# Wetland & Waterbodies Delineation Report



# Champlain Hudson Power Express Segment 9 - Package 5B

## Bethlehem, New York

CHA Project Number: 066076

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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, Inc") 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, and Article 24 Freshwater Wetlands Act (FWW)) & Article 15 (Protection of Waters) of the Environmental Conservation Law along the overland transmission cable route that follows State and local roadways and the CSX Corporation (CSX) railroad rights-of-way ("ROW"). Delineations were conducted with the objective of verifying and updating previous wetland delineations performed for the Project Corridor as part of 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 Jurisdiction Determination limits) during field surveys for the overland portions of the Project.

The project also includes equipment staging, laydown areas and access roads, including the Bethlehem Yard.

#### 2.0 SEGMENT 9 - PACKAGE 5B CORRIDOR OVERVIEW

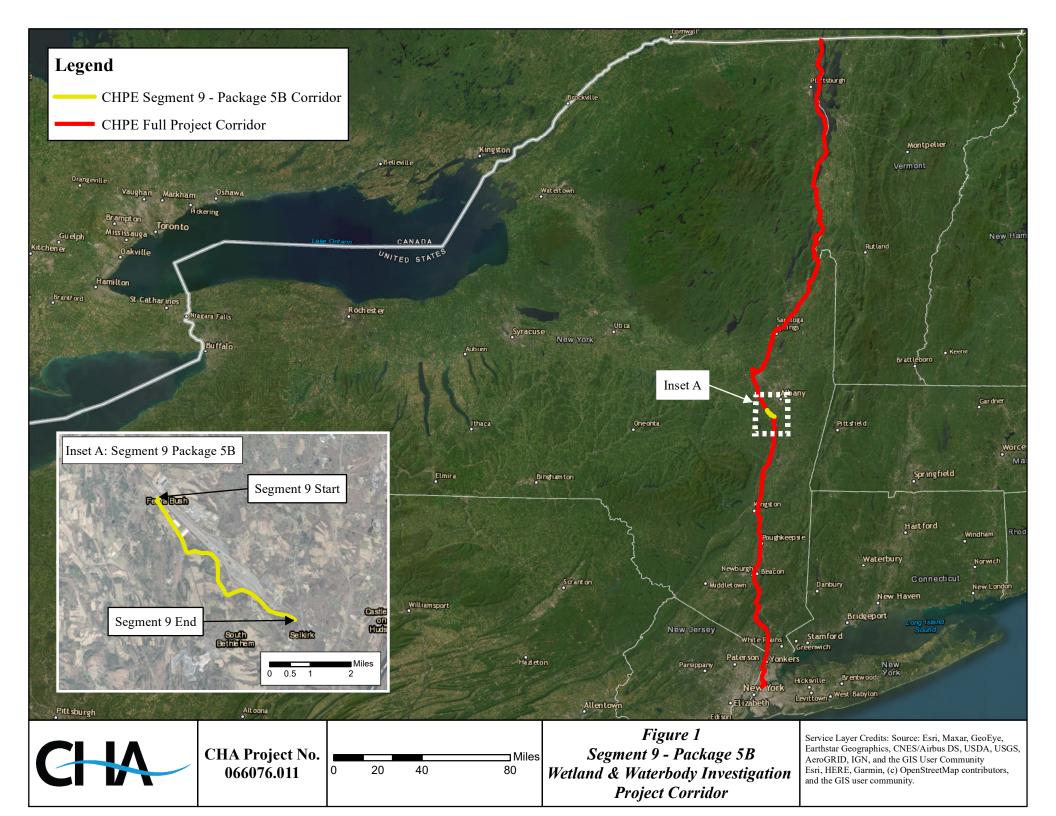
The entire Project Corridor is approximately 339 miles from Montreal, Quebec, Canada to New York City, New York, USA. Figure 1 below shows the route from the Canadian border to New York City and highlights the approximately 5.3 miles of the Segment 9 - Package 5B Project Corridor that was investigated for wetlands and waterbodies.

Segment 9 - Package 5B begins at NYS Route 32 (Feura Bush Road) in Bethlehem, NY where Segment 9 - Package 5A ended (50899+00) on the CSX railroad. Segment 9 - Package 5B extends south approximately 5.3 miles on NYS Route 32 (Feura Bush Road), south on W Yard Road, through a forest, east/southeast onto S Albany Road, then east/southeast through an undeveloped area to where Segment 9 - Package 5B terminates, and Segment 10 - Package 6 begins. The total distance of Segment 9 - Package 5B is 5.3 miles.

The Bethlehem Staging and Laydown Yard is situated within the Town of Bethlehem in the southern part of Segment 9 - Package 5B northeast and southwest of West Yard Road.







#### 3.0 WETLAND DELINEATION METHODOLOGY

To determine the potential for wetland impacts from construction of the Project, CHA assessed the 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 Engineering & Land Surveying, D.P.C. (Shumaker) assisted with the field work. Wetland scientists conducted wetland delineations in November 2021, October 2022 and December 2022. 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 land within and outside of ROWs along Feura Bush Road, W Yard Road and S Albany Road, and areas of undeveloped lands that connect these ROW's. The wetland delineation limits were approximately 50 feet from the edge of pavement, limited to the side of the road on which the alignment follows and primarily within the ROW of the aforementioned roads.

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. Wetland and upland data points were recorded to show the difference between the wetland and upland habitats. Generally, one data point set (wetland and upland) was collected for each wetland. Wetland Determination Data Sheets corresponding to each point can be found in Attachment 1.

Wetlands within the Segment 9 - Package 5B Project Corridor fall under the jurisdiction of the U.S. Army Corps of Engineers (USACE). There are no New York State Department of Environmental Conservation (NYSDEC) regulated wetlands within the Segment 9 - Package 5B Project Corridor. The New York State methodology similarly recognizes the three parameters of vegetation, soils, and hydrology; however, under the New York State method the hydric vegetation criterion is mandatory, while the other two parameters are not (Browne et. al. 1995). Wetlands regulated by the 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, it uses field delineation to determine the precise boundaries of these wetland areas.

Prior to actual 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 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 and alternatives for the purposes of verifying and modifying the previous delineation. Refer to Attachment 2 for NWI and NYSDEC Freshwater Wetland & Stream Mapping and Attachment 3 for NRCS Soil Mapping.

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. 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, including streams under NYSDEC Article 15 jurisdiction, were identified by the presence of an ordinary high-water mark (OHWM) or stream channel. Delineation and flagging were completed to identify the ordinary high-water mark



(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 jurisdiction that were identified in the Project Corridor along the current proposed underground transmission cable route. 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. Wetland determination data forms and photographic documentation of the wetlands are included in Attachment 1.

#### 4.0 WETLAND & WATERBODIES DELINEATION RESULTS

A total of 27 wetland areas were identified in the Segment 9 - Package 5B Project Corridor totaling approximately 43.8 acres. An additional three wetland areas were identified within the Bethlehem staging and laydown yard. However, access was not granted for this area for delineation purposes and the size and location are approximate at this time. Table 4-1 in Attachment 4 provides a summary of the wetlands identified, including their classification in accordance with Cowardin et al. (1979) and their federal jurisdiction. No wetlands within the Segment 9 – Package 5B Project Corridor correspond with wetlands mapped by the NYSDEC.

Descriptions of wetland vegetation, hydrology, and soils observed within the Project Corridor are presented in the following sections. The delineated wetlands are summarized in Table 4-1 (Attachment 4) and the delineated boundaries are illustrated on the Wetlands and Waterbodies Delineation Mapping (Attachment 5). Table 4-2 (Attachment 4) summarizes the waterbodies identified within the Project Corridor, with photographs of these resources provided in Attachment 6. Table 4-3 (Attachment 4) provides the soil series information.



#### 4.1 **VEGETATION**

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

#### 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), and with less than 50 percent aerial cover by shrubs and/or trees. The freshwater emergent wetlands along the Project Corridor primarily include shallow emergent marsh, common reed marsh and purple loosestrife marsh (Edinger et. al., 2014).

Shallow emergent marshes occur on mineral soils or deep muck soils that are permanently saturated and seasonally flooded. Water depths range from 6 inches to 3.3 feet during flood stages (Edinger et. al., 2014). Characteristic vegetation of shallow emergent marshes within the Project Corridor includes sensitive fern (*Onoclea sensibilis*), rough goldenrod (*Solidago rugosa*), giant goldenrod (*Solidago gigantea*), devil's beggarticks (*Bidens frondosa*), scouring rush (*Equisetum hyemale*), field horsetail (*Equisetum arvense*), cattails (*Typha* spp.), sedges (*Carex spp.*), asters (*Symphyotrichum spp.*), reed canary grass (*Phalaris arundinacea*) and soft rush (*Juncus effusus*). Invasive species observed within the shallow emergent marshes include common reed (*Phragmites australis*), purple loosestrife (*Lythrum salicaria*) honeysuckle (*Lonicera spp.*) and common buckthorn (*Rhamnus cathartica*).

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<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> 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.



Common reed marsh and purple loosestrife marsh 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 or irrigation, are commonly found along the railroad and road ROW's. Vegetation within the ditches is typically dominated by invasive species such as common reed, purple loosestrife, and reed canary grass; however, some areas may be dominated by native, non-invasive wetland species.

#### 4.1.2 Palustrine Scrub-Shrub Wetland

The scrub-shrub wetland cover type includes areas that are dominated by shrubs and saplings that are less than 6 meters (20 feet) tall (Cowardin et. al., 1979), and have less than 50 percent aerial cover by trees. Scrub-shrub wetlands along the Project Corridor were dominated by silky dogwood (*Cornus amomum*), gray dogwood (*Cornus racemosa*), common buckthorn and honeysuckle. Other vegetation observed includes red maple (*Acer rubrum*), green ash (*Fraxinus pennsylvanica*), pussy willow (*Salix discolor*), gray birch (*Betula populifolia*), black willow (*Salix nigra*), sensitive fern, moneywort (*Lysimachia nummularia*) and field horsetail. Invasive species observed include honeysuckle and common buckthorn.

#### 4.1.3 Palustrine Forested Wetland

Forested wetland cover types are dominated by trees and shrubs that have a tolerance to a seasonal high-water table. For a community 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 (Edinger et al., 2014). Red maple hardwood swamp is the only forested wetland community within the Project Corridor.

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 red maple, green ash, American elm (*Ulmus americana*), gray birch, swamp

white oak (*Quercus bicolor*) and white pine (*Pinus strobus*). Shrub species commonly observed include dogwoods, gray birch, spicebush (*Ilex verticillata*), American elm and honeysuckle. The herbaceous layer typically includes sensitive fern, field horsetail, moneywort and young growth of the tree and shrub species. Invasive species primarily included honeysuckle and buckthorn.

#### 4.2 HYDROLOGY

#### 4.2.1 Streams

Table 4-2 lists the 12 streams (perennial (7), intermittent (5)) identified within the Project Corridor, which is located within the Middle Hudson Basin. This watershed stretches across New York and Massachusetts, encompassing over 1,554,773 acres. Perennial waterbodies within the Project Corridor include Coeymans Creek and two unnamed tributaries 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 included surface water (A1), high water table (A2), saturation within the upper portion of the soil during the growing season (A3), water-stained leaves (B9), oxidized rhizospheres on living roots (C3), presence of reduced iron (C4), geomorphic position (D2) and FAC-neutral test (D5) (Attachment 1). Hydrologic factors contributing to wetland hydrology varied by wetland and included flooding from adjacent streams, temporary inundation from runoff, precipitation and/or snowmelt, and seasonal to permanent shallow groundwater tables.

Hydrology along the Project Corridor has been historically altered by roadway drainage ditches. The wetland delineators inspected these ditches for the presence or absence of wetland indicators and hydrologic connectivity to wetlands or streams.

#### 4.3 SOILS

The United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soil map units for the Project Corridor are provided in Attachment 3. Indicators of hydric soils documented during the delineations included depleted below dark surface (A11),

sandy mucky mineral (S1), sandy redox (S5), dark surface (S7), depleted matrix (F3) and redox dark surface (F6) (Attachment 1). A total of forty-one (41) different soil types have been mapped by the NRCS within the Project Corridor. The mapped soil types range from somewhat excessively drained to poorly drained soils. According to descriptions provided by the NRCS Web Soil Survey (2022) (Attachment 4, Table 4-3), four (4) of the soils mapped within the Project Corridor are classified as hydric soils (Fluvaquents-Udifluvents complex, frequently flooded, Madalin silt loam, Raynham very fine sandy loam, and Shaker fine sandy loam). 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. The disturbed 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, USDA 2022). Soils survey mapping and additional information regarding relevant soil characteristics are provided in Attachment 3.

#### **Burdett Series (BuA & BuB)**

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 0 to 25 percent. The A horizon is dark grayish brown silt loam and is from 0-9 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.

#### Chenango Series (ChB, ChC & ChD)

These are very deep, well and somewhat excessively drained soils formed in water-sorted material on outwash plains, kames, eskers, terraces, and alluvial fans. Slope ranges from 0 to 60 percent. Typically, the A horizon is a very dark grayish brown gravelly silt loam, with very weak fine subangular blocky and very blocky structure, extending 0 to 8 inches. The B horizon is dark yellowish brown to brown very gravelly silt loam, with very weak to moderate subangular blocky or granular structure. The C horizon is a dark grayish brown to brown extremely loamy coarse sand, with an upper surface of pebbles, few roots, and 10 percent soft dark brown and dark yellowish brown weathered pebbles. This horizon can be strongly acidic.

#### Claverack Series (ClA & ClB)

These are very deep, moderately well drained soils formed in sandy deposits that overlie clayey lacustrine sediments. They are nearly level to sloping soils in shallow deltas on lake plains. The sand, which overlies finer textured sediments, is dominated by quartz and has been derived primarily from non-calcareous sandstone or granite. Slope ranges from 0 to 15 percent. Typically, the A horizon consists of a fine sand and is usually a dark grayish brown color. The B horizon consists of structureless sand. In some places, the lower part of the B horizon has gray or grayish brown redoximorphic features below a depth of 18 inches. The C horizon is a silty clay loam or clay with some sub-horizons of silt or loam, up to 5 inches thick.

#### Colonie Series (CoB, CoC & CoD)

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 0 to 60 percent. The A horizon is dark grayish brown loamy fine sand with weak fine and very fine granular structure extending 0-8 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 63-80 inches. Some pedons have redoximorphic features below 40 inches.

#### Elmridge Series (ElA & ElB)

These are very deep, moderately well drained soils formed in loamy over clayey sediments. They are nearly level to moderately steep soils on glacial lacustrine and marine terraces, and on lake plains. Slope ranges from 0 to 25 percent. Typically, the A horizon consists of a fine sandy loam usually a very dark grayish brown with weak medium granular structure, extending from 0 to 6 inches. The B horizon consists of dark yellowish brown fine dandy loam with weak or moderate granular or subangular blocky structure. The B horizon has iron depletions above a depth of 24 inches. The C horizon is an olive brown varved silt and clay with massive separating to weak thick plates along varved bedding planes.

#### Elnora Series (EnA & EnB)

These soils are very deep and moderately well drained. These soils formed in sandy glacial lake, deltaic and eolian sediments. Slopes range from 0 to 8 percent. The A horizon is dark grayish brown loamy fine sand with weak fine granular structure. The A horizon extends from 0-10 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 (Fx)

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.

#### Hudson Series (HuB, HuC, HuD & HuE)

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 0 to 60 percent. The A horizon is typically brown silt loam and silty clay loam, with granular structure, extending 5 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.

#### 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 0 to 3 percent. The A horizon is very dark gray silt loam with dry, moderate medium granular structure, extending 0 to 8 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.

#### Nunda Series (NuB, NuC, NuD & NuE)

These very deep and deep, moderately well drained soils formed in a silty mantle that overlie till derived from clayey shale. They are generally found on upland till plains. Slopes range from 0 to 35 percent. The A horizon is dark grayish brown silt loam with medium granular structure from 0 to 9 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.

#### 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 0 to 12 percent. The A horizon is dark grayish brown silt loam with moderate fine and medium granular structure, extending 0 to 6 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 0 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 9 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.

#### 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 0 to 25 percent. The A horizon is dark grayish brown silt loam with moderate fine granular structure extending from 0 to 9 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.

#### **Shaker Series (Sh)**

These are very deep, poorly drained soils formed in loamy over clayey sediments. They are nearly level to gently sloping soils occurring in low-lying positions on glaciolacustrine and marine terraces. Slopes range from 0 to8 percent. The O horizon where present is commonly black hemic material extending from 0 to 2 inches. The A horizon is very dark brown fine sandy loam with weak medium granular structure from depths of 2 to 6 inches. The B horizon is light brownish gray to brown sandy loam with weak medium subangular blocky structure. The C horizon is dark yellowish brown varved silt and clay with massive separating to weak plates along varved bedding planes extending from depths of 30 to 65 inches.

#### **Stafford Series (St)**

These very deep, somewhat poorly drained soils formed in sandy glacio- lacustrine deposits. These nearly level soils are found on deltas and sand plains. Slopes range from 0 to 3 percent. The A horizon is very dark grayish brown loamy fine sand. The structure is granular. The B horizon is brown or grayish brown loamy fine sand. It has weak granular, subangular blocky, or platy structure or it is massive. The C horizon is light brownish gray or grayish brown fine sand to sand. It is massive or single grain.

#### **Udipsamments (Ud & Uf)**

These are very deep, nearly level to undulating, moderately well drained to excessively drained soils formed in dredged materials. Slopes range from 0 to 8 percent. Typically, the texture of the material is loamy sand or sand, with layers of silty material or gravel at varying depths. Subsurface layers are weakly stratified due to occasional new deposits on the surface.

#### Udorthents (Uh & Uk)

These are very deep, nearly level to gently sloping areas of well drained loamy soils that are a result of man-made cuts and fills in loamy upland soils. Slopes range from 0 to 8 percent. Typically, the surface layer is dark brown silt loam extending to 5 inches. Layers below the surface are brown and yellowish-brown silt loam containing up to 80 percent rock fragments to a depth of 72 inches or more.

#### Valois Series (VaB & VaC)

These are very deep, well drained soils on nearly level to steep lateral moraines along lower valley sides. These soils formed in till dominated by siltstone, sandstone or shale. The slopes range from 0 to 60 percent. The A horizon is brown gravelly loam with weak medium granular structure extending from 0 to 7 inches. The B horizon is brown silt loam/ gravelly silt loam with weak fine granular structure and weak medium subangular blocky structure. The C horizon is dark grayish brown very gravelly fine sandy loam and gravelly clay loam. The C horizon has 40 percent rock fragments and extends from 47 to 72 inches.

#### Wakeland Series (Wa)

These very deep, somewhat poorly drained soils formed in silty alluvium on floodplains and floodplain steps. Slopes range from 0 to 2 percent. The A horizon is dark grayish brown silt loam. The C horizon is grayish brown silt loam with yellowish brown redoximorphic features. The structure is granular.

#### Wassaic Series (WcB & WcC)

These moderately deep, well drained soils formed in loamy till. These soils are on bedrock controlled till plains. The slopes range from 0 to 50 percent. The A horizon is dark grayish brown silt loam with moderate medium granular structure. The E horizon is grayish brown and has a texture similar to the A horizon. The B horizon is brown silt loam and has moderate medium subangular blocky structure. The C horizon is brown gravelly loam with weak medium platy structure.

#### 5.0 SUMMARY

Wetlands identified along the Project Corridor include shallow emergent marsh, common reed marsh, purple loosestrife marsh, shrub swamp and red maple-hardwood swamp. Stream communities include artificial ditches, intermittent streams, and perennial streams.

Land use in the Project Corridor is diverse, ranging from commercial, residential, and agricultural to undeveloped areas consisting of fields, shrublands and forest. Because most of the

Project Corridor consists of existing roadway corridors, many wetlands are characterized by previous anthropogenic disturbance and/or the presence of invasive plant species. The wetland boundaries abutting the roadways are typically defined by the edge of the soil fill for the roadway embankments.

Confirmation of the wetland boundaries are the responsibility of the involved regulatory agencies with jurisdiction over wetlands and waterbodies within this Package of the overall project. As previously noted, wetlands within Segment 9 - Package 5B are regulated by USACE (Section 10/404) and none of the wetlands are regulated by NYSDEC (Article 24). Streams and other waterbodies are regulated by USACE (Section 10/404). Based on review of the NYSDEC wetland mapping, none of the delineated wetlands are identified as regulated under Article 24. It is anticipated that USACE will take jurisdiction over all of the mapped wetlands within the Project Corridor and NYSDEC will not take jurisdiction of the delineated streams. Final jurisdictional determinations will be made by the respective agencies.

The Bethlehem Yard was not accessible at the time of the field investigations. All information regarding wetlands in this area are approximate. Access to this site will be required for filed verification (delineation) prior to permitting, if it is determined that these potential wetlands will be affected.

#### 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 (NRCS), United States Department of Agriculture (USDA). Web soil Survey. Map Unit Descriptions. Accessed online May 2, 2022: https://websoilsurvey.nrcs.usda.gov/app/.
- 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

#### **U.S. Army Corps of Engineers**

#### WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

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

Project/Site: CHPE	(	City/County: Bethleh	em/Albany County	Sampling Date: 1/11/23		
Applicant/Owner: TDI			State: NY	Sampling Point: Wetland B-1		
Investigator(s): C. Einstein & N. Frazer		Section, To	wnship, Range:			
Landform (hillside, terrace, etc.): ditch	Local re	elief (concave, conve	x, none): concave	Slope %: 2		
Subregion (LRR or MLRA): LRR R	Lat: 42-34-46.78		73-52-27.92	 Datum: WGS84		
Soil Map Unit Name: Udorthents, clayey-urba	<del></del>		NWI classification:	PEM		
Are climatic / hydrologic conditions on the site		Yes x		explain in Remarks.)		
Are Vegetation x , Soil , or Hydro			nal Circumstances" prese	,		
			•			
Are Vegetation, Soil, or Hydro SUMMARY OF FINDINGS – Attach	·		d, explain any answers in tions, transects, im	•		
Hydrophytic Vegetation Present?	Yes X No	Is the Sampled A				
Hydric Soil Present?	Yes X No No	within a Wetland?		No		
Wetland Hydrology Present?	Yes X No	If yes, optional We	etiand Site ID.			
Remarks: (Explain alternative procedures he Linear vegetated roadside ditch.	ere or in a separate report.)					
Linear vegetateu roausiue uitori.						
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicators (m	ninimum of two required)		
Primary Indicators (minimum of one is require	ed; check all that apply)		Surface Soil Cracks			
X Surface Water (A1)	Water-Stained Leaves (B	9)	Drainage Patterns (			
High Water Table (A2)	Aquatic Fauna (B13)	,	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)		Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C	21)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres or			n Aerial Imagery (C9)		
— Drift Deposits (B3)	Presence of Reduced Iron		Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (C6)				
Iron Deposits (B5)	Thin Muck Surface (C7)	\	Shallow Aquitard (D3)  Microtopographic Relief (D4)			
Inundation Visible on Aerial Imagery (B7	· <del></del> · · ·	.s)		` '		
Sparsely Vegetated Concave Surface (B	8)		X FAC-Neutral Test ([	J5)		
Field Observations: Surface Water Present? Yes x	N- Donth (inches):	4				
Surface Water Present?  Yesx  Water Table Present?  Yes	No Depth (inches): _ No x Depth (inches):					
Saturation Present? Yes x	No Depth (inches):		d Hydrology Present?	Yes X No		
(includes capillary fringe)	No Doput (monoc)		a riyarology i 1000iit.	163 <u>/ 110</u>		
Describe Recorded Data (stream gauge, mor	nitoring well, aerial photos, prev	vious inspections), if	available:			
`		• •				
Remarks:						

#### **VEGETATION** – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1 2				Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
3		<u> </u>		Total Number of Dominant Species Across All Strata:1 (B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
7				Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size:15')				OBL species0 x 1 =0
1				FACW species 45 x 2 = 90
2.				FAC species0 x 3 =0
3.				FACU species0 x 4 =0
4.				UPL species 0 x 5 = 0
5.				Column Totals: 45 (A) 90 (B)
6.				Prevalence Index = B/A = 2.00
7.				Hydrophytic Vegetation Indicators:
		=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5' )		•		X 2 - Dominance Test is >50%
1. Phragmites australis	45	Yes	FACW	X 3 - Prevalence Index is ≤3.0 <sup>1</sup>
2		·		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
				data in Remarks or on a separate sheet)
4.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
<ul><li>5.</li><li>6.</li></ul>				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7.				Definitions of Vegetation Strata:
8 9				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
10.				
11.				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
12.				Herb – All herbaceous (non-woody) plants, regardless
	45	=Total Cover		of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size:)				Woody vines – All woody vines greater than 3.28 ft in
1				height.
2				Hydrophytic
3				Vegetation
4				Present?
		=Total Cover		
Remarks: (Include photo numbers here or on a sepa Ditch has recently been dug out.	irate sheet.)			

Sampling Point: Wetland B-1

SOIL Sampling Point Wetland B-1

Depth	ription: (Describe t Matrix	o the de		Featur		ator or cc	onnin the absence o	i ilidicators.)	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0-4	10YR 2/1	100					Loamy/Clayey		
4-14	10YR 4/1	80	10YR 6/4	_20_	C	M	Loamy/Clayey	Distinct redox concentrations	
				_					
				_		_			
				_					
¹Type: C=Co	ncentration, D=Depl	etion, RM	=Reduced Matrix, M	S=Masl	ked San	d Grains.	<sup>2</sup> Location: P	PL=Pore Lining, M=Matrix.	
Type: C=Concentration, D=Depletion, R  Hydric Soil Indicators:  Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) X Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Mesic Spodic (A17) (MLRA 144A, 145, 149B) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6)  Restrictive Layer (if observed):			Dark Surface (\$ Polyvalue Belov MLRA 149B) Thin Dark Surfa High Chroma S Loamy Mucky N Loamy Gleyed X Depleted Matrix Redox Dark Su Depleted Dark Redox Depress Marl (F10) (LRI Red Parent Ma	w Surface (S9) cands (S9) cands (S9) dineral (Matrix ( c (F3) rface (F8) Surface cions (F8 R K, L)	(LRR R 611) (LRI (F1) (LR F2) (66) (F7)	, MLRA 1 R K, L) R K, L)	Indicators for Problematic Hydric Soils <sup>3</sup> :  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)		
Type: _ Depth (in	graveches):	el 14					Hydric Soil Prese	nt? Yes_X No	
Remarks:									



Wetland B-1 - View facing west



Wetland B-1- Soils

**SITE PHOTOGRAPHS** 

Segment 9 – Package 5B

**Champlain Hudson Power Express** 

#### U.S. Army Corps of Engineers

#### WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

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

Project/Site: CHPE	City/County: Bethlehem/Albany County Sampling Date: 1/11/23
Applicant/Owner: TDI	State: NY Sampling Point: Upland B-1
Investigator(s): C. Einstein & N. Frazer	Section, Township, Range:
Landform (hillside, terrace, etc.): hillslope	Local relief (concave, convex, none): none Slope %: 2
Subregion (LRR or MLRA): LRR R Lat: 42-34-46	<del></del>
Soil Map Unit Name: Udorthents, clayey-urban land complex (Uh	
Are climatic / hydrologic conditions on the site typical for this time	
Are Vegetation, Soil, or Hydrologysignifical	
Are Vegetation, Soil, or Hydrologynaturally	
SUMMARY OF FINDINGS – Attach site map showi	ng sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area
Hydric Soil Present? Yes No X	within a Wetland? Yes No X
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate r	eport.)
mowed	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that ap	<u> </u>
Surface Water (A1) Water-Stained	<del>_</del>
High Water Table (A2) Saturation (A3) Aquatic Fauna Marl Deposits	· · · · · · · · · · · · · · · · · · ·
Water Marks (B1)  Water Marks (B1)  Hydrogen Sulfi	<u> </u>
<del></del>	spheres on Living Roots (C3)  Saturation Visible on Aerial Imagery (C9)
l <del></del>	educed Iron (C4)  Stunted or Stressed Plants (D1)
l <del></del>	duction in Tilled Soils (C6)  Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Sur	· · · · · · · · · · · · · · · · · · ·
Inundation Visible on Aerial Imagery (B7) Other (Explain	in Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
	(inches):
	(inches):
	(inches):   Wetland Hydrology Present? Yes No _X
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial p	notos, previous inspections), if available:
Remarks:	
Tolland.	

#### **VEGETATION** – Use scientific names of plants.

Tree Stratum (Plot size: 30' )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:				
1.		<u>'</u>						
2.				Number of Dominant Species That Are OBL, FACW, or FAC:0 (A)				
3. 4.				Total Number of Dominant Species Across All Strata:(B)				
5. 6.				Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)				
7				Prevalence Index worksheet:				
		=Total Cover		Total % Cover of: Multiply by:				
Sapling/Shrub Stratum (Plot size:)				OBL species0 x1 =0				
1				FACW species 0 x 2 = 0				
2				FAC species 5 x 3 = 15				
3.				FACU species 95 x 4 = 380				
4.				UPL species0 x 5 =0				
5.				Column Totals: 100 (A) 395 (B)				
6.		· · · · · · · · · · · · · · · · · · ·		Prevalence Index = B/A = 3.95				
7.				Hydrophytic Vegetation Indicators:				
		=Total Cover		1 - Rapid Test for Hydrophytic Vegetation				
Herb Stratum (Plot size: 5' )		-		2 - Dominance Test is >50%				
1. Poa pratensis	85	Yes	FACU	3 - Prevalence Index is ≤3.0 <sup>1</sup>				
Plantago lanceolata	10	No	FACU	4 - Morphological Adaptations <sup>1</sup> (Provide supporting				
Setaria pumila	5	No	FAC	data in Remarks or on a separate sheet)				
4.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)				
5.								
6.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
7.				Definitions of Vegetation Strata:				
8.				Trace Manda district 2 in (7.0 and an arrangin				
9.				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.				
10.				Sanling/ahruh Woody plants loss than 2 in DBH				
11.				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.				
12				Herb – All herbaceous (non-woody) plants, regardless				
	100	=Total Cover		of size, and woody plants less than 3.28 ft tall.				
Woody Vine Stratum (Plot size: 30')				Woody vines – All woody vines greater than 3.28 ft in				
1.				height.				
2.								
3.				Hydrophytic				
4.				Vegetation           Present?         Yes         No _ X _				
		=Total Cover						
Remarks: (Include photo numbers here or on a separ	ate sheet )	•						
Tremane. (morage prote familiario ficio di alla separ	ato oncot.)							

Sampling Point: Upland B-1

SOIL Sampling Point Upland B-1

Profile Desc	ription: (Describe t Matrix	to the de		<b>ument th</b> x Featur		ator or co	onfirm the absence o	of indicate	ors.)	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remark	(S
0.11	10VD 2/2						L comy/Clayey		with area	· · ol
0-11	10YR 3/2	100					Loamy/Clayey		with grav	/ei
<sup>1</sup> Type: C=Co	ncentration, D=Depl	letion, RN	//=Reduced Matrix, N	/IS=Masl	ked Sand	d Grains.	<sup>2</sup> Location: F	PL=Pore L	ining, M=Mat	rix.
Hydric Soil I	ndicators:						Indicators f	or Proble	ematic Hydric	: Soils³:
Histosol (	(A1)		Dark Surface (	S7)			2 cm M	uck (A10)	(LRR K, L, M	ILRA 149B)
Histic Ep	ipedon (A2)		Polyvalue Belo	w Surfac	ce (S8) (	LRR R,	Coast Prairie Redox (A16) ( <b>LRR K, L, R</b> )			
Black His	stic (A3)		MLRA 149B	)			5 cm Mucky Peat or Peat (S3) (LRR K, L, R)			
Hydroger	n Sulfide (A4)		Thin Dark Surf	ace (S9)	(LRR R	, MLRA 1	149B) Polyvalue Below Surface (S8) (LRR K, L)			
	Layers (A5)		High Chroma S				Thin Dark Surface (S9) ( <b>LRR K, L</b> )			
Depleted	Below Dark Surface	e (A11)	Loamy Mucky	Mineral (	(F1) ( <b>LR</b>	R K, L)	Iron-Manganese Masses (F12) (LRR K, L, R)			
	rk Surface (A12)		Loamy Gleyed	Matrix (	F2)		Piedmont Floodplain Soils (F19) (MLRA 149B)			
	odic (A17)		Depleted Matri				Red Parent Material (F21) (outside MLRA 145)			
-	A 144A, 145, 149B)		Redox Dark Su		-		Very Shallow Dark Surface (F22) Other (Explain in Remarks)			
	ucky Mineral (S1)		Depleted Dark				Other (E	Explain in	Remarks)	
	eyed Matrix (S4)		Redox Depress		8)		3, ,, ,			
Sandy Re			Marl (F10) ( <b>LR</b>		04) (84) 8	34 44E\	<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present,			
Stripped	Matrix (S6)		Red Parent Ma	iterial (F	21) <b>(ML</b> i	KA 145)		•		
Postrictivo I	ayer (if observed):						unies	s disturbe	d or problema	ilic.
Type:	grav									
· · -										
Depth (in	ches):	11					Hydric Soil Prese	nt?	Yes	No X
Remarks:										



Upland B-1- View facing east



**Upland B-1- Soils** 

Segment 9 – Package 5B

### **SITE PHOTOGRAPHS**

**Champlain Hudson Power Express** 

#### **U.S. Army Corps of Engineers**

#### WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

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

Project/Site: CHPE	Cit	ty/County: Bethlehe	em/Albany County	Sampling Date: 1/11/23	
Applicant/Owner: TDI			State: NY	Sampling Point: Wetland C-2	
Investigator(s): C. Einstein & N. Frazer		Section, Tow	vnship, Range:		
Landform (hillside, terrace, etc.): ditch	Local relie	ef (concave, convex	x, none): concave	Slope %: 1	
Subregion (LRR or MLRA): LRR R	Lat: 42.578374	,	-73.8739	 Datum: WGS84	
Soil Map Unit Name: Fluvaquents-udifluvents		~ .	NWI classification:	PEM	
Are climatic / hydrologic conditions on the site ty		Yes x	<u> </u>	explain in Remarks.)	
Are Vegetation , Soil , or Hydrolo			nal Circumstances" prese	,	
<del></del>			•		
Are Vegetation, Soil, or Hydrolo			, explain any answers in	,	
SUMMARY OF FINDINGS – Attach s	ite map snowing sampii	ing point locat	ions, transects, im	portant features, etc.	
Hydrophytic Vegetation Present?	Yes X No I	Is the Sampled Ar	ea	1	
Hydric Soil Present?	Yes X No v	within a Wetland?	Yes X	No	
Wetland Hydrology Present?	Yes X No I	If yes, optional Wet	land Site ID:		
Remarks: (Explain alternative procedures here	,				
Data point taken near flag C-7 for Wetlands C-	-2 and C-1. Both of these wetlan	nds are channelized	d ditches dominated by co	ommon reed.	
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicators (m	ninimum of two required)	
Primary Indicators (minimum of one is required	d; check all that apply)		Surface Soil Cracks		
X Surface Water (A1)	Water-Stained Leaves (B9)	<del></del> .	Drainage Patterns (E		
High Water Table (A2)	Aquatic Fauna (B13)	-	Moss Trim Lines (B16)		
Saturation (A3)	Marl Deposits (B15)		Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres on L	Living Roots (C3)	Saturation Visible or	n Aerial Imagery (C9)	
Drift Deposits (B3)	Presence of Reduced Iron (	(C4)	Stunted or Stressed	Plants (D1)	
Algal Mat or Crust (B4)	Recent Iron Reduction in Til	lled Soils (C6)	(C6) X Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7)	,	Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)_			Microtopographic Relief (D4)		
Sparsely Vegetated Concave Surface (B8)	,)		X FAC-Neutral Test (D	)5)	
Field Observations:					
		2			
	No x Depth (inches):				
	No Depth (inches):	0 Wetland	d Hydrology Present?	Yes <u>X</u> No	
(includes capillary fringe)	9 1 0		9.11		
Describe Recorded Data (stream gauge, monit	toring well, aeriai pnotos, previol	ous inspections), ii a	available:		
Remarks:					
Wetland C-2 is adjacent to Stream S7.					

#### **VEGETATION** – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: 30' )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:				
1.		_ <del>'</del>		Number of Dominant Species				
2				That Are OBL, FACW, or FAC:(A)				
3. 4.				Total Number of Dominant Species Across All Strata:1 (B)				
<ul><li>5.</li><li>6.</li></ul>				Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)				
7				Prevalence Index worksheet:				
		=Total Cover		Total % Cover of: Multiply by:				
Sapling/Shrub Stratum (Plot size:)				OBL species0 x 1 =0				
1.				FACW species 94 x 2 = 188				
2.				FAC species0 x 3 =0				
3.				FACU species0 x 4 =0				
4.				UPL species 0 x 5 = 0				
5.				Column Totals: 94 (A) 188 (B)				
6.				Prevalence Index = B/A = 2.00				
7.				Hydrophytic Vegetation Indicators:				
		=Total Cover		1 - Rapid Test for Hydrophytic Vegetation				
Herb Stratum (Plot size: 5' )		•		X 2 - Dominance Test is >50%				
Phragmites australis	92	Yes	FACW	X 3 - Prevalence Index is ≤3.0 <sup>1</sup>				
Lysimachia nummularia	2	No No	FACW	4 - Morphological Adaptations <sup>1</sup> (Provide supporting				
3			17.00	data in Remarks or on a separate sheet)				
4.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)				
<ul><li>5.</li><li>6.</li></ul>				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
7.				Definitions of Vegetation Strata:				
8				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.				
10.				Sapling/shrub – Woody plants less than 3 in. DBH				
11.				and greater than or equal to 3.28 ft (1 m) tall.				
12				<b>Herb</b> – All herbaceous (non-woody) plants, regardless				
	94	=Total Cover		of size, and woody plants less than 3.28 ft tall.				
Woody Vine Stratum (Plot size: 30')				Woody vines – All woody vines greater than 3.28 ft in				
1.				height.				
2.		·		Hydrophytic				
3.				Vegetation				
4.		=Total Cover		Present?				
Demonstrate (Include whate assumble as home as as a second	-414\							
Remarks: (Include photo numbers here or on a separ	ate sheet.)							

Sampling Point: Wetland C-2

SOIL Sampling Point Wetland C-2

	•	o the de	-			ator or co	onfirm the absence o	f indicators.)	
Depth	Matrix	0/		k Featur		1 - 2	T 4	Danis and a	
(inches)	Color (moist)	<u>%</u>	Color (moist)		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0-10	10YR 2/1	100					Loamy/Clayey	with gravel	
10-16	10YR 4/1	80	2.5Y 6/4	10	C	M	Loamy/Clayey	Prominent redox concentrations	
			5YR 4/4	_10	C	M		Prominent redox concentrations	
		etion, RI	M=Reduced Matrix, M	1S=Masl	ked Sand	d Grains.		L=Pore Lining, M=Matrix.	
Hydric Soil II			Dawle Courters at	07\				or Problematic Hydric Soils <sup>3</sup> :	
— Histosol (	•		Dark Surface (S		00 (80) (	I DD D	2 cm Muck (A10) (LRR K, L, MLRA 149B)		
Black His	pedon (A2) tic (A3)		MLRA 149B		Le (36) (I	LKK K,	Coast Prairie Redox (A16) (LRR K, L, R)  5 cm Mucky Peat or Peat (S3) (LRR K, L, R)		
	Sulfide (A4)		Thin Dark Surfa		(LRR R	. MLRA 1			
	Layers (A5)		High Chroma S		-		Thin Dark Surface (S9) (LRR K, L)		
	Below Dark Surface	(A11)	Loamy Mucky I					nganese Masses (F12) ( <b>LRR K, L, R</b> )	
Thick Da	k Surface (A12)		Loamy Gleyed	ed Matrix (F2)				nt Floodplain Soils (F19) ( <b>MLRA 149B</b> )	
Mesic Sp	odic (A17)		X Depleted Matrix	x (F3)			Red Parent Material (F21) (outside MLRA 145)		
(MLRA	A 144A, 145, 149B)		Redox Dark Su	ırface (F	6)		Very Shallow Dark Surface (F22)		
I —	ucky Mineral (S1)		Depleted Dark				Other (E	explain in Remarks)	
	eyed Matrix (S4)		Redox Depress		3)		2		
Sandy Re			Marl (F10) ( <b>LR</b>				<sup>3</sup> Indicators of hydrophytic vegetation and		
Stripped	Matrix (S6)		Red Parent Ma	iterial (F	21) <b>(ML</b> F	RA 145)	wetland hydrology must be present, unless disturbed or problematic.		
Restrictive L	ayer (if observed):						uniess	s disturbed of problematic.	
Type:	none	)							
Depth (in	ches):						Hydric Soil Presei	nt? Yes X No	
Remarks:	,								



Wetland C-2 - View facing north



Wetland C-2- Soils

**SITE PHOTOGRAPHS** 

Segment 9 – Package 5B

**Champlain Hudson Power Express** 



Wetland C-1- View facing north



Wetland C-1- Soils

Segment 9 – Package 5B

**SITE PHOTOGRAPHS** 

## WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE	(	City/County: Bethleh	em/Albany County	Sampling Date: 1/11/23			
Applicant/Owner: TDI			State: NY	Sampling Point: Upland C-2			
Investigator(s): C. Einstein & N. Frazer		Section, To	wnship, Range:	<u> </u>			
Landform (hillside, terrace, etc.): hillslope	Local re	elief (concave, conve	x, none): none	Slope %: 1			
Subregion (LRR or MLRA): LRR R	Lat: 42-34-41.78	•	73-52-25.35	' Datum: WGS84			
Soil Map Unit Name: Fluvaquents-udifluvents		5	NWI classification:	n/a			
Are climatic / hydrologic conditions on the site		Yes x		explain in Remarks.)			
, ,	,,			,			
Are Vegetation, Soil, or Hydro			nal Circumstances" prese				
Are Vegetation, Soil, or Hydro			d, explain any answers in	·			
SUMMARY OF FINDINGS – Attach	site map showing samp	pling point loca	tions, transects, im	portant features, etc.			
Hydrophytic Vegetation Present?	Yes No X	Is the Sampled A	rea				
Hydric Soil Present?	Yes No X	within a Wetland	? Yes	No X			
Wetland Hydrology Present?	Yes No X	If yes, optional We	tland Site ID:				
Data point taken near flag C-7 for Upland C-2	2 and C-1. Mowed.						
HYDROLOGY							
Wetland Hydrology Indicators:			Secondary Indicators (n	ninimum of two required)			
Primary Indicators (minimum of one is require	ed; check all that apply)		Surface Soil Cracks	s (B6)			
Surface Water (A1)	Water-Stained Leaves (B	39)	Drainage Patterns (	·			
— High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B	·			
Saturation (A3)	Marl Deposits (B15)		Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odor (C						
Sediment Deposits (B2)	Oxidized Rhizospheres or						
Drift Deposits (B3)	Presence of Reduced Iron	• •	Stunted or Stressed				
Algal Mat or Crust (B4) Iron Deposits (B5)	Recent Iron Reduction in Thin Muck Surface (C7)	Tilled Solis (Co)	Geomorphic Positio Shallow Aquitard (D	` '			
Inundation Visible on Aerial Imagery (B7		(e)	Microtopographic R	·			
Sparsely Vegetated Concave Surface (B	· —	.5)	FAC-Neutral Test (I				
Field Observations:	<u></u>			50)			
Surface Water Present? Yes	No x Depth (inches):						
Water Table Present? Yes	No x Depth (inches):						
Saturation Present? Yes	No x Depth (inches):		d Hydrology Present?	Yes No _X_			
(includes capillary fringe)							
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos, prev	vious inspections), if	available:				
Remarks:							

Tree Stratum (Plot size: 30' )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1.	70 0010.			
2.				Number of Dominant Species That Are OBL, FACW, or FAC:0(A)
3. 4.				Total Number of Dominant Species Across All Strata:(B)
5. 6.				Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
7				Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size:)				OBL species0 x1 =0
1				FACW species 0 x 2 = 0
2.				FAC species10 x 3 =30
3.				FACU species 95 x 4 = 380
4				UPL species0 x 5 =0
5.				Column Totals: 105 (A) 410 (B)
6.				Prevalence Index = B/A = 3.90
7.				Hydrophytic Vegetation Indicators:
		=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5' )		-		2 - Dominance Test is >50%
1. Poa pratensis	70	Yes	FACU	3 - Prevalence Index is ≤3.0 <sup>1</sup>
2. Plantago lanceolata	25	Yes	FACU	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
3. Galium boreale	10	No No	FAC	data in Remarks or on a separate sheet)
4.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5.				
6.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7.				Definitions of Vegetation Strata:
8.				Tree – Woody plants 3 in. (7.6 cm) or more in
9.				diameter at breast height (DBH), regardless of height.
10.				Sapling/shrub – Woody plants less than 3 in. DBH
11.				and greater than or equal to 3.28 ft (1 m) tall.
12.				Herb – All herbaceous (non-woody) plants, regardless
	105	=Total Cover		of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size:30')				Woody vines – All woody vines greater than 3.28 ft in
1.				height.
2.				
3.				Hydrophytic
4.				Vegetation           Present?         Yes         No _ X _
		=Total Cover		
Remarks: (Include photo numbers here or on a sepa	rate sheet )	_		
Tremarks. (include prioto numbers here of on a sepa	rate sileet.)			

Sampling Point: Upland C-2

SOIL Sampling Point Upland C-2

Profile Desc	ription: (Describe t Matrix	to the de		<b>ument th</b> x Featur		ator or co	onfirm the absence o	of indicate	ors.)	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remark	S
	40VD 0/4									1
0-8	10YR 2/1	100					Loamy/Clayey		with grav	<u>/ei                                    </u>
										_
<sup>1</sup> Type: C=Co	ncentration, D=Depl	letion, RN	/I=Reduced Matrix, N	/IS=Mas	ked Sand	d Grains.	<sup>2</sup> Location: F	L=Pore L	ining, M=Mat	rix.
Hydric Soil I									matic Hydric	
Histosol (	(A1)		Dark Surface (	S7)			2 cm M	uck (A10)	(LRR K, L, M	LRA 149B)
Histic Ep	ipedon (A2)		Polyvalue Belo	w Surfa	ce (S8) (	LRR R,	Coast P	rairie Red	lox (A16) ( <b>LR</b>	R K, L, R)
Black His	tic (A3)		MLRA 149B	)			5 cm M	ucky Peat	or Peat (S3)	(LRR K, L, R)
Hydroger	n Sulfide (A4)		Thin Dark Surf	ace (S9)	(LRR R	, MLRA 1	Polyvalı	ie Below	Surface (S8) (	LRR K, L)
Stratified	Layers (A5)		High Chroma S	3ands (S	311) ( <b>LR</b> I	R K, L)	Thin Da	rk Surface	e (S9) ( <b>LRR K</b>	Χ, L)
Depleted	Below Dark Surface	e (A11)	Loamy Mucky	Mineral (	(F1) ( <b>LR</b>	R K, L)	Iron-Ma	nganese I	Masses (F12)	(LRR K, L, R)
	rk Surface (A12)		Loamy Gleyed	Matrix (	F2)		Piedmo	nt Floodpl	ain Soils (F19	9) (MLRA 149B)
	odic (A17)		Depleted Matri							side MLRA 145)
	A 144A, 145, 149B)		Redox Dark Su		-				k Surface (F2	2)
	ucky Mineral (S1)		Depleted Dark				Other (E	Explain in	Remarks)	
	eyed Matrix (S4)		Redox Depress		8)		3, ,, ,			
Sandy Re			Marl (F10) ( <b>LR</b>		04) (84) 8			-	rophytic vege	
Stripped	Matrix (S6)		Red Parent Ma	iterial (F	21) <b>(ML</b> F	RA 145)		•	ogy must be p	
Postriotivo I	ayer (if observed):						unies	s disturbe	d or problema	IUC.
Type:	ayer (II observed): grav									
· · -										
Depth (in	ches):	8					Hydric Soil Prese	nt?	Yes	NoX
Remarks:										



Upland C-2- View facing north



**Upland C-2- Soils** 

Segment 9 – Package 5B

# **SITE PHOTOGRAPHS**



**Upland C-1- View facing north** 



**Upland C-1- Soils** 

Segment 9 – Package 5B

# **SITE PHOTOGRAPHS**

## WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE	City/Coun	ty: Feura Bush/Albany	Sampling Date: 1/3/23				
Applicant/Owner: TDI		State:	NY Sampling Point: D-1 Wet				
Investigator(s): J. Greaves	9	Section, Township, Range:					
Landform (hillside, terrace, etc.): Depression	Local relief (conc	ave, convex, none): Conca	ve Slope %: 2				
· ·	42.565491	Long: -73.863100	' Datum: NAD83				
Soil Map Unit Name: RhA - Rhinebeck silty clay loam, 0		NWI classif					
Are climatic / hydrologic conditions on the site typical for the		Yes x No	(If no, explain in Remarks.)				
	-						
Are Vegetation, Soil, or Hydrology		Are "Normal Circumstance	· — —				
Are Vegetation, Soil, or Hydrology		(If needed, explain any an	,				
SUMMARY OF FINDINGS – Attach site map	showing sampling po	oint locations, transe	cts, important features, etc.				
Hydrophytic Vegetation Present? Yes X	No Is the S	Sampled Area					
Hydric Soil Present? Yes X	No within a	a Wetland? Yes	s_X_ No				
Wetland Hydrology Present? Yes X	No If yes, o	ptional Wetland Site ID: <u>r</u>	near flag D-9				
Remarks: (Explain alternative procedures here or in a sea Shrub swamp.	parate report.)						
HYDROLOGY							
Wetland Hydrology Indicators:		Secondary India	cators (minimum of two required)				
Primary Indicators (minimum of one is required; check al	l that apply)	Surface So	il Cracks (B6)				
X Surface Water (A1) X Water-	-Stained Leaves (B9)	X Drainage P					
<del></del> ·	c Fauna (B13)	X Moss Trim					
Saturation (A3) Marl D	eposits (B15)	Dry-Season Water Table (C2)					
<del></del> · · ·	gen Sulfide Odor (C1)	C1) Crayfish Burrows (C8)					
	ed Rhizospheres on Living R	on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)					
<del></del>	nce of Reduced Iron (C4)		Stressed Plants (D1)				
_ ` `	t Iron Reduction in Tilled Soi	· / ·	c Position (D2)				
	luck Surface (C7)	Shallow Aq					
	(Explain in Remarks)		raphic Relief (D4)				
Sparsely Vegetated Concave Surface (B8)		X FAC-Neutra	al Test (D5)				
Field Observations:							
Surface Water Present? Yes X No	Depth (inches): 2						
Water Table Present? Yes X No	Depth (inches): 0	l					
Saturation Present? Yes X No	Depth (inches): 0	Wetland Hydrology Pro	esent? Yes <u>X</u> No				
(includes capillary fringe)	provious inon						
Describe Recorded Data (stream gauge, monitoring well,	aeriai pnotos, previous irisp	ections), it available.					
Remarks:							
Tonae.							

3.   Pinus strobus   2	<b>/EGETATION</b> – Use scientific names of pla	ints.			Sampling Point:	D-1 Wet
2	Tree Stratum (Plot size:30')				Dominance Test worksheet:	
2	1. Salix nigra	20	Yes	OBL	Number of Dominant Species	
Species Across All Strata: 6 (B)   Face	2. Quercus bicolor	2	No	FACW		5 (A)
Species Across All Strata: 6 (B   Species Across All Strata: 8 (B   Species Across All Strata: 9 (B   Spec	3. Pinus strobus	2	No	FACU	Total Number of Dominant	
Percent of Dominants Specifical FACW, or FAC: 83.3% (A   Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 40 x1 = 40   Multiply by: OBL species 40 x1 = 40   Multiply by: OBL species 40 x1 = 40   Multiply by: OBL species 5 x3 = 15   FACW species 102 x2 = 204   FACY species 5 x3 = 15   FACW species 5 x3 = 15   FACW species 17 x4 = 68   FA	4.					6 (B)
That Are OBL, FACW, or FAC: 83.3% (A   Prevalence Index worksheet:   Total % Cover of: Multiply by:   OBL species 40 x1 = 40   At   At   At   At   At   At   At   A	5.				Percent of Deminant Species	
24	6.				· · · · · · · · · · · · · · · · · · ·	83.3% (A/B)
Sapling/Shrub Stratum (Plot size: 15' )   1.   Cornus amonum   50   Yes   FACW   FA	7.				Prevalence Index worksheet:	
1.		24	=Total Cover		Total % Cover of: Mu	ultiply by:
2. Lonicera morrowii	Sapling/Shrub Stratum (Plot size: 15' )		-			
Sample   S	1. Cornus amomum	50	Yes	FACW	FACW species 102 x 2 =	204
UPL species   0	2. Lonicera morrowii	5	No	FACU	FAC species 5 x 3 =	15
Column Totals: 164 (A) 327   Prevalence Index = B/A = 1.99   Hydrophytic Vegetation Indicators:   1 - Rapid Test for Hydrophytic Vegetation     X 2 - Dominance Test is >50%     X 3 - Prevalence Index is ≤3.0¹     Lythrum salicaria	3. Acer rubrum	5	No	FAC	FACU species 17 x 4 =	68
Column Totals: 164 (A) 327   Prevalence Index = B/A = 1.99   Hydrophytic Vegetation Indicators:   1 - Rapid Test for Hydrophytic Vegetation     X 2 - Dominance Test is >50%     X 3 - Prevalence Index is ≤3.0¹     Lythrum salicaria	4.				UPL species 0 x 5 =	0
Prevalence Index = B/A = 1.99					<u> </u>	327 (B)
Herb Stratum (Plot size: 5' )   Stratum (Plot size: 30' )   Stratu	6.	1	<u> </u>			
Herb Stratum (Plot size: 5' )   20 Yes OBL   X 2 - Dominance Test is >50%   X 3 - Prevalence Index is ≤3.0¹   20 Oncclea sensibilis   20 Yes FACW   4 - Morphological Adaptations¹ (Provide support data in Remarks or on a separate sheet)   4 - Symphyotrichum novi-belgii   10 No FACW   Problematic Hydrophytic Vegetation¹ (Explain)   5.   5   5   5   5   5   5   5   5	7.		·		Hydrophytic Vegetation Indicators:	
Herb Stratum (Plot size: 5' )  1. Lythrum salicaria 20 Yes OBL 2. Onoclea sensibilis 3. Impatiens capensis 20 Yes FACW 3. Impatiens capensis 20 Yes FACW 4. Morphological Adaptations¹ (Provide supported data in Remarks or on a separate sheet) 4. Symphyotrichum novi-belgii 10 No FACW Problematic Hydrophytic Vegetation¹ (Explain) 5. Indicators of hydric soil and wetland hydrology mube 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, regardle of size, and woody plants less than 3.28 ft tall.  Woody Vine Stratum (Plot size: 30' ) 1. Celastrus orbiculatus 10 Yes FACU Hydrophytic Vegetation  Woody vines — All woody vines greater than 3.28 ft height.  Hydrophytic Vegetation		60	=Total Cover			
1. Lythrum salicaria 2. Onoclea sensibilis 2. Onoclea sensibilis 3. Impatiens capensis 2. Oyes FACW 4. Symphyotrichum novi-belgii 5.	Herb Stratum (Plot size: 5' )		-		I —	5
2. Onoclea sensibilis 2. Onoclea sensibilis 2. Onoclea sensibilis 2. Oyes FACW 3. Impatiens capensis 2. Oyes FACW 4. Symphyotrichum novi-belgii 2. Onoclea sensibilis 3. Impatiens capensis 4. Symphyotrichum novi-belgii 4. Symphyotrichum novi-belgii 5. Onoclea sensibilis 4. Symphyotrichum novi-belgii 5. Onoclea sensibilis 4. Noo FACW 4. Problematic Hydrophytic Vegetation (Explain) 1 Indicators of hydric soil and wetland hydrology muse 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, regardle of size, and woody plants less than 3.28 ft tall.  Woody Vine Stratum (Plot size: 30') 1. Celastrus orbiculatus 10 Yes FACU 4. Morphological Adaptations (Provide support data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation 1 (Explain)  1 Indicators of hydric soil and wetland hydrology muse 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 heigh diameter at breast height (DBH), regardless of height diameter at breast height (DBH), regardless o	<del></del> '	20	Yes	OBL	I —	
3. Impatiens capensis 4. Symphyotrichum novi-belgii 5. 6. 7. 8. 9. 9. 10. 10. No FACW 1 Problematic Hydrophytic Vegetation (Explain) 5 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 Vine Stratum (Plot size: 30') 1. Celastrus orbiculatus 10 Yes FACU  Hydrophytic Vegetation			-		1 <del></del>	Provide supporting
4. Symphyotrichum novi-belgii  5.					1 —	
5.	<del></del>				Problematic Hydrophytic Vegetati	ion <sup>1</sup> (Explain)
6. Indicators of hydric soil and wetland hydrology mube present, unless disturbed or problematic.  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, and woody plants less than 3.28 ft tall.  Woody Vine Stratum (Plot size: 30')  1. Celastrus orbiculatus  10 Yes FACU  Hydrophytic Vegetation  Hydrophytic Vegetation					<u> </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, regardlest of size, and woody plants less than 3.28 ft tall.  Woody Vine Stratum (Plot size: 30' )  Celastrus orbiculatus 10 Yes FACU Hydrophytic  Hydrophytic Vegetation						
8		-	<u> </u>			matio.
9.						
Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  12.		-	<u> </u>			
11	10	-	<del></del>			
12		-				
Woody Vine Stratum (Plot size: 30' )  1. Celastrus orbiculatus 10 Yes FACU Hydrophytic  2. Hydrophytic Vegetation			·		and greater than or equal to 5.25 it (1	m) tan.
Woody Vine Stratum (Plot size: 30' )  1. Celastrus orbiculatus 10 Yes FACU height.  2. Hydrophytic Vegetation	12.	70	-Total Cover			
1. Celastrus orbiculatus 10 Yes FACU height.  2. Hydrophytic Vegetation	Woody Vino Stratum (Plot size: 30' )		- Total Cover		or size, and woody plants less than 5.	.20 it tall.
2		10	Voo	EACH	_	ter than 3.28 ft in
3. Hydrophytic Vegetation			res	<u> FACU</u>	neight.	
vegetation			<del></del>		Hydrophytic	
4 Present? Yes X No			<del></del>			
40 T-4-1 C	4		T-4-1-0		Present? Yes X No	<del></del>
10=Total Cover		10	= I otal Cover			

SOIL Sampling Point D-1 Wet

Profile Desc Depth	cription: (Describe t Matrix	o the de		<b>ıment th</b> x Featur		ator or co	onfirm the absence o	f indicators.)		
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks	
0-16	10YR 4/1	85	10YR 5/6	15	С	PL/M	Loamy/Clayey	Prominent	redox con	centrations
	oncentration, D=Depl	etion, RN	//=Reduced Matrix, M	IS=Masl	ked San	d Grains.		L=Pore Lining,		
Hydric Soil Histosol			Dark Surface (	<b>97</b> )				or Problemationsk (A10) (LRR	-	
	pipedon (A2)		Polyvalue Belo	,	ce (S8) (	LRR R.		airie Redox (A		-
Black Hi			MLRA 149B		•• (••) (			cky Peat or Pe		=
	n Sulfide (A4)		Thin Dark Surfa	ace (S9)	(LRR R	, MLRA 1		e Below Surfa		•
Stratified	l Layers (A5)		High Chroma S	Sands (S	811) ( <b>LR</b>	R K, L)	Thin Dar	k Surface (S9)	(LRR K,	L)
Depleted	d Below Dark Surface	(A11)	Loamy Mucky	Mineral (	(F1) ( <b>LR</b>	RK, L)	Iron-Mar	nganese Masse	es (F12) ( <b>I</b>	LRR K, L, R)
	ark Surface (A12)		Loamy Gleyed		F2)					(MLRA 149B)
	podic (A17)		X Depleted Matri					-		de MLRA 145)
	A 144A, 145, 149B)		Redox Dark Su		-			allow Dark Sur		)
	lucky Mineral (S1)		Depleted Dark				Other (E	xplain in Rema	arks)	
	edox (S5)		Redox Depress		8)		<sup>3</sup> Indicate	rs of hydrophy	tio vogoto	tion and
	Matrix (S6)		Marl (F10) ( <b>LR</b> Red Parent Ma		21\ (ML)	DA 145\		d hydrology m	_	
Stripped	Watrix (30)		Red Falent Wa	iteriai (i	21) (IVILI	NA 140)		disturbed or p		
Restrictive I	Layer (if observed):									
Type:										
Depth (ir	nches):						Hydric Soil Preser	nt? Ye	s <u>X</u>	No
Remarks:							-			



Wetland D-9 (PSS)- View facing southwest



Wetland D-9 (PSS) - Soils

**SITE PHOTOGRAPHS** 

Segment 9 – Package 5B

## WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE		City/County: Feura E	3ush/Albany	Sampling Date: 1/3/23			
Applicant/Owner: TDI			State: NY	Sampling Point: D-1 Upl			
Investigator(s): J. Greaves		Section, To	wnship, Range:				
Landform (hillside, terrace, etc.): Hillslope	Local re	——— elief (concave, conve	ex, none): Convex	Slope %: 45			
Subregion (LRR or MLRA): LRR R	Lat: 42.565430	•	-73.862758	Datum: NAD83			
Soil Map Unit Name: RhA - Rhinebeck silty of			NWI classification:				
				lain in Domarka )			
Are climatic / hydrologic conditions on the site		Yes x	` ` `	explain in Remarks.)			
Are Vegetation, Soil, or Hydrol			nal Circumstances" prese				
Are Vegetation, Soil, or Hydrol			d, explain any answers in	•			
SUMMARY OF FINDINGS – Attach	site map showing samp	pling point loca	tions, transects, im	nportant features, etc.			
Hydrophytic Vegetation Present?	Yes No X	Is the Sampled A	rea				
Hydric Soil Present?	Yes No X	within a Wetland		No X			
Wetland Hydrology Present?	Yes No X	If yes, optional We	etland Site ID: near flag	D-9			
Remarks: (Explain alternative procedures he	ere or in a separate report.)						
Successional northern hardwoods.							
HYDROLOGY							
Wetland Hydrology Indicators:				minimum of two required)			
Primary Indicators (minimum of one is require			Surface Soil Cracks				
Surface Water (A1)	Water-Stained Leaves (B	9)	Drainage Patterns (				
High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B	•			
Saturation (A3)	Marl Deposits (B15)	24)	Dry-Season Water Table (C2)				
— Water Marks (B1) Sediment Deposits (B2)	Hydrogen Sulfide Odor (C Oxidized Rhizospheres or		· · · · · · · · · · · · · · · · ·				
Drift Deposits (B3)	Presence of Reduced Iron		Stunted or Stressed	• • • •			
Algal Mat or Crust (B4)	Recent Iron Reduction in		Geomorphic Position				
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7)		(s)	Microtopographic R				
Sparsely Vegetated Concave Surface (B	· —	,	FAC-Neutral Test (I	` '			
Field Observations:	·			,			
Surface Water Present? Yes	No X Depth (inches):						
Water Table Present? Yes	No X Depth (inches):						
Saturation Present? Yes	No X Depth (inches):		d Hydrology Present?	Yes No _X_			
(includes capillary fringe)							
Describe Recorded Data (stream gauge, mor	nitoring well, aerial photos, prev	vious inspections), if	available:				
D							
Remarks:							

	Absolute	Dominant	Indicator	Sampling Point: D-1 Upl		
ree Stratum (Plot size:30')	% Cover	Species?	Status	Dominance Test worksheet:		
Quercus alba	15	Yes	FACU	Number of Dominant Species		
. Juniperus virginiana	15	Yes	FACU	That Are OBL, FACW, or FAC:1 (A)		
. Acer platanoides	15	Yes	UPL	Total Number of Dominant		
. Quercus bicolor	5	No	FACW	Species Across All Strata: 9 (B)		
. <u>Malus</u>	15	Yes		Percent of Dominant Species		
i				That Are OBL, FACW, or FAC: 11.1% (A/B		
				Prevalence Index worksheet:		
	65	=Total Cover		Total % Cover of: Multiply by:		
Sapling/Shrub Stratum (Plot size: 15' )				OBL species 0 x 1 = 0		
. Lonicera morrowii	50	Yes	FACU	FACW species 5 x 2 = 10		
Rhamnus cathartica	10	No	FAC	FAC species 30 x 3 = 90		
. Cornus racemosa	10	No	FAC	FACU species 130 x 4 = 520		
				UPL species 15 x 5 = 75		
 i.				Column Totals: 180 (A) 695 (B		
				Prevalence Index = B/A = 3.86		
·				Hydrophytic Vegetation Indicators:		
	70	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation		
Herb Stratum (Plot size: 5' )				2 - Dominance Test is >50%		
. Solidago canadensis	25	Yes	FACU	3 - Prevalence Index is ≤3.0 <sup>1</sup>		
2. Lonicera morrowii	15	Yes	FACU	4 - Morphological Adaptations <sup>1</sup> (Provide supportin		
3. Equisetum arvense	10	Yes	FAC	data in Remarks or on a separate sheet)		
L. Equipotem arvenue				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)		
5.	-			<u> </u>		
3.	-			<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
·				Definitions of Vegetation Strata:		
 3.	-					
)				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.		
0				Sapling/shrub – Woody plants less than 3 in. DBH		
1.				and greater than or equal to 3.28 ft (1 m) tall.		
2.				<b>Herb</b> – All herbaceous (non-woody) plants, regardles:		
	50	=Total Cover		of size, and woody plants less than 3.28 ft tall.		
Noody Vine Stratum (Plot size: 30' )				Woody vines – All woody vines greater than 3.28 ft in		
. Celastrus orbiculatus	10	Yes	FACU	height.		
3.				Hydrophytic		
I.				Vegetation Present? Yes No X		
·	10	=Total Cover				
		- I Otal Oovel				

SOIL Sampling Point D-1 Upl

		the dep				tor or co	onfirm the absence of	of indicato	rs.)		
Depth (in a land)	Matrix	0/		x Featur		1 - 2	T		D		
(inches)	Color (moist)	<u>%</u>	Color (moist)		Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remark	is	
0-5	10YR 2/1	100					Sandy				
<sup>1</sup> Type: C=Co	ncentration, D=Deple	tion, RM	=Reduced Matrix, M	1S=Masl	ked Sand	Grains.	<sup>2</sup> Location: F	L=Pore Lii	ning, M=Mat	rix.	
Hydric Soil I	ndicators:						Indicators f	or Probler	natic Hydric	Soils <sup>3</sup> :	
Histosol (	A1)		Dark Surface (	S7)			2 cm M	uck (A10) (	LRR K, L, M	ILRA 149B)	)
Histic Ep	pedon (A2)		Polyvalue Belo	w Surfac	ce (S8) ( <b>I</b>	RR R,	Coast F	rairie Redo	x (A16) ( <b>LR</b>	R K, L, R)	
Black His	tic (A3)		MLRA 149B	)			5 cm M	ucky Peat o	or Peat (S3)	(LRR K, L,	R)
Hydroger	Sulfide (A4)		Thin Dark Surfa	ace (S9)	(LRR R,	MLRA 1	49B) Polyvalı	ie Below S	urface (S8) (	(LRR K, L)	
Stratified	Layers (A5)		High Chroma S	Sands (S	11) ( <b>LRF</b>	R K, L)	Thin Da	rk Surface	(S9) (LRR K	ί, L)	
Depleted	Below Dark Surface	(A11)	Loamy Mucky I	Mineral (	(F1) ( <b>LRF</b>	R K, L)	Iron-Ma	nganese M	lasses (F12)	(LRR K, L,	R)
Thick Da	k Surface (A12)		Loamy Gleyed	Matrix (	F2)		Piedmo	nt Floodpla	in Soils (F19	) (MLRA 14	49B)
Mesic Sp	odic (A17)		Depleted Matri	x (F3)			Red Pa	rent Materia	al (F21) <b>(out</b>	side MLRA	145)
(MLR	A 144A, 145, 149B)		Redox Dark Su	ırface (F	6)				Surface (F2	.2)	
	ucky Mineral (S1)		Depleted Dark				Other (E	Explain in F	Remarks)		
	eyed Matrix (S4)		Redox Depress		3)		2				
Sandy Re			Marl (F10) ( <b>LR</b>					•	ophytic vege		
Stripped	Matrix (S6)		Red Parent Ma	iterial (F	21) <b>(MLF</b>	RA 145)			gy must be p		
							unles	s disturbed	or problema	itic.	
	ayer (if observed):										
Type: _	rock										
Depth (in	ches):	5					Hydric Soil Prese	nt?	Yes	No X	_
Remarks:	of rail ballast with min	imal am	ounts of mineral soi	ls interm	nived						
CONS CONSIST	orran banası witirinin	iiiiai aiii		is intern	iixcu.						



**Upland D-9- View facing southwest** 



**Upland D-9- Soils** 

Segment 9 – Package 5B

# **SITE PHOTOGRAPHS**

## WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE	(	City/County: Feura E	Bush/Albany	Sampling Date: 1/3/23		
Applicant/Owner: TDI			State: NY	Sampling Point: 5B-J Wet (PEM)		
Investigator(s): J. Greaves		Section, To	wnship, Range:	<u> </u>		
Landform (hillside, terrace, etc.): Hillslope	Local re	elief (concave, conve	x, none): Convex	Slope %: 1		
Subregion (LRR or MLRA): LRR R	Lat: 42.564063	•	-73.861635	 Datum: NAD83		
Soil Map Unit Name: RhA - Rhinebeck silty of			NWI classification:	PEM1		
Are climatic / hydrologic conditions on the site		Yes x		explain in Remarks.)		
			` ` `	,		
Are Vegetation, Soil, or Hydrol			nal Circumstances" prese			
Are Vegetation, Soil, or Hydrol			d, explain any answers in	•		
SUMMARY OF FINDINGS – Attach	site map showing samp	oling point loca	tions, transects, im	portant features, etc.		
Hydrophytic Vegetation Present?	Yes X No	Is the Sampled A	rea			
Hydric Soil Present?	Yes X No	within a Wetland	? Yes X	No		
Wetland Hydrology Present?	Yes X No	If yes, optional We	etland Site ID: near flag	5B-J-14		
Cattail marsh (recently brush-hogged).						
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicators (m	ninimum of two required)		
Primary Indicators (minimum of one is require	ed; check all that apply)		Surface Soil Cracks	(B6)		
X Surface Water (A1)	X Water-Stained Leaves (BS	9)	X Drainage Patterns (	•		
X High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B	·		
X Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odor (C	•	Crayfish Burrows (C			
Sediment Deposits (B2)	Oxidized Rhizospheres on			n Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron Recent Iron Reduction in	, ,	Stunted or Stressed	· ·		
Algal Mat or Crust (B4) Iron Deposits (B5)	Thin Muck Surface (C7)	Tilled Solls (Co)	X Geomorphic Positio Shallow Aquitard (D			
Inundation Visible on Aerial Imagery (B7)		e)	Microtopographic Re			
Sparsely Vegetated Concave Surface (B.	· — · · ·	3)	X FAC-Neutral Test (D	` '		
Field Observations:						
Surface Water Present? Yes X	No Depth (inches): _	1				
Water Table Present? Yes X	No Depth (inches):	12				
Saturation Present? Yes X	No Depth (inches):	6 Wetlan	d Hydrology Present?	Yes <u>X</u> No		
(includes capillary fringe)						
Describe Recorded Data (stream gauge, mor	nitoring well, aerial photos, prev	ious inspections), if	available:			
Remarks:						

Tree Stratum (Plot size:30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
. Fraxinus pennsylvanica	5	Yes	FACW	
1.				Number of Dominant Species That Are OBL, FACW, or FAC: (A)
i				Total Number of Dominant
l				Species Across All Strata: 2 (B)
5.				Percent of Dominant Species
S				That Are OBL, FACW, or FAC: 100.0% (A/B
,				Prevalence Index worksheet:
	5	=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size:15'	)			OBL species 90 x 1 = 90
. Cornus amomum	2	No	FACW	FACW species 7 x 2 = 14
Lonicera morrowii	2	No	FACU	FAC species 0 x 3 = 0
l				FACU species 2 x 4 = 8
l				UPL species0 x 5 =0
i				Column Totals: 99 (A) 112 (B)
i				Prevalence Index = B/A =1.13
				Hydrophytic Vegetation Indicators:
	4	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
lerb Stratum (Plot size: 5' )				X 2 - Dominance Test is >50%
. Typha latifolia	85	Yes	OBL	X 3 - Prevalence Index is ≤3.0 <sup>1</sup>
2. Lythrum salicaria	5	No	OBL	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
3.				data in Remarks or on a separate sheet)
1.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5.				1. disabase of hardeless of har
5.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7.				Definitions of Vegetation Strata:
3.				Tree – Woody plants 3 in. (7.6 cm) or more in
).				diameter at breast height (DBH), regardless of height.
0				Sapling/shrub – Woody plants less than 3 in. DBH
1				and greater than or equal to 3.28 ft (1 m) tall.
2				Herb – All herbaceous (non-woody) plants, regardles:
	90	=Total Cover		of size, and woody plants less than 3.28 ft tall.
Noody Vine Stratum (Plot size: 30'	)			Woody vines – All woody vines greater than 3.28 ft in
1				height.
2				Hydrophytic
3.				Vegetation
1				Present?
		=Total Cover		

SOIL Sampling Point: 5B-J Wet (PEM)

Depth	Matrix	.o the de	•	dox Featu			onfirm the absence o	ni maicators.)
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-8	10YR 2/1	95	10YR 5/6	5	c	m_	Loamy/Clayey	Prominent redox concentrations
8-16	2.5Y 5/2	55	10YR 5/6	30	c	PL/M	Loamy/Clayey	Prominent redox concentrations
			10YR 2/1	15		<u>m</u>		Prominent redox concentrations
				_				
¹Type: C=Co	oncentration, D=Depl	etion, RN	 M=Reduced Matrix,	 MS=Mas	ked San	d Grains.	<sup>2</sup> Location: F	PL=Pore Lining, M=Matrix.
Hydric Soil I			•	·				for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Dark Surface	e (S7)			2 cm M	uck (A10) ( <b>LRR K, L, MLRA 149B</b> )
Histic Ep	ipedon (A2)		Polyvalue Be	low Surfa	ice (S8) (	LRR R,	Coast P	Prairie Redox (A16) ( <b>LRR K, L, R</b> )
Black His	stic (A3)		MLRA 149	<b>B</b> )			5 cm M	ucky Peat or Peat (S3) ( <b>LRR K, L, R</b> )
Hydroge	n Sulfide (A4)		Thin Dark Su	ırface (S9	) (LRR F	R, MLRA 1	149B) Polyvalı	ue Below Surface (S8) ( <b>LRR K, L</b> )
	Layers (A5)		High Chroma	-			· —	irk Surface (S9) (LRR K, L)
	Below Dark Surface	(A11)	Loamy Muck	•				nganese Masses (F12) ( <b>LRR K, L, R</b> )
	rk Surface (A12)	(,	Loamy Gleye			, -,		nt Floodplain Soils (F19) (MLRA 149B)
	podic (A17)		Depleted Ma		(- –)			rent Material (F21) (outside MLRA 145)
	A 144A, 145, 149B)		X Redox Dark		<del>-</del> 6)			nallow Dark Surface (F22)
	ucky Mineral (S1)		Depleted Da					Explain in Remarks)
	leyed Matrix (S4)		Redox Depre					,
	edox (S5)		Marl (F10) ( <b>L</b>	•	•		<sup>3</sup> Indicate	ors of hydrophytic vegetation and
	Matrix (S6)		Red Parent N			RA 145)	wetla	nd hydrology must be present,
Restrictive L	ayer (if observed):						unies	s disturbed or problematic.
Type:								
Depth (ir	nches):						Hydric Soil Prese	nt? Yes X No
Remarks:								



Wetland 5B-J-14 (PEM) - View facing northeast



Wetland 5B-J-14 (PEM) - Soils

**SITE PHOTOGRAPHS** 

Segment 9 – Package 5B

## WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE	City/County: Fe	eura Bush/Albany	Sampling Date: 1/3/23
Applicant/Owner: TDI		State: NY	Sampling Point: 5B-J Wet (PSS)
Investigator(s): J. Greaves	Sectio	on, Township, Range:	
Landform (hillside, terrace, etc.): Depression	Local relief (concave, o	convex, none): Concave	Slope %: 3
Subregion (LRR or MLRA): LRR R	Lat: 42.561728 L	 _ong: -73.861073	Datum: NAD83
Soil Map Unit Name: RhA - Rhinebeck silty clay lo	pam, 0 to 3 percent slopes	NWI classification:	PSS1
Are climatic / hydrologic conditions on the site typica	cal for this time of year? Yes	x No (If no, e	explain in Remarks.)
Are Vegetation , Soil , or Hydrology	significantly disturbed? Are	"Normal Circumstances" preser	,
Are Vegetation , Soil , or Hydrology	<del></del>	eeded, explain any answers in F	
SUMMARY OF FINDINGS – Attach site		•	•
Hydrophytic Vegetation Present? Yes_ Hydric Soil Present? Yes	X No Is the Sampl within a Wet		No
Wetland Hydrology Present? Yes		al Wetland Site ID: near flag t	
Remarks: (Explain alternative procedures here or			
Shrub swamp within depressional areas along an a			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicators (mi	inimum of two required)
Primary Indicators (minimum of one is required; ch	neck all that apply)	Surface Soil Cracks	
X Surface Water (A1)	Water-Stained Leaves (B9)	X Drainage Patterns (E	
X High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B1	6)
I —	Marl Deposits (B15)	Dry-Season Water T	able (C2)
l <del></del>	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (Ca	·
I <del></del>	Oxidized Rhizospheres on Living Roots (	· · —	Aerial Imagery (C9)
	Presence of Reduced Iron (C4)	Stunted or Stressed	·
	Recent Iron Reduction in Tilled Soils (C6	· —	
	Thin Muck Surface (C7)	Shallow Aquitard (D3	
I <del></del>	Other (Explain in Remarks)	Microtopographic Re	` '
Sparsely Vegetated Concave Surface (B8)		X FAC-Neutral Test (D	5)
Field Observations:			
Surface Water Present? Yes X No	<u> </u>		
Water Table Present? Yes X No Saturation Present? Yes X No	: ` ` /	Istlend Undralagy Brocont?	Vee V No
Saturation Present? Yes X No (includes capillary fringe)	Depth (inches): 0 W	/etland Hydrology Present?	Yes X No
Describe Recorded Data (stream gauge, monitorin		 ns) if available <sup>.</sup>	
20001120 1 (0001402 2202 (000200 3002)	ig won, action prictice, pro	io), ii araiias.c.	
Remarks:			

Trace Charles (Dish size) 201	Absolute	Dominant	Indicator	Daminamas Tast wantshart		
Tree Stratum (Plot size:30')  1. Salix alba	% Cover 10	Species? Yes	Status FACW	Dominance Test worksheet:		
2. Rhamnus cathartica	10	Yes	FAC	Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)		
3. Fraxinus pennsylvanica	2	No	FACW	,		
4.				Total Number of Dominant Species Across All Strata: 6 (B)		
5.						
6.				Percent of Dominant Species That Are OBL, FACW, or FAC: 83.3% (A/B)		
7.				Prevalence Index worksheet:		
	22	=Total Cover		Total % Cover of: Multiply by:		
Sapling/Shrub Stratum (Plot size: 15' )		-		OBL species 0 x 1 = 0		
1. Cornus amomum	40	Yes	FACW	FACW species 152 x 2 = 304		
2. Cornus racemosa	15	Yes	FAC	FAC species 45 x 3 = 135		
3. Rhamnus cathartica	10	No	FAC	FACU species 10 x 4 = 40		
4. Salix alba	10	No	FACW	UPL species 0 x 5 = 0		
5.				Column Totals: 207 (A) 479 (B)		
6.				Prevalence Index = B/A = 2.31		
7.				Hydrophytic Vegetation Indicators:		
	75	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation		
Herb Stratum (Plot size:5' )				X 2 - Dominance Test is >50%		
1. Lysimachia nummularia	60	Yes	FACW	X 3 - Prevalence Index is ≤3.0 <sup>1</sup>		
2. Solidago gigantea	10	No	FACW	4 - Morphological Adaptations (Provide supporting		
3. Solidago rugosa	10	No	FAC	data in Remarks or on a separate sheet)		
4. Onoclea sensibilis	10	No	FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)		
5. Cornus amomum	10	No	FACW	Indicators of hydric soil and wetland hydrology must		
6				be present, unless disturbed or problematic.		
7				Definitions of Vegetation Strata:		
8				Tree – Woody plants 3 in. (7.6 cm) or more in		
9				diameter at breast height (DBH), regardless of height.		
10				Sapling/shrub – Woody plants less than 3 in. DBH		
11				and greater than or equal to 3.28 ft (1 m) tall.		
12				Herb – All herbaceous (non-woody) plants, regardless		
	100	=Total Cover		of size, and woody plants less than 3.28 ft tall.		
Woody Vine Stratum (Plot size:)				Woody vines – All woody vines greater than 3.28 ft in		
1. Celastrus orbiculatus	10	Yes	FACU	height.		
2				Hudronbotic		
3				Hydrophytic Vegetation		
4				Present? Yes X No		
	10	=Total Cover				
Remarks: (Include photo numbers here or on a sepa	rate sheet.)			•		

Sampling Point: 5B-J Wet (PSS)

SOIL Sampling Point 5B-J Wet (PSS)

		o the de				itor or co	onfirm the absence of	f indicators.)
Depth	Matrix	0/		x Featur		1 2	Taratrona	Demonto
(inches)	Color (moist)	<u>%</u>	Color (moist)		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-12	10YR 2/1	100					Sandy	
<sup>1</sup> Type: C=Co	ncentration, D=Deple	etion RM	 ∕/=Reduced Matrix N	 IS=Mas	ked Sand		<sup>2</sup> I ocation: P	L=Pore Lining, M=Matrix.
Hydric Soil I		) (1011, T (1	i rtoddodd Matiix, ff	TO MIGO	Rou Guile	- Oranio.		or Problematic Hydric Soils <sup>3</sup> :
Histosol (			X Dark Surface (	<b>97</b> )				ick (A10) (LRR K, L, MLRA 149B)
	•		Polyvalue Belo	,	00 (89) (1	DD D		
	pedon (A2)				CE (36) (I	LKK K,		rairie Redox (A16) (LRR K, L, R)
Black His			MLRA 149B	,				icky Peat or Peat (S3) (LRR K, L, R)
	Sulfide (A4)		Thin Dark Surf					e Below Surface (S8) (LRR K, L)
	Layers (A5)		High Chroma S					k Surface (S9) ( <b>LRR K, L</b> )
	Below Dark Surface	(A11)	Loamy Mucky			R K, L)		nganese Masses (F12) ( <b>LRR K, L, R</b> )
Thick Da	rk Surface (A12)		Loamy Gleyed	Matrix (	F2)		Piedmor	nt Floodplain Soils (F19) ( <b>MLRA 149B</b> )
Mesic Sp	odic (A17)		Depleted Matri	x (F3)			Red Par	ent Material (F21) (outside MLRA 145)
(MLR/	A 144A, 145, 149B)		Redox Dark Su	ırface (F	<del>-</del> 6)		Very Sha	allow Dark Surface (F22)
Sandy M	ucky Mineral (S1)		Depleted Dark	Surface	(F7)		Other (E	xplain in Remarks)
Sandy Gl	eyed Matrix (S4)		Redox Depres	sions (F	8)			
Sandy Re	edox (S5)		 Marl (F10) ( <b>LR</b>	RK, L)			<sup>3</sup> Indicato	rs of hydrophytic vegetation and
Stripped	Matrix (S6)		Red Parent Ma		21) <b>(MLF</b>	RA 145)		id hydrology must be present,
<u> </u>	` ,			,	, ,	,		disturbed or problematic.
Restrictive L	ayer (if observed):							·
Type:	,							
··· -	ahaa).						Hudria Cail Dragge	ot? Voc V No
Depth (in	ches):						Hydric Soil Preser	nt? Yes X No
Remarks:								



Wetland 5B-J-28 (PSS)- View facing northeast



Wetland 5B-J-28 (PSS) - Soils

**SITE PHOTOGRAPHS** 

Segment 9 – Package 5B

## WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE	(	City/County: Feura E	3ush/Albany	Sampling Date: 1/3/23		
Applicant/Owner: TDI			State: NY	Sampling Point: 5B-J Wet (PFO)		
Investigator(s): J. Greaves		Section, To	wnship, Range:	<u> </u>		
Landform (hillside, terrace, etc.): Hillslope	Local re	elief (concave, conve	ex. none). Concave	Slope %: 2		
Subregion (LRR or MLRA): LRR R	Lat: 42.565794	•	-73.862726	' Datum: NAD83		
Soil Map Unit Name: RhA - Rhinebeck silty of	<del></del>		NWI classification:	PFO1		
·						
Are climatic / hydrologic conditions on the site		Yes x	` ` '	explain in Remarks.)		
Are Vegetation, Soil, or Hydro			nal Circumstances" prese			
Are Vegetation, Soil, or Hydro	logynaturally problemate	tic? (If needed	d, explain any answers in	Remarks.)		
SUMMARY OF FINDINGS – Attach	site map showing samp	pling point loca	tions, transects, im	portant features, etc.		
Hydrophytic Vegetation Present?	Yes X No	Is the Sampled A	rea			
Hydric Soil Present?	Yes X No	within a Wetland	? Yes X	No		
Wetland Hydrology Present?	Yes X No	If yes, optional We	etland Site ID: near flag	5B-J-5		
Remarks: (Explain alternative procedures he Red maple hardwood swamp.	re or in a separate report.)					
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicators (m	ninimum of two required)		
Primary Indicators (minimum of one is require	ed check all that apply)		Surface Soil Cracks			
Surface Water (A1)	Water-Stained Leaves (B	(9)	Drainage Patterns (			
High Water Table (A2)	Aquatic Fauna (B13)	-,	Moss Trim Lines (B	·		
Saturation (A3)	Marl Deposits (B15)		Dry-Season Water	·		
Water Marks (B1)	Hydrogen Sulfide Odor (C	21)	Crayfish Burrows (C	28)		
Sediment Deposits (B2)	Oxidized Rhizospheres or	n Living Roots (C3)	Saturation Visible or	n Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron	n (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (C6)				
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7	· <del></del> · · ·	is)	Microtopographic Ro	` '		
Sparsely Vegetated Concave Surface (B	8)		X FAC-Neutral Test (	D5)		
Field Observations:						
Surface Water Present? Yes	No X Depth (inches):					
	No X Depth (inches): _ No X Depth (inches):		d Uudralaay Brasant?	Voc. V. No.		
Saturation Present? Yes  (includes capillary fringe)	NO A Deptit (inches).	Wellan	d Hydrology Present?	YesX No		
Describe Recorded Data (stream gauge, mor	nitoring well, aerial photos, prev	I vious inspections), if	available:			
D0001100110001202 22.22 (5 2 3 3 3 3	11011119 11011, across p, i	,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,,	avanasis.			
Remarks:						

Tree Stratum (Plot size: 30' )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
Fraxinus pennsylvanica	25	Yes	FACW	
Populus deltoides	20	Yes	FAC	Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)
3. Acer rubrum	5	No	FAC	Total Number of Descious
4. Rhamnus cathartica	5	No	FAC	Total Number of Dominant Species Across All Strata: 7 (B)
5.				
6.				Percent of Dominant Species That Are OBL, FACW, or FAC: 85.7% (A/B)
7.				Prevalence Index worksheet:
	55	=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15' )		•		OBL species 0 x1 = 0
1. Rhamnus cathartica	20	Yes	FAC	FACW species 80 x 2 = 160
2. Cornus amomum	15	Yes	FACW	FAC species 85 x 3 = 255
3. Lonicera morrowii	5	No	FACU	FACU species 20 x 4 = 80
4. Fraxinus pennsylvanica	5	No	FACW	UPL species 5 x 5 = 25
5. Acer rubrum	5	No	FAC	Column Totals: 190 (A) 520 (B)
6. Rosa multiflora	5	No	FACU	Prevalence Index = B/A = 2.74
7.				Hydrophytic Vegetation Indicators:
	55	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5' )				X 2 - Dominance Test is >50%
1. Onoclea sensibilis	35	Yes	FACW	X 3 - Prevalence Index is ≤3.0 <sup>1</sup>
2. Solidago rugosa	15	Yes	FAC	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
3. Fragaria vesca	5	No	UPL	data in Remarks or on a separate sheet)
4. Geum canadense	5	No	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. Cornus racemosa	5	No	FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
6. Rhamnus cathartica	5	No	FAC	be present, unless disturbed or problematic.
7.				Definitions of Vegetation Strata:
8.				Tree – Woody plants 3 in. (7.6 cm) or more in
9				diameter at breast height (DBH), regardless of height.
10.				Sapling/shrub – Woody plants less than 3 in. DBH
11.				and greater than or equal to 3.28 ft (1 m) tall.
12.				Herb – All herbaceous (non-woody) plants, regardless
	70	=Total Cover		of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size:30')				Woody vines – All woody vines greater than 3.28 ft in
1. Celastrus orbiculatus	10	Yes	FACU	height.
2.				
3.				Hydrophytic Vegetation
4.				Present? Yes X No No
	10	=Total Cover		
Remarks: (Include photo numbers here or on a sepa	rate sheet.)			1

Sampling Point: 5B-J Wet (PFO)

SOIL Sampling Point 5B-J Wet (PFO)

	•	o the de	•			ator or co	onfirm the absence of	f indicators.)
Depth	Matrix	0/		K Featur		1 - 2	T 4	D - v vl
(inches)	Color (moist)		Color (moist)		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-10	10YR 2/1	90	10YR 5/6	10	<u> </u>	<u>m</u>	Sandy	Prominent redox concentrations
10-16	10YR 5/2	<u>75</u>	10YR 5/6	15	<u> </u>	PL/M	Loamy/Clayey	Prominent redox concentrations
			10YR 2/1	10	<u> </u>	<u>m</u>		Distinct redox concentrations
		etion, RI	//⊒Reduced Matrix, M	1S=Masl	ked San	d Grains.		L=Pore Lining, M=Matrix.
Hydric Soil In Histosol (			X Dark Surface (	S7)				or Problematic Hydric Soils <sup>3</sup> : lck (A10) (LRR K, L, MLRA 149B)
	pedon (A2)		Polyvalue Belo	-	ce (S8) (	I RR R		rairie Redox (A16) ( <b>LRR K, L, R</b> )
Black His			MLRA 149B		(00) (	LIXIX IX,		cky Peat or Peat (S3) (LRR K, L, R)
	Sulfide (A4)		Thin Dark Surfa	<b>,</b>	(LRR R	, MLRA 1		e Below Surface (S8) ( <b>LRR K, L</b> )
	Layers (A5)		High Chroma S		-			k Surface (S9) ( <b>LRR K, L</b> )
X Depleted	Below Dark Surface	(A11)	Loamy Mucky I	Mineral (	(F1) ( <b>LR</b>	RK, L)	Iron-Mar	nganese Masses (F12) ( <b>LRR K, L, R</b> )
Thick Dar	k Surface (A12)		Loamy Gleyed	Matrix (	F2)		Piedmon	nt Floodplain Soils (F19) ( <b>MLRA 149B</b> )
Mesic Sp	odic (A17)		X Depleted Matrix	x (F3)			Red Pare	ent Material (F21) (outside MLRA 145)
(MLRA	A 144A, 145, 149B)		Redox Dark Su	ırface (F	6)		Very Sha	allow Dark Surface (F22)
I —	ucky Mineral (S1)		Depleted Dark				Other (E	xplain in Remarks)
	eyed Matrix (S4)		Redox Depress		8)		2	
X Sandy Re			Marl (F10) ( <b>LR</b>					rs of hydrophytic vegetation and
Stripped	Matrix (S6)		Red Parent Ma	iterial (F	21) <b>(ML</b> I	RA 145)		d hydrology must be present,
Restrictive L	ayer (if observed):						unless	disturbed or problematic.
Type:	ayer (ii observea).							
Depth (in	ches):						Hydric Soil Preser	nt? Yes X No
Remarks:								



Wetland 5B-J-5 (PFO) - View facing northeast



Wetland 5B-J-5 (PFO) - Soils

**SITE PHOTOGRAPHS** 

Segment 9 – Package 5B

## WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE	Cit	ty/County: Feura Bush/Albany	Sampling Date: 1/3/23		
Applicant/Owner: TDI		State: NY	Sampling Point: 5B-J (PFO) Upl		
Investigator(s): J. Greaves		Section, Township, Range:			
Landform (hillside, terrace, etc.): Hillslope	Local relie	ef (concave, convex, none): Convex	Slope %: 45		
Subregion (LRR or MLRA): LRR R	Lat: 42.565683	Long: -73.862876	Datum: NAD83		
Soil Map Unit Name: RhA - Rhinebeck silty c	lay loam, 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, e	explain in Remarks.)		
Are Vegetation , Soil , or Hydrol		<del></del> ,	,		
Are Vegetation , Soil , or Hydrol			<del></del>		
SUMMARY OF FINDINGS – Attach			•		
	· · · ·				
Hydrophytic Vegetation Present? Hydric Soil Present?		ls the Sampled Area within a Wetland? Yes	No X		
		If yes, optional Wetland Site ID: near flag			
Remarks: (Explain alternative procedures he					
Successional northern hardwoods. This uplar	nd data point represents the uplan		,		
collected for Wetland 5B-J because of the ho abandoned railbed).	mogenous nature of the upland of	community (successional northern hardwood	ds that has formed on an		
abaliuoneu raiibeu).					
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (m	ninimum of two required)		
Primary Indicators (minimum of one is require	ed; check all that apply)	Surface Soil Cracks	(B6)		
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (I	B10)		
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B <sup>2</sup>	16)		
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water 1			
—— Water Marks (B1)	Hydrogen Sulfide Odor (C1)	<u> </u>			
Sediment Deposits (B2)	Oxidized Rhizospheres on Li	· · · —	n Aerial Imagery (C9)		
—— Drift Deposits (B3)	Presence of Reduced Iron (0	<del></del>	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction in Till		` '		
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D			
Inundation Visible on Aerial Imagery (B7)	· · · · · · · · · · · · · · · · · · ·	Microtopographic Re	` '		
Sparsely Vegetated Concave Surface (B8	3)	FAC-Neutral Test (D	)5)		
Field Observations:					
Surface Water Present? Yes	No X Depth (inches):				
Water Table Present? Yes Saturation Present? Yes	No X Depth (inches):  No X Depth (inches):  No X Depth (inches):				
	No X Depth (inches):	Wetland Hydrology Present?	Yes No _X_		
(includes capillary fringe)					
Describe Recorded Data (stream gauge, mor	itoring well, aerial photos, previou	us inspections), if available:			
Remarks:					
Nemano.					

Species? Yes No No No  Total Cover Yes Yes No  Total Cover  Yes Yes No No No No	FACU FACU FACU FACU FACU FACU FACU FACU	Dominance Test worksheet:   Number of Dominant Species   That Are OBL, FACW, or FAC: 0 (A)   Total Number of Dominant 6 (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 5 x 3 = 15   FACU species 180 x 4 = 720   UPL species 0 x 5 = 0   Column Totals: 185 (A) 735   (B Prevalence Index = B/A = 3.97   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)		
No No No No  Total Cover  Yes Yes No  =Total Cover  Yes No  No  No  No  No  No  No  No  No  No	FACU FACU FACU FACU FACU FACU	That Are OBL, FACW, or FAC:		
=Total Cover  Yes Yes No  =Total Cover  Yes No  No  No	FACU FACU FACU FACU FACU FACU	Total Number of Dominant Species Across All Strata: 6 (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 x1 = 0  FACW species 0 x2 = 0  FAC species 5 x3 = 15  FACU species 180 x4 = 720  UPL species 0 x5 = 0  Column Totals: 185 (A) 735 (B  Prevalence Index = B/A = 3.97  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 the su		
=Total Cover  Yes Yes No  =Total Cover  Yes No  No  No  No	FACU FACU FACU FACU FACU	Species Across All Strata: 6 (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 x1 = 0  FACW species 0 x2 = 0  FAC species 5 x3 = 15  FACU species 180 x4 = 720  UPL species 0 x5 = 0  Column Totals: 185 (A) 735 (B  Prevalence Index = B/A = 3.97  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 the supporting test is test and the supporting test		
Yes Yes No  =Total Cover  Yes Yes No	FACU FACU FACU	Percent of Dominant Species That Are OBL, FACW, or FAC:    Description		
Yes Yes No  =Total Cover  Yes Yes No	FACU FACU FACU	That Are OBL, FACW, or FAC:		
Yes Yes No  =Total Cover  Yes Yes No	FACU FACU FACU	Prevalence Index worksheet:  Total % Cover of: Multiply by:  OBL species 0 x 1 = 0  FACW species 0 x 2 = 0  FAC species 5 x 3 = 15  FACU species 180 x 4 = 720  UPL species 0 x 5 = 0  Column Totals: 185 (A) 735 (B  Prevalence Index = B/A = 3.97  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 the supporting terms are supported to the supported		
Yes Yes No  =Total Cover  Yes Yes No	FACU FACU FACU	Total % Cover of: Multiply by:  OBL species 0 x1 = 0  FACW species 0 x2 = 0  FAC species 5 x3 = 15  FACU species 180 x4 = 720  UPL species 0 x5 = 0  Column Totals: 185 (A) 735 (B  Prevalence Index = B/A = 3.97  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 the suppo		
Yes Yes No  =Total Cover  Yes Yes No	FACU FACU FACU	OBL species $0$ $x 1 = 0$ FACW species $0$ $x 2 = 0$ FAC species $5$ $x 3 = 15$ FACU species $180$ $x 4 = 720$ UPL species $0$ $x 5 = 0$ Column Totals: $185$ (A) $735$ (B  Prevalence Index $= B/A = 3.97$ Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation  2 - Dominance Test is $> 50\%$ 3 - Prevalence Index is $\le 3.0^1$ 4 - Morphological Adaptations $0$ (Provide supporting the content of t		
Yes No  =Total Cover  Yes Yes No	FACU FACU FACU	FACW species $0$ $x 2 = 0$ FAC species $5$ $x 3 = 15$ FACU species $180$ $x 4 = 720$ UPL species $0$ $x 5 = 0$ Column Totals: $185$ (A) $735$ (B  Prevalence Index $= B/A = 3.97$ Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation  2 - Dominance Test is $> 50\%$ 3 - Prevalence Index is $\le 3.0^1$ 4 - Morphological Adaptations (Provide supporting the second content of the supporting the second content of the supporting the second content of the secon		
Yes No  =Total Cover  Yes Yes No	FACU FACU FACU	FAC species $5$ $x 3 = 15$ FACU species $180$ $x 4 = 720$ UPL species $0$ $x 5 = 0$ Column Totals: $185$ (A) $735$ (B  Prevalence Index = B/A = $3.97$ Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation  2 - Dominance Test is >50%  3 - Prevalence Index is $\le 3.0^1$ 4 - Morphological Adaptations (Provide supporting the supporting terms)		
=Total Cover  Yes Yes No	FACU FACU	FACU species $180$ x 4 = $720$ UPL species $0$ x 5 = $0$ Column Totals: $185$ (A) $735$ (B  Prevalence Index = B/A = $3.97$ Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation  2 - Dominance Test is >50%  3 - Prevalence Index is $\le 3.0^1$ 4 - Morphological Adaptations <sup>1</sup> (Provide supporting the supporting term of the support		
=Total Cover  Yes Yes No	FACU FACU	UPL species 0 x 5 = 0  Column Totals: 185 (A) 735 (B  Prevalence Index = B/A = 3.97  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 the supporting test of the support te		
Yes Yes No	FACU	Column Totals: 185 (A) 735 (B  Prevalence Index = B/A = 3.97  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 the supporting test of the support test of the suppo		
Yes Yes No	FACU	Prevalence Index = B/A = 3.97  Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation  2 - Dominance Test is >50%  3 - Prevalence Index is ≤3.0¹  4 - Morphological Adaptations¹ (Provide supportin		
Yes Yes No	FACU	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)		
Yes Yes No	FACU	1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting		
Yes Yes No	FACU	2 - Dominance Test is >50%  3 - Prevalence Index is ≤3.0 <sup>1</sup> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting		
Yes No	FACU	3 - Prevalence Index is ≤3.0 <sup>1</sup> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting		
Yes No	FACU	4 - Morphological Adaptations <sup>1</sup> (Provide supporting		
No				
	FACU	data in Remarks or on a separate sheet)		
No		data in Remarks or on a separate sheet)		
	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)		
No	FACU	- 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, regardles:		
=Total Cover		of size, and woody plants less than 3.28 ft tall.		
		Woody vines – All woody vines greater than 3.28 ft in		
Yes	FACU	height.		
		Hydrophytic Vegetation		
		Present? Yes No X		
=Total Cover				
	•	Yes FACU		

SOIL

Depth	ription: (Describe to Matrix	tne deptn		<b>ument tr</b> x Featur		itor or co	onfirm the absence of	indicators.)	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0-16	10YR 2/1						Loamy/Clayey		
							<u> </u>		
<sup>1</sup> Type: C=Co	oncentration, D=Deplet	ion RM=R	educed Matrix M	 leeM=2N	ed Sand	Grains	<sup>2</sup> l ocation: Pl		
Hydric Soil I		.ioii, ixivi–ix	educed Matrix, IV	io-iviasi	Neu Sanc	i Giailis.		r Problematic Hydric Soils <sup>3</sup> :	
Histosol			Dark Surface (	S7)				ck (A10) (LRR K, L, MLRA 149	
	ipedon (A2)		Polyvalue Belo	,	ce (S8) (I	LRR R.		airie Redox (A16) ( <b>LRR K, L, F</b>	
Black His			MLRA 149B		() (-	<b>,</b>		cky Peat or Peat (S3) ( <b>LRR K</b> ,	•
	n Sulfide (A4)		Thin Dark Surfa	,	(LRR R	MLRA 1		e Below Surface (S8) (LRR K,	
	Layers (A5)		– High Chroma S					Surface (S9) (LRR K, L)	,
Depleted	Below Dark Surface (	A11) —	Loamy Mucky	Mineral (	(F1) ( <b>LRI</b>	R K, L)	Iron-Man	ganese Masses (F12) ( <b>LRR K</b> ,	, L, R)
Thick Da	rk Surface (A12)	_	_ Loamy Gleyed	Matrix (	F2)		Piedmont	Floodplain Soils (F19) ( <b>MLR</b>	A 149B)
Mesic Sp	oodic (A17)	_	Depleted Matri	x (F3)			Red Pare	nt Material (F21) <b>(outside ML</b>	.RA 145)
(MLR	A 144A, 145, 149B)	_	_Redox Dark Su	-	-		Very Sha	llow Dark Surface (F22)	
	ucky Mineral (S1)	_	_Depleted Dark		, ,		Other (Ex	plain in Remarks)	
	leyed Matrix (S4)	_	_Redox Depress		3)		2		
	edox (S5)	_	_Marl (F10) ( <b>LR</b>		a.v. <b></b> =			s of hydrophytic vegetation an	ıd
Stripped	Matrix (S6)	_	_Red Parent Ma	iterial (F	21) (MLF	RA 145)		d hydrology must be present,	
Postrictivo I	_ayer (if observed):						uniess	disturbed or problematic.	
Type:	Layer (II Observed).								
-	\.						Headain Cail Dannan	40 Van Na	V
Depth (in	icnes):						Hydric Soil Present	t? Yes No _	<u>~</u>
Remarks:									
Soils consist	of railroad ballast/cind	er.							



Upland 5B-J-5- View facing northwest



**Upland 5B-J-5- Soils** 

Segment 9 – Package 5B

# **SITE PHOTOGRAPHS**

## WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE	Ci <sup>*</sup> Ci <sup>*</sup>	ity/County: Bethlehe	em/Albany County	Sampling Date: <u>2/27/2023</u>		
Applicant/Owner: TDI			State: NY	Sampling Point: 5B-L		
Investigator(s): C. Scrivner & J. Greaves		Section, Tov	vnship, Range:	<u> </u>		
Landform (hillside, terrace, etc.): Linear depre	ession Local relie	ef (concave, conve	x, none): Concave	Slope %: 3		
Subregion (LRR or MLRA): LRR R	Lat: 42.561096	•	-73.856934	 Datum: WGS84		
Soil Map Unit Name: ScA - Scio silt loam, 0 to			NWI classification:	<del></del>		
Are climatic / hydrologic conditions on the site ty		Yes x	<del></del>	explain in Remarks.)		
Are Vegetation , Soil , or Hydrolog			ial Circumstances" prese	,		
<del></del>			·	<del></del>		
Are Vegetation, Soil, or Hydrolog SUMMARY OF FINDINGS – Attach si	<u></u>		, explain any answers in	,		
	— Ite map snowing sampi	my point iocat	ions, transcots, iii	portant reatures, etc.		
, , , ,		Is the Sampled Ar				
'		within a Wetland?		No		
, 0,		If yes, optional Wet	tland Site ID:			
Remarks: (Explain alternative procedures here	e or in a separate report.)					
Common reed marsh.						
HYDROLOGY						
			O			
Wetland Hydrology Indicators:	de de all that angly)		Secondary Indicators (m			
Primary Indicators (minimum of one is required  Y. Surface Water (A1)		<u> </u>	Surface Soil Cracks			
X Surface Water (A1) X High Water Table (A2)	Water-Stained Leaves (B9) Aquatic Fauna (B13)		Drainage Patterns (B Moss Trim Lines (B	•		
X Saturation (A3)	Marl Deposits (B15)		Dry-Season Water 1	·		
Water Marks (B1)	Hydrogen Sulfide Odor (C1)		Crayfish Burrows (C			
Sediment Deposits (B2)	Oxidized Rhizospheres on L			n Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron (		Stunted or Stressed			
Algal Mat or Crust (B4)	Recent Iron Reduction in Til					
Iron Deposits (B5)	Thin Muck Surface (C7)	· · · · · · · · · · · · · · · · · · ·				
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	)	Microtopographic Re	·		
Sparsely Vegetated Concave Surface (B8)	)		X FAC-Neutral Test (D	)5)		
Field Observations:			<del></del>			
Surface Water Present? Yes X	No Depth (inches):	1				
Water Table Present? Yes X	No Depth (inches):	0				
	No Depth (inches):	0 Wetland	d Hydrology Present?	YesX_ No		
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monit	toring well, aerial photos, previo	ous inspections), if a	available:			
Remarks:						
Remarks.						
				Į.		

**VEGETATION** – Use scientific names of plants. Sampling Point: 5B-L Absolute Dominant Indicator Tree Stratum (Plot size: 30') % Cover Species? Status **Dominance Test worksheet:** 1. **Number of Dominant Species** 2. That Are OBL, FACW, or FAC: 3 (A) 3. Total Number of Dominant (B) 4. Species Across All Strata: 3 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 100.0% (A/B) Prevalence Index worksheet: Multiply by: Total % Cover of: =Total Cover Sapling/Shrub Stratum (Plot size: 15' OBL species x 1 = Rhamnus cathartica FAC **FACW** species 95 x 2 = 190 5 2. Cornus amomum Yes **FACW** FAC species x 3 = 15 0 x 4 = 3. FACU species 0 4. UPL species 0 x 5 = 5. Column Totals: 105 (A) 6. Prevalence Index = B/A = 2.00 **Hydrophytic Vegetation Indicators:** 7. 10 =Total Cover 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% Herb Stratum (Plot size: 5') Phragmites australis Yes **FACW** X 3 - Prevalence Index is ≤3.0<sup>1</sup> No 4 - Morphological Adaptations<sup>1</sup> (Provide supporting 2. Lythrum salicaria OBL data in Remarks or on a separate sheet) 3. 4. Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 5. <sup>1</sup>Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. 7. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 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 95 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 30' Woody vines - All woody vines greater than 3.28 ft in 1. height. 2. Hydrophytic 3. Vegetation No \_\_\_ Present? Yes X =Total Cover

SOIL Sampling Point 5B-L

Depth	. Matrix			x Featur			onfirm the absence o	· maioacoroi,
(inches)	Color (moist)	%	Color (moist)		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-11	10YR 3/1	80	10YR 5/3	_20_	c	<u>m</u>	Loamy/Clayey	Distinct redox concentrations
11-16	10YR 3/1	75	10YR 5/4	5	c	<u>m</u>	Loamy/Clayey	Distinct redox concentrations
			10YR 4/6		<u> </u>	<u>m</u>		Prominent redox concentrations
Type: C=Co	oncentration, D=Deple	—— etion. RM	——————————————————————————————————————	—— //S=Mas	——— ked Sand	—— d Grains.	2Location: P	PL=Pore Lining, M=Matrix.
Hydric Soil I  Histosol Histic Ep Black His Hydroge Stratified Depleted Thick Da Mesic Sp (MLR. Sandy M Sandy G Sandy R Stripped	ndicators:  (A1)  pipedon (A2)  stic (A3)  n Sulfide (A4)  Layers (A5)  I Below Dark Surface  ork Surface (A12)  oodic (A17)  A 144A, 145, 149B)  ucky Mineral (S1)  leyed Matrix (S4)  edox (S5)  Matrix (S6)  Layer (if observed):		Dark Surface ( Polyvalue Belo MLRA 149B Thin Dark Surf High Chroma S Loamy Mucky Loamy Gleyed Depleted Matri X Redox Dark Su Depleted Dark Redox Depress Marl (F10) (LR Red Parent Ma	S7) w Surfar ) ace (S9) Sands (S Mineral Matrix ( x (F3) urface (F Surface sions (F8 R K, L)	ce (S8) ( ) (LRR R S11) (LRI (F1) (LR F2) (F6) (F7) B)	LRR R, , MLRA 1 R K, L) R K, L)	Indicators for 2 cm Mu Coast P 5 cm Mu Polyvalu Thin Dan Iron-Man Piedmor Red Par Very Sho Other (E	or Problematic Hydric Soils <sup>3</sup> :  uck (A10) (LRR K, L, MLRA 149B)  rairie Redox (A16) (LRR K, L, R)  ucky Peat or Peat (S3) (LRR K, L, R)  ue Below Surface (S8) (LRR K, L)  rk Surface (S9) (LRR K, L)  nganese Masses (F12) (LRR K, L, R)  nt Floodplain Soils (F19) (MLRA 149B)  rent Material (F21) (outside MLRA 145)  allow Dark Surface (F22)  Explain in Remarks)  ors of hydrophytic vegetation and  nd hydrology must be present,  s disturbed or problematic.
Remarks:								



Wetland 5B-L - View facing northwest



Wetland 5B-L - Soils

Segment 9 – Package 5B

**SITE PHOTOGRAPHS** 

## WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE		City/County: Bethleh	nem/Albany County	Sampling Date: <u>2/27/2023</u>			
Applicant/Owner: TDI			State: NY	Sampling Point: 5B-L Upl			
Investigator(s): C. Scrivner & J. Greaves		Section, To	wnship, Range:				
Landform (hillside, terrace, etc.): Hillslope	Local re	elief (concave, conve	ex. none): Convex	Slope %: 35			
Subregion (LRR or MLRA): LRR R	Lat: 42.561146		-73.856977	Datum: WGS84			
Soil Map Unit Name: ScA - Scio silt loam, 0		5	NWI classification:				
Are climatic / hydrologic conditions on the site		Vac v		explain in Remarks.)			
, ,	**	Yes X	` ` `	,			
Are Vegetation, Soil, or Hydro			nal Circumstances" prese				
Are Vegetation, Soil, or Hydro	·		d, explain any answers in	•			
SUMMARY OF FINDINGS – Attach	site map showing samp	pling point loca	tions, transects, im	portant features, etc.			
Hydrophytic Vegetation Present?	Yes No _X_	Is the Sampled A	rea				
Hydric Soil Present?	Yes No X	within a Wetland	? Yes	No X			
Wetland Hydrology Present?	Yes No X	If yes, optional We	tland Site ID:				
Remarks: (Explain alternative procedures he	ere or in a separate report.)						
Mowed roadside.							
LIVEDOLOGV							
HYDROLOGY							
Wetland Hydrology Indicators:				ninimum of two required)			
Primary Indicators (minimum of one is requir		201	Surface Soil Cracks				
Surface Water (A1)	Water-Stained Leaves (B	39)	Drainage Patterns (B10)  Moss Trim Lines (B16)				
High Water Table (A2) Saturation (A3)	Aquatic Fauna (B13)		Dry-Season Water Table (C2)				
Water Marks (B1)	Marl Deposits (B15) Hydrogen Sulfide Odor (C	C1)	Crayfish Burrows (C	· ·			
Sediment Deposits (B2)	Oxidized Rhizospheres or	· ·		·			
Drift Deposits (B3)	Presence of Reduced Iron						
Algal Mat or Crust (B4)	Recent Iron Reduction in	` '	<u> </u>				
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7		<del></del>					
Sparsely Vegetated Concave Surface (B	· -		FAC-Neutral Test (I				
Field Observations:	,		<del>_</del>	,			
Surface Water Present? Yes	No X Depth (inches):						
Water Table Present? Yes	No X Depth (inches):						
Saturation Present? Yes	No X Depth (inches):		d Hydrology Present?	Yes No _X_			
(includes capillary fringe)							
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos, prev	vious inspections), if	available:				
<u> </u>							
Remarks:							

	Absolute	Dominant	Indicator	
tratum (Plot size:30')	% Cover	Species?	Status	Dominance Test worksheet:
				Number of Dominant Species
				That Are OBL, FACW, or FAC:1(A)
				Total Number of Deminent
				Total Number of Dominant Species Across All Strata: 2 (B)
	_			``
				Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B
				Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
- A/Shrub Stratum (Diot aiza: 15'		- rotal Gover		OBL species 0 x 1 = 0
Sapling/Shrub Stratum       (Plot size:				
				FACW species 0 x 2 = 0
				FAC species30 x 3 =90
				FACU species60 x 4 =240
				UPL species10 x 5 =50
				Column Totals: 100 (A) 380 (B
				Prevalence Index = B/A =3.80
				Hydrophytic Vegetation Indicators:
		=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
tratum (Plot size:)				2 - Dominance Test is >50%
pa pratensis	50	Yes	FACU	3 - Prevalence Index is ≤3.0 <sup>1</sup>
etaria pumila	30	Yes	FAC	4 - Morphological Adaptations (Provide supporting
chorium intybus	10	No	FACU	data in Remarks or on a separate sheet)
entaurea stoebe	10	No	UPL	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
				<u>-</u>
				<sup>1</sup> 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
				diameter at breast neight (DBH), regardless of neight
				Sapling/shrub – Woody plants less than 3 in. DBH
				and greater than or equal to 3.28 ft (1 m) tall.
12				Herb – All herbaceous (non-woody) plants, regardless
	100	=Total Cover		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
		=Total Cover		
		=Total Cover		Vegetation

SOIL Sampling Point 5B-L Upl

Profile Desc Depth	ription: (Describe : Matrix	to the de		<b>ument th</b> x Featur		itor or co	onfirm the absence o	f indicato	rs.)	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remark	S
	40VD 2/2				<del></del>					_
0-12	10YR 3/2	100					Loamy/Clayey			
<sup>1</sup> Type: C=Co	ncentration, D=Depl	letion, RN	/I=Reduced Matrix, N	/IS=Masl	ked Sand	d Grains.	<sup>2</sup> Location: F	L=Pore Li	ning, M=Matı	ix.
Hydric Soil I	ndicators:						Indicators f	or Proble	matic Hydric	Soils <sup>3</sup> :
Histosol	(A1)		Dark Surface (	S7)			2 cm Mu	ıck (A10) (	LRR K, L, M	LRA 149B)
Histic Ep	ipedon (A2)		Polyvalue Belo	w Surfac	ce (S8) (	LRR R,	Coast P	rairie Redo	ox (A16) ( <b>LR</b>	R K, L, R)
Black His	stic (A3)		MLRA 149B	·)			5 cm Mu	icky Peat	or Peat (S3)	(LRR K, L, R)
Hydrogei	n Sulfide (A4)		Thin Dark Surf		-		<b>I49B</b> ) Polyvalu	ie Below S	Surface (S8) (	LRR K, L)
	Layers (A5)		High Chroma S	-			Thin Da	rk Surface	(S9) ( <b>LRR K</b>	(, L)
	Below Dark Surface	e (A11)	Loamy Mucky			R K, L)		-		(LRR K, L, R)
	rk Surface (A12)		Loamy Gleyed		F2)				-	) (MLRA 149B)
	oodic (A17)		Depleted Matri							side MLRA 145)
	A 144A, 145, 149B)		Redox Dark Su	-	-				Surface (F2	2)
	ucky Mineral (S1)		Depleted Dark				Other (E	xplain in F	Remarks)	
	leyed Matrix (S4)		Redox Depress		8)		31			
	edox (S5)		Marl (F10) (LR		24) /MI F	24 445)		-	ophytic veget	
Suipped	Matrix (S6)		Red Parent Ma	iteriai (F.	∠ 1) (IVILF	KA 145)		-	gy must be p I or problema	
Restrictive I	.ayer (if observed):						unies	Gustarbec	or problema	illo.
Type:	Roc									
-							Uhadaia Cail Bassa	-40	Vaa	No. V
Depth (in	icnes):	12					Hydric Soil Prese	nt?	Yes	NoX
Remarks:										



Upland 5B-L- View facing east



**Upland 5B-L - Soils** 

# **SITE PHOTOGRAPHS**

## WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

City/County: Bethlehem/Albany County Sampling Date: 2/27/2023
State: NY Sampling Point: 5B-MN Wet
Section, Township, Range:
Local relief (concave, convex, none): Concave Slope %: 10
<del></del>
NWI classification: PEM1
year? Yes x No (If no, explain in Remarks.)
y disturbed? Are "Normal Circumstances" present? Yes x No
roblematic? (If needed, explain any answers in Remarks.)
g sampling point locations, transects, important features, etc.
Is the Sampled Area
within a Wetland? Yes X No
If yes, optional Wetland Site ID:
port.)
Secondary Indicators (minimum of two required)
Surface Soil Cracks (B6)  V. Drainage Pattern (B10)
eaves (B9) X Drainage Patterns (B10)  Moss Trim Lines (B16)
Moss Trim Lines (B16)  Dry-Season Water Table (C2)
e Odor (C1) Crayfish Burrows (C8)
cheres on Living Roots (C3)  Saturation Visible on Aerial Imagery (C9)
uced Iron (C4)  Stunted or Stressed Plants (D1)
uction in Tilled Soils (C6) X Geomorphic Position (D2)
ce (C7) Shallow Aquitard (D3)
Remarks) Microtopographic Relief (D4)
X FAC-Neutral Test (D5)
nches):
nches):10
nches):0 Wetland Hydrology Present? Yes _X No
otos, previous inspections), if available:

	Absolute	Dominant	Indicator	
ree Stratum (Plot size:30')	% Cover	Species?	Status	Dominance Test worksheet:
				Number of Dominant Species
				That Are OBL, FACW, or FAC: 3 (A)
	1			Total Number of Dominant Species Across All Strata: 3 (B)
				Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B
				Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
sapling/Shrub Stratum (Plot size: 15' )		•		OBL species 90 x 1 = 90
·				FACW species 0 x 2 = 0
				FAC species 5 x 3 = 15
				FACU species 0 x 4 = 0
	-			UPL species 0 x 5 = 0
i				Column Totals: 95 (A) 105 (B
	-			Prevalence Index = B/A = 1.11
	1			Hydrophytic Vegetation Indicators:
	1	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
lerb Stratum (Plot size: 5' )		•		X 2 - Dominance Test is >50%
. Lythrum salicaria	70	Yes	OBL	X 3 - Prevalence Index is ≤3.0 <sup>1</sup>
2. Juncus effusus	20	Yes	OBL	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
3.	-			data in Remarks or on a separate sheet)
	-			Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
 i.	-			
	-			<sup>1</sup> 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
0.				
1.				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
2.				
	90	=Total Cover		<b>Herb</b> – All herbaceous (non-woody) plants, regardles of size, and woody plants less than 3.28 ft tall.
Voody Vine Stratum (Plot size: 30' )				
. Vitis riparia	5	Yes	FAC	<b>Woody vines</b> – All woody vines greater than 3.28 ft in height.
,			1710	noight.
·	-			Hydrophytic
				Vegetation Present? Yes X No
	5	=Total Cover		Fresent: Tes NO
·		- Loial Cover		,

SOIL Sampling Point 5B-MN Wet

Profile Desci Depth	ription: (Describe to Matrix	o the de		<b>ıment tl</b> x Featur		ator or co	onfirm the absence o	f indicators.)	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0-8	10YR 2/1	90	10YR 5/4	10	С		Loamy/Clayey	Distinct redox concentra	ations
8-18	10YR 5/1	70	10YR 4/6	_20_	c	m	Loamy/Clayey	Prominent redox concent	rations
			10YR 5/6	10	c	<u>m</u>		Prominent redox concent	rations
									_
		etion, RI	M=Reduced Matrix, N	/IS=Mas	ked Sand	d Grains.		L=Pore Lining, M=Matrix.	2
Hydric Soil II			Dork Curfoss (	C7)				or Problematic Hydric Soils	
— Histosol (	pedon (A2)		Dark Surface ( Polyvalue Belo		na (S8) (	I DD D		uck (A10) ( <b>LRR K, L, MLRA 1</b> rairie Redox (A16) ( <b>LRR K, L</b>	-
Black His			MLRA 149B		(00) (	LIXIX IX,		ucky Peat or Peat (S3) ( <b>LRR</b> I	-
	Sulfide (A4)		Thin Dark Surf	,	(LRR R	, MLRA 1		ie Below Surface (S8) ( <b>LRR F</b>	-
	Layers (A5)		High Chroma S		-			rk Surface (S9) ( <b>LRR K, L</b> )	,
X Depleted	Below Dark Surface	(A11)	Loamy Mucky	Mineral	(F1) ( <b>LR</b>	R K, L)	Iron-Mar	nganese Masses (F12) ( <b>LRR</b>	K, L, R)
Thick Da	rk Surface (A12)		Loamy Gleyed	Matrix (	F2)		Piedmor	nt Floodplain Soils (F19) ( <b>ML</b> l	RA 149B)
Mesic Sp	odic (A17)		X Depleted Matri					ent Material (F21) (outside N	/ILRA 145)
	A 144A, 145, 149B)		X Redox Dark Su	-	-			allow Dark Surface (F22)	
	ucky Mineral (S1)		Depleted Dark		` '		Other (E	xplain in Remarks)	
	eyed Matrix (S4)		Redox Depress		3)		3		
	edox (S5)		Marl (F10) ( <b>LR</b>		04) (84) 8	- 4 4 <del>-</del> 1	<sup>3</sup> Indicators of hydrophytic vegetation and		
Stripped	Matrix (S6)		Red Parent Material (F21) (MLRA 145)				wetland hydrology must be present, unless disturbed or problematic.		
Restrictive L	ayer (if observed):							alotarood of problematic.	
Type:									
Depth (in	ches):						Hydric Soil Presei	nt? Yes X No	
Remarks:									



Wetland 5B-MN (PEM) - View facing west



Wetland 5B-MN (PEM) - Soils

**SITE PHOTOGRAPHS** 

## WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE		City/County: Bethleh	iem/Albany County	Sampling Date: <u>2/27/2023</u>		
Applicant/Owner: TDI			State: NY	Sampling Point: 5B-MN Upl		
Investigator(s): C. Scrivner & J. Greaves		Section, To	wnship, Range:	<u> </u>		
Landform (hillside, terrace, etc.): Hillslope	Local re	elief (concave, conve	ex. none): Convex	Slope %: 40		
Subregion (LRR or MLRA): LRR R	Lat: 42.560599	•	-73.853849	Datum: WGS84		
Soil Map Unit Name: ScA - Scio silt loam, 0			NWI classification:			
Are climatic / hydrologic conditions on the site		Vac v		explain in Remarks.)		
,	,,	Yes X				
Are Vegetation, Soil, or Hydro	<del></del>		nal Circumstances" prese			
Are Vegetation, Soil, or Hydro			d, explain any answers in	·		
SUMMARY OF FINDINGS – Attach	site map showing samp	pling point loca	tions, transects, im	portant features, etc.		
Hydrophytic Vegetation Present?	Yes No X	Is the Sampled A	rea			
Hydric Soil Present?	Yes X No	within a Wetland	? Yes	No X		
Wetland Hydrology Present?	Yes No X	If yes, optional We	tland Site ID:			
Remarks: (Explain alternative procedures he	ere or in a separate report.)					
Mowed roadside.						
LIVEROL COV						
HYDROLOGY						
Wetland Hydrology Indicators:				ninimum of two required)		
Primary Indicators (minimum of one is requir			Surface Soil Cracks			
Surface Water (A1)	Water-Stained Leaves (B	i9)	Drainage Patterns (	·		
High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B16) Dry-Season Water Table (C2)			
Saturation (A3) Water Marks (B1)	Marl Deposits (B15)	<b>~</b> 4\				
Water Marks (B1) Sediment Deposits (B2)	Hydrogen Sulfide Odor (C Oxidized Rhizospheres or	•	Crayfish Burrows (C	n Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron		Stunted or Stressed	=		
Algal Mat or Crust (B4)	Recent Iron Reduction in	` '	Geomorphic Positio	· ·		
Iron Deposits (B5)	Thin Muck Surface (C7)	· · · · · · · · · · · · · · · · · · ·				
Inundation Visible on Aerial Imagery (B7		(s)	Microtopographic R	·		
Sparsely Vegetated Concave Surface (B	·—	,	FAC-Neutral Test ([			
Field Observations:	,		_	,		
Surface Water Present? Yes	No X Depth (inches):					
	No X Depth (inches):					
Saturation Present? Yes	No X Depth (inches):		d Hydrology Present?	Yes No _X_		
(includes capillary fringe)						
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos, prev	vious inspections), if	available:			
Remarks:						

Tree Stratum (Plot size: 30' )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1.	70 00001	Орескоз	Otatus	
2.				Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
3.				Total Number of Deminent
4				Total Number of Dominant Species Across All Strata:  4 (B)
5. 6.				Percent of Dominant Species That Are OBL, FACW, or FAC: 25.0% (A/B)
7.				Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15' )		-		OBL species 0 x 1 = 0
1.				FACW species 0 x 2 = 0
2.				FAC species 20 x 3 = 60
3.				FACU species 60 x 4 = 240
				UPL species 20 x 5 = 100
5.				Column Totals: 100 (A) 400 (B)
				Prevalence Index = B/A = 4.00
7.				Hydrophytic Vegetation Indicators:
·		=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5' )		-		2 - Dominance Test is >50%
1. Poa pratensis	40	Yes	FACU	3 - Prevalence Index is ≤3.0 <sup>1</sup>
Centaurea stoebe	20	Yes	UPL	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Solidago canadensis	20	Yes	FACU	data in Remarks or on a separate sheet)
A Ostania manuila	20	Yes	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
		165		
6				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7				
8.				Definitions of Vegetation Strata:
· -				Tree – Woody plants 3 in. (7.6 cm) or more in
9.				diameter at breast height (DBH), regardless of height.
10				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
12.				Houte All books as a confusion was also because of
	100	=Total Cover		<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size: 30' )		-		Manada at a san a Milana da atau a manada at a san a san at a san
1.				<b>Woody vines</b> – All woody vines greater than 3.28 ft in height.
2.				
3.				Hydrophytic
4.				Vegetation Present? Yes No X_
· ——		=Total Cover		
Remarks: (Include photo numbers here or on a separ	rate sheet )	_		
Remarks. (include photo numbers here of on a separ	ate sneet.)			

Sampling Point: 5B-MN Upl

SOIL Sampling Point 5B-MN Upl

Depth	Matrix			x Featur			onfirm the absence o	i maicators.
(inches)	Color (moist)	%	Color (moist)	%_	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-10	10YR 3/1	80	10YR 4/3	_20	c	<u>m</u>	Loamy/Clayey	Distinct redox concentrations
10-16	10YR 5/3	100					Loamy/Clayey	
• • • • • • • • • • • • • • • • • • • •	ncentration, D=Depl	etion, RN	/I=Reduced Matrix, M	1S=Mas	ked Sand	d Grains.		PL=Pore Lining, M=Matrix.
Hydric Soil I			Dank Confess (	C7\				or Problematic Hydric Soils <sup>3</sup> :
— Histosol (	ipedon (A2)		Dark Surface ( Polyvalue Belo		ce (S8) (I	LRR R.		uck (A10) ( <b>LRR K, L, MLRA 149B</b> ) rairie Redox (A16) ( <b>LRR K, L, R</b> )
Black His			MLRA 149B		() (-	,		ucky Peat or Peat (S3) ( <b>LRR K, L, R</b> )
Hydroger	n Sulfide (A4)		Thin Dark Surfa	ace (S9	) (LRR R	, MLRA 1	1 <b>49B</b> ) Polyvalu	ie Below Surface (S8) ( <b>LRR K, L</b> )
	Layers (A5)		High Chroma S	-				rk Surface (S9) ( <b>LRR K, L</b> )
	Below Dark Surface rk Surface (A12)	(A11)	Loamy Mucky			R K, L)		nganese Masses (F12) ( <b>LRR K, L, R</b> )
	odic (A17)		Loamy Gleyed Depleted Matri		,FZ)			nt Floodplain Soils (F19) ( <b>MLRA 149B</b> <sup>-</sup> ent Material (F21) <b>(outside MLRA 14</b>
	A 144A, 145, 149B)		X Redox Dark Su	. ,	<del>-</del> 6)			allow Dark Surface (F22)
Sandy M	ucky Mineral (S1)		Depleted Dark	Surface	(F7)		Other (E	Explain in Remarks)
	eyed Matrix (S4)		Redox Depress		8)		2	
	edox (S5)		Marl (F10) ( <b>LR</b>	-	.04) (84) 5			ors of hydrophytic vegetation and
Stripped	Matrix (S6)		Red Parent Ma	iteriai (F	·21) (MLF	KA 145)		nd hydrology must be present, s disturbed or problematic.
Restrictive L	ayer (if observed):							and an experience of problematic.
Type:								
Depth (in	ches):						Hydric Soil Prese	nt? Yes X No
Remarks:								



Upland 5B-MN (PEM)- View facing north



**Upland 5B-MN (PEM)- Soils** 

# **SITE PHOTOGRAPHS**

## WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE	c	City/County: Bethleh	em/Albany County	Sampling Date: <u>2/27/2023</u>		
Applicant/Owner: TDI			State: NY	Sampling Point: 5B-MN		
Investigator(s): C. Scrivner & J. Greaves		Section, To	wnship, Range:			
Landform (hillside, terrace, etc.): Depression	Local rel	lief (concave, conve	x, none): Concave	Slope %: 2		
Subregion (LRR or MLRA): LRR R	Lat: 42.560783	•	-73.855161	 Datum: WGS84		
Soil Map Unit Name: HuE - Hudson silt loam,			NWI classification:	PSS1		
Are climatic / hydrologic conditions on the site ty		Yes x		explain in Remarks.)		
			<del></del>	•		
Are Vegetation, Soil, or Hydrolog			nal Circumstances" prese			
Are Vegetation, Soil, or Hydrolog			I, explain any answers in	,		
SUMMARY OF FINDINGS – Attach s	ite map showing samp	ling point locat	tions, transects, ım	portant features, etc.		
Hydrophytic Vegetation Present? Y	Yes X No	Is the Sampled Ar	rea			
Hydric Soil Present? Y	Yes X No	within a Wetland?		No		
Wetland Hydrology Present? Y	Yes X No	If yes, optional We	tland Site ID:			
Remarks: (Explain alternative procedures here	e or in a separate report.)					
Shrub swamp.						
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicators (m	ninimum of two required)		
Primary Indicators (minimum of one is required	d; check all that apply)		Surface Soil Cracks	(B6)		
Surface Water (A1)	Water-Stained Leaves (B9	9)	Drainage Patterns (I	·		
X High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B16)			
X Saturation (A3)	Marl Deposits (B15)		Dry-Season Water 1	· ·		
Water Marks (B1)	Hydrogen Sulfide Odor (C1	= -	Crayfish Burrows (C	·		
Sediment Deposits (B2)	Oxidized Rhizospheres on			n Aerial Imagery (C9)		
Drift Deposits (B3) Algal Mat or Crust (B4)	Presence of Reduced Iron Recent Iron Reduction in T	` '	<ul><li>Stunted or Stressed</li><li>X Geomorphic Position</li></ul>			
Iron Deposits (B5)	Thin Muck Surface (C7)	Tilled Solis (Co)	Shallow Aquitard (D			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks					
Sparsely Vegetated Concave Surface (B8)		′/	X FAC-Neutral Test (D	` '		
Field Observations:	<del>,</del>			,		
	No X Depth (inches):					
Water Table Present? Yes X	No Depth (inches):	10				
Saturation Present? Yes X	No Depth (inches):	0 Wetlan	d Hydrology Present?	Yes <u>X</u> No		
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monit	toring well, aerial photos, previ	ious inspections), if	available:			
Remarks:						
Tremano.						

FAC  FAC  FAC	Number of Dominant Species That Are OBL, FACW, or FAC:  Total Number of Dominant Species Across All Strata:  Percent of Dominant Species That Are OBL, FACW, or FAC:  Total % Cover of:  Multiply by:  OBL species  0 x 1 = 0
ver	That Are OBL, FACW, or FAC:  Total Number of Dominant Species Across All Strata:  Percent of Dominant Species That Are OBL, FACW, or FAC:  Total % Cover of:  Multiply by:
	Species Across All Strata: 8 (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: 75.0% (A/B)  Prevalence Index worksheet:  Total % Cover of: Multiply by:
	Percent of Dominant Species That Are OBL, FACW, or FAC: 75.0% (A/B)  Prevalence Index worksheet:  Total % Cover of: Multiply by:
	That Are OBL, FACW, or FAC: 75.0% (A/B)  Prevalence Index worksheet:  Total % Cover of: Multiply by:
	That Are OBL, FACW, or FAC: 75.0% (A/B)  Prevalence Index worksheet:  Total % Cover of: Multiply by:
	Total % Cover of: Multiply by:
FAC	OBL species 0 x 1 = 0
FAC	· <u> </u>
	FACW species 75 x 2 = 150
FACU	FAC species 63 x 3 = 189
FACW	FACU species 15 x 4 = 60
FAC	UPL species 0 x 5 = 0
	Column Totals: 153 (A) 399 (B)
	Prevalence Index = B/A = 2.61
_	Hydrophytic Vegetation Indicators:
ver	1 - Rapid Test for Hydrophytic Vegetation
	X 2 - Dominance Test is >50%
FACW	X 3 - Prevalence Index is ≤3.0 <sup>1</sup>
FAC	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
_	data in Remarks or on a separate sheet)
FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
	<sup>1</sup> 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.
ver	
	Woody vines – All woody vines greater than 3.28 ft in
ver FAC	Woody vines – All woody vines greater than 3.28 ft in height.
	height.
	height.  Hydrophytic
	height.
	height.  Hydrophytic Vegetation
-	FAC

Sampling Point:

5B-MN

SOIL Sampling Point 5B-MN

Profile Desc Depth	cription: (Describe to Matrix	the de		<b>ument th</b> x Feature		ator or co	onfirm the absence of indicators.)		
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture Remarks		
0-10	10YR 3/1	85	10YR 4/3	5	С	m	Loamy/Clayey Distinct redox concentrations		
			10YR 5/3	10	C	<u>m</u>	Distinct redox concentrations		
10-17	10YR 5/1	65	10YR 5/6	30	C	<u>m</u>	Loamy/Clayey Prominent redox concentrations		
			10YR 5/3	5	<u> </u>	<u>m</u>	Distinct redox concentrations		
¹Type: C=Co	oncentration, D=Deple	tion, RM	======================================	——— //S=Masl	ked Sand	Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.		
Hydric Soil			· · ·	-			Indicators for Problematic Hydric Soils <sup>3</sup> :		
Histosol			Dark Surface (	S7)			2 cm Muck (A10) (LRR K, L, MLRA 149B)		
	pipedon (A2)		Polyvalue Belo		ce (S8) (	I RR R	Coast Prairie Redox (A16) (LRR K, L, R)		
Black Hi			MLRA 149B		00 (00) (		5 cm Mucky Peat or Peat (S3) (LRR K, L, F		
				,	/I DD D	MIDA	<del></del>		
	n Sulfide (A4)		Thin Dark Surfa		-				
	Layers (A5)		— High Chroma S				Thin Dark Surface (S9) (LRR K, L)		
	d Below Dark Surface	(A11)	Loamy Mucky Mineral (F1) (LRR K, L)				Iron-Manganese Masses (F12) (LRR K, L, I		
Thick Da	ark Surface (A12)		Loamy Gleyed	Matrix (I	F2)		Piedmont Floodplain Soils (F19) (MLRA 149B)		
Mesic S <sub>I</sub>	podic (A17)		X Depleted Matri	x (F3)			Red Parent Material (F21) (outside MLRA 145		
(MLR	A 144A, 145, 149B)		X Redox Dark Su	ırface (F	6)		Very Shallow Dark Surface (F22)		
Sandy M	lucky Mineral (S1)		Depleted Dark	Surface	(F7)		Other (Explain in Remarks)		
Sandy G	leyed Matrix (S4)		X Redox Depress	sions (F	3)		<del></del>		
—— Sandy R	edox (S5)		Marl (F10) ( <b>LR</b>	RK, L)			<sup>3</sup> Indicators of hydrophytic vegetation and		
	Matrix (S6)		Red Parent Material (F21) (MLRA 145)				wetland hydrology must be present,		
<u> </u>							unless disturbed or problematic.		
Type:	Layer (if observed):								
Depth (ir	nches):						Hydric Soil Present? Yes X No		
Remarks:									



Wetland 5B-MN (PSS) - View facing west



Wetland 5B-MN (PSS) - Soils

**SITE PHOTOGRAPHS** 

## WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE	City/County: Bethlehem/Albany County Sampling Date: 2/27/2023
Applicant/Owner: TDI	State: NY Sampling Point: 5B-MN Upl
Investigator(s): C. Scrivner & J. Greaves	Section, Township, Range:
Landform (hillside, terrace, etc.): Hillslope Loca	al relief (concave, convex, none): Convex Slope %: 35
Subregion (LRR or MLRA): LRR R Lat: 42.560971	Long: -73.855304 Datum: WGS84
Soil Map Unit Name: ScA - Scio silt loam, 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 Hydrologysignificantly distu	
Are Vegetation , Soil , or Hydrology naturally problem	
	mpling point locations, transects, important features, etc.
· -	
Hydrophytic Vegetation Present?  Yes No X  Hydric Soil Present?  Yes X No	Is the Sampled Area within a Wetland? Yes No _X_
Wetland Hydrology Present?  Yes No X	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate report.)	
Deciduous forest.	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves	<u> </u>
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor	
Sediment Deposits (B2) Oxidized Rhizospheres	
Drift Deposits (B3) Presence of Reduced I	
Algal Mat or Crust (B4)Recent Iron Reduction	· · · · · · · · · · · · · · · · · · ·
Iron Deposits (B5) Thin Muck Surface (C7	
Inundation Visible on Aerial Imagery (B7)Other (Explain in Rema	
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No _X Depth (inches	
Surface Water Present?         Yes         No X         Depth (inches)           Water Table Present?         Yes         No X         Depth (inches)           Saturation Present?         Yes         No X         Depth (inches)	
	S):   Wetland Hydrology Present? Yes No _X
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, p	
Describe Recorded Data (stream gauge, monitoring well, aenai photos, p	revious inspections), ii avaliable.
Remarks:	

EGETATION – Use scientific names of pla		Daminant	lu di a atau	Sampling Point: 5B-MN Upl
ree Stratum (Plot size:30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
. Rhamnus cathartica	30	Yes	FAC	Number of Dominant Species
. Fraxinus americana	15	Yes	FACU	That Are OBL, FACW, or FAC: 3 (A)
Acer platanoides	10	No	UPL	Total Number of Dominant
i				Species Across All Strata: 8 (B)
j.				Percent of Dominant Species
S		<u> </u>		That Are OBL, FACW, or FAC: 37.5% (A/B)
:		·		Prevalence Index worksheet:
	55	=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size:15')		•		OBL species 0 x 1 = 0
. Cornus racemosa	45	Yes	FAC	FACW species 0 x 2 = 0
Lonicera morrowii	10	No	FACU	FAC species 105 x 3 = 315
3. Rhamnus cathartica	10	No	FAC	FACU species 95 x 4 = 380
Juniperus virginiana	5	No	FACU	UPL species 10 x 5 = 50
5.				Column Totals: 210 (A) 745 (B)
5.				Prevalence Index = B/A = 3.55
7.				Hydrophytic Vegetation Indicators:
	70	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5' )		•		2 - Dominance Test is >50%
1. Solidago canadensis	30	Yes	FACU	3 - Prevalence Index is ≤3.0 <sup>1</sup>
2. Cornus racemosa	20	Yes	FAC	4 - Morphological Adaptations <sup>1</sup> (Provide supportin
3. Juniperus virginiana	10	No	FACU	data in Remarks or on a separate sheet)
Parthenocissus quinquefolia	10	No	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5.				<u> </u>
3.		·		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7.		<u> </u>		Definitions of Vegetation Strata:
3.				Tree – Woody plants 3 in. (7.6 cm) or more in
9.				diameter at breast height (DBH), regardless of height.
10.				Sapling/shrub – Woody plants less than 3 in. DBH
11.				and greater than or equal to 3.28 ft (1 m) tall.
12.		·		<b>Herb</b> – All herbaceous (non-woody) plants, regardless
	70	=Total Cover		of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size: 30')		•		Mandarina All woody vince greater than 2.28 ft in
1. Celastrus orbiculatus	5	Yes	FACU	<b>Woody vines</b> – All woody vines greater than 3.28 ft in height.
2. Vitis aestivalis	5	Yes	FACU	
3. Parthenocissus quinquefolia	5	Yes	FACU	Hydrophytic
4.				Vegetation Present? Yes No X
	15	=Total Cover		
		•		

SOIL Sampling Point 5B-MN Upl

Profile Desc Depth	ription: (Describe t Matrix	to the de	-	<b>ıment th</b> x Featur		ator or co	onfirm the absence of	f indicators.	.)	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks	
0-5	10YR 4/3	100					Loamy/Clayey			
5-16	10YR 5/1	98	10YR 5/4	2			Loamy/Clayey	Distinct	redox conc	entrations
<u> </u>	10113/1	90	10113/4		<u> </u>		Loainy/Clayey	DISTILICE	redux conc	entrations
				—						
<sup>1</sup> Type: C=Co	ncentration. D=Depl	etion. RN	M=Reduced Matrix, M	 IS=Mas <sup>l</sup>	ked Sand	d Grains.	<sup>2</sup> Location: P	L=Pore Linin	ng. M=Matrix	
Hydric Soil I			,				Indicators fo			
Histosol			Dark Surface (S	S7)				ck (A10) ( <b>LF</b>	-	
Histic Ep	ipedon (A2)		Polyvalue Belo	w Surfa	ce (S8) (	LRR R,	Coast Pr	airie Redox	(A16) ( <b>LRR</b>	K, L, R)
Black His	stic (A3)		MLRA 149B)	)			5 cm Mu	cky Peat or	Peat (S3) (L	RR K, L, R)
Hydrogei	n Sulfide (A4)		Thin Dark Surfa	ace (S9)	(LRR R	, MLRA 1	Polyvalu	e Below Sur	face (S8) ( <b>L</b>	RR K, L)
	Layers (A5)		High Chroma S				Thin Dar	k Surface (S	9) ( <b>LRR K,</b>	L)
	Below Dark Surface	e (A11)	Loamy Mucky I			RK, L)		_		LRR K, L, R)
	rk Surface (A12)		Loamy Gleyed		F2)					(MLRA 149B)
	oodic (A17)		X Depleted Matrix							ide MLRA 145)
	A 144A, 145, 149B)		Redox Dark Su		-			allow Dark S		)
	ucky Mineral (S1) leyed Matrix (S4)		Depleted Dark Redox Depress				Other (E	xplain in Rer	narks)	
	edox (S5)		Marl (F10) (LRI		0)		<sup>3</sup> Indicato	rs of hydropl	hytic vegeta	ation and
	Matrix (S6)		Red Parent Ma		21) <b>(MI</b> I	RA 145)		d hydrology	-	
					/ (	,		disturbed o		
Restrictive L	.ayer (if observed):								'	
Type:										
Depth (in	iches):						Hydric Soil Preser	nt?	Yes X	No
Remarks:										



Upland 5B-MN (PSS)- View facing east



**Upland 5B-MN (PSS) - Soils** 

# **SITE PHOTOGRAPHS**

## WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE	City/County: Bethlehem/Albany County Sampling Date:	2/27/2023
Applicant/Owner: TDI	State: NY Sampling Point:	5B-O Wet
Investigator(s): C. Scrivner & J. Greaves	Section, Township, Range:	
Landform (hillside, terrace, etc.): Linear depression Local re	relief (concave, convex, none): Concave Slope	%: 5
Subregion (LRR or MLRA): LRR R Lat: 42.560436	Long: -73.851597 Datum:	WGS84
Soil Map Unit Name: ScA - Scio silt loam, 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	s.)
Are Vegetation, Soil, or Hydrology significantly disturb	bed? Are "Normal Circumstances" present? Yes x	No
Are Vegetation , Soil , or Hydrology naturally problema		
SUMMARY OF FINDINGS – Attach site map showing sam	pling point locations, transects, important featur	es, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area	
Hydric Soil Present? Yes X No	within a Wetland? Yes X No	
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedures here or in a separate report.)  Common reed marsh ditch.		
HYDROLOGY		
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two req	uire <u>d)</u>
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)	<del></del>
X Surface Water (A1) Water-Stained Leaves (E	B9) X Drainage Patterns (B10)	
X High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)	
X Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)	
Water Marks (B1) Hydrogen Sulfide Odor (	· · · · · · · · · · · · · · · · · · ·	
Sediment Deposits (B2) Oxidized Rhizospheres o		29)
Drift Deposits (B3) Presence of Reduced Iro		
Algal Mat or Crust (B4)Recent Iron Reduction in	· / — · · /	
Iron Deposits (B5)  — Thin Muck Surface (C7)  — Other (Explain in Remort	Shallow Aquitard (D3)  Microtopagraphic Relief (D4)	
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remark		
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)	
Field Observations:		
Surface Water Present? Yes X No Depth (inches):		
Water Table Present? Yes X No Depth (inches): Saturation Present? Yes X No Depth (inches):		No
Saturation Present? Yes X No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? YesX	NO
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections) if available:	
Describe Necorded Data (Stream gauge, monitoring wen, acriai priotos, pre	, vious inspections), it available.	
Remarks:		

Tree Stratum (Plot size: 30' )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1.	70 00101			
2.				Number of Dominant Species That Are OBL, FACW, or FAC:(A)
3. 4.				Total Number of Dominant Species Across All Strata:(B)
5. 6.				Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
7				Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size:)				OBL species45 x 1 =45
1				FACW species 45 x 2 = 90
2				FAC species 0 x 3 = 0
3.				FACU species0 x 4 =0
4				UPL species0 x 5 =0
5.				Column Totals: 90 (A) 135 (B)
6.				Prevalence Index = B/A = 1.50
7.				Hydrophytic Vegetation Indicators:
		=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5' )		-		X 2 - Dominance Test is >50%
1. Phragmites australis	45	Yes	FACW	X 3 - Prevalence Index is ≤3.0 <sup>1</sup>
Lythrum salicaria	45	Yes	OBL	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
3.				data in Remarks or on a separate sheet)
4				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
6				be present, unless disturbed or problematic.  Definitions of Vegetation Strata:
8.		-		Deminions of Vegetation Strata.
9.				<b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
10.				Sapling/shrub – Woody plants less than 3 in. DBH
11				and greater than or equal to 3.28 ft (1 m) tall.
12				Herb – All herbaceous (non-woody) plants, regardless
	90	=Total Cover		of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size:) 1.				Woody vines – All woody vines greater than 3.28 ft in height.
2				- rogra
2				Hydrophytic
				Vegetation Present? Yes X No
4		-Tatal Cause		Present? Yes X No No
		_=Total Cover		
Remarks: (Include photo numbers here or on a sepa	rate sheet.)			

Sampling Point: 5B-O Wet

SOIL Sampling Point 5B-O Wet

Profile Desc Depth	ription: (Describe to Matrix	o the de		<b>ument th</b> x Featur		ator or co	onfirm the absence o	of indicators.)	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remark	S
0-8	10YR 3/2	100					Loamy/Clayey		
0.40	40VD 2/2	70	10YR 5/6					Duamin ant naday as	
8-16	10YR 3/2		1018 5/6	30		<u>m</u>	Loamy/Clayey	Prominent redox co	nicentrations
		_		<u> </u>	<u> </u>	<u> </u>			
		_		_					
					<u> </u>	<u> </u>			
1- 0.0							2		
Hydric Soil I	oncentration, D=Deple	etion, RIV	I=Reduced Matrix, N	/IS=Masi	ked Sand	Grains.		PL=Pore Lining, M=Mate For Problematic Hydric	•
Histosol Histic Ep Black His Hydroger Stratified Depleted Thick Da Mesic Sp (MLR. Sandy M Sandy G Sandy R	(A1) ipedon (A2)	(A11)	Dark Surface ( Polyvalue Belo MLRA 149B Thin Dark Surf High Chroma S Loamy Mucky Loamy Gleyed Depleted Matri X Redox Dark St Depleted Dark Redox Depres Marl (F10) (LR Red Parent Ma	ow Surface (S9) Sands (S Mineral I I Matrix ( ix (F3) urface (Fa Surface Sions (F8 RR K, L)	(LRR R 111) (LRI (F1) (LRI F2) 6) (F7)	, MLRA 1 R K, L) R K, L)	2 cm Mu Coast P 5 cm Mu Thin Da Iron-Mai Piedmoi Red Par Very Sh Other (E	uck (A10) (LRR K, L, M rairie Redox (A16) (LRI ucky Peat or Peat (S3) ue Below Surface (S8) ( rk Surface (S9) (LRR K nganese Masses (F12) nt Floodplain Soils (F19 rent Material (F21) (out allow Dark Surface (F2 Explain in Remarks) ors of hydrophytic veget nd hydrology must be p s disturbed or problema	LRA 149B) R K, L, R) (LRR K, L, R) LRR K, L) (, L) ((LRR K, L, R) 0) (MLRA 149B) side MLRA 145) 2) tation and resent,
Restrictive L	ayer (if observed):						unico	o distarbed of problems	
Type:									
Depth (in	nches):						Hydric Soil Prese	nt? Yes X	No
Remarks:									



Wetland 5B-O (PEM)- View facing west



Wetland 5B-O (PEM)- Soils

SITE PHOTOGRAPHS

**Champlain Hudson Power Express** 

Segment 9 – Package 5B

## WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE		City/County: Bethleh	nem/Albany County	Sampling Date: 2/27/2023	
Applicant/Owner: TDI			State: NY	Sampling Point: 5B-O Wet	
Investigator(s): C. Scrivner & J. Greaves		Section, To	wnship, Range:		
Landform (hillside, terrace, etc.): Hillslope	Local re	elief (concave, conve	ex, none): Concave	Slope %: 2	
Subregion (LRR or MLRA): LRR R	Lat: 42.560364	•	-73.851368	Datum: WGS84	
Soil Map Unit Name: ScA - Scio silt loam, 0		Long.	NWI classification:	<del></del>	
Are climatic / hydrologic conditions on the site		Yes x		explain in Remarks.)	
			nal Circumstances" prese		
Are Vegetation, Soil, or Hydro			•		
Are Vegetation, Soil, or Hydro SUMMARY OF FINDINGS – Attach			d, explain any answers in l tions, transects, im	•	
	I			• •	
Hydrophytic Vegetation Present?	Yes X No	Is the Sampled A			
Hydric Soil Present?		<del></del>			
Wetland Hydrology Present?		ii yes, optional we			
Remarks: (Explain alternative procedures he Red maple hardwood swamp.	ere or in a separate repoπ.)				
Red таріе пагимоой эматір.					
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicators (m	inimum of two required)	
Primary Indicators (minimum of one is requir	red: check all that apply)		Surface Soil Cracks		
X Surface Water (A1)	Water-Stained Leaves (B	Q)	X Drainage Patterns (E		
X High Water Table (A2)	Aquatic Fauna (B13)	0)	Moss Trim Lines (B16)		
X Saturation (A3)	Marl Deposits (B15)		Dry-Season Water T	·	
Water Marks (B1)	Hydrogen Sulfide Odor (C	21)	Crayfish Burrows (C	·	
Sediment Deposits (B2)	Oxidized Rhizospheres or	•	_ '	n Aerial Imagery (C9)	
Drift Deposits (B3)	Presence of Reduced Iron		Stunted or Stressed		
Algal Mat or Crust (B4)	Recent Iron Reduction in	` ,	X Geomorphic Position	· ·	
Iron Deposits (B5)	Thin Muck Surface (C7)	(,	Shallow Aquitard (D3		
Inundation Visible on Aerial Imagery (B7		s)	Microtopographic Re	·	
Sparsely Vegetated Concave Surface (B	/ <del></del> \ '	/	X FAC-Neutral Test (D		
Field Observations:	,			,	
Surface Water Present? Yes X	No Depth (inches):	1			
Water Table Present? Yes X					
Saturation Present? Yes X	No Depth (inches):  No Depth (inches):	0 Wetlan	d Hydrology Present?	Yes X No	
(includes capillary fringe)			, ,,		
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos, prev	vious inspections), if	available:		
Remarks:					

<b>'EGETATION</b> – Use scientific names of pla	ants.			Sampling Point: 5B-O Wet		
Tree Stratum (Plot size: 30' )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:		
1. Fraxinus pennsylvanica	30	Yes	FACW	Number of Dominant Species		
2. Acer rubrum	30	Yes	FAC	That Are OBL, FACW, or FAC:	10 (A)	
3. Populus deltoides	10	No	FAC	Total Number of Dominant		
4.				Species Across All Strata:	10 (B)	
5.				Percent of Dominant Species		
6.				•	100.0% (A/B)	
7.				Prevalence Index worksheet:		
	70	=Total Cover		Total % Cover of: M	lultiply by:	
Sapling/Shrub Stratum (Plot size: 15' )		•		OBL species 0 x 1 =	0	
1. Cornus amomum	15	Yes	FACW	FACW species 65 x 2 =	130	
2. Cornus racemosa	15	Yes	FAC	FAC species 95 x 3 =	285	
3. Acer rubrum	10	Yes	FAC	FACU species 8 x 4 =	32	
4. Lonicera morrowii	5	No	FACU	UPL species 0 x 5 =	0	
5. Prunus serotina	3	No	FACU	Column Totals: 168 (A)	447 (B)	
6.				Prevalence Index = B/A =	2.66	
7.				Hydrophytic Vegetation Indicators:	<u> </u>	
	48	=Total Cover		1 - Rapid Test for Hydrophytic Ve		
Herb Stratum (Plot size: 5' )		-		X 2 - Dominance Test is >50%		
1. Cornus racemosa	15	Yes	FAC	X 3 - Prevalence Index is ≤3.0 <sup>1</sup>		
2. Phragmites australis	10	Yes	FACW	4 - Morphological Adaptations <sup>1</sup> (F	Provide supporting	
3. Onoclea sensibilis	10	Yes	FACW	data in Remarks or on a separ		
4. Toxicodendron radicans	10	Yes	FAC	Problematic Hydrophytic Vegetat	tion <sup>1</sup> (Explain)	
5.		100		<u> </u>		
6.				<sup>1</sup> Indicators of hydric soil and wetland be present, unless disturbed or proble		
7.				Definitions of Vegetation Strata:	omatio.	
8.						
9.				<b>Tree</b> – Woody plants 3 in. (7.6 cm) o diameter at breast height (DBH), regard		
10						
11.				Sapling/shrub – Woody plants less and greater than or equal to 3.28 ft (1		
12.					,	
	45	=Total Cover		Herb – All herbaceous (non-woody) pof size, and woody plants less than 3		
Woody Vine Stratum (Plot size: 30' )		- Total Gover				
1. Vitis riparia	5	Yes	FAC	<b>Woody vines</b> – All woody vines greatheight.	ter than 3.28 ft in	
		165	FAC	neight.		
				Hydrophytic		
3 4.				Vegetation Present? Yes X No		
<del></del>	5	=Total Cover		Present? Yes X No	<b>'</b> ——	
	<u></u>	- Fotal Cover				

SOIL Sampling Point 5B-O Wet

Depth	ription: (Describe to Matrix	tne de		<b>ument tr</b> x Featur		itor or co	onfirm the absence of indicators.)	)	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0-6	10YR 3/1	90	10YR 4/4	5	c	<u>m</u>	Loamy/Clayey Distinct	redox concentrations	
			10YR 5/3	5	c	<u>m</u>	Distinct	redox concentrations	
6-16	10YR 5/1	70	10YR 4/6		c	<u>m</u>	Loamy/Clayey Prominen	t redox concentrations	
			10YR 5/6	10	<u> </u>	<u>m</u>	Prominen	t redox concentrations	
<sup>1</sup> Type: C=Cc	oncentration, D=Deple	tion RM	=Reduced Matrix N	 //S=Masi	 ked Sand	 d Grains	<sup>2</sup> Location: PL=Pore Lining		
Hydric Soil I			Ttoddood Matrix, 17	io maoi	itou ourit	oranio.	Indicators for Problemat		
Histosol			Dark Surface (	S7)			2 cm Muck (A10) ( <b>LR</b>	-	
Histic Epipedon (A2)			Polyvalue Below Surface (S8) (LRR R,				Coast Prairie Redox (A16) (LRR K, L, R)		
Black Histic (A3)			MLRA 149B)					Peat (S3) ( <b>LRR K, L, R</b> )	
	n Sulfide (A4)		Thin Dark Surfa	,	/I DD D	MI DA 1			
	Layers (A5)		High Chroma S				Thin Dark Surface (S		
		(111)					<del></del>		
	Below Dark Surface	(A11)	Loamy Mucky I			K K, L)		ses (F12) (LRR K, L, R)	
	rk Surface (A12)		Loamy Gleyed		F2)			Soils (F19) (MLRA 149B)	
	oodic (A17)		X Depleted Matrix		·C\			F21) (outside MLRA 145)	
	A 144A, 145, 149B)		X Redox Dark Su				Very Shallow Dark Su		
	ucky Mineral (S1)		Depleted Dark				Other (Explain in Rem	iaiks)	
	leyed Matrix (S4)		Redox Depress	•	5)		31		
	edox (S5)		Marl (F10) ( <b>LR</b>		04) (84) F	34 44E\	<sup>3</sup> Indicators of hydrophytic vegetation and		
Stripped	Matrix (S6)		Red Parent Ma	iteriai (F	21) (MLF	KA 145)	wetland hydrology r unless disturbed or		
Restrictive L Type:	ayer (if observed):								
Depth (ir	nches):						Hydric Soil Present? Y	'es_X_ No	
Remarks:									



Wetland 5B-O (PFO)- View facing west



Wetland 5B-O (PFO) - Soils

**SITE PHOTOGRAPHS** 

## WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE		City/County: Bethleh	nem/Albany County	Sampling Date: 2/27/2023
Applicant/Owner: TDI			State: NY	Sampling Point: 5B-O Upl
Investigator(s): C. Scrivner & J. Greaves		Section, To	——— wnship, Range:	
Landform (hillside, terrace, etc.): Hillslope	Local re	elief (concave, conve	ex, none): Convex	Slope %: 40
Subregion (LRR or MLRA): LRR R	Lat: 42.560464	•	-73.851302	Datum: WGS84
Soil Map Unit Name: ScA - Scio silt loam, 0			NWI classification:	
Are climatic / hydrologic conditions on the site		Vac v		explain in Remarks.)
, ,	,,	Yes X		. ,
Are Vegetation, Soil, or Hydro			nal Circumstances" prese	
Are Vegetation, Soil, or Hydro	' <del></del>		d, explain any answers in	
SUMMARY OF FINDINGS – Attach	site map showing samp	pling point loca	tions, transects, im	portant features, etc.
Hydrophytic Vegetation Present?	Yes No _X	Is the Sampled A	rea	
Hydric Soil Present?	Yes No X	within a Wetland	? Yes	No X
Wetland Hydrology Present?	Yes No X	If yes, optional We	etland Site ID:	
Remarks: (Explain alternative procedures he Mowed roadside. Shared upland plot for the l	' '			
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indicators (n	ninimum of two required)
Primary Indicators (minimum of one is require	ed; check all that apply)		Surface Soil Cracks	s (B6)
Surface Water (A1)	Water-Stained Leaves (B	39)	Drainage Patterns (	•
High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B	·
Saturation (A3)	Marl Deposits (B15)		Dry-Season Water	· ·
Water Marks (B1)	Hydrogen Sulfide Odor (C	•	Crayfish Burrows (C	,
Sediment Deposits (B2)	Oxidized Rhizospheres or	= : :		n Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron	, ,	Stunted or Stressed	
Algal Mat or Crust (B4) Iron Deposits (B5)	Recent Iron Reduction in Thin Muck Surface (C7)	Tilled Solis (Co)	Geomorphic Position Shallow Aquitard (D	, ,
Inundation Visible on Aerial Imagery (B7		(e)	Microtopographic R	•
Sparsely Vegetated Concave Surface (B	· — · · ·	.5)	FAC-Neutral Test (I	
Field Observations:				
Surface Water Present? Yes	No X Depth (inches):			
	No X Depth (inches):			
Saturation Present? Yes	No X Depth (inches):		d Hydrology Present?	Yes No _ X _
(includes capillary fringe)				
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos, prev	vious inspections), if	available:	
Remarks:				

·				Sampling Point: 5B-O Upl
Tree Stratum (Plot size:30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
				Number of Dominant Species
·				That Are OBL, FACW, or FAC:1 (A)
				Total Number of Dominant
				Species Across All Strata: 2 (B)
i				Percent of Dominant Species
3.				That Are OBL, FACW, or FAC:50.0% (A/B
				Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15' )				OBL species0 x 1 =0
				FACW species 0 x 2 = 0
				FAC species 45 x 3 = 135
3.				FACU species 55 x 4 = 220
				UPL species 0 x 5 = 0
				Column Totals: 100 (A) 355 (B
i				Prevalence Index = B/A = 3.55
· .				Hydrophytic Vegetation Indicators:
		=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5' )				2 - Dominance Test is >50%
Poa pratensis	45	Yes	FACU	3 - Prevalence Index is ≤3.0 <sup>1</sup>
2. Setaria pumila	45	Yes	FAC	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
3. Taraxacum officinale	10	No	FACU	data in Remarks or on a separate sheet)
				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5.				
				<sup>1</sup> 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
0				
				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
2				
	100	=Total Cover		Herb – All herbaceous (non-woody) plants, regardles of size, and woody plants less than 3.28 ft tall.
Voody Vine Stratum (Plot size: 30' )	100	Total Gover		
				<b>Woody vines</b> – All woody vines greater than 3.28 ft in height.
				neight.
				Hydrophytic
1.				Vegetation Present? Yes No X
I.		=Total Cover		Present?

SOIL Sampling Point 5B-O Upl

Depth	ription: (Describe to Matrix	o the de <sub>l</sub>		<b>ıment t</b> ı x Featur		ator or co	onfirm the absence of	indicators.)	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remark	ks
0-12	10YR 4/3	98	10YR 3/4	2	С		Loamy/Clayey	Faint redox cond	centrations
			_						
1Type: C=Co	 ncentration, D=Deple		======================================	 IS=Mas	ked Sand	 d Grains	<sup>2</sup> I ocation: PI	L=Pore Lining, M=Mat	triy
Hydric Soil II		Zuon, ruv	i-reduced iviation, iv	IO-IVIA3	neu oan	J Oranis.		or Problematic Hydric	•
Histosol (			Dark Surface (	S7)				ck (A10) ( <b>LRR K, L, N</b>	
	pedon (A2)		Polyvalue Belo		ce (S8) (	LRR R,		airie Redox (A16) ( <b>LR</b>	•
Black His	tic (A3)		MLRA 149B	)			5 cm Mu	cky Peat or Peat (S3)	(LRR K, L, R)
Hydroger	Sulfide (A4)		Thin Dark Surfa	ace (S9	(LRR R	, MLRA 1	149B) Polyvalue	e Below Surface (S8)	(LRR K, L)
	Layers (A5)		High Chroma S	Sands (S	611) ( <b>LR</b> I	R K, L)	Thin Darl	k Surface (S9) ( <b>LRR I</b>	<b>&lt;</b> , <b>L</b> )
	Below Dark Surface	(A11)	Loamy Mucky I			R K, L)		ganese Masses (F12)	
	k Surface (A12)		Loamy Gleyed		F2)			t Floodplain Soils (F1	
	odic (A17)		Depleted Matrix		-0\			ent Material (F21) (out	
	A 144A, 145, 149B)		Redox Dark Su		-			allow Dark Surface (F2	22)
·	ucky Mineral (S1) eyed Matrix (S4)		Depleted Dark Redox Depress				— Other (E)	xplain in Remarks)	
Sandy Re			Marl (F10) (LR		0)		<sup>3</sup> Indicator	rs of hydrophytic vege	etation and
	Matrix (S6)		Red Parent Ma	-	21) <b>(MLF</b>	RA 145)		d hydrology must be p	
	()			(-	/ (			disturbed or problema	
Restrictive L	ayer (if observed):								
Type:	rock	[							
Depth (in	ches):	12					Hydric Soil Presen	it? Yes	No X
Remarks:									



**Upland 5B-O- View facing south** 



**Upland 5B-O - Soils** 

# **SITE PHOTOGRAPHS**

## WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE	(	City/County: Bethleh	nem/Albany County	Sampling Date: <u>2/27/2023</u>
Applicant/Owner: TDI			State: NY	Sampling Point: 5B-K Wet
Investigator(s): C. Scrivner & J. Greaves		Section, To	wnship, Range:	
Landform (hillside, terrace, etc.): Depressio	n Local re	elief (concave, conve	ex, none): Concave	Slope %: 2
Subregion (LRR or MLRA): LRR R	Lat: 42.560228	•	-73.849207	 Datum: WGS84
Soil Map Unit Name: ScB - Scio silt loam, 31		~	NWI classification:	<del></del>
Are climatic / hydrologic conditions on the site		Yes x		explain in Remarks.)
Are Vegetation , Soil , or Hydrol			mal Circumstances" prese	,
<del></del>			•	
Are Vegetation, Soil, or Hydrol			d, explain any answers in	•
SUMMARY OF FINDINGS – Attach	site map snowing samp	Diling point local	tions, transects, iiii	portant reatures, etc.
Hydrophytic Vegetation Present?	Yes X No	Is the Sampled A		
Hydric Soil Present?	Yes X No	within a Wetland?		No
Wetland Hydrology Present?	Yes X No	If yes, optional We	etland Site ID:	_
Remarks: (Explain alternative procedures he	ere or in a separate report.)			
Common reed marsh.				
HYDROLOGY				·
Wetland Hydrology Indicators:			Secondary Indicators (m	ninimum of two required)
Primary Indicators (minimum of one is require	ed; check all that apply)		Surface Soil Cracks	(B6)
Surface Water (A1)	Water-Stained Leaves (BS	9)	Drainage Patterns (I	B10)
X High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B	•
X Saturation (A3)	Marl Deposits (B15)		Dry-Season Water	
— Water Marks (B1)	Hydrogen Sulfide Odor (C	•	Crayfish Burrows (C	•
Sediment Deposits (B2)	Oxidized Rhizospheres or	= : :		n Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron	, ,	Stunted or Stressed	
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (Co)	X Geomorphic Positio	
Iron Deposits (B5)	Thin Muck Surface (C7) Other (Explain in Remarks	·a1	Shallow Aquitard (D Microtopographic Re	
Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B	· <del></del>	s)	X FAC-Neutral Test (	, ,
Field Observations:	0)		<u> </u>	
Surface Water Present? Yes	No X Depth (inches):			
Water Table Present? Yes X	No Depth (inches):	10		
Saturation Present? Yes X	No Depth (inches):		d Hydrology Present?	Yes X No
(includes capillary fringe)			w 11, 41 - 12 - 13 - 13 - 13 - 13 - 13 - 13 - 1	<u> </u>
Describe Recorded Data (stream gauge, mor	nitoring well, aerial photos, prev	vious inspections), if	available:	
Remarks:				

Rhamnus cathartica	5	Yes	FAC	Number of Dominant Species
		-		I Number of Dominant Species
-				That Are OBL, FACW, or FAC: 4 (A)
				(vy
				Total Number of Dominant Species Across All Strata: 4 (B)
				Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B
				That Are OBL, FACW, or FAC: 100.0% (A/B Prevalence Index worksheet:
	5	=Total Cover		
1: (OL LOL (DL) : 451		- Fotal Cover		Total % Cover of: Multiply by:
apling/Shrub Stratum (Plot size:	_			OBL species 0 x1 = 0
Cornus racemosa	5	Yes	FAC_	FACW species 100 x 2 = 200
·				FAC species15 x 3 =45
				FACU species0 x 4 =0
·				UPL species0 x 5 =0
• ,				Column Totals: 115 (A) 245 (B
				Prevalence Index = B/A =2.13
				Hydrophytic Vegetation Indicators:
	5	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
erb Stratum (Plot size:)				X 2 - Dominance Test is >50%
Phragmites australis	90	Yes	FACW	X 3 - Prevalence Index is ≤3.0 <sup>1</sup>
Onoclea sensibilis	10	No	FACW	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
				data in Remarks or on a separate sheet)
				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
		,		1 landicators of levels and contained levels and contained
				<sup>1</sup> 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
4				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
2.				
	100	=Total Cover		<b>Herb</b> – All herbaceous (non-woody) plants, regardles of size, and woody plants less than 3.28 ft tall.
Jacobs Vina Chartura (Diet sina) 201	100	. – Fotal Covel		of size, and woody plants less than 3.26 it tall.
/oody Vine Stratum (Plot size: 30' )	_		<b>540</b>	<b>Woody vines</b> – All woody vines greater than 3.28 ft in
Vitis riparia	5	Yes	<u>FAC</u>	height.
				Hydrophytic
·				Vegetation
·				Present?
	5	=Total Cover		

SOIL Sampling Point 5B-K Wet

Depth	Matrix	uie de		u <b>ment tr</b> x Featur		ALOF OF CO	onfirm the absence of	mulcators.)	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0-7	10YR 2/1	90	10YR 5/3	10	c	m	Loamy/Clayey	Distinct redox conce	entrations
7-16	10YR 4/1	63	10YR 5/4	5	c	m	Loamy/Clayey	Distinct redox conce	entrations
			10YR 4/4	_20_	c	m_		Distinct redox conce	entrations
			10YR 5/6	2	c	<u>m</u>		Prominent redox con-	centrations
¹Type: C=Co	oncentration, D=Deple	tion, RN	 ∕/=Reduced Matrix, M	//S=Mas	ked Sand	d Grains.	<sup>2</sup> Location: PL	_=Pore Lining, M=Matrix	ζ.
Hydric Soil							Indicators fo	r Problematic Hydric S	Soils <sup>3</sup> :
Histosol	(A1)		Dark Surface (	S7)			2 cm Muc	ck (A10) ( <b>LRR K, L, ML</b>	RA 149B)
Histic Epipedon (A2)			Polyvalue Below Surface (S8) (LRR R,				Coast Prairie Redox (A16) (LRR K, L, R)		
	stic (A3)		MLRA 149B)				5 cm Mucky Peat or Peat (S3) (LRR K, L, R)		
	n Sulfide (A4)		Thin Dark Surfa	ace (S9)	(LRR R	, MLRA 1		e Below Surface (S8) (L	•
	d Layers (A5)		High Chroma S					k Surface (S9) ( <b>LRR K,</b> I	
	d Below Dark Surface	(A11)	Loamy Mucky					ganese Masses (F12) ( <b>I</b>	•
	ark Surface (A12)	(, , , ,	Loamy Gleyed			, _,		t Floodplain Soils (F19)	
Mesic Spodic (A17)			X Depleted Matri		/				
(MLRA 144A, 145, 149B)			X Redox Dark Su		:6)		Red Parent Material (F21) (outside MLRA 145)  Very Shallow Dark Surface (F22)		
			Depleted Dark	•				κplain in Remarks)	,
Sandy Gloved Matrix (S4)			Redox Depress		. ,		Outlet (Ex	tpiain in Nomarkoj	
Sandy Redex (S5)			Marl (F10) (LR		5)		<sup>3</sup> Indicator	rs of hydrophytic vegeta	tion and
Sandy Redox (S5)					24) /MI E	DA 44E\	<sup>3</sup> Indicators of hydrophytic vegetation and		
Stripped Matrix (S6)		Red Parent Material (F21) (MLRA 145)				wetland hydrology must be present, unless disturbed or problematic.			
	Layer (if observed):								
Type:									
Depth (ii	ncnes):						Hydric Soil Presen	t? Yes X	No
Remarks:									



Wetland 5B-K - View facing west



Wetland 5B-K - Soils

**SITE PHOTOGRAPHS** 

## WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE	City/County: Beth	nlehem/Albany County	Sampling Date: 2/27/2023		
Applicant/Owner: TDI		State: NY	Sampling Point: 5B-K Upl		
Investigator(s): C. Scrivner & J. Greaves	Section,	Township, Range:			
Landform (hillside, terrace, etc.): Hillslope	Local relief (concave, cor		Slope %: 40		
Subregion (LRR or MLRA): LRR R Lat: 42.560		ng: -73.849292	 Datum: WGS84		
Soil Map Unit Name: HuE - Hudson silt loam, 25 to 45 percent s	-	NWI classification:			
Are climatic / hydrologic conditions on the site typical for this time	•		explain in Remarks.)		
, ,	_	ormal Circumstances" prese			
Are Vegetation, Soil, or Hydrologysignification, Soil, or Hydrologysignification, Soil, or Hydrologysignification, so it is a second of the second of th					
Are Vegetation, Soil, or Hydrologynaturall		ded, explain any answers in	•		
SUMMARY OF FINDINGS – Attach site map show	ring sampling point lo	cations, transects, im	portant features, etc.		
Hydrophytic Vegetation Present? Yes No	X Is the Sampled	d Area			
	X within a Wetla				
	X If yes, optional '	tional Wetland Site ID:			
Remarks: (Explain alternative procedures here or in a separate	report.)				
Successional old field.					
11/2201 00/					
HYDROLOGY					
Wetland Hydrology Indicators:			ninimum of two required)		
Primary Indicators (minimum of one is required; check all that a		Surface Soil Cracks	` '		
<del></del>	d Leaves (B9)	Drainage Patterns (	•		
High Water Table (A2) Aquatic Faun		Moss Trim Lines (B	·		
Saturation (A3)Marl Deposits		Dry-Season Water Table (C2)			
<del></del>	Ifide Odor (C1)	Crayfish Burrows (C8)			
l <del></del>	zospheres on Living Roots (C				
<del></del> -	Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
<del></del>	Reduction in Tilled Soils (C6)	· · · · - · · · · · · · · · · · · · · ·			
Iron Deposits (B5) Thin Muck Su		Shallow Aquitard (D3)  Microtopographic Relief (D4)			
l <del></del>	n in Remarks)				
Sparsely Vegetated Concave Surface (B8)		FAC-Neutral Test (	D5)		
Field Observations:					
	th (inches):				
Water Table Present? Yes No X Dept	th (inches):	· · · · · · · · · · · · · · · · · · ·	W N- V		
	th (inches): Wet	Wetland Hydrology Present? Yes No _X_			
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial	photos previous inspections'	if available:			
Describe Necorded Data (Sileam gauge, monitoring won, across	priotos, previous irispections,	, II avaliabic.			
Remarks:					

	D 1	Landing Arm			
Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:		
			Number of Dominant Species		
			That Are OBL, FACW, or FAC:1 (A)		
			Total Number of Dominant		
			Species Across All Strata: 5 (B)		
			Percent of Dominant Species		
			That Are OBL, FACW, or FAC: 20.0% (A/B		
			Prevalence Index worksheet:		
	=Total Cover		Total % Cover of: Multiply by:		
			OBL species 0 x 1 = 0		
10	Yes	FACU	FACW species 0 x 2 = 0		
			FAC species 5 x 3 = 15		
			· — —		
	<u>res</u>	FAC	' <del></del>		
			UPL species 10 x 5 = 50		
			Column Totals: 120 (A) 485 (B		
			Prevalence Index = B/A =4.04		
			Hydrophytic Vegetation Indicators:		
20	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation		
			2 - Dominance Test is >50%		
50	Yes	FACU	3 - Prevalence Index is ≤3.0 <sup>1</sup>		
10	No	FACU	4 - Morphological Adaptations <sup>1</sup> (Provide supporting		
10	No	FACU	data in Remarks or on a separate sheet)		
10	No	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)		
10	No	UPL	<u> </u>		
			<sup>1</sup> 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, regardles		
90	=Total Cover		of size, and woody plants less than 3.28 ft tall.		
			Woody vines – All woody vines greater than 3.28 ft i		
10	Yes	FACU	height.		
			Hydrophytic Vegetation		
			Present? Yes No X		
	10 5 5 5 	=Total Cover  10	=Total Cover  10		

SOIL Sampling Point 5B-K Upl

Profile Desc Depth	ription: (Describe : Matrix	to the de		<b>ument th</b> x Feature		ator or co	onfirm the absence o	of indicate	ors.)	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remark	(S
	40VD 0/0									_
0-10	10YR 3/3	100					Loamy/Clayey			
<sup>1</sup> Type: C=Co	ncentration D=Depl	letion RN	——— ∕I=Reduced Matrix, N	 IS=Masl	ked Sand	 d Grains	<sup>2</sup> I ocation: F	PI =Pore I	ining, M=Mat	rix
Hydric Soil I		iotion, rti	T TOUGOOG WIGHTX, N	io iviasi	itou ouric	oranio.			ematic Hydric	
Histosol			Dark Surface (	S7)					(LRR K, L, N	
	ipedon (A2)		Polyvalue Belo		ce (S8) (	LRR R.			lox (A16) ( <b>LR</b>	•
Black His			MLRA 149B		. (55)	,				(LRR K, L, R)
	n Sulfide (A4)		Thin Dark Surf	,	(LRR R	. MLRA 1		-	Surface (S8)	
	Layers (A5)		High Chroma S		-				e (S9) ( <b>LRR</b> K	
	Below Dark Surface	e (A11)	Loamy Mucky							(LRR K, L, R)
	rk Surface (A12)	,	Loamy Gleyed			, ,		-		(MLRA 149B)
	oodic (A17)		Depleted Matri		,					side MLRA 145)
	A 144A, 145, 149B)		Redox Dark Su		6)				k Surface (F2	
Sandy M	ucky Mineral (S1)		Depleted Dark	Surface	(F7)		Other (E	Explain in	Remarks)	
Sandy G	leyed Matrix (S4)		Redox Depress	sions (F	3)					
Sandy R	edox (S5)		Marl (F10) ( <b>LR</b>	RK,L)			<sup>3</sup> Indicate	ors of hyd	rophytic vege	tation and
Stripped	Matrix (S6)		Red Parent Ma	iterial (F	21) <b>(MLF</b>	RA 145)	wetla	nd hydrolc	ogy must be p	resent,
							unles	s disturbe	d or problema	atic.
Restrictive L	.ayer (if observed):									
Type: _	roc	k								
Depth (in	iches):	10					Hydric Soil Prese	nt?	Yes	No X
Remarks:				,						



Upland 5B-K- View facing east



**Upland 5B-K - Soils** 

Segment 9 – Package 5B

# **SITE PHOTOGRAPHS**

### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE Phase 5			
Applicant/Owner: CHA		State: <u>NY</u>	Sampling Point: <u>H-10</u>
Investigator(s): J. L. Williams, N. G. Dominic	Section, Township	, Range:	
Landform (hillslope, terrace, etc.):	Local relief (concave,	convex, none):	Slope (%):
Subregion (LRR or MLRA): <u>LRR - R</u>	Lat: <u>42°33'56.518"N</u>	Long: <u>73°51'29.665"W</u>	Datum: NAD83
Soil Map Unit Name:		NWI classifi	ication:_PEM
Are climatic / hydrologic conditions on the site typical			
Are Vegetation NO , Soil NO , or Hydrology N	IO significantly disturbed?	Are "Normal Circumstances"	present? Yes X No \(\sime\)
Are Vegetation NO , Soil NO , or Hydrology I		(If needed, explain any answe	
SUMMARY OF FINDINGS – Attach site	e map showing sampling poi	nt locations, transect	s, important features, etc.
	No Within a W	·	
Remarks: (Explain alternative procedures here or Identified as Wetland H-1 on we		ort text.	
HYDROLOGY		O d - m - li- di-	
Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; cf	neck all that apply)		cators (minimum of two required) Il Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)		atterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim L	
Saturation (A3)	Marl Deposits (B15)		n Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Bu	
☐ Sediment Deposits (B2) ☐ Drift Deposits (B3)	Oxidized Rhizospheres on Living Presence of Reduced Iron (C4)		Visible on Aerial Imagery (C9) Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled So	<del>-</del>	c Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aqu	
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	<del>_</del>	raphic Relief (D4)
Sparsely Vegetated Concave Surface (B8)		<u></u> FAC-Neutra	al Test (D5)
Field Observations:  Surface Water Present? Yes No [	Depth (inches):1"		
Water Table Present? Yes X No [	Depth (inches):6"		
Saturation Present? Yes No [	Depth (inches):	Wetland Hydrology Prese	ent? Yes 🗵 No 🗌
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring	ng well, aerial photos, previous inspec	lions), ii avaliable:	
Remarks:			
Drains into culturate under road			
Drains into culvert under road			

				_	ampling Point: <u>H-8</u>
<u>Tree Stratum</u> (Plot size: <u>30</u> )	Absolute % Cover	Dominan Species?	t Indicator Status	Dominance Test workshe	eet:
1				Number of Dominant Spec That Are OBL, FACW, or F	
2				, , ,	
3				Total Number of Dominant Species Across All Strata:	(B)
				·	
4				Percent of Dominant Spec That Are OBL, FACW, or F	ies FAC: (A/B
5				, , , ,	
6				Prevalence Index worksh	
7				Total % Cover of:	
		= Total Co	ver	OBL species	
Sapling/Shrub Stratum (Plot size: 15 )				FACW species	
1		-		FAC species	
2		-	_ =	UPL species	
3					
4					(5)
5		_	<u>-</u>	Prevalence Index =	B/A =
3		_	<u>-</u>	Hydrophytic Vegetation I	ndicators:
7				1 - Rapid Test for Hyd	rophytic Vegetation
		= Total Co		2 - Dominance Test is	>50%
Herb Stratum (Plot size: 5 )				3 - Prevalence Index is	
1. Phragmites australis	90	YES	FACW		ptations <sup>1</sup> (Provide supportin on a separate sheet)
2				Problematic Hydrophy	tic Vegetation¹ (Explain)
3				<sup>1</sup> Indicators of hydric soil ar	nd wetland hydrology must
4				be present, unless disturbe	
5				Definitions of Vegetation	Strata:
6.				Tree Woody plants 2 in	(7.6 cm) or more in diamete
				at breast height (DBH), reg	
7				Sapling/shrub – Woody p	lants less than 3 in DBH
3				and greater than or equal t	
9		· <u>-</u>		Herb – All herbaceous (non-	woody) plants, regardless of
10		-	- <del>-</del>	size, and woody plants less th	
11			- <del>-</del>	Woody vines – All woody vi	nes greater than 3.28 ft in
12		-		height.	
	<u>90</u>	= Total Co	ver		
Woody Vine Stratum (Plot size: 15 )					
1			_ =		
2			_ =	Hydrophytic Vegetation	_
3				Present? Yes _	✓ No
4.		_	<u> </u>		
		= Total Co	ver		

SOIL Sampling Point: FB-TS1

Profile Desc	ription: (Describe	to the de	oth needed to docur	nent the i	ndicator	or confirm	the absence	of indicators.)
Depth	Matrix			x Features	<u>s</u> _ 1	. 2		
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	Remarks
0-10	10YR 4/2	100					SCL	restrictive layer at 10"
					-	-		
								·
					-	=		
					<del>-</del>	<del>-</del>		<del></del>
					<u>-                                     </u>			
					-	_		
					-	-		
1Type: C=Cc	ncentration D=Den	letion RM	=Reduced Matrix, M	S=Macked	Sand Gra	nine	<sup>2</sup> Location	n: PL=Pore Lining, M=Matrix.
Hydric Soil I		iction, raiv	-Reduced Matrix, Mi	J-Masked	Janu Ore	aii i 3 .		s for Problematic Hydric Soils <sup>3</sup> :
Histosol			Polyvalue Belov	w Surface	(S8) ( <b>LRF</b>	R.	_	Muck (A10) ( <b>LRR K</b> , <b>L, MLRA 149B</b> )
	oipedon (A2)		MLRA 149B		(00) (=:::	,		Prairie Redox (A16) (LRR K, L, R)
Black His			Thin Dark Surfa				_	Mucky Peat or Peat (S3) ( <b>LRR K, L, R</b> )
	n Sulfide (A4)		Loamy Mucky N			, L)		Surface (S7) (LRR K, L, M)
	Layers (A5)	- (0.44)	Loamy Gleyed		)			alue Below Surface (S8) (LRR K, L)
	l Below Dark Surfac irk Surface (A12)	e (ATT)	Depleted Matrix Redox Dark Su					Dark Surface (S9) ( <b>LRR K</b> , <b>L</b> )  Manganese Masses (F12) ( <b>LRR K</b> , <b>L</b> , <b>R</b> )
	lucky Mineral (S1)		Depleted Dark					nont Floodplain Soils (F19) (MLRA 149B)
	leyed Matrix (S4)		Redox Depress	•	- /		_	Spodic (TA6) ( <b>MLRA 144A, 145, 149B</b> )
🗵 Sandy R	edox (S5)						Red P	Parent Material (F21)
	Matrix (S6)							Shallow Dark Surface (TF12)
<u> </u>	face (S7) ( <b>LRR R, N</b>	ILRA 149	<b>B</b> )				<u> </u>	(Explain in Remarks)
<sup>3</sup> Indicators of	hydrophytic vegetat	ion and w	etland hydrology mus	t he nrese	ant unless	: disturbed	or problemati	C
	ayer (if observed):		etiana nyarology mas	st be prese	int, unicoo	distarbed	T probleman	<u>.                                    </u>
Type: rock								
Depth (inc			•				Hydric Soil	l Present? Yes 🔲 No 🗵
Remarks:	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		-				Tiyano oon	11000III. 100 <u>L.</u> 110 <u>E.</u>
Remarks.								



Wetland H (Feura Bush) - View facing South



Wetland H (Feura Bush) - Soils

Phase 5

# **SITE PHOTOGRAPHS**

### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE Phase 5	City/County: Feura	Bush	Sampling Date: 11/03/2021
Applicant/Owner: CHA		State: <u>NY</u>	Sampling Point: <u>I-6</u>
Investigator(s): J. L. Williams, N. G. Dominic	Section, Township,	Range:	
Landform (hillslope, terrace, etc.):	Local relief (concave, o	convex, none):	Slope (%):
Subregion (LRR or MLRA): <u>LRR - R</u> Lat:		Long:	Datum: <u>NAD83</u>
Soil Map Unit Name:		NWI classific	cation: PEM
Are climatic / hydrologic conditions on the site typical for			
Are Vegetation NO , Soil NO , or Hydrology NO	significantly disturbed? A	ւre "Normal Circumstances" բ	present? Yes 🗵 No 🔲
Are Vegetation NO , Soil NO , or Hydrology NO		f needed, explain any answe	
SUMMARY OF FINDINGS – Attach site ma	ap showing sampling poir	ıt locations, transects	, important features, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Yes   Yes   Yes   Yes   Yes   X	No Is the Samp within a We	<b>.</b>	No 🗆
Wetland Hydrology Present? Yes X  Remarks: (Explain alternative procedures here or in a		nal Wetland Site ID: Wetland	I - Feura Bush
Identified as Wetland I-1 on wetland		t text.	
HYDROLOGY			
Wetland Hydrology Indicators:			ators (minimum of two required)
Primary Indicators (minimum of one is required; check	•	Surface Soil	
	Water-Stained Leaves (B9) Aquatic Fauna (B13)	<u> </u>	
	Marl Deposits (B15)		Water Table (C2)
	Hydrogen Sulfide Odor (C1)	Crayfish Buri	
	Oxidized Rhizospheres on Living R	loots (C3) 🔲 Saturation Vi	isible on Aerial Imagery (C9)
1 <del>-</del>	Presence of Reduced Iron (C4)	=	tressed Plants (D1)
	Recent Iron Reduction in Tilled Soil		Position (D2)
	Thin Muck Surface (C7) Other (Explain in Remarks)	Shallow Aqui	aphic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	Carlor (Explain in Normanio)	FAC-Neutral	
Field Observations:		<u> </u>	
Surface Water Present? Yes X No X	Depth (inches):1"		
Water Table Present? Yes X No X	Depth (inches):3"		
Saturation Present? Yes X No \( \bigcup \)	Depth (inches):surface	Wetland Hydrology Preser	nt? Yes 🗵 No 🗌
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring w	l ⁄ell, aerial photos, previous inspecti	ons), if available:	
Remarks:			
Drains into culvert under road			

					ampling Point: <u>I-6</u>
Tree Stratum (Plot size: 30 )	Absolute % Cover	Dominant Species?		Dominance Test worksho	
1. <u>Acer rubrum</u>	20	YES	FACU	Number of Dominant Spec That Are OBL, FACW, or F	
2.			<u>-</u>	, , ,	
3				Total Number of Dominant Species Across All Strata:	(B)
				Devent of Dominant Cons	
5				Percent of Dominant Spec That Are OBL, FACW, or F	FAC: (A/B
S				Prevalence Index worksh	
7				Total % Cover of:	
4-	20	= Total Co	ver	OBL species	
Sapling/Shrub Stratum (Plot size: 15 )				FACW species	
<u>. Lonicera sp.</u>				FAC species	
<u>.                                    </u>		-		UPL species	
3					(A)(B)
k <u>.                                    </u>					(5)
5				Prevalence Index =	B/A =
3		_	<u>-</u>	Hydrophytic Vegetation I	ndicators:
7				1 - Rapid Test for Hyd	rophytic Vegetation
		= Total Co		2 - Dominance Test is	>50%
Herb Stratum (Plot size: 5 )		•		3 - Prevalence Index is	
Phragmites australis	90	VES	FACW/		ptations <sup>1</sup> (Provide supportin · on a separate sheet)
<u></u>				Problematic Hydrophy	
				<del> </del>	
3				<sup>1</sup> Indicators of hydric soil ar be present, unless disturbe	
4				Definitions of Vegetation	Strata:
5					
3				Tree – Woody plants 3 in. at breast height (DBH), reg	(7.6 cm) or more in diamete pardless of height.
7					
3				Sapling/shrub – Woody p and greater than or equal t	
9				Herb – All herbaceous (non-	
10		-		size, and woody plants less th	
l1			<u> </u>	Woody vines – All woody vi	nes greater than 3.28 ft in
12			<u>-</u>	height.	nes greater than 3.26 ft in
	90	= Total Co	ver		
Noody Vine Stratum (Plot size: 15 )					
l <u>.</u>		_			
2.		_	=	Hydrophytic	
3.		_		Vegetation Present? Yes _	⊠ No □
4.					
''-		= Total Co			
		1014100	VCI		

SOIL Sampling Point: 1-6

Profile Desc	ription: (Describe	to the de	oth needed to docur	nent the i	ndicator	or confirm	the absence of indicators.)	
Depth	Matrix			x Features	<u>s</u>	0		
(inches)	Color (moist)	%	Color (moist)		Type <sup>1</sup>	Loc <sup>2</sup>	Texture Remarks	_
0-10	10YR 4/2	100						
					_	_		
								—
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					-	-		
1							2	—
Hydric Soil I		letion, RIV	=Reduced Matrix, MS	S=Masked	Sand Gra	ains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> :	
_				0 (	(00) (LDF		_	
Histosol			Polyvalue Below		(S8) (LRF	κκ,	2 cm Muck (A10) ( <b>LRR K, L, MLRA 149B</b> )  Coast Prairie Redox (A16) ( <b>LRR K, L, R</b> )	
Black His	oipedon (A2)		Thin Dark Surfa		DD D MI	PA 1/0R\		
	n Sulfide (A4)		Loamy Mucky N				Dark Surface (S7) (LRR K, L, M)	
	Layers (A5)		Loamy Gleyed			, <b>-</b> /	Polyvalue Below Surface (S8) (LRR K, L)	
	Below Dark Surface	e (A11)	Depleted Matrix		,		Thin Dark Surface (S9) (LRR K, L)	
	rk Surface (A12)	,	Redox Dark Su				Iron-Manganese Masses (F12) (LRR K, L, R)	)
Sandy M	lucky Mineral (S1)		Depleted Dark	Surface (F	7)		Piedmont Floodplain Soils (F19) (MLRA 1498	
	leyed Matrix (S4)		Redox Depress	ions (F8)			Mesic Spodic (TA6) ( <b>MLRA 144A, 145, 149B</b>	•)
	edox (S5)						Red Parent Material (F21)	
	Matrix (S6)							
L Dark Sur	face (S7) ( <b>LRR R, N</b>	ILRA 149	<b>B</b> )				U Other (Explain in Remarks)	
3								
			etland hydrology mus	t be prese	ent, unless	disturbed of	or problematic.	
	ayer (if observed):							
Type: <u>rock</u>			-					
Depth (inc	ches): <u>10"</u>		-				Hydric Soil Present? Yes 🔲 No 🗵	-
Remarks:								



Wetland I-1 - View facing south.



Wetland I-1 - Soils

Segment 9 – Package 5B

**SITE PHOTOGRAPHS** 

#### **U.S. Army Corps of Engineers**

#### WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

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

Project/Site: CHPE	City/County:	: Bethlehem/Albany County	Sampling Date: 2/27/2023			
Applicant/Owner: TDI		State: NY	Sampling Point: H & I Upl			
Investigator(s): C. Scrivner & J. Greaves	Sec	ction, Township, Range:	<u> </u>			
Landform (hillside, terrace, etc.): Hillslope		ve, convex, none): Convex	Slope %: 35			
Subregion (LRR or MLRA): LRR R Lat: 42.		Long: -73.845876	 Datum: WGS84			
Soil Map Unit Name: ScA - Scio silt loam, 0 to 3 percent slo		NWI classification:				
Are climatic / hydrologic conditions on the site typical for this			explain in Remarks.)			
Are Vegetation, Soil, or Hydrologysig		Are "Normal Circumstances" preser				
Are Vegetation , Soil , or Hydrology nat		If needed, explain any answers in I				
<del></del>		•	,			
SUMMARY OF FINDINGS – Attach site map sh	nowing sampling poir	nt locations, transects, imp	portant features, etc.			
Hydrophytic Vegetation Present? Yes N	lo X Is the Sar	mpled Area				
	lo X within a V		No X			
Wetland Hydrology Present? Yes N	lo X If yes, opt	ional Wetland Site ID:				
Remarks: (Explain alternative procedures here or in a sepa	arate report.)					
Shared upland plot for Wetlands H and I. Mowed roadside.						
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indicators (m	inimum of two required)			
Primary Indicators (minimum of one is required; check all the	nat apply)	Surface Soil Cracks	<del></del>			
-	ained Leaves (B9)	Drainage Patterns (E	• •			
<del></del>	Fauna (B13)	Moss Trim Lines (B1				
<del></del>	osits (B15)	Dry-Season Water T	•			
Water Marks (B1) Hydroger	n Sulfide Odor (C1)	Crayfish Burrows (C	8)			
Sediment Deposits (B2) Oxidized	Rhizospheres on Living Roc	ots (C3)Saturation Visible or	Aerial Imagery (C9)			
Drift Deposits (B3) Presence	e of Reduced Iron (C4)					
Algal Mat or Crust (B4) Recent Ir	on Reduction in Tilled Soils	Tilled Soils (C6) Geomorphic Position (D2)				
Iron Deposits (B5) Thin Muc	ck Surface (C7)	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7) Other (Ex	xplain in Remarks)	Microtopographic Re	elief (D4)			
Sparsely Vegetated Concave Surface (B8)		FAC-Neutral Test (D	5)			
Field Observations:						
Surface Water Present? Yes No X [	Depth (inches):					
	Depth (inches):					
Saturation Present? Yes No X [	Depth (inches):	Wetland Hydrology Present?	Yes No _X_			
(includes capillary fringe)		22 5 26 9 11				
Describe Recorded Data (stream gauge, monitoring well, as	erial photos, previous inspec	tions), it available:				
Remarks:						

Tree Stratum (Plot size:30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species That Are OBL, FACW, or FAC:(A)
3. 4.				Total Number of Dominant Species Across All Strata:(B)
5. 6.				Percent of Dominant Species That Are OBL, FACW, or FAC:50.0%(A/B)
7				Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size:15')				OBL species0 x1 =0
1.				FACW species0 x 2 =0
2.				FAC species35 x 3 =105
3				FACU species 55 x 4 = 220
4				UPL species10 x 5 =50
5.				Column Totals: 100 (A) 375 (B)
6.				Prevalence Index = B/A = 3.75
7.				Hydrophytic Vegetation Indicators:
		=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5' )				2 - Dominance Test is >50%
1. Poa pratensis	35	Yes	FACU	3 - Prevalence Index is ≤3.0 <sup>1</sup>
2. Setaria pumila	35	Yes	FAC	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
3. Cichorium intybus	10	No	FACU	data in Remarks or on a separate sheet)
4. Taraxacum officinale	10	No	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. Centaurea stoebe	10	No	UPL	
6.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7				Definitions of Vegetation Strata:
8.				_
9.				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
10.				
11.				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
12				Herb – All herbaceous (non-woody) plants, regardless
	100	=Total Cover		of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size: 30' ) 1.				<b>Woody vines</b> – All woody vines greater than 3.28 ft in height.
2.				
3.				Hydrophytic Vegetation
4.				Present? Yes No X
		=Total Cover		
Remarks: (Include photo numbers here or on a sepa	rate sheet.)			

Sampling Point:

H & I Upl

SOIL Sampling Point H & I Upl

Profile Desc Depth	ription: (Describe to Matrix	o the dep		cument the dox Featur		ator or co	onfirm the absence of	f indicators.)		
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	S	
0-8	10YR 2/1	100	, ,				Loamy/Clayey			
8-11	10YR 4/3	75	10YR 4/6	5	С	m	Loamy/Clayey	Distinct redox con	centrations	
			7.5YR 4/6	20	С	m		Prominent redox co	ncentrations	
¹Type: C=Cd	oncentration, D=Deple	etion, RM	=Reduced Matrix	, MS=Mas	ked San	d Grains.	<sup>2</sup> Location: PL	L=Pore Lining, M=Matri	ix.	
Hydric Soil	Indicators:						Indicators fo	or Problematic Hydric	Soils <sup>3</sup> :	
Histosol			Dark Surface	e (S7)			2 cm Mud	ick (A10) ( <b>LRR K, L, M</b> I	LRA 149B)	
Histic Ep	pipedon (A2)		Polyvalue Be	low Surfa	ce (S8) (	LRR R,	Coast Pra	rairie Redox (A16) ( <b>LRF</b>	R K, L, R)	
Black Hi	stic (A3)		MLRA 149	<b>B</b> )			5 cm Mud	icky Peat or Peat (S3) (	LRR K, L, R)	
Hydroge	n Sulfide (A4)		Thin Dark Su	ırface (S9)	(LRR R	, MLRA 1	149B) Polyvalue	e Below Surface (S8) (I	LRR K, L)	
Stratified	l Layers (A5)		High Chroma	a Sands (S	311) ( <b>LR</b> I	R K, L)	Thin Dark	k Surface (S9) ( <b>LRR K</b>	, <b>L</b> )	
Depleted	Below Dark Surface	(A11)	Loamy Muck	y Mineral	(F1) ( <b>LR</b>	RK, L)	Iron-Man	nganese Masses (F12)	(LRR K, L, R)	
Thick Da	ark Surface (A12)		Loamy Gleye	ed Matrix (	F2)		Piedmon	nt Floodplain Soils (F19	) (MLRA 149B)	
Mesic S	oodic (A17)		Depleted Ma	trix (F3)			Red Pare	ent Material (F21) <b>(outs</b>	side MLRA 145)	
— (MLR	A 144A, 145, 149B)		Redox Dark	Surface (F	<sup>-</sup> 6)		Very Sha	allow Dark Surface (F22	2)	
Sandy M	lucky Mineral (S1)		Depleted Da	rk Surface	(F7)		Other (Ex	xplain in Remarks)		
Sandy G	leyed Matrix (S4)		Redox Depre	essions (F	8)					
_	edox (S5)		Marl (F10) (L	RR K, L)			<sup>3</sup> Indicators of hydrophytic vegetation and			
	Matrix (S6)		Red Parent N		21) <b>(ML</b> I	RA 145)	wetland hydrology must be present, unless disturbed or problematic.			
Restrictive I	_ayer (if observed):						unless	disturbed of problema	uc.	
Туре:	rock									
Depth (ir	nches):	11					Hydric Soil Presen	nt? Yes	NoX	
Remarks:										



Upland H & I- View facing north



Upland H & I - Soils

Segment 9 – Package 5B

# SITE PHOTOGRAPHS

### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

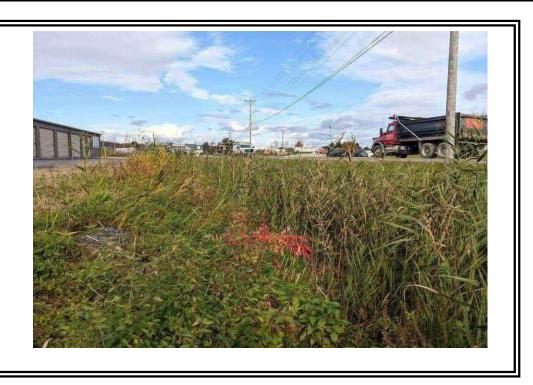
Project/Site: CHPE Phase 5			
Applicant/Owner: CHA		State: <u>NY</u>	Sampling Point: <u>G-7</u>
Investigator(s): J. L. Williams, N. G. Dominic	Section, Township	, Range:	
Landform (hillslope, terrace, etc.):	Local relief (concave,	convex, none):	Slope (%):
Subregion (LRR or MLRA): <u>LRR - R</u> I	_at: <u>42°34'34.313" N</u>	Long: <u>73°52'8.925" W</u>	Datum: NAD83
Soil Map Unit Name:		NWI classific	cation: PEM
Are climatic / hydrologic conditions on the site typical	al for this time of year? Yes 🔲 1	No (If no, explain in F	Remarks.)
Are Vegetation NO, Soil NO, or Hydrology N	Significantly disturbed?	Are "Normal Circumstances"	present? Yes 🗵 No 🔲
Are Vegetation NO, Soil NO, or Hydrology N	NO naturally problematic?	(If needed, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site	map showing sampling poi	nt locations, transects	s, important features, etc.
Hydric Soil Present? Yes		pled Area etland? Yes X onal Wetland Site ID: Wetland	<b>No</b>
PEM Wetland G  Identified as Wetland G-1 on wet		ort text.	
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one is required; ch	neck all that apply)	Surface Soil	Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	<u>∐</u> Drainage Pa	
High Water Table (A2)  Saturation (A3)	Aquatic Fauna (B13)	Moss Trim L	• •
☑ Saturation (A3)     ☐ Water Marks (B1)	☐ Marl Deposits (B15) ☐ Hydrogen Sulfide Odor (C1)	Crayfish Bur	Water Table (C2)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living		isible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)		stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled So	oils (C6) 🔲 Geomorphic	Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aqu	itard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	<del>_</del>	aphic Relief (D4)
☐ Sparsely Vegetated Concave Surface (B8)		<u></u> FAC-Neutra	Test (D5)
Field Observations:  Surface Water Present?  Yes X No [	Double (in also a):4#		
Surface Water Present? Yes X No Water Table Present? Yes X No C	Depth (inches):1" Depth (inches):6"		
Saturation Present? Yes X No [	Depth (inches): surface	Wetland Hydrology Prese	nt? Yes 🛛 No 🗌
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitorir	ng well, aerial photos, previous inspec	lions), if available:	
Remarks:			
Drains into culvert under road			

<u>Tree Stratum</u> (Plot size: <u>30</u> )	Absolute % Cover	Dominant Indicator Species? Status	Dominance Test worksheet:
1. Acer rubrum	20	YES FAC	Number of Dominant Species
2. Quercus rubra			That Are OBL, FACW, or FAC: (A)
			Total Number of Dominant Species Across All Strata: (B)
3			Species Across Ali Strata: (B)
4			Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
5			
6		<u>-</u>	Prevalence Index worksheet:
7		<u>-</u> <u>-</u>	Total % Cover of: Multiply by:
	50	= Total Cover	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15			FACW species x 2 =
1			FAC species x 3 =
2			FACU species x 4 =
3			UPL species x 5 =
			Coldifii Totals: (A) (B)
4			Prevalence Index = R/A =
5			
6			Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation
7		<del>-</del>	2 - Dominance Test is >50%
		= Total Cover	☐ 3 - Prevalence Index is ≤3.0¹
Herb Stratum (Plot size: 5			4 - Morphological Adaptations <sup>1</sup> (Provide supporting
1. Phragmites australis	90	YES FACW	data in Remarks or on a separate sheet)
2		<u> </u>	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
3			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4.			be present, unless disturbed or problematic.
5			Definitions of Vegetation Strata:
			To a Manda de de 2 in (7 C and) an and in discrete
6			<b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
7			
8			Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9		<u>-</u>	Howh All howhoosons (non-woods) plants recordless of
10		<u>-</u> -	<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11		<u>-</u> <u>-</u>	Washing All and decimal and the 2.29 ft in
12			<b>Woody vines</b> – All woody vines greater than 3.28 ft in height.
	90	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.		_	
2.			Hydrophytic
		<u> </u>	Vegetation Present?  Yes ⊠ No □
3		<u> </u>	Tresent.
4	-	<u> </u>	
		= Total Cover	
Remarks: (Include photo numbers here or on a separate	sheet.)		

Sampling Point: G-7

SOIL Sampling Point: G-7

Profile Desc	ription: (Describ	e to the de	oth needed to document the i		or confirm	n the absence o	of indicators.)
Depth (inches)	Matrix Color (moist)	%	Redox Feature Color (moist) %	<u>s</u> _Type <sup>1</sup> _	Loc <sup>2</sup>	Texture	Remarks
0-2	10YR 2/1	100	Color (Holst) 76	<u>rype</u>			restrictive layer at 10"
2-10	10YR 3/1	100					restrictive layer at 10"
2-10	1011(3/1					JICL .	restrictive layer at 10
	-				-		
				-			
				-			
						. <u></u>	
				-	-		
				-	-		
-							
-			· <u></u>				
-				-	<u>-</u>		
1				<del>-</del>	-	2	
'Type: C=Ce Hydric Soil		epletion, RM	I=Reduced Matrix, MS=Masked	I Sand Gr	ains.		PL=Pore Lining, M=Matrix.  for Problematic Hydric Soils <sup>3</sup> :
Histosol Histic Ep Black Hi Hydroge Stratified Depleted Thick Da Sandy M Sandy G Stripped Dark Su	(A1) pipedon (A2) stic (A3) on Sulfide (A4) d Layers (A5) d Below Dark Surfa ark Surface (A12) Mucky Mineral (S1) Beleyed Matrix (S4) Redox (S5) Matrix (S6) rface (S7) (LRR R,	MLRA 149	Polyvalue Below Surface MLRA 149B) Thin Dark Surface (S9) (I Loamy Mucky Mineral (F- Loamy Gleyed Matrix (F2 Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F6) Redox Depressions (F8)	LRR R, M 1) (LRR K )	LRA 149B , L)	2 cm Mill Coast P Coas	uck (A10) (LRR K, L, MLRA 149B) Prairie Redox (A16) (LRR K, L, R) ucky Peat or Peat (S3) (LRR K, L, R) urface (S7) (LRR K, L, M) ue Below Surface (S8) (LRR K, L) urk Surface (S9) (LRR K, L) unganese Masses (F12) (LRR K, L, R) unt Floodplain Soils (F19) (MLRA 149B) spodic (TA6) (MLRA 144A, 145, 149B) urent Material (F21) uallow Dark Surface (TF12) Explain in Remarks)
Remarks:							



Wetland G (Feura Bush) - View facing North



Wetland G (Feura Bush) - Soils

Phase 5

# **SITE PHOTOGRAPHS**

#### U.S. Army Corps of Engineers

#### WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

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

Project/Site: CHPE	(	City/County: Bethleh	nem/Albany County	Sampling Date: <u>2/27/2023</u>
Applicant/Owner: TDI			State: NY	Sampling Point: G Wet
Investigator(s): C. Scrivner & J. Greaves		Section, To	wnship, Range:	<u> </u>
Landform (hillside, terrace, etc.): Hillslope	Local re	elief (concave, conve	ex. none). Concave	Slope %: 2
Subregion (LRR or MLRA): LRR R	Lat: 42.555477	•	-73.845199	 Datum: WGS84
Soil Map Unit Name: ScA - Scio silt loam, 01			NWI classification:	<del></del>
Are climatic / hydrologic conditions on the site		Yes x		explain in Remarks.)
, ,	**		` ` '	,
Are Vegetation, Soil, or Hydrol			nal Circumstances" prese	
Are Vegetation, Soil, or Hydrol SUMMARY OF FINDINGS – Attach			d, explain any answers in	•
OUMMANT OF FREE TOO - AMOUNT	Site map snowing same			iportant reatures, etc.
Hydrophytic Vegetation Present?	Yes X No	Is the Sampled A		
Hydric Soil Present?	Yes X No	within a Wetland		No
Wetland Hydrology Present?	Yes X No	If yes, optional We	tland Site ID:	
Remarks: (Explain alternative procedures he	ere or in a separate report.)			
Red maple hardwood swamp.				
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indicators (m	ninimum of two required)
Primary Indicators (minimum of one is require	ed; check all that apply)		Surface Soil Cracks	s (B6)
Surface Water (A1)	Water-Stained Leaves (BS	9)	Drainage Patterns (I	B10)
X High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B	•
X Saturation (A3)	Marl Deposits (B15)		Dry-Season Water	
— Water Marks (B1)	Hydrogen Sulfide Odor (C	•	Crayfish Burrows (C	
Sediment Deposits (B2)	Oxidized Rhizospheres or			n Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron	, ,	Stunted or Stressed	
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (Co)	X Geomorphic Positio	
Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7)	Thin Muck Surface (C7) Other (Explain in Remarks	·a1	Shallow Aquitard (D Microtopographic Re	
Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B	· <del></del>	s)	X FAC-Neutral Test (	, ,
Field Observations:	0)	<u> </u>	<u> </u>	
Surface Water Present? Yes	No X Depth (inches):			
Water Table Present? Yes X	No Depth (inches):	12		
Saturation Present? Yes X	No Depth (inches):		d Hydrology Present?	Yes X No
(includes capillary fringe)	,,,,,,		w,	
Describe Recorded Data (stream gauge, mor	nitoring well, aerial photos, prev	vious inspections), if	available:	
Remarks:				

ree Stratum (Plot size: 30' )	Absolute	Dominant	Localita a Alexan		
	% Cover	Species?	Indicator Status	Dominance Test worksheet:	
Ulmus americana	50	Yes	FACW	Number of Dominant Species	
Salix fragilis	10	No	UPL	That Are OBL, FACW, or FAC:	5 (A)
·				Total Number of Dominant	
				Species Across All Strata:	5 (B)
·				Percent of Dominant Species	
· <u></u>				That Are OBL, FACW, or FAC:1	00.0% (A/B
·				Prevalence Index worksheet:	
	60	=Total Cover		Total % Cover of: Mu	ıltiply by:
apling/Shrub Stratum (Plot size:15')				OBL species 20 x 1 =	20
Cornus racemosa	30	Yes	FAC	FACW species 150 x 2 =	300
Cornus amomum	20	Yes	FACW	FAC species 35 x 3 =	105
Lonicera morrowii	10	No	<u>FACU</u>	FACU species 10 x 4 =	40
Rhamnus cathartica	5	No	FAC	UPL species10 x 5 =	50
· <u></u>				Column Totals: 225 (A)	515 (B
·				Prevalence Index = B/A =	2.29
·				Hydrophytic Vegetation Indicators:	
	65	=Total Cover		1 - Rapid Test for Hydrophytic Ve	getation
erb Stratum (Plot size: 5')				X 2 - Dominance Test is >50%	
Onoclea sensibilis	70	Yes	FACW	X 3 - Prevalence Index is ≤3.0 <sup>1</sup>	
Lythrum salicaria	20	Yes	OBL	4 - Morphological Adaptations <sup>1</sup> (Pi	
Solidago gigantea	10	No	FACW	data in Remarks or on a separa	ate sheet)
				Problematic Hydrophytic Vegetation	on <sup>1</sup> (Explain)
				<sup>1</sup> Indicators of hydric soil and wetland he present, unless disturbed or proble	
				Definitions of Vegetation Strata:	
				Tree – Woody plants 3 in. (7.6 cm) or	moro in
		<u> </u>		diameter at breast height (DBH), regal	
0.				Sapling/shrub – Woody plants less th	nan 3 in DRH
1				and greater than or equal to 3.28 ft (1	
2				Herb – All herbaceous (non-woody) pl	lante rogardloe
	100	=Total Cover		of size, and woody plants less than 3.2	
Voody Vine Stratum (Plot size:30')		-		Woody vines – All woody vines greate	er than 3 28 ft i
·				height.	ei tilali 3.20 it ii
					<del></del>
				Hydrophytic Vegetation	
		- <del> </del>		Present? Yes X No	
		=Total Cover			

SOIL Sampling Point G Wet

Profile Desc Depth	cription: (Describe to Matrix	the dep		ument th x Featur		ator or co	onfirm the absence of indicators.)	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture Remarks	3
0-11	2.5Y 3/1	95	2.5Y 4/3	5	С	m	Loamy/Clayey Distinct redox cond	entrations
11-16	2.5Y 4/1	70	2.5Y 5/3	10	c	m_	Loamy/Clayey Distinct redox cond	entrations
			10YR 4/6		c	<u>m</u>	Prominent redox cor	ncentrations
				_		_		
¹Type: C=Co	oncentration, D=Deple	tion, RM	=Reduced Matrix, N	 √S=Masl	ked San	d Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix	X.
Hydric Soil	Indicators:						Indicators for Problematic Hydric	Soils <sup>3</sup> :
Histosol	(A1)		Dark Surface (	(S7)			2 cm Muck (A10) (LRR K, L, ML	_RA 149B)
—— Histic Ep	pipedon (A2)		Polyvalue Belo	w Surfa	ce (S8) (	LRR R,	Coast Prairie Redox (A16) (LRR	K, L, R)
Black Histic (A3)			MLRA 149B		. , ,		5 cm Mucky Peat or Peat (S3) (I	•
	n Sulfide (A4)		Thin Dark Surf	ace (S9)	(LRR R	, MLRA 1		
	Layers (A5)		—— High Chroma S				Thin Dark Surface (S9) (LRR K,	•
	Below Dark Surface	(A11)	Loamy Mucky				Iron-Manganese Masses (F12) (	•
	ark Surface (A12)	,	Loamy Gleyed			, ,	Piedmont Floodplain Soils (F19)	
	podic (A17)		Depleted Matri		,		Red Parent Material (F21) (outs	
	A 144A, 145, 149B)		X Redox Dark Su		6)		Very Shallow Dark Surface (F22	
	lucky Mineral (S1)		—— Depleted Dark	-	-		Other (Explain in Remarks)	,
	sleyed Matrix (S4)		X Redox Depress					
	ledox (S5)		Marl (F10) ( <b>LR</b>	•	-,		<sup>3</sup> Indicators of hydrophytic vegeta	ation and
	Matrix (S6)		Red Parent Ma		21) <b>(MLF</b>	RA 145)	wetland hydrology must be pre unless disturbed or problemati	esent,
	Layer (if observed):						annos alstanzos or prozionian	
Type:								
Depth (ir	nches):						Hydric Soil Present? Yes X	No
Remarks:								



Wetland G (PFO) - View facing east



Wetland G (PFO) - Soils

**SITE PHOTOGRAPHS** 

Segment 9 – Package 5B

#### U.S. Army Corps of Engineers

#### WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

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

Project/Site: CHPE		City/County: Bethleh	em/Albany County	Sampling Date: <u>2/27/2023</u>
Applicant/Owner: TDI			State: NY	Sampling Point: G Upl
Investigator(s): C. Scrivner & J. Greaves		Section, To	——— wnship, Range:	<u> </u>
Landform (hillside, terrace, etc.): Hillslope	Local re	elief (concave, conve	x, none): Concave	Slope %: 40
Subregion (LRR or MLRA): LRR R	Lat: 42.555591	•	-73.845415	 Datum: WGS84
Soil Map Unit Name: ScA - Scio silt loam, 0			NWI classification:	
Are climatic / hydrologic conditions on the site		Yes x	<del></del>	explain in Remarks.)
Are Vegetation , Soil , or Hydrol	,,	· · · · · · · · · · · · · · · · · · ·	nal Circumstances" prese	
			·	
Are Vegetation, Soil, or Hydrol	<u> </u>		d, explain any answers in	•
SUMMARY OF FINDINGS – Attach	site map snowing samp	pling point local	tions, transects, iii	iportant reatures, etc.
Hydrophytic Vegetation Present?	Yes No _X	Is the Sampled A	rea	
Hydric Soil Present?	Yes No X	within a Wetland		No X
Wetland Hydrology Present?	Yes No _X	If yes, optional We	tland Site ID:	
Remarks: (Explain alternative procedures he	ere or in a separate report.)			
Mowed roadside.				
HYDROLOGY				
			O:d Indicatoro (n	-tt
Wetland Hydrology Indicators:  Primary Indicators (minimum of one is require	ad: check all that annly)		Surface Soil Cracks	ninimum of two required)
Surface Water (A1)	Water-Stained Leaves (B		Drainage Patterns (	
High Water Table (A2)	Aquatic Fauna (B13)	9)	Moss Trim Lines (B	·
Saturation (A3)	Marl Deposits (B15)		Dry-Season Water	·
Water Marks (B1)	Hydrogen Sulfide Odor (C	C1)	Crayfish Burrows (C	
Sediment Deposits (B2)	Oxidized Rhizospheres or	•		n Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron		Stunted or Stressed	=
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (C6)	Geomorphic Position	on (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquitard (D	03)
Inundation Visible on Aerial Imagery (B7	· —	(s)	Microtopographic R	, ,
Sparsely Vegetated Concave Surface (B	8)	<u>.</u>	FAC-Neutral Test (I	D5)
Field Observations:				
Surface Water Present? Yes	No X Depth (inches):			
	No X Depth (inches):			N V
Saturation Present? Yes	No X Depth (inches):	Wetlan	d Hydrology Present?	Yes No _X_
(includes capillary fringe)  Describe Recorded Data (stream gauge, more	nitering well perial photos prev	vious inspections) if	available:	
Describe Necorded Data (Stream gauge, mor	illolling well, aerial priotos, pro-	vious irispections, ir	avalianie.	
Remarks:				

#### **VEGETATION** – Use scientific names of plants. Sampling Point: G Upl Absolute Indicator Dominant Tree Stratum (Plot size: 30') % Cover Species? Status **Dominance Test worksheet:** 1. **Number of Dominant Species** 2. That Are OBL, FACW, or FAC: 1 (A) 3. Total Number of Dominant 4. Species Across All Strata: 2 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 50.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Multiply by: Sapling/Shrub Stratum (Plot size: 15') OBL species x 1 = **FACW** species 0 x 2 = 0 2. FAC species 35 x 3 = 105 50 3. FACU species x 4 = 200 5 4. UPL species x 5 = 5. Column Totals: 90 (A) Prevalence Index = B/A = 3.67 6. **Hydrophytic Vegetation Indicators:** 7. 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% Herb Stratum (Plot size: 5') Poa pratensis Yes **FACU** 3 - Prevalence Index is ≤3.01 4 - Morphological Adaptations<sup>1</sup> (Provide supporting 2. 30 Yes FAC Setaria pumila data in Remarks or on a separate sheet) 5 3. Taraxacum officinale No **FACU** 4. Galium boreale 5 No FAC Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 5. Cichorium intybus 5 No **FACU** <sup>1</sup>Indicators of hydric soil and wetland hydrology must UPL 5 6. Centaurea stoebe No be present, unless disturbed or problematic. 7. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 9. diameter at breast height (DBH), regardless of height. 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 90 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 30' Woody vines - All woody vines greater than 3.28 ft in height. 2. Hydrophytic 3. Vegetation Yes \_\_\_ Present? No X =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point G Upl

Profile Desc Depth	ription: (Describe : Matrix	to the de		<b>ument th</b> x Feature		ator or co	onfirm the absence o	f indicato	ors.)	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remark	(S
					<del></del>					_
0-10	10YR 3/1	100					Loamy/Clayey			
										_
			-							
¹Type: C=Co	ncentration, D=Dep	letion. RN	/=Reduced Matrix, N	 //S=Masl	ked Sand	Grains.	<sup>2</sup> Location: F	L=Pore Li	ining, M=Mat	rix.
Hydric Soil I			, , , , , , , , , , , , , , , , , , , ,						matic Hydric	
Histosol			Dark Surface (	S7)					(LRR K, L, N	
	ipedon (A2)		Polyvalue Belo		ce (S8) (l	LRR R,			ox (A16) ( <b>LR</b>	•
Black His			MLRA 149B		, , ,					(LRR K, L, R)
	n Sulfide (A4)		Thin Dark Surf	ace (S9)	(LRR R	, MLRA 1		-	Surface (S8)	
Stratified	Layers (A5)		High Chroma S	Sands (S	311) ( <b>LRI</b>	R K, L)	Thin Da	rk Surface	(S9) (LRR K	ζ, <b>L</b> )
 Depleted	Below Dark Surface	e (A11)	Loamy Mucky	Mineral (	(F1) ( <b>LR</b> I	R K, L)	Iron-Ma	nganese N	Masses (F12)	(LRR K, L, R)
Thick Da	rk Surface (A12)		Loamy Gleyed	Matrix (	F2)		Piedmoi	nt Floodpla	ain Soils (F19	9) (MLRA 149B)
Mesic Sp	oodic (A17)		Depleted Matri	x (F3)			Red Par	ent Materi	ial (F21) <b>(out</b>	side MLRA 145)
(MLR	A 144A, 145, 149B)		Redox Dark Su	ırface (F	<sup>-</sup> 6)		Very Sh	allow Dark	k Surface (F2	2)
Sandy M	ucky Mineral (S1)		Depleted Dark	Surface	(F7)		Other (E	Explain in F	Remarks)	
Sandy G	leyed Matrix (S4)		Redox Depress	sions (F8	8)					
Sandy Re	edox (S5)		Marl (F10) ( <b>LR</b>	RK,L)			<sup>3</sup> Indicato	ors of hydr	ophytic vege	tation and
Stripped	Matrix (S6)		Red Parent Ma	iterial (F	21) <b>(MLF</b>	RA 145)	wetlar	nd hydrolo	gy must be p	resent,
							unles	s disturbed	d or problema	atic.
	.ayer (if observed):									
Type: _	roc	k								
Depth (in	iches):	10					Hydric Soil Prese	nt?	Yes	No X
Remarks:										



Upland G (PFO)- View facing south



Upland G (PFO) - Soils

Segment 9 – Package 5B

# **SITE PHOTOGRAPHS**

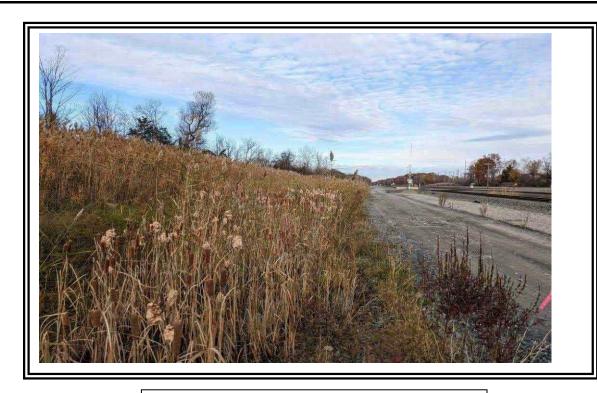
### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE Phase 5	City/County: Feura	a Bush	Sampling Date: <u>11/03/2021</u>
Applicant/Owner: CHA		State: <u>NY</u>	Sampling Point: <u>E-2</u>
Investigator(s): J. L. Williams, N. G. Dominic	Section, Township	, Range:	
Landform (hillslope, terrace, etc.):	Local relief (concave,	convex, none):	Slope (%):
Subregion (LRR or MLRA): <u>LRR - R</u> Lat:		Long:	Datum: NAD83
Soil Map Unit Name:		NWI classifi	cation: Upland
Are climatic / hydrologic conditions on the site typical for			
Are Vegetation NO , Soil NO , or Hydrology NO	significantly disturbed?	Are "Normal Circumstances"	present? Yes X No D
Are Vegetation NO , Soil NO , or Hydrology NO		(If needed, explain any answe	
SUMMARY OF FINDINGS – Attach site m	nap showing sampling poi	nt locations, transects	s, important features, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Yes   Y	No 🔀 within a We		]_ No 🗵
Remarks: (Explain alternative procedures here or in a lidentified as Wetland E on mapping			
Taching do Francis 2 on Mapping			
HYDROLOGY			
Wetland Hydrology Indicators:			ators (minimum of two required)
Primary Indicators (minimum of one is required; check			Cracks (B6)
	Water-Stained Leaves (B9) Aquatic Fauna (B13)	☐ Drainage Pa ☐ Moss Trim L	atterns (B10)
	Marl Deposits (B15)		ı Water Table (C2)
	Hydrogen Sulfide Odor (C1)	Crayfish Bu	
Sediment Deposits (B2)	Oxidized Rhizospheres on Living F	Roots (C3) 🔲 Saturation \	/isible on Aerial Imagery (C9)
	Presence of Reduced Iron (C4)	<del>-</del>	Stressed Plants (D1)
l <del></del>	Recent Iron Reduction in Tilled So	· · · <del>-</del> · ·	Position (D2)
	Thin Muck Surface (C7)	<u>Ш</u> Shallow Aqu П Missetone se	
Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)	FAC-Neutra	raphic Relief (D4)
Field Observations:		<u> </u>	1 1651 (D3)
Surface Water Present? Yes X No X	Depth (inches):1"		
Water Table Present? Yes X No	Depth (inches):6"		
Saturation Present? Yes No D	_ Depth (inches):	Wetland Hydrology Prese	nt? Yes 🗵 No 🗌
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring v	l vell, aerial photos, previous inspect	tions), if available:	
Remarks:			
Drains into culvert under road			

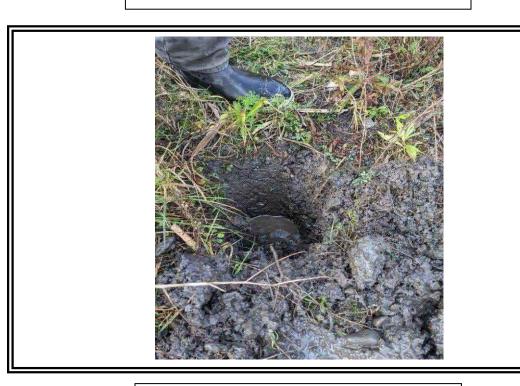
			Sa	
Tree Stratum (Plot size: 30 )	Absolute % Cover	Dominant Indicator Species? Status	Dominance Test workshee	
1. <u>Acer rubrum</u>	20	YES -	Number of Dominant Specie That Are OBL, FACW, or FA	
2. <u>Ouercus rubra</u>	30	YES -		(, ,
3			Total Number of Dominant Species Across All Strata:	(B)
1			B	
ī. 5			Percent of Dominant Specie That Are OBL, FACW, or FA	
5			Prevalence Index worksho	
7			Total % Cover of:	
	50	= Total Cover	OBL species	
Sapling/Shrub Stratum (Plot size: 15 )			FACW species	
l		<u> </u>	FAC species FACU species	
2		<u>-</u>	UPL species	
3		<u>-</u> <u>-</u>	Column Totals:	
l <u>.</u>		<u> </u>		_ ('') ('')
5		<u> </u>	Prevalence Index = B	/A =
3			Hydrophytic Vegetation In	dicators:
7			1 - Rapid Test for Hydro	ophytic Vegetation
		= Total Cover	2 - Dominance Test is >	•50%
Herb Stratum (Plot size: 5 )			3 - Prevalence Index is	
1. Phragmites australis	۵۸	VEC	4 - Morphological Adap data in Remarks or o	tations <sup>1</sup> (Provide supporting
			Problematic Hydrophyti	
2.			1 <del>.</del>	, , ,
3			<sup>1</sup> Indicators of hydric soil and be present, unless disturbed	
4,				-
5		<u>-</u> -	Definitions of Vegetation S	Strata:
5		<u> </u>	Tree – Woody plants 3 in. (7	
7		<u> </u>	at breast height (DBH), rega	irdiess of neight.
3		<u> </u>	Sapling/shrub – Woody pla and greater than or equal to	
)		<u> </u>		•
10			Herb – All herbaceous (non-w size, and woody plants less tha	
11		<u>-</u> <u>-</u>		
12			Woody vines – All woody vin height.	es greater than 3.28 ft in
	90	= Total Cover		
Noody Vine Stratum (Plot size: 15 )				
)		_		
			Hydrophytic	
		<del>-</del>	Vegetation Present? Yes	⊠ No □
4		<u> </u>		<u> </u>
4. <u> </u>		<u>-</u>		
		= Total Cover		

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

Profile Desc	ription: (Describe	to the de	oth needed to docu	ment the i	ndicator	or confirm	the absence	of indicators.)
Depth	Matrix			ox Feature:	<u>s</u> .			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	Remarks
0-10	10YR 4/2	100					SCL	restrictive layer at 10"
		-						
					_			
					-	_		
					-	=		
	-							
					-			
					-	_		
		<u> </u>			-			
					-	-		
		-	_		<u>-</u>	-		
		letion, RM	I=Reduced Matrix, M	S=Masked	I Sand Gr	ains.		: PL=Pore Lining, M=Matrix.
Hydric Soil							_	for Problematic Hydric Soils <sup>3</sup> :
Histosol			Polyvalue Belo		(S8) ( <b>LR</b> I	₹R,	_	Muck (A10) (LRR K, L, MLRA 149B)
	oipedon (A2)		MLRA 149B	,	DD D M	DA 440D)		Prairie Redox (A16) (LRR K, L, R)
Black Hi	stic (A3) en Sulfide (A4)		Thin Dark Surf					Mucky Peat or Peat (S3) (LRR K, L, R) Surface (S7) (LRR K, L, M)
	d Layers (A5)		Loamy Gleyed			., ∟)		llue Below Surface (S8) ( <b>LRR K, L</b> )
	d Below Dark Surfac	e (A11)	Depleted Matri		.)			ark Surface (S9) (LRR K, L)
	ark Surface (A12)	· ( · · · · )	Redox Dark Su	. ,				anganese Masses (F12) ( <b>LRR K, L, R</b> )
_	lucky Mineral (S1)		Depleted Dark					ont Floodplain Soils (F19) (MLRA 149B)
_	Gleyed Matrix (S4)		Redox Depres		,		_	Spodic (TA6) (MLRA 144A, 145, 149B)
	Redox (S5)			, ,			_	arent Material (F21)
Stripped	Matrix (S6)						☐ Very S	shallow Dark Surface (TF12)
🔲 Dark Su	rface (S7) ( <b>LRR R, I</b>	/ILRA 149	<b>B</b> )				D Other	(Explain in Remarks)
			etland hydrology mu	st be prese	ent, unles	s disturbed	or problemation	o.
Restrictive	Layer (if observed):							
Type: rock	<		-					<u>_</u>
Depth (in	ches): <u>10"</u>		-				Hydric Soil	Present? Yes 🔲 No 🗵
Remarks:							1	



Wetland E (Feura Bush) - View facing North



Wetland E (Feura Bush) - Soils

Phase 5

# SITE PHOTOGRAPHS

#### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE Phase 5	City/County: Feura Bush Sampling Date: 11/03/2021
Applicant/Owner: CHA	State: NY Sampling Point: E-4 Upland
Investigator(s): Nick Dominic/Justin Williams	Section, Township, Range:
Landform (hillside, terrace, etc.):	relief (concave, convex, none): Slope %:
·	Long: 73°52'9.515" W 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 disturt	
Are Vegetation , Soil , or Hydrology naturally problema	
SUMMARY OF FINDINGS – Attach site map showing sam	
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present? Yes No X	within a Wetland? Yes No_X_
Wetland Hydrology Present?  Yes  No X	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate report.)  Upland of Wetland E-4	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (E	B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) — Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (	——————————————————————————————————————
Sediment Deposits (B2) Oxidized Rhizospheres of	——
Presence of Reduced Iro	<u> </u>
Algal Mat or Crust (B4)  Recent Iron Reduction in	
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remark	
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No X Depth (inches):	
Water Table Present? Yes No X Depth (inches):	
Saturation Present? Yes No _X Depth (inches):	Wetland Hydrology Present? Yes No _X
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	vious inspections), if available:
Remarks:	

<u>Tree Stratum</u> (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:			
<ol> <li>Quercus rubra</li> <li>Quercus rubra</li> </ol>	10	Yes	UPL	Number of Dominant Species That Are OBL, FACW, or FAC:1(A)			
3. 4.				Total Number of Dominant Species Across All Strata:3(B)			
<ul><li>5.</li><li>6.</li></ul>				Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)			
7.				Prevalence Index worksheet:			
	10	=Total Cover		Total % Cover of: Multiply by:			
Sapling/Shrub Stratum (Plot size: 15 )		-		OBL species 0 x 1 = 0			
1.				FACW species 0 x 2 = 0			
2.				FAC species 60 x 3 = 180			
3.				FACU species 30 x 4 = 120			
4				UPL species 10 x 5 = 50			
5.				Column Totals: 100 (A) 350 (B)			
6				Prevalence Index = B/A = 3.50			
7				Hydrophytic Vegetation Indicators:			
<i>i</i>		-Tatal Cavar					
		=Total Cover		1 - Rapid Test for Hydrophytic Vegetation			
Herb Stratum (Plot size: 5				2 - Dominance Test is >50%			
1. Poa spp.	60	Yes	FAC	3 - Prevalence Index is ≤3.0¹			
<ol> <li>Taraxacum officinale.</li> <li></li></ol>	30	Yes	FACU	4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)			
4.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)			
5				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			
7				Definitions of Vegetation Strata:			
8.				To a Washington Sin (7.0 and an arrangin			
9.				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.			
10		<u> </u>		Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.			
12.							
	90	=Total Cover		<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.			
Woody Vine Stratum (Plot size: 30 ) 1.				Woody vines – All woody vines greater than 3.28 ft in height.			
2.							
3.				Hydrophytic			
1				Vegetation Present? Yes No			
<b>7.</b>		=Total Cover		103NO			
		•					
Remarks: (Include photo numbers here or on a separ	aie sileei.)						

Sampling Point: E-4 Upland

SOIL Sampling Point E-4 Upland

	Depth	Matrix	o ano ao <sub>l</sub>		x Featur			onfirm the absence of indica		
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  Hydric Soil Indicators: Histosol (A1) Histosol (A1) Histosol (A2) Histosol (A2) Histosol (A2) Histosol (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Goast Prairie Redox (A16) (LRR K, L, R) Hydrogen Sulfide (A4) High Chroma Sands (S11) (LRR K, L) Polyvalue Below Surface (S9) (LRR R, L) Polyvalue Below Surface (S9) (LRR K, L, R) Polyvalue Below Surface (S9) (LRR K, L, R) Hydrogen Sulfide (A4) High Chroma Sands (S11) (LRR K, L) Polyvalue Below Surface (S9) (LRR K, L, R) Polyvalue Below Surface (S9) (LRR K, L) Thick Dark Surface (A11) Depleted Below Dark Surface (A11) Thick Dark Surface (A11) Sandy Mucky Minoral (S1) Sandy Mucky Minoral (S1) Redox Dark Surface (F9) Sandy Redox (S5) Redox Dark Surface (F9) Sandy Redox (S5) Redox Dark Surface (F7) Redox Redox (S6) Dark Surface (S7) Polyvalue Below Dark Surface (F22) Stripped Matrix (S6) Marl (F10) (LRR K, L) Dark Surface (F22) Stripped Matrix (S6) Marl (F10) (LRR K, L) Dark Surface (F7) Poly Sandy Redox (S6) Redox Dark Surface (F9) Polyvalue Below Dark Surface (F22) Stripped Matrix (S6) Marl (F10) (LRR K, L) Dark Surface (F22) Stripped Matrix (S6) Marl (F10) (LRR K, L) Dark Surface (F9) Polyvalue Below Surface (F22) Stripped Matrix (S6) Marl (F10) (LRR K, L) Dark Surface (F22) Stripped Matrix (S6) Dark Surface (F9) Polyvalue Below Surface (F22) Stripped Matrix (S6) Marl (F10) (LRR K, L) Dark Surface (F2) Dark Surface (F2) Dark Surface (F2) Dark Surface (F2) Dark Surface (F3) Polyvalue Below Surface (F22) Dark Surface (F3) Polyvalue Below Surface (F2) Dark Surface (F3) Polyvalue Below Surface (F2) Dark Surface (F3) Polyvalue Below Surface (F3) (RR K, L, R) Polyvalue Bel	(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remar	ks
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) High Chroma Sands (S11) (LRR K, L) High Chroma Sands (S11) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Loamy Micy Mineral (F1) Thic Dark Surface (A12) Sandy Mucky Mineral (S1) September (A3) September (A4) September (A3) September (A4)	0-10	10yr 4/2	100					Loamy/Clayey		
Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thick Dark Surface (A11) Depleted Below Dark Surface (A12) Depleted Matrix (F3) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Dark Surface (S7)  Marl (F10) (LRR K, L) Below Dark Surface (A12) Depleted Dark Surface (F7) Sandy Redox (S5) Redox Depressions (F8) Were Shallow Dark Surface (F22) Stripped Matrix (S6) Marl (F10) (LRR K, L) Below Dark Surface (A12) Stripped Matrix (S6) Below Dark Surface (A12) Below Dark Surface (A	10-16	10yr 3/2	100					Loamy/Clayey		
Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thick Dark Surface (A11) Depleted Below Dark Surface (A12) Depleted Matrix (F3) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Dark Surface (S9) Stripped Matrix (S6) Dark Surface (S7)  Hydric Soil Present?  Hydric Soil Present? Yes No X  No X										
Hydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R,  Histosol (A2)  MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, R)  Black Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Loamy Mucky Mineral (F1) (LRR K, L)  Thick Dark Surface (A11)  Depleted Below Dark Surface (A12)  Sandy Mucky Mineral (S1)  Redox Dark Surface (F6)  Sandy Gleyed Matrix (S4)  Depleted Dark Surface (F7)  Redox Depressions (F8)  Stripped Matrix (S6)  Marl (F10) (LRR K, L)  Stripped Matrix (S6)  Marl (F10) (LRR K, L)  Hydric Soil Present?  Yes  No  X										
Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thick Dark Surface (A11) Depleted Below Dark Surface (A12) Depleted Matrix (F3) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Dark Surface (S9) Stripped Matrix (S6) Dark Surface (S7)  Hydric Soil Present?  Hydric Soil Present? Yes No X  No X										
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Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thick Dark Surface (A11) Depleted Below Dark Surface (A12) Depleted Matrix (F3) Polyvalue Mesic Spodic (TA6) (MLRA 149B) Sandy Mucky Mineral (S1) Sandy Redox (S5) Redox Dark Surface (F6) Stripped Matrix (S4) Dark Surface (S7)  Redox Depressions (F8) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Dark Surface (S7)  Hydric Soil Present?  Hydric Soil Present?  Hydric Soil Present?  Yes No X										
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Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thick Dark Surface (A11) Depleted Below Dark Surface (A12) Depleted Matrix (F3) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Dark Surface (S9) Stripped Matrix (S6) Dark Surface (S7)  Hydric Soil Present?  Hydric Soil Present? Yes No X  No X										
Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thick Dark Surface (A11) Depleted Below Dark Surface (A12) Depleted Matrix (F3) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Depleted Dark Surface (F6) Sandy Redox (S5) Redox Depressions (F8) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Dark Surface (S9) Stripped Matrix (S6) Dark Surface (S7)  Hydric Soil Present?  Hydric Soil Present? Yes No X  No X										
Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thick Dark Surface (A11) Depleted Below Dark Surface (A12) Depleted Matrix (F3) Polyvalue Mesic Spodic (TA6) (MLRA 149B) Sandy Mucky Mineral (S1) Sandy Redox (S5) Redox Dark Surface (F6) Stripped Matrix (S4) Dark Surface (S7)  Redox Depressions (F8) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Dark Surface (S7)  Hydric Soil Present?  Hydric Soil Present?  Hydric Soil Present?  Yes No X										
Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thick Dark Surface (A11) Depleted Below Dark Surface (A12) Depleted Matrix (F3) Polyvalue Mesic Spodic (TA6) (MLRA 149B) Sandy Mucky Mineral (S1) Sandy Redox (S5) Redox Dark Surface (F6) Stripped Matrix (S4) Dark Surface (S7)  Redox Depressions (F8) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Dark Surface (S7)  Hydric Soil Present?  Hydric Soil Present?  Hydric Soil Present?  Yes No X										
Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histosol (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Thick Dark Surface (A11) Depleted Below Dark Surface (A12) Depleted Matrix (F3) Polyvalue Mesic Spodic (TA6) (MLRA 149B) Sandy Mucky Mineral (S1) Sandy Redox (S5) Redox Dark Surface (F6) Stripped Matrix (S4) Dark Surface (S7)  Redox Depressions (F8) Stripped Matrix (S6) Marl (F10) (LRR K, L) Stripped Matrix (S6) Dark Surface (S7)  Hydric Soil Present?  Hydric Soil Present?  Hydric Soil Present?  Yes No X										
Histosol (A1)			etion, RM	=Reduced Matrix, M	1S=Mas	ked San	d Grains.			
Histic Epipedon (A2)  Black Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  5 cm Mucky Peat or Peat (S3) (LRR K, L, R)  Hydrogen Sulfide (A4)  High Chroma Sands (S11) (LRR K, L)  Stratified Layers (A5)  Loamy Mucky Mineral (F1) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Depleted Below Dark Surface (A11)  Loamy Gleyed Matrix (F2)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Redox Dark Surface (F6)  Sandy Gleyed Matrix (S4)  Depleted Dark Surface (F7)  Red Parent Material (F21)  Sandy Redox (S5)  Redox Depressions (F8)  Very Shallow Dark Surface (F22)  Stripped Matrix (S6)  Dark Surface (S7)  *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  *Restrictive Layer (if observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes No X	·=				o (	(00) (			-	
Black Histic (A3)						ce (S8) (	LRR R,			
Hydrogen Sulfide (A4)  High Chroma Sands (S11) (LRR K, L)  Stratified Layers (A5)  Loamy Mucky Mineral (F1) (LRR K, L)  Depleted Below Dark Surface (S9) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K, L, R)  Thick Dark Surface (A12)  Depleted Matrix (F2)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Depleted Dark Surface (F6)  Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  Sandy Redox (S5)  Redox Depressions (F8)  Very Shallow Dark Surface (F22)  Stripped Matrix (S6)  Dark Surface (S7)  And (F10) (LRR K, L)  Other (Explain in Remarks)  Polyvalue Below Surface (S8) (LRR K, L)  Trin Dark Surface (S9) (LRR K, L)  Polyvalue Below Surface (S9) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K, L, R)  Polyvalue Below Surface (S9) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K, L, R)  Polyvalue Below Surface (S9) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K, L, R)  Polyvalue Below Surface (S9) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K, L, R)  Polyvalue Below Surface (S9) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K, L, R)  Polyvalue Below Surface (S9) (LRR K, L)  Polyvalue Below Surface (S9) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Other (Explain in Remarks)  Polyvalue Below Surface (S9) (LRR K, L)  Other (Explain in Remarks)  Polyvalue Below Surface (S9) (LRR K, L)  Type:  Depth (inches):  Hydric Soil Present? Yes No X						(LRR R	. MLRA '			·
Stratified Layers (A5)  Loamy Mucky Mineral (F1) (LRR K, L)  Depleted Below Dark Surface (A11)  Loamy Gleyed Matrix (F2)  Iron-Manganese Masses (F12) (LRR K, L, R)  Thick Dark Surface (A12)  Depleted Matrix (F3)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Depleted Dark Surface (F6)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7)  Marl (F10) (LRR K, L)  Other (Explain in Remarks)  Piedmont Floodplain Soils (F19) (MLRA 149B)  Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  Mesic Spodic (TA6) (MLRA 149B)  Mesic Spodic (TA6) (ML										
Thick Dark Surface (A12)  Depleted Matrix (F3)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Depleted Dark Surface (F7)  Sandy Redox (S5)  Redox Depressions (F8)  Stripped Matrix (S6)  Dark Surface (S7)  Marl (F10) (LRR K, L)  Other (Explain in Remarks)  Jork Surface (S7)  Aldicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes  No  X							-			
Sandy Mucky Mineral (S1) Redox Dark Surface (F6) Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  Sandy Gleyed Matrix (S4) Depleted Dark Surface (F7) Red Parent Material (F21)  Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (F22)  Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks)  Dark Surface (S7)   *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):  Type:  Depth (inches):  Hydric Soil Present? Yes No X	Depleted	d Below Dark Surface	: (A11)	Loamy Gleyed	Matrix (	F2)		Iron-Manganese	Masses (F12	) (LRR K, L, R)
Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Redox Depressions (F8)  Stripped Matrix (S6)  Dark Surface (S7)  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  X										
Sandy Redox (S5) Redox Depressions (F8) Very Shallow Dark Surface (F22) Stripped Matrix (S6) Marl (F10) (LRR K, L) Other (Explain in Remarks)  Dark Surface (S7)  3 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No X		•								I4A, 145, 149B)
Stripped Matrix (S6)										221
Dark Surface (S7)  3 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes  No X						0)			•	22)
<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):  Type:  Depth (inches):  Hydric Soil Present?  Yes  No X				Wan (1 10) (ER	····, 上)			Other (Explain)	r romano,	
Restrictive Layer (if observed):           Type:	<del></del>	,								
Type:	<sup>3</sup> Indicators o	f hydrophytic vegetati	on and w	etland hydrology mu	ıst be pr	esent, u	nless dist	urbed or problematic.		
Depth (inches): Hydric Soil Present? Yes No X		Layer (if observed):								
	•									
Remarks:	Depth (ii	nches):						Hydric Soil Present?	Yes	No <u>X</u>
	Remarks:									



**Upland E-1 - View facing southeast.** 



**Upland E-1 - Soils** 

Segment 9 – Package 5B

# SITE PHOTOGRAPHS

### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE Phase 5			
Applicant/Owner: CHA		State: <u>NY</u>	Sampling Point: F-2
Investigator(s): J. L. Williams, N. G. Dominic	Section, Township	o, Range:	
Landform (hillslope, terrace, etc.):	Local relief (concave, convex, none): Slope (%):		
Subregion (LRR or MLRA): <u>LRR - R</u> La			
Soil Map Unit Name:		NWI classific	cation:_PEM
Are climatic / hydrologic conditions on the site typical		_	Remarks.)
Are Vegetation NO , Soil NO , or Hydrology NO	significantly disturbed?	Are "Normal Circumstances" ړ	oresent? Yes 🗵 No 🔲
Are Vegetation NO , Soil NO , or Hydrology No		(If needed, explain any answe	
SUMMARY OF FINDINGS – Attach site	map showing sampling poi	nt locations, transects	s, important features, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Remarks: (Explain alternative procedures here or i	No within a W No If yes, option		No ⊠ F
Identified as Wetland F-1 on wetla		rt text.	
HYDROLOGY			
Wetland Hydrology Indicators:			ators (minimum of two required)
Primary Indicators (minimum of one is required; che	<b>-</b>	Surface Soil	
Surface Water (A1)  High Water Table (A2)	☑ Water-Stained Leaves (B9) ☑ Aquatic Fauna (B13)	<u> </u>	
Saturation (A3)	Marl Deposits (B15)		Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Bur	rows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living I		isible on Aerial Imagery (C9)
☐ Drift Deposits (B3)	Presence of Reduced Iron (C4)	_	tressed Plants (D1)
☐ Algal Mat or Crust (B4) ☐ Iron Deposits (B5)	$\frac{1}{2}$ Recent Iron Reduction in Tilled So $\frac{1}{2}$ Thin Muck Surface (C7)	Shallow Aqu	Position (D2)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)		aphic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	<u> </u>	FAC-Neutral	
Field Observations:			
Surface Water Present? Yes X No X	Depth (inches):1"		
Water Table Present? Yes X No	Depth (inches):6"		
Saturation Present? Yes X No (includes capillary fringe)	Depth (inches):surface	Wetland Hydrology Preser	nt? Yes ⊠ No □
Describe Recorded Data (stream gauge, monitoring	well, aerial photos, previous inspec	tions), if available:	
Remarks:			
Drains into culvert under road			

VEGETATION – Use scientific names of plants.			Sa	
Tree Stratum (Plot size: 30 )	Absolute % Cover	Dominant Indicator Species? Status	Dominance Test worksheet:	
1. <u>Acer rubrum</u>	20	YES -	Number of Dominant Specie That Are OBL, FACW, or FA	
2. <u>Ouercus rubra</u>	30	YES -		
3			Total Number of Dominant Species Across All Strata:	(B)
			Devent of Deminent Charle	, ,
5			Percent of Dominant Species That Are OBL, FACW, or FAC: (A/E	
S			Prevalence Index workshe	
7			Total % Cover of:	
	50	= Total Cover	OBL species	
Sapling/Shrub Stratum (Plot size: 15 )			FACW species	
		<del>-</del>	FAC species FACU species	
2	· ·	<del>-</del>	UPL species	
3	<u> </u>	<u> </u>	Column Totals:	
l				_ (-)
5		<u>-</u>	Prevalence Index = B/A =	
3		<u> </u>	Hydrophytic Vegetation In	dicators:
7			1 - Rapid Test for Hydro	phytic Vegetation
		= Total Cover	2 - Dominance Test is >50%	
Herb Stratum (Plot size: 5 )			3 - Prevalence Index is ≤3.0 <sup>1</sup>	
1. Phragmites australis	۵0	VEC		
2.			1 <del>.</del>	
3			<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
1				-
5	· ·	<del>-</del>	Definitions of Vegetation S	Strata:
8	<u> </u>	<del>-</del>	Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.	
7	· .	<u> </u>	at breast neight (DBH), rega	irdiess of neight.
3	<u> </u>	<u> </u>	Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3,28 ft (1 m) tall.	
)		<u> </u>		
10	-	<u> </u>	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.	
l1		<u> </u>		
12.				
	90	= Total Cover		
Noody Vine Stratum (Plot size:15)				
		<del>-</del>	Hydrophytic	
2	- · · <u></u>	<del></del>	Vegetation   Present?   Yes   ⊠   No □	
3		<del></del>		
1. <u> </u>		<u>-</u>		
		= Total Cover		

SOIL Sampling Point: F-2

Profile Desc	ription: (Describe	to the dep	oth needed to document th		or confirm	n the absence	of indicators.)
Depth	Matrix	%	Redox Featu	res	_Loc <sup>2</sup>	Toutumo	Domonico
(inches)	Color (moist)		Color (moist) %	<u>rype</u>	LOC	<u>Texture</u>	Remarks
0-10	10YR 4/2	100			-	SCL	restrictive layer at 10"
					-		
				<u>-</u>	-		
				-	-		
		- '					
		-			-		<del></del>
					-	. <del></del>	
		<u> </u>			-		
					<u>-                                      </u>		
				-	-		
						·	
	-	<del></del>				· <del></del>	<del></del>
					-		
'Type: C=Co		letion, RM	=Reduced Matrix, MS=Mask	ed Sand G	ains.		n: PL=Pore Lining, M=Matrix. s for Problematic Hydric Soils <sup>3</sup> :
Histosol			Polyvalue Below Surface	(S8) (I <b>P</b>	D D	_	Muck (A10) (LRR K, L, MLRA 149B)
	oipedon (A2)		MLRA 149B)	30 (00) ( <b>LI</b>	к к,	_	Prairie Redox (A16) (LRR K, L, R)
Black His			Thin Dark Surface (S9)				Mucky Peat or Peat (S3) (LRR K, L, R)
	n Sulfide (A4)		Loamy Mucky Mineral (		(, L)		Surface (S7) (LRR K, L, M)
	l Layers (A5) l Below Dark Surfac	e (A11)	Loamy Gleyed Matrix ( Depleted Matrix (F3)	-2)			alue Below Surface (S8) ( <b>LRR K</b> , <b>L</b> ) Park Surface (S9) ( <b>LRR K</b> , <b>L</b> )
	ark Surface (A12)	- ( )	Redox Dark Surface (F	6)		_	fanganese Masses (F12) ( <b>LRR K, L, R</b> )
	lucky Mineral (S1)		Depleted Dark Surface				nont Floodplain Soils (F19) ( <b>MLRA 149B</b> )
	leyed Matrix (S4) edox (S5)		Redox Depressions (F8	3)			Spodic (TA6) ( <b>MLRA 144A, 145, 149B</b> ) Parent Material (F21)
	Matrix (S6)						Shallow Dark Surface (TF12)
	rface (S7) ( <b>LRR R, N</b>	/ILRA 149	<b>B</b> )				(Explain in Remarks)
3							
	hydrophytic vegeta ayer (if observed):		etland hydrology must be pre	esent, unles	s disturbed	or problemati	<u>C.</u>
Type: rock	• •						
Depth (inc						Hydric Soil	l Present? Yes ☐ No 🗵
Remarks:	···/.					1,	



Wetland F (Feura Bush) - View facing North



Wetland F (Feura Bush) - Soils

# Phase 5

## **SITE PHOTOGRAPHS**

### WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE	(	City/County: Bethleh	em/Albany County	Sampling Date: 2/27/2023		
Applicant/Owner: TDI		- 	State: NY	Sampling Point: F-1 Upl		
Investigator(s): C. Scrivner & J. Greaves		Section, Tov	vnship, Range:			
Landform (hillside, terrace, etc.): Hillslope	Local re	elief (concave, conve		Slope %: 35		
Subregion (LRR or MLRA): LRR R	Lat: 42.549849		-73.844999	 Datum: WGS84		
Soil Map Unit Name: HuE - Hudson silt loam,	<u> </u>		NWI classification:			
Are climatic / hydrologic conditions on the site t		Yes x		evolain in Damarke )		
, ,			<del></del>	explain in Remarks.)		
Are Vegetation, Soil, or Hydrold	<u> </u>		nal Circumstances" prese			
Are Vegetation, Soil, or Hydrold	<del></del>		l, explain any answers in	•		
SUMMARY OF FINDINGS – Attach s	site map showing samp	oling point locat	tions, transects, im	portant features, etc.		
Hydrophytic Vegetation Present?	Yes No X	Is the Sampled Ar	·ea			
	Yes No X	within a Wetland?		No X		
l	Yes No X	If yes, optional We				
Remarks: (Explain alternative procedures her	re or in a separate report.)	-				
Mowed roadside.	, , ,					
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicators (m			
Primary Indicators (minimum of one is required			Surface Soil Cracks	` '		
Surface Water (A1)	Water-Stained Leaves (BS	9)	Drainage Patterns (I	•		
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)				
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odor (C	•	Crayfish Burrows (C	,		
Sediment Deposits (B2)	Oxidized Rhizospheres or			n Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron		Stunted or Stressed	` '		
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (C6)	Geomorphic Positio			
Iron Deposits (B5)	Thin Muck Surface (C7)	- 1	Shallow Aquitard (D	•		
Inundation Visible on Aerial Imagery (B7)	<del></del> ' '	S)	Microtopographic Re			
Sparsely Vegetated Concave Surface (B8	<u>')                                    </u>		FAC-Neutral Test ([	Jo)		
Field Observations:	No. V. Double (inches)					
Surface Water Present? Yes	No X Depth (inches):  No X Depth (inches):					
Water Table Present? Yes Saturation Present? Yes	No X Depth (inches): No X Depth (inches):		d Undralassi Brasanta	Vac Na V		
Saturation Present? Yes (includes capillary fringe)	No X Depth (inches): _	welland	d Hydrology Present?	Yes No _X_		
Describe Recorded Data (stream gauge, moni	itoring well aerial photos, prev	/ious inspections), if	availahle <sup>.</sup>			
2000,000,1000,1000	noinig 11011, 201121 p.1, 1	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	avanabio.			
Remarks:						

#### F-1 Upl **VEGETATION** – Use scientific names of plants. Sampling Point: Absolute Indicator Dominant <u>Tree Stratum</u> (Plot size: 30') % Cover Species? Status **Dominance Test worksheet:** 1. **Number of Dominant Species** 2. That Are OBL, FACW, or FAC: 1 (A) 3. Total Number of Dominant 4. Species Across All Strata: 2 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 50.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Multiply by: Sapling/Shrub Stratum (Plot size: 15') OBL species x 1 = **FACW** species 0 x 2 = 0 2. FAC species 25 x 3 = 75 3. FACU species 65 x 4 = 260 4. UPL species 10 x 5 = 5. Column Totals: 100 Prevalence Index = B/A = 3.85 6. **Hydrophytic Vegetation Indicators:** 7. 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% Herb Stratum (Plot size: 5' ) Poa pratensis Yes **FACU** 3 - Prevalence Index is ≤3.01 4 - Morphological Adaptations<sup>1</sup> (Provide supporting 2. 25 Yes FAC Setaria pumila data in Remarks or on a separate sheet) 10 3. Centaurea stoebe No UPL 4. Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 5. <sup>1</sup>Indicators of hydric soil and wetland hydrology must

100 =Total Cover Woody Vine Stratum (Plot size: 30' Woody vines - All woody vines greater than 3.28 ft in 1. height. 2. Hydrophytic 3. Vegetation Yes \_\_\_ Present? No X =Total Cover

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

6.

7.

8.

be present, unless disturbed or problematic.

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

of size, and woody plants less than 3.28 ft tall.

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

**Definitions of Vegetation Strata:** 

SOIL Sampling Point F-1 Upl

	•	the dep				itor or co	onfirm the absence of	findicators.)	
Depth	Matrix	0/		x Featur		1 - 2	T	Damanka	
(inches)	Color (moist)		Color (moist)		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remark	<u>(S</u>
0-11	2.5Y 3/2	100					Loamy/Clayey		
<sup>1</sup> Type: C=Co	ncentration, D=Deple	tion, RM	=Reduced Matrix, N	/IS=Masl	ked Sand	l Grains.	<sup>2</sup> Location: Pl	L=Pore Lining, M=Mat	rix.
Hydric Soil Ir	ndicators:						Indicators fo	or Problematic Hydric	Soils <sup>3</sup> :
Histosol (	A1)		Dark Surface (	S7)			2 cm Mu	ck (A10) (LRR K, L, N	ILRA 149B)
Histic Epi	pedon (A2)		Polyvalue Belo	w Surfa	ce (S8) (I	LRR R,	Coast Pr	airie Redox (A16) ( <b>LR</b>	R K, L, R)
Black His	tic (A3)		MLRA 149B	5)			5 cm Mu	cky Peat or Peat (S3)	(LRR K, L, R)
Hydrogen	Sulfide (A4)		Thin Dark Surf	ace (S9)	(LRR R	, MLRA 1	49B) Polyvalue	e Below Surface (S8)	(LRR K, L)
Stratified	Layers (A5)		High Chroma S	Sands (S	311) ( <b>LRF</b>	R K, L)	Thin Dark	k Surface (S9) ( <b>LRR k</b>	<b>ί</b> , <b>L</b> )
Depleted	Below Dark Surface	(A11)	Loamy Mucky	Mineral	(F1) ( <b>LRI</b>	R K, L)	Iron-Man	iganese Masses (F12)	(LRR K, L, R)
Thick Dar	k Surface (A12)		Loamy Gleyed	Matrix (	F2)		Piedmon	t Floodplain Soils (F19	9) (MLRA 149B)
Mesic Sp	odic (A17)		Depleted Matri	x (F3)			Red Pare	ent Material (F21) <b>(out</b>	side MLRA 145)
(MLRA	A 144A, 145, 149B)		Redox Dark Su	urface (F	<sup>5</sup> 6)		Very Sha	allow Dark Surface (F2	.2)
Sandy Mu	ucky Mineral (S1)		Depleted Dark	Surface	(F7)		Other (Ex	xplain in Remarks)	
_	eyed Matrix (S4)		Redox Depress		8)		•		
Sandy Re			Marl (F10) ( <b>LR</b>					rs of hydrophytic vege	
Stripped I	Matrix (S6)		Red Parent Ma	aterial (F	21) <b>(MLF</b>	RA 145)	wetland hydrology must be present,		
							unless	disturbed or problema	atic.
	ayer (if observed):								
Type: _	Rock								
Depth (in	ches):	11					Hydric Soil Presen	nt? Yes	No X
Remarks:									



**Upland F-1- View facing south** 



**Upland F-1- Soils** 

Segment 9 – Package 5B

## SITE PHOTOGRAPHS

### WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE	(	City/County: Bethleh	nem/Albany County	Sampling Date: <u>2/27/2023</u>		
Applicant/Owner: TDI			State: NY	Sampling Point: 5B-P Wet		
Investigator(s): C. Scrivner & J. Greaves		Section, To	wnship, Range:	<u> </u>		
Landform (hillside, terrace, etc.): Linear dep	pression Local re	elief (concave, conve	ex. none): Concave	Slope %: 2		
Subregion (LRR or MLRA): LRR R	Lat: 42.543836	•	-73.841551	' Datum: WGS84		
Soil Map Unit Name: RhA - Rhinebeck silty of			NWI classification:	<del></del>		
Are climatic / hydrologic conditions on the site				explain in Remarks.)		
		Yes x	` ` `	,		
Are Vegetation, Soil, or Hydrol			nal Circumstances" prese 			
Are Vegetation, Soil, or Hydrol			d, explain any answers in	,		
SUMMARY OF FINDINGS – Attach	site map showing samp	pling point loca	tions, transects, im	portant features, etc.		
Hydrophytic Vegetation Present?	Yes X No	Is the Sampled A	rea			
Hydric Soil Present?	Yes X No	within a Wetland	? Yes X	No		
Wetland Hydrology Present?	Yes X No	If yes, optional We	tland Site ID:			
Remarks: (Explain alternative procedures he Common reed marsh ditch.	ere or in a separate report.)					
Common rood march dron.						
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicators (m	ninimum of two required)		
Primary Indicators (minimum of one is require	ed; check all that apply)		Surface Soil Cracks	(B6)		
X Surface Water (A1)	Water-Stained Leaves (B9	9)	X Drainage Patterns (	· ·		
X High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)				
X Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)				
— Water Marks (B1)	Hydrogen Sulfide Odor (C	· ·	Crayfish Burrows (C	•		
Sediment Deposits (B2)	X Oxidized Rhizospheres or	• ,		n Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced Iron		Stunted or Stressed	· ·		
Algal Mat or Crust (B4)	Recent Iron Reduction in Thin Muck Surface (C7)	Tilled Soils (Cb)	X Geomorphic Positio			
Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7)		·a)	Shallow Aquitard (D Microtopographic Re	·		
Sparsely Vegetated Concave Surface (B	· <del></del> · · ·	S)	X FAC-Neutral Test (	` '		
Field Observations:			<u></u>	55)		
Surface Water Present? Yes X	No Depth (inches):	0.5				
Water Table Present? Yes X	No Depth (inches):	10				
Saturation Present? Yes X	No Depth (inches):		d Hydrology Present?	Yes X No		
(includes capillary fringe)	. , , _		,			
Describe Recorded Data (stream gauge, mor	nitoring well, aerial photos, prev	vious inspections), if	available:			
Remarks:						

<u>Tree Stratum</u> (Plot size: 30' )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:			
1				Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)			
3.				Total Number of Dominant Species Across All Strata: 1 (B)			
5.				Percent of Dominant Species			
6.		· ——		That Are OBL, FACW, or FAC: 100.0% (A/B)			
7		T-4-1 0		Prevalence Index worksheet:			
0 15 (0) 1 0( ) (0) (1)		=Total Cover		Total % Cover of: Multiply by:			
Sapling/Shrub Stratum (Plot size: 15' )				OBL species 10 x 1 = 10			
1.				FACW species 80 x 2 = 160			
2.		·		FAC species0 x 3 =0			
3				FACU species 0 x 4 = 0			
4				UPL species0 x 5 =0			
5				Column Totals: 90 (A) 170 (B)			
6				Prevalence Index = B/A =1.89			
7		. <u></u>		Hydrophytic Vegetation Indicators:			
		=Total Cover		1 - Rapid Test for Hydrophytic Vegetation			
Herb Stratum (Plot size: 5' )				X 2 - Dominance Test is >50%			
1. Phragmites australis	80	Yes	FACW	X 3 - Prevalence Index is ≤3.0 <sup>1</sup>			
2. Lythrum salicaria	10	No	OBL	4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)			
3.							
4				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)			
5. 6.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			
7.				Definitions of Vegetation Strata:			
8.				Tree – Woody plants 3 in. (7.6 cm) or more in			
9.				diameter at breast height (DBH), regardless of height.			
11.				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.			
12.		· <u></u>		Hank All bank account (non-viscalis) plants in appullate			
	90	=Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.			
Woody Vine Stratum (Plot size: 30')				Woody vines – All woody vines greater than 3.28 ft in			
1				height.			
2				Hydrophytic			
3. 4.		·		Vegetation Present? Yes X No			
<b>*</b> .		=Total Cover		riesent: res_XNo			
Remarks: (Include photo numbers here or on a separ	rate sheet.)						

Sampling Point: \_\_\_5B-P Wet

SOIL Sampling Point 5B-P Wet

Profile Desc Depth	ription: (Describe to Matrix	o the de		<b>ument tl</b> x Featur		tor or co	onfirm the absence o	f indicators.)	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0-5	10YR 4/1	95	10YR 4/6	5	С	PL	Loamy/Clayey	Prominent redox concentrations	
5-16	2.5Y 3/2	60	10YR 5/6	40	c	m_	Loamy/Clayey	Prominent redox concentrations	
¹Type: C=Co	oncentration, D=Deple	etion, RN	=Reduced Matrix, N	/IS=Masl	ked Sand	d Grains.	<sup>2</sup> Location: P	PL=Pore Lining, M=Matrix.	
Black His Hydrogei Stratified Depleted Thick Da Mesic Sp (MLR Sandy M Sandy G Sandy R Stripped	(A1) ipedon (A2)	(A11)	Dark Surface ( Polyvalue Belo MLRA 149B Thin Dark Surf High Chroma S Loamy Mucky Loamy Gleyed X Depleted Matri X Redox Dark St Depleted Dark Redox Depress Marl (F10) (LR Red Parent Ma	ow Surface ) ace (S9) Sands (S Mineral Matrix ( x (F3) urface (F Surface sions (F8 R K, L)	(LRR R 111) (LRI (F1) (LRI F2) 6) (F7)	, MLRA 1 R K, L) R K, L)	Indicators for Problematic Hydric Soils <sup>3</sup> :  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, F)		
Depth (ir	nches):						Hydric Soil Prese	nt? Yes X No	
Remarks:									



Wetland 5B-P- View facing south



Wetland 5B-P - Soils

SITE PHOTOGRAPHS

**Champlain Hudson Power Express** 

Segment 9 – Package 5B

### WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE	(	City/County: Bethleh	nem/Albany County	Sampling Date: 2/27/2023			
Applicant/Owner: TDI			State: NY	Sampling Point: 5B-P Upl			
Investigator(s): C. Scrivner & J. Greaves		Section, To	wnship, Range:	<u> </u>			
Landform (hillside, terrace, etc.): Hillslope	Local re	elief (concave, conve	ex. none): Convex	Slope %: 35			
Subregion (LRR or MLRA): LRR R	Lat: 42.543851	•	-73.841542	Datum: WGS84			
Soil Map Unit Name: RhA - Rhinebeck silty of	<del></del>		NWI classification:				
Are climatic / hydrologic conditions on the site				explain in Remarks.)			
		Yes X	' '				
Are Vegetation, Soil, or Hydrol			mal Circumstances" prese				
Are Vegetation, Soil, or Hydrol			d, explain any answers in	•			
SUMMARY OF FINDINGS – Attach	site map showing samp	pling point loca	tions, transects, im	nportant features, etc.			
Hydrophytic Vegetation Present?	Yes No _X_	Is the Sampled A	rea	1			
Hydric Soil Present?	Yes No X	within a Wetland	? Yes	No X			
Wetland Hydrology Present?	Yes No X	If yes, optional We	etland Site ID:				
Remarks: (Explain alternative procedures he	ere or in a separate report.)						
Mowed roadside.							
HYDROLOGY							
Wetland Hydrology Indicators:	: 1 1 11 11 1 mm h A			minimum of two required)			
Primary Indicators (minimum of one is require			Surface Soil Cracks				
Surface Water (A1)	Water-Stained Leaves (B9	B9) Drainage Patterns (B10) Moss Trim Lines (B16)					
High Water Table (A2) Saturation (A3)	Aquatic Fauna (B13) Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1)	Hydrogen Sulfide Odor (C						
Sediment Deposits (B2)	Oxidized Rhizospheres or						
Drift Deposits (B3)	Presence of Reduced Iron		Stunted or Stressed	• • • •			
Algal Mat or Crust (B4)	Recent Iron Reduction in	` '	Geomorphic Position				
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquitard (D				
Inundation Visible on Aerial Imagery (B7	Other (Explain in Remarks						
Sparsely Vegetated Concave Surface (B	.8)		FAC-Neutral Test (I	D5)			
Field Observations:							
Surface Water Present? Yes	No X Depth (inches):						
	No X Depth (inches):						
Saturation Present? Yes	No X Depth (inches): _	Wetlan	d Hydrology Present?	Yes No _X_			
(includes capillary fringe)							
Describe Recorded Data (stream gauge, mor	nitoring well, aerial photos, prev	vious inspections), it	available:				
Remarks:							
Nomano.							

Tree Stratum (Plot size:30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1 2				Number of Dominant Species That Are OBL, FACW, or FAC:1(A)
3. 4.				Total Number of Dominant Species Across All Strata:(B)
5. 6.				Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
7			-	Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size:)				OBL species0 x 1 =0
1				FACW species 0 x 2 = 0
2.				FAC species 45 x 3 = 135
3.				FACU species 50 x 4 = 200
4.		· <u></u>		UPL species 5 x 5 = 25
5.				Column Totals: 100 (A) 360 (B)
6.				Prevalence Index = B/A = 3.60
7.				Hydrophytic Vegetation Indicators:
		=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5' )		. Total Gover		2 - Dominance Test is >50%
	45	Yes	FACU	3 - Prevalence Index is ≤3.0 <sup>1</sup>
<u></u>				
2. Setaria pumila	45	Yes	FAC	4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
3. Centaurea stoebe	5	No	UPL	
4. Taraxacum officinale	5	No	<u>FACU</u>	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
<ul><li>5.</li><li>6.</li></ul>				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7.		· <u></u>		Definitions of Vegetation Strata:
8.				Trace Manda Planta 2 in (7.0 and an arrangin
9.				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
10.				
11.				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
12				<b>Herb</b> – All herbaceous (non-woody) plants, regardless
	100	=Total Cover		of size, and woody plants less than 3.28 ft tall.
<u>Woody Vine Stratum</u> (Plot size:)  1				Woody vines – All woody vines greater than 3.28 ft in height.
2.				
2				Hydrophytic
				Vegetation Present? Yes No X
<b>4</b> .		=Total Cover		1100m: 100 <u>X</u>
Remarks: (Include photo numbers here or on a sepa	rate sneet.)			

Sampling Point: 5B-P Upl

SOIL Sampling Point 5B-P Upl

Profile Desc Depth	ription: (Describe t Matrix	to the de		<b>ument th</b> x Feature		ator or co	onfirm the absence of	indicator	s.)	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remark	.s
0-6	10yr 3/1	100			<u>- 771 </u>		Loamy/Clayey			<del>-</del>
6.16	10) (5.4/4	100								
6-16	10yr 4/1	100					Loamy/Clayey			
<sup>1</sup> Type: C=Co	ncentration, D=Depl	etion, RN	/I=Reduced Matrix, N	1S=Masl	ked Sand	d Grains.	<sup>2</sup> Location: PL	.=Pore Lin	ing, M=Matr	ix.
Hydric Soil I							Indicators fo		-	
Histosol	` '		Dark Surface (	,					RR K, L, M	•
	ipedon (A2)		Polyvalue Belo		ce (S8) (l	LRR R,				•
Black His			MLRA 149B	,	// DD D	MIDA		-		(LRR K, L, R)
	n Sulfide (A4) Layers (A5)		Thin Dark Surf		-				urface (S8) ( (S9) ( <b>LRR K</b>	•
	Below Dark Surface	(Δ11)	Loamy Mucky							(LRR K, L, R)
	rk Surface (A12)	, (, (, , , ,	Loamy Gleyed			( ( , L)				) (MLRA 149B)
	oodic (A17)		Depleted Matri		_,					side MLRA 145)
	A 144A, 145, 149B)		Redox Dark Su		6)				Surface (F2:	
Sandy M	ucky Mineral (S1)		Depleted Dark	Surface	(F7)		Other (Ex	plain in Re	emarks)	
Sandy G	leyed Matrix (S4)		Redox Depress	sions (F8	3)					
	edox (S5)		Marl (F10) ( <b>LR</b>	-			<sup>3</sup> Indicator	s of hydro	phytic veget	ation and
Stripped	Matrix (S6)		Red Parent Ma	nt Material (F21) (MLRA 145)			wetland hydrology must be present,			
<b>D</b> (11)							unless	disturbed	or problema	tic.
	.ayer (if observed):									
Type:								_		
Depth (in	iches):						Hydric Soil Present	t?	Yes	NoX
Remarks:										



Upland 5B-P- View facing north



**Upland 5B-P- Soils** 

Segment 9 – Package 5B

## **SITE PHOTOGRAPHS**

### WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE	City/County: Bet	thlehem/Albany County	Sampling Date: 9/27/22		
Applicant/Owner: TDI		State: NY	Sampling Point: Wet_5B-A		
Investigator(s): C. Scrivner & N. Frazer	Section	, Township, Range:	_		
Landform (hillside, terrace, etc.): Depression	Local relief (concave, co		Slope %: 2		
		· ·			
	-	ong: <u>-73.84193°W</u>	Datum: WGS84		
Soil Map Unit Name: Fx - Fluvaquents-Udifluvents comp	lex, frequently flooded	NWI classification:	PEM1		
Are climatic / hydrologic conditions on the site typical for the	nis time of year? Yes _	x No (If no,	explain in Remarks.)		
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "I	Normal Circumstances" prese	ent? Yes x No		
Are Vegetation, Soil, or Hydrology	naturally problematic? (If ne-	eded, explain any answers in	Remarks.)		
SUMMARY OF FINDINGS – Attach site map		ocations, transects, ir	mportant features, etc.		
Hydrophytic Vegetation Present? Yes X	No Is the Sample	d Araa			
Hydrophytic Vegetation Present?  Hydric Soil Present?  Yes X  Yes X	No Is the Sample No within a Wetla		No		
Wetland Hydrology Present? Yes X		Wetland Site ID: Near flag			
		Trought one is. Itour has	905770		
Remarks: (Explain alternative procedures here or in a se Persistent Palustrine Emergent Marsh dominated by com	,	nen water			
T crostone i alabemio Emergent Maron deminated by con	mon reed war a small portion of op	on water.			
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (n	ninimum of two required)		
Primary Indicators (minimum of one is required; check all	that apply)	Surface Soil Cracks	s (B6)		
Surface Water (A1) Water	-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2) Aquati	c Fauna (B13)	Moss Trim Lines (B16)			
Saturation (A3)Marl D	eposits (B15)	Dry-Season Water Table (C2)			
Water Marks (B1) Hydro	gen Sulfide Odor (C1)	Crayfish Burrows (C	C8)		
Sediment Deposits (B2) Oxidiz	ed Rhizospheres on Living Roots (C	C3)Saturation Visible o	n Aerial Imagery (C9)		
Drift Deposits (B3) Preser	nce of Reduced Iron (C4)	Stunted or Stressed	d Plants (D1)		
Algal Mat or Crust (B4) Recen	t Iron Reduction in Tilled Soils (C6)	X Geomorphic Position	on (D2)		
<del></del>	luck Surface (C7)	Shallow Aquitard (D	03)		
Inundation Visible on Aerial Imagery (B7) X Other	(Explain in Remarks)	Microtopographic R	` '		
Sparsely Vegetated Concave Surface (B8)		X FAC-Neutral Test (I	D5)		
Field Observations:					
Surface Water Present? Yes No _X					
Water Table Present? Yes No _X					
Saturation Present? Yes No X	Depth (inches): We	tland Hydrology Present?	Yes X No		
(includes capillary fringe)		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			
Describe Recorded Data (stream gauge, monitoring well,	aeriai photos, previous inspections	s), if available:			
Remarks:					
Adjacent to Stream and ponding.					
, ,					

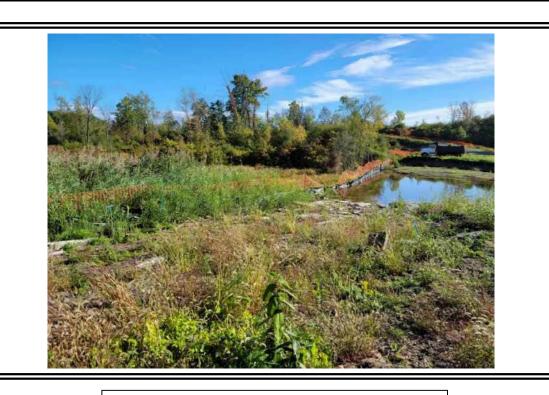
Tree Stratum (Plot size:30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:			
1 2		·		Number of Dominant Species That Are OBL, FACW, or FAC:	2 (A)		
3. 4.				Total Number of Dominant Species Across All Strata:	2 (B)		
<ul><li>5.</li><li>6.</li></ul>				Percent of Dominant Species That Are OBL, FACW, or FAC:	100.0% (A/B)		
7				Prevalence Index worksheet:			
		=Total Cover		Total % Cover of:	Multiply by:		
Sapling/Shrub Stratum (Plot size: 15' )		_		OBL species 20 x 1:	= 20		
1.				FACW species 80 x 2 :	= 160		
2.				FAC species 0 x 3	= 0		
3.				FACU species 0 x 4 :	= 0		
4.				UPL species 0 x 5	= 0		
5.				Column Totals: 100 (A)	180 (B)		
6.				Prevalence Index = B/A =	1.80		
7.				Hydrophytic Vegetation Indicators	s:		
		=Total Cover		1 - Rapid Test for Hydrophytic \			
Herb Stratum (Plot size: 5' )		-		X 2 - Dominance Test is >50%			
Phragmites australis	80	Yes	FACW	X 3 - Prevalence Index is ≤3.0 <sup>1</sup>			
Lythrum salicaria	20	Yes	OBL	4 - Morphological Adaptations <sup>1</sup> (Provide supporting			
3.				data in Remarks or on a separate sheet)			
4.				Problematic Hydrophytic Vegeta	ation <sup>1</sup> (Explain)		
5.				<sup>1</sup> Indicators of hydric soil and wetland	d bydrology must bo		
6.				present, unless disturbed or probler			
7.				Definitions of Vegetation Strata:			
8.				Tree – Woody plants 3 in. (7.6 cm)	or more in diameter		
9.				at breast height (DBH), regardless of			
10.				Sapling/shrub – Woody plants less	s than 3 in DBH		
11.				and greater than or equal to 3.28 ft			
12.				Herb – All herbaceous (non-woody)	) plants, regardless		
	100	=Total Cover		of size, and woody plants less than			
Woody Vine Stratum (Plot size:)				Woody vines – All woody vines gre	eater than 3.28 ft in		
1				height.			
2.							
3.				Hydrophytic Vegetation			
4.					lo		
		=Total Cover					
Remarks: (Include photo numbers here or on a separa	ate sheet.)						
	,						

Sampling Point:

Wet\_5B-A

SOIL Sampling Point: Wet\_5B-A

Profile Descripe Depth	ription: (Describe to Matrix	the dep		ment the		tor or co	nfirm the absence of	indicators.)	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0-15	2.5Y 3/1	75	7.5YR 3/4	25	C	M	Loamy/Clayey	Prominent redox concentrations	
15-19	10YR 4/2	85	10YR 4/6	10	С	М	Loamy/Clayey	Prominent redox concentrations	
			10YR 2/1	5	С	M		Faint redox concentrations	
<sup>1</sup> Type: C=Co	ncentration D=Deple	tion RM	=Reduced Matrix M	S=Mask	ed Sand	Grains	<sup>2</sup> l ocation: P	L=Pore Lining, M=Matrix.	
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains <b>Hydric Soil Indicators:</b>					Oranio.		or Problematic Hydric Soils <sup>3</sup> :		
Histosol (	(A1)		Dark Surface (	S7)			2 cm Muck (A10) (LRR K, L, MLRA 149B)		
Histic Epi	pedon (A2)			value Below Surface (S8) (LRR R,			Coast Prairie Redox (A16) (LRR K, L, R)		
	Black Histic (A3) MLRA 149B)						icky Peat or Peat (S3) (LRR K, L, R)		
	Hydrogen Sulfide (A4) Thin Dark Surface (S9) (LRR R, MLRA								
	tratified Layers (A5) High Chroma Sands (S11) (LRR K, L)					rk Surface (S9) (LRR K, L)			
	Below Dark Surface rk Surface (A12)	(A11)	Loamy Mucky I			K K, L)	Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B)		
	odic (A17)		Depleted Matri:	•	2)			ent Material (F21) (outside MLRA 145)	
	A 144A, 145, 149B)		X Redox Dark Su		6)			allow Dark Surface (F22)	
•	ucky Mineral (S1)		Depleted Dark					xplain in Remarks)	
	eyed Matrix (S4)		Redox Depress					,	
Sandy Re	edox (S5)		Marl (F10) ( <b>LR</b>	R K, L)			<sup>3</sup> Indicato	ors of hydrophytic vegetation and	
Stripped I	Matrix (S6)		Red Parent Ma	iterial (F2	21) <b>(MLR</b>	RA 145)	wetland hydrology must be present,		
Destrict dest	("f -1 1)						unless	s disturbed or problematic.	
_	ayer (if observed):								
_	ah aa).						Undria Cail Brass	No. V. No.	
Depth (in	cnes):						Hydric Soil Preser	nt? Yes X No	
Remarks:									



Wetland 5B-A - View facing northeast



Wetland 5B-A - Soils

SITE PHOTOGRAPHS

Segment 9 – Package 5B

### WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE		City/County: Bethlehem/Albany County	Sampling Date: 9/27/22
Applicant/Owner: TDI		State: NY	Sampling Point: UPL_5B-A
Investigator(s): C. Scrivner & N. Frazer		Section, Township, Range:	
Landform (hillside, terrace, etc.): Hillslope	Local re	elief (concave, convex, none): Concave	Slope %: 15
Subregion (LRR or MLRA): LRR R	Lat: 42.548°N	Long: -73.84204°W	Datum: WGS84
Soil Map Unit Name: Fx - Fluvaquents-Udifl			<del></del>
Are climatic / hydrologic conditions on the site			explain in Remarks.)
Are Vegetation, Soil, or Hydro		<del></del>	•
<del></del>			
Are Vegetation, Soil, or Hydro			,
SUMMARY OF FINDINGS – Attach	site map showing samp	oling point locations, transects, im	portant features, etc.
Hydrophytic Vegetation Present?	Yes No X	Is the Sampled Area	
Hydric Soil Present?	Yes No X	within a Wetland? Yes	No X
Wetland Hydrology Present?	Yes No X	If yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedures he	ere or in a separate report.)		
Adjacent successional old field hillslope.			
LHYDROLOGY			
Wetland Hydrology Indicators:		<del></del>	ninimum of two required)
Primary Indicators (minimum of one is requir		Surface Soil Cracks	, ,
Surface Water (A1)	Water-Stained Leaves (B		
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (E	
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water	
Water Marks (B1)	Hydrogen Sulfide Odor (C		,
Sediment Deposits (B2)	Oxidized Rhizospheres of	· · · —	on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iro		
Algal Mat or Crust (B4)	Recent Iron Reduction in		, ,
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (I	
Inundation Visible on Aerial Imagery (B7	′ <del></del> ` ` '	<del></del>	
Sparsely Vegetated Concave Surface (E	38)	FAC-Neutral Test (	D5)
Field Observations:			
Surface Water Present? Yes	No X Depth (inches):		
Water Table Present? Yes	No X Depth (inches):		
Saturation Present? Yes	No X Depth (inches):	Wetland Hydrology Present?	Yes No _X_
(includes capillary fringe)  Describe Recorded Data (stream gauge, mo	nitoring well porial photos prov	vious inspections) if available:	
Describe Recorded Data (Stream gauge, mo	rilloring well, aerial priolos, prev	nous inspections), ii available.	
Remarks:			

Tree Stratum (Plot size: 30' )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:			
1 2				Number of Dominant Species That Are OBL, FACW, or FAC:(A)			
3. 4.				Total Number of Dominant Species Across All Strata:(B)			
5 6	-			Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)			
7				Prevalence Index worksheet:			
		=Total Cover		Total % Cover of: Multiply by:			
Sapling/Shrub Stratum (Plot size:)				OBL species 0 x 1 = 0			
1		<u> </u>		FACW species 0 x 2 = 0			
2.				FAC species1 x 3 =3			
3.				FACU species 22 x 4 = 88			
4				UPL species 23 x 5 = 115			
5				Column Totals: 46 (A) 206 (B)			
6.				Prevalence Index = B/A = 4.48			
7				Hydrophytic Vegetation Indicators:			
		=Total Cover		1 - Rapid Test for Hydrophytic Vegetation			
Herb Stratum (Plot size: 5')				2 - Dominance Test is >50%			
Setaria viridis	20	Yes	UPL	3 - Prevalence Index is ≤3.0 <sup>1</sup>			
2. Cirsium arvense	10	Yes	FACU	4 - Morphological Adaptations (Provide supporting			
3. Amaranthus retroflexus	3	No	FACU	data in Remarks or on a separate sheet)			
4. Plantago lanceolata	3	No	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)			
5. Daucus carota	2	No	UPL	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be			
6. Taraxacum officinale	2	No	FACU	present, unless disturbed or problematic.			
7. Lotus corniculatus	2	No	FACU	Definitions of Vegetation Strata:			
8. Parthenocissus quinquefolia	1	No	FACU	Tree – Woody plants 3 in. (7.6 cm) or more in diameter			
9. Asclepias syriaca	1	No	UPL	at breast height (DBH), regardless of height.			
10. Trifolium pratense	1	No	FACU	Sapling/shrub – Woody plants less than 3 in. DBH			
11. Solanum dulcamara	1	No	FAC	and greater than or equal to 3.28 ft (1 m) tall.			
12				<b>Herb</b> – All herbaceous (non-woody) plants, regardless			
	46	=Total Cover		of size, and woody plants less than 3.28 ft tall.			
Woody Vine Stratum (Plot size:30')				Woody vines – All woody vines greater than 3.28 ft in			
1				height.			
2.							
3.				Hydrophytic Vegetation			
4.				Present? Yes No X			
		=Total Cover					
Remarks: (Include photo numbers here or on a separa	ate sheet.)			•			
· ·	,						

Sampling Point: UPL\_5B-A

SOIL Sampling Point: UPL\_5B-A

Profile Desc Depth	ription: (Describe to Matrix	the dep		ment the x Feature		or or co	nfirm the absence of ind	cators.)		
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Rema	arks	
0-3	7.5YR 3/1	100					Loamy/Clayey			
3-17	7.5YR 3/3	100					Loamy/Clayey			
	7.0110	100					<u> </u>			
1			Dadwaad Matrix M				2 <sub>1</sub> 4 Dl - D			
Hydric Soil I	oncentration, D=Deple	ellon, Kivi	=Reduced Matrix, M	5=IVIASK	eu Sanu	Grains.		ore Lining, M=Ma roblematic Hydr		
Histosol			Dark Surface (S	37)				A10) ( <b>LRR K, L,</b>		
	pipedon (A2)		Polyvalue Belov	,	ce (S8) ( <b>L</b>	.RR R,		e Redox (A16) ( <b>L</b>		
Black His			MLRA 149B)	)				Peat or Peat (S3		
Hydroge	n Sulfide (A4)		Thin Dark Surfa	ace (S9)	(LRR R,	MLRA 1	<b>49B</b> ) Polyvalue B	elow Surface (S8)	) (LRR K, L)	
	Layers (A5)		High Chroma S					urface (S9) (LRR		
	Below Dark Surface	(A11)	Loamy Mucky N			R K, L)		nese Masses (F12		
	ark Surface (A12)		Loamy Gleyed	•	<del>-</del> 2)				19) (MLRA 149B)	
	oodic (A17) A 144A, 145, 149B)		Depleted Matrix Redox Dark Su		·6)			wateriai (F21) <b>(o</b> i v Dark Surface (F	utside MLRA 145)	
	lucky Mineral (S1)		Depleted Dark					ain in Remarks)	22)	
	leyed Matrix (S4)		Redox Depress				Outlot (Expire	iii iii rtomano,		
	edox (S5)		Marl (F10) (LRI		,		<sup>3</sup> Indicators of	of hydrophytic veg	etation and	
Stripped	Matrix (S6)		Red Parent Ma	terial (F2	21) <b>(MLR</b>	A 145)	wetland hydrology must be present,			
							unless dis	turbed or problen	natic.	
	_ayer (if observed):									
Type:										
Depth (ir	nches):						Hydric Soil Present?	Yes	NoX	
Remarks:										



**Upland 5B-A - View facing west/southwest** 



**Upland 5B-A - Soils** 

Segment 9 – Package 5B

## SITE PHOTOGRAPHS

### WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE		City/County: Bethlehem/Albany County	Sampling Date: 9/27/22
Applicant/Owner: TDI		State: NY	Sampling Point: Wet_5B-B
Investigator(s): C. Scrivner & N. Frazer		Section, Township, Range:	
Landform (hillside, terrace, etc.): Depression	on Local re	elief (concave, convex, none): Concave	Slope %: 2
Subregion (LRR or MLRA): LRR R	Lat: 42.54837°N	Long: -73.84082°W	Datum: WGS84
Soil Map Unit Name: Fx - Fluvaquents-Udiflu			PEM1
Are climatic / hydrologic conditions on the site			explain in Remarks.)
Are Vegetation, Soil, or Hydro	•		•
<u> </u>			
Are Vegetation, Soil, or Hydro			•
SUMMARY OF FINDINGS – Attach	site map showing samp	oling point locations, transects, im	portant features, etc.
Hydrophytic Vegetation Present?	Yes X No	Is the Sampled Area	
Hydric Soil Present?	Yes X No	within a Wetland? Yes X	No
Wetland Hydrology Present?	Yes X No	If yes, optional Wetland Site ID: Near flag	5B-B-1
Remarks: (Explain alternative procedures he	ere or in a separate report.)		
Persistent Palustrine Emergent Marsh	. ,		
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicators (n	ninimum of two required)
Primary Indicators (minimum of one is require	ed; check all that apply)	Surface Soil Cracks	s (B6)
Surface Water (A1)	Water-Stained Leaves (B	9) Drainage Patterns (	B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B	16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water	Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C	C1) Crayfish Burrows (C	28)
Sediment Deposits (B2)	Oxidized Rhizospheres or	n Living Roots (C3) Saturation Visible o	n Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron		d Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (C6) X Geomorphic Position	n (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D	93)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remark	s) Microtopographic R	elief (D4)
Sparsely Vegetated Concave Surface (B	8)	X FAC-Neutral Test (I	D5)
Field Observations:			
Surface Water Present? Yes			
Water Table Present? Yes	No X Depth (inches):		
Saturation Present? Yes	No X Depth (inches):	Wetland Hydrology Present?	Yes X No
(includes capillary fringe)			
Describe Recorded Data (stream gauge, mor	nitoring well, aerial photos, prev	rious inspections), if available:	
Remarks:			
- Nomanie			

Tree Stratum (Plot size: 30' )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species
2				That Are OBL, FACW, or FAC:(A)
3. 4.				Total Number of Dominant Species Across All Strata: (B)
5. 6.				Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
7				Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size:)				OBL species60 x 1 =60
1				FACW species 40 x 2 = 80
2.				FAC species0 x 3 =0
3.				FACU species 5 x 4 = 20
4				UPL species 0 x 5 = 0
5				Column Totals: (A) (B)
6.				Prevalence Index = B/A = 1.52
7				Hydrophytic Vegetation Indicators:
		=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size:)				X 2 - Dominance Test is >50%
1. Lythrum salicaria	60	Yes	OBL	X 3 - Prevalence Index is ≤3.0 <sup>1</sup>
2. Onoclea sensibilis	30	Yes	FACW	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
3. Cornus sericea	10	No	FACW	data in Remarks or on a separate sheet)
4.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5	-			<sup>1</sup> Indicators of hydric soil and wetland hydrology must be
6.				present, unless disturbed or problematic.
7				Definitions of Vegetation Strata:
8. 9.				<b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
10.				Continuate with Weeds plants less than 2 in DDI
11.				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
12				Herb – All herbaceous (non-woody) plants, regardless
	100	=Total Cover		of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size:)				Woody vines – All woody vines greater than 3.28 ft in
1. Vitis aestivalis	5	Yes	FACU	height.
2				Hodon bods
3				Hydrophytic Vegetation
4				Present?
	5	=Total Cover		
Remarks: (Include photo numbers here or on a separa	ate sheet.)			

Sampling Point: Wet\_5B-B

SOIL Sampling Point: Wet\_5B-B

(inches)         Color (moist)         %         Type¹         Loc²         Texture         Remarks           0-12         10YR 4/2         80         10YR 4/6         20         C         M         Loamy/Clayey         Prominent redox concentration           12-18         10YR 4/2         55         10YR 3/6         40         C         M         Loamy/Clayey         Prominent redox concentration           7.5YR 3/4         5         C         M         Distinct redox concentration
12-18 10YR 4/2 55 10YR 3/6 40 C M Loamy/Clayey Prominent redox concentration
7.5YR 3/4 5 C M Distinct redox concentration
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (LRR K, L, MLRA 149B
Histic Epipedon (A2) Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, R)
Black Histic (A3) MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L,
Hydrogen Sulfide (A4)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Polyvalue Below Surface (S8) (LRR K, L)
Stratified Layers (A5) High Chroma Sands (S11) (LRR K, L) Thin Dark Surface (S9) (LRR K, L)
Depleted Below Dark Surface (A11) Loamy Mucky Mineral (F1) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L)
Thick Dark Surface (A12)  Loamy Gleyed Matrix (F2)  Piedmont Floodplain Soils (F19) (MLRA 1
Mesic Spodic (A17)  X Depleted Matrix (F3)  Red Parent Material (F21) (outside MLR/
(MLRA 144A, 145, 149B)Redox Dark Surface (F6)Very Shallow Dark Surface (F22)Sandy Mucky Mineral (S1)Depleted Dark Surface (F7)Other (Explain in Remarks)
Sandy Gleyed Matrix (S4)  Redox Depressions (F8)
Sandy Redox (S5)  Marl (F10) (LRR K, L)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Sandy Redox (S5)
Stripped Matrix (S6)  Red Parent Material (F21) (MLRA 145)  wetland hydrology must be present,
unless disturbed or problematic.
Restrictive Layer (if observed):
Type:
Depth (inches): Hydric Soil Present? Yes X No
Remarks:



Wetland 5B-B - View facing east



Wetland 5B-B - Soils

SITE PHOTOGRAPHS

Segment 9 – Package 5B

### WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:				
2.		·		Number of Dominant Species That Are OBL, FACW, or FAC:(A)				
3.         4.				Total Number of Dominant Species Across All Strata:4 (B)				
5. 6.				Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)				
7				Prevalence Index worksheet:				
		=Total Cover		Total % Cover of: Multiply by:				
Sapling/Shrub Stratum (Plot size:)				OBL species 8 x 1 = 8				
1				FACW species 0 x 2 = 0				
2				FAC species 30 x 3 = 90				
3.				FACU species 38 x 4 = 152				
4				UPL species 5 x 5 = 25				
5				Column Totals: 81 (A) 275 (B)				
6.				Prevalence Index = B/A = 3.40				
7.				Hydrophytic Vegetation Indicators:				
		=Total Cover		1 - Rapid Test for Hydrophytic Vegetation				
Herb Stratum (Plot size: 5' )		•		2 - Dominance Test is >50%				
1. Persicaria maculosa	15	Yes	FAC	3 - Prevalence Index is ≤3.0 <sup>1</sup>				
2. Lotus corniculatus	10	Yes	FACU	4 - Morphological Adaptations (Provide supporting				
3. Solanum dulcamara	10	Yes	FAC	data in Remarks or on a separate sheet)				
4. Oxalis stricta	10	Yes	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)				
5. Lythrum salicaria	8	No	OBL	<del>-</del>				
6. Trifolium pratense	6	No	FACU	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
7. Arctium minus	5	No	FACU	Definitions of Vegetation Strata:				
8. Cirsium arvense	5	No	FACU	_				
9. Daucus carota	5	No	UPL	<b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.				
10. Setaria pumila	3	No	FAC					
11. Toxicodendron radicans	2	No	FAC	Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.				
12. Phytolacca decandra	2	No	FACU					
- I Try total document		=Total Cover		<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.				
Woody Vine Stratum (Plot size: 30' )	0.	-10141 00101						
1.				Woody vines – All woody vines greater than 3.28 ft in height.				
2.				noight.				
				Hydrophytic				
4.				Vegetation   Present?   Yes   No X				
*·		=Total Cover		Present?				
Decrete (technical and a second	( b ( )	= rotal Cover						
Remarks: (Include photo numbers here or on a separa	ite sneet.)							

Upl\_5B-B

Sampling Point:

SOIL Sampling Point: Upl\_5B-B

Depth	Matrix	the dep		x Featur		101 01 001	nfirm the absence of in	idicators.)		
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Rema	arks	
0-20	10YR 3/3	95	10YR 5/2	5	D	М	Loamy/Clayey			
		—								
1Type: C=C(	oncentration, D=Deplet	ion RM-	-Reduced Matrix M	S-Mask	had Sand	Grains	<sup>2</sup> l ocation: Pl -	Pore Lining, M=Ma	atriv	
Hydric Soil		1011, 13111-	-reduced Matrix, Mic	J-IVIGSK	ca Garia	Oranis.		Problematic Hyd		
Histosol			Dark Surface (S	37)				(A10) ( <b>LRR K, L,</b>		
	pipedon (A2)		Polyvalue Belov		ce (S8) ( <b>I</b>	LRR R,		irie Redox (A16) (L		,
Black Hi			MLRA 149B)	)			5 cm Muck	ky Peat or Peat (S3	) (LRR K,	L, R)
Hydroge	n Sulfide (A4)		Thin Dark Surfa	ace (S9)	(LRR R,	, MLRA 1	<b>49B</b> ) Polyvalue	Below Surface (S8	) (LRR K,	L)
Stratified	d Layers (A5)		High Chroma S	ands (S	311) (LRF	R K, L)	Thin Dark	Surface (S9) (LRR	. <b>K</b> , <b>L</b> )	
Depleted	d Below Dark Surface (	A11)	Loamy Mucky N	∕lineral (	(F1) ( <b>LRF</b>	R K, L)	Iron-Mang	anese Masses (F1	2) ( <b>LRR K</b>	(, L, R)
	ark Surface (A12)		Loamy Gleyed		F2)			Floodplain Soils (F		
	podic (A17)		Depleted Matrix					nt Material (F21) (o		.RA 145)
•	A 144A, 145, 149B)		Redox Dark Su				<del></del> ·	ow Dark Surface (F	<del>-</del> 22)	
	flucky Mineral (S1)		Depleted Dark				Other (Exp	olain in Remarks)		
	Sleyed Matrix (S4)		Redox Depress	•	8)		31 m dia a ta ra	of hydrophytic veg	ratation on	ر ما
	ledox (S5) Matrix (S6)		Marl (F10) (LRI	. ,	21) /MI E	) A 145\				ia
Siripped	Wattix (30)		Red Parent Ma	teriai (F	21) (IVILI	(A 143)		and hydrology must be present, ss disturbed or problematic.		
Restrictive I	Layer (if observed):						unicss o	istarbed or probler	natio.	
Type:	-uyo. ( ouco. rou).									
Depth (ir	nches).						Hydric Soil Present	? Yes	No	X
							,			
Remarks:										



Upland 5B-B - View facing south



**Upland 5B-B - Soils** 

Segment 9 – Package 5B

## SITE PHOTOGRAPHS

### WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE	City/County: Bethlehem/Albany County Sampling Date: 9/27/22
Applicant/Owner: TDI	State: NY Sampling Point: Wet_5B-C
Investigator(s): C. Scrivner & 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: 42.5482	<del></del>
Soil Map Unit Name: Fx - Fluvaquents-Udifluvents complex, freq	
Are climatic / hydrologic conditions on the site typical for this time of	<del></del>
Are Vegetation, Soil, or Hydrology significa	
	<del></del> -
Are Vegetation, Soil, or Hydrologynaturally	
SUMMARY OF FINDINGS – Attach site map showi	ng sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: Near flag 5B-C-4
Remarks: (Explain alternative procedures here or in a separate re	eport.)
Persistent Palustrine Emergent Marsh wihtin project area. Outside	of project area is a Palustrine Scrub Shrub wetland.
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that app	ly) Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained	Leaves (B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna	(B13) Moss Trim Lines (B16)
Saturation (A3) Marl Deposits	(B15) Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulf	de Odor (C1) Crayfish Burrows (C8)
Sediment Deposits (B2)  Oxidized Rhizo	spheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of R	educed Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)Recent Iron Re	eduction in Tilled Soils (C6) X Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Sur	face (C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)Other (Explain	in Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)
Field Observations:	
	(inches):
Water Table Present? Yes No X Depth	(inches):
Saturation Present? Yes X No Depth	(inches): 8 Wetland Hydrology Present? Yes X No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial pl	notos, previous inspections), if available:
Remarks:	
Remarks.	

	Absolute	Dominant	Indicator				
ree Stratum (Plot size: 30')	% Cover	Species?	Status	Dominance Test worksheet:			
Salix alba	10	Yes	FACW	Number of Dominant Species			
·				That Are OBL, FACW, or FAC: 6	(A)		
•				Total Number of Dominant			
·		<u> </u>		Species Across All Strata: 7	(B)		
				Percent of Dominant Species			
·				That Are OBL, FACW, or FAC: 85.7%	(A/B		
				Prevalence Index worksheet:			
	10	=Total Cover		Total % Cover of: Multiply by:	_		
apling/Shrub Stratum (Plot size:15')				OBL species 55 x 1 = 55	_		
. Cornus amomum	8	Yes	FACW	FACW species 29 x 2 = 58	_		
. Fraxinus pennsylvanica	3	Yes	FACW	FAC species 8 x 3 = 24	_		
. Rhamnus cathartica	3	Yes	FAC	FACU species 31 x 4 = 124	_		
				UPL species 1 x 5 = 5	_		
				Column Totals: 124 (A) 266	(B		
				Prevalence Index = B/A = 2.15			
·				Hydrophytic Vegetation Indicators:			
	14	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation			
lerb Stratum (Plot size:5' )				X 2 - Dominance Test is >50%			
. Galium mollugo	30	Yes	FACU	X 3 - Prevalence Index is ≤3.0 <sup>1</sup>			
. Lythrum salicaria	25	Yes	OBL	4 - Morphological Adaptations <sup>1</sup> (Provide support data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  1 Indicators of hydric soil and wetland hydrology must			
. Symphyotrichum puniceum	20	Yes	OBL				
. Scirpus cyperinus	10	No	OBL				
. Symphyotrichum novae-angliae	5	No	FACW				
. Phragmites australis	3	No	FACW	present, unless disturbed or problematic.			
. Euthamia graminifolia	3	No	FAC	Definitions of Vegetation Strata:			
. Populus deltoides	2	No	FAC	Tree – Woody plants 3 in. (7.6 cm) or more in dia	met		
. Solidago canadensis	1	No	FACU	at breast height (DBH), regardless of height.	11100		
0. Daucus carota	1	No	UPL	Sapling/shrub – Woody plants less than 3 in. DB	RН		
1				and greater than or equal to 3.28 ft (1 m) tall.	" .		
2.				Herb – All herbaceous (non-woody) plants, regard	dloo		
	100	=Total Cover		of size, and woody plants less than 3.28 ft tall.	uies		
Voody Vine Stratum (Plot size:30' )		_		Manda di angan Allamanda di angan angan da angan angan angan da angan angan angan da angan	. e. :		
				<b>Woody vines</b> – All woody vines greater than 3.28 height.	) IL III		
				Hydrophytic			
·				Vegetation Present? Yes X No			
<u> </u>		=Total Cover					

SOIL Sampling Point: Wet\_5B-C

Profile Desc Depth	ription: (Describe to Matrix	the dep		ment the x Feature		tor or co	nfirm the absence of	indicators.)		
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks		
0-13	2.5Y 3/1	93	10YR 3/6	2	С	М	Loamy/Clayey	Prominent redox concentrations		
			10YR 2/1	5	С	M		Faint redox concentrations		
13-19	10YR 3/3	90	10YR 4/1	5		M	Loamy/Clayey			
			10YR 4/6	5	С	M		Distinct redox concentrations		
			1011( 4/0					Distillet redox concentrations		
<sup>1</sup> Type: C=Cc	ncentration, D=Deple	tion, RM		S=Mask	ed Sand	Grains.	<sup>2</sup> Location: Pl	L=Pore Lining, M=Matrix.		
Hydric Soil I	•	,	,					or Problematic Hydric Soils <sup>3</sup> :		
Histosol	(A1)		Dark Surface (	S7)			2 cm Mu	ck (A10) (LRR K, L, MLRA 149B)		
Histic Ep	ipedon (A2)		Polyvalue Belo	w Surfac	ce (S8) ( <b>L</b>	RR R,	Coast Pr	rairie Redox (A16) (LRR K, L, R)		
Black His	` '		MLRA 149B)5 cm Mucky Peat or Peat					cky Peat or Peat (S3) (LRR K, L, R)		
	n Sulfide (A4)		Thin Dark Surfa							
	Layers (A5)		High Chroma S					k Surface (S9) (LRR K, L)		
	Below Dark Surface	(A11)	Loamy Mucky I			R K, L)	Iron-Manganese Masses (F12) (LRR K, L, R)			
	rk Surface (A12)							nt Floodplain Soils (F19) (MLRA 149B)		
	odic (A17)			Depleted Matrix (F3)				Red Parent Material (F21) (outside MLRA 145  Very Shallow Dark Surface (F22)		
•	<b>A 144A, 145, 149B)</b> ucky Mineral (S1)		X Redox Dark Su Depleted Dark					er (Explain in Remarks)		
	leyed Matrix (S4)		Redox Depress		. ,		Other (E.	xpiairi iri Kemarks)		
	edox (S5)		Marl (F10) (LR		<i>5)</i>		<sup>3</sup> Indicato	rs of hydrophytic vegetation and		
	Matrix (S6)		Red Parent Ma		21) <b>(MLR</b>	RA 145)	wetland hydrology must be present,			
	,			`	, ,	,		disturbed or problematic.		
	ayer (if observed):									
Type:										
Depth (in	ches):						Hydric Soil Presen	nt? Yes X No		
Remarks:										



Wetland 5B-C - View facing west



Wetland 5B-C - Soils

**SITE PHOTOGRAPHS** 

Segment 9 – Package 5B

### WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE	City/County: Bethlehem/Albany County Sampling Date: 9/27/22
Applicant/Owner: TDI	State: NY Sampling Point: Upl_5B-C
Investigator(s): C. Scrivner & N. Frazer	Section, Township, Range:
	Local relief (concave, convex, none): Convex Slope %: 3
Subregion (LRR or MLRA): LRR R Lat: 42.54837°N	
Soil Map Unit Name: HuE - Hudson silt loam, 25 to 45 percent slope	
Are climatic / hydrologic conditions on the site typical for this time of ye	
Are Vegetation, Soil, or Hydrologysignificantly	disturbed? Are "Normal Circumstances" present? Yes x No
Are Vegetation, Soil, or Hydrologynaturally pro	oblematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, transects, important features, etc.
Library to Venetation Descrito	La the Committed Associated
Hydrophytic Vegetation Present?  Hydric Soil Present?  Yes  No X  No X	Is the Sampled Area within a Wetland? Yes No X
Hydric Soil Present? Yes No X  Wetland Hydrology Present? Yes No X	within a Wetland? Yes No _X  If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate repo Successional old field hillslope.	11.)
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Lea	aves (B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B1	5) Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide	Odor (C1) Crayfish Burrows (C8)
Sediment Deposits (B2)  Oxidized Rhizosph	neres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)Presence of Redu	ced Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)Recent Iron Reduc	ction in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface	e (C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in F	Remarks)Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No X Depth (in	ches):
	ches):
Saturation Present? Yes No X Depth (in	ches): Wetland Hydrology Present? Yes No _X
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspections), if available:
D	
Remarks:	

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1 2				Number of Dominant Species That Are OBL, FACW, or FAC:  0 (	A)
3. 4.				Total Number of Dominant Species Across All Strata: 3 (	В)
5 6				Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (	A/B)
7.				Prevalence Index worksheet:	
		=Total Cover		Total % Cover of: Multiply by:	
Sapling/Shrub Stratum (Plot size:15')				OBL species 0 x 1 = 0	
1.				FACW species 0 x 2 = 0	
2.				FAC species 5 x 3 = 15	
3.				FACU species 50 x 4 = 200	
4.				UPL species 45 x 5 = 225	
5.				Column Totals: 100 (A) 440	(B)
6.				Prevalence Index = B/A = 4.40	
7.				Hydrophytic Vegetation Indicators:	
		=Total Cover		1 - Rapid Test for Hydrophytic Vegetation	
Herb Stratum (Plot size: 5' )				2 - Dominance Test is >50%	
1. Lotus corniculatus	30	Yes	FACU	3 - Prevalence Index is ≤3.0 <sup>1</sup>	
Artemisia vulgaris	25	Yes	UPL	4 - Morphological Adaptations <sup>1</sup> (Provide suppo	ortina
3. Centaurea stoebe	20	Yes	UPL	data in Remarks or on a separate sheet)	9
Ambrosia artemisiifolia	15	No	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain	,
5. Erigeron canadensis	5	No	FACU		
Euthamia graminifolia	5	No	FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology mupresent, unless disturbed or problematic.	ıst be
7				Definitions of Vegetation Strata:	
8.					
9.				<b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diar at breast height (DBH), regardless of height.	neter
10 11.				Sapling/shrub – Woody plants less than 3 in. DB and greater than or equal to 3.28 ft (1 m) tall.	Н
12.					.
	100	=Total Cover		Herb – All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall.	lless
Woody Vine Stratum (Plot size:)  1				<b>Woody vines</b> – All woody vines greater than 3.28 height.	ft in
2.					
3.				Hydrophytic	
4.				Vegetation           Present?         Yes         No X	
		=Total Cover			
Remarks: (Include photo numbers here or on a separa	ate sheet.)				
Remarks: (Include photo numbers here or on a separa					

Sampling Point:

Upl\_5B-C

SOIL Sampling Point: UpI\_5B-C

Depth	ription: (Describe to Matrix	the dep		<b>ment th</b> k Featur		or or co	nfirm the absence of	indicators.	)	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remar	ks
()			Color (molety		. )   0					
<sup>1</sup> Type: C=Co	oncentration, D=Deple	tion, RM	=Reduced Matrix, MS	S=Mask	ed Sand	Grains.	<sup>2</sup> Location: F	PL=Pore Lini	ng, M=Mat	rix.
Hydric Soil I	ndicators:						Indicators f	for Problem	atic Hydri	c Soils³:
Histosol	(A1)		Dark Surface (S	S7)			2 cm M	uck (A10) ( <b>L</b>	RR K, L, N	ILRA 149B)
Histic Ep	ipedon (A2)		Polyvalue Belov	w Surfac	ce (S8) ( <b>L</b>	.RR R,	Coast F	rairie Redox	(A16) ( <b>LR</b>	R K, L, R)
Black His	stic (A3)		MLRA 149B)	)			5 cm M	ucky Peat or	Peat (S3)	(LRR K, L, R)
Hydroge	n Sulfide (A4)		Thin Dark Surfa	ace (S9)	(LRR R,	MLRA 1	49B) Polyvali	ue Below Su	rface (S8)	(LRR K, L)
Stratified	Layers (A5)		High Chroma S	ands (S	11) (LRR	K, L)	Thin Da	ark Surface (	S9) (LRR I	<b>K</b> , L)
	Below Dark Surface	(A11)	Loamy Mucky N							(LRR K, L, R)
	rk Surface (A12)	` ,	Loamy Gleyed			. ,		_		9) (MLRA 149B)
	oodic (A17)		Depleted Matrix	,	,					tside MLRA 145)
	A 144A, 145, 149B)		Redox Dark Su		6)			nallow Dark S		
	ucky Mineral (S1)		Depleted Dark					Explain in Re		/
	leyed Matrix (S4)		Redox Depress					=xp1a  1   1   1   1	mamo,	
	edox (S5)		Marl (F10) (LRI		3)		<sup>3</sup> Indicat	ors of hydrop	hytic vege	tation and
	Matrix (S6)		Red Parent Ma		21) <b>(MI R</b>	Δ 145)		nd hydrology		
опррои	Wattix (GG)			toriai (i z	21) (IVILIN	A 140)		s disturbed o		
Postrictive I	ayer (if observed):						unies	s disturbed t	or problem	alio.
_		E:III								
•										
Depth (ir	nches):	0					Hydric Soil Prese	nt?	Yes	No X
Remarks:										



**Upland 5B-C - View facing northeast** 



**Upland 5B-C - Soils** 

Segment 9 – Package 5B

# SITE PHOTOGRAPHS

### WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE		City/County: Bethlehem/Albany County	Sampling Date: 9/27/22
Applicant/Owner: TDI		State: NY	Sampling Point: Wet_5B-D
Investigator(s): C. Scrivner & N. Frazer		Section, Township, Range:	
Landform (hillside, terrace, etc.): Flat	Local re	elief (concave, convex, none): None	Slope %: 0
		Long: -73.84013°W	Datum: WGS84
Subregion (LRR or MLRA): LRR R	Lat: 42.54893°N		
Soil Map Unit Name: RhB - Rhinebeck silty	clay loan, 3 to 6 percent slopes		
Are climatic / hydrologic conditions on the sit	e typical for this time of year?	Yes <u>x</u> No (If no,	explain in Remarks.)
Are Vegetation, Soil, or Hydi	rology significantly disturb	ped? Are "Normal Circumstances" prese	ent? Yes x No
Are Vegetation, Soil, or Hydr	rologynaturally problemat	tic? (If needed, explain any answers in	Remarks.)
SUMMARY OF FINDINGS – Attach	site map showing samp	oling point locations, transects, im	portant features, etc.
Hydrophytic Vegetation Present?	Yes X No	Is the Sampled Area	M.
Hydric Soil Present?	Yes X No No	within a Wetland? Yes X	No
Wetland Hydrology Present?	Yes X No	If yes, optional Wetland Site ID: Near flag	g 5B-D-2
Remarks: (Explain alternative procedures h	nere or in a separate report.)		
Palustrine Scrub Shrub wetland.			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicators (r	minimum of two required)
Primary Indicators (minimum of one is requi	ired; check all that apply)	Surface Soil Cracks	s (B6)
Surface Water (A1)	Water-Stained Leaves (B	39) Drainage Patterns	(B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (E	316)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water	Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C	C1) Crayfish Burrows (	C8)
Sediment Deposits (B2)	Oxidized Rhizospheres of	n Living Roots (C3) Saturation Visible of	on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iro	on (C4) Stunted or Stresse	d Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (C6) X Geomorphic Position	on (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard ([	D3)
Inundation Visible on Aerial Imagery (B	7)Other (Explain in Remark	(s)Microtopographic F	Relief (D4)
Sparsely Vegetated Concave Surface (	B8)	X FAC-Neutral Test (	D5)
Field Observations:			
Surface Water Present? Yes	No X Depth (inches):		
Water Table Present? Yes	No X Depth (inches): No Depth (inches):		
Saturation Present? Yes	No Depth (inches):	Wetland Hydrology Present?	Yes X No
(includes capillary fringe)			
Describe Recorded Data (stream gauge, m	onitoring well, aerial photos, prev	vious inspections), if available:	
Remarks:			

Number of Dominant Species   That Are OBL, FACW, or FAC:   4	Tree Stratum (Plot size:30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
Total Number of Dominant   Species Across All Strata:   4 (B)		10	Yes	FACW	· ·
Total Number of Dominant Species Across All Strata:	2.		· ——		That Are OBL, FACW, or FAC: 4 (A)
Parcent of Dommant Species   That Are OBL_FACKU or FAC:   100.0% (A/B)	3. 4.				
That Are OBL, FACW, or FAC: 100.0% (A/B)	5				Percent of Dominant Species
Total Stratum (Plot size: 15' )   Total Cover   Total Cover of:   Multiply by:	6				· ·
Sapling/Shrub Stratum   (Plot size: 15" )   35	7				Prevalence Index worksheet:
1. Viburnum dentatum		10	=Total Cover		Total % Cover of: Multiply by:
2.   Cornus amomum	Sapling/Shrub Stratum (Plot size:15')				OBL species 30 x 1 = 30
Rhamnus cathartica   10	Viburnum dentatum	35	Yes	FAC	FACW species 42 x 2 = 84
Fraxinus pennsylvanica   5	2. Cornus amomum	25	Yes	FACW	FAC species 62 x 3 = 186
2 No FACW   F	3. Rhamnus cathartica	10	No	FAC	FACU species 5 x 4 = 20
Prevalence Index = B/A = 2.30    Hydrophytic Vegetation Indicators:   1 - Rapid Test for Hydrophytic Vegetation	4. Fraxinus pennsylvanica	5	No	FACW	UPL species 0 x 5 = 0
Hydrophytic Vegetation Indicators:   1 - Rapid Test for Hydrophytic Vegetation	5. Ulmus americana	2	No	FACW	Column Totals: (A) (B)
Total Cover	6.				Prevalence Index = B/A = 2.30
Symphyotrichum puniceum   30    Yes	7.				Hydrophytic Vegetation Indicators:
1. Symphyotrichum puniceum  2. Euthamia graminifolia  3. One of FAC 2. Euthamia graminifolia  3. Solidago rugosa  5. No FAC 4. Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)  4. Solidago canadensis 5. No FAC 5. No FAC 7. Problematic Hydrophytic Vegetation¹ (Explain)  5. Toxicodendron radicans 7. Definitions of Vegetation Strata:  7. Definitions of Vegetation Strata:  7. Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  7. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  8. Herb – All herbaceous (non-woody) plants, regardless of size, and woody vines greater than 3.28 ft in height.  8. Woody Vine Stratum (Plot size: 30')  8. Hydrophytic Vegetation Present? Yes X No		77	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
2. Euthamia graminifolia  10 No FAC 3. Solidago rugosa 5 No FAC 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 5 No FAC 7 Problematic Hydrophytic Vegetation¹ (Explain) 5 Toxicodendron radicans 2 No FAC 7 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 in height.  Woody vines – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation Present? Yes X No_	Herb Stratum (Plot size: 5' )				X 2 - Dominance Test is >50%
data in Remarks or on a separate sheet)  Solidago canadensis  No FACU Problematic Hydrophytic Vegetation¹ (Explain)  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 vines greater than 3.28 ft in height.  Woody Vine Stratum (Plot size: 30' )  Moody Vine Stratum (Plot size: 30' )  Tree – Woody vines – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation Present? Yes X No	Symphyotrichum puniceum	30	Yes	OBL	X 3 - Prevalence Index is ≤3.0 <sup>1</sup>
4. Solidago canadensis 5 No FACU 7. Toxicodendron radicans 2 No FAC 9. Definitions of Vegetation Strata: 10.	2. Euthamia graminifolia	10	No	FAC	
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 Vine Stratum (Plot size: 30' )  Woody vines – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation Present? Yes X No	3. Solidago rugosa	5	No	FAC	data in Remarks or on a separate sneet)
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 Vine Stratum (Plot size:	4. Solidago canadensis	5	No	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
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 Vine Stratum (Plot size: 30')  Moody Vine Stratum (Plot size: 30')  Hydrophytic Vegetation Present? Yes X No  =Total Cover	<ul><li>5. <u>Toxicodendron radicans</u></li><li>6.</li></ul>	2	No	FAC	
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 Vine Stratum (Plot size: 30')  Woody vines – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation Present? Yes X No  =Total Cover	7.				'
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 Vine Stratum (Plot size: 30')  Woody vines – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation Present? Yes X No	8.				
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 Vine Stratum (Plot size: 30' )  Woody vines – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation Present? Yes X No	9.				* '
and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody Vine Stratum (Plot size: 30' )  Woody vines – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation Present? Yes X No	10.		·		
Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.   Woody Vine Stratum (Plot size: 30' )	11.		·		
S2			·		
Woody Vine Stratum (Plot size: 30' )  1.		52	=Total Cover		
Moody Vines = All woody Vines greater than 3.28 ft in height.  2. Hydrophytic Vegetation Present? Yes X No	Woody Vine Stratum (Plot size: 30')		•		
Hydrophytic Vegetation Present? Yes X No					
Hydrophytic Vegetation Present? Yes X No	0		·		
4	2		·		
=Total Cover	4.		· ———		
l	· -		=Total Cover		
Contained. (Theread priore trained on on a superace street.)	Remarks: (Include photo numbers here or on a constr	ate sheet \			
	Tromarko. (moidae prioto numbers nere or on a separe	ato 31100t.)			

Sampling Point:

Wet\_5B-D

SOIL Sampling Point: Wet\_5B-D

Depth	ription: (Describe to Matrix	tne aep		<b>ment tn</b> k Featur		tor or co	nfirm the absence of	indicators.)		
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Re	marks	
0-10	10YR 3/2	95	10YR 3/6	5	С	M	Loamy/Clayey	Prominent red	lox con	centrations
10-19	10YR 4/2	60	10YR 3/6	40	С	М	Loamy/Clayey	Prominent red	lox con	centrations
<sup>1</sup> Type: C=Co	oncentration, D=Deple	tion, RM	=Reduced Matrix, MS	3=Mask	ed Sand	Grains.		L=Pore Lining, M= or Problematic H		
Histosol Histic Ep Black His Hydroge Stratified X Depleted Thick Da Mesic Sp (MLR Sandy M Sandy G Sandy R Stripped	(A1) pipedon (A2)	(A11)	Dark Surface (S Polyvalue Belov MLRA 149B) Thin Dark Surfa High Chroma S Loamy Mucky N Loamy Gleyed I X Depleted Matrix X Redox Dark Su Depleted Dark S Redox Depress Marl (F10) (LRF Red Parent Mat	w Surface  ace (S9)  ands (S  dineral (  Matrix (F3)  rface (F  Surface  sions (FE  R K, L)	(LRR R, 611) (LRF (F1) (LRF F2) (66) (F7)	, MLRA 1 R K, L) R K, L)	2 cm Mu Coast Pr 5 cm Mu Thin Dar Iron-Mar Piedmor Red Par Very Sha Other (E	arck (A10) (LRR K, rairie Redox (A16) acky Peat or Peat or Peat or Peat or Redox Surface (S9) (Linganese Masses (Interpretation of Peat of Peat or Peat or Redox (Redox Peat of Peat o	L, MLI (LRR (S3) (LISS) (LISS) (LISS) (LISS) (LISS) (LISS) (LISS) (E12)	RA 149B) K, L, R) RR K, L, R) RR K, L) L) LRR K, L, R) (MLRA 149B) de MLRA 145)  ion and sent,
Type: Depth (ir			<u> </u>				Hydric Soil Preser	nt? Yes_	X	No
Remarks:										



Wetland 5B-D - View facing west/southwest



Wetland 5B-D - Soils

**SITE PHOTOGRAPHS** 

Segment 9 – Package 5B

### WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE	City/County: Bethlehem/Albany County Sampling Date: 9/27-22
Applicant/Owner: TDI	State: NY Sampling Point: Upl_5B-D
Investigator(s): C. Scrivner & N. Frazer	Section, Township, Range:
	relief (concave, convex, none): None Slope %: 0
Subregion (LRR or MLRA): LRR R Lat: 42.54897°N	Long: -73.83991°W Datum: WGS84
Soil Map Unit Name: RhB - Rhinebeck silty clay loam, 3 to 8 percent slope	
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 distur	
Are Vegetation, Soil, or Hydrologynaturally problems	<del></del>
<del></del> -	mpling point locations, transects, important features, etc.
Lludronhutic Vegetation Drocent2	In the Complet Area
Hydrophytic Vegetation Present?  Hydric Soil Present?  Yes No X  No X	Is the Sampled Area within a Wetland? Yes No X
Hydric Soil Present?  Wetland Hydrology Present?  Yes No X  No X	within a Wetland? Yes No X  If yes, optional Wetland Site ID:
	ii yes, optional victiand one ib.
Remarks: (Explain alternative procedures here or in a separate report.) Successional old field.	
Outcessional old noid.	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)Water-Stained Leaves (	(B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor	(C1) Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres	on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)Presence of Reduced In	on (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction i	n Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remains	rks)Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No _X Depth (inches):	: <u></u>
Water Table Present? Yes No X Depth (inches):	
Saturation Present? Yes No X Depth (inches):	Wetland Hydrology Present? Yes No X
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pro-	evious inspections), if available:
Remarks:	

Tree Stratum (Plot size:30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
<ol> <li>Pinus strobus</li> <li></li> </ol>	10	Yes	FACU	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
3. 4.				Total Number of Dominant Species Across All Strata:6(B)
5 6				Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)
7.				Prevalence Index worksheet:
	10	=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size:)				OBL species 5 x 1 = 5
1				FACW species10 x 2 =20
2.				FAC species10 x 3 =30
3				FACU species 52 x 4 = 208
4.				UPL species 5 x 5 = 25
5.				Column Totals: 82 (A) 288 (B)
6.				Prevalence Index = B/A = 3.51
7.				Hydrophytic Vegetation Indicators:
		=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5' )		-		2 - Dominance Test is >50%
Lotus corniculatus	10	Yes	FACU	3 - Prevalence Index is ≤3.0 <sup>1</sup>
Euthamia graminifolia	10	Yes	FAC	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
3. Lonicera morrowii	10	Yes	FACU	data in Remarks or on a separate sheet)
4. Cornus amomum	10	Yes	FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. Oxalis stricta	5	No	FACU	_
6. Lythrum salicaria	5	No	OBL	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7. Solidago canadensis	5	No	FACU	Definitions of Vegetation Strata:
8. Centaurea stoebe	5	No	UPL	
9. Erigeron canadensis	2	No	FACU	<b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
10.				
11.		·		Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
12.		·		
	62	=Total Cover		<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size: 30')		-		
1. Vitis aestivalis	10	Yes	FACU	Woody vines – All woody vines greater than 3.28 ft in height.
2.				- rong-m
3.				Hydrophytic
4.				Vegetation Present? Yes No X
··	10	=Total Cover		135 <u> </u>
Remarks: (Include photo numbers here or on a separa				
Remarks. (Include photo numbers here of on a separa	ate sneet.)			

Sampling Point:

Upl\_5B-D

SOIL Sampling Point: UpI\_5B-D

Depth	ription: (Describe to Matrix	the dep		<b>ment th</b> c Featur		or or co	nfirm the absence of in	dicators.)	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Rem	arks
0-16	10YR 3/3	100					Loamy/Clayey	silt lo	nam
0.0								<u> </u>	
									_
<sup>1</sup> Type: C=Co	ncentration, D=Deplet	ion. RM	=Reduced Matrix. MS	S=Mask	ed Sand	Grains.	<sup>2</sup> Location: PL=	Pore Lining, M=M	atrix.
Hydric Soil I		,	,					Problematic Hyd	
Histosol	(A1)		Dark Surface (S	S7)			2 cm Muck	(A10) ( <b>LRR K, L</b> ,	MLRA 149B)
Histic Ep	ipedon (A2)		Polyvalue Belov	w Surfac	e (S8) ( <b>L</b>	.RR R,	Coast Prai	rie Redox (A16) ( <b>I</b>	RR K, L, R)
Black His	stic (A3)		MLRA 149B)				5 cm Muck	y Peat or Peat (S	3) (LRR K, L, R)
	n Sulfide (A4)		Thin Dark Surfa	, ,	•		· — ·	Below Surface (S8	
	Layers (A5)		High Chroma S					Surface (S9) (LRF	
	Below Dark Surface (	(A11)	Loamy Mucky N			( K, L)		anese Masses (F1	
	rk Surface (A12)		Loamy Gleyed	•	-2)				(19) (MLRA 149B)
	odic (A17) <b>A 144A, 145, 149B)</b>		Depleted Matrix Redox Dark Su		6)			ow Dark Surface (	outside MLRA 145)
	ucky Mineral (S1)		Depleted Dark					lain in Remarks)	1 22)
	leyed Matrix (S4)		Redox Depress				<u> </u>	iam in reomane)	
	edox (S5)		Marl (F10) (LRI		,		<sup>3</sup> Indicators	of hydrophytic ve	getation and
	Matrix (S6)		Red Parent Ma	terial (F2	21) <b>(MLR</b>	A 145)		hydrology must be	
							unless d	sturbed or proble	matic.
Restrictive L	ayer (if observed):								
Type:									
Depth (in	ches):						Hydric Soil Present?	Yes	NoX
Remarks:							1		



**Upland 5B-D - View facing southeast** 



**Upland 5B-D - Soils** 

Segment 9 – Package 5B

# SITE PHOTOGRAPHS

### WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE	City/County: Bethlehem/Albany County Sampling Date: 9/27/22
Applicant/Owner: TDI	State: NY Sampling Point: Wet_5B-E
Investigator(s): C. Scrivner & N. Frazer	Section, Township, Range:
Landform (hillside, terrace, etc.): Depression	Local relief (concave, convex, none): Concave Slope %: 3
Subregion (LRR or MLRA): LRR R Lat: 42.5492°N	<del></del>
Soil Map Unit Name: W - Water	NWI classification: PUBx
·	<del></del>
Are climatic / hydrologic conditions on the site typical for this time of	
Are Vegetation, Soil, or Hydrologysignificant	<del></del>
Are Vegetation, Soil, or Hydrologynaturally p	oroblematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: Near flag 5B-E-6
Remarks: (Explain alternative procedures here or in a separate reproduction with vegetated banks.	Jon.)
Total min rogotatod barnio.	
LIVERGLOOV	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply	y) Surface Soil Cracks (B6)
X Surface Water (A1) Water-Stained L	eaves (B9) Drainage Patterns (B10)
X High Water Table (A2) Aquatic Fauna (	B13) Moss Trim Lines (B16)
X Saturation (A3) Marl Deposits (E	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfid	
	pheres on Living Roots (C3)Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Rec	duced Iron (C4) Stunted or Stressed Plants (D1)
<del></del>	luction in Tilled Soils (C6) X Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surfa	
X Inundation Visible on Aerial Imagery (B7)Other (Explain in	
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)
Field Observations:	
	inches): 24
	inches): 0
Saturation Present? Yes X No Depth (	inches): 0 Wetland Hydrology Present? Yes X No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous inspections), if available:
Remarks:	

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1 2				Number of Dominant Species That Are OBL, FACW, or FAC: (A)
3. 4.				Total Number of Dominant Species Across All Strata: 2 (B)
5 6				Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
7				Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size:)				OBL species 42 x 1 = 42
1.				FACW species 8 x 2 = 16
2				FAC species 0 x 3 = 0
3				FACU species 0 x 4 = 0
4				UPL species0 x 5 =0
5	-			Column Totals: (A) (B)
6.				Prevalence Index = B/A = 1.16
7				Hydrophytic Vegetation Indicators:
		=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5' )				X 2 - Dominance Test is >50%
1. Typha latifolia	25	Yes	OBL	X 3 - Prevalence Index is ≤3.0 <sup>1</sup>
Lythrum salicaria	15	Yes	OBL	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
3. Bidens frondosa	8	No	FACW	data in Remarks or on a separate sheet)
4. Scirpus cyperinus	2	No	OBL	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. 6.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7.		·		Definitions of Vegetation Strata:
9.				<b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
10				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
12.				Harb All barbassus (non woods) plants regardless
	50	=Total Cover		<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size:) 1.				Woody vines – All woody vines greater than 3.28 ft in height.
				Height.
2				Hydrophytic
3				Vegetation           Present?         Yes X No
		=Total Cover		
Remarks: (Include photo numbers here or on a separ	ate sheet.)			

Sampling Point:

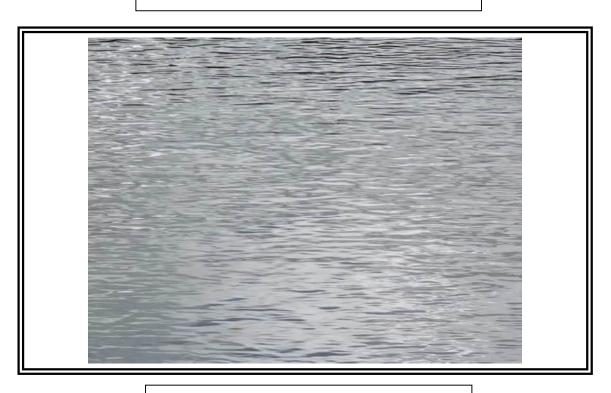
Wet\_5B-E

SOIL Sampling Point: Wet\_5B-E

Depth	cription: (Describe to Matrix	the dep		<b>ment th</b> x Featur		or or co	nfirm the absence of inc	dicators.)	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	<b>S</b>
()	Color (molor)		Color (molety		.,,,,,		· oxtaro		,
1 <sub>Type:</sub> C-C(	oncentration, D=Deplet	tion RM		C-Mack	hae2 bo	Graine	<sup>2</sup> I ocation: PI –	Pore Lining, M=Matrix	,
Hydric Soil I		llUH, EXIVI-	=Reduced Matrix, Mix	3=IVIask	eu Sanu .	Grairis.		Problematic Hydric S	
Histosol			Dark Surface (S	27)				(A10) (LRR K, L, ML	
	pipedon (A2)		Polyvalue Belov	,	ca (S8) (I	DD R		rie Redox (A16) ( <b>LRR</b>	
Black His			MLRA 149B)		,e (00) ( <b>-</b>	-Nix 1x,		y Peat or Peat (S3) (L	
	en Sulfide (A4)		Thin Dark Surfa		/I RR R	MIRA 1		g Pear of Pear (S3) ( <b>L</b> Below Surface (S8) ( <b>L</b>	
	d Layers (A5)		High Chroma S					Surface (S9) (LRR K,	
	d Layers (A5) d Below Dark Surface (	(411)	Loamy Mucky N					anese Masses (F12) (I	
	ark Surface (A12)	(A11)	Loamy Gleyed			ι <b>κ</b> , <b>∟</b> <sub>/</sub>		Floodplain Soils (F19)	
	podic (A17)		Depleted Matrix	,	-2)				
	, ,		Redox Dark Su	. ,	:G)			t Material (F21) <b>(outs</b> i ow Dark Surface (F22)	
	(A 144A, 145, 149B)			,	•				)
	flucky Mineral (S1)		Depleted Dark : Redox Depress				Λ Office (Expi	lain in Remarks)	
	Bleyed Matrix (S4) Ledox (S5)		Marl (F10) (LRI		3)		<sup>3</sup> Indicators	of hydrophytic vegeta	tion and
	Matrix (S6)		Red Parent Ma		24) <b>(MI R</b>	^ 1 <i>4</i> 5)		hydrology must be pre	
ouipped	Manix (30)		Red I arent Ma	lenai (i z	21) (IVILIX	.A 140 <i>j</i>			
Postrictive I	Layer (if observed):						uiliess ui	isturbed or problemati	C.
Type:	_dyer (II observed).								
•			<del></del>						
Depth (ir	nches):		<u></u>				Hydric Soil Present?	Yes X	No
Remarks:									
No soils were	e collected due to water	er depth b	being approximately	2 feet a	nd domin	ant veget	tation being FACW to OB	L.	



Wetland 5B-E - View facing northwest



Wetland 5B-E - Soils

**SITE PHOTOGRAPHS** 

Segment 9 – Package 5B

### WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE	City	y/County: Bethlehem/Albany County	Sampling Date: 9/27/22
Applicant/Owner: TDI		State: NY	Sampling Point: Upl_5B-E
Investigator(s): C. Scrivner & N. Frazer		Section, Township, Range:	
Landform (hillside, terrace, etc.): Flat	Local relief	f (concave, convex, none): None	Slope %: 0
Subregion (LRR or MLRA): LRR R	Lat: 42.54922°N	Long: -73.83892°W	Datum: WGS84
Soil Map Unit Name: RhB - Rhinebeck silty clay	_	NWI classification:	NA
Are climatic / hydrologic conditions on the site typic	•		explain in Remarks.)
Are Vegetation, Soil, or Hydrology	· <u></u>		
Are Vegetation, Soil, or Hydrology	naturally problematic?	(If needed, explain any answers in	Remarks.)
SUMMARY OF FINDINGS – Attach site	e map showing sampling	ng point locations, transects, imp	portant features, etc.
Hydrophytic Vegetation Present? Yes	s No X Is	s the Sampled Area	
Hydric Soil Present? Yes		vithin a Wetland?	No X
Wetland Hydrology Present?		yes, optional Wetland Site ID:	<u> </u>
		yes, optional violatia site ib.	
Remarks: (Explain alternative procedures here o Successional old field.	ir in a separate report.)		
Successional dia nota.			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicators (m	inimum of two required)
Primary Indicators (minimum of one is required; c	check all that apply)	Surface Soil Cracks	<del>-</del>
Surface Water (A1)	Water-Stained Leaves (B9)	Oralinage Patterns (I	, ,
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B	
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water	
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C	
Sediment Deposits (B2)	Oxidized Rhizospheres on Li		n Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C	· · · —	
Algal Mat or Crust (B4)	<ul> <li>Recent Iron Reduction in Tille</li> </ul>		
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D	, ,
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Ro	
Sparsely Vegetated Concave Surface (B8)		FAC-Neutral Test (E	
Field Observations:		<u> </u>	·
Surface Water Present? Yes No	o X Depth (inches):		
Water Table Present? Yes No			
Saturation Present? Yes No	Depth (inches):	Wetland Hydrology Present?	Yes No X
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitori	ing well, aerial photos, previou	s inspections), if available:	
Remarks:			

1 - Rapid Te 2 - Dominan 3 - Prevalen 4 - Morpholodata in Re	Dominant All Strata:  nant Species ACW, or FAC:  ex worksheet:  over of:  0  10  45  45  100  ce Index = B/A	Multi x 1 = x 2 = x 3 = x 4 = x 5 = (A) A = eators: hytic Vege nytic Vege ons <sup>1</sup> (Pro	ovide sup e sheet)	(A) (B) (A/B) (B) (B)
Percent of Domin That Are OBL, F. Prevalence Inde Total % Co DBL species FACW species FACU species DPL species Column Totals: Prevalence 1 - Rapid Te 2 - Dominan 3 - Prevalence 4 - Morpholocidata in Res Problematic	All Strata:  nant Species ACW, or FAC:  ex worksheet:  over of:  0  10  45  45  100  ce Index = B/A getation Indicest for Hydroph ace Test is >50 ce Index is ≤3.  ogical Adaptation emarks or on a	Multi x 1 = x 2 = x 3 = x 4 = x 5 = (A) A = cators: aytic Vege ons <sup>1</sup> (Pro	0.0%  tiply by:  0  30  180  225  435  4.35  etation  ovide sup e sheet)	(A/B)
Frevalence Inde Total % Co DBL species FACW species FACU species DPL species Column Totals: Prevalence 1 - Rapid Te 2 - Dominan 3 - Prevalence 4 - Morpholocy data in Res Problematic	ACW, or FAC:  ex worksheet:  over of:  0  10  45  45  100  ce Index = B/A getation Indicest for Hydrophologous Test is >50  ce Index is ≤3.  ogical Adaptation and the second and the seco	Multi x 1 = x 2 = x 3 = x 4 = x 5 = (A) A = cators: aytic Vege ons <sup>1</sup> (Pro	tiply by:  0  0  30  180  225  435  4.35  etation  ovide sup e sheet)	
Total % Co DBL species FACW species FAC species FACU species UPL species Column Totals: Prevalenc 1 - Rapid Te 2 - Dominan 3 - Prevalenc 4 - Morpholocdata in Re	over of:  0  10  45  45  100  ce Index = B/A  getation Indicest for Hydrophoce Test is >50  ce Index is ≤3.  ogical Adaptation arks or on a	Multivariation $x = 1$ $x = 1$ $x = 2$ $x = 3$ $x = 4$ $x = 5$ $x = 1$	0 0 30 180 225 435 4.35 etation	
DBL species FACW species FAC species FACU species UPL species Column Totals: Prevalence 1 - Rapid Te 2 - Dominan 3 - Prevalence 4 - Morpholocy data in Re	0 0 10 45 45 100 ce Index = B/A getation Indicest for Hydrophoce Test is >50 ce Index is ≤3. ogical Adaptationemarks or on a	x 1 = x 2 = x 3 = x 4 = x 5 = (A) A = eators: hytic Vege 10% 100s <sup>1</sup> (Pro- tal separate	0 0 30 180 225 435 4.35 etation	
FACW species FAC species FACU species JPL species Column Totals: Prevalence 1 - Rapid Te 2 - Dominan 3 - Prevalence 4 - Morpholocyte data in Reserved	0 10 45 45 100 ce Index = B/A getation Indicest for Hydrophoce Test is >50 ce Index is ≤3. ogical Adaptation	x 2 = x 3 = x 4 = x 5 = (A) A = eators: hytic Vege y% 100 ons <sup>1</sup> (Pro- a separate	0 30 180 225 435 4.35 etation	
FAC species FACU species JPL species Column Totals: Prevalenc 1 - Rapid Te 2 - Dominan 3 - Prevalen 4 - Morpholo data in Re	10 45 45 100  De Index = B/A  getation Indice est for Hydrophoce Test is >50  ce Index is ≤3.  ogical Adaptation emarks or on a	x 3 = x 4 = x 5 = (A) A = cators: nytic Vege 10% 100s <sup>1</sup> (Pro- ca separate	30 180 225 435 4.35 etation	
FACU species  JPL species  Column Totals:  Prevalence  1 - Rapid Te  2 - Dominan  3 - Prevalence  4 - Morpholocy data in Reserved	45  45  100  ce Index = B/A  getation Indicest for Hydrophoce Test is >50  ce Index is ≤3.  ogical Adaptationemarks or on a	x = 4 $x = 5$ $x = 6$ $x =$	180 225 435 4.35 etation  ovide sup e sheet)	
JPL species  Column Totals:  Prevalence  1 - Rapid Te  2 - Dominan  3 - Prevalence  4 - Morpholocy data in Reserved	45 100  ce Index = B/A  getation Indicest for Hydroph ace Test is >50 ace Index is ≤3. agical Adaptation arrays or on a	x 5 =	225 435 4.35 etation  ovide sup e sheet)	
Prevalence  1 - Rapid Te  2 - Dominan  3 - Prevalence  4 - Morpholocitata in Re	100  ce Index = B/A  getation Indicest for Hydroph ce Test is >50 ce Index is ≤3.  ogical Adaptation	(A)	435 4.35 etation ovide sup e sheet)	
Prevalence  1 - Rapid Te  2 - Dominan  3 - Prevalen  4 - Morpholocotata in Re  Problematic	ce Index = B/A  getation Indic est for Hydroph ace Test is >50 ace Index is ≤3. agical Adaptati emarks or on a	cators:  hytic Vege  %  .0 <sup>1</sup> fons <sup>1</sup> (Pro	4.35 etation ovide sup e sheet)	
1 - Rapid Te 2 - Dominan 3 - Prevalen 4 - Morpholodata in Re	getation Indicest for Hydroph ce Test is >50 ce Index is ≤3. ogical Adaptati emarks or on a	eators:  nytic Vege  0%  .0 <sup>1</sup> tions <sup>1</sup> (Pro	etation ovide sup e sheet)	porting
1 - Rapid Te 2 - Dominan 3 - Prevalen 4 - Morpholo data in Re	est for Hydroph ace Test is >50 ce Index is ≤3. ogical Adaptati emarks or on a	nytic Vege 9% .0 <sup>1</sup> ions <sup>1</sup> (Pro a separate	ovide sup e sheet)	porting
2 - Dominan 3 - Prevalen 4 - Morpholo data in Re	ce Test is >50 ce Index is ≤3 ogical Adaptati emarks or on a	0% .0 <sup>1</sup> ions <sup>1</sup> (Pro a separate	ovide sup e sheet)	porting
3 - Prevalen 4 - Morpholo data in Re	ce Index is ≤3. ogical Adaptati emarks or on a	.0 <sup>1</sup> ions <sup>1</sup> (Pro a separate	e sheet)	porting
4 - Morpholo data in Re	ogical Adaptati emarks or on a	ions <sup>1</sup> (Pro a separate	e sheet)	porting
data in Re	emarks or on a	a separat	e sheet)	porting
data in Re	emarks or on a	a separat	e sheet)	
	Hydrophytic V	egetation	n <sup>1</sup> (Explai	
			i (Expidi	n)
		_		
Indicators of hyd present, unless of				nust be
Definitions of V				
			. ,	
Tree – Woody plat breast height (				ameter
Sapling/shrub - and greater than				ВН
<b>Herb</b> – All herba				rdless
•	, ,			8 ft in
neight.				
-lydronhytic				
/egetation				
Present?	Yes	No_	X	
- -	ydrophytic egetation	eight. ydrophytic egetation	eight. ydrophytic egetation	ydrophytic egetation

Sampling Point:

Upl\_5B-E

SOIL Sampling Point: Upl\_5B-E

Depth	Matrix	the de		rnent tri k Featur		tor or co	nfirm the absence of	indicators.)	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Rem	arks
0-17	10YR 3/3	98	10YR 5/8	2	С	M	Loamy/Clayey	Prominent redox	concentrations
						_			
						<u> </u>			
		_			_	_			
						<u> </u>			
		_				<u> </u>			
1		tion DM	Dadward Matrix M	2 Maal		0		Dave Linian M. M	-4-1
Hydric Soil I	oncentration, D=Deple	tion, Rivi	=Reduced Matrix, Mi	S=IVIask	ed Sand	Grains.		L=Pore Lining, M=M or Problematic Hyd	
Histosol			Dark Surface (\$	S7)				ck (A10) (LRR K, L,	
	pipedon (A2)		Polyvalue Belov	,	ce (S8) (I	RR R.		airie Redox (A16) ( <b>L</b>	,
Black His			MLRA 149B)		() (-	<b>,</b>		cky Peat or Peat (S	
	n Sulfide (A4)		Thin Dark Surfa		(LRR R	, MLRA 1		e Below Surface (S8	
	Layers (A5)		High Chroma S					k Surface (S9) ( <b>LRF</b>	
	Below Dark Surface	(A11)	Loamy Mucky N					ganese Masses (F1	
	rk Surface (A12)	` ,	Loamy Gleyed			,		t Floodplain Soils (F	
Mesic Sp	oodic (A17)		Depleted Matrix	(F3)			Red Pare	ent Material (F21) <b>(o</b>	utside MLRA 14
(MLR	A 144A, 145, 149B)		Redox Dark Su	rface (F	6)		Very Sha	allow Dark Surface (	F22)
Sandy M	lucky Mineral (S1)		Depleted Dark	Surface	(F7)		Other (E	xplain in Remarks)	
Sandy G	leyed Matrix (S4)		Redox Depress	ions (F	8)				
	edox (S5)		Marl (F10) ( <b>LR</b> l	R K, L)			<sup>3</sup> Indicato	rs of hydrophytic ve	getation and
Stripped	Matrix (S6)		Red Parent Ma	terial (F	21) <b>(MLF</b>	RA 145)		d hydrology must be disturbed or proble	
	_ayer (if observed):								
Type: Depth (ir	nches):						Hydric Soil Presen	t? Yes	No X
Remarks:	,						-		



**Upland 5B-E - View facing north/northeast** 



**Upland 5B-E - Soils** 

Segment 9 – Package 5B

# SITE PHOTOGRAPHS

### WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE	City/County: Bethlehem/Albany County Sampling Date: 9/27/22
Applicant/Owner: TDI	State: NY Sampling Point: Wet_5B-F
Investigator(s): C. Scrivner & N. Frazer	Section, Township, Range:
Landform (hillside, terrace, etc.): Depression	Local relief (concave, convex, none): Concave Slope %: 4
Subregion (LRR or MLRA): LRR R Lat: 42.5483	<del></del>
Soil Map Unit Name: HuE - Hudson silt loam, 25 to 45 percent sl	
Are climatic / hydrologic conditions on the site typical for this time of	<u></u>
Are Vegetation, Soil, or Hydrology significa	
<del></del>	
Are Vegetation, Soil, or Hydrologynaturally	
SUMMARY OF FINDINGS – Attach site map showi	ng sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: Near flag 5B-F-9
Remarks: (Explain alternative procedures here or in a separate r	eport.)
Persistent Palustrine Emergent Marsh.	
LIVERALAN	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that app	· ,
Surface Water (A1) Water-Stained	
High Water Table (A2) Aquatic Fauna	
Saturation (A3) Marl Deposits	· · · · · · · · · · · · · · · · · · ·
Water Marks (B1)Hydrogen Sulf	
<del></del>	ospheres on Living Roots (C3)Saturation Visible on Aerial Imagery (C9)
<del></del>	educed Iron (C4) Stunted or Stressed Plants (D1)
	eduction in Tilled Soils (C6) X Geomorphic Position (D2)
Iron Deposits (B5)Thin Muck Sur	,
Inundation Visible on Aerial Imagery (B7)Other (Explain	
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)
Field Observations:	
	n (inches):
Water Table Present? Yes No X Depth	n (inches):
	(inches): 0 Wetland Hydrology Present? Yes X No
(includes capillary fringe)	L
Describe Recorded Data (stream gauge, monitoring well, aerial p	notos, previous inspections), if available:
Remarks:	
Tromano.	

3. Carex vulpinoidea 4. Phragmites australis 5. No FACW 5. Epilobium ciliatum 5. No FACW 6. Solidago gigantea 7. Euthamia graminifolia 8. 9.	ree Stratum (Plot size:30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1.	·				
Percent of Dominant Species   That Are OBL, FACW, or FAC: 100.0%	·				
Sapiling/Shrub Stratum (Plot size: 15' )					
Sapiling/Shrub Stratum					Prevalence Index worksheet:
1.	_		=Total Cover		Total % Cover of: Multiply by:
2.	apling/Shrub Stratum (Plot size:15')				OBL species 80 x 1 = 80
FACU species   0					FACW species 15 x 2 = 30
4					FAC species 5 x 3 = 15
5.					FACU species 0 x 4 = 0
6. Prevalence Index = B/A = 1.25    Hydrophytic Vegetation Indicators:	·				UPL species 0 x 5 = 0
Total Cover	·				Column Totals: 100 (A) 125 (B)
Eleft Stratum   Plot size: 5'	<u></u>				Prevalence Index = B/A =1.25
Herb Stratum (Plot size: 5' )					Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5' )   30			=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
2. Scirpus atrovirens 3. Carex vulpinoidea 4. Phragmites australis 5. No FACW 5. Epilobium ciliatum 6. Solidago gigantea 7. Euthamia graminifolia 8. 9.	lerb Stratum (Plot size: 5' )				
2. Scirpus atrovirens 3. Carex vulpinoidea 4. Phragmites australis 5. No FACW 5. Epilobium ciliatum 6. Solidago gigantea 7. Euthamia graminifolia 8. 9.	Lythrum salicaria	30	Yes	OBL	X 3 - Prevalence Index is ≤3.0 <sup>1</sup>
3. Carex vulpinoidea 4. Phragmites australis 5. No FACW 5. Epilobium ciliatum 5. No FACW 6. Solidago gigantea 7. Euthamia graminifolia 8. 9.		25	Yes	OBL	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
4. Phragmites australis 5 No FACW 5. Epilobium ciliatum 5 No FACW 6. Solidago gigantea 5 No FACW 7. Euthamia graminifolia 5 No FAC 8. 9. 10. 11. 12. 12. 13. 14. 15. 16. 16. 17. 18. 18. 19. 18. 19. 19. 10. 10. 11. 11. 12. 12. 13. 14. 15. 16. 16. 17. 18. 18. 18. 19. 19. 10. 10. 11. 11. 12. 12. 13. 14. 15. 16. 16. 17. 18. 18. 18. 19. 19. 10. 10. 10. 11. 11. 12. 13. 14. 15. 15. 16. 16. 17. 18. 18. 19. 19. 10. 10. 10. 10. 10. 11. 11. 12. 12. 13. 14. 15. 16. 16. 17. 18. 18. 19. 19. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10		25	Yes	OBL	data in Remarks or on a separate sheet)
5. Epilobium ciliatum 6. Solidago gigantea 7. Euthamia graminifolia 8. 9. 10. 11. 12. 12. 13. 14. 15. 15. 16. 16. 17. 18. 18. 19. 18. 19. 19. 10. 10. 11. 11. 12. 12. 13. 14. 15. 15. 16. 16. 17. 18. 18. 19. 19. 10. 10. 11. 11. 12. 13. 14. 15. 15. 16. 16. 17. 18. 18. 19. 19. 19. 10. 10. 10. 11. 11. 12. 13. 14. 15. 15. 16. 16. 17. 18. 18. 19. 19. 19. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10			No		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
6. Solidago gigantea  5 No FACW  FACW  Present, unless disturbed or problematic.  Definitions of Vegetation Strata:  Tree – Woody plants 3 in. (7.6 cm) or more in d at breast height (DBH), regardless of height.  Sapling/shrub – Woody plants less than 3 in. E 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 Vine Stratum (Plot size: 30')  1. Woody vines – All woody vines greater than 3.1 height.  Hydrophytic		5	No	FACW	<u> </u>
7. Euthamia graminifolia 5 No FAC Definitions of Vegetation Strata:  8. Tree – Woody plants 3 in. (7.6 cm) or more in dat breast height (DBH), regardless of height.  10. Sapling/shrub – Woody plants less than 3 in. [1 and greater than or equal to 3.28 ft (1 m) tall.  12. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody Vine Stratum (Plot size: 30')  1. Woody vines – All woody vines greater than 3.2 height.  Hydrophytic	<u> </u>	5	No		
8					
9.					
Sapling/shrub — Woody plants less than 3 in. Land greater than or equal to 3.28 ft (1 m) tall.    Herb — All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall.    Woody Vine Stratum   (Plot size: 30' )					
Woody Vine Stratum (Plot size: 30' )  1.					Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
Woody Vine Stratum (Plot size: 30' )  1.	2				Harb — All herbaceous (non-woody) plants, regardless
1. height.  Hydrophytic	_	100	=Total Cover		
1 height. 2 Hydrophytic	Voody Vine Stratum (Plot size: 30' )				Washing All woods vines greater than 2.20 ft in
Hydrophytic					
Hydrophytic					
3.	· ·				
					_
=Total Cover	· <u>-</u> -		-Total Cover		100 <u>X</u> 100 <u>X</u>
<del></del>			=10tal Covel		
Remarks: (Include photo numbers here or on a separate sheet.)	emarks: (Include photo numbers here or on a separate	e sheet.)			-

Sampling Point:

Wet\_5B-F

SOIL Sampling Point: Wet\_5B-F

Depth	ription: (Describe to Matrix	tne de		<b>ment th</b> x Featur		OF OF CO	nfirm the absence of	maicators.)		
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Re	emarks	
0-6	10YR 3/2	95	10YR 4/6	5	С	М	Loamy/Clayey	Prominent red	lox cond	centrations
6-16	10YR 4/2	60	10YR 2/1	5	С	М	Loamy/Clayey	Faint redox	concer	ntrations
			10YR 4/6	35	С	М		Prominent red	lox cond	centrations
1Type: C=Co	oncentration, D=Deple	tion PM	——————————————————————————————————————	S-Mack	ed Sand	Grains	<sup>2</sup> Location: P	L=Pore Lining, M=	-Matrix	
Hydric Soil I		tiion, Kiv	i=Neduced Matrix, Mi	3=IVIASK	eu Sanu	Grains.		or Problematic H		
Histosol			Dark Surface (S	<b>37</b> )				ick (A10) ( <b>LRR K</b> ,		
Histic Ep	ipedon (A2)		Polyvalue Belov	w Surfac	ce (S8) ( <b>I</b>	RR R,	Coast Pr	rairie Redox (A16)	(LRR I	K, L, R)
Black His	stic (A3)		MLRA 149B)	1			5 cm Mucky Peat or Peat (S3) (LRR K, L, R)			RR K, L, R)
Hydroge	n Sulfide (A4)		Thin Dark Surfa	ace (S9)	(LRR R,	MLRA 1	<b>49B</b> ) Polyvalu	e Below Surface (	(S8) ( <b>LF</b>	RR K, L)
	Layers (A5)		High Chroma S					k Surface (S9) (L		
	Below Dark Surface	(A11)	Loamy Mucky N			R K, L)		nganese Masses (		
	irk Surface (A12)		Loamy Gleyed		F2)			nt Floodplain Soils		
	oodic (A17)		X Depleted Matrix		·c)			ent Material (F21)		de MLRA 145)
•	A 144A, 145, 149B)		X Redox Dark Su					allow Dark Surface	, ,	
	lucky Mineral (S1) leyed Matrix (S4)		Depleted Dark Redox Depress				Other (E	xplain in Remarks	<i>i)</i>	
	edox (S5)		Marl (F10) (LRI		5)		<sup>3</sup> Indicators of hydrophytic vegetation and			
	Matrix (S6)		Red Parent Ma		21) <b>(MI F</b>	A 145)	wetland hydrology must be present,			
	a (33)				, (	,	unless disturbed or problematic.			
	ayer (if observed):									
Type:										
Depth (ir	nches):						Hydric Soil Preser	nt? Yes_	<u> </u>	No
Remarks:										



Wetland 5B-F - View facing west/southwest



Wetland 5B-F - Soils

SITE PHOTOGRAPHS

Segment 9 – Package 5B

### WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE	City/County: Bethlehem/Albany County Sampling Date: 9/27/22
Applicant/Owner: TDI	State: NY Sampling Point: Upl_5B-F
Investigator(s): C. Scrivner & N. Frazer	Section, Township, Range:
Landform (hillside, terrace, etc.): Slight hillslope Local re	relief (concave, convex, none): Convex Slope %: 2
Subregion (LRR or MLRA): LRR R Lat: 42.84829°N	Long: -73.8365°W Datum: WGS84
Soil Map Unit Name: HuE - Hudson silt loam, 25 to 45 percent slopes	NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes x No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturb	
Are Vegetation, Soil, or Hydrology naturally problema	
SUMMARY OF FINDINGS – Attach site map showing samp	pling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area
Hydric Soil Present? Yes No X	within a Wetland? Yes No _X_
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate report.)	
Successional old field.	
L HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (E	
High Water Table (A2)  Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) — Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C	· · · · · · · · · · · · · · · · ·
Sediment Deposits (B2) Oxidized Rhizospheres o	
Drift Deposits (B3) Presence of Reduced Iro	<u> </u>
Algal Mat or Crust (B4)Recent Iron Reduction in	· / · · · · · · · · · · · · · · · · · ·
Iron Deposits (B5) — Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)Other (Explain in Remark	
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No _X Depth (inches):	
Water Table Present? Yes No X Depth (inches):	
Saturation Present? Yes No _X Depth (inches):	Wetland Hydrology Present? Yes No _X
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, prev	vious inspections), if available:
Remarks:	_

Tree Stratum (Plot size: 30' )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
2.				Number of Dominant Species That Are OBL, FACW, or FAC:(A)
3. 4.		<u> </u>		Total Number of Dominant Species Across All Strata:5(B)
5 6				Percent of Dominant Species That Are OBL, FACW, or FAC: 40.0% (A/B)
7				Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size:15')				OBL species 0 x 1 = 0
1. Cornus amomum	45	Yes	FACW	FACW species 47 x 2 = 94
2. Rhamnus cathartica	25	Yes	FAC	FAC species 25 x 3 = 75
3				FACU species 58 x 4 = 232
4.				UPL species 40 x 5 = 200
5				Column Totals: (A) (B)
6.				Prevalence Index = B/A = 3.54
7				Hydrophytic Vegetation Indicators:
	70	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5' )				2 - Dominance Test is >50%
1. Lotus corniculatus	30	Yes	FACU	3 - Prevalence Index is ≤3.0 <sup>1</sup>
2. Centaurea stoebe	20	Yes	UPL	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
3. Artemisia vulgaris	20	Yes	UPL	data in Remarks or on a separate sheet)
4. Solidago canadensis	15	No	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. Plantago lanceolata	6	No	FACU	The disease of budging as it and continued budgets as a second by
6. Solidago altissima	5	No	FACU	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7. Symphyotrichum novae-angliae	2	No	FACW	Definitions of Vegetation Strata:
8. Cirsium vulgare	2	No	FACU	
9.				<b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
11				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
12				Herb – All herbaceous (non-woody) plants, regardless
	100	=Total Cover		of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size:30')				Woody vines – All woody vines greater than 3.28 ft in
1				height.
2.				
3.				Hydrophytic
4.				Vegetation Present? Yes No X
		=Total Cover		
Remarks: (Include photo numbers here or on a separa	ete sheet )			
remarks. (include prioto numbers here of our a separa	ale Sileel.)			

Sampling Point:

Upl\_5B-F

SOIL Sampling Point: Upl\_5B-F

		o the de				tor or co	nfirm the absence of in	dicators.)		
Depth	Matrix			x Featur		. 2		_		
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remar	·ks	
0-12	10YR 3/3	100					Loamy/Clayey			
12-17	10YR 4/4	90	7.5YR 5/6	10	С	М	Loamy/Clayey	Distinct redox co	ncentrations	
									_	
									_	
									_	
									_	
	-									
1							2			
		etion, RM	=Reduced Matrix, M	S=Mask	ed Sand	Grains.		Problematic Under		
Hydric Soil In Histosol (A			Dark Surface (	<b>9</b> 7)				Problematic Hydri		
	pedon (A2)		Polyvalue Belo		re (S8) (I	RRR		< (A10) ( <b>LRR K, L, N</b> irie Redox (A16) ( <b>LR</b>		
Black Hist			MLRA 149B		JC (OO) (E	-1111 11,		ky Peat or Peat (S3)	·	
	Sulfide (A4)		Thin Dark Surfa		(LRR R,	MLRA 1		Below Surface (S8)		
	Layers (A5)		High Chroma S					Surface (S9) (LRR I		
	Below Dark Surface	(A11)	Loamy Mucky I					anese Masses (F12)	*	
Thick Dar	k Surface (A12)		Loamy Gleyed	Matrix (F	=2)		Piedmont	Floodplain Soils (F1	9) ( <b>MLRA 149B</b> )	
Mesic Spo	odic (A17)		Depleted Matrix	x (F3)			Red Parer	nt Material (F21) <b>(o</b> u	tside MLRA 145)	
(MLRA	A 144A, 145, 149B)		Redox Dark Su	ırface (F	6)		Very Shall	ow Dark Surface (F2	22)	
Sandy Mu	ıcky Mineral (S1)		Depleted Dark	Surface	(F7)		Other (Exp	olain in Remarks)		
	eyed Matrix (S4)		Redox Depress	sions (F8	3)					
Sandy Re			Marl (F10) ( <b>LR</b>				<sup>3</sup> Indicators of hydrophytic vegetation and			
Stripped N	Matrix (S6)		Red Parent Ma	iterial (F	21) <b>(MLR</b>	RA 145)	wetland hydrology must be present,			
5 414 1							unless o	disturbed or problem	atic.	
	ayer (if observed):									
Type:										
Depth (inc	ches):						Hydric Soil Present	? Yes	NoX	
Remarks:										



**Upland 5B-F - View facing southwest** 



**Upland 5B-F - Soils** 

Segment 9 – Package 5B

# SITE PHOTOGRAPHS

### WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE	City/County: Bethlehem/Albany County Sampling Date: 9/27/22
Applicant/Owner: TDI	State: NY Sampling Point: Wet_5B-F
Investigator(s): C. Scrivner & N. Frazer	Section, Township, Range:
Landform (hillside, terrace, etc.): Depression	Local relief (concave, convex, none): Concave Slope %: 3
Subregion (LRR or MLRA): LRR R Lat: 42.54896°l	
Soil Map Unit Name: RhB - Rhinebeck silty clay loam, 3 to 8 percer	
	<u>-</u>
Are climatic / hydrologic conditions on the site typical for this time of y	
Are Vegetation, Soil, or Hydrologysignificantl	<del></del> -
Are Vegetation, Soil, or Hydrologynaturally pr	roblematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: Near flag 5B-F-4
Remarks: (Explain alternative procedures here or in a separate rep	
Palustrine scrub shrub wetland.	,
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
X Surface Water (A1) Water-Stained Le	eaves (B9) X Drainage Patterns (B10)
X High Water Table (A2) Aquatic Fauna (E	Moss Trim Lines (B16)
X Saturation (A3)Marl Deposits (B	15) Dry-Season Water Table (C2)
Water Marks (B1)Hydrogen Sulfide	Odor (C1) Crayfish Burrows (C8)
Sediment Deposits (B2)Oxidized Rhizosp	oheres on Living Roots (C3) X Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Red	uced Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)Recent Iron Redu	uction in Tilled Soils (C6) X Geomorphic Position (D2)
Iron Deposits (B5)Thin Muck Surface	ce (C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)Other (Explain in	Remarks)Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes X No Depth (i	nches):0.5
	nches):6
Saturation Present? Yes X No Depth (i	nches): 0 Wetland Hydrology Present? Yes X No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial pho	os, previous inspections), if available:
Remarks:	
Tomano.	

=Total Cover  Yes Yes	FACW FAC	Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)  Total Number of Dominant Species Across All Strata: 5 (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 35 x 1 = 35  FACW species 70 x 2 = 140  FAC species 25 x 3 = 75
Yes		Species Across All Strata:         5         (B)           Percent of Dominant Species         100.0%         (A/B)           Prevalence Index worksheet:         Multiply by:           OBL species         35         x 1 = 35           FACW species         70         x 2 = 140
Yes		That Are OBL, FACW, or FAC: 100.0% (A/B)           Prevalence Index worksheet:           Total % Cover of:         Multiply by:           OBL species         35         x 1 = 35           FACW species         70         x 2 = 140
Yes		Total % Cover of:         Multiply by:           OBL species         35         x 1 = 35           FACW species         70         x 2 = 140
Yes		OBL species       35       x 1 =       35         FACW species       70       x 2 =       140
		FACW species 70 x 2 = 140
Yes	FAC	FAC species 25 x 3 = 75
		· — — —
		FACU species 0 x 4 = 0
		UPL species 5 x 5 = 25
		Column Totals: 135 (A) 275 (B)
		Prevalence Index = B/A =2.04
		Hydrophytic Vegetation Indicators:
=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
		X 2 - Dominance Test is >50%
Yes	OBL	X 3 - Prevalence Index is ≤3.0 <sup>1</sup>
Yes		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
		data in Remarks or on a separate sheet)
No	UPL	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
		<del></del>
		<sup>1</sup> Indicators of hydric soil and wetland hydrology must b present, unless disturbed or problematic.
		Definitions of Vegetation Strata:
		<b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diamete 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.
=Total Cover		<b>Herb</b> – 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
		Hydrophytic Vegetation
		Present? Yes X No No
=Total Cover		
	Yes Yes Yes No No Total Cover	Yes         OBL           Yes         FACW           Yes         OBL           No         UPL           No         FACW   =Total Cover

Sampling Point:

Wet\_5B-F

SOIL Sampling Point: Wet\_5B-F

Profile Desc Depth	ription: (Describe to Matrix	the dep		ment the x Feature		tor or co	nfirm the absence of i	indicators.)	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0-7	10YR 3/1	90	10YR 3/6	10	С	М	Loamy/Clayey	Prominent redox concentrations	
7-15	10YR 3/2	70	10YR 3/6	30	С	М	Loamy/Clayey	Prominent redox concentrations	
15-20	10YR 4/2	60	10YR 3/4	35	С	М	Loamy/Clayey	Distinct redox concentrations	
			10YR 2/1	5	С	М		Faint redox concentrations	
								_	
<sup>1</sup> Type: C=Co	ncentration, D=Deple	tion, RM:	=Reduced Matrix, M	S=Mask	ed Sand	Grains.	<sup>2</sup> Location: Pl	_=Pore Lining, M=Matrix.	
Hydric Soil I								or Problematic Hydric Soils <sup>3</sup> :	
Histosol	` '		Dark Surface (	,	(00) (1	DD D		ck (A10) (LRR K, L, MLRA 149B)	
Black His	ipedon (A2)		Polyvalue Belo		e (58) ( <b>L</b>	LKK K,		airie Redox (A16) ( <b>LRR K, L, R</b> ) cky Peat or Peat (S3) ( <b>LRR K, L, R</b> )	
	n Sulfide (A4)			•	(LRR R.	MLRA 1		e Below Surface (S8) (LRR K, L)	
	` '		Thin Dark Surface (S9) (LRR R, MLRA 1 High Chroma Sands (S11) (LRR K, L)					k Surface (S9) (LRR K, L)	
Stratified Layers (A5) Depleted Below Dark Surface (A11)		(A11)	Loamy Mucky Mineral (F1) (LRR K, L)				Iron-Manganese Masses (F12) (LRR K, L, R)		
	rk Surface (A12)	()	Loamy Gleyed			, -,	Piedmont Floodplain Soils (F19) (MLRA 149B)		
	odic (A17)		Depleted Matrix		,		Red Parent Material (F21) (outside MLRA 145)		
(MLR	A 144A, 145, 149B)		X Redox Dark Su		6)		Very Shallow Dark Surface (F22)		
Sandy M	ucky Mineral (S1)		Depleted Dark	Surface	(F7)		Other (Explain in Remarks)		
Sandy G	leyed Matrix (S4)		Redox Depress	sions (F8	3)				
Sandy Re	edox (S5)		Marl (F10) ( <b>LR</b>	R K, L)			<sup>3</sup> Indicators of hydrophytic vegetation and		
Stripped	Matrix (S6)		Red Parent Material (F21) (MLRA 145)				wetland hydrology must be present,		
Restrictive I	.ayer (if observed):						unless	disturbed or problematic.	
Type:	ayer (ii observeu).								
Depth (in	ches):						Hydric Soil Presen	it? Yes X No	
Remarks:	<u> </u>								



Wetland 5B-F - View facing west/southwest



Wetland 5B-E - Soils

**SITE PHOTOGRAPHS** 

Segment 9 – Package 5B

### WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE		City/County: Bethlehem/Alb	any County	Sampling Date: 9/27/22			
Applicant/Owner: TDI			State: NY	Sampling Point: Upl_5B-F			
Investigator(s): C. Scrivner & N. Frazer		Section, Township,	Range:				
Landform (hillside, terrace, etc.): Hillslope	Local re	elief (concave, convex, none		Slope %: 10			
Subregion (LRR or MLRA): LRR R	Lat: 42.54899°N	Long: -73.83		Datum: WGS84			
Soil Map Unit Name: RhB - Rhinebeck silty			WI classification:	NA VVGGG4			
Are climatic / hydrologic conditions on the site	typical for this time of year?	Yes <u>x</u> N	No (If no, e	explain in Remarks.)			
Are Vegetation, Soil, or Hydro	ology significantly disturb	ed? Are "Normal Circ	cumstances" preser	nt? Yes x No			
Are Vegetation, Soil, or Hydro	'		in any answers in F				
SUMMARY OF FINDINGS – Attach			,	,			
	· · · · · · · · · · · · · · · · · · ·			·			
Hydrophytic Vegetation Present?	Yes No X	Is the Sampled Area		<b>N</b> V			
Hydric Soil Present?	Yes No X	within a Wetland?	Yes	No X			
Wetland Hydrology Present?	Yes No _X	If yes, optional Wetland S	ite ID:				
HYDROLOGY							
Wetland Hydrology Indicators:		<u>Secor</u>	ndary Indicators (m	inimum of two required)			
Primary Indicators (minimum of one is require	ed; check all that apply)	s	urface Soil Cracks	(B6)			
Surface Water (A1)	Water-Stained Leaves (B	9)D	rainage Patterns (E	310)			
High Water Table (A2)	Aquatic Fauna (B13)	M	loss Trim Lines (B1	6)			
Saturation (A3)	Marl Deposits (B15)	<u></u> D	ry-Season Water T	able (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C	C1)C	rayfish Burrows (C	8)			
Sediment Deposits (B2)	Oxidized Rhizospheres or	n Living Roots (C3)S	aturation Visible or	Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron	n (C4)S	tunted or Stressed	Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in	n Tilled Soils (C6) Geomorphic Position (D2)					
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7	')Other (Explain in Remark						
Sparsely Vegetated Concave Surface (E	38)	F.	AC-Neutral Test (D	5)			
Field Observations:							
Surface Water Present? Yes	No X Depth (inches):						
Water Table Present? Yes	No X Depth (inches): No X Depth (inches):						
Saturation Present? Yes	No X Depth (inches):	Wetland Hydr	ology Present?	Yes No _X			
(includes capillary fringe)							
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos, prev	rious inspections), if available	e:				
Remarks:							
Nomano.							

Tree Stratum (Plot size:30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. 2.		·		Number of Dominant Species That Are OBL, FACW, or FAC:(A)
3. 4.				Total Number of Dominant Species Across All Strata:5 (B)
5. 6.				Percent of Dominant Species That Are OBL, FACW, or FAC: 40.0% (A/B)
7				Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15' )				OBL species 0 x 1 = 0
1. Cornus amomum	45	Yes	FACW	FACW species 47 x 2 = 94
2. Rhamnus cathartica	25	Yes	FAC	FAC species35 x 3 =105
3				FACU species 78 x 4 = 312
4.				UPL species0 x 5 =0
5.				Column Totals: 160 (A) 511 (B)
6.				Prevalence Index = B/A = 3.19
7.				Hydrophytic Vegetation Indicators:
·	70	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5' )		-10101 0010.		2 - Dominance Test is >50%
	35	Voc	EACH	
1. Cirsium arvense	35	Yes	FACU	3 - Prevalence Index is ≤3.0¹
2. Apocynum cannabinum	10	No No	FAC	4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
3. Rubus allegheniensis	5	No	FACU	
4. Lotus corniculatus	5	No	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. Ambrosia artemisiifolia	5	No	FACU	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be
6. Solidago canadensis	3	No	FACU	present, unless disturbed or problematic.
7. Bidens frondosa	2	No	FACW	Definitions of Vegetation Strata:
8				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
9.				at breast height (DBH), regardless of height.
10.				Sapling/shrub – Woody plants less than 3 in. DBH
11.				and greater than or equal to 3.28 ft (1 m) tall.
12.				
	65	=Total Cover		<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size:)				Woody vines – All woody vines greater than 3.28 ft in
Parthenocissus quinquefolia	20	Yes	FACU	height.
2. Vitis aestivalis	5	Yes	FACU	
3.				Hydrophytic Vegetation
4.				Present? Yes No X
	25	=Total Cover		
Remarks: (Include photo numbers here or on a separa				1
Remains. (include prioto numbers here of on a separe	ile Sileei.j			

Sampling Point:

Upl\_5B-F

SOIL Sampling Point: Upl\_5B-F

Profile Desc Depth	ription: (Describe to Matrix	the dep		<b>ment th</b> c Featur		or or co	nfirm the absence of in	dicators.)	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Rema	arks
0-17	10YR 3/4	100					Loamy/Clayey		
0-17	1011(3)4	100	_				Loamy/Olayey		_
	·		_						_
			_						_
	oncentration, D=Deplet	ion, RM=	Reduced Matrix, MS	S=Mask	ed Sand	Grains.		Pore Lining, M=Ma	
Hydric Soil I								Problematic Hydr	
Histosol		-	Dark Surface (S	,				(A10) ( <b>LRR K, L</b> ,	
	ipedon (A2)	-	Polyvalue Belov		e (S8) ( <b>L</b>	.RR R,		rie Redox (A16) (L	
Black His	` '		MLRA 149B)		/I DD D	MI DA 4		y Peat or Peat (S3	
· ·	n Sulfide (A4)	-	Thin Dark Surfa	, ,			· —	Below Surface (S8)	
	Layers (A5)		High Chroma S					Surface (S9) (LRR	
	l Below Dark Surface ( irk Surface (A12)	A11) _		Loamy Mucky Mineral (F1) (LRR K, L) Loamy Gleyed Matrix (F2)				anese Masses (F1)	
		-		•	2)			Floodplain Soils (F <sup>.</sup> t Material (F21) <b>(o</b> .	utside MLRA 1456)
Mesic Spodic (A17)		Depleted Matrix (F3)  Redox Dark Surface (F6)					ow Dark Surface (F		
(MLRA 144A, 145, 149B) Sandy Mucky Mineral (S1)		Depleted Dark Surface (F7)					lain in Remarks)		
Sandy Gleyed Matrix (S4)		-	Redox Depressions (F8)				Other (Exp	iam in Romano)	
Sandy Redox (S5)			Mari (F10) ( <b>LRR K, L</b> )				<sup>3</sup> Indicators	of hydrophytic veg	etation and
Stripped Matrix (S6)		Red Parent Material (F21) (MLRA 145)				wetland hydrology must be present,			
		-					unless d	isturbed or problen	natic.
Restrictive L	ayer (if observed):								
Type:									
Depth (ir	nches):						Hydric Soil Present?	Yes	No X
Remarks:	'								
rtemarks.									



**Upland 5B-F - View facing east/southeast** 



**Upland 5B-F - Soils** 

Segment 9 – Package 5B

# SITE PHOTOGRAPHS

### WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE	(	City/County: Bethleh	em/Albany County	Sampling Date: 5/3/23			
Applicant/Owner: TDI			State: NY	Sampling Point: P5-DD-5 Wet			
Investigator(s): C. Einstein & J. Greaves		Section, To	wnship, Range:				
Landform (hillside, terrace, etc.): Depressio	n Local re	elief (concave, conve	x, none): Concave	Slope %: 3			
Subregion (LRR or MLRA): LRR R	Lat: 42.551227		-73.839477	 Datum: WGS84			
Soil Map Unit Name: RhB - Rhinebeck silty of			NWI classification:	<del></del>			
Are climatic / hydrologic conditions on the site		Yes x		explain in Remarks.)			
Are Vegetation , Soil , or Hydrol			nal Circumstances" prese	. ,			
			·				
Are Vegetation, Soil, or Hydrologynaturally problematic? (If needed, explain any answers in Remarks.)  SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.							
SUMMART OF FINDINGS - ALLACII	Site map snowing samp	IINg point ioca	tions, transects, iii	iportant features, etc.			
Hydrophytic Vegetation Present?	Yes X No	Is the Sampled A	rea				
Hydric Soil Present?	Yes X No	within a Wetland					
Wetland Hydrology Present?	Yes X No	If yes, optional We	tland Site ID: Wetland	P5-DD			
Remarks: (Explain alternative procedures he	ere or in a separate report.)						
Common reed marsh.							
HYDROLOGY							
Wetland Hydrology Indicators:				ninimum of two required)			
Primary Indicators (minimum of one is require			Surface Soil Cracks				
X Surface Water (A1)	Water-Stained Leaves (B9	9)	Drainage Patterns (B10)				
X High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B	·			
X Saturation (A3)	Marl Deposits (B15)		Dry-Season Water Table (C2)				
Water Marks (B1)	Hydrogen Sulfide Odor (C	· ·	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizospheres on	-					
Drift Deposits (B3)	Presence of Reduced Iron		Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	Recent Iron Reduction in Thin Music Surface (C7)	Tilled Soils (Co)	· / — · · · /				
Iron Deposits (B5)	Thin Muck Surface (C7)	~\	Shallow Aquitard (D	· ·			
Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B	· ——	5)	Microtopographic R X FAC-Neutral Test (I	, ,			
<del></del>	0)		FAC-INCULIAL LEST (I	ມວ)			
Field Observations: Surface Water Present? Yes X	Na Donth (inches):	0.5					
Surface Water Present? Yes X  Water Table Present? Yes X	No Depth (inches): _ No Depth (inches):	8					
Saturation Present? Yes X	No Depth (inches):		d Hydrology Present?	Yes X No			
(includes capillary fringe)	NO Берин (шонез)		u nyurology r resent:	169 <u>v</u> 110			
Describe Recorded Data (stream gauge, mor	nitoring well, aerial photos, prev		available:				
2000 120 1 1000 100 2 2 2 2 2 2 2 2 2 2	moning mon, dona. photos, p	1000 mopes,,	avanasio.				
Remarks:							

Tree Stratum (Plot size: 30' )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. 2.				Number of Dominant Species That Are OBL, FACW, or FAC:3(A)
3. 4.				Total Number of Dominant Species Across All Strata:4(B)
<ul><li>5.</li><li>6.</li></ul>				Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
7				Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size:)				OBL species 2 x 1 = 2
1. Cornus racemosa	5	Yes	FAC	FACW species 103 x 2 = 206
2. Cornus amomum	5	Yes	FACW	FAC species 5 x 3 = 15
3. Lonicera morrowii	5	Yes	FACU	FACU species 5 x 4 = 20
4.				UPL species 0 x 5 = 0
5.				Column Totals: 115 (A) 243 (B)
6.				Prevalence Index = B/A = 2.11
7.				Hydrophytic Vegetation Indicators:
	 15	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5' )				X 2 - Dominance Test is >50%
1. Phragmites australis	98	Yes	FACW	X 3 - Prevalence Index is ≤3.0 <sup>1</sup>
Typha latifolia	2	No	OBL	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
				data in Remarks or on a separate sheet)
4.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5.				
6.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7.				Definitions of Vegetation Strata:
8.				Tree – Woody plants 3 in. (7.6 cm) or more in
9.				diameter at breast height (DBH), regardless of height.
10 11.				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
				and greater than or equal to 3.20 it (1 iii) tail.
12	100	=Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size: 30' )				
				Woody vines – All woody vines greater than 3.28 ft in height.
				noight.
2				Hydrophytic
3.				Vegetation
4.				Present? Yes X No
		=Total Cover		
Remarks: (Include photo numbers here or on a separ	ate sheet.)			

Sampling Point: P5-DD-5 Wet

SOIL Sampling Point P5-DD-5 Wet

		o the de	-			ator or co	onfirm the absence of	f indicators.)
Depth (inches)	Matrix Color (moist)	%	Color (moist)	x Featur %	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-6	10YR 4/1	80	10YR 4/4	20	С	m	Loamy/Clayey	Distinct redox concentrations
			1011(4/4					Distillet redux concentrations
6-16	7.5YR 4/2	85	7.5YR 4/6	15	<u> </u>	<u>m</u>	Loamy/Clayey	Prominent redox concentrations
<sup>1</sup> Type: C=Co	ncentration, D=Deple	etion, RI	M=Reduced Matrix, M	1S=Mas	ked San	d Grains.		L=Pore Lining, M=Matrix.
Hydric Soil Ir								or Problematic Hydric Soils <sup>3</sup> :
Histosol (	·		Dark Surface (					ick (A10) (LRR K, L, MLRA 149B)
I —	pedon (A2)		Polyvalue Belo		ce (S8) (	LRR R,		rairie Redox (A16) (LRR K, L, R)
Black His	นิต (A3) เ Sulfide (A4)		MLRA 149B Thin Dark Surfa		\	MIDA		cky Peat or Peat (S3) (LRR K, L, R)
	Layers (A5)		High Chroma S					e Below Surface (S8) ( <b>LRR K, L</b> ) k Surface (S9) ( <b>LRR K, L</b> )
	Below Dark Surface	(A11)	Loamy Mucky I					nganese Masses (F12) (LRR K, L, R)
	k Surface (A12)	(, , , , ,	Loamy Gleyed			, = ,		nt Floodplain Soils (F19) (MLRA 149B)
	odic (A17)		X Depleted Matrix		,			ent Material (F21) (outside MLRA 145)
(MLRA	A 144A, 145, 149B)		Redox Dark Su	ırface (F	<del>-</del> 6)		Very Sha	allow Dark Surface (F22)
Sandy Mu	ucky Mineral (S1)		Depleted Dark	Surface	(F7)		Other (E	xplain in Remarks)
	eyed Matrix (S4)		X Redox Depress		8)			
Sandy Re			Marl (F10) ( <b>LR</b>					rs of hydrophytic vegetation and
Stripped I	Matrix (S6)		Red Parent Ma	iterial (F	21) <b>(MLI</b>	RA 145)		d hydrology must be present,
Do otri otivo I	(if a baam and).						unless	disturbed or problematic.
Type:	ayer (if observed):							
1 1 -	- L V-						Uhadaia Gail Bassasa	-40 Y Y N-
	ches):						Hydric Soil Preser	nt? Yes X No
Remarks:								



Wetland P5-DD - View facing southeast.



Wetland P5-DD - Soils

Segment 9 – Package 5B

**SITE PHOTOGRAPHS** 

## WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE		City/County: Bethleh	nem/Albany County	Sampling Date: 5/3/23			
Applicant/Owner: TDI			State: NY	Sampling Point: P5-DD-5			
Investigator(s): C. Einstein & J. Greaves		Section, To	wnship, Range:	<u> </u>			
Landform (hillside, terrace, etc.): Hillslope	Local re	elief (concave, conve	ex, none): Convex	Slope %: 20			
Subregion (LRR or MLRA): LRR R	Lat: 42.551241	•	-73.839536	Datum: WGS84			
Soil Map Unit Name: RhB - Rhinebeck silty of			NWI classification:				
Are climatic / hydrologic conditions on the site				explain in Remarks.)			
		Yes X	` ` `	,			
Are Vegetation, Soil, or Hydrol			nal Circumstances" prese				
Are Vegetation, Soil, or Hydrol			d, explain any answers in	·			
SUMMARY OF FINDINGS – Attach	site map showing samp	pling point loca	tions, transects, im	portant features, etc.			
Hydrophytic Vegetation Present?	Yes No X	Is the Sampled A	rea				
Hydric Soil Present?	Yes No X	within a Wetland	? Yes	No X			
Wetland Hydrology Present?	Yes No X	If yes, optional We	tland Site ID: <u>Upland a</u>	adjacent to Wetland P5-DD			
Remarks: (Explain alternative procedures he Successional shrubland.	ere or in a separate report.)						
HYDROLOGY							
Wetland Hydrology Indicators:			Secondary Indicators (n	ninimum of two required)			
Primary Indicators (minimum of one is require	ed: check all that apply)		Surface Soil Cracks				
Surface Water (A1)	Water-Stained Leaves (B	39)	Drainage Patterns (				
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3)	Marl Deposits (B15)		Dry-Season Water	Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C	21)	Crayfish Burrows (C	C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres or	n Living Roots (C3)	Saturation Visible o	n Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron		Stunted or Stressed				
Algal Mat or Crust (B4)	Recent Iron Reduction in						
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquitard (D	·			
Inundation Visible on Aerial Imagery (B7)	·— ` `	is)	Microtopographic R	` '			
Sparsely Vegetated Concave Surface (B	8)	<del></del>	FAC-Neutral Test (I	D5)			
Field Observations: Surface Water Present? Yes	No. V Donth (inches):						
	No X Depth (inches): _ No X Depth (inches): _						
Saturation Present? Yes	No X Depth (inches):		d Hydrology Present?	Yes No _X_			
(includes capillary fringe)	70 77 Sopa. (		a rijarorogj i rosom.				
Describe Recorded Data (stream gauge, mor	nitoring well, aerial photos, prev	vious inspections), if	available:				
Remarks:							
кепакѕ.							

## **VEGETATION** – Use scientific names of plants.

Tree Stratum (Plot size:30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. 2.				Number of Dominant Species That Are OBL, FACW, or FAC:1(A)
3. 4.				Total Number of Dominant Species Across All Strata:3(B)
<ul><li>5.</li><li>6.</li></ul>				Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)
7				Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size:)				OBL species0 x1 =0
1				FACW species 0 x 2 = 0
2				FAC species30 x 3 =90
3.				FACU species35 x 4 =140
4				UPL species0 x 5 =0
5.				Column Totals: 65 (A) 230 (B)
6.				Prevalence Index = B/A = 3.54
7.				Hydrophytic Vegetation Indicators:
		=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5' )		•		2 - Dominance Test is >50%
1. Lonicera morrowii	20	Yes	FACU	3 - Prevalence Index is ≤3.0 <sup>1</sup>
2. Cornus racemosa	20	Yes	FAC	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
3. Rhamnus cathartica	10	No	FAC	data in Remarks or on a separate sheet)
4. Juniperus virginiana	10	No	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5 6.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7.				Definitions of Vegetation Strata:
8.		·		Tree – Woody plants 3 in. (7.6 cm) or more in
9				diameter at breast height (DBH), regardless of height.
11.				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
12				Herb – All herbaceous (non-woody) plants, regardless
	60	=Total Cover		of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size: 30' )				Woody vines – All woody vines greater than 3.28 ft in
1. Vitis aestivalis	5	Yes	FACU	height.
2				Hydrophytic
3. 4.				Vegetation Present? Yes No X
4.	5	=Total Cover		Tresent: resNoX_
Remarks: (Include photo numbers here or on a separ		•		
Tremaiks. (include prioto numbers here of our a separ	ale sileet.)			

Sampling Point: P5-DD-5

SOIL Sampling Point P5-DD-5

Profile Desc Depth	ription: (Describe t Matrix	to the de		<b>ument th</b> x Feature		ator or co	onfirm the absence of	indicator	rs.)	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remark	(S
0-2	7.5YR 4/2	100			<u></u>		Loamy/Clayey			
2-16	10YR 4/3	100					Loamy/Clayey			
2-10	10114/3	100					Loamy/Clayey			
	oncentration, D=Depl	etion, RN	/I=Reduced Matrix, N	/IS=Masl	ked Sand	d Grains.	<sup>2</sup> Location: PL			
Hydric Soil I			<b>5</b> 10 6 7	~~\			Indicators fo		-	
— Histosol	` '		Dark Surface (		oo (CO) (	I DD D			LRR K, L, M	· ·
Black His	oipedon (A2)		Polyvalue Belo		ce (So) (I	LKK K,			ox (A16) ( <b>LR</b> or Peat (S3)	(LRR K, L, R)
	n Sulfide (A4)		Thin Dark Surf	,	(LRR R	. MLRA 1		-	urface (S8) (	
	Layers (A5)		High Chroma S		-				(S9) (LRR K	
	Below Dark Surface	(A11)	Loamy Mucky	-						(LRR K, L, R)
Thick Da	rk Surface (A12)		Loamy Gleyed	Matrix (	F2)	-	Piedmont	t Floodpla	in Soils (F19	9) (MLRA 149B)
Mesic Sp	oodic (A17)		Depleted Matri	x (F3)			Red Pare	ent Materia	al (F21) <b>(out</b>	side MLRA 145)
	A 144A, 145, 149B)		Redox Dark Su	-	-				Surface (F2	2)
	ucky Mineral (S1)		Depleted Dark				Other (Ex	oplain in R	Remarks)	
	leyed Matrix (S4)		Redox Depress		3)		31			4a4:
	edox (S5) Matrix (S6)		Marl (F10) ( <b>LR</b> Red Parent Ma		21) /MI E	OA 14E)		-	ophytic vege gy must be p	
— Stripped	Matrix (30)		Neu Falent Wa	ileriai (i .	21) (IVILI	XA 143)			or problema	
Restrictive L	ayer (if observed):						unicco	diotarboa	or probleme	
Type:	,									
Depth (in	nches):						Hydric Soil Presen	t?	Yes	No X
Remarks:	<u> </u>									



Upland P5-DD - View facing xx



**Upland P5-DD - Soils** 

Segment 9 – Package 5B

# **SITE PHOTOGRAPHS**

## WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE	City/Co	ounty: Bethlehem/Albany County	Sampling Date: 9/27/22
Applicant/Owner: TDI	_	State: NY	Sampling Point: Wet_5B-G
Investigator(s): C. Scrivner & N. Frazer		Section, Township, Range:	
Landform (hillside, terrace, etc.): Depression	Local relief (co	ncave, convex, none): Concave	Slope %: 2
Subregion (LRR or MLRA): LRR R	Lat: 42.54903°N	Long: -73.83716°W	Datum: WGS84
Soil Map Unit Name: RhB - Rhinebeck silty clay I	_	NWI classification:	PEM1
Are climatic / hydrologic conditions on the site typic	cal for this time of year?	Yes x No (If no,	explain in Remarks.)
Are Vegetation , Soil , or Hydrology	ŕ	Are "Normal Circumstances" prese	
<u> </u>		·	
Are Vegetation, Soil, or Hydrology		(If needed, explain any answers in	
SUMMARY OF FINDINGS – Attach site	map snowing sampling p	Doint locations, transects, im	portant features, etc.
Hydrophytic Vegetation Present? Yes	s X No Is the	e Sampled Area	
Hydric Soil Present? Yes	x No withi	n a Wetland? Yes X	No
Wetland Hydrology Present? Yes	S X No If yes	, optional Wetland Site ID: Near flag	j 5B-G-3
Persistent Palustrine Emergent Marsh			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicators (n	ninimum of two required)
Primary Indicators (minimum of one is required; c	heck all that apply)	Surface Soil Cracks	; (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	X Drainage Patterns (	B10)
High Water Table (A2)	_Aquatic Fauna (B13)	Moss Trim Lines (B	16)
Saturation (A3)	_Marl Deposits (B15)	Dry-Season Water	Table (C2)
Water Marks (B1)	_Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C	28)
Sediment Deposits (B2)	_Oxidized Rhizospheres on Living	Roots (C3) Saturation Visible o	n Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed	J Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled S	Soils (C6) X Geomorphic Position	n (D2)
Iron Deposits (B5)	_Thin Muck Surface (C7)	Shallow Aquitard (D	,
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic R	, ,
Sparsely Vegetated Concave Surface (B8)		X FAC-Neutral Test (I	D5)
Field Observations:			
Surface Water Present? Yes No	Depth (inches):	-	
	Depth (inches):	<del>_</del> '	
	Depth (inches):	- Wetland Hydrology Present?	Yes <u>X</u> No
(includes capillary fringe)	annually and all all atom and device in	and the second s	
Describe Recorded Data (stream gauge, monitori	ng well, aerial pnotos, previous ins	pections), if available:	
Remarks:			
1			

# **VEGETATION** – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: 30' )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1.		· <u>'</u>		
2.				Number of Dominant Species That Are OBL, FACW, or FAC:3(A)
3				Total Number of Dominant Species Across All Strata:4(B)
5.				Percent of Dominant Species
6.				That Are OBL, FACW, or FAC: 75.0% (A/B)
7				Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15' )		-		OBL species 60 x 1 = 60
1. Rhamnus cathartica	10	Yes	FAC	FACW species 5 x 2 = 10
2.				FAC species 10 x 3 = 30
3.				FACU species 15 x 4 = 60
4.				UPL species 20 x 5 = 100
5.				Column Totals: 110 (A) 260 (B)
6.		·		Prevalence Index = B/A = 2.36
7.				Hydrophytic Vegetation Indicators:
	10	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5' )				X 2 - Dominance Test is >50%
Persicaria sagittata	20	Yes	OBL	X 3 - Prevalence Index is ≤3.0 <sup>1</sup>
Lythrum salicaria	20	Yes	OBL	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Centaurea stoebe	20	Yes	UPL	data in Remarks or on a separate sheet)
Symphyotrichum puniceum	15	No	OBL	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Solidago altissima	15	No	FACU	
6. Juncus effusus	5	No No	OBL	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7. Symphyotrichum novae-angliae	5	No	FACW	Definitions of Vegetation Strata:
8.				Trans. Was deathers 0: (7.0 cm) as many in the material
9.				<b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
10.				Sapling/shrub – Woody plants less than 3 in. DBH
11.				and greater than or equal to 3.28 ft (1 m) tall.
12.		· .		Harb All back cooks (non-woods) plants reposition
	100	=Total Cover		<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size:)				Woody vines – All woody vines greater than 3.28 ft in
1				height.
2.				
3				Hydrophytic Vegetation
4.				Present? Yes X No
		=Total Cover		
Remarks: (Include photo numbers here or on a separa	ate sheet.)			

Sampling Point:

Wet\_5B-G

SOIL Sampling Point: Wet\_5B-G

Depth	ription: (Describe to Matrix	o the dep		<b>ment th</b> x Featur		or or co	nfirm the absence of	indicators.)
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-6	10YR 3/2	95	10YR 4/6	5	С	М	Loamy/Clayey	Prominent redox concentrations
6-16	10YR 4/2	70	10YR 4/6	30	С	М	Loamy/Clayey	Prominent redox concentrations
<sup>1</sup> Type: C=Cc	oncentration, D=Deple	etion RM	=Reduced Matrix M	S=Mask	ed Sand	Grains	<sup>2</sup> Location: P	L=Pore Lining, M=Matrix.
Hydric Soil I		Zilori, TXIVI	-reduced Matrix, M	0-Mask	ca Garia	Oranis.		or Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface (	S7)				ick (A10) (LRR K, L, MLRA 149B)
	pipedon (A2)		Polyvalue Belo	,	e (S8) ( <b>L</b>	.RR R,		rairie Redox (A16) (LRR K, L, R)
Black His	stic (A3)		MLRA 149B		, , ,			icky Peat or Peat (S3) (LRR K, L, R)
— Hydrogei	n Sulfide (A4)		Thin Dark Surfa	ace (S9)	(LRR R,	MLRA 1	<b>49B</b> ) Polyvalu	e Below Surface (S8) (LRR K, L)
Stratified	Layers (A5)		High Chroma S	ands (S	11) (LRR	R K, L)	Thin Dar	k Surface (S9) ( <b>LRR K, L</b> )
	Below Dark Surface	(A11)	Loamy Mucky I					nganese Masses (F12) (LRR K, L, R)
	rk Surface (A12)	,	Loamy Gleyed			, ,		nt Floodplain Soils (F19) (MLRA 149B)
	podic (A17)		X Depleted Matrix	•	,			ent Material (F21) (outside MLRA 145)
	A 144A, 145, 149B)		X Redox Dark Su		6)			allow Dark Surface (F22)
•	lucky Mineral (S1)		Depleted Dark					xplain in Remarks)
	leyed Matrix (S4)		Redox Depress					Apidin in Nomano)
	edox (S5)		Marl (F10) (LR		,,		<sup>3</sup> Indicato	ors of hydrophytic vegetation and
	Matrix (S6)		Red Parent Ma		21) <b>/MI D</b>	Λ 1/15)		nd hydrology must be present,
опрресс	Wattix (OO)		Red i aleit wa	icriai (i z	- 1 <i>)</i> (IVILIX	A 140)		s disturbed or problematic.
Restrictive L	_ayer (if observed):						unioc	dictarboa of problematic.
Type:	,							
Depth (in	nches):						Hydric Soil Preser	nt? Yes X No
Remarks:								



Wetland 5B-G - View facing north



Wetland 5B-G - Soils

**SITE PHOTOGRAPHS** 

Segment 9 – Package 5B

## WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE	City/County: Bethlehem/Albany County Sampling Date: 9/27/22
Applicant/Owner: TDI	State: NY Sampling Point: Upl_5B-G
Investigator(s): C. Scrivner & N. Frazer	Section, Township, Range:
Landform (hillside, terrace, etc.): Flat	Local relief (concave, convex, none): None Slope %: 0
Subregion (LRR or MLRA): LRR R Lat: 42.54899	<del>-</del>
Soil Map Unit Name: RhB - Rhinebeck silty clay loam, 3 to 8 perce	
Are climatic / hydrologic conditions on the site typical for this time of	<del></del>
	<del></del>
Are Vegetation, Soil, or Hydrologysignifican	
Are Vegetation, Soil, or Hydrologynaturally	problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	ng sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area
Hydric Soil Present? Yes No X	<del>_</del>
Wetland Hydrology Present? Yes No X	<del>-</del>
Remarks: (Explain alternative procedures here or in a separate re Mowed/Maintained utility Right-of-Way.	port.)
, ,	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that appl	y) Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained	Leaves (B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna	(B13) Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (	B15) Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfice	de Odor (C1) Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizos	spheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Re	educed Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)Recent Iron Re	duction in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5)Thin Muck Surfa	ace (C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain i	in Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No X Depth	(inches):
Water Table Present? Yes No X Depth	(inches):
Saturation Present? Yes No X Depth	(inches): Wetland Hydrology Present? Yes No _X
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial ph	otos, previous inspections), if available:
Remarks:	

# **VEGETATION** – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1 2		·		Number of Dominant Species That Are OBL, FACW, or FAC: (A)
3. 4.				Total Number of Dominant Species Across All Strata:(B)
<ul><li>5.</li><li>6.</li></ul>	,			Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
7.				Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15' )				OBL species0 x 1 =0
1.				FACW species 0 x 2 = 0
2.				FAC species 10 x 3 = 30
3				FACU species75 x 4 =300
4.				UPL species 15 x 5 = 75
5.				Column Totals: 100 (A) 405 (B)
6.				Prevalence Index = B/A = 4.05
7.				Hydrophytic Vegetation Indicators:
		=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5' )		-		2 - Dominance Test is >50%
1. Poa pratensis	50	Yes	FACU	3 - Prevalence Index is ≤3.0 <sup>1</sup>
Plantago lanceolata	15	Yes	FACU	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
3. Centaurea stoebe	10	No	UPL	data in Remarks or on a separate sheet)
4. Lotus corniculatus	10	No	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. Setaria pumila	10	No	FAC	<u> </u>
6. Daucus carota	5	No	UPL	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7.				Definitions of Vegetation Strata:
8.		·		
9.				<b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
11.				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
12.				<b>Herb</b> – All herbaceous (non-woody) plants, regardless
	100	=Total Cover		of size, and woody plants less than 3.28 ft tall.
<u>Woody Vine Stratum</u> (Plot size:)  1				Woody vines – All woody vines greater than 3.28 ft in height.
2.				
3.				Hydrophytic
4.				Vegetation           Present?         Yes         No _ X _
		=Total Cover		
Remarks: (Include photo numbers here or on a separa	eta shaat )			
Remarks: (Include photo numbers here or on a separa	ate sheet.)			

Sampling Point:

Upl\_5B-G

SOIL Sampling Point: Upl\_5B-G

I )onth	Matrix	•		k Feature		. 0. 00.	nfirm the absence of in	ilaioato oi,	
Depth (inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Rema	rks
			Color (molot)	70	1,700			rtome	
0-16	10YR 3/3	100					Loamy/Clayey		
1			D. L. HARRE M				21	D Italia M. M.	
Hydric Soil I	ncentration, D=Deple	etion, Rivi	-Reduced Matrix, M	S=IVIASK	ed Sand G	rains.		=Pore Lining, M=Ma r Problematic Hydr	
Histosol (			Dark Surface (S	27)				k (A10) ( <b>LRR K, L,</b>	
	ipedon (A2)		Polyvalue Belov		ع (S2) را <b>آ</b>	P P		airie Redox (A16) ( <b>L</b>	
Black His	. , ,		MLRA 149B)		C (00) ( <b>L</b> I	,		ky Peat or Peat (S3	
	n Sulfide (A4)		Thin Dark Surfa		(LRR R. I	MLRA 1		Below Surface (S8	
	Layers (A5)		High Chroma S					Surface (S9) (LRR	
	Below Dark Surface	(A11)	Loamy Mucky N					ganese Masses (F1:	
	rk Surface (A12)	(	Loamy Gleyed			, ,		Floodplain Soils (F	
	oodic (A17)		Depleted Matrix	•	,			nt Material (F21) (o	
	A 144A, 145, 149B)		Redox Dark Su	. ,	6)			llow Dark Surface (F	•
	ucky Mineral (S1)		Depleted Dark	Surface	(F7)			plain in Remarks)	•
	leyed Matrix (S4)		Redox Depress					,	
	edox (S5)		Marl (F10) ( <b>LR</b> l				<sup>3</sup> Indicators	s of hydrophytic veg	etation and
Stripped			Red Parent Ma	terial (F2	21) <b>(MLR</b>	145)	wetland	d hydrology must be	present,
	Matrix (30)								
<u> </u>	Wattix (30)						unless	disturbed or problen	natic.
	.ayer (if observed):						unless	disturbed or problen	natic.
			<del></del>				unless	disturbed or problen	natic.
Restrictive L	ayer (if observed):		<del></del>				unless of the second se	·	
Restrictive L Type: Depth (in	ayer (if observed):		<del></del>					·	NoX
Restrictive L	ayer (if observed):		<del></del>					·	
Restrictive L Type: Depth (in	ayer (if observed):		<del></del>					·	
Restrictive L Type: Depth (in	ayer (if observed):		<del></del>					·	
Restrictive L Type: Depth (in	ayer (if observed):		<del></del>					·	
Restrictive L Type: Depth (in	ayer (if observed):		<del></del>					·	
Restrictive L Type: Depth (in	ayer (if observed):		<del></del>					·	
Restrictive L Type: Depth (in	ayer (if observed):		<del></del>					·	
Restrictive L Type: Depth (in	ayer (if observed):		<del></del>					·	
Restrictive L Type: Depth (in	ayer (if observed):		<del></del>					·	
Restrictive L Type: Depth (in	ayer (if observed):		<del></del>					·	
Restrictive L Type: Depth (in	ayer (if observed):		<del></del>					·	
Restrictive L Type: Depth (in	ayer (if observed):		<del></del>					·	
Restrictive L Type: Depth (in	ayer (if observed):		<del></del>					·	
Restrictive L Type: Depth (in	ayer (if observed):		<del></del>					·	



Upland 5B-G - View facing north/northwest



**Upland 5B-G - Soils** 

Segment 9 – Package 5B

# SITE PHOTOGRAPHS

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE Phase 5	City/County: <u>Feur</u>	a Bush	Sampling Date: <u>12/14/2021</u>
Applicant/Owner: <u>CHA</u>		State: <u>NY</u>	Sampling Point: 5B-I
Investigator(s): Nick Dominic, Justn Williams	Section, Township	, Range: <u>Feura Rush</u>	
Landform (hillslope, terrace, etc.):	Local relief (concave,	convex, none):	Slope (%):
Subregion (LRR or MLRA): LRR R	Lat: <u>42.54591</u>	Long: <u>-73.83881</u>	Datum: NAD83
Soil Map Unit Name:		NWI classif	ication: PSS
Are climatic / hydrologic conditions on the site typ	pical for this time of year? Yes 🔀 1	No (If no, explain in	Remarks.)
Are Vegetation NO, Soil NO ▼_, or Hydrolog	y <u>NO</u> significantly disturbed?	Are "Normal Circumstances"	present? Yes X No \(\sime\)
Are Vegetation NO, Soil NO, or Hydrolog		(If needed, explain any answ	
SUMMARY OF FINDINGS – Attach s	ite map showing sampling poi	nt locations, transect	s, important features, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Yes _ Yes _	No Within a W  No If yes, option		No □
Remarks: (Explain alternative procedures here	or in a separate report.)		
Wetland 5B-I			
HYDROLOGY			
Wetland Hydrology Indicators:			cators (minimum of two required)
Primary Indicators (minimum of one is required;			il Cracks (B6)
Surface Water (A1)  High Water Table (A2)	Water-Stained Leaves (B9)		atterns (B10)
High Water Table (A2)  Saturation (A3)	Aquatic Fauna (B13)  Marl Deposits (B15)	☐ Moss Trim	, ,
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Bu	Nater Table (C2)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living		Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	· · · <del>-</del>	Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Sc	<del>-</del>	c Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aq	, ,
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)		raphic Relief (D4)
Sparsely Vegetated Concave Surface (B8)		FAC-Neutra	al Test (D5)
Field Observations:			
Surface Water Present? Yes No			
Water Table Present? Yes No			
Saturation Present? Yes X No (includes capillary fringe)	Depth (inches): 0	Wetland Hydrology Prese	ent? Yes 🔼 No 📙
Describe Recorded Data (stream gauge, monitor	 pring well, aerial photos, previous inspec	tions), if available:	
Remarks:			
Terriane.			

# **VEGETATION –** Use scientific names of plants.

<b>/EGETATION –</b> Use scientific names of plants.				Sampling Point: 15B-I
Tree Stratum (Plot size: 20	Absolute	-	t Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30</u> ) 1)	% Cover			Number of Dominant Species
2			」 <u> </u>	That Are OBL, FACW, or FAC: _4 (A)
3		<u>-</u>		Total Number of Dominant Species Across All Strata: _5(B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 8 (A/B)
6				Paralle de la constante de la
7.				Prevalence Index worksheet:
		= Total Co	over	OBL species x1 =
Sapling/Shrub Stratum (Plot size: 15 )				FACW species x 2 =
1. <u>Cornus sericea</u>	<b>6</b> 0	YES ▼	FACW ▼	FAC species x 3 =
2		=		FACU species x 4 =
3			-	UPL species x 5 =(A)
4				Column Totals: (A) (B)
5			<u> </u>	Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
		= Total Co	over	2 - Dominance Test is >50%
Herb Stratum (Plot size: 5				☐ 3 - Prevalence Index is ≤3.0 4 - Morphological Adaptations (Provide supporting
1. Onoclea sensibilis	60	YES 🔻	FACW -	data in Remarks or on a separate sheet)
2. Lythrum salicaria	40	YES	. FACW ▼	Problematic Hydrophytic Vegetation¹ (Explain)
3. Epilobium spp.	25	YES ▼	OBL 🔻	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
5		-		Definitions of Vegetation Strata:
6		-		<b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
7			_ =	
8		-		Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9		-		Herb – All herbaceous (non-woody) plants, regardless of
10		-		size, and woody plants less than 3.28 ft tall.
11		-	<u> </u>	Woody vines – All woody vines greater than 3.28 ft in
12			<del>-</del> <del>-</del>	height.
		= Total Co	over	
Woody Vine Stratum (Plot size: 30 )	_		a 🖂	
1. <u>Celastrus orbiculatus</u>	-	YES	UPL ▼	Hydrophytic
2				Vegetation Present?  Yes   No □
3		-	_ =	Tresent.
4		= Total Co	nver	

SOIL Sampling Point: 15B-I

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)											
Depth	Matrix		Redo	x Features	5						
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture Remarks				
0-16	10yr/3/1	95	7.5yr/5/6	5	<u>C</u> ▼	<u>-</u>	SaLo Prominent				
					-	<u> </u>					
	-				-						
					<u>-</u>	<del>-</del>					
					-	-					
	-				-	<del>-</del>					
	-				-	<del>-</del>					
					<u>-</u>	-					
					-	-					
						-					
1					<u>-</u>		2				
Type: C=Co		etion, RM	=Reduced Matrix, M	S=Masked	Sand Gra	ains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> :				
Histosol			Polyvalue Belo	w Surface	(S8) (L <b>R</b> F	R.R.	2 cm Muck (A10) (LRR K, L, MLRA 149B)				
Histic Ep	oipedon (A2)		MLRA 149B	)			Coast Prairie Redox (A16) (LRR K, L, MLRA 149B)				
Black His			Thin Dark Surfa								
	n Sulfide (A4)		Loamy Mucky I			, L)	☐ Dark Surface (S7) ( <b>LRR K, L, M</b> )☐ Polyvalue Below Surface (S8) ( <b>LRR K, L</b> )				
	l Layers (A5) I Below Dark Surface	(Δ11)	Loamy Gleyed Depleted Matrix		)		Thin Dark Surface (S9) (LRR K, L)				
	rk Surface (A12)	,,,,,	Redox Dark Su	. ,			Iron-Manganese Masses (F12) (LRR K, L, R)				
_	lucky Mineral (S1)		Depleted Dark				Piedmont Floodplain Soils (F19) (MLRA 149B)				
	leyed Matrix (S4)		Redox Depress	•	,		Mesic Spodic (TA6) ( <b>MLRA 144A, 145, 149B</b> )				
	edox (S5)						Red Parent Material (F21)				
	Matrix (S6)		_,				☐ Very Shallow Dark Surface (TF12)				
☐ Dark Sur	face (S7) ( <b>LRR R, N</b>	ILRA 149	В)				Uther (Explain in Remarks)				
		ion and w	etland hydrology mu	st be prese	ent, unless	s disturbed	or problematic.				
Type:	.ayer (if observed):										
Depth (inc	ches):						Hydric Soil Present? Yes 🗵 No 🔲				
Remarks:	,										



Wetland 5B-I - View facing south

**SITE PHOTOGRAPHS** 

Segment 9 – Package 5B



Wetland 5B-I - PSS Soils.

Phase 5

SITE PHOTOGRAPHS

## WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE		City/County: Selkirk/	Albany County	Sampling Date: 12-30-22					
Applicant/Owner: TDI			State: NY	Sampling Point: 5B-I UPL					
Investigator(s): C. Scrivner & J. Greaves		Section, To	wnship, Range:						
Landform (hillside, terrace, etc.): Flat	Local re	elief (concave, conve	x, none): None	Slope %: 0					
Subregion (LRR or MLRA): LRR R	Lat: 42.54611° N	•	-73.83877° W	 Datum: WGS84					
Soil Map Unit Name: Fx: Fluvaquents-Udiflu			NWI classification	<del></del>					
Are climatic / hydrologic conditions on the site		Yes x		o, explain in Remarks.)					
Are Vegetation , Soil , or Hydro			nal Circumstances" pre	•					
<del></del>			·						
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)									
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.									
Hydrophytic Vegetation Present?	Yes X No	Is the Sampled A	rea						
Hydric Soil Present?	Yes No X	within a Wetland		No X					
Wetland Hydrology Present?	Yes No X	If yes, optional We	tland Site ID:						
Remarks: (Explain alternative procedures he	ere or in a separate report.)								
Successional Old Field									
HYDROLOGY									
Wetland Hydrology Indicators:			-	(minimum of two required)					
Primary Indicators (minimum of one is require			Surface Soil Crac						
Surface Water (A1)	Water-Stained Leaves (B	39)	Drainage Patterns						
High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B16)						
Saturation (A3)	Marl Deposits (B15)		Dry-Season Water Table (C2)						
Water Marks (B1)	— Hydrogen Sulfide Odor (C	•	Crayfish Burrows (C8)						
Sediment Deposits (B2)	Oxidized Rhizospheres or	= : :							
Drift Deposits (B3)	Presence of Reduced Iron		Stunted or Stress	· ·					
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (Cb)							
Iron Deposits (B5)	Thin Muck Surface (C7)								
Inundation Visible on Aerial Imagery (B7	·	(S)	Microtopographic	, ,					
Sparsely Vegetated Concave Surface (E	38)	<del></del>	FAC-Neutral Test	. (D5) 					
Field Observations:	No. V Dowth (inches)								
Surface Water Present? Yes	No X Depth (inches):								
	No X Depth (inches):		d Hudrala au Bracant	2 Vaa Na V					
Saturation Present? Yes	No X Depth (inches):	vveuan	d Hydrology Present?	? Yes No _X					
(includes capillary fringe)  Describe Recorded Data (stream gauge, mo	nitoring well perial photos pre-	vious inspections) if	availahle:						
Describe Necorded Data (Stream gauge, me	Thioning well, aerial priotos, pro-	vious irispections, ir	avaliable.						
Remarks:									

## **VEGETATION** – Use scientific names of plants.

Tree Stratum (Plot size:30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:				
1. 2.				Number of Dominant Species That Are OBL, FACW, or FAC:(A)				
3. 4.				Total Number of Dominant Species Across All Strata: 3 (B)				
<ul><li>5.</li><li>6.</li></ul>				Percent of Dominant Species That Are OBL, FACW, or FAC:66.7%(A/B)				
7				Prevalence Index worksheet:				
		=Total Cover		Total % Cover of: Multiply by:				
Sapling/Shrub Stratum (Plot size:)				OBL species0 x1 =0				
1				FACW species 0 x 2 = 0				
2				FAC species 50 x 3 = 150				
3	-			FACU species10 x 4 =40				
4				UPL species40 x 5 =200				
5.				Column Totals: 100 (A) 390 (B)				
6.				Prevalence Index = B/A = 3.90				
7.				Hydrophytic Vegetation Indicators:				
		=Total Cover		1 - Rapid Test for Hydrophytic Vegetation				
Herb Stratum (Plot size: 5' )		•		X 2 - Dominance Test is >50%				
1. Artemisia vulgaris	40	Yes	UPL	3 - Prevalence Index is ≤3.0 <sup>1</sup>				
2. Setaria pumila	30	Yes	FAC	4 - Morphological Adaptations <sup>1</sup> (Provide supporting				
3. Xanthium strumarium	20	Yes	FAC	data in Remarks or on a separate sheet)				
4. Dipsacus fullonum	10	No	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)				
5. 6.		<u> </u>		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
7				Definitions of Vegetation Strata:				
8. 9.				<b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.				
10		<del>-</del>		Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.				
12.								
	100	=Total Cover		<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.				
<u>Woody Vine Stratum</u> (Plot size:)  1				Woody vines – All woody vines greater than 3.28 ft in height.				
2.								
3.				Hydrophytic				
				Vegetation Present? Yes X No				
4.		=Total Cover		11030ML 100 <u>X</u> 110 <u></u>				
Remarks: (Include photo numbers here or on a separ	rate sheet )	-						
Tromaine. (molade prioto nambero nere er en a separ	rate sheet.)							

Sampling Point: 5B-I UPL

SOIL Sampling Point 5B-I UPL

Profile Desc Depth	file Description: (Describe to the depth needed to document the indicator or co					onfirm the absence of indicators.)				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remark	(S
	40)/D 0/0						/ 0			
0-16	10YR 3/2	100					Loamy/Clayey			
¹Type: C=Co	oncentration, D=Depl	etion. RN		 1S=Masl	ked Sand	Grains.	<sup>2</sup> Location: F	PL=Pore L	ining, M=Mat	rix.
Hydric Soil I			· · · · · · · · · · · · · · · · · · ·						ematic Hydric	
Histosol			Dark Surface (	S7)					(LRR K, L, N	
<del>_</del>						airie Redox (A16) ( <b>LRR K, L, R</b> )				
							(LRR K, L, R)			
Hydroge	n Sulfide (A4)		Thin Dark Surfa	ace (S9)	(LRR R	, MLRA 1	149B) Polyvalı	ue Below	Surface (S8)	(LRR K, L)
Stratified	Layers (A5)		High Chroma S	Sands (S	311) ( <b>LRI</b>	R K, L)	Thin Da	rk Surface	e (S9) ( <b>LRR K</b>	(, L)
Depleted	Below Dark Surface	e (A11)	Loamy Mucky	Mineral	(F1) ( <b>LR</b> I	R K, L)	Iron-Ma	nganese l	Masses (F12)	(LRR K, L, R)
Thick Da	rk Surface (A12)		Loamy Gleyed	Matrix (	F2)		Piedmo	nt Floodpl	ain Soils (F19	9) (MLRA 149B)
Mesic Sp	oodic (A17)		Depleted Matri	x (F3)			Red Pa	rent Mater	rial (F21) <b>(out</b>	side MLRA 145)
(MLR	A 144A, 145, 149B)		Redox Dark Su	ırface (F	<sup>-</sup> 6)		Very Sh	allow Dar	k Surface (F2	2)
Sandy M	ucky Mineral (S1)		Depleted Dark	Surface	(F7)		Other (F	Explain in	Remarks)	
Sandy G	leyed Matrix (S4)		Redox Depress	sions (F	8)					
Sandy R	edox (S5)		Marl (F10) ( <b>LR</b>	<b>R K</b> , <b>L</b> )			<sup>3</sup> Indicators of hydrophytic vegetation and			
Stripped	Matrix (S6)		Red Parent Ma	iterial (F	21) <b>(MLF</b>	RA 145)	wetland hydrology must be present,			
							unles	s disturbe	d or problema	atic.
	.ayer (if observed):									
Type: _										
Depth (ir	iches):						Hydric Soil Prese	nt?	Yes	. No <u>X</u>
Remarks:										



Upland 5B-I - View facing west



**Upland 5B-I - Soils** 

Segment 9 – Package 5B

# SITE PHOTOGRAPHS

## WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE		City/County: Bethlehem/Albany County	Sampling Date: 9/27/22				
Applicant/Owner: TDI		State: NY	Sampling Point: Wet_5B-I				
Investigator(s): C. Scrivner & N. Frazer		Section, Township, Range:	_				
Landform (hillside, terrace, etc.): Flat	Local re	elief (concave, convex, none): None	Slope %: 0				
Subregion (LRR or MLRA): LRR R	Lat: 42.54567°N	Long: -73.84157°W	Datum: WGS84				
Soil Map Unit Name: RhA - Rhinebeck silty			PEM1				
Are climatic / hydrologic conditions on the site	typical for this time of year?	Yes x No (If no,	explain in Remarks.)				
. •	,	<del></del>					
Are Vegetation, Soil, or Hydr							
Are Vegetation, Soil, or Hydr	ologynaturally problemat	tic? (If needed, explain any answers in	Remarks.)				
SUMMARY OF FINDINGS – Attach	site map showing samp	oling point locations, transects, im	portant features, etc.				
Hydrophytic Vegetation Present?	Yes X No	Is the Sampled Area					
Hydric Soil Present?	Yes X No	within a Wetland? Yes X	No				
Wetland Hydrology Present?	Yes X No	If yes, optional Wetland Site ID: Near flag	5B-I-12				
Remarks: (Explain alternative procedures h Persistent Palustrine Emergent Marsh.	ere or in a separate report.)						
HYDROLOGY  Wetland Hydrology Indicators:		Secondary Indicators (r	ninimum of two required)				
Primary Indicators (minimum of one is requi	red; check all that apply)	Surface Soil Cracks	s (B6)				
Surface Water (A1)	Water-Stained Leaves (B	39) Drainage Patterns	(B10)				
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1)	Hydrogen Sulfide Odor (C	C1) Crayfish Burrows (0	C8)				
Sediment Deposits (B2)	X Oxidized Rhizospheres or	n Living Roots (C3) Saturation Visible of	n Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced Iron	n (C4) Stunted or Stressed	d Plants (D1)				
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (C6) Geomorphic Position	on (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D	03)				
Inundation Visible on Aerial Imagery (B7	7)Other (Explain in Remark	(s)Microtopographic R	elief (D4)				
Sparsely Vegetated Concave Surface (I	38)	FAC-Neutral Test (	D5)				
Field Observations:							
Surface Water Present? Yes							
Water Table Present? Yes Saturation Present? Yes	No X Depth (inches):						
<u></u>	No X Depth (inches):	Wetland Hydrology Present?	Yes <u>X</u> No				
(includes capillary fringe)							
Describe Recorded Data (stream gauge, mo	onitoring well, aerial photos, prev	rious inspections), if available:					
Remarks:							

# **VEGETATION** – Use scientific names of plants.

Tree Stratum (Plot size: 30' )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:				
2.				Number of Dominant Species That Are OBL, FACW, or FAC:(A)				
3. 4.		- ————————————————————————————————————		Total Number of Dominant Species Across All Strata:5(B)				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 40.0% (A/B)				
7.				Prevalence Index worksheet:				
		=Total Cover		Total % Cover of: Multiply by:				
Sapling/Shrub Stratum (Plot size:)				OBL species 0 x 1 = 0				
1. Rosa multiflora	5	Yes	FACU	FACW species 55 x 2 = 110				
2.				FAC species 25 x 3 = 75				
3.				FACU species 40 x 4 = 160				
4				UPL species0 x 5 =0				
5				Column Totals: 120 (A) 345 (B)				
6.				Prevalence Index = B/A = 2.88				
7				Hydrophytic Vegetation Indicators:				
	5	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation				
Herb Stratum (Plot size: 5' )				2 - Dominance Test is >50%				
1. Carex conoidea	30	Yes	FACW	X 3 - Prevalence Index is ≤3.0 <sup>1</sup>				
2. Symphyotrichum novi-belgii	20	Yes	FACW	4 - Morphological Adaptations (Provide supporting				
3. Solidago altissima	20	Yes	FACU	data in Remarks or on a separate sheet)				
4. Solidago rugosa	10	No	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)				
5. Viburnum dentatum	10	No	FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be				
6. Fraxinus pennsylvanica	5	No	FACW	present, unless disturbed or problematic.				
7. Cornus racemosa	5	No	FAC	Definitions of Vegetation Strata:				
8.				Tana Manda dia (7.6 am) ay mana in dia mata				
9.				<b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.				
10.								
11.		· ——		Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.				
12.								
	100	=Total Cover		<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.				
Woody Vine Stratum (Plot size: 30' )	100	- rotal covol						
1. Vitis aestivalis	15	Yes	FACU	<b>Woody vines</b> – All woody vines greater than 3.28 ft in height.				
2.	10	103	TAGO	rioight.				
3.				Hydrophytic				
				Vegetation				
4.				Present? Yes X No				
	15	=Total Cover						
Remarks: (Include photo numbers here or on a separ	ate sheet.)							

Sampling Point:

Wet\_5B-I

SOIL Sampling Point: Wet\_5B-I

Profile Desc Depth	ription: (Describe to Matrix	the de		<b>ment th</b> ‹ Featur		tor or co	nfirm the absence of	indicators.)		
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Re	emarks	
0-10	10YR 2/1	90	7.5YR 4/6	10	С	PL	Loamy/Clayey	Prominent red	lox conc	centrations
10-20	2.5Y 4/2	65	7.5YR 5/8	20	С	М	Sandy	Prominent red	ox cond	centrations
			7.5YR 3/4	10	С	М		Prominent red	lox cond	centrations
			7.5YR 2.5/1	5	С	М		Distinct redo	x conce	entrations
<sup>1</sup> Type: C=Co	ncentration, D=Deple	tion, RM	=Reduced Matrix, MS	3=Mask	ed Sand	Grains.	<sup>2</sup> Location: P	L=Pore Lining, M=	-Matrix.	
Hydric Soil I					or Problematic H					
Histosol (A1)  Histic Epipedon (A2)  Dark Surface (S7)  Polyvalue Below Surface (S8) (LRR R,						DD D	2 cm Muck (A10) (LRR K, L, MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, R)			
	ipedon (A2)		MLRA 149B)		ce (58) ( <b>L</b>	KK K,		cky Peat or Peat (		·
Black Histic (A3) MLRA 149B) Hydrogen Sulfide (A4) Thin Dark Surface (S9) (LRR R, MLRA 1					MLRA 1		e Below Surface (			
· ·	Layers (A5)		High Chroma S					k Surface (S9) ( <b>L</b> l		
	Below Dark Surface	(A11)	Loamy Mucky N					nganese Masses (		-
Thick Da	rk Surface (A12)		Loamy Gleyed I	Matrix (I	F2)		Piedmont Floodplain Soils (F19) (MLRA 149B)			
Mesic Sp	odic (A17)		Depleted Matrix	(F3)			Red Parent Material (F21) (outside MLRA 145)			
(MLR	A 144A, 145, 149B)		X Redox Dark Su	rface (F	6)		Very Shallow Dark Surface (F22)			
	ucky Mineral (S1)		Depleted Dark S				Other (Explain in Remarks)			
	leyed Matrix (S4)		Redox Depress		8)		3			
	edox (S5)		Marl (F10) (LRF		04) (84) 5		<sup>3</sup> Indicators of hydrophytic vegetation and			
Stripped	Matrix (S6)		Red Parent Mat	erial (F	21) <b>(ML</b> R	(A 145)		d hydrology must disturbed or prob	•	
Restrictive L	ayer (if observed):						uniose	dictarboa or prob	Torrida	
Type:										
Depth (in	ches):						Hydric Soil Presen	nt? Yes_	<u>X</u>	No
Remarks:										



Wetland 5B-I - View facing northeast



Wetland 5B-I - Soils

**SITE PHOTOGRAPHS** 

Segment 9 – Package 5B

## WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE		City/County: Selkirk/	Albany County	Sampling Date: 12-30-22					
Applicant/Owner: TDI			State: NY	Sampling Point: 5B-I UPL					
Investigator(s): C. Scrivner & J. Greaves		Section, To	wnship, Range:						
Landform (hillside, terrace, etc.): Flat	Local re	elief (concave, conve	x, none): None	Slope %: 0					
Subregion (LRR or MLRA): LRR R	Lat: 42.54611° N	•	-73.83877° W	 Datum: WGS84					
Soil Map Unit Name: Fx: Fluvaquents-Udiflu			NWI classification	<del></del>					
Are climatic / hydrologic conditions on the site		Yes x		o, explain in Remarks.)					
Are Vegetation , Soil , or Hydro			nal Circumstances" pre	•					
<del></del>			·						
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)									
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.									
Hydrophytic Vegetation Present?	Yes X No	Is the Sampled A	rea						
Hydric Soil Present?	Yes No X	within a Wetland		No X					
Wetland Hydrology Present?	Yes No X	If yes, optional We	tland Site ID:						
Remarks: (Explain alternative procedures he	ere or in a separate report.)								
Successional Old Field									
HYDROLOGY									
Wetland Hydrology Indicators:			-	(minimum of two required)					
Primary Indicators (minimum of one is require			Surface Soil Crac						
Surface Water (A1)	Water-Stained Leaves (B	39)	Drainage Patterns						
High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B16)						
Saturation (A3)	Marl Deposits (B15)		Dry-Season Water Table (C2)						
Water Marks (B1)	— Hydrogen Sulfide Odor (C	•	Crayfish Burrows (C8)						
Sediment Deposits (B2)	Oxidized Rhizospheres or	= : :							
Drift Deposits (B3)	Presence of Reduced Iron		Stunted or Stress	· ·					
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (Cb)							
Iron Deposits (B5)	Thin Muck Surface (C7)								
Inundation Visible on Aerial Imagery (B7	·	(S)	Microtopographic	, ,					
Sparsely Vegetated Concave Surface (E	38)	<del></del>	FAC-Neutral Test	. (D5) 					
Field Observations:	No. V Dowth (inches)								
Surface Water Present? Yes	No X Depth (inches):								
	No X Depth (inches):		d Hudrala au Bracant	2 Vaa Na V					
Saturation Present? Yes	No X Depth (inches):	vveuan	d Hydrology Present?	? Yes No _X					
(includes capillary fringe)  Describe Recorded Data (stream gauge, mo	nitoring well perial photos pre-	vious inspections) if	availahle:						
Describe Necorded Data (Stream gauge, me	Thioning well, aerial priotos, pro-	vious irispections, ir	avaliable.						
Remarks:									

## **VEGETATION** – Use scientific names of plants.

Tree Stratum (Plot size:30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:				
1. 2.				Number of Dominant Species That Are OBL, FACW, or FAC:(A)				
3. 4.				Total Number of Dominant Species Across All Strata: 3 (B)				
<ul><li>5.</li><li>6.</li></ul>				Percent of Dominant Species That Are OBL, FACW, or FAC:66.7%(A/B)				
7				Prevalence Index worksheet:				
		=Total Cover		Total % Cover of: Multiply by:				
Sapling/Shrub Stratum (Plot size:)				OBL species0 x1 =0				
1				FACW species 0 x 2 = 0				
2				FAC species50 x 3 =150				
3	-			FACU species10 x 4 =40				
4				UPL species40 x 5 =200				
5.				Column Totals: 100 (A) 390 (B)				
6.				Prevalence Index = B/A = 3.90				
7.				Hydrophytic Vegetation Indicators:				
		=Total Cover		1 - Rapid Test for Hydrophytic Vegetation				
Herb Stratum (Plot size: 5' )		•		X 2 - Dominance Test is >50%				
1. Artemisia vulgaris	40	Yes	UPL	3 - Prevalence Index is ≤3.0 <sup>1</sup>				
2. Setaria pumila	30	Yes	FAC	4 - Morphological Adaptations <sup>1</sup> (Provide supporting				
3. Xanthium strumarium	20	Yes	FAC	data in Remarks or on a separate sheet)				
4. Dipsacus fullonum	10	No	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)				
5. 6.		<u> </u>		<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
7				Definitions of Vegetation Strata:				
8. 9.				<b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.				
10		<del>-</del>		Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.				
12.								
	100	=Total Cover		<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.				
<u>Woody Vine Stratum</u> (Plot size:)  1				Woody vines – All woody vines greater than 3.28 ft in height.				
2.								
3.				Hydrophytic				
				Vegetation Present? Yes X No				
4.		=Total Cover		11030ML 100 <u>X</u> 110 <u></u>				
Remarks: (Include photo numbers here or on a separ	rate sheet )	-						
Tromaine. (molade prioto nambero nere er en a separ	rate sheet.)							

Sampling Point: 5B-I UPL

SOIL Sampling Point 5B-I UPL

Profile Desc Depth	file Description: (Describe to the depth needed to document the indicator or co					onfirm the absence of indicators.)				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remark	(S
	40)/D 0/0						/ 0			
0-16	10YR 3/2	100					Loamy/Clayey			
¹Type: C=Co	oncentration, D=Depl	etion. RN		 1S=Masl	ked Sand	Grains.	<sup>2</sup> Location: F	PL=Pore L	ining, M=Mat	rix.
Hydric Soil I			· · · · · · · · · · · · · · · · · · ·						ematic Hydric	
Histosol			Dark Surface (	S7)					(LRR K, L, N	
<del>_</del>						airie Redox (A16) ( <b>LRR K, L, R</b> )				
							(LRR K, L, R)			
Hydroge	n Sulfide (A4)		Thin Dark Surfa	ace (S9)	(LRR R	, MLRA 1	149B) Polyvalı	ue Below	Surface (S8)	(LRR K, L)
Stratified	Layers (A5)		High Chroma S	Sands (S	311) ( <b>LRI</b>	R K, L)	Thin Da	rk Surface	e (S9) ( <b>LRR K</b>	(, L)
Depleted	Below Dark Surface	e (A11)	Loamy Mucky	Mineral	(F1) ( <b>LR</b> I	R K, L)	Iron-Ma	nganese l	Masses (F12)	(LRR K, L, R)
Thick Da	rk Surface (A12)		Loamy Gleyed	Matrix (	F2)		Piedmo	nt Floodpl	ain Soils (F19	9) (MLRA 149B)
Mesic Sp	oodic (A17)		Depleted Matri	x (F3)			Red Pa	rent Mater	rial (F21) <b>(out</b>	side MLRA 145)
(MLR	A 144A, 145, 149B)		Redox Dark Su	ırface (F	<sup>-</sup> 6)		Very Sh	allow Dar	k Surface (F2	2)
Sandy M	ucky Mineral (S1)		Depleted Dark	Surface	(F7)		Other (F	Explain in	Remarks)	
Sandy G	leyed Matrix (S4)		Redox Depress	sions (F	8)					
Sandy R	edox (S5)		Marl (F10) ( <b>LR</b>	<b>R K</b> , <b>L</b> )			<sup>3</sup> Indicators of hydrophytic vegetation and			
Stripped	Matrix (S6)		Red Parent Ma	iterial (F	21) <b>(MLF</b>	RA 145)	wetland hydrology must be present,			
							unles	s disturbe	d or problema	atic.
	.ayer (if observed):									
Type: _										
Depth (ir	iches):						Hydric Soil Prese	nt?	Yes	. No <u>X</u>
Remarks:										



**Upland 5B-I - View facing south** 



**Upland 5B-I - Soils** 

Segment 9 – Package 5B

**SITE PHOTOGRAPHS** 

## WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE	City/Count	y: Bethlehem/Albany County	Sampling Date: 9/27/22						
Applicant/Owner: TDI		State: NY	Sampling Point: Wet_FA						
Investigator(s): C. Scrivner & N. Frazer	Se	ection, Township, Range:							
Landform (hillside, terrace, etc.): Depression	Local relief (conca	ave, convex, none): Concave	Slope %: 2						
	Lat: 42.54717°N	Long: -73.83314°W	· Datum: WGS84						
Soil Map Unit Name: HuB - Hudson silt loam, 3 to 8		NWI classification:	<del></del>						
Are climatic / hydrologic conditions on the site typica			explain in Remarks.)						
	•	<del></del> `	,						
Are Vegetation, Soil, or Hydrology _		Are "Normal Circumstances" preser	<del></del>						
Are Vegetation, Soil, or Hydrology _		(If needed, explain any answers in I	•						
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.									
Hydrophytic Vegetation Present? Yes _	X No Is the Sa	ampled Area							
Hydric Soil Present? Yes	X No within a	Wetland? Yes X	No						
Wetland Hydrology Present? Yes _	X No If yes, op	otional Wetland Site ID: Near flag	5B-H-25						
Remarks: (Explain alternative procedures here or in Persistent Palustrine Emergent Marsh dominated by									
HYDROLOGY									
Wetland Hydrology Indicators:		Secondary Indicators (m	ninimum of two required)						
Primary Indicators (minimum of one is required; che	eck all that apply)	Surface Soil Cracks	(B6)						
I —	Water-Stained Leaves (B9)	Drainage Patterns (E	•						
l <del></del> -	Aquatic Fauna (B13)	Moss Trim Lines (B1	·						
I <del></del>	Marl Deposits (B15)	Dry-Season Water Table (C2)							
l <del></del> -	Hydrogen Sulfide Odor (C1)	· · · · · · · · · · · · · · · · · · ·							
<del></del> -	Oxidized Rhizospheres on Living Ro	· · —	n Aerial Imagery (C9)						
l <del></del>	Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils	Stunted or Stressed  X Geomorphic Position	· ·						
I <del></del> ` `	Recent fron Reduction in Tilled Solls Thin Muck Surface (C7)	s (C6) X Geomorphic Position Shallow Aquitard (D3							
l <u> </u>	Other (Explain in Remarks)	Microtopographic Re							
Sparsely Vegetated Concave Surface (B8)	Allor (Explain in Fernance)	X FAC-Neutral Test (D5)							
Field Observations:		<u> </u>							
Surface Water Present? Yes No_	X Depth (inches):								
Water Table Present? Yes X No	Depth (inches): 0								
Saturation Present? Yes X No	Depth (inches): 0	Wetland Hydrology Present?	Yes X No						
(includes capillary fringe)									
Describe Recorded Data (stream gauge, monitoring	y well, aerial photos, previous inspe	ections), if available:							
Remarks:									

**VEGETATION** – Use scientific names of plants. Sampling Point: Wet FA Absolute Indicator Dominant Tree Stratum (Plot size: 30') % Cover Species? Status **Dominance Test worksheet:** 1. **Number of Dominant Species** 2. That Are OBL, FACW, or FAC: (A) 3. Total Number of Dominant (B) 4. Species Across All Strata: 2 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 100.0% (A/B) Prevalence Index worksheet: Multiply by: =Total Cover Total % Cover of: Sapling/Shrub Stratum (Plot size: 15') OBL species x 1 = **FACW** species 80 x 2 = 160 0 2. FAC species x 3 = 0 0 x 4 = 3. FACU species 4. UPL species 0 x 5 = 5. Column Totals: 100 (A) Prevalence Index = B/A = 1.80 6. **Hydrophytic Vegetation Indicators:** 7. 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% Herb Stratum (Plot size: 5') Phragmites australis Yes **FACW** X 3 - Prevalence Index is ≤3.0<sup>1</sup> 4 - Morphological Adaptations<sup>1</sup> (Provide supporting 2. Lythrum salicaria Yes OBL data in Remarks or on a separate sheet) 3. 4. Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 5. <sup>1</sup>Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. 7. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 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.

100 =Total Cover

=Total Cover

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

Woody Vine Stratum (Plot size: 30'

1.

2.

3.

No \_\_\_\_

Herb - All herbaceous (non-woody) plants, regardless

Woody vines - All woody vines greater than 3.28 ft in

of size, and woody plants less than 3.28 ft tall.

Yes X

height.

Hydrophytic

Vegetation

Present?

SOIL Sampling Point Wet\_FA

Depth	ription: (Describe t Matrix	o tne ae		ı <b>ment t</b> ı x Featur		ator or co	onfirm the absence o	Tindicators	<b>&gt;.</b> )		
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks	s	
0-3	10YR 2/2	95	10YR 3/6	5	С	M	Loamy/Clayey	Promine	ent redox co	ncentrations	
3-18	10YR 4/1	80	10YR 5/8	5	C	M	Loamy/Clayey	Promine	ent redox co	ncentrations	
			10YR 3/6	_10_	C	<u>M</u>		Promine	ent redox co	ncentrations	
			10YR 2/1	5	С	М		Faint	redox conce	entrations	
		etion, RN	M=Reduced Matrix, M	IS=Mas	ked San	d Grains.	<sup>2</sup> Location: P				
Hydric Soil I			Dark Surface (	C7)			Indicators for Problematic Hydric Soils <sup>3</sup> : 2 cm Muck (A10) (LRR K, L, MLRA 149B)				
Histosol (A1)			Dark Surface (S		re (S8) (	I RR R			.KK K, L, WII ( (A16) (LRF	•	
—— Histic Epipedon (A2) Black Histic (A3)			MLRA 149B)		(50) (	LIXIX IX,				(LRR K, L, R)	
Hydrogen Sulfide (A4)			Thin Dark Surfa	•	) (LRR R	, MLRA 1		-	ırface (S8) ( <b>I</b>		
Stratified Layers (A5)			High Chroma S						S9) ( <b>LRR K</b> ,	•	
X Depleted Below Dark Surface (A11)		(A11)	Loamy Mucky N							(LRR K, L, R)	
Thick Da	ark Surface (A12)		Loamy Gleyed	Matrix (	(F2)		Piedmont Floodplain Soils (F19) (MLRA 149B)				
Mesic Sp	oodic (A17)		X Depleted Matrix	۲ (F3)			Red Parent Material (F21) (outside MLRA 145)				
(MLR	A 144A, 145, 149B)		Redox Dark Su	rface (F	<del>-</del> 6)		Very Shallow Dark Surface (F22)				
Sandy M	lucky Mineral (S1)		Depleted Dark	Surface	e (F7)		Other (Explain in Remarks)				
	leyed Matrix (S4)		Redox Depress		8)		2				
	edox (S5)		Marl (F10) ( <b>LRI</b>	-			<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present,				
Stripped	Matrix (S6)		Red Parent Ma	terial (F	<sup>-</sup> 21) <b>(MLI</b>	RA 145)			y must be pr or problemat		
Restrictive L	_ayer (if observed):							o diotarboa c	or problema		
Type:											
Depth (ir	nches):						Hydric Soil Presei	nt?	Yes X	No	
Remarks:											



Wetland FA (PEM) - View facing north



Wetland FA - Soils

**SITE PHOTOGRAPHS** 

Segment 9 – Package 5B

## WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE		City/County: Bethleh	em/Albany County	Sampling Date: 9/27/22	
Applicant/Owner: TDI			State: NY	Sampling Point: Wet_FA	
Investigator(s): C. Scrivner & N. Frazer		Section, Tov	wnship, Range:	<u> </u>	
Landform (hillside, terrace, etc.): Depression	Local rel	lief (concave, conve	x, none): Concave	Slope %: 2	
Subregion (LRR or MLRA): LRR R	Lat: 42.54709°N	•	-73.83336°W	' Datum: WGS84	
Soil Map Unit Name: HuB - Hudson silt loam, 3			NWI classification:	<del></del>	
Are climatic / hydrologic conditions on the site typical for this time of year?  Yes x No (If no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrologysignificantly disturbed? Are "Normal Circumstances" present? Yesx No					
Are Vegetation, Soil, or Hydrologynaturally 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? Ye	Hydrophytic Vegetation Present?  Yes X No Is the Sampled Area				
Hydric Soil Present?	/es X No	No within a Wetland? Yes _X No			
Wetland Hydrology Present? Ye	/es X No	If yes, optional We	es, optional Wetland Site ID: Near flag 5B-H-25		
Palustrine Forested Broad-leaf deciduous wetland.					
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicators (m	ninimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			Surface Soil Cracks		
Surface Water (A1)  X Water-Stained Leaves (E		9)	X Drainage Patterns (B10)		
High Water Table (A2) Aquatic Fauna (B13)			X Moss Trim Lines (B16)		
Saturation (A3)Marl Deposits (B15)			Dry-Season Water Table (C2)		
Water Marks (B1)  Hydrogen Sulfide Odor (C1		•	Crayfish Burrows (C8)		
Sediment Deposits (B2)  X Oxidized Rhizospheres or  Presence of Reduced Iron					
Drift Deposits (B3) Presence of Reduced Iro Algal Mat or Crust (B4) Recent Iron Reduction in		, ,	• • • • • • • • • • • • • • • • • • • •		
Algal Mat or Crust (B4) Recent Iron Reduction in Iron Deposits (B5) Thin Muck Surface (C7)		Tilled Solis (Co)	Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)  Other (Explain in Remark		s)	Microtopographic Re	•	
Sparsely Vegetated Concave Surface (B8)		-)	FAC-Neutral Test (D		
Field Observations:			_	,	
Surface Water Present? Yes N	No X Depth (inches):	. ]			
Water Table Present? Yes N	No X Depth (inches):		<u> </u>		
	No X Depth (inches):	Wetland Hydrology Present? Yes X No			
(includes capillary fringe)					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

VEGETATION – Use scientific names of pla	ants.			Sampling Point: Wet_FA
Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. Acer rubrum	65	Yes	FAC	Number of Dominant Species
2. Fraxinus pennsylvanica	10	No	FACW	That Are OBL, FACW, or FAC: 7(A)
3. Populus deltoides	10	No	FAC	Total Number of Dominant
4. Quercus bicolor	5	No	FACW	Species Across All Strata: 12 (B)
5.				Percent of Dominant Species
6.				That Are OBL, FACW, or FAC: 58.3% (A/B)
7.				Prevalence Index worksheet:
	90	=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15' )				OBL species 0 x 1 = 0
Lonicera morrowii	20	Yes	FACU	FACW species 65 x 2 = 130
2. Fraxinus pennsylvanica	15	Yes	FACW	FAC species 115 x 3 = 345
3. Rhamnus cathartica	10	Yes	FAC	FACU species 55 x 4 = 220
4. Populus deltoides	5	No	FAC	UPL species 0 x 5 = 0
5.				Column Totals: 235 (A) 695 (B)
6.				Prevalence Index = B/A = 2.96
7.				Hydrophytic Vegetation Indicators:
	50	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5' )		rotal Cover		X 2 - Dominance Test is >50%
Solidago gigantea	15	Yes	FACW	X 3 - Prevalence Index is ≤3.0 <sup>1</sup>
Quercus bicolor	10	Yes	FACW	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Parthenocissus quinquefolia	10	Yes	FACU	data in Remarks or on a separate sheet)
4. Solidago rugosa	10	Yes	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. Onoclea sensibilis	10	Yes	FACW	- Troblematic Trydrophytic Vegetation (Explain)
6. Potentilla simplex	10	Yes	FACU	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7. Acer rubrum	5	No	FAC	Definitions of Vegetation Strata:
8. Toxicodendron radicans	5	No	FAC	Deminions of Vegetation Strata.
	5		FAC	Tree – Woody plants 3 in. (7.6 cm) or more in
9. Persicaria virginiana		No	FAC	diameter at breast height (DBH), regardless of height.
10				Sapling/shrub – Woody plants less than 3 in. DBH
11.				and greater than or equal to 3.28 ft (1 m) tall.
12				Herb – All herbaceous (non-woody) plants, regardless
	80	=Total Cover		of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size: 30' )	, -	.,		Woody vines – All woody vines greater than 3.28 ft in
1. Celastrus orbiculatus		Yes	FACU	height.
2. Vitis aestivalis	5	Yes	<u>FACU</u>	Hydrophytic
3.				Vegetation
4				Present? Yes X No No
	15	=Total Cover		
Remarks: (Include photo numbers here or on a sepa	rate sheet.)			

SOIL Sampling Point Wet\_FA

Profile Desc Depth	ription: (Describe t Matrix	to the de	•	<b>ıment tl</b> x Featur		ator or co	onfirm the absence of	f indicators.)
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-9	10YR 2/2	90	7.5YR 3/4	10	C		Loamy/Clayey	Distinct redox concentrations
9-15	10YR 4/2	70	7.5YR 4/6	10		M	Loamy/Clayey	Prominent redox concentrations
			10YR 4/6	20				Prominent redox concentrations
15-17	10YR 5/2	75	10YR 3/6	20			Loamy/Clayey	Prominent redox concentrations
			10YR 2/1	5				Distinct redox concentrations
-								
'Type: C=Co		etion, RN	//=Reduced Matrix, M	IS=Mas	ked Sand	d Grains.		L=Pore Lining, M=Matrix. or Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface (S	S7)				ick (A10) (LRR K, L, MLRA 149B)
	oipedon (A2)		Polyvalue Belov		ce (S8) (	LRR R,		rairie Redox (A16) ( <b>LRR K, L, R</b> )
Black His			MLRA 149B)		( -/(	•		icky Peat or Peat (S3) (LRR K, L, R)
— Hydroge	n Sulfide (A4)		Thin Dark Surfa	ace (S9)	) (LRR R	, MLRA 1	149B) Polyvalu	e Below Surface (S8) (LRR K, L)
Stratified	Layers (A5)		High Chroma S	Sands (S	311) ( <b>LRI</b>	R K, L)	Thin Dar	rk Surface (S9) ( <b>LRR K, L</b> )
X Depleted	l Below Dark Surface	e (A11)	Loamy Mucky N	Mineral	(F1) ( <b>LR</b> !	RK, L)	Iron-Mar	nganese Masses (F12) ( <b>LRR K, L, R</b> )
Thick Da	rk Surface (A12)		Loamy Gleyed	Matrix (	F2)		Piedmor	nt Floodplain Soils (F19) ( <b>MLRA 149B</b> )
Mesic Sp	oodic (A17)		X Depleted Matrix	x (F3)			Red Pare	ent Material (F21) <b>(outside MLRA 145</b>
	A 144A, 145, 149B)		X Redox Dark Su					allow Dark Surface (F22)
	lucky Mineral (S1)		Depleted Dark				Other (E	xplain in Remarks)
	leyed Matrix (S4)		Redox Depress		8)		3	
	edox (S5)		Marl (F10) ( <b>LRI</b>		-04\	· ·		ors of hydrophytic vegetation and
Stripped	Matrix (S6)		Red Parent Ma	iteriai (F	21) <b>(MLI</b>	RA 145)		nd hydrology must be present, s disturbed or problematic.
Restrictive L	_ayer (if observed):							
Type:								
Depth (ir	nches):						Hydric Soil Preser	nt? Yes X No
Remarks:								



Wetland FA (PFO) - View facing west



Wetland FA - Soils

**SITE PHOTOGRAPHS** 

Segment 9 – Package 5B

## WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE	City/County: Bethlehem/Albany County	Sampling Date: 9/27/22
Applicant/Owner: TDI	State: NY	Sampling Point: Upl_FA
Investigator(s): C. Scrivner & N. Frazer	Section, Township, Range:	·
Landform (hillside, terrace, etc.): Flat Local	relief (concave, convex, none): None	Slope %: 0
Subregion (LRR or MLRA): LRR R Lat: 42.5471°N	Long: -73.83289°W	 Datum: WGS84
Soil Map Unit Name: HuB - Hudson silt loam, 3 to 8 percent slopes	NWI classification:	NA
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes x No (If no, e.	xplain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly distur		,
Are Vegetation , Soil , or Hydrology naturally problems		
SUMMARY OF FINDINGS – Attach site map showing sam		•
· · · · ·	T	
Hydrophytic Vegetation Present?  Hydric Soil Present?  Yes No X  No X	Is the Sampled Area within a Wetland? Yes	No X
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID:	NO
Remarks: (Explain alternative procedures here or in a separate report.)		
Maintained utility access road.		
HYDROLOGY		
Wetland Hydrology Indicators:	Secondary Indicators (mi	inimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks	
Surface Water (A1)Water-Stained Leaves (	<del></del>	
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B1	·
Saturation (A3) Marl Deposits (B15)	Dry-Season Water T	able (C2)
Water Marks (B1) Hydrogen Sulfide Odor (		3)
Sediment Deposits (B2) Oxidized Rhizospheres		=
Drift Deposits (B3) Presence of Reduced Ir	· / —	· ·
Algal Mat or Crust (B4)Recent Iron Reduction in	` <i>'</i> —	
Iron Deposits (B5)  Thin Muck Surface (C7)  Other (Fxylain in Remark)		
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remar Sparsely Vegetated Concave Surface (B8)	rks)Microtopographic Re FAC-Neutral Test (D	
	FAO-INGULIAL LEST (D.	5)
Field Observations:		
Surface Water Present? Yes No X Depth (inches):  Water Table Present? Yes No X Depth (inches):		
Surface Water Present?         Yes         No X         Depth (inches):           Water Table Present?         Yes         No X         Depth (inches):           Saturation Present?         Yes         No X         Depth (inches):		Yes No X
(includes capillary fringe)	- Wolland Hydrology 1 1005	163160
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:	
, , , , , , , , , , , , , , , , , , , ,	· · · · · · · · · · · · · · · · · · ·	
Remarks:		

**VEGETATION** – Use scientific names of plants. Sampling Point: Upl FA Absolute Indicator Dominant <u>Tree Stratum</u> (Plot size: 30') % Cover Species? Status **Dominance Test worksheet:** 1. **Number of Dominant Species** 2. That Are OBL, FACW, or FAC: 1 (A) 3. Total Number of Dominant 4. Species Across All Strata: 2 (B) 5. Percent of Dominant Species 6. That Are OBL, FACW, or FAC: 50.0% (A/B) Prevalence Index worksheet: =Total Cover Total % Cover of: Multiply by: Sapling/Shrub Stratum (Plot size: 15') OBL species x 1 = **FACW** species 0 x 2 = 0 2. FAC species 25 x 3 =75 x 4 = 3. FACU species 35 140 4. UPL species 0 x 5 = 5. Column Totals: 60 (A) Prevalence Index = B/A = 3.58 6. **Hydrophytic Vegetation Indicators:** 7. 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% Herb Stratum (Plot size: 5') 1. Setaria pumila Yes FAC 3 - Prevalence Index is ≤3.01 4 - Morphological Adaptations<sup>1</sup> (Provide supporting 2. 15 Yes **FACU** Poa pratensis data in Remarks or on a separate sheet) 10 3. Plantago lanceolata No **FACU** 4. Lotus corniculatus 10 No **FACU** Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 5. <sup>1</sup>Indicators of hydric soil and wetland hydrology must 6. be present, unless disturbed or problematic. 7. **Definitions of Vegetation Strata:** 8. Tree - Woody plants 3 in. (7.6 cm) or more in 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 60 =Total Cover of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 30' Woody vines - All woody vines greater than 3.28 ft in 1. height. 2. Hydrophytic 3. Vegetation Yes \_\_\_ Present? No X =Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point Upl\_FA

Total continuity   Total conti	Profile Desc Depth	ription: (Describe t Matrix	o the de		<b>ument t</b> l ox Featur		ator or co	onfirm the absence of	indicators.)	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.			%				Loc <sup>2</sup>	Texture	Re	emarks
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  Hydric Soil Indicators:  Histosol (A1)  Histosol (A2)  Histosol (A2)  Histosol (A3)  Histosol (A3)  Histosol (A4)  Histosol (A4)  Thin Dark Surface (S8) (LRR R, Cast Prairie Redox (A16) (LRR K, L, R)  Hydrogen Sulfide (A4)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Thin Dark Surface (S9) (LRR R, L)  High Chroma Sands (S11) (LRR K, L)  Thic Dark Surface (A11)  Loamy Mucky Mineria (F1) (LRR K, L)  Thic Dark Surface (A12)  Mesic Spodic (A17)  (MLRA 144A, 145, 149B)  Sandy Mucky Mineria (S1)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Sitripped Matrix (S4)  Red Parent Material (F21) (MLRA 145)  Sitripped Matrix (S8)  Red Parent Material (F21) (MLRA 145)  Restrictive Layer (If observed):  Type: Rock/fill  Depth (inches): 8  Hydric Soil Present? Yes No X		10VD 2/2						L comy/Clayey	, a de	th rooks
Hydric Soil Indicators:  Histosol (A1)  Dark Surface (S7)  Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, R)  Black Histic (A3)  MLRA 149B)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  High Chroma Sands (S11) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Depleted Below Dark Surface (A11)  Loamy Mucky Mineral (F1) (LRR K, L)  Mesic Spodic (A17)  (MLRA 144A, 145, 149B)  Sandy Mucky Mineral (S1)  Sandy Redox (S5)  Aedox Dark Surface (F6)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Redox Depressions (F8)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Restrictive Layer (if observed):  Type:  Rock/fill  Depth (inches):  8  Hydric Soil Present?  Yes No X	<u>U-0</u>	10113/3	100		- —			Loamy/Clayey _	WIL	ITTOCKS
Hydric Soil Indicators:  Histosol (A1)  Dark Surface (S7)  Polyvalue Below Surface (S8) (LRR R,  Coast Prairie Redox (A16) (LRR K, L, R)  Black Histic (A3)  MLRA 149B)  Hydrogen Sulfide (A4)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Polyvalue Below Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  High Chroma Sands (S11) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Thin Dark Surface (A11)  Loamy Mucky Mineral (F1) (LRR K, L)  Mesic Spodic (A17)  (MLRA 144A, 145, 149B)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Redox Depressions (F8)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Restrictive Layer (if observed):  Type:  Rock/fill  Depth (inches):  8  Indicators for Problematic Hydric Soils 3:  2 cm Muck (A10) (LRR K, L, MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, R)  Som Mucky Peat or Peat (S3) (LRR K, L, R)  For Mucky Peat or Peat (S3) (LRR K, L, R)  Som Mucky Peat or Peat (S3) (LRR K, L, R)  Thin Dark Surface (S9) (LRR K, L, R)  For Mucky Peat or Peat (S3) (LRR K, L, R)  For Mucky Peat or Peat (S3) (LRR K, L, R)  For Mucky Peat or Peat (S3) (LRR K, L, R)  Coast Prairie Redox (A16) (LRR K, L, R)  For Mucky Peat or Peat (S3) (LRR K, L, R)  For Mucky Peat or Peat (S3) (LRR K, L, R)  For Mucky Peat or Peat (S3) (LRR K, L, R)  For Mucky Peat or Peat (S3) (LRR K, L, R)  For Mucky Peat or Peat (S3) (LRR K, L, R)  For Mucky Peat or Peat (S3) (LRR K, L, R)  For Mucky Peat or Peat (S3) (LRR K, L, R)  For Mucky Peat or Peat (S3) (LRR K, L, R)  For Mucky Peat or Peat (S3) (LRR K, L, R)  For Mucky Peat or Peat (S3) (LRR										
Hydric Soil Indicators:  Histosol (A1)  Dark Surface (S7)  Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, R)  Black Histic (A3)  MLRA 149B)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  High Chroma Sands (S11) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Depleted Below Dark Surface (A11)  Loamy Mucky Mineral (F1) (LRR K, L)  Mesic Spodic (A17)  (MLRA 144A, 145, 149B)  Sandy Mucky Mineral (S1)  Sandy Redox (S5)  Aedox Dark Surface (F6)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Redox Depressions (F8)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Restrictive Layer (if observed):  Type:  Rock/fill  Depth (inches):  8  Hydric Soil Present?  Yes No X										
Hydric Soil Indicators:  Histosol (A1)  Dark Surface (S7)  Polyvalue Below Surface (S8) (LRR R,  Coast Prairie Redox (A16) (LRR K, L, R)  Black Histic (A3)  MLRA 149B)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  High Chroma Sands (S11) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Depleted Below Dark Surface (A11)  Loamy Mucky Mineral (F1) (LRR K, L)  Mesic Spodic (A17)  (MLRA 144A, 145, 149B)  Sandy Mucky Mineral (S1)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Depleted Dark Surface (F7)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Redox Depressions (F8)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Restrictive Layer (if observed):  Type:  Rock/fill  Depth (inches):  8  Indicators for Problematic Hydric Soils 3:  2 cm Muck (A10) (LRR K, L, MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, R)  Som Mucky Peat or Peat (S3) (LRR K, L, R)  For Mucky Peat or Peat (S3) (LRR K, L, R)  Coast Prairie Redox (A16) (LRR K, L, R)  Thin Dark Surface (S9) (LRR K, L, R)  For Mucky Peat or Peat (S3) (LRR K, L, R)  Polyvalue Below Surface (S9) (LRR K, L, R)  For Mucky Peat or Peat (S3) (LRR K, L, R)  Coast Prairie Redox (A16) (LRR K, L, R)  Coast Prairie Redox (A16) (LRR K, L, R)  Coast Prairie Redox (A16) (LRR K, L, R)  For Mucky Peat or Peat (S3) (LRR K, L, R)  For Mucky Peat or Peat (S3) (LRR K, L, R)  For Mucky Peat or Peat (S3) (LRR K, L, R)  For Mucky Peat or Peat (S3) (LRR K, L, R)  For Mucky Peat or Peat (S3) (LRR K, L, R)  For Mucky Peat or Peat (S3) (LRR K, L, R)  For Mucky Peat or Peat (S3) (LRR K, L, R)  For Mucky Peat or Peat (S3) (LRR K, L, R)  For Mucky Peat or Peat (S3) (LRR K, L, R)  For Mucky Peat or Peat (S3) (LRR K, L, R)  For Mucky										
Hydric Soil Indicators:  Histosol (A1)  Dark Surface (S7)  Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, R)  Black Histic (A3)  MLRA 149B)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  High Chroma Sands (S11) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Depleted Below Dark Surface (A11)  Loamy Mucky Mineral (F1) (LRR K, L)  Mesic Spodic (A17)  (MLRA 144A, 145, 149B)  Sandy Mucky Mineral (S1)  Sandy Redox (S5)  Aedox Dark Surface (F6)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Redox Depressions (F8)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Restrictive Layer (if observed):  Type:  Rock/fill  Depth (inches):  8  Hydric Soil Present?  Yes No X										
Hydric Soil Indicators:  Histosol (A1)  Dark Surface (S7)  Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, R)  Black Histic (A3)  MLRA 149B)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  High Chroma Sands (S11) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Depleted Below Dark Surface (A11)  Loamy Mucky Mineral (F1) (LRR K, L)  Mesic Spodic (A17)  (MLRA 144A, 145, 149B)  Sandy Mucky Mineral (S1)  Sandy Redox (S5)  Aedox Dark Surface (F6)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Redox Depressions (F8)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Restrictive Layer (if observed):  Type:  Rock/fill  Depth (inches):  8  Hydric Soil Present?  Yes No X										
Hydric Soil Indicators:  Histosol (A1)  Dark Surface (S7)  Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, R)  Black Histic (A3)  MLRA 149B)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  High Chroma Sands (S11) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Depleted Below Dark Surface (A11)  Loamy Mucky Mineral (F1) (LRR K, L)  Mesic Spodic (A17)  (MLRA 144A, 145, 149B)  Sandy Mucky Mineral (S1)  Sandy Redox (S5)  Aedox Dark Surface (F6)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Redox Depressions (F8)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Restrictive Layer (if observed):  Type:  Rock/fill  Depth (inches):  8  Hydric Soil Present?  Yes No X										
Hydric Soil Indicators:  Histosol (A1)  Dark Surface (S7)  Polyvalue Below Surface (S8) (LRR R,  Coast Prairie Redox (A16) (LRR K, L, R)  Black Histic (A3)  MLRA 149B)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  High Chroma Sands (S11) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Depleted Below Dark Surface (A11)  Loamy Mucky Mineral (F1) (LRR K, L)  Mesic Spodic (A17)  (MLRA 144A, 145, 149B)  Sandy Mucky Mineral (S1)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Depleted Dark Surface (F7)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Redox Depressions (F8)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Restrictive Layer (if observed):  Type:  Rock/fill  Depth (inches):  8  Indicators for Problematic Hydric Soils 3:  2 cm Muck (A10) (LRR K, L, MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, R)  Som Mucky Peat or Peat (S3) (LRR K, L, R)  For Mucky Peat or Peat (S3) (LRR K, L, R)  Coast Prairie Redox (A16) (LRR K, L, R)  Thin Dark Surface (S9) (LRR K, L, R)  For Mucky Peat or Peat (S3) (LRR K, L, R)  Polyvalue Below Surface (S9) (LRR K, L, R)  For Mucky Peat or Peat (S3) (LRR K, L, R)  Coast Prairie Redox (A16) (LRR K, L, R)  Coast Prairie Redox (A16) (LRR K, L, R)  Coast Prairie Redox (A16) (LRR K, L, R)  For Mucky Peat or Peat (S3) (LRR K, L, R)  For Mucky Peat or Peat (S3) (LRR K, L, R)  For Mucky Peat or Peat (S3) (LRR K, L, R)  For Mucky Peat or Peat (S3) (LRR K, L, R)  For Mucky Peat or Peat (S3) (LRR K, L, R)  For Mucky Peat or Peat (S3) (LRR K, L, R)  For Mucky Peat or Peat (S3) (LRR K, L, R)  For Mucky Peat or Peat (S3) (LRR K, L, R)  For Mucky Peat or Peat (S3) (LRR K, L, R)  For Mucky Peat or Peat (S3) (LRR K, L, R)  For Mucky										
Hydric Soil Indicators:  Histosol (A1)  Dark Surface (S7)  Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, R)  Black Histic (A3)  MLRA 149B)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  High Chroma Sands (S11) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Depleted Below Dark Surface (A11)  Loamy Mucky Mineral (F1) (LRR K, L)  Mesic Spodic (A17)  (MLRA 144A, 145, 149B)  Sandy Mucky Mineral (S1)  Sandy Redox (S5)  Aedox Dark Surface (F6)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Redox Depressions (F8)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Restrictive Layer (if observed):  Type:  Rock/fill  Depth (inches):  8  Hydric Soil Present?  Yes No X										
Hydric Soil Indicators:  Histosol (A1)  Dark Surface (S7)  Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, R)  Black Histic (A3)  MLRA 149B)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  High Chroma Sands (S11) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Depleted Below Dark Surface (A11)  Loamy Mucky Mineral (F1) (LRR K, L)  Mesic Spodic (A17)  (MLRA 144A, 145, 149B)  Sandy Mucky Mineral (S1)  Sandy Redox (S5)  Aedox Dark Surface (F6)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Redox Depressions (F8)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Restrictive Layer (if observed):  Type:  Rock/fill  Depth (inches):  8  Hydric Soil Present?  Yes No X										
Hydric Soil Indicators:  Histosol (A1)  Dark Surface (S7)  Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, R)  Black Histic (A3)  MLRA 149B)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  High Chroma Sands (S11) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Depleted Below Dark Surface (A11)  Loamy Mucky Mineral (F1) (LRR K, L)  Mesic Spodic (A17)  (MLRA 144A, 145, 149B)  Sandy Mucky Mineral (S1)  Sandy Redox (S5)  Aedox Dark Surface (F6)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Redox Depressions (F8)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Restrictive Layer (if observed):  Type:  Rock/fill  Depth (inches):  8  Hydric Soil Present?  Yes No X										
Hydric Soil Indicators:  Histosol (A1)  Dark Surface (S7)  Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, R)  Black Histic (A3)  MLRA 149B)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  High Chroma Sands (S11) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Depleted Below Dark Surface (A11)  Loamy Mucky Mineral (F1) (LRR K, L)  Mesic Spodic (A17)  (MLRA 144A, 145, 149B)  Sandy Mucky Mineral (S1)  Sandy Redox (S5)  Aedox Dark Surface (F6)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Redox Depressions (F8)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Restrictive Layer (if observed):  Type:  Rock/fill  Depth (inches):  8  Hydric Soil Present?  Yes No X										
Hydric Soil Indicators:  Histosol (A1)  Dark Surface (S7)  Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, R)  Black Histic (A3)  MLRA 149B)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  High Chroma Sands (S11) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Depleted Below Dark Surface (A11)  Loamy Mucky Mineral (F1) (LRR K, L)  Mesic Spodic (A17)  (MLRA 144A, 145, 149B)  Sandy Mucky Mineral (S1)  Sandy Redox (S5)  Aedox Dark Surface (F6)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Redox Depressions (F8)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Restrictive Layer (if observed):  Type:  Rock/fill  Depth (inches):  8  Hydric Soil Present?  Yes No X										
Hydric Soil Indicators:  Histosol (A1)  Dark Surface (S7)  Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, R)  Black Histic (A3)  MLRA 149B)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  High Chroma Sands (S11) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Depleted Below Dark Surface (A11)  Loamy Mucky Mineral (F1) (LRR K, L)  Mesic Spodic (A17)  (MLRA 144A, 145, 149B)  Sandy Mucky Mineral (S1)  Sandy Redox (S5)  Aedox Dark Surface (F6)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Redox Depressions (F8)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Restrictive Layer (if observed):  Type:  Rock/fill  Depth (inches):  8  Hydric Soil Present?  Yes No X										
Hydric Soil Indicators:  Histosol (A1)  Dark Surface (S7)  Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, R)  Black Histic (A3)  MLRA 149B)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  High Chroma Sands (S11) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Depleted Below Dark Surface (A11)  Loamy Mucky Mineral (F1) (LRR K, L)  Mesic Spodic (A17)  (MLRA 144A, 145, 149B)  Sandy Mucky Mineral (S1)  Sandy Redox (S5)  Aedox Dark Surface (F6)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Redox Depressions (F8)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Restrictive Layer (if observed):  Type:  Rock/fill  Depth (inches):  8  Hydric Soil Present?  Yes No X					. —					
Hydric Soil Indicators:  Histosol (A1)  Dark Surface (S7)  Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, R)  Black Histic (A3)  MLRA 149B)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  High Chroma Sands (S11) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Depleted Below Dark Surface (A11)  Loamy Mucky Mineral (F1) (LRR K, L)  Mesic Spodic (A17)  (MLRA 144A, 145, 149B)  Sandy Mucky Mineral (S1)  Sandy Redox (S5)  Aedox Dark Surface (F6)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Redox Depressions (F8)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Restrictive Layer (if observed):  Type:  Rock/fill  Depth (inches):  8  Hydric Soil Present?  Yes No X										
Hydric Soil Indicators:  Histosol (A1)  Dark Surface (S7)  Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, R)  Black Histic (A3)  MLRA 149B)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  High Chroma Sands (S11) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Depleted Below Dark Surface (A11)  Loamy Mucky Mineral (F1) (LRR K, L)  Mesic Spodic (A17)  (MLRA 144A, 145, 149B)  Sandy Mucky Mineral (S1)  Sandy Redox (S5)  Aedox Dark Surface (F6)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Redox Depressions (F8)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Restrictive Layer (if observed):  Type:  Rock/fill  Depth (inches):  8  Hydric Soil Present?  Yes No X	<sup>1</sup> Type: C=Co	oncentration, D=Deple	etion, RM	=Reduced Matrix,	MS=Mas	ked Sand	d Grains.	<sup>2</sup> Location: PL	_=Pore Lining, M	l=Matrix.
Histosol (A1)  Histic Epipedon (A2)  Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, R)  Black Histic (A3)  MLRA 149B)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Polyvalue Below Surface (S9) (LRR R, MLRA 149B)  Polyvalue Below Surface (S8) (LRR K, L, R)  Hydrogen Sulfide (A4)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Polyvalue Below Surface (S8) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Depleted Below Dark Surface (A11)  Loamy Mucky Mineral (F1) (LRR K, L)  Thick Dark Surface (A12)  Mesic Spodic (A17)  (MLRA 144A, 145, 149B)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Red Parent Material (F21) (MLRA 145)  Red Parent Material (F21) (MLRA 145)  Red Parent Material (F21) (MLRA 145)  Wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):  Type:  Rock/fill  Depth (inches):  8  Hydric Soil Present?  Yes  No  X			· ·	•						
Black Histic (A3)	-			Dark Surface	(S7)					-
Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Depleted Below Dark Surface (A11)  Loamy Mucky Mineral (F1) (LRR K, L)  Thick Dark Surface (A12)  Mesic Spodic (A17)  Depleted Matrix (F3)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Depleted Dark Surface (F7)  Sandy Redox (S5)  Marl (F10) (LRR K, L)  Mesic Spodic (A17)  Sandy Redox (S5)  Sandy Redox (S5)  Stripped Matrix (S6)  Red Parent Material (F21) (MLRA 145)  Material (F21) (LRR K, L)  Stripped Matrix (S6)  Red Parent Material (F21) (MLRA 145)  M	—— Histic Ep	ipedon (A2)		Polyvalue Bel	ow Surfa	ce (S8) (	LRR R,	Coast Pra	airie Redox (A16	i) (LRR K, L, R)
Stratified Layers (A5)  High Chroma Sands (S11) (LRR K, L) Thin Dark Surface (S9) (LRR K, L)  Depleted Below Dark Surface (A11) Loamy Mucky Mineral (F1) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R)  Thick Dark Surface (A12) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (MLRA 149B)  Mesic Spodic (A17) Depleted Matrix (F3) Red Parent Material (F21) (outside MLRA 145  (MLRA 144A, 145, 149B) Redox Dark Surface (F6) Very Shallow Dark Surface (F22)  Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Other (Explain in Remarks)  Sandy Gleyed Matrix (S4) Redox Depressions (F8)  Sandy Redox (S5) Marl (F10) (LRR K, L)  Stripped Matrix (S6) Red Parent Material (F21) (MLRA 145) wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):  Type: Rock/fill  Depth (inches): 8 Hydric Soil Present? Yes No X	Black His	stic (A3)		MLRA 1498	3)			5 cm Mud	cky Peat or Peat	(S3) ( <b>LRR K, L, R</b> )
Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Mesic Spodic (A17)  (MLRA 144A, 145, 149B)  Sandy Mucky Mineral (S1)  Sandy Redox (S5)  Sandy Redox (S5)  Stripped Matrix (S6)  Red Parent Material (F21) (MLRA 145)  Marl (F10) (LRR K, L)  Red Parent Material (F21) (MLRA 145)  Marl (F20)  Marl (F21)  Marl (	Hydroge	n Sulfide (A4)		Thin Dark Sur	face (S9	) (LRR R	, MLRA 1	149B) Polyvalue	e Below Surface	(S8) ( <b>LRR K, L</b> )
Thick Dark Surface (A12)  Mesic Spodic (A17)  (MLRA 144A, 145, 149B)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Red Parent Material (F21) (outside MLRA 145)  Marl (F10) (LRR K, L)  Redox Depressions (F8)  Redox Depressions (F21) (MLRA 145)  Marl (F10) (LRR K, L)  Restrictive Layer (if observed):  Type:  Rock/fill  Depth (inches):  8  Piedmont Floodplain Soils (F19) (MLRA 149B)  Red Parent Materix (F2)  Red Parent Material (F21) (outside MLRA 145)  Very Shallow Dark Surface (F22)  Other (Explain in Remarks)  3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Hydric Soil Present?  Yes  No  X	Stratified	Layers (A5)		High Chroma	Sands (S	S11) ( <b>LRI</b>	R K, L)	Thin Dark	k Surface (S9) ( <b>L</b>	.RR K, L)
Mesic Spodic (A17) Depleted Matrix (F3) Red Parent Material (F21) (outside MLRA 145 (MLRA 144A, 145, 149B) Redox Dark Surface (F6) Very Shallow Dark Surface (F22) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Other (Explain in Remarks) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Marl (F10) (LRR K, L) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed): Type: Rock/fill Depth (inches): 8 Hydric Soil Present? Yes No X	Depleted	Below Dark Surface	(A11)	Loamy Mucky	Mineral	(F1) ( <b>LR</b> I	<b>R K</b> , <b>L</b> )	Iron-Man	ganese Masses	(F12) ( <b>LRR K, L, R</b> )
(MLRA 144A, 145, 149B)       Redox Dark Surface (F6)       Very Shallow Dark Surface (F22)         Sandy Mucky Mineral (S1)       Depleted Dark Surface (F7)       Other (Explain in Remarks)         Sandy Gleyed Matrix (S4)       Redox Depressions (F8)         Sandy Redox (S5)       Marl (F10) (LRR K, L)       **Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Restrictive Layer (if observed):         Type:       Rock/fill         Depth (inches):       8         Hydric Soil Present?         Yes       No	Thick Da	rk Surface (A12)		Loamy Gleyed	d Matrix (	(F2)		Piedmon	t Floodplain Soils	s (F19) ( <b>MLRA 149B</b> )
Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Red Parent Material (F21) (MLRA 145)  Restrictive Layer (if observed):  Type:  Rock/fill  Depth (inches):  8  Depleted Dark Surface (F7)  Redox Depressions (F8)  Marl (F10) (LRR K, L)  Wetland hydrology must be present, unless disturbed or problematic.  Hydric Soil Present?  Yes  No  X	Mesic Sp	oodic (A17)		Depleted Mati	rix (F3)			Red Pare	ent Material (F21)	) (outside MLRA 145
Sandy Gleyed Matrix (S4) Sandy Redox (S5) Marl (F10) (LRR K, L) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 145) Wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed): Type: Rock/fill Depth (inches): 8 Hydric Soil Present? Yes No X					-	-				
Sandy Redox (S5) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 145) Wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed): Type: Rock/fill Depth (inches): 8  Hydric Soil Present? Yes No X								Other (Ex	kplain in Remark	s)
Stripped Matrix (S6) Red Parent Material (F21) (MLRA 145) wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):  Type: Rock/fill  Depth (inches): 8 Hydric Soil Present? Yes No X						8)		3		
Restrictive Layer (if observed):  Type: Rock/fill  Depth (inches): 8 Hydric Soil Present? Yes No X					-					=
Restrictive Layer (if observed):           Type:         Rock/fill           Depth (inches):         8           Hydric Soil Present?         Yes No _X	Stripped	Matrix (S6)		Red Parent M	aterial (F	(MLF)	RA 145)			
Type:         Rock/fill           Depth (inches):         8           Hydric Soil Present?         Yes         No         X	<b>5</b>							unless	disturbed or prol	blematic.
Depth (inches): 8 Hydric Soil Present? Yes No X		• ,	E:11							
<u> </u>	•	<u>-</u> <u>-</u>								
Remarks:	Depth (ir	nches):	8					Hydric Soil Presen	it? Yes_	No <u>X</u>
	Remarks:							•		



Upland FA - View facing south



**Upland FA - Soils** 

Segment 9 – Package 5B

# **SITE PHOTOGRAPHS**

## WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE	City/County: Bethlehem/Albany County Sampling Date: 12/2/22
Applicant/Owner: TDI	State: NY Sampling Point: Wet P5B-Z
Investigator(s): C. Scrivner & C. Einstein	Section, Township, Range:
·	ocal relief (concave, convex, none): Concave Slope %: 3
Subregion (LRR or MLRA): LRR R Lat: 42.54386° N	Long: -73.82464° W Datum: WGS84
Soil Map Unit Name: Uh: Udorthents, clayey-Urban land complex	NWI classification: PEM1
Are climatic / hydrologic conditions on the site typical for this time of year	
Are Vegetation, Soil, or Hydrologysignificantly d	
Are Vegetation, Soil, or Hydrologynaturally prob	
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: Near flag P5B-Z-4
Persistent palustrine emergent marsh doiminated by common reed.	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leav	ves (B9) Drainage Patterns (B10)
X High Water Table (A2) Aquatic Fauna (B13	
X Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide O	dor (C1) Crayfish Burrows (C8)
	eres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduce	· · · · · · · · · · · · · · · · · · ·
	ion in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface	
Inundation Visible on Aerial Imagery (B7)Other (Explain in Re	
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No X Depth (inch	les):
Surface Water Present?         Yes         No         X         Depth (inch           Water Table Present?         Yes         X         No         Depth (inch           Saturation Present?         Yes         X         No         Depth (inch	165): 9 Westernd Hisdreless: Brocont2 Voc V No
	nes): 0 Wetland Hydrology Present? Yes X No
(includes capillary fringe)	iii
Describe Recorded Data (stream gauge, monitoring well, aerial photos	s, previous inspections), ii available:
Remarks:	

<u>Tree Stratum</u> (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species That Are OBL, FACW, or FAC:4(A)
3. 4.				Total Number of Dominant Species Across All Strata:5(B)
5.         6.				Percent of Dominant Species That Are OBL, FACW, or FAC: 80.0% (A/B)
7		<u> </u>		Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size:)				OBL species 20 x 1 = 20
1. Rhamnus cathartica	5	Yes	FAC	FACW species 85 x 2 = 170
2. Lonicera morrowii	5	Yes	FACU	FAC species 5 x 3 = 15
3. Cornus amomum	5	Yes	FACW	FACU species 5 x 4 = 20
4.				UPL species0 x 5 =0
5.				Column Totals: 115 (A) 225 (B)
6.				Prevalence Index = B/A = 1.96
7.				Hydrophytic Vegetation Indicators:
	15	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5')		_		X 2 - Dominance Test is >50%
Phragmites australis	75	Yes	FACW	X 3 - Prevalence Index is ≤3.0 <sup>1</sup>
Lythrum salicaria	20	Yes	OBL	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Onoclea sensibilis	5	No	FACW	data in Remarks or on a separate sheet)
4.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5 6.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7.				Definitions of Vegetation Strata:
8				<b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
10 11.				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
12.				Hart All Lad and a constant to the state of
	100	=Total Cover		<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size: 30' )				Woody vines – All woody vines greater than 3.28 ft in
1				height.
2				Hydrophytic
3. 4.		· ——		Vegetation Present? Yes X No
		=Total Cover		
Demarka: (Include photo numbers here or on a concr	ata abaat \	-10101 00101		
Remarks: (Include photo numbers here or on a separa	ate sheet.)			

Sampling Point: Wet P5B-Z

**SOIL** Sampling Point: Wet P5B-Z

Profile Description: (Description: Matrix			ı <b>ment tn</b> x Featur		tor or co	ntirm the absence of in	idicators.)
(inches) Color (moist	t) %	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-9 10YR 2/1	100					Mucky Sand	
9-16 10YR 5/2	80	10YR 4/6	20	С	PL/M	Loamy/Clayey	Prominent redox concentrations
1 <del></del>		D. L. IMaid M			<u> </u>	21	D P M. Marz
<sup>1</sup> Type: C=Concentration, D=E Hydric Soil Indicators:	Depletion, RIVI	=Reduced Matrix, M	IS=IVIASK	ed Sand	Grains.		=Pore Lining, M=Matrix.  Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)		X Dark Surface (	(S7)				k (A10) ( <b>LRR K, L, MLRA 149B</b> )
Histic Epipedon (A2)		Polyvalue Belo		ce (S8) ( <b>I</b>	LRR R,		irie Redox (A16) ( <b>LRR K, L, R</b> )
Black Histic (A3)		MLRA 149B	3)			5 cm Mucl	ky Peat or Peat (S3) (LRR K, L, R)
Hydrogen Sulfide (A4)		Thin Dark Surf					Below Surface (S8) (LRR K, L)
Stratified Layers (A5)		High Chroma S					Surface (S9) (LRR K, L)
X Depleted Below Dark Sur		Loamy Mucky			R K, L)		ranese Masses (F12) (LRR K, L, R)
Thick Dark Surface (A12) Mesic Spodic (A17)	)	Loamy Gleyed X Depleted Matri		F2)			Floodplain Soils (F19) (MLRA 149B) nt Material (F21) (outside MLRA 145
(MLRA 144A, 145, 14	9B)	Redox Dark St		·6)			low Dark Surface (F22)
X Sandy Mucky Mineral (S1	•	Depleted Dark	,	•			plain in Remarks)
Sandy Gleyed Matrix (S4)		Redox Depres	sions (F	8)			,
Sandy Redox (S5)		Marl (F10) ( <b>LR</b>	R K, L)			<sup>3</sup> Indicators	s of hydrophytic vegetation and
Stripped Matrix (S6)		Red Parent Ma	aterial (F	21) <b>(MLF</b>	RA 145)	wetland	hydrology must be present,
						unless o	disturbed or problematic.
Restrictive Layer (if observe	ed):						
Type:						11-1-1-0-11-0	o va v Na
Depth (inches):						Hydric Soil Present	? Yes X No
Remarks:							



Wetland P5B-Z - View facing north



Wetland P5B-Z - Soils

**SITE PHOTOGRAPHS** 

Segment 9 – Package 5B

## WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE	City/County: Bethlehem/Albany County Sampling Date: 12/2/22
Applicant/Owner: TDI	State: NY Sampling Point: Wet P5B-Y
Investigator(s): C. Scrivner & C. Einstein	Section, Township, Range:
	ocal relief (concave, convex, none): Concave Slope %: 3
Subregion (LRR or MLRA): LRR R Lat: 42.54509° N	Long: -73.82632° W Datum: WGS84
Soil Map Unit Name: Uh: Udorthents, clayey-Urban land complex	NWI classification: PEM1
<del></del>	
Are climatic / hydrologic conditions on the site typical for this time of year	<u> </u>
Are Vegetation, Soil, or Hydrologysignificantly d	disturbed? Are "Normal Circumstances" present? Yes x No
Are Vegetation, Soil, or Hydrologynaturally prob	olematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing s	sampling point locations, transects, important features, etc.
III land fo Vendefor Perceit	La dia Camada I Anna
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present?  Yes X No	within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: Near flag P5B-Y-3
Remarks: (Explain alternative procedures here or in a separate report.	.)
Persistent palustrine emergent marsh doiminated by common reed.	
LIVERALOGY	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leav	ves (B9) Drainage Patterns (B10)
X High Water Table (A2) Aquatic Fauna (B13	Moss Trim Lines (B16)
X Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide O	Odor (C1) Crayfish Burrows (C8)
Sediment Deposits (B2)  X Oxidized Rhizosphe	eres on Living Roots (C3)Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduce	
Algal Mat or Crust (B4)Recent Iron Reduct	ion in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface	(C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)Other (Explain in Re	emarks)Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No X Depth (incl	hes):
Water Table Present? Yes X No Depth (incl	
Saturation Present? Yes X No Depth (incl	hes): 0 Wetland Hydrology Present? Yes X No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos	s, previous inspections), if available:
Remarks:	

Tree Stratum (Plot size: 30' )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1 2				Number of Dominant Species That Are OBL, FACW, or FAC:4 (A)
3. 4.				Total Number of Dominant Species Across All Strata:5(B)
<ul><li>5.</li><li>6.</li></ul>				Percent of Dominant Species That Are OBL, FACW, or FAC: 80.0% (A/B)
7		<u> </u>		Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size:)				OBL species 20 x 1 = 20
1. Rhamnus cathartica	5	Yes	FAC	FACW species 85 x 2 = 170
2. Cornus amomum	5	Yes	FACW	FAC species 5 x 3 = 15
3. Rhus typhina	3	Yes	UPL	FACU species 0 x 4 = 0
4.				UPL species 3 x 5 = 15
5.				Column Totals: 113 (A) 220 (B)
6.				Prevalence Index = B/A = 1.95
7.				Hydrophytic Vegetation Indicators:
	13	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5' )		•		X 2 - Dominance Test is >50%
Phragmites australis	80	Yes	FACW	X 3 - Prevalence Index is ≤3.0 <sup>1</sup>
Lythrum salicaria	20	Yes	OBL	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
3.				data in Remarks or on a separate sheet)
4.				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. 6.	-			<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7.				Definitions of Vegetation Strata:
8 9.				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
10.				Sapling/shrub – Woody plants less than 3 in. DBH
11		· ——		and greater than or equal to 3.28 ft (1 m) tall.
12	100	=Total Cover		<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size: 30')				Woody vines – All woody vines greater than 3.28 ft in
1				height.
2				
3.				Hydrophytic Vegetation
4.				Present? Yes X No
		=Total Cover		
Remarks: (Include photo numbers here or on a separa	ate sheet )			
Tromanio. (molado prioto namboro noro er en a copar	210 011001.			

Sampling Point: Wet P5B-Y

SOIL Sampling Point: Wet P5B-Y

Depth	Matrix	, uie ae	•	ment the x Featur		LOI OF CO	nfirm the absence of i	กนเซสเบาร.)	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0-9	10YR 2/1	100					Mucky Sand		
9-16	10YR 5/2	80	10YR 4/6	20	С	PL/M	Loamy/Clayey	Prominent redox con	centrations
<sup>1</sup> Type: C=Co	oncentration, D=Deple	tion, RM	l=Reduced Matrix, M	S=Mask	ed Sand	Grains.	<sup>2</sup> Location: PL	=Pore Lining, M=Matrix	
Hydric Soil I								r Problematic Hydric S	
Histosol	•		X Dark Surface (	,	(0.5)			ck (A10) (LRR K, L, ML	
	oipedon (A2)		Polyvalue Belo		e (S8) ( <b>I</b>	LRR R,		airie Redox (A16) (LRR	
Black His	n Sulfide (A4)		Thin Dark Surf	,	(I RR R	MIRA1		cky Peat or Peat (S3) ( <b>L</b> Below Surface (S8) ( <b>L</b> l	
	Layers (A5)		High Chroma S		•			Surface (S9) (LRR K,	
	Below Dark Surface	(A11)	Loamy Mucky					ganese Masses (F12) (I	
	rk Surface (A12)		Loamy Gleyed					Floodplain Soils (F19)	
Mesic Sp	oodic (A17)		X Depleted Matri	x (F3)			Red Pare	nt Material (F21) <b>(outsi</b>	de MLRA 145)
(MLR	A 144A, 145, 149B)		Redox Dark Su	ırface (F	6)		Very Sha	llow Dark Surface (F22)	
	ucky Mineral (S1)		Depleted Dark		. ,		Other (Ex	rplain in Remarks)	
	leyed Matrix (S4)		Redox Depres		3)		31	and the state of the state of	e 1
	edox (S5) Matrix (S6)		Marl (F10) (LR Red Parent Ma		24) <b>/MI</b> E	) A 145\		s of hydrophytic vegetat d hydrology must be pre	
Stripped	Matrix (30)		Red Falent Wa	iteriai (F2	21) (IVILI	(A 143)		disturbed or problemation	
Restrictive L	_ayer (if observed):						unioco	alotarboa or problemati	<u>.                                    </u>
Type:									
Depth (in	nches):						Hydric Soil Present	? Yes X	No
Remarks:							L		



Wetland P5B-Y - View facing south



Wetland P5B-Y - Soils

**SITE PHOTOGRAPHS** 

Segment 9 – Package 5B

## WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE			City/County: Bethleh	nem/Albany County	Sampling Date: 12/2/22
Applicant/Owner: TD	ıl			State: NY	Sampling Point: UPL
Investigator(s): C. Scrivn	er & C. Einstein		Section, To	wnship, Range:	
Landform (hillside, terrace	e, etc.): Flat	Local re	elief (concave, conve	x, none): None	Slope %: 0
Subregion (LRR or MLRA)	): LRR R	Lat: 42.5441° N	Long:	-73.8254° W	Datum: WGS84
Soil Map Unit Name: Uh	: Udorthents, clayey	/-Urban land complex		NWI classification:	NA
Are climatic / hydrologic co	onditions on the site	typical for this time of year?	Yes x	No (If no, e	explain in Remarks.)
Are Vegetation , S	oil , or Hydro	ologysignificantly disturb	ed? Are "Norn	nal Circumstances" prese	ent? Yes x No
	<u> </u>	ologynaturally problemat		d, explain any answers in	Remarks.)
<u></u>	<u> </u>	site map showing samp		•	,
Lhudranhutia Vagatatian F	Procent?	Vee Ne V	la the Campled A		
Hydrophytic Vegetation F Hydric Soil Present?	Tesent?	Yes No X Yes No X	Is the Sampled Awithin a Wetland		No. V
Wetland Hydrology Prese	ent?	Yes No X	If yes, optional We		No X
		ere or in a separate report.)	ii yes, optional we	liand Oile ID.	
HYDROLOGY					
Wetland Hydrology Ind	icators:			Secondary Indicators (m	ninimum of two required)
Primary Indicators (minin	num of one is requir	ed; check all that apply)		Surface Soil Cracks	(B6)
Surface Water (A1)		Water-Stained Leaves (B	39)	Drainage Patterns (I	B10)
High Water Table (A	2)	Aquatic Fauna (B13)		Moss Trim Lines (B	16)
Saturation (A3)		Marl Deposits (B15)		Dry-Season Water	Γable (C2)
Water Marks (B1)		Hydrogen Sulfide Odor (C	C1)	Crayfish Burrows (C	(8)
Sediment Deposits (	B2)	Oxidized Rhizospheres of	n Living Roots (C3)	Saturation Visible or	n Aerial Imagery (C9)
Drift Deposits (B3)		Presence of Reduced Iro	n (C4)	Stunted or Stressed	Plants (D1)
Algal Mat or Crust (E	54)	Recent Iron Reduction in	Tilled Soils (C6)	Geomorphic Positio	n (D2)
Iron Deposits (B5)		Thin Muck Surface (C7)		Shallow Aquitard (D	3)
Inundation Visible or	ı Aerial Imagery (B7	Other (Explain in Remark	(s)	Microtopographic Ro	` '
Sparsely Vegetated	Concave Surface (B	38)		FAC-Neutral Test (D	D5)
Field Observations:					
Surface Water Present?		No X Depth (inches):			
Water Table Present?	Yes	No X Depth (inches):			
Saturation Present?	Yes	No X Depth (inches):	Wetlan	d Hydrology Present?	Yes NoX_
(includes capillary fringe)					
Describe Recorded Data	(stream gauge, mo	nitoring well, aerial photos, prev	vious inspections), if a	available:	
Remarks:					
Romano.					

Trop Stratum	(Plot size:	30'	)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:		
4					Species:	Status			
							Number of Dominant Species That Are OBL, FACW, or FAC:		(A)
							Total Number of Dominant Species Across All Strata:		(B)
5.							Percent of Dominant Species That Are OBL, FACW, or FAC:		(A/B)
7							Prevalence Index worksheet		( /
					=Total Cover		Total % Cover of:	Multiply by	<i>/</i> :
Sapling/Shrub	Stratum (Plot	size:	15'				OBL species		
	,						FACW species	x 2 =	
							FAC species	x 3 =	
								x 4 =	
-							UPL species	x 5 =	
							Column Totals:	(A)	
							Prevalence Index = B/A	` '	(D)
,							Hydrophytic Vegetation India		
				· ·	=Total Cover		1 - Rapid Test for Hydroph		
Herb Stratum	(Plot size:	5'	)		-10tai 00vci		2 - Dominance Test is >50	-	
			<u> </u>				3 - Prevalence Index is ≤3.		
-							4 - Morphological Adaptati		upporting
、 <del></del>							data in Remarks or on a		
1							Problematic Hydrophytic V	egetation <sup>1</sup> (Exp	olain)
6							<sup>1</sup> Indicators of hydric soil and we present, unless disturbed or present.		y must b
7							Definitions of Vegetation Stra		
3.							Tree – Woody plants 3 in. (7.6 at breast height (DBH), regard	cm) or more in	diamete
10.							Sapling/shrub – Woody plants	s less than 3 in.	DBH
							and greater than or equal to 3.	20 II ( 1 III) IaII.	
12.					=Total Cover		Herb – All herbaceous (non-wood size, and woody plants less		
Woody Vine St	<u>tratum</u> (Plot	size:					Woody vines – All woody vine height.	s greater than 3	3.28 ft in
2									
3.							Hydrophytic Vegetation		
1. <u> </u>							Present? Yes	No X	
					=Total Cover				

SOIL

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

Depth	Matrix	, tile de		k Feature		.01 01 00	nfirm the absence of	indicators.,			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks		
1							2				
		tion, RM	1=Reduced Matrix, MS	3=Maske	ed Sand	Grains.		L=Pore Lining,		_:1_3.	
Hydric Soil I			Dark Curtage (6	271				or Problemation	-		ND)
Histosol (	,		Dark Surface (S	,	o (CO) (I	DD D		ck (A10) ( <b>LRR</b>			
	pedon (A2)		Polyvalue Belov		e (58) (L	.KK K,		airie Redox (A	, ,		•
Black His	` '		MLRA 149B)		/I DD D	MI DA 1		cky Peat or Pe	, , ,		
	Sulfide (A4)		Thin Dark Surfa	, ,	•		· — ·	e Below Surface			_)
	Layers (A5) Below Dark Surface	(	High Chroma S Loamy Mucky N					k Surface (S9)			I D\
	rk Surface (A12)	(A11)				K K, L)		iganese Masse			
	odic (A17)		Loamy Gleyed Depleted Matrix		2)			t Floodplain S ent Material (F			
	A 144A, 145, 149B)		Redox Dark Su	, ,	6)			allow Dark Sur		JE IVILI	NA 143)
-				•	•			xplain in Rema			
	ucky Mineral (S1)		Depleted Dark :  Redox Depress				Other (E	xpiain in Kema	arks)		
	eyed Matrix (S4) edox (S5)		Marl (F10) (LRI	,	·)		<sup>3</sup> Indicate	rs of hydrophy	tic vogotati	on on	4
	Matrix (S6)		Red Parent Ma		21\ <b>/MI D</b>	Λ 1/15)			•		,
опірреа	watrix (OO)		Red r arent was	iciiai (i z	-1) <b>(IVIL</b> IX	A 140)	wetland hydrology must be present, unless disturbed or problematic.				
Restrictive I	ayer (if observed):						uniess	distuibed of p	noblemanc	•	
Type:	Rock/ba	ıllast									
· -							Hardwin Cail Dunnan	V.	_	M-	V
Depth (in	cnes):	0					Hydric Soil Preser	it? Ye	es	No_	Χ
Remarks:	-4		f rock/ballast at the su		41		d/ 4l-				
NO SOIIS COIIE	cted due to restrictive	layer or	TOCK/Dallast at the su	mace or	the unpa	aved road	a/pain.				



Upland P5B-Z and P5B-Y - View facing south



**Upland P5B-Z and P5B-Y – Soils (ballast)** 

Segment 9 – Package 5B

# SITE PHOTOGRAPHS

## WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE	(	City/County: Selkirk	/Albany	Sampling Date: 10/6/22		
Applicant/Owner: TDI			State: NY	Sampling Point: P5-AA-6 Wet		
Investigator(s): C. Einstein & N. Frazer		Section, To	wnship, Range:	<u> </u>		
Landform (hillside, terrace, etc.): flat	Local re	elief (concave, conve	ex. none): none	Slope %: 0		
Subregion (LRR or MLRA): LRR R	Lat: 42-32-19.77N	•	73-49-08.90W	Datum: WGS84		
Soil Map Unit Name: Hudson silt loam (HuB)			NWI classification:			
·				-		
Are climatic / hydrologic conditions on the site		Yes x		explain in Remarks.)		
Are Vegetation, Soil, or Hydrol			mal Circumstances" pres	ent? Yes x No		
Are Vegetation, Soil, or Hydrol	ogynaturally problemati	ic? (If neede	d, explain any answers ir	n Remarks.)		
SUMMARY OF FINDINGS – Attach	site map showing samp	oling point loca	tions, transects, in	nportant features, etc.		
Hydrophytic Vegetation Present?	Yes X No	Is the Sampled A	rea			
Hydric Soil Present?	Yes X No	within a Wetland	? Yes X	No		
Wetland Hydrology Present?	Yes X No	If yes, optional We	etland Site ID:			
shrub swamp						
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicators (r	minimum of two required)		
Primary Indicators (minimum of one is require			Surface Soil Crack			
Surface Water (A1)	X Water-Stained Leaves (BS	9)	Drainage Patterns			
High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)		Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (C	•	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres or					
Drift Deposits (B3) Algal Mat or Crust (B4)	Presence of Reduced Iron Recent Iron Reduction in		Stunted or Stressed Plants (D1)  Is (C6) Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Tilled Oolis (Oo)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)		s)	Microtopographic Relief (D4)			
Sparsely Vegetated Concave Surface (Bi	· — · · · · · · · · · · · · · · · · · ·	<i>5</i> )	FAC-Neutral Test (	, ,		
Field Observations:	,			,		
Surface Water Present? Yes	No x Depth (inches):					
Water Table Present? Yes	No x Depth (inches):					
Saturation Present? Yes	No x Depth (inches):		nd Hydrology Present?	Yes <u>X</u> No		
(includes capillary fringe)						
Describe Recorded Data (stream gauge, mor	nitoring well, aerial photos, prev	ious inspections), if	available:			
Remarks:						

	Absolute	Dominant	Indicator				
ree Stratum (Plot size:30')	% Cover	Species?	Status	Dominance Test worksheet:			
·				Number of Dominant Species			
·				That Are OBL, FACW, or FAC: 2 (A)			
·				Total Number of Dominant			
·				Species Across All Strata: 6 (B)			
i				Percent of Dominant Species			
·				That Are OBL, FACW, or FAC: 33.3% (A/B)			
·		·		Prevalence Index worksheet:			
		=Total Cover		Total % Cover of: Multiply by:			
apling/Shrub Stratum (Plot size:15')				OBL species 5 x 1 = 5			
. Cornus alba	70	Yes	FACW	FACW species 125 x 2 = 250			
Lonicera tatarica	20	Yes	<u>FACU</u>	FAC species10 x 3 =30			
Rhamnus cathartica	10	<u>No</u>	FAC	FACU species80 x 4 =320			
				UPL species0 x 5 =0			
i				Column Totals: (A) (B			
·				Prevalence Index = B/A = 2.75			
·				Hydrophytic Vegetation Indicators:			
	100	=Total Cover		1 - Rapid Test for Hydrophytic Vegetation			
lerb Stratum (Plot size:5')				2 - Dominance Test is >50%			
. Rosa multiflora	10	No	FACU	X 3 - Prevalence Index is ≤3.0 <sup>1</sup>			
Lythrum salicaria	5	No	OBL	4 - Morphological Adaptations <sup>1</sup> (Provide supporting			
. Cornus alba	45	Yes	FACW	data in Remarks or on a separate sheet)			
. Lonicera tatarica	5	No	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)			
. Onoclea sensibilis	10	No	FACW	- Indicators of hydric soil and wetland hydrology must			
Sphagnum sp.	20	Yes		be present, unless disturbed or problematic.			
				Definitions of Vegetation Strata:			
<u> </u>				Tree – Woody plants 3 in. (7.6 cm) or more in			
				diameter at breast height (DBH), regardless of height			
0.				Continuate with Manda plants land them 2 in DDI.			
1.				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.			
2.							
	95	=Total Cover		<b>Herb</b> – All herbaceous (non-woody) plants, regardles of size, and woody plants less than 3.28 ft tall.			
Voody Vine Stratum (Plot size: 30' )							
. Celastrus orbiculatus	35	Yes	FACU	<b>Woody vines</b> – All woody vines greater than 3.28 ft in height.			
Parthenocissus quinquefolia	10	Yes	FACU	Tioight.			
- Tarineneologue quinquerona				Hydrophytic			
·				Vegetation Present? Yes X No			
·	45	-Tatal Cause		Present?			
	45	=Total Cover					

SOIL Sampling Point P5-AA-6 Wet

	•	o the de	•			ator or co	onfirm the absence of	f indicators.)		
Depth (inches)	Matrix Color (moist)	0/:		x Featur		Loc <sup>2</sup>	Toyturo	Pomorko		
(inches)	Color (moist)		Color (moist)		Type <sup>1</sup>	Loc	Texture	Remarks		
0-7	10YR 2/1	100					Loamy/Clayey			
7-16	10YR 5/2	70	10YR 4/6	30	C	M	Loamy/Clayey	Prominent redox concentrations		
<sup>1</sup> Type: C=Co	ncentration, D=Deple	etion, RI	M=Reduced Matrix, N	/IS=Mas	ked Sand	d Grains.	<sup>2</sup> Location: P	L=Pore Lining, M=Matrix.		
Hydric Soil II	ndicators:						Indicators fo	or Problematic Hydric Soils <sup>3</sup> :		
Histosol (	A1)		Dark Surface (	S7)			2 cm Mu	ick (A10) ( <b>LRR K, L, MLRA 149B</b> )		
Histic Epi	pedon (A2)		Polyvalue Belo	w Surfa	ce (S8) (	LRR R,	Coast Pr	rairie Redox (A16) ( <b>LRR K, L, R</b> )		
Black His			MLRA 149B	•				icky Peat or Peat (S3) ( <b>LRR K, L, R</b> )		
	Sulfide (A4)		Thin Dark Surface (S9) (LRR R, MLRA 1					e Below Surface (S8) ( <b>LRR K, L</b> )		
	Layers (A5)		High Chroma S					k Surface (S9) ( <b>LRR K, L</b> )		
	Below Dark Surface	(A11)	Loamy Mucky			RK, L)		nganese Masses (F12) ( <b>LRR K, L, R</b> )		
	k Surface (A12)		Loamy Gleyed		F2)			nt Floodplain Soils (F19) (MLRA 149B)		
I —	odic (A17)		X Depleted Matri		-0\			ent Material (F21) (outside MLRA 145)		
-	A 144A, 145, 149B)		Redox Dark Su		-			allow Dark Surface (F22)		
I —	ucky Mineral (S1)		Depleted Dark				Other (E	xplain in Remarks)		
Sandy Re	eyed Matrix (S4)		Redox Depress Marl (F10) (LR		0)		<sup>3</sup> Indicato	rs of hydrophytic vegetation and		
	Matrix (S6)		Red Parent Ma		21) (MI E	DA 1/15)	wetland hydrology must be present,			
ouipped	Watrix (OO)		TCGT architime	iteriai (i	21) (IVILI	(A 140)	unless disturbed or problematic.			
Restrictive L	ayer (if observed):						1	alotal board of problem and		
Type:	none	9								
Denth (in	ches):						Hydric Soil Preser	nt? Yes X No		
							Tryunc con r reser	<u> </u>		
Remarks:										



Wetland P5-AA-6- View facing south



Wetland P5-AA-6- Soils

**Segment 9- Package 5B** 

**SITE PHOTOGRAPHS** 

## WETLAND DETERMINATION DATA SHEET – Northcentral and Northeast Region

See ERDC/EL TR-12-1; the proponent agency is CECW-CO-R

Project/Site: CHPE		City/County: Selkirk/	Albany	Sampling Date: 10/6/22		
Applicant/Owner: TDI	_		State:	NY Sampling Point: P5-AA-6 Upl		
Investigator(s): C. Einstein & N. Frazer		Section, Tov	 vnship, Range:			
Landform (hillside, terrace, etc.): flat	Local re	elief (concave, conve	K, none): none	Slope %: 0		
Subregion (LRR or MLRA): LRR R	Lat: 42-32-19.77N	•	73-49-08.90W	 Datum: WGS84		
Soil Map Unit Name: Hudson silt loam (Hu	<del></del>		NWI classific			
Are climatic / hydrologic conditions on the s	•	Voc. v	<del></del>	(If no, explain in Remarks.)		
, ,	,,	Yes x		,		
Are Vegetation, Soil, or Hyd			al Circumstances	· — —		
Are Vegetation, Soil, or Hyd	<u> </u>			wers in Remarks.)		
SUMMARY OF FINDINGS – Attac	h site map showing sam	pling point locat	ions, transec	ts, important features, etc.		
Hydrophytic Vegetation Present?	Yes No X	Is the Sampled Ar	ea			
Hydric Soil Present?	Yes No X	within a Wetland?	Yes	No X		
Wetland Hydrology Present?	Yes No X	If yes, optional We	land Site ID:			
Remarks: (Explain alternative procedures Gravel road.	here or in a separate report.)					
HYDROLOGY  Wetland Hydrology Indicators:			Socondary Indica	ators (minimum of two required)		
Primary Indicators (minimum of one is requ	uired: check all that annly)		Surface Soil	<del>_</del>		
Surface Water (A1)	Water-Stained Leaves (B	39)	Drainage Pa	, ,		
High Water Table (A2)	Aquatic Fauna (B13)	50)	Moss Trim Lines (B16)			
Saturation (A3)	Marl Deposits (B15)		Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odor (0	C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres o	•	Roots (C3) Saturation Visible on Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iro	on (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in	Tilled Soils (C6)	ils (C6) Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (I	· · ·	ks)	Microtopographic Relief (D4)			
Sparsely Vegetated Concave Surface	(B8)		FAC-Neutral	Test (D5)		
Field Observations:						
Surface Water Present? Yes	No x Depth (inches):					
Water Table Present? Yes Saturation Present? Yes	No x Depth (inches):		d I breducija su r Duce			
Saturation Present? Yes (includes capillary fringe)	No x Depth (inches):	wetian	d Hydrology Pres	sent? Yes No _X		
Describe Recorded Data (stream gauge, n	nonitoring well, aerial photos, pre	vious inspections) if	available <sup>.</sup>			
Describe Reserved Data (Stream gauge, ii	formorning won, donar priotos, pro	viodo inopeotiono,, in	avallabio.			
Remarks:						

Tree Stratum (Plot size: 30' )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1.				Number of Dominant Species
2.				That Are OBL, FACW, or FAC:(A)
3. 4.				Total Number of Dominant Species Across All Strata:3(B)
<ul><li>5.</li><li>6.</li></ul>				Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)
7				Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15' )				OBL species 0 x 1 = 0
1.				FACW species 0 x 2 = 0
2.				FAC species 25 x 3 = 75
3.				FACU species45 x 4 =180
4				UPL species 2 x 5 = 10
5				Column Totals: 72 (A) 265 (B)
6.	-			Prevalence Index = B/A =3.68
7				Hydrophytic Vegetation Indicators:
		=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5' )				2 - Dominance Test is >50%
1. Centaurea stoebe	2	No	UPL	3 - Prevalence Index is ≤3.0 <sup>1</sup>
2. Geranium maculatum	5	No	FACU	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
3. Galium boreale	15	Yes	FAC	data in Remarks or on a separate sheet)
4. Toxicodendron radicans	10	No	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
5. Cirsium arvense	20	Yes	FACU	1 Indicators of hydric call and watland hydrology must
6.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7				Definitions of Vegetation Strata:
8				Tree – Woody plants 3 in. (7.6 cm) or more in
9.				diameter at breast height (DBH), regardless of height.
10				Sapling/shrub – Woody plants less than 3 in. DBH
11				and greater than or equal to 3.28 ft (1 m) tall.
12	ī			<b>Herb</b> – All herbaceous (non-woody) plants, regardless
	52	=Total Cover		of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size:30')				Woody vines – All woody vines greater than 3.28 ft in
1. Celastrus orbiculatus	20	Yes	FACU	height.
2.				
3.				Hydrophytic Vegetation
4.				Present? Yes No X
	20	=Total Cover		
Remarks: (Include photo numbers here or on a sepa	rate sheet.)			
` .	,			

Sampling Point: P5-AA-6 Upl

SOIL Sampling Point P5-AA-6 Upl

		the de				itor or co	onfirm the absence of i	ndicators.)
Depth	Matrix			x Featur		. 2	<b>-</b> .	
(inches)	Color (moist)	%	Color (moist)		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
1Type: C=Cc	ncentration, D=Deple	tion PA	4-Poducod Matrix N				<sup>2</sup> l ocation: DI =	Pore Lining, M=Matrix.
Hydric Soil I		tion, ixi	n-reduced Matrix, it	io-ivias	Keu Gand	Olallis.		Problematic Hydric Soils <sup>3</sup> :
_			Dark Surface (	C7)				
— Histosol			Dark Surface (		(00) (	DD D		( (A10) (LRR K, L, MLRA 149B)
	ipedon (A2)		Polyvalue Belo		ce (58) (I	LKK K,		rie Redox (A16) (LRR K, L, R)
Black His			MLRA 149B	•				ky Peat or Peat (S3) ( <b>LRR K, L, R</b> )
	n Sulfide (A4)		Thin Dark Surf					Below Surface (S8) ( <b>LRR K, L</b> )
	Layers (A5)		High Chroma S				Thin Dark	Surface (S9) ( <b>LRR K, L</b> )
Depleted	Below Dark Surface	(A11)	Loamy Mucky	Mineral	(F1) ( <b>LRI</b>	R K, L)	Iron-Manga	anese Masses (F12) ( <b>LRR K, L, R</b> )
Thick Da	rk Surface (A12)		Loamy Gleyed	Matrix (	F2)		Piedmont I	Floodplain Soils (F19) ( <b>MLRA 149B</b> )
Mesic Sp	odic (A17)		Depleted Matri	x (F3)			Red Paren	t Material (F21) (outside MLRA 145
(MLR	A 144A, 145, 149B)		Redox Dark Su	ırface (F	6)		Very Shall	ow Dark Surface (F22)
Sandy M	ucky Mineral (S1)		Depleted Dark	Surface	(F7)		Other (Exp	olain in Remarks)
Sandy G	leyed Matrix (S4)		Redox Depress	sions (F	8)			
Sandy R	edox (S5)		Marl (F10) ( <b>LR</b>		•		<sup>3</sup> Indicators	of hydrophytic vegetation and
	Matrix (S6)		Red Parent Ma		21) <b>(MLF</b>	RA 145)		hydrology must be present,
	( /				/ (			listurbed or problematic.
Restrictive L	.ayer (if observed):						u555 u	
Type:	grave	el						
Depth (in	ches):	0					Hydric Soil Present	? Yes No _X
Remarks:								
This area is a	gravel road- no soils	present	t.					



**Upland AA-6- View facing west** 

Segment 9- Package 5B

SITE PHOTOGRAPHS

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CHPE Phase 5	City/County: <u>Selki</u>	rk	_ Sampling Date: 11/18/21
Applicant/Owner: <u>CHA</u>		State: <u>NY</u>	Sampling Point: <u>GA-4</u>
Investigator(s): Nick Dominic, Justn Williams			
Landform (hillslope, terrace, etc.):	Local relief (concave,	convex, none):	Slope (%):
Subregion (LRR or MLRA): LRR R	Lat: <u>42.53884</u>	Long: <u>-73.81896</u>	Datum: NAD83
Soil Map Unit Name:		NWI classif	ication: PSS
Are climatic / hydrologic conditions on the site typic	al for this time of year? Yes <u>X</u> ۱	√o (If no, explain in l	Remarks.)
Are Vegetation NO, Soil NO, or Hydrology 1	NO significantly disturbed?	Are "Normal Circumstances"	present? Yes X No D
Are Vegetation NO , Soil NO , or Hydrology		(If needed, explain any answ	
SUMMARY OF FINDINGS – Attach site	e map showing sampling poi	nt locations, transect	s, important features, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Yes	No  within a W		<u> </u>
Remarks: (Explain alternative procedures here of Wetland GA	· In a separate report.)		
HYDROLOGY			
Wetland Hydrology Indicators:			cators (minimum of two required)
Primary Indicators (minimum of one is required; c	_		ll Cracks (B6)
Surface Water (A1)  High Water Table (A2)	☐ Water-Stained Leaves (B9) ☐ Aquatic Fauna (B13)	☐ Drainage Pa	atterns (B10) Lines (B16)
Saturation (A3)	Marl Deposits (B15)	<del>-</del>	n Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Bu	
Sediment Deposits (B2)	Oxidized Rhizospheres on Living F	<del>-</del>	Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or 9	Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled So	<del>-</del>	c Position (D2)
☐ Iron Deposits (B5)	☐ Thin Muck Surface (C7)	<u></u> Shallow Aqı	
Inundation Visible on Aerial Imagery (B7)	U Other (Explain in Remarks)	= ' '	raphic Relief (D4)
Sparsely Vegetated Concave Surface (B8)  Field Observations:		<u></u> FAC-Neutra	II Test (D5)
Surface Water Present? Yes X No	Depth (inches): 1		
Water Table Present? Yes X No	Depth (inches): 8		
Saturation Present? Yes 🗵 No	Depth (inches): 4	Wetland Hydrology Prese	ent? Yes 🗵 No 🗌
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous inspect	lions), if available:	
Remarks:			

				Sampling Point: <u>GA-4</u>
<u>Tree Stratum</u> (Plot size: <u>30</u> )	Absolute % Cover	Dominan Species?	t Indicator Status	Dominance Test worksheet:
1. <u>Fraxinus americana</u>	<u>15</u>	YES ▼	FACU ▼	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3		_		Species Across All Strata: (B)
4		_		Percent of Dominant Species
5	-	_		That Are OBL, FACW, or FAC: (A/B)
6		_	<u> </u>	Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
				OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15 )				FACW species x 2 =
1. <u>Cornus sericea</u>	60	YES ▼	FACW ▼	FAC species x 3 =
2. Lonicera spp.				FACU species x 4 =
3			_	UPL species x 5 =
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				
·		= Total Co		2 - Dominance Test is >50%
Herb Stratum (Plot size: 5		- Total Co	IVEI	3 - Prevalence Index is ≤3.0 <sup>1</sup>
1. <u>Scirpus spp.</u>	40	YES	OBL 🔻	4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
2. Lythrum salicaria		YES ▼	I EACW ▼	☐ Problematic Hydrophytic Vegetation¹ (Explain)
3. Juncus spp.			FACW -	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than or equal to 3.28 ft (1 m) tall.
10		_		Herb – All herbaceous (non-woody) plants, regardless of
11		_	_	size, and woody plants less than 3.28 ft tall.
12.		_		Woody vines – All woody vines greater than 3.28 ft in height.
· <u>-                                     </u>	100	= Total Co		neight.
Woody Vine Stratum (Plot size: 30 )	100	1014100	, voi	
1. <u>Vitis riparia</u> (1 101 3126	0	VEC I		
	_	TES V	. FAC ▼	Hydrophytic
2		-		Vegetation   Present?   Yes   X   No
2		-		Tresent.
3				
3 4		= Total Co	<u> </u>	

SOIL Sampling Point: GA-4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth	Matrix		Redo	x Feature:	<u>s</u>			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	Remarks
0-16	10YR/3/1	94	10yr/5/6	6	-	-	CISiL	Prominent redox
						<u>-                                      </u>		
					_	_		
·		· ——						-
					-			
						-		
					-			
					-			
					-			
					-			
·								
					-	-		
<sup>1</sup> Type: C=Co	oncentration, D=Dep	letion, RM	=Reduced Matrix, M	S=Masked	Sand Gr	ains.	<sup>2</sup> Location	n: PL=Pore Lining, M=Matrix.
Hydric Soil I							Indicators	for Problematic Hydric Soils <sup>3</sup> :
Histosol	· ,		Polyvalue Belov	พ Surface	(S8) ( <b>LR</b>	R R,		Muck (A10) ( <b>LRR K, L, MLRA 149B</b> )
	pipedon (A2)		MLRA 149B	,				Prairie Redox (A16) (LRR K, L, R)
Black His			Thin Dark Surfa					Mucky Peat or Peat (S3) (LRR K, L, R)
	n Sulfide (A4)		Loamy Mucky N			k, L)		Surface (S7) (LRR K, L, M)
	l Layers (A5) l Below Dark Surface	o (A11)	Loamy Gleyed  Depleted Matrix		:)			alue Below Surface (S8) (LRR K, L) Park Surface (S9) (LRR K, L)
	ark Surface (A12)	C (A11)	<ul><li>☑ Depleted Matrix (F3)</li><li>☑ Redox Dark Surface (F6)</li></ul>					langanese Masses (F12) ( <b>LRR K, L, R</b> )
_	lucky Mineral (S1)		Depleted Dark Surface (F7)					ont Floodplain Soils (F19) (MLRA 149B)
	Bleyed Matrix (S4)		Redox Depressions (F8)				_	Spodic (TA6) ( <b>MLRA 144A, 145, 149B</b> )
	ledox (S5)			, ,				arent Material (F21)
Stripped	Matrix (S6)						Very S	Shallow Dark Surface (TF12)
Dark Sui	rface (S7) ( <b>LRR R, N</b>	ILRA 149	<b>B</b> )				U Other	(Explain in Remarks)
			etland hydrology mus	st be prese	ent, unles	s disturbed	or problemation	c.
Restrictive L	_ayer (if observed):							
Type:			-					
Depth (inc	ches):		-				Hydric Soil	Present? Yes 🗵 No 🔲
Remarks:								



Wetland GA - View facing northeast.

**SITE PHOTOGRAPHS** 

Segment 9 – Package 5B