Technical Memorandum

IGOR I. SIKORSKY MEMORIAL AIRPORT
Stratford, Connecticut

Wetland Field Investigation and Delineation
For Runway Safety Area Project

State Project 15-336

Prepared under contract to:

URS Corporation

For:

THE CITY OF BRIDGEPORT, CT
and the
CONNECTICUT DEPARTMENT OF TRANSPORTATION

By:

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INTRODUCTION

The Connecticut Department of Transportation (CTDOT) and the City of Bridgeport are currently undertaking a runway safety area project at Igor I. Sikorsky Memorial Airport (BDR) in Stratford, Connecticut (State CTDOT Project No. 15-336). The project involves safety improvements to the runway safety area (RSA) at Runway 6-24 and relocation of State Route 113 to facilitate these safety improvements (see Figure 1 for project area overview). The purpose of the Sikorsky Runway Safety Project is, in part, to install an Emergency Materials Arresting System (EMAS) at the north end of Runway 6-24 to reduce the frequency and severity of aircraft incidents at the airport.

Fitzgerald & Halliday, Inc. (FHI) was retained by URS Corporation (URS) to identify and delineate wetlands within the limits of the project area (see Figures 3a–3d). The delineation also included delineation of potential wetland mitigation sites associated with anticipated wetland impacts resulting from the project.

METHODOLOGY

Delineation efforts occurred during the period from fall of 2009 to the fall of 2012. FHI field-delineated the boundaries of the wetlands proximate to the proposed areas of construction/earthwork within the project limits. The wetland delineations were conducted according to both the federal and State of Connecticut definitions. Federal wetland resources were delineated in the field according to the U.S. Army Corps of Engineers (USACE) 1987 *Wetland Delineation Manual* and the USACE 2012 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region*. Connecticut state inland wetlands were delineated based upon soil type as outlined in Section 22a-38 of Chapter 440 of the General Statutes of Connecticut; defining wetland soils as either: poorly drained, very poorly drained, alluvial, or floodplain soils. Tidal wetlands were delineated based on tidal vegetation and proximity to tidal waters as outlined in Section 22a-29 of Chapter 440 of the General Statutes of Connecticut. Identification of watercourses, as regulated by Connecticut, were based upon the definitions contained in Section 22a-38 of Chapter 440 of the Connecticut General Statutes of Connecticut; including the following hydrological systems under the term “watercourse”: rivers, streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs, and all other bodies of water, natural or artificial, vernal or intermittent, public or private.

Due to altered hydraulic conditions associated with previous anthropogenic disturbance on and near BDR, the daily tidal cycle elevations on the airport, and therefore the limits of tidal wetlands, were not always consistent with “typical” conditions in an unaltered tidal wetland. In many areas, the limits of tidal wetlands (i.e., areas with appropriate hydrology, soils, and tidal vegetation) was below the Coastal Jurisdiction Line (formerly the high tide line), which is at an elevation of 5.9 feet NGVD29. In some areas, it was very close to the Mean High Water elevation of 4.24 feet NGVD29. We anticipate the reason for this is due to both anthropogenic (man-made) and natural causes. First, the tidal wetlands located north of Route 113 in the southern portion of the airport property

are hydraulically controlled by the existing culvert under Route 113. This culvert is undersized, and does not allow full tidal flushing onto the airport. As a result, daily tidal water elevations likely do not reach the same elevation north of Route 113, as they do south of Route 113 (which is unobstructed) during regular tidal cycles. Therefore, the influence of tidal water on the airport north of Route 113 is less pronounced and is likely located at a lower elevation. In addition, under natural conditions, tidal elevations tend to be less the farther inland from the tidal source the channels extend. The combination of these two factors explains the limits of tidal vegetation found in the field on the airport proper.

As a result of the altered hydraulic conditions, coordination was carried out with the Connecticut Department of Energy and Environmental Protection (DEEP) and it was determined that, because all of the delineated wetlands fall within one foot elevation above the Coastal Jurisdiction Line, all of the wetlands would be covered under the jurisdictional authority of DEEP's Office of Long Island Sound Program (OLISP), on a state level. On a federal level, all of the wetlands are under the jurisdictional authority of USACE. At the request of USACE, digital survey files of the delineated wetlands were transmitted to them for review, as part of the preliminary jurisdictional determination process.

FHI flagged the boundaries of several wetlands, each identified by a separate flag series number. Because the wetland delineations were carried out over several years the wetland numbers have been organized in geographic order and grouped by wetland systems, based on hydraulic connectivity. The original flag series numbers are included in the descriptions for reference. In some cases two or more of the wetlands were found to be hydraulically connected, but were flagged with different flag series because the hydraulic connection takes place beyond the project's proposed limits of work.

The project is located in an area highly disturbed by historic anthropogenic activity, where there is evidence of disturbance and fill to the native soils. Therefore, the majority of the soils in the project corridor are classified by the Natural Resource Conservation Service (NRCS) as Udorthents and Urban Land Complexes (refer to Figure 2). The urban soils encountered within the project limits are typical of coastal filled and developed lands in Connecticut. Wetland fill areas encountered in the field were classified as Aquents. The delineated wetland areas within the project area are shown on Figures 3a-3d.

The project area is composed of many small wetland areas and several larger wetland areas. Since many of the smaller wetlands have similar vegetation, soil, hydrology, and functionality, soil scientists prepared representative wetland transects and documentation as appropriate. Several of the larger wetland systems contained areas of variation in soils, vegetation or hydrology, and in these cases, multiple transect and documentation were completed for the same wetland area. In this way, USACE transects and documentation was completed to highlight the representative wetland areas encountered, rather than each individual wetland. There are some wetlands with multiple transects and some wetlands

with no transects. The transect forms (in the appendix of this report) describe the data collected at these locations (visually represented in Figure 4).

The wetland functions and values of each wetland system were documented according to the U.S. Army Corps of Engineers (USACE) *Highway Methodology Supplement* (1999). USACE (1999) is a descriptive approach, documenting thirteen potential functions and values, listed below, which may or may not be present within the wetland area being studied. Wetland functions are self-sustaining properties of a wetland ecosystem that exist in the absence of society. Wetland values are benefits derived from either one or more wetland functions and the physical characteristics that are associated with the wetland.

USACE (1999) Wetland Functions and Values

1) Groundwater Recharge/Discharge
2) Floodflow Alteration
3) Fish and Shellfish
4) Sediment/Toxicant/Pathogen Retention
5) Nutrient Removal, Retention and Transformation
6) Production Export
7) Sediment/Shoreline Stabilization
8) Wildlife Habitat
9) Recreation Value (Consumptive and Non-consumptive)
10) Educational and/or Scientific Value
11) Uniqueness/Heritage Value
12) Visual Quality/ Aesthetic Value
13) Threatened or Endangered Species Habitat Value

The principal functions and values of each wetland system are discussed in the detailed descriptions below. The USACE Wetland Function and Value Forms are appended to this report.

The Connecticut Department of Energy and Environmental Protection (CTDEEP) Natural Diversity Database (NDDB) December 2012 data layer indicates that the site is located within an area with the potential presence of threatened or endangered species or their habitat. As part of the project, field surveys for listed vegetation, birds, and invertebrates was conducted during the 2012 field season. The results of these reports are provided within the following separate reports:

1. Avian Survey Report, Runway Safety Area Project, Igor I. Sikorsky Memorial Airport (2013)
2. Igor I. Sikorsky Memorial Airport Rare Moth Findings Report (2013)
3. Vegetation Report, Runway Safety Area Project, Igor I. Sikorsky Memorial Airport (2013)

The wetlands associated with the project were classified according to *Classifications of Wetlands and Deepwater Habitats of the United States* (Cowardin, et. al. 1979) system of wetland classification, the primary wetland types within the project area are riverine and palustrine. There are no vernal pools or aquifer protection areas in the project area.

The following section contains more detailed descriptions of the individual delineated wetland areas. Supplemental materials attached to this report include project figures, a flag series graphic, photographs of each wetland system, and wetland function and value forms.

WETLAND DESCRIPTIONS

Wetland A

Field Flaglines: 2012 Flag Series C1 to C20, 2012 Flag Series D1 to D4, 2012 Flag Series G1 to G10, 2012 Flag Series F1 to F11, 2012 Flag Series E1 to E50, 2012 Flag Series A1 to A39, 2009 Flag Series 701 to 722 & 2012 Flag Series B1 to B2

Wetland A is located east of the airport, between Route 113 and the marine basin. This emergent wetland encompasses a residential driveway and two tidal ditches. It has been greatly altered in the past, and is comprised predominantly of fill material with scattered piles of concrete, rebar, and other debris. There are several different wetland types within this system, as well as the Marine Basin located to the north. A large portion of this wetland has been found, through other field studies, to contain Raymark waste materials associated with the Raymark Waste OPERABLE UNIT 6 Superfund Site.

A small area of high and low tidal marsh is located adjacent to the northwestern end of the existing tidal ditch, near the Marine Basin. This wetland is dominated by smooth cordgrass (*Spartina alterniflora*) and saltmeadow cordgrass (*Spartina patens*), with smaller areas of common reed (*Phragmites australis*), black grass (*Juncus gerardii)*, seaside goldenrod (*Solidago sempervirens*), and spear saltbrush (*Atriplex patula*) in the high marsh portions and upper fringe. Although native in appearance, this marsh area is composed of historic fill materials. Functions and values of this wetland area are greater than those in other portions of this tidal wetland, since this portion is lower and dominated by more native wetland species.

The second, and largest, portion of this wetland system is a high marsh area located in fill material to the west and east of the existing tidal ditch. The portion of this area to the west of the existing tidal ditch is currently maintained by BDR through mowing and is dominated by cool-season grasses such as Kentucky bluegrass (*Poa pratens*) and tall fescue (*Schedonorus arundinacues*), with scattered clumps of switchgrass (*Panicum virgatum*) and seaside goldenrod (*Solidago sempervirens*). Its lower fringes also have scattered individuals of marsh elder (*Iva frutescens*).

The portion of this area to the east of the existing tidal ditch is also composed of fill materials and construction debris. Tidally-influenced areas exist along the tidal ditch, and also along two fingers extending away from the tidal ditch, parallel to Route 113.

Vegetation in this area is dominated by common reed, with smaller clumps of seaside goldenrod, black grass, and marsh elder.

The principal functions of this wetland are floodflow alteration, shoreline stabilization, and wildlife habitat.

The northern portion of this system is comprised of the Marine Basin, a human-made estuarine embayment with a direct connection to the Housatonic River. The Marine basin is bound on its southern end by an earthen berm, separating it from the tidal wetlands north of Route 113. The earthen berm is armored on the Marine Basin side by large rip rap stone material, and an old tide gate is located in the center of the berm. The tide gate is currently non-functioning and does not allow water to pass through it. As a result, the saline water of the Marine Basin does not reach the tidal channels to the south during normal daily tidal cycles. However, during certain high high tides and storm events, water from the Marine Basin can reach elevations sufficient to flow over two low points on the berm and reach the tidal ditches and wetlands to the south.

Wetland B

Flaglines: 2009 Flag Series 601 to 622 & 2012 Flag Series G1 to G82

Wetland B is located to the west of Route 113, between the eastern ends of runways 11-29 and 6-24, within the airport property perimeter fence. This emergent wetland currently does not receive daily tidal flushing due to the non-functional tide gate at the Marine Basin berm and the non-functional culvert under Route 113. It is hydraulically connected to wetland A only through occasional, large scale storm surges and certain high high tides. As a result, this wetland tends to collect freshwater runoff from the surrounding area, which stays ponded until it infiltrates or evaporates. This mixture of occasional freshwater runoff and tidal marine waters create a brackish, salt pond habitat in this wetland due to the failing cross culvert and tide gate. This creates a flooding issue on Route 113, which is super-elevated on the northern side, trapping water within Wetland B and sometimes on the roadway itself. It often takes several days for the floodwaters to recede off the roadway due to the failing cross culvert and tide gate, which do not allow floodwater water to drain from this wetland.

The open water tidal ditch that flows to the failing cross-culvert under Route 113 from the east is the dominant feature of the northeastern portion of this wetland. The vegetation within this wetland is currently dominated by common reed (*Phragmites australis*), with smaller remnant areas of smooth cordgrass close to the ditch and saltmeadow cordgrass (*Spartina patens*) further from the ditch. Along the southern edge of this wetland is an area that is maintained by the airport and is dominated by black grass and spear saltbrush. This wetland supports sub-populations of the state-endengered salt pond grass (*Leptochloa fusca spp. Fascicularis*) and the state species of special concern orach (*Atriplex glabriuscula*). The principal functions of this wetland are floodflow alteration and wildlife habitat.

Wetland C

Flagline: 2010 Flag Series 1801 to 1811

Wetland C is located directly south of the point where Runway 6-24 and Runway 11-29 intersect in the infield area on the east side of the Runway 6-24. This small, emergent wetland is not hydraulically connected to any other wetland, although it is close to and north of Wetland D.

Wetland vegetation is dominated by chairmaker's rush (*Scirpus americana*) [also Schoenoplectus pungens]. It is the single most dominant species in this wetland, occupying as a near monotypic dominant. *Scirpus americana* is a high marsh species (i.e., above MHW) found in brackish tidal wetlands, and at the upper border of high salt marshes. The principal function of this wetland is groundwater recharge.

Wetland D

Flagline: 2010 Flag Series 1701 to 1760

Wetland D is located southeast of Runway 6-24 near its intersection with Runway 11-29 along the periphery of the airfield, on the eastern side of the Runway 24 end. This emergent wetland is large with several open water channels draining its margin. A low area of high marsh tidal wetland extends from the open tidal channel into the RSA to the edge of Runway 6-24. This area is currently mowed/maintained since it is in the RSA, but is still dominated by tidal vegetation. The larger portion of this wetland, outside the RSA is dominated by invasive common reed. There appears to be an old culvert connecting this wetland to Wetland H, under the eastern end of Taxiway H (abandoned runway). At the time of delineation there was water in the ditch, but it appears that this culvert does not function. This wetland receives primarily freshwater inputs from precipitation and groundwater, since it has been hydraulically isolated from daily tidal flushing. Salinities measured in 2012 ranged from 0 to 3.0 ppt (parts per thousand). This wetland does receive inflows of saline water during coastal flooding events, but typically not during the normal tidal cycle.

Wetland vegetation in the portion of this wetland located in the RSA is dominated by chairmaker's rush (*Scirpus americana*) [also Schoenoplectus pungens]. It is the single most dominant species in this portion of the wetland, occupying as a near monotypic dominant. *Scirpus americana* is a high marsh species (i.e., above MHW) found in brackish tidal wetlands, and at the upper border of high salt marshes.Other species within this wetland, or along its periphery, include: bent grass (*Agrostis palustris*) [also *Agrostis stolonifera*]; cypress panicgrass (*Dichanthelium dichotomum*); path rush (*Juncus tenuis*); tapertip rush (*Juncus acuminatus*); lance-leaved violet (*Viola lanceolata*); marsh seedbox (*Ludwigia palustris*); umbrella sedge (*Cyperus* sp.). Areas along the edge of the open water tidal channel are dominated by black grass, common reed and saltmarsh bulrush (*Scirpus robustus*).

Wetland vegetation in the larger emergent portion of the wetland, within the tidal channels and outside the RSA, are dominated by common reed. The principal functions of this wetland are floodflow alteration and wildlife habitat.

Wetland E

Flagline: 2012 Flag Series A1 to A13

Wetland E is located at the southeastern end of Taxiway H, the abandoned runway, at the eastern end of the airport. This forested wetland is situated at the base of the slope of Route 113. This wetland is located below the MHW elevation and is likely a remnant tidal wetland.

Wetland vegetation is comprised of red maple (*Acer rubrum*), false nettle (*Boehmeria cylindrical*), and mugwort (*Artemisia vulgaris*). The principal function of this wetland is groundwater recharge.

Wetland F

Flagline: 2012 Flag Series B1 to B34

Wetland F is located at the eastern end of Taxiway H, the abandoned runway, at the eastern end of the airport. This forested/emergent wetland is situated between Route 113 and an open field at the eastern end of Taxiway H. This wetland is located below the MHW elevation and is likely a remnant tidal wetland.

Wetland vegetation within the forested portion of the wetland is comprised of willow (*Salix spp.*), gray birch (*Betula populifolia*), northern bayberry (*Morella pensylvanica*), groundsel tree (*Baccharis halimifolia*), common reed, mugwort, poison ivy (*Toxicodendron radicans*), and oriental bittersweet (*Celastrus orbiculatus*). Wetland vegetation within the emergent portion of the wetland is comprised of spikerush (*Eleocharis obtusa*), broom sedge (*Carex spp.*), Canadian rush (*Juncus canadensis*), awlfruit sedge (C*arex stipata*), woolgrass (*Scirpus cyperinus*), and bog white violet (V*iola lanceolata*). The principal function of this wetland is groundwater recharge.

Wetland G

Flagline: 2012 Flag Series C1 to C63

Wetland G is located at the southwestern end of Taxiway H, the abandoned runway, at the eastern end of the airport. This emergent wetland is situated between a residential neighborhood and an open field at the end of Taxiway H.

Wetland vegetation is comprised of spikerush, Canadian rush, bog white violet, rough barnyardgrass (*Echinochloa muricata*), dotted smartweed (*Polygonum punctatum*), marshpepper knotweed (*Polygonum hydropiper*), marsh seedbox (*Ludwigia palustrus*),

and tapertip rush (*Juncus acuminatus*). The principal function of this wetland is groundwater recharge.

Wetland H

Flaglines: 2012 Flag Series D1 to D24, X1 to X47, D63 to D101; 2012 Flag Series E1 to E19; 2010 Flag Series 1601 to 1661; 2010 Flag Series 1501 to 1520; 2010 Flag Series 1301 to 1315; 2010 Flag Series 1201 to 1216; 2010 Flag Series 801 to 888; 2012 Flag Series 202 to 216; and 2012 Flag Series Z282 to Z243

Wetland H is a large wetland system located along the southern side of Taxiway H, and at the southern end of the airport between Route 113 and Runway 6-24, and extending to the airport entrance. This vast emergent wetland contains several open water tidal ditches, salt pannes, maintained grass areas, and unmaintained open marsh areas. Wetland H is hydraulically connected to a large open water system on the southern side of Route 113 via a culvert under Route 113 south of Runway 6-24. Wetland H receives daily tidal flushing, however, it appears the culvert under Route 113 to the south of Runway 6-24 does constrict normal tidal flushing to some extent. Salinities within Wetland H subject to tidal action were typically above 20 ppt.

Wetland vegetation is dominated by smooth cordgrass and saltmeadow cordgrass. Less dominant vegetation is comprised of seaside goldenrod, spikerush, Canadian rush, bog white violet, rough barnyardgrass, dotted smartweed, marsh seedbox, tapertip rush, common reed, black grass, bentgrass, aster, groundsel tree, and marsh elder. The principal functions of this wetland are floodflow alteration, fish and shellfish habitat, shoreline stabilization, and wildlife habitat. Biological surveys during 2012 identified this wetland as important habitat for the mudflat tiger beetle (*Cicindela marginalis*), a Connecticut special concern species. This wetland was also identified as important nesting habitat for two state-listed avian species: Seaside Sparrow (*Ammodramus maritimus*) [CT Threatened species] and Saltmarsh Sharp-tailed Sparrow (*Ammodramus caudacutus*) [CT Species of Special Concern].

Wetland I

Flagline: 2010 Flag Series 1401 to 1425

Wetland I is located on the southeast side of Runway 6-24. This small, emergent wetland is not hydraulically connected to any other wetland, although it is close to Wetland H. This is a very shallow depression and is primarily ephemeral in nature.

Wetland vegetation is dominated by sedge, rush, and aster. The principal function of this wetland is groundwater recharge.

Wetland J

Flagline: 2010 Flag Series 1101 to 1109

Wetland J is located on the southeast side of Runway 6-24. This small, emergent wetland is not hydraulically connected to any other wetland, although it is close to wetlands H and K. This is a very shallow depression and is primarily ephemeral in nature.

Wetland vegetation is dominated by bentgrass, sedge, rush, and aster. The principal function of this wetland is groundwater recharge.

Wetland K

Flagline: 2010 Flag Series 1001 to 1025

Wetland K is located on the southeast side of Runway 6-24. This emergent wetland is not hydraulically connected to any other wetland, although it is close to wetlands H and J. This is a very shallow depression and is primarily ephemeral in nature.

Wetland vegetation is dominated by bentgrass, sedge, rush, and aster. The principal function of this wetland is groundwater recharge.

Wetland L

Flagline: 2010 Flag Series 901 to 916

Wetland L is located on the southwest side of Runway 6-24, southwest of Taxiway A, near the Runway 6 approach. This small, emergent wetland is not hydraulically connected to any other wetland, although it is close to Wetland H. This is a very shallow depression and is primarily ephemeral in nature.

Wetland vegetation is dominated by bentgrass, sedge, rush, black grass, and aster. The principal function of this wetland is groundwater recharge.

Wetland M

Flagline: 2010 Flag Series 701 to 725

Wetland M is located on the southwest side of Runway 6-24, southwest of Taxiway A, near the Runway 6 approach. This small, emergent wetland is not hydraulically connected to any other wetland, although it is close to wetlands H and N. This is a very shallow depression and is primarily ephemeral in nature.

Wetland vegetation is dominated by bentgrass, sedge, rush, black grass, and aster. The principal function of this wetland is groundwater recharge.

Wetland N

Flagline: 2010 Flag Series 601 to 644

Wetland N is located on the southwest side of Runway 6-24, southwest of Taxiway A, near the Runway 6 approach. This emergent wetland is not hydraulically connected to any other wetland, although it is close to wetlands M and O. This is a very shallow depression and is primarily ephemeral in nature.

Wetland vegetation is dominated by bentgrass, sedge, rush, black grass, and aster. The principal function of this wetland is groundwater recharge.

Wetland O

Flagline: 2010 Flag Series 501 to 511

Wetland O is located on the southwest side of Runway 6-24, just southwest and adjacent to Taxiway A. This small, emergent wetland is not hydraulically connected to any other wetland, although it is close to Wetland N. There is also a storm drain just north of this wetland from under Taxiway A.

Wetland vegetation is dominated by green bulrush, bentgrass, sedge, and rush. Other species include black grass and aster. The principal function of this wetland is groundwater recharge.

Wetland P

Flagline: 2010 Flag Series 401 to 457

Wetland P is located in the infield area on the west side of Runway 6-24, between Taxiway A and Taxiway C. This long, linear swale is flanked by an emergent wetland which broadens in width near the middle and narrows on each end. This wetland is hydraulically connected to Wetlands H, R, and S by a series of culverts under the taxiways. At the time of delineation there was some standing water in this wetland; elevations in the lower lportions of the wetland are below MHW. There were also small fish (species undefined) observed in the open water portion of this wetland.

Wetland vegetation is dominated by smooth cordgrass, saltmeadow cordgrass, yellow nutsedge (*Cyperus esculentus*), green bulrush (*Scirpus atrovirens*), and common reed. Other species include saltmarsh bulrush, black grass, bentgrass, and aster. The principal functions of this wetland are floodflow alteration, shoreline stabilization, and wildlife habitat.

Wetland Q

Flagline: 2010 Flag Series 301 to 318

Wetland Q is located in the infield area on the west side of Runway 6-24. This long, linear swale is an emergent wetland that is aligned perpendicularly to the middle of Wetland R, but is not hydraulically connected to it.

Wetland vegetation is dominated by yellow nutsedge, green bulrush, bentgrass, sedge, and aster. The principal function of this wetland is groundwater recharge.

Wetland R

Flagline: 2010 Flag Series 201 to 225

Wetland R is located in the infield area on the west side of Runway 6-24, between the Taxiway H and Taxiway C. This long, linear swale is bordered on both sides by an emergent wetland that is hydraulically connected to wetlands H, P, and S by a series of culverts under the taxiways. At the time of delineation there was some standing water in this wetland.

Wetland vegetation is dominated by yellow nutsedge, green bulrush, saltmarsh bulrush and mowed black willow (*Salix nigra*). Other species include redosier dogwood (*Cornus sericea*), and common reed. The principal functions of this wetland are floodflow alteration and shoreline stabilization.

Wetland S

Flagline: 2010 Flag Series 101 to 106

Wetland S is located in the infield area on the west side of Runway 6-24, just northeast of Taxiway H. This small, emergent wetland is hydraulically connected to wetlands H, P, and R by a series of culverts under the taxiways. At the time of delineation there was some standing water in this wetland.

Wetland vegetation is dominated by yellow nutsedge, green bulrush, and mowed goldenrod. Other species include black willow, and redosier dogwood. The principal function of this wetland is floodflow alteration.

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Attached to this report are the following supporting materials:

- Figure 1 Project Area Map
- Figure 2 showing the NRCS soils mapping in the project area
- Figures 3a-3d showing the delineated wetlands (on aerial photograph base)
- Figure 4 showing the transect locations in relation to the wetland systems
- Photographs of each wetland system
- Wetland Function and Value Forms
- US Army Corps of Engineers Wetland Determination Forms (transect forms)

Respectfully submitted,

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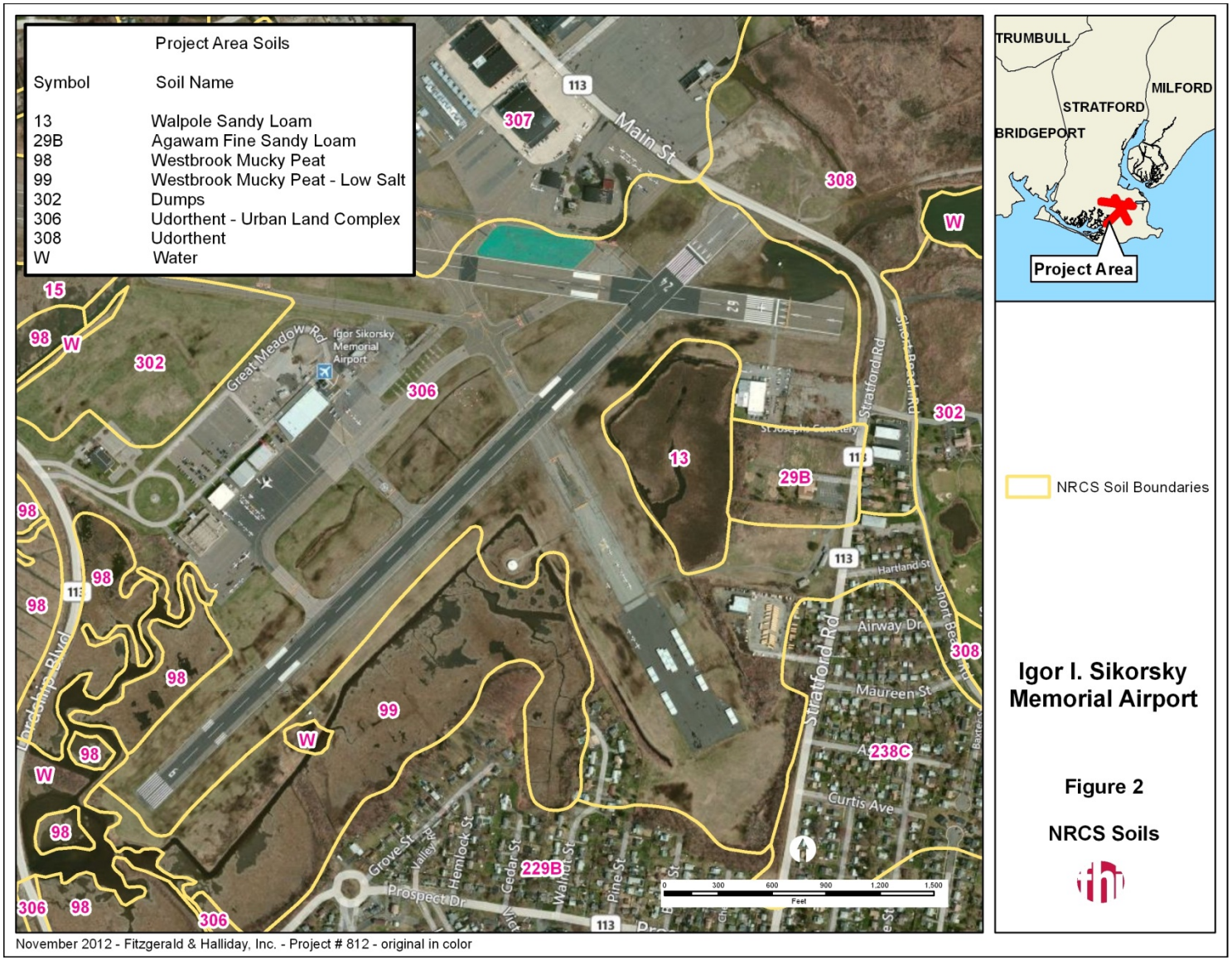
Igor I. Sikorsky Memorial Airport

Figure 1

Project Area

November 2012 - Fitzgerald & Halliday, Inc. - Project # 812 - original in color



November 2012 - Fitzgerald & Halliday, Inc. - Project # 812 - original in color

Delineated Tidal Wetland Flaglines

Estimated Wetland System Boundaries

Igor I. Sikorsky Memorial Airport

Figure 3A

Tidal Wetland Delineations

March 2013 - Fitzgerald & Halliday, Inc. - Project # 812 - original in color

Delineated Tidal Wetland Flaglines

Estimated Wetland System Boundaries

Igor I. Sikorsky Memorial Airport

Figure 3B

Tidal Wetland Delineations

March 2013 - Fitzgerald & Halliday, Inc. - Project # 812 - original in color

Delineated Tidal Wetland Flaglines

Estimated Wetland System Boundaries

Igor I. Sikorsky Memorial Airport

Figure 3C

Tidal Wetland Delineations

March 2013 - Fitzgerald & Halliday, Inc. - Project # 812 - original in color

Delineated Tidal Wetland Flaglines

Estimated Wetland System Boundaries

Igor I. Sikorsky Memorial Airport

Figure 3D

Tidal Wetland Delineations

March 2013 - Fitzgerald & Halliday, Inc. - Project # 812 - original in color

Transect Locations

Delineated Tidal Wetland Flaglines

Estimated Wetland System Boundaries

Igor I. Sikorsky Memorial Airport

Figure 4

Wetland Transects

March 2013 - Fitzgerald & Halliday, Inc. - Project # 812 - original in color

Wetland Photographs

Wetland A

Wetland A

Wetland B

Wetland C

Wetland D

Wetland E

Wetland F

Wetland G

Wetland H

Wetland H

Wetland H

Wetland I

Wetland J

Wetland K

Wetland L

Wetland M

Wetland N

Wetland O

Wetland P

Wetland Q

Wetland R

Wetland S

Wetland Function-Value Evaluation Form

Total area of wetland_____ Human made? No Is wetland part of a wildlife corridor? Yes or a "habitat island"?_____

Adjacent land use Sikorsky Airport / Route 113 Distance to nearest roadway or other development ~5 - 200 ft

Dominant wetland systems present E2EM Contiguous undeveloped buffer zone present Yes

Is the wetland a separate hydraulic system? No If not, where does the wetland lie in the drainage basin? Upper

How many tributaries contribute to the wetland? 1 Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. Wetland A

Latitude_____ Longitude_____

Prepared by: DWL Date 3/14/13

Wetland Impact:
Type_____ Area_____

Evaluation based on:
Office_____ Field X

Corps manual wetland delineation completed? Y_____ N X

Function/Value	Suitability Y	Suitability N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge	○	◉	4,7,15		variable water levels are tidally influenced
Floodflow Alteration	◉	○	2,4,5,6,7,8,10,11,13	X	flood storage apparent in these wetlands
Fish and Shellfish Habitat	○	◉	1		see marine qualifiers. minimal habitat due to physical restrictions
Sediment/Toxicant Retention	○	◉	1,2,4,10		inadequate retention due to tidal fluctuation
Nutrient Removal	○	◉	2,5,7,8,9		no nutrient sources
Production Export	○	◉	4,5,6,7		minimal production occuring within this wetland
Sediment/Shoreline Stabilization	◉	○	2,3,6,7,8,9,10,12,13	X	these wetlands often form the edges of open water areas
Wildlife Habitat	◉	○	6,7,8,11,13,18,19,21	X	entire area is known to be a critical wildlife habitat
Recreation	○	◉	5,9		no access, private property
Educational/Scientific Value	○	◉	1,5,6,14		private property, no access
Uniqueness/Heritage	○	◉	1,5,13,14,17,19,22,24		private property, no access
Visual Quality/Aesthetics	○	◉	2,6,8,12		private property, no access
ES Endangered Species Habitat	◉	○	1,2		T&E species are known to occur on site
Other	○	◉			

Notes:

* Refer to backup list of numbered considerations.

Wetland Function-Value Evaluation Form

Total area of wetland_____ Human made? No Is wetland part of a wildlife corridor? Yes or a "habitat island"?_____

Adjacent land use Sikorsky Airport / Route 113 Distance to nearest roadway or other development ~15

Dominant wetland systems present E2EM Contiguous undeveloped buffer zone present No

Is the wetland a separate hydraulic system? No If not, where does the wetland lie in the drainage basin? Upper

How many tributaries contribute to the wetland? 1 Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. Wetland B

Latitude_____ Longitude_____

Prepared by: DWL Date 3/14/13

Wetland Impact:
Type_____ Area_____

Evaluation based on:
Office_____ Field X

Corps manual wetland delineation completed? Y_____ N X

Function/Value	Suitability Y	Suitability N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge	○	◉	4,8,15		variable water levels are tidally influenced
Floodflow Alteration	◉	○	2,4,5,6,7,8,10,11,13	X	flood storage apparent in this wetlands
Fish and Shellfish Habitat	○	◉	1		see marine qualifiers. minimal habitat due to physical restrictions
Sediment/Toxicant Retention	◉	○	1,2,4,5,9		potential sed/tox from airport and road
Nutrient Removal	○	◉	5,7,8,9		no nutrient sources
Production Export	○	◉	4,5,6,7,8		minimal production occuring within this wetland
Sediment/Shoreline Stabilization	○	◉	2,3		most of this wetland does not border open water
Wildlife Habitat	◉	○	6,7,8,11,13,18,19,21	X	entire area is known to be a critical wildlife habitat
Recreation	○	◉	5		no access, private property
Educational/Scientific Value	○	◉	1,5,6,14		private property, no access
Uniqueness/Heritage	○	◉	1,5,13,17,19,24		private property, no access
Visual Quality/Aesthetics	○	◉	2,6,8,12		private property, no access
ES Endangered Species Habitat	◉	○	1,2		T&E species are known to occur on site
Other	○	◉			

Notes:

* Refer to backup list of numbered considerations.

Wetland Function-Value Evaluation Form

Total area of wetland_____ Human made? No Is wetland part of a wildlife corridor? Yes or a "habitat island"?_____

Adjacent land use Sikorsky Airport Distance to nearest roadway or other development ~15

Dominant wetland systems present E2EM Contiguous undeveloped buffer zone present No

Is the wetland a separate hydraulic system? Yes If not, where does the wetland lie in the drainage basin?_____

How many tributaries contribute to the wetland? 0 Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. Wetland C

Latitude_____ Longitude_____

Prepared by: DWL Date 3/14/13

Wetland Impact:
Type_____ Area_____

Evaluation based on:
Office_____ Field X

Corps manual wetland delineation completed? Y_____ N X

Function/Value	Suitability Y	Suitability N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge	◉	○	4,8,15	X	evidence of groundwater recharge
Floodflow Alteration	○	◉	4,5,6,9		flood storage apparent in this wetlands
Fish and Shellfish Habitat	○	◉			no open water associated with this wetland
Sediment/Toxicant Retention	○	◉	2,4,5		wetland area too small to retain significant amounts of sed/tox
Nutrient Removal	○	◉	5,7,8,9		no nutrient sources
Production Export	○	◉	7		minimal production occuring within this wetland
Sediment/Shoreline Stabilization	○	◉			no open water associated with this wetland
Wildlife Habitat	◉	○	7,8,11,13,18,19		entire area is known to be a critical wildlife habitat
Recreation	○	◉	5		no access, private property
Educational/Scientific Value	○	◉	1,5,14		private property, no access
Uniqueness/Heritage	○	◉	1,13,17,19,24		private property, no access
Visual Quality/Aesthetics	○	◉	2,6,8,12		private property, no access
ES Endangered Species Habitat	◉	○	1,2		T&E species are known to occur on site
Other	○	◉			

Notes:

* Refer to backup list of numbered considerations.

Wetland Function-Value Evaluation Form

Total area of wetland_____ Human made? No Is wetland part of a wildlife corridor? Yes or a "habitat island"?_____

Adjacent land use Sikorsky Airport Distance to nearest roadway or other development ~15

Dominant wetland systems present E2EM Contiguous undeveloped buffer zone present No

Is the wetland a separate hydraulic system? No If not, where does the wetland lie in the drainage basin? Upper

How many tributaries contribute to the wetland? 1 Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. Wetland D

Latitude_____ Longitude_____

Prepared by: DWL Date 3/14/13

Wetland Impact:
Type_____ Area_____

Evaluation based on:
Office_____ Field X

Corps manual wetland delineation completed? Y_____ N X

Function/Value	Suitability Y	Suitability N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge	○	◉	4,8,15		variable water levels are tidally influenced
Floodflow Alteration	◉	○	2,4,5,6,7,8,10,11,13	X	flood storage apparent in this wetland
Fish and Shellfish Habitat	○	◉	1		see marine qualifiers. minimal habitat due to physical restrictions
Sediment/Toxicant Retention	◉	○	1,2,4,5,9		potential sed/tox from airport and road
Nutrient Removal	○	◉	5,7,8,9		no nutrient sources
Production Export	○	◉	4,5,6,7,8		minimal production occuring within this wetland
Sediment/Shoreline Stabilization	○	◉	2,3		most of this wetland does not border open water
Wildlife Habitat	◉	○	6,7,8,11,13,18,19,21	X	entire area is known to be a critical wildlife habitat
Recreation	○	◉	5		no access, private property
Educational/Scientific Value	○	◉	1,5,6,14		private property, no access
Uniqueness/Heritage	○	◉	1,5,13,17,19,24		private property, no access
Visual Quality/Aesthetics	○	◉	2,6,8,12		private property, no access
ES Endangered Species Habitat	◉	○	1,2		T&E species are known to occur on site
Other	○	◉			

Notes:

* Refer to backup list of numbered considerations.

Wetland Function-Value Evaluation Form

Total area of wetland_____ Human made? No Is wetland part of a wildlife corridor? Yes or a "habitat island"?_____

Adjacent land use Sikorsky Airport / Route 113 Distance to nearest roadway or other development ~15

Dominant wetland systems present E2FO Contiguous undeveloped buffer zone present No

Is the wetland a separate hydraulic system? Yes If not, where does the wetland lie in the drainage basin?_____

How many tributaries contribute to the wetland? 0 Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. Wetland E

Latitude_____ Longitude_____

Prepared by: DWL Date 3/14/13

Wetland Impact:
Type_____ Area_____

Evaluation based on:
Office_____ Field X

Corps manual wetland delineation completed? Y_____ N X

Function/Value	Suitability Y	Suitability N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge	◉	○	4,8,15	X	evidence of groundwater recharge
Floodflow Alteration	◉	○	4,5,6,7,11		not associated with open water
Fish and Shellfish Habitat	○	◉			not associated with open water
Sediment/Toxicant Retention	◉	○	1,2,4,5,9		potential sed/tox from airport and road
Nutrient Removal	○	◉	5,7,8,9		no nutrient sources
Production Export	○	◉	4,5,7,8		minimal production occuring within this wetland
Sediment/Shoreline Stabilization	○	◉	2,3		not associated with open water
Wildlife Habitat	◉	○	7,8,11,13,18,19,21		entire area is known to be a critical wildlife habitat
Recreation	○	◉	5		no access, private property
Educational/Scientific Value	○	◉	1,5,14		private property, no access
Uniqueness/Heritage	○	◉	1,5,13,17,19,24		private property, no access
Visual Quality/Aesthetics	○	◉	2,6,8,12		private property, no access
ES Endangered Species Habitat	◉	○	1,2		T&E species are known to occur on site
Other	○	◉			

Notes:

* Refer to backup list of numbered considerations.

Wetland Function-Value Evaluation Form

Total area of wetland_____ Human made? No Is wetland part of a wildlife corridor? Yes or a "habitat island"?_____

Adjacent land use Sikorsky Airport Distance to nearest roadway or other development ~15

Dominant wetland systems present E2EM Contiguous undeveloped buffer zone present No

Is the wetland a separate hydraulic system? Yes If not, where does the wetland lie in the drainage basin?_____

How many tributaries contribute to the wetland? 0 Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. Wetland F

Latitude_____ Longitude_____

Prepared by: DWL Date 3/14/13

Wetland Impact:
Type_____ Area_____

Evaluation based on:
Office_____ Field X

Corps manual wetland delineation completed? Y_____ N X

Function/Value	Suitability Y	Suitability N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge	◉	○	4,8,15	X	evidence of groundwater recharge
Floodflow Alteration	○	◉	4,5,6,9		flood storage apparent in this wetland
Fish and Shellfish Habitat	○	◉			no open water associated with this wetland
Sediment/Toxicant Retention	○	◉	2,4,5		wetland area too small to retain significant amounts of sed/tox
Nutrient Removal	○	◉	5,7,8,9		no nutrient sources
Production Export	○	◉	7		minimal production occuring within this wetland
Sediment/Shoreline Stabilization	○	◉			no open water associated with this wetland
Wildlife Habitat	◉	○	7,8,11,13,18,19		entire area is known to be a critical wildlife habitat
Recreation	○	◉	5		no access, private property
Educational/Scientific Value	○	◉	1,5,14		private property, no access
Uniqueness/Heritage	○	◉	1,13,17,19,24		private property, no access
Visual Quality/Aesthetics	○	◉	2,6,8,12		private property, no access
ES Endangered Species Habitat	◉	○	1,2		T&E species are known to occur on site
Other	○	◉			

Notes:

* Refer to backup list of numbered considerations.

Wetland Function-Value Evaluation Form

Total area of wetland_____ Human made? No Is wetland part of a wildlife corridor? Yes or a "habitat island"?_____

Adjacent land use Sikorsky Airport Distance to nearest roadway or other development ~15

Dominant wetland systems present E2EM Contiguous undeveloped buffer zone present No

Is the wetland a separate hydraulic system? Yes If not, where does the wetland lie in the drainage basin?_____

How many tributaries contribute to the wetland? 0 Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. Wetland G

Latitude_____ Longitude_____

Prepared by: DWL Date 3/14/13

Wetland Impact:
Type_____ Area_____

Evaluation based on:
Office_____ Field X

Corps manual wetland delineation completed? Y_____ N X

Function/Value	Suitability Y	Suitability N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge	◉	○	4,8,15	X	evidence of groundwater recharge
Floodflow Alteration	○	◉	4,5,6,9		flood storage apparent in this wetland
Fish and Shellfish Habitat	○	◉			no open water associated with this wetland
Sediment/Toxicant Retention	○	◉	2,4,5		wetland area too small to retain significant amounts of sed/tox
Nutrient Removal	○	◉	5,7,8,9		no nutrient sources
Production Export	○	◉	7		minimal production occuring within this wetland
Sediment/Shoreline Stabilization	○	◉			no open water associated with this wetland
Wildlife Habitat	◉	○	7,8,11,13,18,19		entire area is known to be a critical wildlife habitat
Recreation	○	◉	5		no access, private property
Educational/Scientific Value	○	◉	1,5,14		private property, no access
Uniqueness/Heritage	○	◉	1,13,17,19,24		private property, no access
Visual Quality/Aesthetics	○	◉	2,6,8,12		private property, no access
ES Endangered Species Habitat	◉	○	1,2		T&E species are known to occur on site
Other	○	◉			

Notes:

* Refer to backup list of numbered considerations.

Wetland Function-Value Evaluation Form

Total area of wetland_____ Human made? No Is wetland part of a wildlife corridor? Yes or a "habitat island"?_____

Adjacent land use Sikorsky Airport / Route 113 Distance to nearest roadway or other development ~5 - 200 ft

Dominant wetland systems present E2EM Contiguous undeveloped buffer zone present Yes

Is the wetland a separate hydraulic system? No If not, where does the wetland lie in the drainage basin? Upper

How many tributaries contribute to the wetland? 1 Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. Wetland H

Latitude_____ Longitude_____

Prepared by: DWL Date 3/14/13

Wetland Impact:
Type_____ Area_____

Evaluation based on:
Office_____ Field X

Corps manual wetland delineation completed? Y_____ N X

Function/Value	Suitability Y	Suitability N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge	○	◉	4,7,15		variable water levels are tidally influenced
Floodflow Alteration	◉	○	2,4,5,6,7,8,10,11,13	X	flood storage apparent in this wetland
Fish and Shellfish Habitat	◉	○	1,2,3,4	X	see marine qualifiers. fish / shellfish habitat present
Sediment/Toxicant Retention	○	◉	1,2,4,10		inadequate retention due to tidal fluctuation
Nutrient Removal	○	◉	2,5,7,8,9		minimal nutrient sources
Production Export	○	◉	4,5,6,7		minimal production occuring within this wetland
Sediment/Shoreline Stabilization	◉	○	2,3,6,7,8,9,10,12,13	X	this wetland forms the edge of open water areas
Wildlife Habitat	◉	○	6,7,8,11,13,18,19,21	X	entire area is known to be a critical wildlife habitat
Recreation	○	◉	5,9		no access, private property
Educational/Scientific Value	○	◉	1,5,6,14		private property, no access
Uniqueness/Heritage	○	◉	1,5,13,14,17,19,22,24		private property, no access
Visual Quality/Aesthetics	○	◉	2,6,8,12		private property, no access
ES Endangered Species Habitat	◉	○	1,2		T&E species are known to occur on site
Other	○	◉			

Notes:

* Refer to backup list of numbered considerations.

Wetland Function-Value Evaluation Form

Total area of wetland_____ Human made? No Is wetland part of a wildlife corridor? Yes or a "habitat island"?_____

Adjacent land use Sikorsky Airport Distance to nearest roadway or other development ~15

Dominant wetland systems present E2EM Contiguous undeveloped buffer zone present No

Is the wetland a separate hydraulic system? Yes If not, where does the wetland lie in the drainage basin?_____

How many tributaries contribute to the wetland? 0 Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. Wetland I

Latitude_____ Longitude_____

Prepared by: DWL Date 3/14/13

Wetland Impact:
Type_____ Area_____

Evaluation based on:
Office_____ Field X

Corps manual wetland delineation completed? Y_____ N X

Function/Value	Suitability Y	Suitability N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge	◉	○	4,8,15	X	evidence of groundwater recharge
Floodflow Alteration	○	◉	4,5,6,9		flood storage apparent in this wetland
Fish and Shellfish Habitat	○	◉			no open water associated with this wetland
Sediment/Toxicant Retention	○	◉	2,4,5		wetland area too small to retain significant amounts of sed/tox
Nutrient Removal	○	◉	5,7,8,9		no nutrient sources
Production Export	○	◉	7		minimal production occuring within this wetland
Sediment/Shoreline Stabilization	○	◉			no open water associated with this wetland
Wildlife Habitat	◉	○	7,8,11,13,18,19		entire area is known to be a critical wildlife habitat
Recreation	○	◉	5		no access, private property
Educational/Scientific Value	○	◉	1,5,14		private property, no access
Uniqueness/Heritage	○	◉	1,13,17,19,24		private property, no access
Visual Quality/Aesthetics	○	◉	2,6,8,12		private property, no access
ES Endangered Species Habitat	◉	○	1,2		T&E species are known to occur on site
Other	○	◉			

Notes:

* Refer to backup list of numbered considerations.

Wetland Function-Value Evaluation Form

Total area of wetland_____ Human made? No Is wetland part of a wildlife corridor? Yes or a "habitat island"?_____

Adjacent land use Sikorsky Airport Distance to nearest roadway or other development ~15

Dominant wetland systems present E2EM Contiguous undeveloped buffer zone present No

Is the wetland a separate hydraulic system? Yes If not, where does the wetland lie in the drainage basin?_____

How many tributaries contribute to the wetland? 0 Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. Wetland J

Latitude_____ Longitude_____

Prepared by: DWL Date 3/14/13

Wetland Impact:
Type_____ Area_____

Evaluation based on:
Office_____ Field X

Corps manual wetland delineation completed? Y_____ N X

Function/Value	Suitability Y	Suitability N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge	◉	○	4,8,15	X	evidence of groundwater recharge
Floodflow Alteration	○	◉	4,5,6,9		flood storage apparent in this wetland
Fish and Shellfish Habitat	○	◉			no open water associated with this wetland
Sediment/Toxicant Retention	○	◉	2,4,5		wetland area too small to retain significant amounts of sed/tox
Nutrient Removal	○	◉	5,7,8,9		no nutrient sources
Production Export	○	◉	7		minimal production occuring within this wetland
Sediment/Shoreline Stabilization	○	◉			no open water associated with this wetland
Wildlife Habitat	◉	○	7,8,11,13,18,19		entire area is known to be a critical wildlife habitat
Recreation	○	◉	5		no access, private property
Educational/Scientific Value	○	◉	1,5,14		private property, no access
Uniqueness/Heritage	○	◉	1,13,17,19,24		private property, no access
Visual Quality/Aesthetics	○	◉	2,6,8,12		private property, no access
ES Endangered Species Habitat	◉	○	1,2		T&E species are known to occur on site
Other	○	◉			

Notes:

* Refer to backup list of numbered considerations.

Wetland Function-Value Evaluation Form

Total area of wetland_____ Human made? No Is wetland part of a wildlife corridor? Yes or a "habitat island"?_____

Adjacent land use Sikorsky Airport Distance to nearest roadway or other development ~15

Dominant wetland systems present E2EM Contiguous undeveloped buffer zone present No

Is the wetland a separate hydraulic system? Yes If not, where does the wetland lie in the drainage basin?_____

How many tributaries contribute to the wetland? 0 Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. Wetland K

Latitude_____ Longitude_____

Prepared by: DWL Date 3/14/13

Wetland Impact:
Type_____ Area_____

Evaluation based on:
Office_____ Field X

Corps manual wetland delineation completed? Y_____ N X

Function/Value	Suitability Y	Suitability N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge	◉	○	4,8,15	X	evidence of groundwater recharge
Floodflow Alteration	○	◉	4,5,6,9		flood storage apparent in this wetland
Fish and Shellfish Habitat	○	◉			no open water associated with this wetland
Sediment/Toxicant Retention	○	◉	2,4,5		wetland area too small to retain significant amounts of sed/tox
Nutrient Removal	○	◉	5,7,8,9		no nutrient sources
Production Export	○	◉	7		minimal production occuring within this wetland
Sediment/Shoreline Stabilization	○	◉			no open water associated with this wetland
Wildlife Habitat	◉	○	7,8,11,13,18,19		entire area is known to be a critical wildlife habitat
Recreation	○	◉	5		no access, private property
Educational/Scientific Value	○	◉	1,5,14		private property, no access
Uniqueness/Heritage	○	◉	1,13,17,19,24		private property, no access
Visual Quality/Aesthetics	○	◉	2,6,8,12		private property, no access
ES Endangered Species Habitat	◉	○	1,2		T&E species are known to occur on site
Other	○	◉			

Notes:

* Refer to backup list of numbered considerations.

Wetland Function-Value Evaluation Form

Total area of wetland_____ Human made? No Is wetland part of a wildlife corridor? Yes or a "habitat island"?_____

Adjacent land use Sikorsky Airport Distance to nearest roadway or other development ~15

Dominant wetland systems present E2EM Contiguous undeveloped buffer zone present No

Is the wetland a separate hydraulic system? Yes If not, where does the wetland lie in the drainage basin?_____

How many tributaries contribute to the wetland? 0 Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. Wetland L

Latitude_____ Longitude_____

Prepared by: DWL Date 3/14/13

Wetland Impact:
Type_____ Area_____

Evaluation based on:
Office_____ Field X

Corps manual wetland delineation completed? Y_____ N X

Function/Value	Suitability Y	Suitability N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge	◉	○	4,8,15	X	evidence of groundwater recharge
Floodflow Alteration	○	◉	4,5,6,9		flood storage apparent in this wetland
Fish and Shellfish Habitat	○	◉			no open water associated with this wetland
Sediment/Toxicant Retention	○	◉	2,4,5		wetland area too small to retain significant amounts of sed/tox
Nutrient Removal	○	◉	5,7,8,9		no nutrient sources
Production Export	○	◉	7		minimal production occuring within this wetland
Sediment/Shoreline Stabilization	○	◉			no open water associated with this wetland
Wildlife Habitat	◉	○	7,8,11,13,18,19		entire area is known to be a critical wildlife habitat
Recreation	○	◉	5		no access, private property
Educational/Scientific Value	○	◉	1,5,14		private property, no access
Uniqueness/Heritage	○	◉	1,13,17,19,24		private property, no access
Visual Quality/Aesthetics	○	◉	2,6,8,12		private property, no access
ES Endangered Species Habitat	◉	○	1,2		T&E species are known to occur on site
Other	○	◉			

Notes:

* Refer to backup list of numbered considerations.

Wetland Function-Value Evaluation Form

Total area of wetland_____ Human made? No Is wetland part of a wildlife corridor? Yes or a "habitat island"?_____

Adjacent land use Sikorsky Airport Distance to nearest roadway or other development ~15

Dominant wetland systems present E2EM Contiguous undeveloped buffer zone present No

Is the wetland a separate hydraulic system? Yes If not, where does the wetland lie in the drainage basin?_____

How many tributaries contribute to the wetland? 0 Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. Wetland M

Latitude_____ Longitude_____

Prepared by: DWL Date 3/14/13

Wetland Impact:
Type_____ Area_____

Evaluation based on:
Office_____ Field X

Corps manual wetland delineation completed? Y_____ N X

Function/Value	Suitability Y	Suitability N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge	◉	○	4,8,15	X	evidence of groundwater recharge
Floodflow Alteration	○	◉	4,5,6,9		flood storage apparent in this wetland
Fish and Shellfish Habitat	○	◉			no open water associated with this wetland
Sediment/Toxicant Retention	○	◉	2,4,5		wetland area too small to retain significant amounts of sed/tox
Nutrient Removal	○	◉	5,7,8,9		no nutrient sources
Production Export	○	◉	7		minimal production occuring within this wetland
Sediment/Shoreline Stabilization	○	◉			no open water associated with this wetland
Wildlife Habitat	◉	○	7,8,11,13,18,19		entire area is known to be a critical wildlife habitat
Recreation	○	◉	5		no access, private property
Educational/Scientific Value	○	◉	1,5,14		private property, no access
Uniqueness/Heritage	○	◉	1,13,17,19,24		private property, no access
Visual Quality/Aesthetics	○	◉	2,6,8,12		private property, no access
ES Endangered Species Habitat	◉	○	1,2		T&E species are known to occur on site
Other	○	◉			

Notes:

* Refer to backup list of numbered considerations.

Wetland Function-Value Evaluation Form

Total area of wetland_____ Human made? No Is wetland part of a wildlife corridor? Yes or a "habitat island"?_____

Adjacent land use Sikorsky Airport Distance to nearest roadway or other development ~15

Dominant wetland systems present E2EM Contiguous undeveloped buffer zone present No

Is the wetland a separate hydraulic system? Yes If not, where does the wetland lie in the drainage basin?_____

How many tributaries contribute to the wetland? 0 Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. Wetland N

Latitude_____ Longitude_____

Prepared by: DWL Date 3/14/13

Wetland Impact:
Type_____ Area_____

Evaluation based on:
Office_____ Field X

Corps manual wetland delineation completed? Y_____ N X

Function/Value	Suitability Y	Suitability N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge	◉	○	4,8,15	X	evidence of groundwater recharge
Floodflow Alteration	○	◉	4,5,6,9		flood storage apparent in this wetland
Fish and Shellfish Habitat	○	◉			no open water associated with this wetland
Sediment/Toxicant Retention	○	◉	2,4,5		wetland area too small to retain significant amounts of sed/tox
Nutrient Removal	○	◉	5,7,8,9		no nutrient sources
Production Export	○	◉	7		minimal production occuring within this wetland
Sediment/Shoreline Stabilization	○	◉			no open water associated with this wetland
Wildlife Habitat	◉	○	7,8,11,13,18,19		entire area is known to be a critical wildlife habitat
Recreation	○	◉	5		no access, private property
Educational/Scientific Value	○	◉	1,5,14		private property, no access
Uniqueness/Heritage	○	◉	1,13,17,19,24		private property, no access
Visual Quality/Aesthetics	○	◉	2,6,8,12		private property, no access
ES Endangered Species Habitat	◉	○	1,2		T&E species are known to occur on site
Other	○	◉			

Notes:

* Refer to backup list of numbered considerations.

Wetland Function-Value Evaluation Form

Total area of wetland_____ Human made? No Is wetland part of a wildlife corridor? Yes or a "habitat island"?_____

Adjacent land use Sikorsky Airport Distance to nearest roadway or other development ~15

Dominant wetland systems present E2EM Contiguous undeveloped buffer zone present No

Is the wetland a separate hydraulic system? Yes If not, where does the wetland lie in the drainage basin?_____

How many tributaries contribute to the wetland? 0 Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. Wetland O

Latitude_____ Longitude_____

Prepared by: DWL Date 3/14/13

Wetland Impact:
Type_____ Area_____

Evaluation based on:
Office_____ Field X

Corps manual wetland delineation completed? Y_____ N X

Function/Value	Suitability Y	Suitability N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge	◉	○	4,8,15	X	evidence of groundwater recharge
Floodflow Alteration	○	◉	4,5,6,9		flood storage apparent in this wetland
Fish and Shellfish Habitat	○	◉			no open water associated with this wetland
Sediment/Toxicant Retention	○	◉	2,4,5		wetland area too small to retain significant amounts of sed/tox
Nutrient Removal	○	◉	5,7,8,9		no nutrient sources
Production Export	○	◉	7		minimal production occuring within this wetland
Sediment/Shoreline Stabilization	○	◉			no open water associated with this wetland
Wildlife Habitat	◉	○	7,8,11,13,18,19		entire area is known to be a critical wildlife habitat
Recreation	○	◉	5		no access, private property
Educational/Scientific Value	○	◉	1,5,14		private property, no access
Uniqueness/Heritage	○	◉	1,13,17,19,24		private property, no access
Visual Quality/Aesthetics	○	◉	2,6,8,12		private property, no access
ES Endangered Species Habitat	◉	○	1,2		T&E species are known to occur on site
Other	○	◉			

Notes:

* Refer to backup list of numbered considerations.

Wetland Function-Value Evaluation Form

Total area of wetland_____ Human made? No Is wetland part of a wildlife corridor? Yes or a "habitat island"?_____

Adjacent land use Sikorsky Airport Distance to nearest roadway or other development ~15

Dominant wetland systems present E2EM Contiguous undeveloped buffer zone present No

Is the wetland a separate hydraulic system? No If not, where does the wetland lie in the drainage basin? Middle

How many tributaries contribute to the wetland? 1 Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. Wetland P

Latitude_____ Longitude_____

Prepared by: DWL Date 3/14/13

Wetland Impact:
Type_____ Area_____

Evaluation based on:
Office_____ Field X

Corps manual wetland delineation completed? Y_____ N X

Function/Value	Suitability Y	Suitability N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge	○	◉	4,7,15		variable water levels are tidally influenced
Floodflow Alteration	◉	○	4,5,6,7,8,10,11,13	X	flood storage apparent in this wetland
Fish and Shellfish Habitat	○	◉	1		see marine qualifiers. minimal habitat due to physical restrictions
Sediment/Toxicant Retention	○	◉	1,2,4,10		inadequate retention due to tidal fluctuation
Nutrient Removal	○	◉	2,5,7,8,9		no nutrient sources
Production Export	○	◉	4,5,6,7		minimal production occuring within this wetland
Sediment/Shoreline Stabilization	◉	○	2,3,6,7,9,12,13	X	this wetland forms the edge of open water
Wildlife Habitat	◉	○	6,7,8,11,13,18,19,21	X	entire area is known to be a critical wildlife habitat
Recreation	○	◉	5		no access, private property
Educational/Scientific Value	○	◉	1,5,14		private property, no access
Uniqueness/Heritage	○	◉	1,5,13,17,19,22,24		private property, no access
Visual Quality/Aesthetics	○	◉	2,6,8,12		private property, no access
ES Endangered Species Habitat	◉	○	1,2		T&E species are known to occur on site
Other	○	◉			

Notes:

* Refer to backup list of numbered considerations.

Wetland Function-Value Evaluation Form

Total area of wetland_____ Human made? No Is wetland part of a wildlife corridor? Yes or a "habitat island"?_____

Adjacent land use Sikorsky Airport Distance to nearest roadway or other development ~15

Dominant wetland systems present E2EM Contiguous undeveloped buffer zone present No

Is the wetland a separate hydraulic system? Yes If not, where does the wetland lie in the drainage basin?_____

How many tributaries contribute to the wetland? 0 Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. Wetland Q

Latitude_____ Longitude_____

Prepared by: DWL Date 3/14/13

Wetland Impact:
Type_____ Area_____

Evaluation based on:
Office_____ Field X

Corps manual wetland delineation completed? Y_____ N X

Function/Value	Suitability Y	Suitability N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge	◉	○	4,8,15	X	evidence of groundwater recharge
Floodflow Alteration	○	◉	4,5,6,9		flood storage apparent in this wetland
Fish and Shellfish Habitat	○	◉			no open water associated with this wetland
Sediment/Toxicant Retention	○	◉	2,4,5		wetland area too small to retain significant amounts of sed/tox
Nutrient Removal	○	◉	5,7,8,9		no nutrient sources
Production Export	○	◉	7		minimal production occuring within this wetland
Sediment/Shoreline Stabilization	○	◉			no open water associated with this wetland
Wildlife Habitat	◉	○	7,8,11,13,18,19		entire area is known to be a critical wildlife habitat
Recreation	○	◉	5		no access, private property
Educational/Scientific Value	○	◉	1,5,14		private property, no access
Uniqueness/Heritage	○	◉	1,13,17,19,24		private property, no access
Visual Quality/Aesthetics	○	◉	2,6,8,12		private property, no access
ES Endangered Species Habitat	◉	○	1,2		T&E species are known to occur on site
Other	○	◉			

Notes:

* Refer to backup list of numbered considerations.

Wetland Function-Value Evaluation Form

Total area of wetland_____ Human made? No Is wetland part of a wildlife corridor? Yes or a "habitat island"?_____

Adjacent land use Sikorsky Airport Distance to nearest roadway or other development ~15

Dominant wetland systems present E2EM Contiguous undeveloped buffer zone present No

Is the wetland a separate hydraulic system? No If not, where does the wetland lie in the drainage basin? Middle

How many tributaries contribute to the wetland? 1 Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. Wetland R

Latitude_____ Longitude_____

Prepared by: DWL Date 3/14/13

Wetland Impact:
Type_____ Area_____

Evaluation based on:
Office_____ Field X

Corps manual wetland delineation completed? Y_____ N X

Function/Value	Suitability Y	Suitability N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge	○	◉	4,7,15		variable water levels are tidally influenced
Floodflow Alteration	◉	○	4,5,6,7,8,10,11,13	X	flood storage apparent in this wetland
Fish and Shellfish Habitat	○	◉	1		see marine qualifiers. minimal habitat due to physical restrictions
Sediment/Toxicant Retention	○	◉	1,2,4,10		inadequate retention due to tidal fluctuation
Nutrient Removal	○	◉	2,5,7,8,9		no nutrient sources
Production Export	○	◉	4,5,6,7		minimal production occuring within this wetland
Sediment/Shoreline Stabilization	◉	○	2,3,6,7,9,12,13	X	this wetland forms the edge of open water
Wildlife Habitat	◉	○	6,7,8,11,13,18,19,21		entire area is known to be a critical wildlife habitat
Recreation	○	◉	5		no access, private property
Educational/Scientific Value	○	◉	1,5,14		private property, no access
Uniqueness/Heritage	○	◉	1,5,13,17,19,22,24		private property, no access
Visual Quality/Aesthetics	○	◉	2,6,8,12		private property, no access
ES Endangered Species Habitat	◉	○	1,2		T&E species are known to occur on site
Other	○	◉			

Notes:

* Refer to backup list of numbered considerations.

Wetland Function-Value Evaluation Form

Total area of wetland_____ Human made? No Is wetland part of a wildlife corridor? Yes or a "habitat island"?_____

Adjacent land use Sikorsky Airport Distance to nearest roadway or other development ~15

Dominant wetland systems present E2EM Contiguous undeveloped buffer zone present No

Is the wetland a separate hydraulic system? No If not, where does the wetland lie in the drainage basin? Upper

How many tributaries contribute to the wetland? 1 Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. Wetland S

Latitude_____ Longitude_____

Prepared by: DWL Date 3/14/13

Wetland Impact:
Type_____ Area_____

Evaluation based on:
Office_____ Field X

Corps manual wetland delineation completed? Y_____ N X

Function/Value	Suitability Y	Suitability N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge	○	◉	4,7,15		variable water levels are tidally influenced
Floodflow Alteration	◉	○	4,5,6,7,8,10,11,13	X	flood storage apparent in this wetland
Fish and Shellfish Habitat	○	◉	1		see marine qualifiers. minimal habitat due to physical restrictions
Sediment/Toxicant Retention	○	◉	1,2,4,10		inadequate retention due to tidal fluctuation
Nutrient Removal	○	◉	2,5,7,8,9		no nutrient sources
Production Export	○	◉	4,5,6,7		minimal production occuring within this wetland
Sediment/Shoreline Stabilization	◉	○	2,3,6,7,9,12,13		too small to influence shoreline
Wildlife Habitat	◉	○	6,7,8,11,13,18,19,21		entire area is known to be a critical wildlife habitat
Recreation	○	◉	5		no access, private property
Educational/Scientific Value	○	◉	1,5,14		private property, no access
Uniqueness/Heritage	○	◉	1,5,13,17,19,22,24		private property, no access
Visual Quality/Aesthetics	○	◉	2,6,8,12		private property, no access
ES Endangered Species Habitat	◉	○	1,2		T&E species are known to occur on site
Other	○	◉			

Notes:

* Refer to backup list of numbered considerations.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Sikorsky Airport City/County: Stratford Sampling Date: 9-7-12

Applicant/Owner: CTDOT State: CT Sampling Point: A1-U1

Investigator(s): D. Hageman, D. Laiuppa Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Fill material near driveway Local relief (concave, convex, none): _____

Slope (%): _____ Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: _____ 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 X, Soil X, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X

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

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

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

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

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

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

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

Remarks:

Fill adjacent to dirt road. No hydrology observed.

VEGETATION – Use scientific names of plants.

Sampling Point: A1-U1

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size:)			
1. Digitaria sanguinalis	90	Y	FACU
2. Schedonorus arundinaceus	15	Y	FACU
3. Plantago lanceolata	5		FACU
4. Hypericum perforatum	<1		UPL
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	= Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

__ Rapid Test for Hydrophytic Vegetation

__ Dominance Test is >50%

__ Prevalence Index is ≤3.0[1]

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

__ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes ____ No X

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

Maintained lawn near access driveway.

SOIL

Sampling Point: A1-U1

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 3/2	100					sl	A
3-17	10YR 4/3	100					sl	Bw
17-24	10YR 3/1	100					sl	C

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No No

Remarks:

Fill material adjacent to access driveway.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Sikorsky Airport City/County: Stratford Sampling Date: 9-7-12

Applicant/Owner: CTDOT State: CT Sampling Point: A1-W1

Investigator(s): D. Hageman, D. Laiuppa Section, Township, Range: _____

Landform (hillslope, terrace, etc.): wetland adjacent to tidal creek Local relief (concave, convex, none): _____

Slope (%): _____ Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: _____ 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 X, Soil X, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X

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

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

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	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.)

It is thought that if left unmanaged, this area would be dominated by tidal wetland vegetation.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____	
Water Table Present?	Yes _____	No X	Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches): 10	**Wetland Hydrology Present?** Yes X No _____

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

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: A1-W1

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size:)			
1. Poa pratensis	75	Y	FACU
2. Panicum virgatum	20	Y	FAC
3. Schedonorus arundinaceus	10	Y	FACU
4. Solidago sempervirens	4	N	FACW
5. Iva frutescens	1	N	FACW
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	= Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

__ Rapid Test for Hydrophytic Vegetation

__ Dominance Test is >50%

__ Prevalence Index is ≤3.0[1]

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

__ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes ____ No X

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

Low area of fill adjacent to tidal creek.

Purpose of plot to document "land capable of supporting" tidal vegetation. It is thought that if left unmanaged, this area would be dominated by tidal wetland vegetation.

SOIL Sampling Point: A1-W1

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 3/1	80	2.5Y 5/6	20	C	M	fsl	A
3-17	10YR 4/2	80	10YR 6/2	10	D	M	sl	Bg
			2.5Y 5/6	10	C	M		
17-21	10YR 4/1	80	10YR 4/6	20	C	M	sicl	C

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

Fill material which has developed redoximorphic features over time.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Sikorsky Airport City/County: Stratford Sampling Date: 9-7-12

Applicant/Owner: CTDOT State: CT Sampling Point: A1-U2

Investigator(s): D. Hageman, D. Laiuppa Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Fill material near Route 113 Local relief (concave, convex, none): _____

Slope (%): _____ Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: _____ 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 X, Soil X, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X

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

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

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

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

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

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

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

Remarks:

Fill adjacent to Route 113. No hydrology observed.

VEGETATION – Use scientific names of plants.

Sampling Point: A1-U2

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1. Myrica pensylvanica	1	Y	FAC
2. Ailanthus altissima	1	Y	UPL
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size:)			
1. Artemisia vulgaris	90	Y	UPL
2. Melilotus alba	5	N	FACU
3. Bromus sp.	10	Y	n/a
4. Rumex crispus	1	N	FAC
5. Phragmites australis	1	N	FACW
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	= Total Cover		
Woody Vine Stratum (Plot size:)			
1. Parthenocissus quinquefolia	5	Y	FACU
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

__ Rapid Test for Hydrophytic Vegetation

__ Dominance Test is >50%

__ Prevalence Index is ≤3.0[1]

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

__ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes ____ No X

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

Fill area near Route 113.

SOIL Sampling Point: A1-U2

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 2/2	100					gr lcs	A
3-6	10YR 4/3	100					gr cs	C
								* refusal @ 6"

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No No

Remarks:

Fill material adjacent to Route 113.

Much brick, pavement, concrete, and stones in soil.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Sikorsky Airport City/County: Stratford Sampling Date: 9-7-12

Applicant/Owner: CTDOT State: CT Sampling Point: A1-W2

Investigator(s): D. Hageman, D. Laiuppa Section, Township, Range: _____

Landform (hillslope, terrace, etc.): wetland adjacent to tidal creek Local relief (concave, convex, none): _____

Slope (%): _____ Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: _____ 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 X, Soil X, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X

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

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

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

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

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes _____	No X	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches): 8

Wetland Hydrology Present? Yes X No _____

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

Remarks:

fill material

VEGETATION – Use scientific names of plants.

Sampling Point: A1-W2

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size:)			
1. Juncus gerardii	95	Y	OBL
2. Phragmites australis	5	N	FACW
3. Solidago sempervirens	5	N	FACW
4. Atriplex patula	1	N	FACW
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	= Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

__ Rapid Test for Hydrophytic Vegetation

__ Dominance Test is >50%

__ Prevalence Index is ≤3.0[1]

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

__ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes X No _____

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

Low area of fill adjacent to tidal creek.

Purpose of plot to document "land capable of supporting" tidal vegetation.

SOIL Sampling Point: A1-W2

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/2	100					gr sl	A
6-17	10YR 3/1	80	10YR 4/6	20	C	M	gr ls	Bg
								* refusal @ 17"

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

Fill material which has developed redoximorphic features over time. Brick, tile and concrete fragments observed within soil horizons.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Sikorsky Airport City/County: Stratford Sampling Date: 9-7-12

Applicant/Owner: CTDOT State: CT Sampling Point: A2-U

Investigator(s): D. Hageman, D. Laiuppa Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Fill slope Local relief (concave, convex, none): _____

Slope (%): _____ Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: _____ 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 X, Soil X, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X

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

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

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

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

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

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

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

Remarks:

Upper fill slope adjacent to dirt road

VEGETATION – Use scientific names of plants.

Sampling Point: A2-U

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size:)			
1. Phragmites australis	100	Y	FACW
2. Phytolacca americana	5	N	FACU
3. Arctium minus	5	N	FACU
4. Artemisia vulgaris	8	N	UPL
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	= Total Cover		
Woody Vine Stratum (Plot size:)			
1. Vitis sp.	10	Y	
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

__ Rapid Test for Hydrophytic Vegetation

__ Dominance Test is >50%

__ Prevalence Index is ≤3.0[1]

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

__ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes X No

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

SOIL Sampling Point: A2-U

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/3	100					sil	A
4-16	10YR 5/2	90	10YR 4/4	10	C	M	sil	B
16-23	10YR 6/1	80	10YR 3/3	15	C	M	sil	C
			10YR 4/6	5	C	M		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Soil appears to be composed of former dredge materials, or excavation spoils.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Sikorsky Airport City/County: Stratford Sampling Date: 9-7-12

Applicant/Owner: CTDOT State: CT Sampling Point: A2-W

Investigator(s): D. Hageman, D. Laiuppa Section, Township, Range: _____

Landform (hillslope, terrace, etc.): marsh near access road Local relief (concave, convex, none): _____

Slope (%): _____ Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: _____ 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 X, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____

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

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

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

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

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes X	No _____	Depth (inches): 3
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches): surface

Wetland Hydrology Present? Yes X No _____

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

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: A2-W

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size:)			
1. Spartina patens	95	Y	OBL
2. Phragmites australis	5		FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	= Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ Rapid Test for Hydrophytic Vegetation

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

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

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes X No ____

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

Spartina marsh adjacent to access road

SOIL Sampling Point: A2-W

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR 3/3	90	10YR 2/1	10	C	m	muck	
7-22	Gley1 2.5/10y	85	10YR 2/1	10	C	m	mucky sil	brick fragments in lower horizon
			10YR 3/3	5	C	m		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

fill material; brick fragments found in lower soil stratum

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Sikorsky Airport City/County: Stratford Sampling Date: 9-1-12

Applicant/Owner: CTDOT State: CT Sampling Point: B1-U

Investigator(s): D. Hageman Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Fill material near woodland Local relief (concave, convex, none): _____

Slope (%): _____ Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: _____ 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 X, Soil X, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X

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

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

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

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

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

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

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

Remarks:

Refusal at 14 inches due to large stones.

VEGETATION – Use scientific names of plants.

Sampling Point: B1-U

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size:)			
1. Plantago lanceolata	45	Y	FACU
2. Paspalum setaceum	20	Y	FACU
3. Agrostis capillaris	20	Y	FAC
4. Festuca trachyphylla	10		UPL
5. Setaria pumila	5		FAC
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	= Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

__ Rapid Test for Hydrophytic Vegetation

__ Dominance Test is >50%

__ Prevalence Index is ≤3.0[1]

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

__ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes ____ No X

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

Maintained lawn

SOIL

Sampling Point: B1-U

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 3/2	100					sl	A
3-14	10YR 4/4	95	7.5YR 4/6	5	C		gr sl	Bw
								* refusal @ 14"

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No No

Remarks:

Fill material adjacent to runway.

Refusal @ 14"

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Sikorsky Airport City/County: Stratford Sampling Date: 9-1-12

Applicant/Owner: CTDOT State: CT Sampling Point: B1-W

Investigator(s): D. Hageman Section, Township, Range: _____

Landform (hillslope, terrace, etc.): wetland adjacent to tidal marsh Local relief (concave, convex, none): _____

Slope (%): _____ Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: _____ 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 X, Soil X, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X

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

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

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

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

HYDROLOGY

Wetland Hydrology Indicators:

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

___ Surface Water (A1)	X Water-Stained Leaves (B9)	___ Surface Soil Cracks (B6)
X High Water Table (A2)	___ Aquatic Fauna (B13)	___ Drainage Patterns (B10)
X Saturation (A3)	___ Marl Deposits (B15)	___ Moss Trim Lines (B16)
___ Water Marks (B1)	___ Hydrogen Sulfide Odor (C1)	___ Dry-Season Water Table (C2)
___ Sediment Deposits (B2)	___ Oxidized Rhizospheres on Living Roots (C3)	X Saturation Visible on 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 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 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 X	No _____	Depth (inches): 18
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches): surface

Wetland Hydrology Present? Yes X No _____

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

Remarks:

Fill material on edge of wooded area. Seasonal ponding evident.

VEGETATION – Use scientific names of plants.

Sampling Point: B1-W

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1. Populus tremuloides	8	Y	FACU
2. Betula populifolia	5	Y	FAC
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1. Salix discolor	20	Y	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size:)			
1. Eleocharis acicularis	80	Y	OBL
2. Viola lanceolata	95	Y	OBL
3. Juncus acuminatus	15	Y	OBL
4. Cyperus sp.	5		
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	= Total Cover		
Woody Vine Stratum (Plot size:)			
1. Celastris orbiculatus	10	Y	UPL
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 71 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

__ Rapid Test for Hydrophytic Vegetation

X Dominance Test is >50%

__ Prevalence Index is ≤3.0[1]

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

__ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes X No

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

Low area of fill on woodland edge.

SOIL Sampling Point: B1-W

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-1.5	7.5YR 2.5/2	100					m sil	A
1.5-14	2.5Y 4/1	100					gr ls	Bg
14-24+	5BG4/1	100					gr ls	C

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Fill material which has developed redoximorphic features over time.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Sikorsky Airport City/County: Stratford Sampling Date: 9-1-12

Applicant/Owner: CTDOT State: CT Sampling Point: D1-U

Investigator(s): D. Hageman, B. Moorehead Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Fill material near runway Local relief (concave, convex, none): _____

Slope (%): _____ Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: _____ 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 X, Soil X, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X

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

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

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

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

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

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

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

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

Remarks:

Fill material adjacent to runway and Route 113.

Refusal at 12 inches due to large stones.

VEGETATION – Use scientific names of plants.

Sampling Point: D1-U

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size:)			
1. Plantago lanceolata	20	Y	FACU
2. Paspalum setaceum	20	Y	FACU
3. Agrostis capillaris	20	Y	FAC
4. Festuca trachyphylla	20	Y	UPL
5. Andropogon virginicus	8		FACU
6. Potentilla canadensis	5		UPL
7. Setaria pumila	5		FAC
8.			
9.			
10.			
11.			
12.			
	= Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 25 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

__ Rapid Test for Hydrophytic Vegetation

__ Dominance Test is >50%

__ Prevalence Index is ≤3.0[1]

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

__ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes ____ No X

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

Maintained lawn near runway

SOIL

Sampling Point: D1-U

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 3/2	100					ls	A
3-12	10YR 4/4	100					v. stony gr s	B
								* refusal @ 12"

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No No

Remarks:

Fill material adjacent to runway.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Sikorsky Airport City/County: Stratford Sampling Date: 9-1-12

Applicant/Owner: CTDOT State: CT Sampling Point: D1-W

Investigator(s): D. Hageman Section, Township, Range: _____

Landform (hillslope, terrace, etc.): wetland adjacent to tidal marsh Local relief (concave, convex, none): _____

Slope (%): _____ Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: _____ 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 X, Soil X, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X

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

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

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

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

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes X	No _____	Depth (inches): 12
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches): surface

Wetland Hydrology Present? Yes X No _____

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

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: D1-W

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size:)			
1. Juncus acuminatus	80	Y	OBL
2. Viola lanceolata	15	Y	OBL
3. Fimbristylis autumnalis	30	Y	FACW
4. Setaria sp.	10		
5. Cyperus bipartitus	8		FACW
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	= Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ Rapid Test for Hydrophytic Vegetation

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

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

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes X No ____

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

Low area of fill adjacent to spartina marsh

SOIL

Sampling Point: D1-W

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 2/1	100					m ls	A
3-7	2.5Y 4/2	100					gr lcs	Bg
7-18+	2.5Y 4/1	85	2.5Y 5/4	15	C		ls	C

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Fill material which has developed redoximorphic features over time.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Sikorsky Airport City/County: Stratford Sampling Date: 9-21-12

Applicant/Owner: CTDOT State: CT Sampling Point: G-U

Investigator(s): D. Hageman Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Fill material near runway Local relief (concave, convex, none): _____

Slope (%): _____ Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: _____ 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 X, Soil X, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X

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

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

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

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

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes _____	No X	Depth (inches): 18"
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): 18"

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

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

Remarks:

Fill material adjacent to runway and Route 113.

VEGETATION – Use scientific names of plants.

Sampling Point: G-U

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size:)			
1. Schedonorus arundinaceus	100	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	= Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

__ Rapid Test for Hydrophytic Vegetation

__ Dominance Test is >50%

__ Prevalence Index is ≤3.0[1]

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

__ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes ____ No X

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

Maintained lawn near runway

SOIL Sampling Point: G-U

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 2/2	98	5YR 3/4	2	C		sl	
4-18+	10YR 5/4	100					gr ls	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No No

Remarks:

Fill material adjacent to runway.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Sikorsky Airport City/County: Stratford Sampling Date: 9-21-12

Applicant/Owner: CTDOT State: CT Sampling Point: G-W

Investigator(s): D. Hageman Section, Township, Range: _____

Landform (hillslope, terrace, etc.): wetland adjacent to runway Local relief (concave, convex, none): _____

Slope (%): _____ Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: _____ NWI classification: _____

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

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

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

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

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

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

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes X	No _____	Depth (inches): 11
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches): surface

Wetland Hydrology Present? Yes X No _____

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

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: G-W

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size:)			
1. Juncus gerardii	80	Y	OBL
2. Atriplex patula	20	Y	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	= Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

__ Rapid Test for Hydrophytic Vegetation

__ Dominance Test is >50%

__ Prevalence Index is ≤3.0[1]

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

__ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes X No ____

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

irregularly flooded marsh

SOIL

Sampling Point: G-W

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	7.5YR 2.5/1	85	7.5YR 4/6	15			m fsl	
2-10	2.5Y 4/2	60	5YR 4/6	40			gr ls	SAB Structure
10-16	2.5Y 4/1	80	2.5Y 5/6	20			ls	C, massive structure
								* refusal at 16"

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

Fill material which has developed redoximorphic features over time.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Sikorsky Airport City/County: Stratford Sampling Date: 9-13-12

Applicant/Owner: CTDOT State: CT Sampling Point: Z-U

Investigator(s): D. Hageman Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Fill slope Local relief (concave, convex, none): _____

Slope (%): _____ Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: _____ 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 X, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____

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

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

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

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

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present?	Yes _____	No X	Depth (inches): _____
Water Table Present?	Yes _____	No X	Depth (inches): 20"
Saturation Present? (includes capillary fringe)	Yes _____	No X	Depth (inches): 20"

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

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

Remarks:

Upper fill slope adjacent to foundation

VEGETATION – Use scientific names of plants.

Sampling Point: Z-U

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1. Prunus serotina	25	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1. Rhus typhina	40	Y	UPL
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size:)			
1. Solidago rugosa	8	Y	FAC
2. Rubus allegheniensis	4	N	FACU
3. Alliaria petiolata	4	N	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	= Total Cover		
Woody Vine Stratum (Plot size:)			
1. Celastrus orbiculatus	70	Y	UPL
2. Vitis sp.	5	N	
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 33% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

__ Rapid Test for Hydrophytic Vegetation

__ Dominance Test is >50%

__ Prevalence Index is ≤3.0[1]

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

__ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes ____ No N

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

SOIL

Sampling Point: Z-U

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

Depth	Matrix		Redox Features				Texture	Remarks
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]		
0-3.5	10YR 3/2						fsl	A
3.5-16	10YR 5/4						sl	B, SAB structure
16-20	10YR 5/4						sl	C, massive structure

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No No

Remarks:

Soil is fill material surrounding former building foundation; placed approximately in the 1960's

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Sikorsky Airport City/County: Stratford Sampling Date: 9-13-12

Applicant/Owner: CTDOT State: CT Sampling Point: Z-W

Investigator(s): D. Hageman Section, Township, Range: _____

Landform (hillslope, terrace, etc.): marsh near fill slope Local relief (concave, convex, none): _____

Slope (%): _____ Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: _____ NWI classification: _____

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

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

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

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

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	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.)

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present?	Yes X	No _____	Depth (inches): 3	
Water Table Present?	Yes X	No _____	Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes X	No _____	Depth (inches): _____	**Wetland Hydrology Present?** Yes X No _____

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

Remarks:

Tidal marsh adjacent to fill slope

11:40AM on 9/13/12

previously measured salinity 26 ppt

VEGETATION – Use scientific names of plants.

Sampling Point: Z-W

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size:)			
1. Spartina alterniflora	100	Y	OBL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	= Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

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

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

___ Rapid Test for Hydrophytic Vegetation

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

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

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes X No ____

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

Spartina marsh adjacent to fill material

SOIL

Sampling Point: Z-W

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	2.5Y 3/1	100					muck	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Phragmites rhizomes in upper 10" of profile