1 - 0 to 8 inches: silt loam

H2 - 8 to 27 inches: silty clay

H3 - 27 to 32 inches: silty clay loam

H4 - 32 to 36 inches: weathered bedrock

Properties and qualities

Slope: 3 to 8 percent

Depth to restrictive feature: 20 to 40 inches to lithic bedrock

Drainage class: Somewhat poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Very low
(0.00 to 0.00 in/hr)

Depth to water table: About 6 to 18 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: D

Hydric soil rating: No

Minor Components**Brockport**

Percent of map unit: 5 percent

Hydric soil rating: No

Manlius

Percent of map unit: 5 percent

Hydric soil rating: No

Tuller

Percent of map unit: 5 percent

Hydric soil rating: No

Angola

Percent of map unit: 5 percent

Hydric soil rating: No

Varick

Percent of map unit: 5 percent

Landform: Depressions

Hydric soil rating: Yes

HTF—Howard soils, very steep**Map Unit Setting**

National map unit symbol: bd4c

Elevation: 230 to 1,030 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Not prime farmland

Map Unit Composition

Howard and similar soils: 75 percent

Minor components: 25 percent

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

Description of Howard

Setting

Landform: Terraces, valley trains

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Riser

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Gravelly loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits, containing significant amounts of limestone

Typical profile

H1 - 0 to 9 inches: gravelly silt loam

H2 - 9 to 19 inches: very gravelly sandy loam

H3 - 19 to 60 inches: very gravelly sandy loam

H4 - 60 to 64 inches: stratified very gravelly loamy sand

Properties and qualities

Slope: 25 to 70 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately high to high (0.57 to 5.95 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

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

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: A

Hydric soil rating: No

Minor Components

Nunda

Percent of map unit: 5 percent

Hydric soil rating: No

Mohawk

Percent of map unit: 5 percent

Hydric soil rating: No

Palmyra

Percent of map unit: 5 percent

Hydric soil rating: No

Phelps

Percent of map unit: 5 percent

Hydric soil rating: No

Lansing

Percent of map unit: 5 percent

Hydric soil rating: No

IIA—Ilion silt loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: bd4t

Elevation: 600 to 1,800 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Ilion and similar soils: 75 percent

Minor components: 25 percent

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

Description of Ilion

Setting

Landform: Depressions

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Base slope

Down-slope shape: Concave

Across-slope shape: Concave

Parent material: Loamy till derived from calcareous dark shale

Typical profile

Ap - 0 to 9 inches: silt loam

E - 9 to 14 inches: silty clay loam

2B - 14 to 39 inches: channery silty clay loam

3C - 39 to 60 inches: gravelly silt loam

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 0 inches

Frequency of flooding: None

Frequency of ponding: Frequent
Calcium carbonate, maximum content: 10 percent
Available water supply, 0 to 60 inches: Moderate (about 8.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: C/D
Ecological site: F101XY014NY - Wet Till Depression
Hydric soil rating: Yes

Minor Components**Scriba**

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

Madalin

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

Fonda

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

Varick

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

Darien

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

Ju—Junius loamy fine sand**Map Unit Setting**

National map unit symbol: bd4y
Elevation: 100 to 650 feet
Mean annual precipitation: 38 to 44 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 110 to 170 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Junius, poorly drained, and similar soils: 50 percent
Junius, somewhat poorly drained, and similar soils: 25 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Junius, Poorly Drained**Setting**

Landform: Deltas on lake plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Calcareous sandy glaciolacustrine or deltaic deposits

Typical profile

H1 - 0 to 10 inches: loamy fine sand
H2 - 10 to 48 inches: loamy fine sand
H3 - 48 to 60 inches: very fine sandy loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Available water supply, 0 to 60 inches: Low (about 4.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A/D
Ecological site: F101XY006NY - Moist Outwash
Hydric soil rating: Yes

Description of Junius, Somewhat Poorly Drained**Setting**

Landform: Deltas on lake plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Calcareous sandy glaciolacustrine or deltaic deposits

Typical profile

H1 - 0 to 10 inches: loamy fine sand
H2 - 10 to 48 inches: loamy fine sand
H3 - 48 to 60 inches: very fine sandy loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): High
(1.98 to 5.95 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Available water supply, 0 to 60 inches: Low (about 4.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A/D
Ecological site: F101XY006NY - Moist Outwash
Hydric soil rating: No

Minor Components**Cheektowaga**

Percent of map unit: 7 percent
Landform: Depressions
Hydric soil rating: Yes

Granby

Percent of map unit: 7 percent
Landform: Depressions
Hydric soil rating: Yes

Claverack

Percent of map unit: 6 percent
Hydric soil rating: No

Elnora

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

Ma—Madalin silty clay loam, 0 to 3 percent slopes**Map Unit Setting**

National map unit symbol: 2spjz
Elevation: 330 to 1,200 feet
Mean annual precipitation: 31 to 57 inches
Mean annual air temperature: 41 to 50 degrees F
Frost-free period: 100 to 190 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

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

Description of Madalin

Setting

Landform: Depressions
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Brown clayey glaciolacustrine deposits derived from calcareous shale

Typical profile

Ap - 0 to 7 inches: silty clay loam
Bg - 7 to 9 inches: silty clay loam
Btg1 - 9 to 21 inches: clay
Btg2 - 21 to 30 inches: silty clay
Cg - 30 to 79 inches: stratified silt to clay

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.20 in/hr)
Depth to water table: About 0 to 7 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 25 percent
Available water supply, 0 to 60 inches: High (about 9.2 inches)

Interpretive groups

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

Minor Components

Rhinebeck

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

Fonda

Percent of map unit: 4 percent
Landform: Depressions
Landform position (two-dimensional): Toeslope

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

Canandaigua

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

Barre

Percent of map unit: 2 percent
Landform: Depressions
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope, tread
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

MPE—Manlius-Rock outcrop association, steep**Map Unit Setting**

National map unit symbol: bd58
Elevation: 200 to 1,800 feet
Mean annual precipitation: 38 to 44 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 110 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

Manlius and similar soils: 55 percent
Rock outcrop: 30 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Manlius**Setting**

Landform: Till plains, ridges, benches
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy till derived mainly from local acid shale bedrock

Typical profile

H1 - 0 to 7 inches: channery silt loam

H2 - 7 to 28 inches: very channery silt loam

H3 - 28 to 32 inches: unweathered bedrock

Properties and qualities

Slope: 25 to 50 percent

Depth to restrictive feature: 20 to 40 inches to lithic bedrock

Drainage class: Well drained

*Capacity of the most limiting layer to transmit water (Ksat): Very low
(0.00 to 0.00 in/hr)*

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 3.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: C

Ecological site: F140XY026PA - Dry Till Uplands

Hydric soil rating: No

Description of Rock Outcrop**Typical profile**

H1 - 0 to 60 inches: unweathered bedrock

Properties and qualities

Slope: 25 to 50 percent

Depth to restrictive feature: 0 inches to lithic bedrock

*Capacity of the most limiting layer to transmit water (Ksat): Very low
(0.00 to 0.00 in/hr)*

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydric soil rating: Unranked

Minor Components**Nassau**

Percent of map unit: 3 percent

Hydric soil rating: No

Brockport

Percent of map unit: 3 percent

Hydric soil rating: No

Lordstown

Percent of map unit: 3 percent

Hydric soil rating: No

Arnot

Percent of map unit: 3 percent

Hydric soil rating: No

Hornell

Percent of map unit: 3 percent

Hydric soil rating: No

MrB—Mardin gravelly silt loam, 3 to 8 percent slopes**Map Unit Setting**

National map unit symbol: bd5k

Elevation: 800 to 1,800 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Mardin and similar soils: 80 percent

Minor components: 20 percent

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

Description of Mardin**Setting**

Landform: Till plains, hills, drumlinoid ridges

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Crest

Down-slope shape: Concave

Across-slope shape: Convex

Parent material: Loamy till derived mainly from acid sedimentary rock

Typical profile

H1 - 0 to 2 inches: gravelly silt loam

H2 - 2 to 27 inches: gravelly loam

H3 - 27 to 47 inches: gravelly silt loam

H4 - 47 to 60 inches: gravelly silt loam

Properties and qualities

Slope: 3 to 8 percent

Depth to restrictive feature: 14 to 27 inches to fragipan

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 18 to 24 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Available water supply, 0 to 60 inches: Low (about 3.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2w

Hydrologic Soil Group: C
Ecological site: F140XY024NY - Moist Dense Till
Hydric soil rating: No

Minor Components**Nunda**

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

Burdett

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

Mosherville

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

Nassau

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

NaB—Nassau channery silt loam, 0 to 8 percent slopes**Map Unit Setting**

National map unit symbol: bd5w
Elevation: 600 to 1,800 feet
Mean annual precipitation: 38 to 44 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 110 to 170 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

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

Description of Nassau**Setting**

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

Typical profile

H1 - 0 to 8 inches: channery silt loam
H2 - 8 to 15 inches: very channery silt loam
H3 - 15 to 19 inches: unweathered bedrock

Properties and qualities

Slope: 0 to 8 percent

Depth to restrictive feature: 10 to 20 inches to lithic bedrock

Drainage class: Somewhat excessively drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to moderately high (0.06 to 0.57 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Very low (about 1.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3s

Hydrologic Soil Group: D

Ecological site: F144AY033MA - Shallow Dry Till Uplands

Hydric soil rating: No

Minor Components**Hornell**

Percent of map unit: 5 percent

Hydric soil rating: No

Arnot

Percent of map unit: 5 percent

Hydric soil rating: No

Brockport

Percent of map unit: 5 percent

Hydric soil rating: No

Manlius

Percent of map unit: 5 percent

Hydric soil rating: No

Mardin

Percent of map unit: 5 percent

Hydric soil rating: No

NuB—Nunda channery silt loam, 3 to 8 percent slopes**Map Unit Setting**

National map unit symbol: bd61

Elevation: 400 to 1,600 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Nunda and similar soils: 75 percent

Minor components: 25 percent

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

Description of Nunda

Setting

Landform: Till plains, hills, drumlinoid ridges

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Crest

Down-slope shape: Concave

Across-slope shape: Convex

Parent material: A silty mantle over loamy till derived from calcareous shale and siltstone

Typical profile

H1 - 0 to 7 inches: channery silt loam

H2 - 7 to 25 inches: channery silt loam

H3 - 25 to 42 inches: gravelly silty clay loam

H4 - 42 to 60 inches: gravelly loam

Properties and qualities

Slope: 3 to 8 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 15 to 24 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 10 percent

Available water supply, 0 to 60 inches: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: C/D

Ecological site: F101XY013NY - Moist Till

Hydric soil rating: No

Minor Components

Lansing

Percent of map unit: 5 percent

Hydric soil rating: No

Darien

Percent of map unit: 5 percent

Hydric soil rating: No

Angola

Percent of map unit: 5 percent

Hydric soil rating: No

Mohawk

Percent of map unit: 5 percent

Hydric soil rating: No

Burdett

Percent of map unit: 5 percent

Hydric soil rating: No

NuC—Nunda channery silt loam, 8 to 15 percent slopes**Map Unit Setting**

National map unit symbol: bd62

Elevation: 400 to 1,600 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Nunda and similar soils: 75 percent

Minor components: 25 percent

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

Description of Nunda**Setting**

Landform: Till plains, hills, drumlinoid ridges

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Crest

Down-slope shape: Concave

Across-slope shape: Convex

Parent material: A silty mantle over loamy till derived from calcareous shale and siltstone

Typical profile

H1 - 0 to 7 inches: channery silt loam

H2 - 7 to 25 inches: channery silt loam

H3 - 25 to 42 inches: gravelly silty clay loam

H4 - 42 to 60 inches: gravelly loam

Properties and qualities

Slope: 8 to 15 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 15 to 24 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 10 percent

Available water supply, 0 to 60 inches: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: C/D

Ecological site: F101XY013NY - Moist Till

Hydric soil rating: No

Minor Components**Darien**

Percent of map unit: 5 percent

Hydric soil rating: No

Lansing

Percent of map unit: 5 percent

Hydric soil rating: No

Mohawk

Percent of map unit: 5 percent

Hydric soil rating: No

Burdett

Percent of map unit: 5 percent

Hydric soil rating: No

Angola

Percent of map unit: 5 percent

Hydric soil rating: No

NVF—Nunda soils, very steep**Map Unit Setting**

National map unit symbol: bd5t

Elevation: 400 to 1,600 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Not prime farmland

Map Unit Composition

Nunda and similar soils: 75 percent

Minor components: 25 percent

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

Description of Nunda**Setting**

Landform: Till plains, hills, drumlinoid ridges

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Side slope

Down-slope shape: Concave
Across-slope shape: Convex
Parent material: A silty mantle over loamy till derived from calcareous shale and siltstone

Typical profile

H1 - 0 to 7 inches: channery silt loam
H2 - 7 to 25 inches: channery silt loam
H3 - 25 to 42 inches: gravelly silty clay loam
H4 - 42 to 60 inches: gravelly loam

Properties and qualities

Slope: 25 to 45 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 15 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Available water supply, 0 to 60 inches: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C/D
Ecological site: F101XY013NY - Moist Till
Hydric soil rating: No

Minor Components**Burdett**

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

Lansing

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

Rock outcrop

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

Manlius

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

Nassau

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

NWC—Nunda extremely stony soils, sloping

Map Unit Setting

National map unit symbol: bd5v

Elevation: 210 to 1,430 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Not prime farmland

Map Unit Composition

Nunda and similar soils: 75 percent

Minor components: 25 percent

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

Description of Nunda

Setting

Landform: Till plains, hills, drumlinoid ridges

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Crest

Down-slope shape: Concave

Across-slope shape: Convex

Parent material: A silty mantle over loamy till derived from calcareous shale and siltstone

Typical profile

H1 - 0 to 7 inches: channery silt loam

H2 - 7 to 25 inches: channery silt loam

H3 - 25 to 42 inches: gravelly silty clay loam

H4 - 42 to 60 inches: gravelly loam

Properties and qualities

Slope: 3 to 8 percent

Surface area covered with cobbles, stones or boulders: 9.0 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 15 to 24 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 10 percent

Available water supply, 0 to 60 inches: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: C/D

Ecological site: F101XY013NY - Moist Till

Hydric soil rating: No

Minor Components

Mardin

Percent of map unit: 5 percent

Hydric soil rating: No

Darien

Percent of map unit: 5 percent

Hydric soil rating: No

Burdett

Percent of map unit: 5 percent

Hydric soil rating: No

Lansing

Percent of map unit: 5 percent

Hydric soil rating: No

Manlius

Percent of map unit: 5 percent

Hydric soil rating: No

OtB—Otisville gravelly loamy sand, 0 to 8 percent slopes

Map Unit Setting

National map unit symbol: bd65

Elevation: 260 to 740 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Not prime farmland

Map Unit Composition

Otisville and similar soils: 80 percent

Minor components: 20 percent

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

Description of Otisville

Setting

Landform: Terraces, outwash plains, deltas

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Tread

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Sandy and gravelly glaciofluvial deposits

Typical profile

H1 - 0 to 7 inches: gravelly loamy sand

H2 - 7 to 36 inches: very gravelly loamy sand

H3 - 36 to 60 inches: stratified very gravelly sand

Properties and qualities

Slope: 0 to 8 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Excessively drained

Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Very low (about 2.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4s

Hydrologic Soil Group: A

Ecological site: F144AY022MA - Dry Outwash

Hydric soil rating: No

Minor Components**Elnora**

Percent of map unit: 5 percent

Hydric soil rating: No

Colonie

Percent of map unit: 5 percent

Hydric soil rating: No

Plainfield

Percent of map unit: 5 percent

Hydric soil rating: No

Alton

Percent of map unit: 5 percent

Hydric soil rating: No

PsA—Plainfield loamy sand, 0 to 3 percent slopes**Map Unit Setting**

National map unit symbol: bd6j

Elevation: 720 to 1,150 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Not prime farmland

Map Unit Composition

Plainfield and similar soils: 80 percent

Minor components: 20 percent

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

Description of Plainfield**Setting**

Landform: Deltas, terraces, outwash plains

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Tread

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Sandy glaciofluvial or deltaic deposits

Typical profile

H1 - 0 to 8 inches: loamy sand

H2 - 8 to 32 inches: coarse sand

H3 - 32 to 78 inches: coarse sand

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Excessively drained

Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 3.7 inches)

Interpretive groups

Land capability classification (irrigated): 3e

Land capability classification (nonirrigated): 3s

Hydrologic Soil Group: A

Hydric soil rating: No

Minor Components**Colonie**

Percent of map unit: 5 percent

Hydric soil rating: No

Elnora

Percent of map unit: 5 percent

Hydric soil rating: No

Alton

Percent of map unit: 5 percent

Hydric soil rating: No

Otisville

Percent of map unit: 5 percent

Hydric soil rating: No

PsB—Plainfield loamy sand, 3 to 10 percent slopes**Map Unit Setting**

National map unit symbol: bd6k

Elevation: 720 to 1,150 feet
Mean annual precipitation: 38 to 44 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 110 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

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

Description of Plainfield**Setting**

Landform: Terraces, outwash plains, deltas
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Sandy glaciofluvial or deltaic deposits

Typical profile

H1 - 0 to 8 inches: loamy sand
H2 - 8 to 32 inches: coarse sand
H3 - 32 to 78 inches: coarse sand

Properties and qualities

Slope: 3 to 10 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: A
Ecological site: F144AY022MA - Dry Outwash
Hydric soil rating: No

Minor Components**Colonie**

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

Elnora

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

Otisville

Percent of map unit: 5 percent

Hydric soil rating: No

Alton

Percent of map unit: 5 percent

Hydric soil rating: No

Ra—Raynham silt loam**Map Unit Setting**

National map unit symbol: bd6n

Elevation: 50 to 500 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Prime farmland if drained

Map Unit Composition

Raynham, somewhat poorly drained, and similar soils: 40 percent

Raynham, poorly drained, and similar soils: 40 percent

Minor components: 20 percent

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

Description of Raynham, Somewhat Poorly Drained**Setting**

Landform: Lake plains

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Tread

Down-slope shape: Concave

Across-slope shape: Linear

Parent material: Glaciolacustrine, eolian, or old alluvial deposits, comprised mainly of silt and very fine sand

Typical profile

H1 - 0 to 8 inches: silt loam

H2 - 8 to 23 inches: silt loam

H3 - 23 to 60 inches: silt loam

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat poorly drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 6 to 18 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 5 percent

Available water supply, 0 to 60 inches: High (about 11.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: C/D

Hydric soil rating: No

Description of Raynham, Poorly Drained**Setting**

Landform: Lake plains

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Tread

Down-slope shape: Concave

Across-slope shape: Linear

Parent material: Glaciolacustrine, eolian, or old alluvial deposits, comprised mainly of silt and very fine sand

Typical profile

H1 - 0 to 8 inches: silt loam

H2 - 8 to 23 inches: silt loam

H3 - 23 to 60 inches: silt loam

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 6 to 12 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 5 percent

Available water supply, 0 to 60 inches: High (about 11.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4w

Hydrologic Soil Group: C/D

Hydric soil rating: Yes

Minor Components**Scio**

Percent of map unit: 5 percent

Hydric soil rating: No

Fredon

Percent of map unit: 5 percent

Landform: Depressions

Hydric soil rating: Yes

Rhinebeck

Percent of map unit: 5 percent

Hydric soil rating: No

Madalin

Percent of map unit: 5 percent

Landform: Depressions

Hydric soil rating: Yes

RhA—Rhinebeck silty clay loam, 0 to 3 percent slopes**Map Unit Setting**

National map unit symbol: bd6p

Elevation: 80 to 1,000 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Prime farmland if drained

Map Unit Composition

Rhinebeck and similar soils: 75 percent

Minor components: 25 percent

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

Description of Rhinebeck**Setting**

Landform: Lake plains

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Tread

Down-slope shape: Concave

Across-slope shape: Linear

Parent material: Clayey and silty glaciolacustrine deposits

Typical profile

H1 - 0 to 13 inches: silty clay loam

H2 - 13 to 28 inches: silty clay

H3 - 28 to 70 inches: stratified silt loam to clay

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat poorly drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 6 to 18 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 10 percent

Available water supply, 0 to 60 inches: Moderate (about 8.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: C/D
Hydric soil rating: No

Minor Components

Hudson

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

Madalin

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

Fonda

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

Churchville

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

Odessa

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

ScA—Scio silt loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: bd6s
Elevation: 100 to 1,000 feet
Mean annual precipitation: 38 to 44 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 110 to 170 days
Farmland classification: All areas are prime farmland

Map Unit Composition

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

Description of Scio

Setting

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

Typical profile

H1 - 0 to 10 inches: silt loam

H2 - 10 to 33 inches: silt loam

H3 - 33 to 60 inches: stratified very fine sandy loam to silt loam to loamy very fine sand

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately high to high (0.57 to 1.98 in/hr)

Depth to water table: About 18 to 24 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 1 percent

Available water supply, 0 to 60 inches: High (about 9.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2w

Hydrologic Soil Group: B/D

Hydric soil rating: No

Minor Components**Elnora**

Percent of map unit: 5 percent

Hydric soil rating: No

Raynham

Percent of map unit: 5 percent

Hydric soil rating: No

Unadilla

Percent of map unit: 5 percent

Hydric soil rating: No

Rhinebeck

Percent of map unit: 5 percent

Hydric soil rating: No

ScB—Scio silt loam, 3 to 8 percent slopes**Map Unit Setting**

National map unit symbol: bd6t

Elevation: 100 to 1,000 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Scio and similar soils: 80 percent

Minor components: 20 percent

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

Description of Scio**Setting**

Landform: Lake plains

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Tread

Down-slope shape: Concave

Across-slope shape: Convex

Parent material: Glaciolacustrine deposits, eolian deposits, or old alluvium, comprised mainly of silt and very fine sand

Typical profile

H1 - 0 to 10 inches: silt loam

H2 - 10 to 33 inches: silt loam

H3 - 33 to 60 inches: stratified very fine sandy loam to silt loam to loamy very fine sand

Properties and qualities

Slope: 3 to 8 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately high to high (0.57 to 1.98 in/hr)

Depth to water table: About 18 to 24 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 1 percent

Available water supply, 0 to 60 inches: High (about 9.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: B/D

Hydric soil rating: No

Minor Components**Raynham**

Percent of map unit: 5 percent

Hydric soil rating: No

Colonie

Percent of map unit: 5 percent

Hydric soil rating: No

Hudson

Percent of map unit: 5 percent

Hydric soil rating: No

Unadilla

Percent of map unit: 5 percent

Hydric soil rating: No

Te—Teel silt loam**Map Unit Setting**

National map unit symbol: bd6w

Elevation: 600 to 1,800 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Teel and similar soils: 75 percent

Minor components: 25 percent

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

Description of Teel**Setting**

Landform: Flood plains

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Talf

Down-slope shape: Concave

Across-slope shape: Convex

Parent material: Silty alluvium

Typical profile

H1 - 0 to 13 inches: silt loam

H2 - 13 to 38 inches: silt loam

H3 - 38 to 60 inches: silt loam

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately high to high (0.57 to 1.98 in/hr)

Depth to water table: About 18 to 24 inches

Frequency of flooding: OccasionalNone

Frequency of ponding: None

Calcium carbonate, maximum content: 1 percent

Available water supply, 0 to 60 inches: High (about 9.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2w

Hydrologic Soil Group: B/D

Hydric soil rating: No

Minor Components**Howard**

Percent of map unit: 5 percent

Hydric soil rating: No

Wayland

Percent of map unit: 5 percent

Landform: Flood plains

Hydric soil rating: Yes

Hamlin

Percent of map unit: 5 percent

Hydric soil rating: No

Copake

Percent of map unit: 5 percent

Hydric soil rating: No

Scio

Percent of map unit: 5 percent

Hydric soil rating: No

TvA—Tuller-Brockport complex, 0 to 3 percent slopes**Map Unit Setting**

National map unit symbol: bd6y

Elevation: 210 to 1,800 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Tuller, somewhat poorly drained, and similar soils: 35 percent

Brockport and similar soils: 30 percent

Tuller, poorly drained, and similar soils: 15 percent

Minor components: 20 percent

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

Description of Tuller, Somewhat Poorly Drained**Setting**

Landform: Benches, ridges, hills

Landform position (two-dimensional): Footslope, summit

Landform position (three-dimensional): Base slope

Down-slope shape: Concave

Across-slope shape: Linear

Parent material: Loamy till derived mainly from acid sandstone, siltstone, and shale

Typical profile

H1 - 0 to 7 inches: channery silt loam
H2 - 7 to 14 inches: channery silt loam
H3 - 14 to 18 inches: unweathered bedrock

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Very low
(0.00 to 0.00 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 1.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: D
Hydric soil rating: No

Description of Brockport**Setting**

Landform: Till plains, ridges, benches
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Clayey till or congeliturbate derived mainly from
neutral or calcareous shale

Typical profile

H1 - 0 to 8 inches: silt loam
H2 - 8 to 22 inches: silty clay
2C - 22 to 28 inches: very channery silty clay loam
2R - 28 to 34 inches: weathered bedrock

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Very low
(0.00 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 1 percent
Available water supply, 0 to 60 inches: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: D
Ecological site: F101XY013NY - Moist Till
Hydric soil rating: No

Description of Tuller, Poorly Drained

Setting

Landform: Benches, ridges, hills
Landform position (two-dimensional): Footslope, summit
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Loamy till derived mainly from acid sandstone, siltstone, and shale

Typical profile

H1 - 0 to 7 inches: channery silt loam
H2 - 7 to 14 inches: channery silt loam
H3 - 14 to 18 inches: unweathered bedrock

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 1.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: D
Hydric soil rating: Yes

Minor Components

Ilion

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

Arnot

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

Angola

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

Varick

Percent of map unit: 5 percent
Landform: Depressions

Hydric soil rating: Yes

Wy—Wayland soils complex, 0 to 3 percent slopes, frequently flooded

Map Unit Setting

National map unit symbol: 2srgv

Elevation: 160 to 1,970 feet

Mean annual precipitation: 31 to 68 inches

Mean annual air temperature: 43 to 52 degrees F

Frost-free period: 105 to 180 days

Farmland classification: Not prime farmland

Map Unit Composition

Wayland and similar soils: 60 percent

Wayland, very poorly drained, and similar soils: 30 percent

Minor components: 10 percent

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

Description of Wayland

Setting

Landform: Flood plains

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Silty and clayey alluvium derived from interbedded
sedimentary rock

Typical profile

A - 0 to 6 inches: silt loam

Bg1 - 6 to 12 inches: silt loam

Bg2 - 12 to 18 inches: silt loam

C1 - 18 to 46 inches: silt loam

C2 - 46 to 72 inches: silty clay loam

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to high (0.14 to 14.17 in/hr)

Depth to water table: About 0 to 6 inches

Frequency of flooding: FrequentNone

Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)

Available water supply, 0 to 60 inches: Very high (about 12.6
inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: B/D
Ecological site: F139XY009OH - Wet Floodplain
Hydric soil rating: Yes

Description of Wayland, Very Poorly Drained

Setting

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

Typical profile

A - 0 to 6 inches: mucky silt loam
Bg1 - 6 to 12 inches: silt loam
Bg2 - 12 to 18 inches: silt loam
C1 - 18 to 46 inches: silt loam
C2 - 46 to 72 inches: silty clay loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.14 to 14.17 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: NoneFrequent
Frequency of ponding: Frequent
Calcium carbonate, maximum content: 15 percent
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Very high (about 12.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: B/D
Ecological site: F139XY009OH - Wet Floodplain
Hydric soil rating: Yes

Minor Components

Wakeville

Percent of map unit: 10 percent
Landform: Flood plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Talf
Down-slope shape: Concave
Across-slope shape: Linear

Hydric soil rating: No

Data Source Information

Soil Survey Area: Saratoga County, New York

Survey Area Data: Version 21, Sep 1, 2021

Soil Survey Area: Schenectady County, New York

Survey Area Data: Version 20, Sep 1, 2021

Map Unit Description

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

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

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

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

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

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

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

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

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

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

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

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

Report—Map Unit Description

Schenectady County, New York

AZF—Arnot-Rock outcrop association, very steep

Map Unit Setting

National map unit symbol: bd37

Elevation: 1,000 to 1,800 feet

Mean annual precipitation: 38 to 44 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 110 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

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

Description of Arnot**Setting**

Landform: Hills, benches, ridges
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy till derived mainly from acid sandstone, siltstone, and shale

Typical profile

H1 - 0 to 7 inches: channery silt loam
H2 - 7 to 16 inches: channery silt loam
H3 - 16 to 20 inches: unweathered bedrock

Properties and qualities

Slope: 35 to 60 percent
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 1.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D
Ecological site: F140XY023NY - Shallow Till Uplands
Hydric soil rating: No

Description of Rock Outcrop**Typical profile**

H1 - 0 to 60 inches: unweathered bedrock

Properties and qualities

Slope: 35 to 60 percent
Depth to restrictive feature: 0 inches to lithic bedrock

Capacity of the most limiting layer to transmit water (Ksat): Very low
(0.00 to 0.00 in/hr)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydric soil rating: Unranked

Minor Components**Tuller**

Percent of map unit: 5 percent

Hydric soil rating: No

Nassau

Percent of map unit: 5 percent

Hydric soil rating: No

Lordstown

Percent of map unit: 5 percent

Hydric soil rating: No

Manlius

Percent of map unit: 5 percent

Hydric soil rating: No

BvA—Burdett-Scriba channery silt loams, 0 to 3 percent slopes**Map Unit Setting**

National map unit symbol: bd3h

Elevation: 210 to 1,600 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Prime farmland if drained

Map Unit Composition

Burdett and similar soils: 50 percent

Scriba and similar soils: 30 percent

Minor components: 20 percent

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

Description of Burdett**Setting**

Landform: Till plains, hills, drumlinoid ridges

Landform position (two-dimensional): Footslope, summit

Landform position (three-dimensional): Base slope

Down-slope shape: Concave

Across-slope shape: Linear

Parent material: A thin silt mantle overlying till that is strongly influenced by shale

Typical profile

H1 - 0 to 9 inches: channery silt loam
H2 - 9 to 16 inches: channery silt loam
H3 - 16 to 44 inches: very gravelly silty clay loam
H4 - 44 to 60 inches: very gravelly silty clay loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water
(Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Available water supply, 0 to 60 inches: Moderate (about 7.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Ecological site: F101XY013NY - Moist Till
Hydric soil rating: No

Description of Scriba**Setting**

Landform: Till plains, drumlins
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Loamy till dominated by sandstone, with lesser amounts of limestone and shale

Typical profile

H1 - 0 to 7 inches: channery silt loam
H2 - 7 to 15 inches: channery silt loam
Bx - 15 to 43 inches: very gravelly loam
C - 43 to 60 inches: very gravelly loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 12 to 18 inches to fragipan
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water
(Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent

Available water supply, 0 to 60 inches: Very low (about 1.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: D

Hydric soil rating: No

Minor Components**Angola**

Percent of map unit: 5 percent

Hydric soil rating: No

Varick

Percent of map unit: 5 percent

Landform: Depressions

Hydric soil rating: Yes

Ilion

Percent of map unit: 5 percent

Landform: Depressions

Hydric soil rating: Yes

Darien

Percent of map unit: 5 percent

Hydric soil rating: No

CoA—Colonie loamy fine sand, 0 to 3 percent slopes**Map Unit Setting**

National map unit symbol: bd3v

Elevation: 150 to 1,000 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Colonie and similar soils: 75 percent

Minor components: 25 percent

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

Description of Colonie**Setting**

Landform: Deltas, beach ridges

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Tread

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Sandy glaciofluvial or eolian deposits

Typical profile

H1 - 0 to 6 inches: loamy fine sand

H2 - 6 to 70 inches: fine sand

H3 - 70 to 110 inches: fine sand

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): High to very high (1.98 to 19.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2s

Hydrologic Soil Group: A

Ecological site: F101XY005NY - Dry Outwash

Hydric soil rating: No

Minor Components**Plainfield**

Percent of map unit: 5 percent

Hydric soil rating: No

Elnora

Percent of map unit: 5 percent

Hydric soil rating: No

Howard

Percent of map unit: 5 percent

Hydric soil rating: No

Unadilla

Percent of map unit: 5 percent

Hydric soil rating: No

Junius

Percent of map unit: 5 percent

Hydric soil rating: No

CoC—Colonie loamy fine sand, 3 to 15 percent slopes**Map Unit Setting**

National map unit symbol: 1qcvw

Elevation: 150 to 1,000 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Colonie and similar soils: 75 percent

Minor components: 25 percent

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

Description of Colonie**Setting**

Landform: Deltas, beach ridges

Landform position (two-dimensional): Shoulder

Landform position (three-dimensional): Tread

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Sandy glaciofluvial or eolian deposits

Typical profile

H1 - 0 to 6 inches: loamy fine sand

H2 - 6 to 70 inches: fine sand

H3 - 70 to 110 inches: fine sand

Properties and qualities

Slope: 3 to 15 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): High to very high (1.98 to 19.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: A

Ecological site: F101XY005NY - Dry Outwash

Hydric soil rating: No

Minor Components**Plainfield**

Percent of map unit: 5 percent

Hydric soil rating: No

Elnora

Percent of map unit: 5 percent

Hydric soil rating: No

Howard

Percent of map unit: 5 percent

Hydric soil rating: No

Nunda

Percent of map unit: 5 percent

Hydric soil rating: No

Junius

Percent of map unit: 5 percent

Hydric soil rating: No

CPE—Colonie and Plainfield soils, steep**Map Unit Setting**

National map unit symbol: bd3x

Elevation: 150 to 1,150 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Not prime farmland

Map Unit Composition

Colonie and similar soils: 45 percent

Plainfield and similar soils: 35 percent

Minor components: 20 percent

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

Description of Colonie**Setting**

Landform: Deltas, beach ridges

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Riser

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Sandy glaciofluvial or eolian deposits

Typical profile

H1 - 0 to 6 inches: loamy fine sand

H2 - 6 to 70 inches: fine sand

H3 - 70 to 110 inches: fine sand

Properties and qualities

Slope: 15 to 50 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): High to very high (1.98 to 19.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Ecological site: F101XY005NY - Dry Outwash
Hydric soil rating: No

Description of Plainfield

Setting

Landform: Terraces, outwash plains, deltas
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Riser
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Sandy glaciofluvial or deltaic deposits

Typical profile

H1 - 0 to 8 inches: loamy sand
H2 - 8 to 32 inches: coarse sand
H3 - 32 to 78 inches: coarse sand

Properties and qualities

Slope: 15 to 50 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Hudson

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

Junius

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

Howard

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

Elnora

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

Cu—Cut and fill land

Map Unit Setting

National map unit symbol: 1vggp

Elevation: 180 to 1,380 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Not prime farmland

Map Unit Composition

Udorthents and similar soils: 70 percent

Minor components: 30 percent

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

Description of Udorthents

Typical profile

H1 - 0 to 4 inches: gravelly loam

H2 - 4 to 70 inches: very gravelly loam

Properties and qualities

Slope: 0 to 15 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat excessively drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to high (0.06 to 5.95 in/hr)

Depth to water table: About 36 to 72 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

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

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: A

Hydric soil rating: No

Minor Components

Angola

Percent of map unit: 5 percent

Hydric soil rating: No

Sun

Percent of map unit: 5 percent

Landform: Depressions

Hydric soil rating: Yes

Ilion

Percent of map unit: 5 percent

Landform: Depressions
Hydric soil rating: Yes

Raynham

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

Hudson

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

Alton

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

FL—Fluvaquents, loamy**Map Unit Setting**

National map unit symbol: bd44
Elevation: 300 to 1,800 feet
Mean annual precipitation: 38 to 44 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 110 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

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

Description of Fluvaquents**Setting**

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

Typical profile

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

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to very high (0.06 to 19.98 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: NoneFrequent
Frequency of ponding: Frequent

Calcium carbonate, maximum content: 15 percent
Available water supply, 0 to 60 inches: Moderate (about 6.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: B/D
Hydric soil rating: Yes

Minor Components**Granby**

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

Hamlin

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

Wayland

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

Teel

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

Saprists

Percent of map unit: 3 percent
Landform: Swamps, marshes
Hydric soil rating: Yes

Aquents

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

Fr—Fredon silt loam**Map Unit Setting**

National map unit symbol: bd47
Elevation: 250 to 1,200 feet
Mean annual precipitation: 38 to 44 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 110 to 170 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Fredon, poorly drained, and similar soils: 50 percent
Fredon, somewhat poorly drained, and similar soils: 25 percent
Minor components: 25 percent

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

Description of Fredon, Poorly Drained

Setting

Landform: Depressions

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Tread

Down-slope shape: Concave

Across-slope shape: Linear

Parent material: Loamy over sandy and gravelly glaciofluvial deposits

Typical profile

Ap - 0 to 9 inches: silt loam

B21 - 9 to 19 inches: gravelly silt loam

B22 - 19 to 31 inches: very gravelly loam

2C - 31 to 45 inches: stratified very gravelly sand

3C - 45 to 60 inches: stratified silt loam to very fine sand

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately high to high (0.20 to 1.98 in/hr)

Depth to water table: About 0 to 6 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Available water supply, 0 to 60 inches: Moderate (about 7.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: B/D

Hydric soil rating: Yes

Description of Fredon, Somewhat Poorly Drained

Setting

Landform: Depressions

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Tread

Down-slope shape: Concave

Across-slope shape: Linear

Parent material: Loamy over sandy and gravelly glaciofluvial deposits

Typical profile

Ap - 0 to 9 inches: silt loam

B21 - 9 to 19 inches: gravelly silt loam

B22 - 19 to 31 inches: very gravelly loam
2C - 31 to 45 inches: stratified very gravelly sand
3C - 45 to 60 inches: stratified silt loam to very fine sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 1.98 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Available water supply, 0 to 60 inches: Moderate (about 7.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: B/D
Hydric soil rating: No

Minor Components**Madalin**

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

Phelps

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

Howard

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

Raynham

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

Ilion

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

Gr—Granby loamy fine sand**Map Unit Setting**

National map unit symbol: bd49
Elevation: 600 to 1,000 feet
Mean annual precipitation: 38 to 44 inches
Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

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

Description of Granby**Setting**

Landform: Depressions
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Sandy glaciofluvial deposits or sandy glaciolacustrine deposits

Typical profile

H1 - 0 to 11 inches: loamy fine sand
H2 - 11 to 26 inches: loamy fine sand
H3 - 26 to 60 inches: sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Calcium carbonate, maximum content: 15 percent
Available water supply, 0 to 60 inches: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: A/D
Hydric soil rating: Yes

Minor Components**Cheektowaga**

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

Palms

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

Junius

Percent of map unit: 5 percent

Hydric soil rating: No

Elnora

Percent of map unit: 5 percent

Hydric soil rating: No

Plainfield

Percent of map unit: 5 percent

Hydric soil rating: No

Gv—Gravel pits**Map Unit Setting**

National map unit symbol: 1vggq

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Not prime farmland

Map Unit Composition

Gravel pits: 70 percent

Minor components: 30 percent

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

Description of Gravel Pits**Typical profile**

H1 - 0 to 6 inches: very gravelly sand

H2 - 6 to 60 inches: very gravelly coarse sand

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8s

Hydric soil rating: Unranked

Minor Components**Herkimer**

Percent of map unit: 5 percent

Hydric soil rating: No

Ilion

Percent of map unit: 5 percent

Landform: Depressions

Hydric soil rating: Yes

Howard

Percent of map unit: 5 percent

Hydric soil rating: No

Palmyra

Percent of map unit: 5 percent

Hydric soil rating: No

Fredon

Percent of map unit: 5 percent

Landform: Depressions

Hydric soil rating: Yes

Farmington

Percent of map unit: 5 percent

Hydric soil rating: No

Ha—Hamlin silt loam**Map Unit Setting**

National map unit symbol: bd4f

Elevation: 180 to 800 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Hamlin and similar soils: 75 percent

Minor components: 25 percent

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

Description of Hamlin**Setting**

Landform: Flood plains

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Rise

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Silty alluvium mainly from areas of siltstone, shale, and limestone

Typical profile

H1 - 0 to 10 inches: silt loam

H2 - 10 to 24 inches: silt loam

H3 - 24 to 37 inches: silt loam

H4 - 37 to 70 inches: silt loam

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately high to high (0.57 to 1.98 in/hr)

Depth to water table: About 36 to 72 inches

Frequency of flooding: OccasionalNone
Frequency of ponding: None
Calcium carbonate, maximum content: 1 percent
Available water supply, 0 to 60 inches: High (about 11.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 1
Hydrologic Soil Group: B
Hydric soil rating: No

Minor Components**Teel**

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

Howard

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

Copake

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

Scio

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

Unnamed soils

Percent of map unit: 2 percent

HoB—Hornell silt loam, 3 to 8 percent slopes**Map Unit Setting**

National map unit symbol: bd4j
Elevation: 600 to 1,800 feet
Mean annual precipitation: 38 to 44 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 110 to 170 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

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

Description of Hornell**Setting**

Landform: Till plains, ridges, benches
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope

Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Clayey till, or till and residuum, derived from acid shale and siltstone

Typical profile

H1 - 0 to 8 inches: silt loam
H2 - 8 to 27 inches: silty clay
H3 - 27 to 32 inches: silty clay loam
H4 - 32 to 36 inches: weathered bedrock

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components**Brockport**

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

Manlius

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

Tuller

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

Angola

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

Varick

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

HoC—Hornell silt loam, 8 to 15 percent slopes**Map Unit Setting**

National map unit symbol: bd4k

Elevation: 600 to 1,800 feet
Mean annual precipitation: 38 to 44 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 110 to 170 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

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

Description of Hornell**Setting**

Landform: Till plains, ridges, benches
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Clayey till, or till and residuum, derived from acid shale and siltstone

Typical profile

H1 - 0 to 8 inches: silt loam
H2 - 8 to 27 inches: silty clay
H3 - 27 to 32 inches: silty clay loam
H4 - 32 to 36 inches: weathered bedrock

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.2 inches)

Interpretive groups

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

Minor Components**Arnot**

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

Manlius

Percent of map unit: 5 percent

Hydric soil rating: No

Lordstown

Percent of map unit: 5 percent

Hydric soil rating: No

Varick

Percent of map unit: 5 percent

Landform: Depressions

Hydric soil rating: Yes

Brockport

Percent of map unit: 5 percent

Hydric soil rating: No

HrA—Howard gravelly silt loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: bd4l

Elevation: 210 to 870 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Howard and similar soils: 75 percent

Minor components: 25 percent

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

Description of Howard

Setting

Landform: Terraces, valley trains

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Tread

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Gravelly loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits, containing significant amounts of limestone

Typical profile

H1 - 0 to 9 inches: gravelly silt loam

H2 - 9 to 19 inches: very gravelly sandy loam

H3 - 19 to 60 inches: very gravelly sandy loam

H4 - 60 to 64 inches: stratified very gravelly loamy sand

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Available water supply, 0 to 60 inches: Low (about 5.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2s
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components**Colonie**

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

Unnamed soils

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

Phelps

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

Alton

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

Palmyra

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

HrB—Howard gravelly silt loam, 3 to 8 percent slopes**Map Unit Setting**

National map unit symbol: bd4m
Elevation: 210 to 1,030 feet
Mean annual precipitation: 38 to 44 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 110 to 170 days
Farmland classification: All areas are prime farmland

Map Unit Composition

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

Description of Howard

Setting

Landform: Terraces, valley trains

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Tread

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Gravelly loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits, containing significant amounts of limestone

Typical profile

H1 - 0 to 9 inches: gravelly silt loam

H2 - 9 to 19 inches: very gravelly sandy loam

H3 - 19 to 60 inches: very gravelly sandy loam

H4 - 60 to 64 inches: stratified very gravelly loamy sand

Properties and qualities

Slope: 3 to 8 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately high to high (0.57 to 5.95 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

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

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2s

Hydrologic Soil Group: A

Hydric soil rating: No

Minor Components

Palmyra

Percent of map unit: 5 percent

Hydric soil rating: No

Unnamed soils

Percent of map unit: 5 percent

Hydric soil rating: No

Phelps

Percent of map unit: 5 percent

Hydric soil rating: No

Colonie

Percent of map unit: 5 percent

Hydric soil rating: No

Alton

Percent of map unit: 5 percent

Hydric soil rating: No

HrD—Howard gravelly silt loam, 15 to 25 percent slopes**Map Unit Setting**

National map unit symbol: bd4p

Elevation: 230 to 790 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Not prime farmland

Map Unit Composition

Howard and similar soils: 75 percent

Minor components: 25 percent

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

Description of Howard**Setting**

Landform: Terraces, valley trains

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Riser

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Gravelly loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits, containing significant amounts of limestone

Typical profile

H1 - 0 to 9 inches: gravelly silt loam

H2 - 9 to 19 inches: very gravelly sandy loam

H3 - 19 to 60 inches: very gravelly sandy loam

H4 - 60 to 64 inches: stratified very gravelly loamy sand

Properties and qualities

Slope: 15 to 25 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately high to high (0.57 to 5.95 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

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

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: A

Hydric soil rating: No

Minor Components

Phelps

Percent of map unit: 5 percent

Hydric soil rating: No

Colonie

Percent of map unit: 5 percent

Hydric soil rating: No

Palmyra

Percent of map unit: 5 percent

Hydric soil rating: No

Alton

Percent of map unit: 5 percent

Hydric soil rating: No

Lansing

Percent of map unit: 3 percent

Hydric soil rating: No

Mohawk

Percent of map unit: 2 percent

Hydric soil rating: No

HTF—Howard soils, very steep

Map Unit Setting

National map unit symbol: bd4c

Elevation: 230 to 1,030 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Not prime farmland

Map Unit Composition

Howard and similar soils: 75 percent

Minor components: 25 percent

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

Description of Howard

Setting

Landform: Terraces, valley trains

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Riser

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Gravelly loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits, containing significant amounts of limestone

Typical profile

H1 - 0 to 9 inches: gravelly silt loam

H2 - 9 to 19 inches: very gravelly sandy loam

H3 - 19 to 60 inches: very gravelly sandy loam

H4 - 60 to 64 inches: stratified very gravelly loamy sand

Properties and qualities

Slope: 25 to 70 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately high to high (0.57 to 5.95 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

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

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: A

Hydric soil rating: No

Minor Components**Nunda**

Percent of map unit: 5 percent

Hydric soil rating: No

Mohawk

Percent of map unit: 5 percent

Hydric soil rating: No

Palmyra

Percent of map unit: 5 percent

Hydric soil rating: No

Phelps

Percent of map unit: 5 percent

Hydric soil rating: No

Lansing

Percent of map unit: 5 percent

Hydric soil rating: No

LoB—Lordstown gravelly silt loam, 3 to 8 percent slopes**Map Unit Setting**

National map unit symbol: bd55

Elevation: 750 to 1,800 feet

Mean annual precipitation: 38 to 44 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 110 to 170 days
Farmland classification: All areas are prime farmland

Map Unit Composition

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

Description of Lordstown**Setting**

Landform: Benches, ridges, hills
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy till derived from sandstone and siltstone

Typical profile

H1 - 0 to 7 inches: gravelly silt loam
H2 - 7 to 22 inches: channery silt loam
H3 - 22 to 26 inches: gravelly silt loam
H4 - 26 to 30 inches: unweathered bedrock

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low
(0.00 to 0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.3 inches)

Interpretive groups

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

Minor Components**Arnot**

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

Manlius

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

Brockport

Percent of map unit: 5 percent

Hydric soil rating: No

Tuller

Percent of map unit: 5 percent

Hydric soil rating: No

LoD—Lordstown gravelly silt loam, 15 to 25 percent slopes**Map Unit Setting**

National map unit symbol: bd57

Elevation: 750 to 1,800 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Not prime farmland

Map Unit Composition

Lordstown and similar soils: 75 percent

Minor components: 25 percent

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

Description of Lordstown**Setting**

Landform: Benches, ridges, hills

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Loamy till derived from sandstone and siltstone

Typical profile

H1 - 0 to 7 inches: gravelly silt loam

H2 - 7 to 22 inches: channery silt loam

H3 - 22 to 26 inches: gravelly silt loam

H4 - 26 to 30 inches: unweathered bedrock

Properties and qualities

Slope: 15 to 25 percent

Depth to restrictive feature: 20 to 40 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low
(0.00 to 0.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 3.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Ecological site: F140XY027NY - Well Drained Till Uplands
Hydric soil rating: No

Minor Components

Nassau

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

Arnot

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

Manlius

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

Brockport

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

Nunda

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

Mg—Made land

Map Unit Setting

National map unit symbol: bd5c
Elevation: 210 to 870 feet
Mean annual precipitation: 38 to 44 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 110 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

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

Description of Udorthents

Typical profile

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

Properties and qualities

Slope: 0 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained

*Capacity of the most limiting layer to transmit water**(Ksat): Moderately low to very high (0.06 to 19.98 in/hr)**Depth to water table: About 36 to 72 inches**Frequency of flooding: None**Frequency of ponding: None**Available water supply, 0 to 60 inches: Very low (about 0.4 inches)***Interpretive groups***Land capability classification (irrigated): None specified**Land capability classification (nonirrigated): 7s**Hydrologic Soil Group: C**Hydric soil rating: No***Minor Components****Nellis***Percent of map unit: 5 percent**Hydric soil rating: No***Cheektowaga***Percent of map unit: 5 percent**Landform: Depressions**Hydric soil rating: Yes***Copake***Percent of map unit: 5 percent**Hydric soil rating: No***Ilion***Percent of map unit: 5 percent**Landform: Depressions**Hydric soil rating: Yes***Burdett***Percent of map unit: 5 percent**Hydric soil rating: No***Raynham***Percent of map unit: 5 percent**Hydric soil rating: No***MPE—Manlius-Rock outcrop association, steep****Map Unit Setting***National map unit symbol: bd58**Elevation: 200 to 1,800 feet**Mean annual precipitation: 38 to 44 inches**Mean annual air temperature: 45 to 48 degrees F**Frost-free period: 110 to 170 days**Farmland classification: Not prime farmland***Map Unit Composition***Manlius and similar soils: 55 percent**Rock outcrop: 30 percent*

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

Description of Manlius

Setting

Landform: Till plains, ridges, benches
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy till derived mainly from local acid shale bedrock

Typical profile

H1 - 0 to 7 inches: channery silt loam
H2 - 7 to 28 inches: very channery silt loam
H3 - 28 to 32 inches: unweathered bedrock

Properties and qualities

Slope: 25 to 50 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: C
Ecological site: F140XY026PA - Dry Till Uplands
Hydric soil rating: No

Description of Rock Outcrop

Typical profile

H1 - 0 to 60 inches: unweathered bedrock

Properties and qualities

Slope: 25 to 50 percent
Depth to restrictive feature: 0 inches to lithic bedrock
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydric soil rating: Unranked

Minor Components**Nassau**

Percent of map unit: 3 percent

Hydric soil rating: No

Brockport

Percent of map unit: 3 percent

Hydric soil rating: No

Lordstown

Percent of map unit: 3 percent

Hydric soil rating: No

Arnot

Percent of map unit: 3 percent

Hydric soil rating: No

Hornell

Percent of map unit: 3 percent

Hydric soil rating: No

NaB—Nassau channery silt loam, 0 to 8 percent slopes**Map Unit Setting**

National map unit symbol: bd5w

Elevation: 600 to 1,800 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Nassau and similar soils: 75 percent

Minor components: 25 percent

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

Description of Nassau**Setting**

Landform: Till plains, ridges, benches

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Crest

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Channery loamy till derived mainly from local slate or shale

Typical profile

H1 - 0 to 8 inches: channery silt loam

H2 - 8 to 15 inches: very channery silt loam

H3 - 15 to 19 inches: unweathered bedrock

Properties and qualities

Slope: 0 to 8 percent

Depth to restrictive feature: 10 to 20 inches to lithic bedrock

Drainage class: Somewhat excessively drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to moderately high (0.06 to 0.57 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Very low (about 1.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3s

Hydrologic Soil Group: D

Ecological site: F144AY033MA - Shallow Dry Till Uplands

Hydric soil rating: No

Minor Components**Hornell**

Percent of map unit: 5 percent

Hydric soil rating: No

Arnot

Percent of map unit: 5 percent

Hydric soil rating: No

Brockport

Percent of map unit: 5 percent

Hydric soil rating: No

Manlius

Percent of map unit: 5 percent

Hydric soil rating: No

Mardin

Percent of map unit: 5 percent

Hydric soil rating: No

NuB—Nunda channery silt loam, 3 to 8 percent slopes**Map Unit Setting**

National map unit symbol: bd61

Elevation: 400 to 1,600 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Nunda and similar soils: 75 percent

Minor components: 25 percent

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

Description of Nunda

Setting

Landform: Till plains, hills, drumlinoid ridges

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Crest

Down-slope shape: Concave

Across-slope shape: Convex

Parent material: A silty mantle over loamy till derived from calcareous shale and siltstone

Typical profile

H1 - 0 to 7 inches: channery silt loam

H2 - 7 to 25 inches: channery silt loam

H3 - 25 to 42 inches: gravelly silty clay loam

H4 - 42 to 60 inches: gravelly loam

Properties and qualities

Slope: 3 to 8 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 15 to 24 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 10 percent

Available water supply, 0 to 60 inches: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: C/D

Ecological site: F101XY013NY - Moist Till

Hydric soil rating: No

Minor Components

Lansing

Percent of map unit: 5 percent

Hydric soil rating: No

Darien

Percent of map unit: 5 percent

Hydric soil rating: No

Angola

Percent of map unit: 5 percent

Hydric soil rating: No

Mohawk

Percent of map unit: 5 percent

Hydric soil rating: No

Burdett

Percent of map unit: 5 percent

Hydric soil rating: No

NWC—Nunda extremely stony soils, sloping**Map Unit Setting**

National map unit symbol: bd5v

Elevation: 210 to 1,430 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Not prime farmland

Map Unit Composition

Nunda and similar soils: 75 percent

Minor components: 25 percent

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

Description of Nunda**Setting**

Landform: Till plains, hills, drumlinoid ridges

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Crest

Down-slope shape: Concave

Across-slope shape: Convex

Parent material: A silty mantle over loamy till derived from calcareous shale and siltstone

Typical profile

H1 - 0 to 7 inches: channery silt loam

H2 - 7 to 25 inches: channery silt loam

H3 - 25 to 42 inches: gravelly silty clay loam

H4 - 42 to 60 inches: gravelly loam

Properties and qualities

Slope: 3 to 8 percent

Surface area covered with cobbles, stones or boulders: 9.0 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 15 to 24 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 10 percent

Available water supply, 0 to 60 inches: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: C/D

Ecological site: F101XY013NY - Moist Till

Hydric soil rating: No

Minor Components**Mardin**

Percent of map unit: 5 percent

Hydric soil rating: No

Darien

Percent of map unit: 5 percent

Hydric soil rating: No

Burdett

Percent of map unit: 5 percent

Hydric soil rating: No

Lansing

Percent of map unit: 5 percent

Hydric soil rating: No

Manlius

Percent of map unit: 5 percent

Hydric soil rating: No

OtB—Otisville gravelly loamy sand, 0 to 8 percent slopes**Map Unit Setting**

National map unit symbol: bd65

Elevation: 260 to 740 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Not prime farmland

Map Unit Composition

Otisville and similar soils: 80 percent

Minor components: 20 percent

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

Description of Otisville**Setting**

Landform: Terraces, outwash plains, deltas

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Tread

Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Sandy and gravelly glaciofluvial deposits

Typical profile

H1 - 0 to 7 inches: gravelly loamy sand
H2 - 7 to 36 inches: very gravelly loamy sand
H3 - 36 to 60 inches: stratified very gravelly sand

Properties and qualities

Slope: 0 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 2.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: A
Ecological site: F144AY022MA - Dry Outwash
Hydric soil rating: No

Minor Components**Elnora**

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

Colonie

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

Plainfield

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

Alton

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

PsA—Plainfield loamy sand, 0 to 3 percent slopes**Map Unit Setting**

National map unit symbol: bd6j
Elevation: 720 to 1,150 feet
Mean annual precipitation: 38 to 44 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 110 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

Plainfield and similar soils: 80 percent

Minor components: 20 percent

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

Description of Plainfield**Setting**

Landform: Deltas, terraces, outwash plains

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Tread

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Sandy glaciofluvial or deltaic deposits

Typical profile

H1 - 0 to 8 inches: loamy sand

H2 - 8 to 32 inches: coarse sand

H3 - 32 to 78 inches: coarse sand

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Excessively drained

Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 3.7 inches)

Interpretive groups

Land capability classification (irrigated): 3e

Land capability classification (nonirrigated): 3s

Hydrologic Soil Group: A

Hydric soil rating: No

Minor Components**Colonie**

Percent of map unit: 5 percent

Hydric soil rating: No

Elnora

Percent of map unit: 5 percent

Hydric soil rating: No

Alton

Percent of map unit: 5 percent

Hydric soil rating: No

Otisville

Percent of map unit: 5 percent

Hydric soil rating: No

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

Map Unit Setting

National map unit symbol: bd6p

Elevation: 80 to 1,000 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Prime farmland if drained

Map Unit Composition

Rhinebeck and similar soils: 75 percent

Minor components: 25 percent

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

Description of Rhinebeck

Setting

Landform: Lake plains

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Tread

Down-slope shape: Concave

Across-slope shape: Linear

Parent material: Clayey and silty glaciolacustrine deposits

Typical profile

H1 - 0 to 13 inches: silty clay loam

H2 - 13 to 28 inches: silty clay

H3 - 28 to 70 inches: stratified silt loam to clay

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat poorly drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 6 to 18 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 10 percent

Available water supply, 0 to 60 inches: Moderate (about 8.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: C/D

Hydric soil rating: No

Minor Components**Hudson**

Percent of map unit: 5 percent

Hydric soil rating: No

Madalin

Percent of map unit: 5 percent

Landform: Depressions

Hydric soil rating: Yes

Fonda

Percent of map unit: 5 percent

Landform: Depressions

Hydric soil rating: Yes

Churchville

Percent of map unit: 5 percent

Hydric soil rating: No

Odessa

Percent of map unit: 5 percent

Hydric soil rating: No

SA—Saprists and Aquepts**Map Unit Setting**

National map unit symbol: bd6r

Elevation: 10 to 2,400 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Not prime farmland

Map Unit Composition

Saprists and similar soils: 45 percent

Aquepts and similar soils: 35 percent

Minor components: 20 percent

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

Description of Saprists**Setting**

Landform: Marshes, swamps

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Talf

Down-slope shape: Concave

Across-slope shape: Concave

Parent material: Organic material

Typical profile

H1 - 0 to 70 inches: muck

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Very poorly drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately high to very high (0.20 to 19.98 in/hr)

Depth to water table: About 0 inches

Frequency of flooding: None

Frequency of ponding: Frequent

Available water supply, 0 to 60 inches: Very high (about 22.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8w

Hydrologic Soil Group: A/D

Hydric soil rating: Yes

Description of Aquepts**Setting**

Landform: Depressions

Landform position (two-dimensional): Toeslope

Down-slope shape: Concave

Across-slope shape: Concave

Typical profile

H1 - 0 to 9 inches: gravelly loam

H2 - 9 to 70 inches: gravelly silt loam

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Very poorly drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to high (0.06 to 5.95 in/hr)

Depth to water table: About 0 inches

Frequency of flooding: None

Frequency of ponding: Frequent

Calcium carbonate, maximum content: 15 percent

Available water supply, 0 to 60 inches: Moderate (about 7.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8w

Hydrologic Soil Group: A/D

Hydric soil rating: Yes

Minor Components**Carlisle**

Percent of map unit: 5 percent

Landform: Marshes, swamps

Hydric soil rating: Yes

Fluvaquents

Percent of map unit: 5 percent

Landform: Flood plains

Hydric soil rating: Yes

Palms

Percent of map unit: 5 percent

Landform: Marshes, swamps

Hydric soil rating: Yes

Fredon

Percent of map unit: 5 percent

Landform: Depressions

Hydric soil rating: Yes

ScA—Scio silt loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: bd6s

Elevation: 100 to 1,000 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Scio and similar soils: 80 percent

Minor components: 20 percent

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

Description of Scio

Setting

Landform: Lake plains

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Tread

Down-slope shape: Concave

Across-slope shape: Convex

Parent material: Glaciolacustrine deposits, eolian deposits, or old alluvium, comprised mainly of silt and very fine sand

Typical profile

H1 - 0 to 10 inches: silt loam

H2 - 10 to 33 inches: silt loam

H3 - 33 to 60 inches: stratified very fine sandy loam to silt loam to loamy very fine sand

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

*Capacity of the most limiting layer to transmit water
(Ksat):* Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 18 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 1 percent
Available water supply, 0 to 60 inches: High (about 9.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: B/D
Hydric soil rating: No

Minor Components**Elnora**

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

Raynham

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

Unadilla

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

Rhinebeck

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

Te—Teel silt loam**Map Unit Setting**

National map unit symbol: bd6w
Elevation: 600 to 1,800 feet
Mean annual precipitation: 38 to 44 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 110 to 170 days
Farmland classification: All areas are prime farmland

Map Unit Composition

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

Description of Teel**Setting**

Landform: Flood plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Talf

Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Silty alluvium

Typical profile

H1 - 0 to 13 inches: silt loam
H2 - 13 to 38 inches: silt loam
H3 - 38 to 60 inches: silt loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 18 to 24 inches
Frequency of flooding: OccasionalNone
Frequency of ponding: None
Calcium carbonate, maximum content: 1 percent
Available water supply, 0 to 60 inches: High (about 9.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: B/D
Hydric soil rating: No

Minor Components**Howard**

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

Wayland

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

Hamlin

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

Copake

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

Scio

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

TvA—Tuller-Brockport complex, 0 to 3 percent slopes**Map Unit Setting**

National map unit symbol: bd6y
Elevation: 210 to 1,800 feet

Mean annual precipitation: 38 to 44 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 110 to 170 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Tuller, somewhat poorly drained, and similar soils: 35 percent
Brockport and similar soils: 30 percent
Tuller, poorly drained, and similar soils: 15 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tuller, Somewhat Poorly Drained**Setting**

Landform: Benches, ridges, hills
Landform position (two-dimensional): Footslope, summit
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Loamy till derived mainly from acid sandstone, siltstone, and shale

Typical profile

H1 - 0 to 7 inches: channery silt loam
H2 - 7 to 14 inches: channery silt loam
H3 - 14 to 18 inches: unweathered bedrock

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 1.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: D
Hydric soil rating: No

Description of Brockport**Setting**

Landform: Till plains, ridges, benches
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Linear

Parent material: Clayey till or congeliturbate derived mainly from neutral or calcareous shale

Typical profile

H1 - 0 to 8 inches: silt loam

H2 - 8 to 22 inches: silty clay

2C - 22 to 28 inches: very channery silty clay loam

2R - 28 to 34 inches: weathered bedrock

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: 20 to 40 inches to lithic bedrock

Drainage class: Somewhat poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 in/hr)

Depth to water table: About 6 to 18 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 1 percent

Available water supply, 0 to 60 inches: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: D

Ecological site: F101XY013NY - Moist Till

Hydric soil rating: No

Description of Tuller, Poorly Drained**Setting**

Landform: Benches, ridges, hills

Landform position (two-dimensional): Footslope, summit

Landform position (three-dimensional): Base slope

Down-slope shape: Concave

Across-slope shape: Linear

Parent material: Loamy till derived mainly from acid sandstone, siltstone, and shale

Typical profile

H1 - 0 to 7 inches: channery silt loam

H2 - 7 to 14 inches: channery silt loam

H3 - 14 to 18 inches: unweathered bedrock

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: 10 to 20 inches to lithic bedrock

Drainage class: Poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)

Depth to water table: About 0 to 12 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Very low (about 1.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: D

Hydric soil rating: Yes

Minor Components**Ilion**

Percent of map unit: 5 percent

Landform: Depressions

Hydric soil rating: Yes

Arnot

Percent of map unit: 5 percent

Hydric soil rating: No

Angola

Percent of map unit: 5 percent

Hydric soil rating: No

Varick

Percent of map unit: 5 percent

Landform: Depressions

Hydric soil rating: Yes

TvB—Tuller-Brockport complex, 3 to 8 percent slopes**Map Unit Setting**

National map unit symbol: bd6z

Elevation: 260 to 1,800 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Tuller, somewhat poorly drained, and similar soils: 35 percent

Brockport and similar soils: 30 percent

Tuller, poorly drained, and similar soils: 15 percent

Minor components: 20 percent

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

Description of Tuller, Somewhat Poorly Drained**Setting**

Landform: Benches, ridges, hills

Landform position (two-dimensional): Footslope, summit

Landform position (three-dimensional): Base slope

Down-slope shape: Concave

Across-slope shape: Linear

Parent material: Loamy till derived mainly from acid sandstone, siltstone, and shale

Typical profile

H1 - 0 to 7 inches: channery silt loam

H2 - 7 to 14 inches: channery silt loam

H3 - 14 to 18 inches: unweathered bedrock

Properties and qualities

Slope: 3 to 8 percent

Depth to restrictive feature: 10 to 20 inches to lithic bedrock

Drainage class: Somewhat poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Very low
(0.00 to 0.00 in/hr)

Depth to water table: About 6 to 18 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Very low (about 1.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: D

Hydric soil rating: No

Description of Brockport**Setting**

Landform: Till plains, ridges, benches

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Base slope

Down-slope shape: Concave

Across-slope shape: Linear

Parent material: Clayey till or congeliturbate derived mainly from neutral or calcareous shale

Typical profile

H1 - 0 to 8 inches: silt loam

H2 - 8 to 22 inches: silty clay

2C - 22 to 28 inches: very channery silty clay loam

2R - 28 to 34 inches: weathered bedrock

Properties and qualities

Slope: 3 to 8 percent

Depth to restrictive feature: 20 to 40 inches to lithic bedrock

Drainage class: Somewhat poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Very low
(0.00 in/hr)

Depth to water table: About 6 to 18 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 1 percent

Available water supply, 0 to 60 inches: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: D

Ecological site: F101XY013NY - Moist Till

Hydric soil rating: No

Description of Tuller, Poorly Drained**Setting**

Landform: Benches, ridges, hills

Landform position (two-dimensional): Footslope, summit

Landform position (three-dimensional): Base slope

Down-slope shape: Concave

Across-slope shape: Linear

Parent material: Loamy till derived mainly from acid sandstone, siltstone, and shale

Typical profile

H1 - 0 to 7 inches: channery silt loam

H2 - 7 to 14 inches: channery silt loam

H3 - 14 to 18 inches: unweathered bedrock

Properties and qualities

Slope: 3 to 8 percent

Depth to restrictive feature: 10 to 20 inches to lithic bedrock

Drainage class: Poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Very low
(0.00 to 0.00 in/hr)

Depth to water table: About 0 to 12 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Very low (about 1.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: D

Hydric soil rating: Yes

Minor Components**Varick**

Percent of map unit: 5 percent

Landform: Depressions

Hydric soil rating: Yes

Arnot

Percent of map unit: 5 percent

Hydric soil rating: No

Angola

Percent of map unit: 5 percent

Hydric soil rating: No

llion

Percent of map unit: 5 percent

Landform: Depressions

Hydric soil rating: Yes

UnB—Unadilla silt loam, 0 to 8 percent slopes**Map Unit Setting**

National map unit symbol: bd71

Elevation: 600 to 1,800 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Unadilla and similar soils: 75 percent

Minor components: 25 percent

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

Description of Unadilla**Setting**

Landform: Lake plains

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Tread

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Glaciolacustrine deposits, eolian deposits, or old alluvium, comprised mainly of silt and very fine sand

Typical profile

H1 - 0 to 9 inches: silt loam

H2 - 9 to 28 inches: very fine sandy loam

C - 28 to 50 inches: very fine sandy loam

2C - 50 to 60 inches: stratified very gravelly sand

Properties and qualities

Slope: 0 to 8 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately high to high (0.57 to 1.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 1 percent

Available water supply, 0 to 60 inches: Moderate (about 8.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: B

Hydric soil rating: No

Minor Components**Scio**

Percent of map unit: 5 percent

Hydric soil rating: No

Raynham

Percent of map unit: 5 percent

Hydric soil rating: No

Howard

Percent of map unit: 5 percent

Hydric soil rating: No

Hamlin

Percent of map unit: 5 percent

Hydric soil rating: No

Hudson

Percent of map unit: 5 percent

Hydric soil rating: No

W—Water**Map Unit Setting**

National map unit symbol: 1qcvx

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Not prime farmland

Map Unit Composition

Water: 100 percent

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

**Wy—Wayland soils complex, 0 to 3 percent slopes,
frequently flooded****Map Unit Setting**

National map unit symbol: 2srgv

Elevation: 160 to 1,970 feet

Mean annual precipitation: 31 to 68 inches

Mean annual air temperature: 43 to 52 degrees F

Frost-free period: 105 to 180 days

Farmland classification: Not prime farmland

Map Unit Composition

Wayland and similar soils: 60 percent

Wayland, very poorly drained, and similar soils: 30 percent

Minor components: 10 percent

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

Description of Wayland**Setting**

Landform: Flood plains

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Silty and clayey alluvium derived from interbedded sedimentary rock

Typical profile

A - 0 to 6 inches: silt loam

Bg1 - 6 to 12 inches: silt loam

Bg2 - 12 to 18 inches: silt loam

C1 - 18 to 46 inches: silt loam

C2 - 46 to 72 inches: silty clay loam

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to high (0.14 to 14.17 in/hr)

Depth to water table: About 0 to 6 inches

Frequency of flooding: FrequentNone

Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)

Available water supply, 0 to 60 inches: Very high (about 12.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 5w

Hydrologic Soil Group: B/D

Ecological site: F139XY009OH - Wet Floodplain

Hydric soil rating: Yes

Description of Wayland, Very Poorly Drained**Setting**

Landform: Flood plains

Landform position (three-dimensional): Tread

Down-slope shape: Concave

Across-slope shape: Concave

Parent material: Silty and clayey alluvium derived from interbedded sedimentary rock

Typical profile

A - 0 to 6 inches: mucky silt loam
Bg1 - 6 to 12 inches: silt loam
Bg2 - 12 to 18 inches: silt loam
C1 - 18 to 46 inches: silt loam
C2 - 46 to 72 inches: silty clay loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.14 to 14.17 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: NoneFrequent
Frequency of ponding: Frequent
Calcium carbonate, maximum content: 15 percent
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Very high (about 12.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: B/D
Ecological site: F139XY009OH - Wet Floodplain
Hydric soil rating: Yes

Minor Components**Wakeville**

Percent of map unit: 10 percent
Landform: Flood plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Talf
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

Data Source Information

Soil Survey Area: Schenectady County, New York
Survey Area Data: Version 20, Sep 1, 2021

Schenectady County, New York

HuB—Hudson silty clay loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: bd4q

Elevation: 300 to 1,800 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Hudson and similar soils: 75 percent

Minor components: 25 percent

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

Description of Hudson

Setting

Landform: Lake plains

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Tread

Down-slope shape: Concave

Across-slope shape: Convex

Parent material: Clayey and silty glaciolacustrine deposits

Typical profile

H1 - 0 to 6 inches: silty clay loam

H2 - 6 to 12 inches: silty clay loam

H3 - 12 to 26 inches: silty clay

H4 - 26 to 60 inches: stratified clay to silt loam

Properties and qualities

Slope: 3 to 8 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 18 to 24 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 20 percent

Available water supply, 0 to 60 inches: High (about 9.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: C/D

Hydric soil rating: No

Minor Components

Rhinebeck

Percent of map unit: 8 percent

Hydric soil rating: No

Odessa

Percent of map unit: 7 percent

Hydric soil rating: No

Unnamed soils

Percent of map unit: 5 percent

Hydric soil rating: No

Churchville

Percent of map unit: 5 percent

Hydric soil rating: No

Data Source Information

Soil Survey Area: Schenectady County, New York

Survey Area Data: Version 20, Sep 1, 2021

Schenectady County, New York

HuC—Hudson silty clay loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: bd4r

Elevation: 300 to 1,800 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Hudson and similar soils: 75 percent

Minor components: 25 percent

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

Description of Hudson

Setting

Landform: Lake plains

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Tread

Down-slope shape: Concave

Across-slope shape: Convex

Parent material: Clayey and silty glaciolacustrine deposits

Typical profile

H1 - 0 to 6 inches: silty clay loam

H2 - 6 to 12 inches: silty clay loam

H3 - 12 to 26 inches: silty clay

H4 - 26 to 60 inches: stratified clay to silt loam

Properties and qualities

Slope: 8 to 15 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 18 to 24 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 20 percent

Available water supply, 0 to 60 inches: High (about 9.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: C/D

Hydric soil rating: No

Minor Components

Unnamed soils

Percent of map unit: 8 percent

Hydric soil rating: No

Rhinebeck

Percent of map unit: 7 percent

Hydric soil rating: No

Churchville

Percent of map unit: 5 percent

Hydric soil rating: No

Brockport

Percent of map unit: 5 percent

Hydric soil rating: No

Data Source Information

Soil Survey Area: Schenectady County, New York

Survey Area Data: Version 20, Sep 1, 2021

Schenectady County, New York

MnB—Manlius silt loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: bd5g

Elevation: 200 to 1,800 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Manlius and similar soils: 80 percent

Minor components: 20 percent

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

Description of Manlius

Setting

Landform: Till plains, ridges, benches

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Crest

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Loamy till derived mainly from local acid shale bedrock

Typical profile

H1 - 0 to 7 inches: silt loam

H2 - 7 to 28 inches: very channery silt loam

H3 - 28 to 32 inches: unweathered bedrock

Properties and qualities

Slope: 3 to 8 percent

Depth to restrictive feature: 20 to 40 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 3.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: C

Ecological site: F144AY034CT - Well Drained Till Uplands

Hydric soil rating: No

Minor Components

Hornell

Percent of map unit: 5 percent

Hydric soil rating: No

Nassau

Percent of map unit: 5 percent

Hydric soil rating: No

Brockport

Percent of map unit: 5 percent

Hydric soil rating: No

Arnot

Percent of map unit: 5 percent

Hydric soil rating: No

Data Source Information

Soil Survey Area: Schenectady County, New York

Survey Area Data: Version 20, Sep 1, 2021

Schenectady County, New York

NaD—Nassau channery silt loam, 8 to 25 percent slopes

Map Unit Setting

National map unit symbol: bd5x

Elevation: 600 to 1,800 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Not prime farmland

Map Unit Composition

Nassau and similar soils: 75 percent

Minor components: 25 percent

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

Description of Nassau

Setting

Landform: Till plains, ridges, benches

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Channery loamy till derived mainly from local slate or shale

Typical profile

H1 - 0 to 8 inches: channery silt loam

H2 - 8 to 15 inches: very channery silt loam

H3 - 15 to 19 inches: unweathered bedrock

Properties and qualities

Slope: 8 to 25 percent

Depth to restrictive feature: 10 to 20 inches to lithic bedrock

Drainage class: Somewhat excessively drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to moderately high (0.06 to 0.57 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Very low (about 1.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6e

Hydrologic Soil Group: D

Ecological site: F144AY033MA - Shallow Dry Till Uplands

Hydric soil rating: No

Minor Components

Manlius

Percent of map unit: 5 percent

Hydric soil rating: No

Brockport

Percent of map unit: 5 percent

Hydric soil rating: No

Mardin

Percent of map unit: 5 percent

Hydric soil rating: No

Hornell

Percent of map unit: 5 percent

Hydric soil rating: No

Tuller

Percent of map unit: 5 percent

Hydric soil rating: No

Data Source Information

Soil Survey Area: Schenectady County, New York

Survey Area Data: Version 20, Sep 1, 2021

Schenectady County, New York

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

Map Unit Setting

National map unit symbol: bd6q

Elevation: 80 to 1,000 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Prime farmland if drained

Map Unit Composition

Rhinebeck and similar soils: 75 percent

Minor components: 25 percent

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

Description of Rhinebeck

Setting

Landform: Lake plains

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Tread

Down-slope shape: Concave

Across-slope shape: Linear

Parent material: Clayey and silty glaciolacustrine deposits

Typical profile

H1 - 0 to 13 inches: silty clay loam

H2 - 13 to 28 inches: silty clay

H3 - 28 to 70 inches: stratified silt loam to clay

Properties and qualities

Slope: 3 to 8 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat poorly drained

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 6 to 18 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 10 percent

Available water supply, 0 to 60 inches: Moderate (about 8.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: C/D

Hydric soil rating: No

Minor Components

Hudson

Percent of map unit: 5 percent

Hydric soil rating: No

Churchville

Percent of map unit: 5 percent

Hydric soil rating: No

Odessa

Percent of map unit: 5 percent

Hydric soil rating: No

Fonda

Percent of map unit: 5 percent

Landform: Depressions

Hydric soil rating: Yes

Madalin

Percent of map unit: 5 percent

Landform: Depressions

Hydric soil rating: Yes

Data Source Information

Soil Survey Area: Schenectady County, New York

Survey Area Data: Version 20, Sep 1, 2021

Schenectady County, New York

UR—Urban land-Colonie complex

Map Unit Setting

National map unit symbol: bd70

Elevation: 150 to 1,000 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Not prime farmland

Map Unit Composition

Urban land: 40 percent

Colonie and similar soils: 30 percent

Minor components: 30 percent

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

Description of Colonie

Setting

Landform: Deltas, beach ridges

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Tread

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Sandy glaciofluvial or eolian deposits

Typical profile

H1 - 0 to 6 inches: loamy fine sand

H2 - 6 to 70 inches: fine sand

H3 - 70 to 110 inches: fine sand

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): High to very high (1.98 to 19.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2s

Hydrologic Soil Group: A

Ecological site: F101XY005NY - Dry Outwash

Hydric soil rating: No

Minor Components

Cheektowaga

Percent of map unit: 5 percent

Landform: Depressions

Hydric soil rating: Yes

Hudson

Percent of map unit: 5 percent

Hydric soil rating: No

Junius

Percent of map unit: 5 percent

Hydric soil rating: No

Howard

Percent of map unit: 5 percent

Hydric soil rating: No

Plainfield

Percent of map unit: 5 percent

Hydric soil rating: No

Granby

Percent of map unit: 5 percent

Landform: Depressions

Hydric soil rating: Yes

Data Source Information

Soil Survey Area: Schenectady County, New York

Survey Area Data: Version 20, Sep 1, 2021

ATTACHMENT 4
TABLES

Table 4-1
Summary of Wetlands Within the Project Corridor¹

Approximate Station & Dwg. No.	Wetland ID	Cowardin Classification ²	Associated Water Course	Area w/in JD Limits (Square Feet)	USACE & NYSDEC Jurisdiction	Coordinates (lat., long.)
Pan Am Railroad						
45000+00 C-401	FA-XU	PFO	Unnamed Tributary to Alplaus Kill	10,331	USACE & NYSDEC (S-105)	42.864336, -73.904967
45064+00 C-403	C-PA-D	PEM	Unnamed Tributary to Mohawk River	12,877	USACE	42.848273, -73.920919
45066+50 C-403	FA-XT	PEM	-	0	USACE	42.849597, -73.918831
45102+75 C-404	C-PA-C	PEM	Unnamed Tributary to Mohawk River (C-PA-S2)	965	USACE	42.844115, -73.930057
45106+75 C-404	C-PA-B	PFO	-	5,551	USACE	42.843466, -73.931735
45118+00 C-404	C-PA-A	PFO	Unnamed Tributary to Mohawk River	10,661	USACE	42.841909, -73.935371
45130+75 C-405	C-PA-E	PEM	-	24,300	USACE	42.840022, -73.940582
45137+25 C-405	FA-XQ	PEM	-	9,284	USACE	42.839431, -73.941300
Access Road 45155+00 C-201	C-4B-B	PEM	-	688	USACE	42.836616, -73.947181
45158+25 C-406	C-PA-F	PFO	-	896	USACE	42.836944, -73.948344
45170+00 C-406	FA-XP	PFO	-	0	USACE	42.834665, -73.952283
I-890 Interchange						
45337+00 C-412	C-4B-A	PEM	Unnamed Tributary to Mohawk River	0	USACE	42.843611, -74.004444
45344+75 C-412	I890-A	PEM	Unnamed Tributary to Mohawk River (I890-S1)	0	USACE	42.841938, -74.006752

Table 4-1
Summary of Wetlands Within the Project Corridor¹

Approximate Station & Dwg. No.	Wetland ID	Cowardin Classification ²	Associated Water Course	Area w/in JD Limits (Square Feet)	USACE & NYSDEC Jurisdiction	Coordinates (lat., long.)
CSX Railroad						
45390+50 C-414	FA-XH	PEM	-	4,909	USACE	42.831607, -73.996648
45394+75 C-413	12-8 A	PEM	Unnamed Tributary to Mohawk River (XG)	1,098	USACE	42.831324, -73.99584
45396+25 C-414	FA-XI	PEM	-	18,634	USACE	42.828377, -73.995653
45400+75 C-414	FA-XL	PEM	-	4,840	USACE	42.829227, -73.995571
45396+25 C-414	FA-XJ	PEM	-	13,319	USACE	42.827371, -73.995452
45403+75 C-414	FA-XE	PEM	-	1,830	USACE	42.829114, -73.994532
45407+25 C-414	FA-XK	PEM	-	23,849	USACE	42.827828, -73.995108
45412+00 C-414	12-8 B	PEM	-	1,662	USACE	42.826561, -73.994
45434+50 C-415	12-8 C	PEM	-	2,833	USACE	42.820603, -73.995871

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

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

Table 4-2
Summary of Waterbodies within the Project Corridor

Approximate Station & Dwg. No.	Waterbody Name	NYSDEC Classification	Waterbody Field ID & NYSDEC Regulation	Flow Status	Substrate	Width (ft.) ¹	Depth (ft.) ¹	Length w/in JD Limits (ft.)	Coordinates (lat., long.)
Pan Am Railroad									
45000+00 C-401	Unnamed Tributary to Alplaus Kill	C/C	FA-XA 876-58.1	Perennial	Silt	4	0.5	0	42.864481, -73.905503
45022+75 C-401	Unnamed Tributary to Mohawk River	Unmapped	C-PA-S6	Intermittent	Sand/cobble/ gravel	15	2.5	117	42.859566, -73.910254
45050+00 C-402	Unnamed Tributary to Mohawk River	Unmapped	C-PA-S5	Intermittent	Sand/gravel	6	2	55	42.853108, -73.914914
45055+00 C-402	Unnamed Tributary to Mohawk River	Unmapped	C-PA-S4	Intermittent	Cobble/gravel	8	1	45	42.851976, -73.915932
45060+00 C-403	Unnamed Tributary to Mohawk River	Unmapped	C-PA-S3	Intermittent	Shale	3	0.5	120	42.850898, -73.917471
45101+25 C-404	Unnamed Tributary to Mohawk River	C/C(T)	C-PA-S2 876-88	Perennial	Cobble over sand	12	2	367	42.844262, -73.929441
45127+50 C-405	Unnamed Tributary to Mohawk River	Unmapped	C-PA-S1	Intermittent	Cobble over mineral/sand	5	0.5	11	42.841021, -73.938045
45141+50 C-405	Unnamed Tributary to Mohawk River	Unmapped	C-PA-S7	Intermittent	Cobble over sand	8	1	31	42.839081, -73.942736
45145+75 C-405	Unnamed Tributary to Mohawk River	C/C	C-PA-S8 876-89	Perennial	Cobble over sand	30	3	43	42.838666, -73.944024

Table 4-2
Summary of Waterbodies within the Project Corridor

Approximate Station & Dwg. No.	Waterbody Name	NYSDEC Classification	Waterbody Field ID & NYSDEC Regulation	Flow Status	Substrate	Width (ft.) ¹	Depth (ft.) ¹	Length w/in JD Limits (ft.)	Coordinates (lat., long.)
Access Road 45155+00 C-201	Unnamed Tributary to Mohawk River	C/C	S1 876-89	Perennial	Cobble/gravel /sand	12	1	890	42.836730, -73.944436
45174+00 C-406	Unnamed Tributary to Mohawk River	C/C(T)	C-PA-S9 876-86	Perennial	Cobble over sand	8	1.5	441	42.83473, -73.953468
45176+25 C-406	Unnamed Tributary to Mohawk River	Unmapped	C-PA-S10	Intermittent	Cobble/gravel	10	2	220	42.834362, -73.954636
I-890 Interchange									
45318+00 C-411	Mohawk River	A/A	Mohawk River 876-8	Perennial	N/A	375	N/A	135	42.84796, -74.00156
45348+50 C-412	Unnamed Tributary to Mohawk River	C/C	I890-S1 876-103	Intermittent	Rocky	6	1	0	42.841588, -74.006774
National Grid Right-of-Way									
45363+50 C-413	Unnamed Tributary to Mohawk River	Unmapped	G-S-4	Intermittent	Pebble/ sediment	2	0.5	108	42.837025, - 74.002719
45364+75 C-413	Unnamed Tributary to Mohawk River	Unmapped	G-S-5	Intermittent	Cobble/ sediment	1	0.5	108	42.836397, - 74.001717
45377+00 C-413	Unnamed Tributary to Mohawk River	Unmapped	G-S-6	Intermittent	Pebble/ sediment	1	0.5	122	42.834794, - 74.000261
CSX Railroad									
45378+25 C-413	Unnamed Tributary to	Unmapped	12-8 S-1	Intermittent	Silt	2	0.5	24	42.835011, -73.99937

Table 4-2
Summary of Waterbodies within the Project Corridor

Approximate Station & Dwg. No.	Waterbody Name	NYSDEC Classification	Waterbody Field ID & NYSDEC Regulation	Flow Status	Substrate	Width (ft.) ¹	Depth (ft.) ¹	Length w/in JD Limits (ft.)	Coordinates (lat., long.)
	Mohawk River								
45388+00 C-413	Unnamed Tributary to Mohawk River	Unmapped	12-8 S-2	Intermittent	N/A	N/A	N/A	0	42.833136, -73.997275
45392+00 C-414	Unnamed Tributary to Mohawk River	Unmapped	FA-XG	Intermittent	Silt	3	0.25	205	42.831435, -73.995680
45417+50 C-414	Unnamed Tributary to Mohawk River	Unmapped	12-8 S-3	Intermittent	Silt	2.5	0.75	136	42.825054, -73.994333

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					
Schenectady	Cheektowaga fine sandy loam	Ce	0-3	Y	Very Poorly Drained
Schenectady	Fluvaquents, loamy	FL	0-2	Y	Poorly Drained
Schenectady	Fredon silt loam	Fr	0-3	Y	Poorly Drained
Schenectady	Granby loamy fine sand	Gr	0-3	Y	Poorly Drained
Schenectady	Junius loamy fine sand	Ju	0-3	Y	Poorly Drained
Schenectady	Madalin silty clay loam	Ma	0-3	Y	Poorly Drained
Schenectady	Saprists and Aquents	SA	0-1	Y	Very Poorly Drained
Schenectady	Wayland soils complex	Wy	0-3	Y	Poorly Drained
Non-hydric Soils					
Schenectady	Arnot-Rock outcrop association, very steep	AZF	35-60	N	Well Drained
Schenectady	Burdett-Sciba channery silt loams	BvA	0-3	N	Somewhat Poorly Drained
Schenectady	Burdett-Sciba channery silt loams	BvB	3-8	N	Somewhat Poorly Drained
Schenectady	Colonie loamy fine sand	CoA	0-3	N	Well Drained
Schenectady	Colonie loamy fine sand	CoC	3-15	N	Well Drained
Schenectady	Colonie and Plainfield soils, steep	CPE	15-50	N	Well Drained
Schenectady	Cut and fill land	Cu	0-15	N	Somewhat Excessively Drained
Schenectady	Elnora loamy fine sand	En	0-3	N	Moderately Well Drained
Schenectady	Gravel pits	Gv	-	-	-
Schenectady	Hamlin silt loam	Ha	0-3	N	Well Drained

Table 4-3
Soil Description Summary

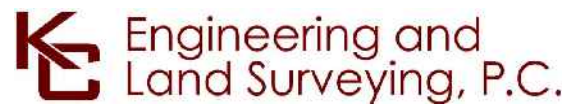
County	Soil Name	Symbol	% Slopes	Hydric (y/n)	Drainage Class
Schenectady	Hornell silt loam	HoB	3-8	N	Somewhat Poorly Drained
Schenectady	Hornell silt loam	HoC	8-15	N	Somewhat Poorly Drained
Schenectady	Howard gravelly silt loam	HrA	0-3	N	Well Drained
Schenectady	Howard gravelly silt loam	HrB	3-8	N	Well Drained
Schenectady	Howard gravelly silt loam	HrD	15-25	N	Well Drained
Schenectady	Howard soils, very steep	HTF	25-70	N	Well Drained
Schenectady	Hudson silty clay loam	HuB	3-8	N	Moderately Well Drained
Schenectady	Hudson silty clay loam	HuC	8-15	N	Moderately Well Drained
Schenectady	Lordstown gravelly silt loam	LoB	3-8	N	Well Drained
Schenectady	Lordstown gravelly silt loam	LoD	15-25	N	Well Drained
Schenectady	Made land	Mg	0-8	N	Somewhat Excessively Drained
Schenectady	Manlius silt loam	MnB	3-8	N	Well Drained
Schenectady	Manlius-Rock outcrop association, steep	MPE	25-50	N	Well Drained
Schenectady	Mardin gravelly silt loam	MrB	3-8	N	Moderately Well Drained
Schenectady	Nassau channery silt loam	NaB	0-8	N	Somewhat Excessively Drained
Schenectady	Nassau channery silt loam	NaD	8-25	N	Somewhat Excessively Drained
Schenectady	Nunda extremely stony soils, sloping	NWC	3-8	N	Moderately Well Drained
Schenectady	Nunda silt loam	NuB	3-8	N	Moderately Well Drained
Schenectady	Nunda silt loam	NuC	8-15	N	Moderately Well Drained
Schenectady	Nunda soils, very deep	NVF	25-45	N	Moderately Well Drained

Table 4-3
Soil Description Summary

County	Soil Name	Symbol	% Slopes	Hydric (y/n)	Drainage Class
Schenectady	Otisville gravelly loamy sand	OtB	0-8	N	Excessively Drained
Schenectady	Phelps gravelly loam, fan	Pr	0-8	N	Moderately Well Drained
Schenectady	Plainfield loamy sand	PsA	0-3	N	Excessively Drained
Schenectady	Plainfield loamy sand	PsB	3-10	N	Excessively Drained
Schenectady	Raynham silt loam	Ra	0-3	N	Somewhat Poorly Drained
Schenectady	Rhinebeck silty clay loam	RhA	0-3	N	Somewhat Poorly Drained
Schenectady	Rhinebeck silty clay loam	RhB	3-8	N	Somewhat Poorly Drained
Schenectady	Scio silt loam	ScA	0-3	N	Moderately Well Drained
Schenectady	Scio silt loam	ScB	3-8	N	Moderately Well Drained
Schenectady	Teel silt loam	Te	0-3	N	Moderately Well Drained
Schenectady	Tuller-Brockport complex	TvA	0-3	N	Somewhat Poorly Drained
Schenectady	Tuller-Brockport complex	TvB	3-8	N	Somewhat Poorly Drained
Schenectady	Unadilla silt loam	UnB	0-8	N	Well Drained
Schenectady	Urban land	UR	0-3	N	Well Drained

ATTACHMENT 5
WETLANDS AND WATERBODIES DELINEATION MAPPING

File: P:\120174-CHPE\CABLE_INSTALL-KIEWIT\60_CAD\20_ENGINEERING_CAD_FILES\PACKAGE_4B\NY_ENVIRONMENTAL_(PROSION_CONTROL)\01_KCE\SHRHEET_FILES\21162_P4B-E&S_KEYPLAN.DWG Saved: 7/24/2023 3:43:47 PM Plotted: 7/26/2023 11:44:17 AM Current User: Emily jbb LastSavedBy: jmarinez



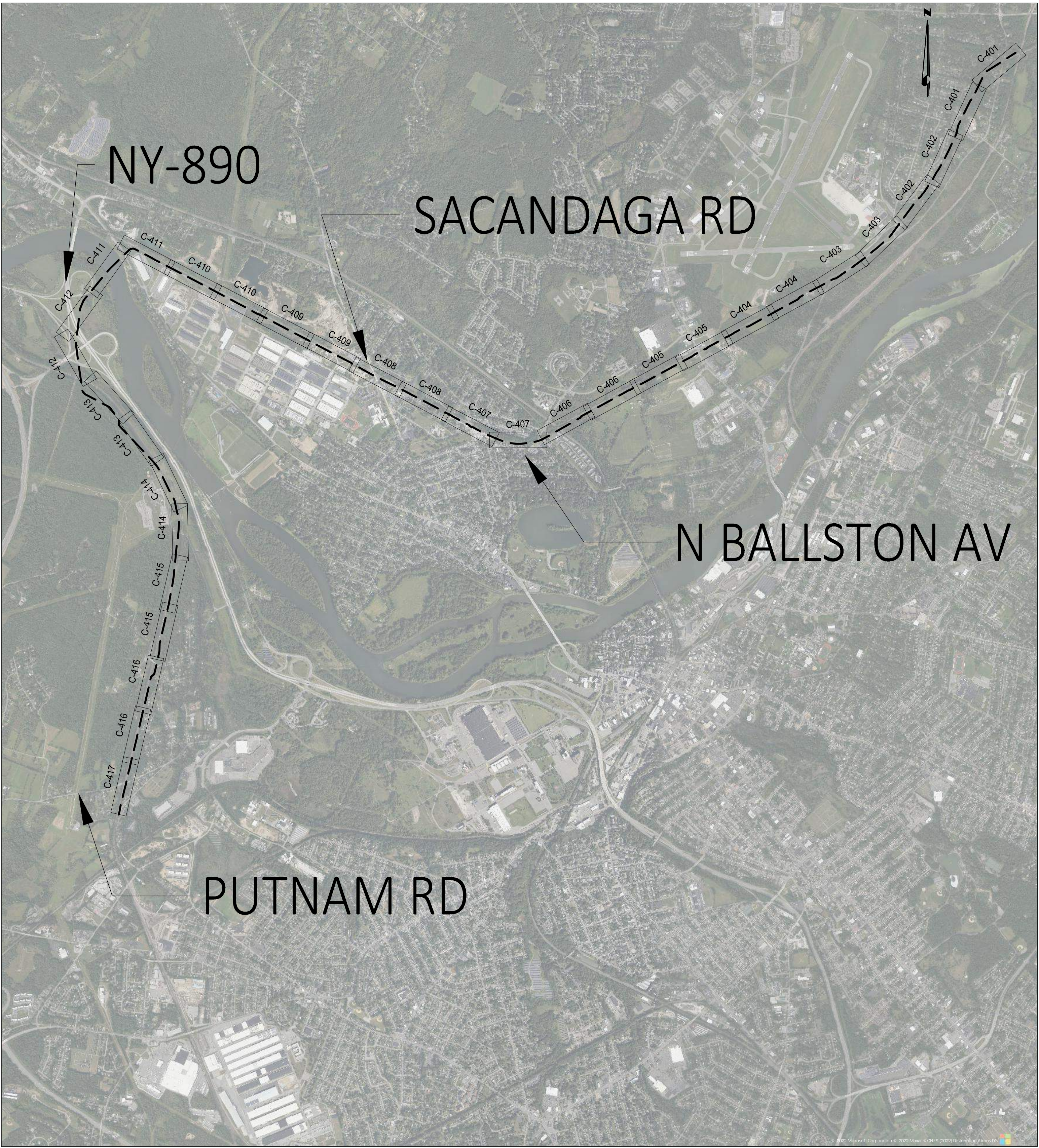
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT OR LAND SURVEYOR TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE 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.

0	07/28/2023	ISSUED FOR CONSTRUCTION SUBMISSION	BL	SL	
No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP	

CHAMPLAIN HUDSON POWER EXPRESS
SEGMENT 7 (PACKAGE 4B) - CSX - PAN AM SOUTHERN
E&S KEY PLAN

DRAWN BY: BL DESIGNED BY: BL APPROVED BY: SL SCALE AS NOTED
REV. NO. 0

KIEWIT PROJECT NO.	21162
KC PROJECT NO.	120174
DRAWING NO.	C-400
DATE	07/26/2023
SH.NO.	OF



PLAN AND PROFILE KEY MAP
SCALE: 1" = 6000'