APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): May 16, 2012 for Trib. T1-W/C, T1-E and Trib. T-2

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:NAE-2005-1505 46 Mill Plain LLC PM: Cori M. Rose

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: CT County/parish/borough: Fairfield City: Danbury
Center coordinates of site (lat/long in degree decimal format): Lat. 41.39489° N, Long. -73.51726° E.
Universal Transverse Mercator: 18
Name of nearest waterbody: Still River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Still River
Name of watershed or Hydrologic Unit Code (HUC): Housatonic River 01100005
☒ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc…) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):
☒ Office (Desk) Determination. Date: December 22, 1010
☒ Field Determination. Date(s): March 12, 2008 and January 20, 2011

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are No** "*navigable waters of the U.S.*" within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [*Required*]
☐ Waters subject to the ebb and flow of the tide.
☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are** "*waters of the U.S.*" within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [*Required*]

1. **Waters of the U.S.**
   a. **Indicate presence of waters of U.S. in review area (check all that apply):** [1]
      ☐ TNWs, including territorial seas
      ☐ Wetlands adjacent to TNWs
      ☒ Relatively permanent waters[2] (RPWs) that flow directly or indirectly into TNWs
      ☐ Non-RPWs that flow directly or indirectly into TNWs
      ☒ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
      ☐ Impoundments of jurisdictional waters
      ☐ Isolated (interstate or intrastate) waters, including isolated wetlands

   b. **Identify (estimate) size of waters of the U.S. in the review area:**
      Non-wetland waters: 2585 linear feet: 3width (ft) and/or acres.
      Wetlands: 3 acres.

   c. **Limits (boundaries) of jurisdiction** based on: **Established by OHWM.**
      Elevation of established OHWM (if known):.

2. **Non-regulated waters/wetlands (check if applicable):**[3]
   ☐ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: .

[1] Boxes checked below shall be supported by completing the appropriate sections in Section III below.
[2] For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).
[3] Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. **TNW**
   Identify TNW:

   Summarize rationale supporting determination:

2. **Wetland adjacent to TNW**
   Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. **Characteristics of non-TNWs that flow directly or indirectly into TNW**

   (i) General Area Conditions:
   Watershed size: 83.2**acres**
   Drainage area: 65 **acres**
   Average annual rainfall: 49.7 inches
   Average annual snowfall: 47.3 inches

   (ii) Physical Characteristics:
   (a) Relationship with TNW:
   ☒ Tributary flows directly into TNW.
   ☐ Tributary flows through **Pick List** tributaries before entering TNW.

   Project waters are **1 (or less)** river miles from TNW.
   Project waters are **1 (or less)** river miles from RPW.
   Project waters are **1 (or less)** aerial (straight) miles from TNW.
   Project waters are **1 (or less)** aerial (straight) miles from RPW.
   Project waters cross or serve as state boundaries. Explain: Not Applicable

   Identify flow route to TNW[5]: Two unnamed headwater tributaries traverse the review area in a north-south direction, ultimately converging at the southern border of the site before being conveyed as a single tributary (T-2) under SR 6-Mill Plain Road. The western headwater tributary (T1-W/C) is conveyed through several culverts before it merges with the

[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.
[5] Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

eastern headwater tributary (T1-E) and before the combined flow, as T-2, leaves the site. T-2 leaves the site through a culvert under Mill Plain Road and takes a circuitous route through man-made conveyances. Specifically, after being conveyed under Mill Plain Road T-2 is discharged to a triangular piece of land between Mill Plain Road and the ConnRail Railroad corridor. it is then passed under the Railroad ROW by another culvert and conveyed approximately 1800 feet via a manmade drainage feature to another culvert which carries the flow under Interstate 84 and into the floodplain system of the Still River (Mill Plain Swamp).
Tributary stream order, if known: 1.

(b) General Tributary Characteristics (check all that apply):
Tributary is: ☒ Natural
☒ Artificial (man-made). Explain: Manmade diversion of T1-W.
☒ Manipulated (man-altered). Explain: As identified above, T1-W/C travels through culverts off-site and after traveling under Amity Lane to enter the site, is diverted via a man-made conveyance ditch for approximately 585 linear feet around the perimeter of the front parcel. Historic aerials suggest that prior to the development or modification at the site, the tributary may have merged with the wetland area identified as W5-E and T1-E at a location upstream of its current configuration. The eastern tributary T1-E originates at a hillside seep and flows naturally through a forested and shrub system until it reaches the lowland elevation of the front parcel. Here it has been degraded by land use (trailer park) and confinement by filled slopes. After being created by the convergence of T1-W and T1-E, the tributary identified as T-2 travels under Mill Plain Road via culvert, into a manmade drainage feature adjacent to the railroad, through another culvert under the railroad corridor, and via a manmade drainage swale along Interstate-84 before traveling under the highway and being discharged to Mill Plain Swamp. The tributary then meanders around hummocks within the swamp for approximately 200 to 300 feet before discharging to waters of the Still River.

Tributary properties with respect to top of bank (estimate):
Average width: 3-4 feet
Average depth: 3 feet
Average side slopes: **2:1.**

Primary tributary substrate composition (check all that apply):
☒ Silts ☒ Sands ☐ Concrete
☐ Cobbles ☒ Gravel ☐ Muck
☐ Bedrock ☒ Vegetation. Type/% cover: Forested/75% and Emergent/≥85%
☐ Other. Explain: .

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: In the natural portion of both tributaries there is no indication of significant erosion, undercutting or slumping. However at the downstream extent of the natural area where they enter the disturbed manmade modified portion of the site, the bank is incised and possesses erosive characteristics. The instability of the tributary in this section is attributed to the lack of stabilizing vegetation and the possible un-compacted nature of different soils associated with the manmade drainage feature. The drainage swale conveyance off-site, along the railroad and the highway, is well vegetated and appears stable. Some undercutting is evident at the end of the pipe under Interstate-84.

Presence of run/riffle/pool complexes. Explain: Small seasonal pools on steep gradient are created through debris dams and topographical differences within the forested portion of the tributaries before they converge at the base of the hills. The depth of the water within the tributaries is not expected to provide habitat for fish, but the conditions are such that they will provide suitable features for obligate macroinvertebrates.

Tributary geometry: Onsite and upslope the geometry is meandering. Through the drainage diversion and offsite, relatively Straight with several 90° turns.

Tributary gradient (approximate average slope): At the headwater origination points of T1-W and T1-E approximately 10% and downslope on the frontage parcel closer to 2%.

(c) Flow:
Tributary provides for: **Seasonal flow**
Estimate average number of flow events in review area/year: **2-5**

Describe flow regime: The source of hydrology for the feeding tributaries is best described as a combination of seasonally high groundwater and supplemented by snow pack contributing flow as snow melt in poorly drained glacial till with moderate slopes and by seasonal precipitation. In New England these systems are normally inundated or saturated to the surface and flow freely from late-winter or early-spring, usually commencing with the first thaw (~February) and continuing through full leaf-out sometime around mid to late-May. We expect that T1-E and T1-W, and consequently T-2 as well, will flow at least 4 to 5 months out of the year and in response to precipitation events.

Other information on duration and volume: Although moderately well drained, the hydric soil inclusions at the subject site have a high seasonal water table of less than 1.5 feet below the ground surface from November through May and is routinely perched over a dense till or bedrock substratum. Consequently, the site has major limitations related to infiltration and a high erosion hazard due to the steep slope, if disturbed.

Surface flow is: **Discrete and confined.** Characteristics: Carried via manmade conveyances for some portion of the site.

Subsurface flow: **Unknown**. Explain findings: .

☐ Dye (or other) test performed: .

Tributary has (check all that apply):

☒ Bed and banks

☒ OHWM[6] (check all indicators that apply):

- ☒ clear, natural line impressed on the bank
- ☒ changes in the character of soil
- ☐ shelving
- ☒ vegetation matted down, bent, or absent
- ☒ leaf litter disturbed or washed away
- ☒ sediment deposition
- ☒ water staining
- ☒ other (list): ice marks
- ☒ the presence of litter and debris
- ☒ destruction of terrestrial vegetation
- ☐ the presence of wrack line
- ☒ sediment sorting
- ☒ scour
- ☐ multiple observed or predicted flow events
- ☐ abrupt change in plant community

☒ Discontinuous OHWM.[7] Explain:In some cases the OHWM is obscured where it enters into pipes or culverts.

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

☐ High Tide Line indicated by:
- ☐ oil or scum line along shore objects
- ☐ fine shell or debris deposits (foreshore)
- ☐ physical markings/characteristics
- ☐ tidal gauges
- ☐ other (list):

☐ Mean High Water Mark indicated by:
- ☐ survey to available datum;
- ☐ physical markings;
- ☐ vegetation lines/changes in vegetation types.

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: Water from the headwater tributaries was clean during the site visit on 12 March 2008, but after the tributaries reached the project site and entered into the manmade conveyance at the site (T1-W(C)) there was a noticeable increase in the volume of soil, road sand and possible salt from Mill Plain Road drainage. These particulates accrete in quiescent zones throughout the lower reach of the Relevant Reaches of the two headwater tributaries and the upper reachs of T-2.

Identify specific pollutants, if known: Due to the land use at and immediately upstream of the site, road sand and salt will be present from the University parking lot, adjacent residential and commercial roads in addition to the normal residential fertilizers, detergents and pesticides which will enter T1-W and T1-E before they enter the perimeter ditch at the site. Within the lower frontage parcel, there is also evidence of illegal dumping of automotive wastes and residential yard waste and trash. After leaving the project site, the tributary receives road runoff and runoff from the railroad right-of-way where additional pollutants, particularly petroleum byproducts from creosote ties, will be present. Some transformation and sequestration of pollutants occurs within the abutting wetlands before the waters are discharged as flow to the Still River.

(iv) Biological Characteristics. Channel supports (check all that apply):

☒ Riparian corridor. Characteristics (type, average width): Upslope from the frontage parcel, the seasonal tributaries pass through forested hardwood swamp with widths ranging from 10 to 70 feet. On the frontage parcel along the manmade diversion ditch and off-site, the riparian corridor has been impacted by anthropogenic development and is limited by its location sandwiched within transportation corridors, in some places less than 20 feet in width. Until it reaches Mill Plain Swamp the riparian corridor is dominated by disturbance-tolerant emergent vegetation and small shrubs. When it reaches the swamp, it takes on a different character with a meandering pathway bordered by a diverse variety of vegetation and visible topographic relief.

☒ Wetland fringe. Characteristics: After leaving the rocky forested slopes, T1-E passes through scrub shrub and emergent communities. T1-W is channelized at its lowermost extent on site for approximately 585 feet and has no wetland fringe as it is conveyed in a manmade conveyance feature created out of upland.

☐ Habitat for:

- ☐ Federally Listed species. Explain findings: .
- ☐ Fish/spawn areas. Explain findings: .
- ☐ Other environmentally-sensitive species. Explain findings: .
- ☒ Aquatic/wildlife diversity. Explain findings: T1-W and T1-E are contiguous with an interconnected network of upland deciduous forest.T-2 terminates in the broad forested floodplain of the Still River. Wetland dependent vertebrates (non-avian) species such as mink, racoon, oppossum, snapping turtle, muskrat, cottontail, hare, eastern painted turtle, spotted turtle, little brown myotis, big brown bat, northern spring pepper, gray tree frog and green frog are common in the vicinity, are likely to use this habitat and contributte to the biological integrity of the Still River. An even larger number of invertebrate species are likely to contribute to the aquatic diversity of the relevant reach due to the varying hydrological regime.

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

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[6]A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

[7]Ibid.

Properties:

Wetland size:3 acres

Wetland type. Explain: Six discrete wetland units are within the review area. Most of the wetlands are forested (W1-W, W2-W, W3-E, W4-E and W-6). A heavily anthropogenically disturbed wetland unit (W5-E) includes older wet forest and a younger scrub shrub and emergent component as it approaches SR 6/Mill Plain Road. There are an additional three discrete wetland units adjacent to T-2 within the relevant reach (W-7, W-8 and W-9). W-7 and W-8 consist of disturbance tolerant herbacious vegetation and small shrubs while W-9 is characterized by broad leaved deciduous forested swamp associated with the Still River.

Wetland quality. Explain:Wetlands at the headwaters (W1-W, W2-W, W3-E and W4-E) remain very high quality, and are relatively clear and cold. They are, however, affected by runoff from the Western Connecticut University campus and adjacent residences. Consequently, they perform important services including tranforming and sequestering pollutants. This factor is one of the important features that illustrate the significance of the wetlands within the review area. Due to the amount of disturbance to the tributary corridor as a result of road and railroad associated activity and the urban environment, W-7 and W-8 are of a fairly low quality consisting of disturbance-tolerant emergent vegetation and ubiquitous invasive shrubs mixed with some native species. Quality of these wetland areas can be best described as similar to a manmade constructed vegetated detention area and its function is similar. W-9 however is completely different and is considered a valuable wildlife habitat and riparian corridor with unique educational and recreational opportunities.

Project wetlands cross or serve as state boundaries. Explain: Not applicable to wetlands in the review area.

(b) General Flow Relationship with Non-TNW:

Flow is: **Intermittent flow**. Explain: The source waters and wetlands within the review area (T1-W, T1-E, W1-W, W2-W, W3-E, W4-E and W5-E) are expected to maintain base flow throughout the winter months and then discharge intermittently following precipitation events at the onset of the growing season following leaf-out condition.This flow is combination with any surface runoff from Mill Plain Road, the railroad and Interstate 84 allows T-2 to flow for a long, but still intermittent period. Flow is expected for a minimum of 4 to 5 months with the exception of the driest months during summer and fall .

Surface flow is**: Discrete and confined**

Characteristics: Surface flow is confined to one main channel or to multiple braided channels for most of its length until it reaches Mill Plain Swamp.

Subsurface flow: **Unknown**. Explain findings: .

☐ Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:

☒ Directly abutting

☐ Not directly abutting

- ☐ Discrete wetland hydrologic connection. Explain: .
- ☐ Ecological connection. Explain: .
- ☐ Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW

Project wetlands are **1 (or less)** river miles from TNW.

Project waters are **1 (or less)** aerial (straight) miles from TNW.

Flow is from: **Wetland to navigable waters.**

Estimate approximate location of wetland as within the **2 - 5-year** floodplain.

(ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: The wetlands in the headwater reach of T1-W and T1-E appear within a bedrock-controlled landscape and they appear to be moderately affected by the surrounding development. The chemical contamination may be limited to those areas associated with runoff from the parking lots upstream and existing or historical residential development. The wetlands located at the foot of the hills (W4-E and W5-E) are subject to much greater loading due to waste, illegal dumping and roadway runoff. T-7 and W-8 adjacent to T-2 are significantly affected by the surrounding urban environment, especially the transportation corridors. Chemical contamination is visible in oily sheen visible on the surface of slow moving water in the low flow channel of T-2. Sampling was not undertaken, but it is exected that these areas will have high detectable levels of calcium choride, metals and petroleum byproducts due to the majority of surface runoff coming from the roadways and railroad. The runoff entering these two wetlands possesses a large component of waterborne road sand which settles out within these two wetlands. Although some suspended sands and materials also discharges into W-9 after being transported under I-84, the majority of this material settles out as soon as it leave the culvert and therefore is visibly degrading a small component of the much larger wetland system.It is anticipated that the unseen chemical contamination would be of greater significance, especially if it is soluble and cannot effectively bind to the sediment that settles out upon entrance to the floodplain.

Identify specific pollutants, if known: Road sand, Calcium derivatives and petroleum products are expected to be the greatest contributor to the wetlands, followed by the residual of any residential detergents, fertilizers and pesticides, or septic leachate which is not retained or transformed by the wetland areas associated with T1-W and T1-E.

(iii) Biological Characteristics. Wetland supports (check all that apply):

☒ Riparian buffer. Characteristics (type, average width):There is a significant vegetated buffer surrounding T1-W© and T1-E. In the upper reach of T-2 there is virtually no riparian buffer and it is limited to a narrow vegetated component identified by W-7 and W-8. The riparian buffer become significant to the tributary in the form of Mill Plain Swamp which is a 90 acre unfragmented forested swamp abutting the Still River .

☒ Vegetation type/percent cover. Explain:All wetlands are well vegetated with >75% cover.

☒ Habitat for:

☐ Federally Listed species. Explain findings: .

☐ Fish/spawn areas. Explain findings: .

☐ Other environmentally-sensitive species. Explain findings: .

☒ Aquatic/wildlife diversity. Explain findings: The slope wetlands are contiguous with an interconnected network of upland deciduous forest which remains undeveloped and provides a a migratory corridor for wildlife to move upslope to the large contiguous area occupied by West Lake Reservoir. In the upper reaches of the headwater tributaries, the wetlands are dominated by deciduous forest, while in the lower wetland locations, the streams are flanked by reeds with shrub and forested wetlands within their floodplains. W-7 and W-8 are expected to have low habitat diversity, useful to the smaller and more disturbance oritented resources such as the American toad, green frog, garter snake, mouse, etc. W-9 remains hyrologically connected with the broad floodplain forest of the Still River. Nurmerous wetland dependent non-avian vertebrate species are common in the vicinity and are likely to use these habitats and as such contribute to the high value and biological intergrity of the Still River. Still more invertebrate species are likely to contribute to overall aquatic diversity of the site.

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: 9

Approximately (111) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Wetland Area	Size (in acres)	Directly abuts? (Y/N)
W3-E	0.85 acre	Yes
W4-E	0.23 acre	Yes
W5-E	0.63 acre	Yes
W1-W	0.71 acre	Yes
W2-W	0.34 acre	Yes
W-7	0.52 acre	Yes
W-8	8.6 acres	Yes
W-9	99 acres	Yes

Summarize overall biological, chemical and physical functions being performed: Onsite the forested swamp is not visibly degraded, is connected to other wetland systems which provide wildlife habitat and contributes to a larger overland wildlife corridor to wild areas north of the University. The vegetative characteristics of the wetlands and their tributaries allow for trapping of sediment and slowing of water velocities. They contribute discharge to tributary baseflow, export biomass, desynchronize floodflow, sequester sediment and toxicants, and transform nutrients. Functional analysis indicates that the overall size of the wetland areas and the numerous constricted outlets contribute to floodflow alteration by metering and slowly releasing otherwise high flows to the Still River. The dense vegetation helps to slow water velocity and allow settlement of suspended materials before they are discharged to the river. This is evident by the amount of sediment settling out in the vicinity of the culverts and by the lack of erosion. Consequently T-2's wetlands are effective at removing a portion of the sediment and toxicants by sequestration or transformation before they are released to the Still River and it is also expected that those areas that are saturated for most of the growing season, the presence of deep organic materials will facilitate denitrification. W-9 in particular also contributes to many other functions and public services. Its vegetative diversity, community structure and hydrologic variation allow for high quality wildlife habitat and provides for some level of production export in the braided hydrologic connections. Its public services include recreation as part of a water-oriented greenway, educational and scientific value for classroom and community stream monitoring initiatives, its uniqueness to the urban heritage of Danbury and a high level of visual aesthetic quality in an otherwise paved location.

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .

2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
   - ☐ TNWs: linear feet width (ft), Or, acres.
   - ☐ Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**
   - ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
   - ☒ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: Evaluation of the T1-E and T1-W tributaries at their upstream points of origin, before they combine to establish T-2, could most likely be described as not relatively permanent IF they were considered solely upon watershed area. The source of hydrology for these tributaries is best described as a combination of seasonally high groundwater supplemented by snow pack contributing flow as snow melt in poorly drained glacial till with moderate slopes. Review of the map unit and series description for soils at the site identifies Woodbridge Fine Sandy Loam, 2-8% slope, very stony (46B) as the dominant soil at the site of the western upper wetland origination point. Although moderately well drained, inclusions within this soil have a seasonal high water table that can be saturated to the surface down to a depth of at least 1 foot below the surface from November through May, which is routinely perched over a dense till or bedrock restrictive layer. Consequently, it has major limitations related to infiltration. The Woodbridge Unit is also identified on the Connecticut list of soils with hydric inclusions (very poorly drained Ridgebury, Leicester or Whitman soils) associated with drainageways and depressions on upland slopes, which is also present at this site. The eastern upper tributary is dominated by Charlton-Chatfield complex with 3 to 45 percent slope and extremely stony. This unit of well-drained soils is usually formed in glacial till deposits on hilltops and side slopes that are underlain by schist, granite, or gneiss bedrock. Wetland inclusions within this map unit often consist of Sutton or Leicester associated with depressions and drainage ways. In New England, these systems are commonly inundated or saturated to the surface and flow freely from late-winter or early-spring, usually commencing with the first thaw (February) and continuing through full leaf-out condition around mid to late-May. For the purposes of our AJD, the area of assessment of permanence was at the confluence of T1-W/C and T1-E. Our observations are consistent with knowledge of headwater temporal or first-order channels which in general have more of less continuous flow at least 4 or 5 months out of the year. By this standard T1-W, T1-E and the upper section of T-2 would be considered seasonal RPW's as defined by the Supreme Court's Rapanos Plurality Standard. Consequently, we claim jurisdiction of these waters by law, but provide documentation for consideration of possible significant nexus of these tributaries with the TNW, in accordance with the December 2, 2008 Supplemental Guidance relating to significant nexus documentation as a matter of policy in our administrative file as a supporting memorandum.

     The June 5, 2007 Guidebook and the December 2, 2008 Supplemental Guidance asserts that "flow characteristics of a particular tributary will be evaluated at the farthest downstream limit of such tributary (i.e., the point the tributary enters a higher order stream". During our determination of tributary character we initially used and defined the confluence of T-2

and T-3 as the Relevant Reach) per the Rapanos Guidance. However, our review concluded that the downstream portion of T-2 was a perennial watercourse and was not representative of the tributaries at the site (T1-E, T1-W and T-2 upstream). Consequently, we separately characterized the flow for the individual tributaries on the site (identified as seasonal relatively permanent waters) and combined this characterization with our analysis of significant nexus under the Sections for hydrology and Category of Water. For this reason the Relevant Reach should be correctly defined as the individual tributary sections identified as T1-W/C and T1-E respectively as they are depicted on AR 112 of the Administrative Record. These locations were selected and assessed initially because they best characterize the unique flow regime of each individual tributary on the subject site. In its documentation dated October 10, 2007, the agent provides baseline information for the watershed area at and immediately upstream of the Review Area. The basis for this flow estimate is unknown, but is assumed to be a rational estimation. The approximation provided is an area of 84 acres at the culvert where the site drains under Mill Plain Road which, based upon our knowledge of the site, appears to be reasonable. The estimate of flow provided is 145 cubic feet per second (cfs) during a peak 25-year/24-hour storm event. This is also reasonable. Due to the significant changes at the site that have occurred, including repeated diversions and changes in configuration to the actual watershed boundary, a rapid method for delineation at this site is difficult and a delineation based upon CT Stream Stats is impossible. However, we attempted to provide an estimate of the existing watershed area based upon our knowledge of the site to verify the agent's estimate. Our estimate is considered very conservative because it does not reflect the drainage area captured from the development of the state university, just upstream, which after construction began discharging its drainage into the current watershed, causing redirection from the adjacent basins immediately to the east and the west. Our calculation of watershed area for T1-E and T1-W is 83.2 acres. We also attempted to estimate flows using the Stream Stats regression analysis, but it is unlikely that the flows estimated by the program are accurate given the amount of modification that has occurred to the basin. The agent provides a proposed land slope of 0.2 percent between the lowermost portion of T1-W and I-84. We note that this slope is not characteristic of the entire Review Area, especially the upper headwater slope sections of T1-E and T1-W, which can be better characterized as having slopes between 10 and 40 percent based on the Charlton-Chatfield Map Unit and landform with which this site is categorized.

Provide estimates for jurisdictional waters in the review area (check all that apply):
☒ Tributary waters: 2585 linear feet 3 width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .

3. **Non-RPWs[8] that flow directly or indirectly into TNWs.**
☐ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**
☒ Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
☐ Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

☒ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: Per regulatory guidance, wetlands are considered adjacent if one of the three following criteria are satisfied: 1) there is an unbroken surface or shallow subsurface connection to jurisdictional waters (may be seasonally or variably intermittent), 2) they are physically separated from JD waters by man-made barriers, natural river berms and the like, or 3) their proximity to a JD water is reasonably close, supporting the science-based inference that such wetlands have an ecological interconnection with JD waters. As noted within other portions of this document and in the AJD form, the wetland areas within the review area identified as W1-W, W2-W, W3-E, W4-E, W5-E, W-7, W-8, and W-9 are all jurisdictional because they have a continuous surface connection (i.e. are abutting) to T1-W, T1-E or T-2, which are considered seasonal RPWs and therefore are considered jurisdictional as a matter of law.

Provide acreage estimates for jurisdictional wetlands in the review area: 3 acres.

5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**

[8]See Footnote # 3.

☐ Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**
   ☐ Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

   Provide estimates for jurisdictional wetlands in the review area: acres.

7. **Impoundments of jurisdictional waters.**[9]
   As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
   ☐ Demonstrate that impoundment was created from "waters of the U.S.," or
   ☐ Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
   ☐ Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):[10]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.
☐ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
☐ which are or could be used for industrial purposes by industries in interstate commerce.
☐ Interstate isolated waters. Explain: .
☐ Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

Provide estimates for jurisdictional waters in the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
   Identify type(s) of waters: .
☐ Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
   ☐ Prior to the Jan 2001 Supreme Court decision in "*SWANCC*," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
☐ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .
☐ Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: acres.

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[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[10] **Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Parcel accumulation plan prepared for 46 Mill Plain LLC, dated May 26, 2009 and revised through October 19, 2010.

☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant. COE Wetland Delineation Transect Location Map and NC-NE Supplement Delineation Forms dated September 22, 2010

- ☒ Office concurs with data sheets/delineation report.
- ☐ Office does not concur with data sheets/delineation report.

☐ Data sheets prepared by the Corps: .

☐ Corps navigable waters' study: .

☐ U.S. Geological Survey Hydrologic Atlas: .

- ☐ USGS NHD data.
- ☐ USGS 8 and 12 digit HUC maps.

☒ U.S. Geological Survey map(s). Cite scale & quad name: Bethel/Danbury CT 1:24000.

☒ USDA Natural Resources Conservation Service Soil Survey. Citation: On-line USDA Web Soil Survey for Fairfield County.

☒ National wetlands inventory map(s). Cite name: Danbury CT downloaded from USACE ORM.

☐ State/Local wetland inventory map(s): .

☒ FEMA/FIRM maps: Federal Emergency Management Agency , 1982, Danbury *Flood Insurance Study* and June 18, 2010 Fairfield Country Flood Insurance Study .

☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): See listed items below.
or ☒ Other (Name & Date): See listed items below.

☐ Previous determination(s). File no. and date of response letter: .

☒ Applicable/supporting case law: See listed items below.

☒ Applicable/supporting scientific literature:See listed items below.

☒ Other information (please specify): See listed items below.

B. ADDITIONAL COMMENTS TO SUPPORT JD: See supporting MFR dated June 6, 2011.

Administrative File Record Documentation Referenced

* Note to User - Some documents within the File Record consist of only a Cover or Title Sheet and due to their size have not been reproduced for the File. Such documents are considered incorporated by reference but can be made available upon request.

REMA Ecological Delineation, Plan by February 22, 2007 Plan by CCA LLC

EPS of New England, April 27, 2010 Letter to R. DeSista

Dept of Army OC Letter to EPS NE Stephen DiLorenzo, May 12, 2010

46 Mill Plain LLC Letter to USACE, August 5, 2010

USACE Letter to 46 Mill Plain LLC - Gary Bachyrycz, August 23, 2010

Letters from 46 Mill Plain LLC Gary Bachyrycz to USACE, September 14, 2010, October 18, 2010 and November 3, 2010.

EPS Letter regarding hydrological connections, January 11, 2011

City of Danbury Transportation Plan, 2005

City of Danbury Land Records, Plan Date March 1,1997

Microsoft Live Aerial Figure of Impediments to Still River, 2011

Terrain Navigator Pro USGS Topographic Map of Mill Plain Road, 1984 Revision

Terrain Navigator Pro USGS Topographic Map, 46 Mill Plain LLC existing drainage

Microsoft Live Maps Aerial Photograph of Mill Plain Swamp

FEMA Flood Insurance Study, 1982

Google Earth Project Plan overlay depicting the subject tributaries and on-site (review area) wetlands

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T1-W tributary length depicted in CT ECO

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JD Support Overlay of tributaries by MJSheehan based upon March 2008 site visit

USGS StreamStats Markup of flows prior to modifications at the site

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USACE NC Region Wetland Delineation Data Forms completed by EPS and Key Map

EPS letter to USACE DiLorenzo dated January 15, 2007

46 Mill Plain LLC New England Highway Methodology Wetland Functional Analysis, September 1999 completed by Cori M. Rose

USACE Jurisdictional Determination Form Instructional Guidebook, June 5, 2007 pp. 40-43

Jd Support Product Overview of 46 Mill Plain LLC Tributaries T1-W, T1-E, T-2 (Relevant Reach)

Google Earth Aerial representation of T-2 and T-3 Confluence

USGS Stream Stats Still River Basin Delineation from point of confluence of T-2 and T-3.

USACE Flooding Analysis of the Upper Still River, Danbury, CT Plate 2, February 2001

Housatonic Valley Council of Elected Officials, Danbury CT Changing Land Use, Accessed April 4, 2011

HVCEO and Lake Kenosia Commission Historical Lake Kenosia Photographs

HVCEO Still River Greenway and River Trail

Wikipedia Still River (Housatonic River) characteristics

USACE Regulatory Guidance Letter 05-05 Ordinary High Water Mark Identification, December 7, 2005

Memorandum for MVP-2007-3980-CKK , November 30, 2007

Photographs of T1-W, T1-W(C) and T1-E from March 12, 2008 site visit

Photographs of T-2 at Railroad Crossing and Interstate-84 from March 12, 2008 site visit

Photographs of T-2 below I-84 from January 20, 2011 site visit

USGS Web Soil Survey Aerial Photograph Overlay depicting OHWM of the Still River Mill Plain Swamp Complex

US EPA and USACE Physical Stream Assessment, September 2004 and Renzetti et al Subsurface Flow in a Shallow Soil Canadian Shield Watershed, 1992

Microsoft Live aerial photographs of drainage conveyance under and adjacent to railroad corridor and I-84

USACE Site photographs taken January 20, 2011

USGS Web Soil Survey, Soil Map for State of Connecticut, Fairfield Country accessed imagery of October 10, 2007

Takashi Gomi et al, Understanding Processes and Downstream Linkages of Headwater Systems, Bioscience Vol.52 No. 10, October 2002

Martin Dieterich and N.H. Anderson, Hydrobiologia Vol 379, 1998.

U.S.G.S. Stream Stats, T-3 Confluence Drainage Basin Delineation and stream flow based upon regression analysis

USACE Flooding Analysis of the Upper Still River Danbury, CT February 2001

FEMA Fairfield Country Flood Insurance Study, June 18, 2010

LiDAR 2000 2-foot contour images of Mill Plain Swamp rectified on aerial photographs from 1934, 1991, 2005, 2006, 2008 and 2010 and topographic map from 1940.

EPS Memo to USACE dated November 1, 2010

Base Map of Western Connecticut State University, August 2010

U.S.G.S Stream Stats Estimated Drainage Area

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USACE Photographs and support documents prepared from March 2008 and January 2011 site visit data

USACE Support documents identifying elevation of OHWM, floodplain elevations and flood storage component of Still River (T-3) and Mill Plain Swamp.

CT ECO aerial photos of W1-W, W2-W, W3-E, W4-E, and W5-E

CT ECO aerial photo of W-6 (EPS Wetland 2)

USACE Photo of W-6 from March 2008 site visit

U.S.G.S demarcation of similarly situated tributary drainage areas upstream of the confluence of T-2 and T-3

CT Dept. of Environmental Protection TMDL Draft Final Report for Still River Regional Basin, July 27, 2009

Richard B. Alexander et al, The Role of Headwater Streams in Downstream Water Quality, Vol. 43, No. 1, Journal of the American Water Resources Association, February 2007

Toronto and Region Conservation, The Natural Functions of Headwater Drainage Features: A Literature Review, March 2007

Chris Burcher et al Physical and Biological Response of Streams to Suburbanization of Historically Agricultural Watersheds, J. N. Am. Benthol. Soc, Vol. 25 No. 2, 2006.

Michael J. Paul and July L. Meyer, Streams in the Urban Landscape, Annual Review of Ecological Systems, Vol. 32, 2001.

Margaret Palmer et al, The Ecological Consequences of Changing Land Use for Running Waters, with a Case Study of Urbanizing Watersheds in Maryland, Yale F&ES Bulletin

Bruce J. Peterson et al, Control of Nitrogen Export from Watersheds by Headwater Streams, Science Vol 292, April 6, 2001.

Brian J Roberts et al, Effects of Upland Disturbance and Instream Restoration on Hydrodynamics and Ammonium Uptake in Headwater Streams, J. N. Am. Benthological Society, Vol 26 No. 1, 2007.

Judy L. Meyer at al, The Contribution of Headwater Streams to Biodiversity in River Networks, J. of American Water Resources Association, Vol. 43 No. 1, February 2007.

Mary C. Freeman et al, Hydrologic Connectivity and the Contribution of Stream Headwaters to Ecological Integrity at Regional Scales, J. of American Water Resources Association, Vol. 43 No. 1, February 2007.

Mark S. Wipfli et al, Ecological Linkages Between Headwaters and Downstream Ecosystems: Transport of Organic Matter, Invertebrates and Wood Down Headwater Channels, J. of American Water Resources Association, Vol. 43 No. 1, February 2007.

Tracie-Lynn Nadeau et al, Hydrological Connectivity Between Headwater Streams and Downstream Waters: How Science Can Inform Policy, J. of American Water Resources Association, Vol. 43 No. 1, February 2007.

FEMA Old Flood Insurance Study

Various photographs and references to local flooding on the Still River corridor in Danbury, CT

Photographs demonstrating sediment retention function at the 46 Mill Plain LLC site.

USACE Jurisdiction Determination Supplemental Guidance dated December 2, 2008.

ATTACHMENT 1

Administrative File for 46 Mill Plain LLC 2005-1505 - Documentation Referenced*

1. REMA Ecological Delineation, Plan by February 22, 2007 Plan by CCA LLC
2. EPS of New England, April 27, 2010 Letter to R. DeSista
3. Dept of Army OC Letter to EPS NE Stephen DiLorenzo, May 12, 2010
4. 46 Mill Plain LLC Letter to USACE, August 5, 2010
5. USACE Letter to 46 Mill Plain LLC - Gary Bachyrycz, August 23, 2010
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35. HVCEO Still River Greenway and River Trail
36. Wikipedia Still River (Housatonic River) characteristics
37. USACE Regulatory Guidance Letter 05-05 Ordinary High Water Mark Identification, December 7, 2005
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74. Mark S. Wipfli et al, Ecological Linkages Between Headwaters and Downstream Ecosystems: Transport of Organic Matter, Invertebrates and Wood Down Headwater Channels, J. of American Water Resources Association, Vol. 43 No. 1, February 2007.
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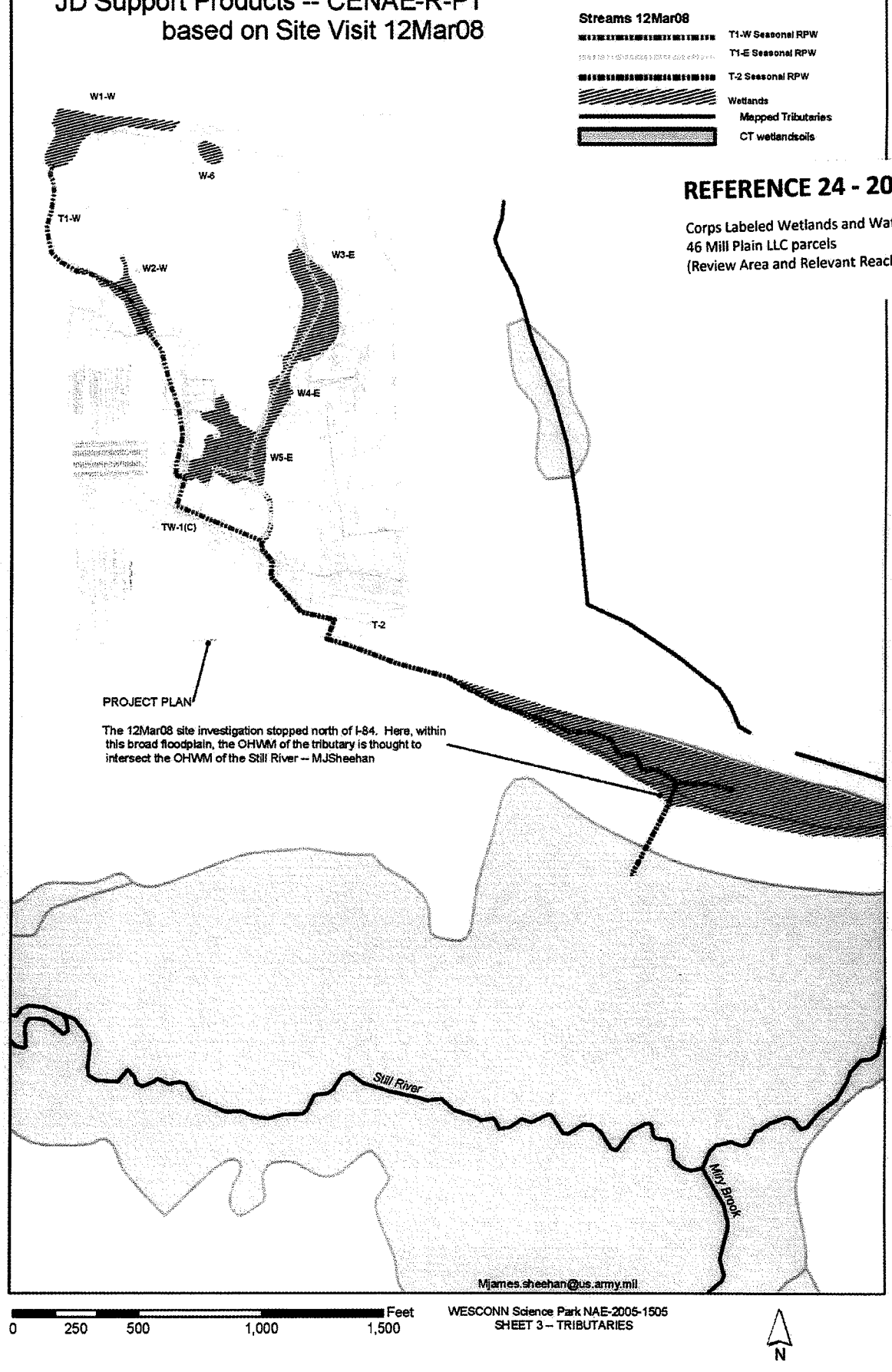
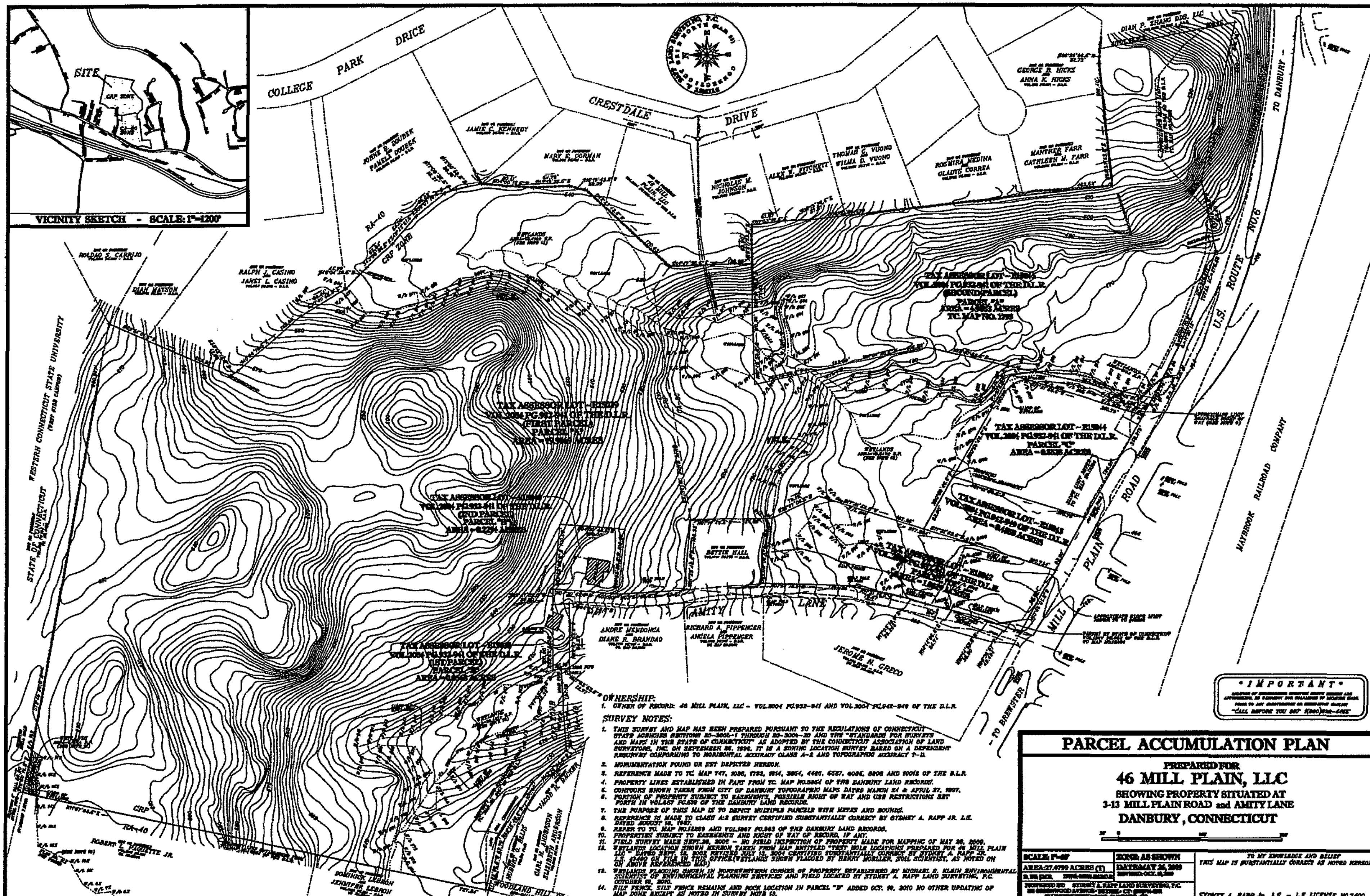
NAE-2005-1505-000114

JD Support Products -- CENAE-R-PT based on Site Visit 12Mar08



REFERENCE 24 - 2005-1505

Corps Labeled Wetlands and Waters on
46 Mill Plain LLC parcels
(Review Area and Relevant Reach)


PARCEL ACCUMULATION PLAN
PREPARED FOR
46 MILL PLAIN, LLC
SHOWING PROPERTY SITUATED AT
3-13 MILL PLAIN ROAD and AMITY LANE
DANBURY, CONNECTICUT
SCALE: 1"=60'
ZONE: AS SHOWN
AREA: 27.4799 ACRES (±)
DATE: MAY 26, 2009
TO MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON
SYDNEY A. RAPP Jr. L.S. - L.S. LICENSE NO. 7400
• I M P O R T A N T •
"CALL BEFORE YOU DIG"
VICINITY SKETCH - SCALE: 1"=1200'
SITE
OWNERSHIP:
1. OWNER OF RECORD: 46 MILL PLAIN, LLC - VOL.2004 PG.932-941 AND VOL.2004 PG.942-949 OF THE D.L.R.
SURVEY NOTES:
1. THIS SURVEY AND MAP HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THROUGH 20-300b-20 AND THE "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996. IT IS A ZONING LOCATION SURVEY BASED ON A DEPENDENT RESURVEY CONFORMING TO HORIZONTAL ACCURACY CLASS A-2 AND TOPOGRAPHIC ACCURACY T-2.
2. MONUMENTATION FOUND OR SET DEPICTED HEREON.
4. PROPERTY LINES ESTABLISHED IN PART FROM TC. MAP NO.3864 OF THE DANBURY LAND RECORDS.
5. CONTOURS SHOWN TAKEN FROM CITY OF DANBURY TOPOGRAPHIC MAPS DATED MARCH 24 & APRIL 27, 1997.
7. THE PURPOSE OF THIS MAP IS TO DEPICT MULTIPLE PARCELS WITH METES AND BOUNDS.
10. PROPERTIES SUBJECT TO EASEMENTS AND RIGHT OF WAY OF RECORD, IF ANY.
TAX ASSESSOR LOT
PARCEL "A"
PARCEL "B"
PARCEL "C"
TC. MAP NO. 1793
COLLEGE PARK DRIVE
CRESTDALE DRIVE
AMITY LANE
MILL PLAIN ROAD
U.S. ROUTE NO.6
TO DANBURY
TO BREWSTER
MAYBROOK RAILROAD COMPANY
WOODLAND HILL ROAD
STATE OF CONNECTICUT
WESTERN CONNECTICUT STATE UNIVERSITY
(WEST SIDE CAMPUS)
RA-40
CRP ZONE
GEORGE B. HICKS
ANNA K. HICKS
MANFRED FARR
CATHLEEN M. FARR
ROSMIRA MEDINA
GLADYS CORREA
THOMAS G. VUONO
WILMA D. VUONO
NICHOLAS M. JOHNSON
MARY E. GORMAN
JAMIE C. KENNEDY
RALPH L. CASINO
JANET L. CASINO
DIAN MATSON
ROLDAO S. CARRIJO
ANDRE MENDONCA
DIANE R. BRANDAO
RICHARD A. PIPPENGER
ANGELA PIPPENGER
JEROME N. GRECO
BETTIE HALL
CARL H. ANDERSON
ELIZABETH ANDERSON
DOMINICK LEBRON
JENNIFER LEBRON
ROBERT L. PAQUETTE JR.
DIAN P. ZHANG DDS, LLC

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: NAE-Prides Corner Farm - Williams Nursery Wetland WB #2006-1542

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State:Connecticut County/parish/borough: New London City: Lebanon
Center coordinates of site (lat/long in degree decimal format): Lat. 41.618611° **Pick List**, Long. 72.215278° **Pick List**.
Universal Transverse Mercator:
Name of nearest waterbody: Pease Brook
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Yantic River
Name of watershed or Hydrologic Unit Code (HUC): 01100003 - Thames

☒ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc…) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

☒ Office (Desk) Determination. Date: February 17, 2012
☒ Field Determination. Date(s): Janaury 17, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** *"navigable waters of the U.S."* within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [*Required*]

☐ Waters subject to the ebb and flow of the tide.
☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are** *"waters of the U.S."* within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [*Required*]

1. **Waters of the U.S.**
   a. **Indicate presence of waters of U.S. in review area (check all that apply):** [1]
      ☐ TNWs, including territorial seas
      ☐ Wetlands adjacent to TNWs
      ☒ Relatively permanent waters[2] (RPWs) that flow directly or indirectly into TNWs
      ☐ Non-RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
      ☒ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
      ☐ Impoundments of jurisdictional waters
      ☐ Isolated (interstate or intrastate) waters, including isolated wetlands

   b. **Identify (estimate) size of waters of the U.S. in the review area:**
      Non-wetland waters: 135 linear feet: 2 width (ft) and/or acres.
      Wetlands: 0.18 acres.

   c. **Limits (boundaries) of jurisdiction** based on: **1987 Delineation Manual**
      Elevation of established OHWM (if known): .

2. **Non-regulated waters/wetlands (check if applicable):**[3]
   ☐ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
   Explain: .

[1] Boxes checked below shall be supported by completing the appropriate sections in Section III below.
[2] For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).
[3] Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. **TNW**
   Identify TNW: .

   Summarize rationale supporting determination: .

2. **Wetland adjacent to TNW**
   Summarize rationale supporting conclusion that wetland is "adjacent": .

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. **Characteristics of non-TNWs that flow directly or indirectly into TNW**

   (i) General Area Conditions:
   Watershed size: 35.24 **square miles**
   Drainage area: 8.2 **acres**
   Average annual rainfall: 52.67/year inches
   Average annual snowfall: 17/year inches

   (ii) Physical Characteristics:
   (a) Relationship with TNW:
   ☐ Tributary flows directly into TNW.
   ☒ Tributary flows through **2** tributaries before entering TNW.

   Project waters are **15-20** river miles from TNW.
   Project waters are **Pick List** river miles from RPW.
   Project waters are **2-5** aerial (straight) miles from TNW.
   Project waters are **Pick List** aerial (straight) miles from RPW.
   Project waters cross or serve as state boundaries. Explain: N/A.

   Identify flow route to TNW[5]: The unnamed intermittent tributary flows west into Pease Brook to the Yantic River to the Thames River and into Long Island Sound.

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[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.
[5] Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

Tributary stream order, if known: .

(b) General Tributary Characteristics (check all that apply):

Tributary is: ☒ Natural
☐ Artificial (man-made). Explain: .
☐ Manipulated (man-altered). Explain: .

Tributary properties with respect to top of bank (estimate):
Average width: 2 feet
Average depth: <1 feet
Average side slopes: **Vertical (1:1 or less).**

Primary tributary substrate composition (check all that apply):

☒ Silts	☐ Sands	☐ Concrete
☒ Cobbles	☐ Gravel	☐ Muck
☐ Bedrock	☐ Vegetation. Type/% cover:	
☐ Other. Explain: .		

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: stable banks .
Presence of run/riffle/pool complexes. Explain: N/A.
Tributary geometry: **Meandering**
Tributary gradient (approximate average slope): %

(c) Flow:
Tributary provides for: **Seasonal flow**
Estimate average number of flow events in review area/year: **11-20**
Describe flow regime: intermittent.
Other information on duration and volume: .

Surface flow is: **Discrete and confined.** Characteristics: .

Subsurface flow: **Unknown**. Explain findings: .
☐ Dye (or other) test performed: .

Tributary has (check all that apply):
☒ Bed and banks
☒ OHWM[6] (check all indicators that apply):

☒ clear, natural line impressed on the bank	☐ the presence of litter and debris
☐ changes in the character of soil	☐ destruction of terrestrial vegetation
☐ shelving	☐ the presence of wrack line
☐ vegetation matted down, bent, or absent	☒ sediment sorting
☒ leaf litter disturbed or washed away	☐ scour
☒ sediment deposition	☐ multiple observed or predicted flow events
☐ water staining	☐ abrupt change in plant community
☐ other (list):	

☐ Discontinuous OHWM.[7] Explain: .

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

☐ High Tide Line indicated by:	☐ Mean High Water Mark indicated by:
☐ oil or scum line along shore objects	☐ survey to available datum;
☐ fine shell or debris deposits (foreshore)	☐ physical markings;
☐ physical markings/characteristics	☐ vegetation lines/changes in vegetation types.
☐ tidal gauges	
☐ other (list):	

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain: Water is clear; the tributary is designated as a Connecticut Class A waterbody, indicating that water quality standards are met.
Identify specific pollutants, if known: N/A.

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[6]A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.
[7]Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☒ Riparian corridor. Characteristics (type, average width): Forested, >50 feet.
- ☐ Wetland fringe. Characteristics: N/A.
- ☒ Habitat for:
  - ☐ Federally Listed species. Explain findings: .
  - ☐ Fish/spawn areas. Explain findings: .
  - ☐ Other environmentally-sensitive species. Explain findings: .
  - ☒ Aquatic/wildlife diversity. Explain findings: Suitable habitat for macroinvertebrates.

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Wetland size:0.18acres

Wetland type. Explain:Palustrine Forested seasonally saturated.

Wetland quality. Explain: .

Project wetlands cross or serve as state boundaries. Explain: No.

(b) General Flow Relationship with Non-TNW:

Flow is: **Ephemeral flow**. Explain: .

Surface flow is: **Discrete**

Characteristics: .

Subsurface flow: **Unknown**. Explain findings: .

☐ Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:

☐ Directly abutting

☒ Not directly abutting

☒ Discrete wetland hydrologic connection. Explain: The wetland drains through a very narrow rill south into the RPW.

☒ Ecological connection. Explain: The forested wetland is within approximatley 100 feet of the RPW; there are no barriers preventing wildlife migration between the RPW and the wetland.

☐ Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW

Project wetlands are **15-20** river miles from TNW.

Project waters are **2-5** aerial (straight) miles from TNW.

Flow is from: **Wetland to navigable waters.**

Estimate approximate location of wetland as within the **100 - 500-year** floodplain.

(ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Water color is clear.

Identify specific pollutants, if known: N/A.

(iii) Biological Characteristics. Wetland supports (check all that apply):

- ☒ Riparian buffer. Characteristics (type, average width):>50 feet.
- ☒ Vegetation type/percent cover. Explain:Forested / 90%.
- ☒ Habitat for:
  - ☐ Federally Listed species. Explain findings: .
  - ☐ Fish/spawn areas. Explain findings: .
  - ☐ Other environmentally-sensitive species. Explain findings: .
  - ☒ Aquatic/wildlife diversity. Explain findings:Habitat for rodents and birds.

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: **2**

Approximately (1.18) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)
Wetland WB / (N)	0.18		
Wetlands SW of RPW (Y)	~1		

Summarize overall biological, chemical and physical functions being performed: The main cumulative functions of these wetlands include wildlife habitat and riparian buffering for the RPW.

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .

2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: Wetland WB is less than 100 feet away from the RPW and has a direct surface connection to the RPW through a narrow rill running south. In combination with the directly abutting wetlands southwest and north of the RPW downstream, wetland WB provides a continual ecological connection with the RPW, indicating a significant nexus to the RPW; therefore it has a substantial effect on the chemical, physical and biological integrity of the TNWs downstream.

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
   - ☐ TNWs: linear feet width (ft), Or, acres.
   - ☐ Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**
   - ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
   - ☒ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows

seasonally: The tributary was flowing during multiple consultant and Corps project manager site visits during multiple months, indicating that the tributary flows for at least three months out of the year.

Provide estimates for jurisdictional waters in the review area (check all that apply):
☒ Tributary waters: **135** linear feet**2**width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .

3. **Non-RPWs[8] that flow directly or indirectly into TNWs.**
☒ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**
☒ Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
☐ Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**
☒ Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: **0.18**acres.

6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**
☒ Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. **Impoundments of jurisdictional waters.[9]**
As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
☐ Demonstrate that impoundment was created from "waters of the U.S.," or
☐ Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
☐ Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):[10]
☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.
☐ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.

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[8]See Footnote # 3.
[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
[10] Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.*

☒ which are or could be used for industrial purposes by industries in interstate commerce.
☒ Interstate isolated waters. Explain: .
☒ Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

Provide estimates for jurisdictional waters in the review area (check all that apply):
☒ Tributary waters: linear feet width (ft).
☒ Other non-wetland waters: acres.
Identify type(s) of waters: .
☒ Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):
☒ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
☒ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
☐ Prior to the Jan 2001 Supreme Court decision in "*SWANCC*," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
☒ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .
☒ Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):
☒ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
☒ Lakes/ponds: acres.
☒ Other non-wetland waters: acres. List type of aquatic resource: .
☒ Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):
☒ Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
☒ Lakes/ponds: acres.
☒ Other non-wetland waters: acres. List type of aquatic resource: .
☒ Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):
☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:SIT E PLAN - EXISTING SITE CONDITIONS January 21, 2012.
☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
☒ Office concurs with data sheets/delineation report.
☐ Office does not concur with data sheets/delineation report.
☒ Data sheets prepared by the Corps: .
☒ Corps navigable waters' study: .
☒ U.S. Geological Survey Hydrologic Atlas: .
☐ USGS NHD data.
☐ USGS 8 and 12 digit HUC maps.
☒ U.S. Geological Survey map(s). Cite scale & quad name: .
☒ USDA Natural Resources Conservation Service Soil Survey. Citation: .
☒ National wetlands inventory map(s). Cite name:Google Earth.
☒ State/Local wetland inventory map(s):Connecticut Environmental Conditions Online.
☒ FEMA/FIRM maps: .
☒ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date):multiple years - see file.
or ☒ Other (Name & Date): Project Manager Photos #s 1, 2, 11 and 12 - see file.
☒ Previous determination(s). File no. and date of response letter:Preliminary determination NAE# 2006-1542 September 26, 2007.
☒ Applicable/supporting case law: .
☒ Applicable/supporting scientific literature: .
☒ Other information (please specify): .

B. ADDITIONAL COMMENTS TO SUPPORT JD: .

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Pride's Corner Farm - "Williams" City/County: Lebanon / New London Sampling Date: 8/24/06

Applicant/Owner: Pride's Corner Farm State: CT Sampling Point: Wb-wet

Investigator(s): W. Root Section, Township, Range: _____

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): Concave Slope (%): 3-8%

Subregion (LRR or MLRA): _____ Lat: 41.6724 Long: -72.21623 Datum: _____

Soil Map Unit Name: Ridgebury / Woodbridge NWI classification: PFO

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

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

Are Vegetation No, Soil No, or Hydrology No 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 _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓ No _____	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present?	Yes ✓ 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)
- ✓ 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 ___	Depth (inches): 1"
Water Table Present?	Yes ✓	No ___	Depth (inches): 12"
Saturation Present? (includes capillary fringe)	Yes ✓	No ___	Depth (inches): -0-

Wetland Hydrology Present? Yes ✓ No _____

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

Remarks:

Seep wetland in rocky forest. Shallow rill flowing; leading to nearby intermittent watercourse; leading to Pease Brook.

Prides Corner Farm . Wetland Site (2)

VEGETATION – Use scientific names of plants. Sampling Point: WB-wet

Tree Stratum (Plot size: 7854 SF)	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer rubrum	50%	Y	FAC
2. Ulmus americana	25%	Y	FACW
3. Fraxinus pennsylvanica	15%	N	FACW
4.			
5.			
6.			
7.			
	90%	= Total Cover	

Sapling/Shrub Stratum (Plot size: 707SF)			
1. Lindera benzoin	60%	Y	FACW
2. Multiflora rosa	10%	N	FACU
3. Acer rubrum	10%	N	FAC
4.			
5.			
6.			
7.			
	80%	= Total Cover	

Herb Stratum (Plot size: 79 SF)			
1. – 0 –			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
		= Total Cover	

Woody Vine Stratum (Plot size: 28275F)			
1. Vitis aestivalis	10%	Y	FACW
2.			

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:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

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

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Prairie Corner Farm - Williams Site (3)

SOIL Sampling Point: WB - wet

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
0-8	10YR 2/2		10YR 5/8	2	C	M	fsl	oxid rhizo
8-14	10YR 5/2		10YR 5/8	10	C	M	fsl	oxid rhizo
14-20	2.5Y 5/2		10YR 5/8	15	C	M	fsl	
			10YR 5/2	2	D	M	fsl	

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ 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 (F21)
- ___ 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: "hardpan"

Depth (inches): 22"

Hydric Soil Present? Yes ✓ No ___

Remarks:

(1)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Pride's Corner Farm - "Williams" City/County: Lebanon / New London Sampling Date: 8/24/06

Applicant/Owner: Pride's Corner Farm State: CT Sampling Point: Wb-12pf.

Investigator(s): W. Root Section, Township, Range: _____

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): Concave Slope (%): 3-8%

Subregion (LRR or MLRA): _____ Lat: 41.61724 Long: -72.21623 Datum: _____

Soil Map Unit Name: Ridgebury / Woodbridge NWI classification: _____ PFO

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

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

Are Vegetation NO, Soil No, or Hydrology No 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 ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	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 ✓	Depth (inches): _____
Water Table Present?	Yes _____	No ✓	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes ✓	No _____	Depth (inches): 22"

Wetland Hydrology Present? Yes _____ No ✓

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

Pride's Corner Farm. Williams Site (2)

VEGETATION – Use scientific names of plants. Sampling Point: WB-UPL

Tree Stratum (Plot size: 2,827 sf)	Absolute % Cover	Dominant Species?	Indicator Status
1. Fraxinus americana	30	Y	FACW
2. Acer saccharum	30	Y	FACU*
3. Carya alba	15	N	UPL
4. Quercus rubra	15	N	FACU*
5. Quercus alba	15	N	FACU*
6.			
7.			
	105	= Total Cover	

Sapling/Shrub Stratum (Plot size: 707 sf)			
1. Acer saccharum	30	Y	FACU*
2. Carya alba	30	Y	UPL
3. Berberis Thunbergii	20	N	FACU
4. Lindera benzoin	20	N	FACW*
5. Rosa multiflora	10	N	FACU
6.			
7.			
	130	= Total Cover	

Herb Stratum (Plot size: 79 sf)			
1. – 0 –			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
		= Total Cover	

Woody Vine Stratum (Plot size: 2,827 sf)			
1. Vitis aestivalis	15	N	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:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

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

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes ___ No ✓

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

Pride's Corner Farm - William's Site (3)

SOIL

Sampling Point: WB-slope

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
0-8	10YR 4/3		N/a				fsl	
8-14	2.5Y 4/3		N/a				fsl	
14-22	2.5Y 4/4		N/a				fsl	

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ 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 (F21).
- ___ 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):

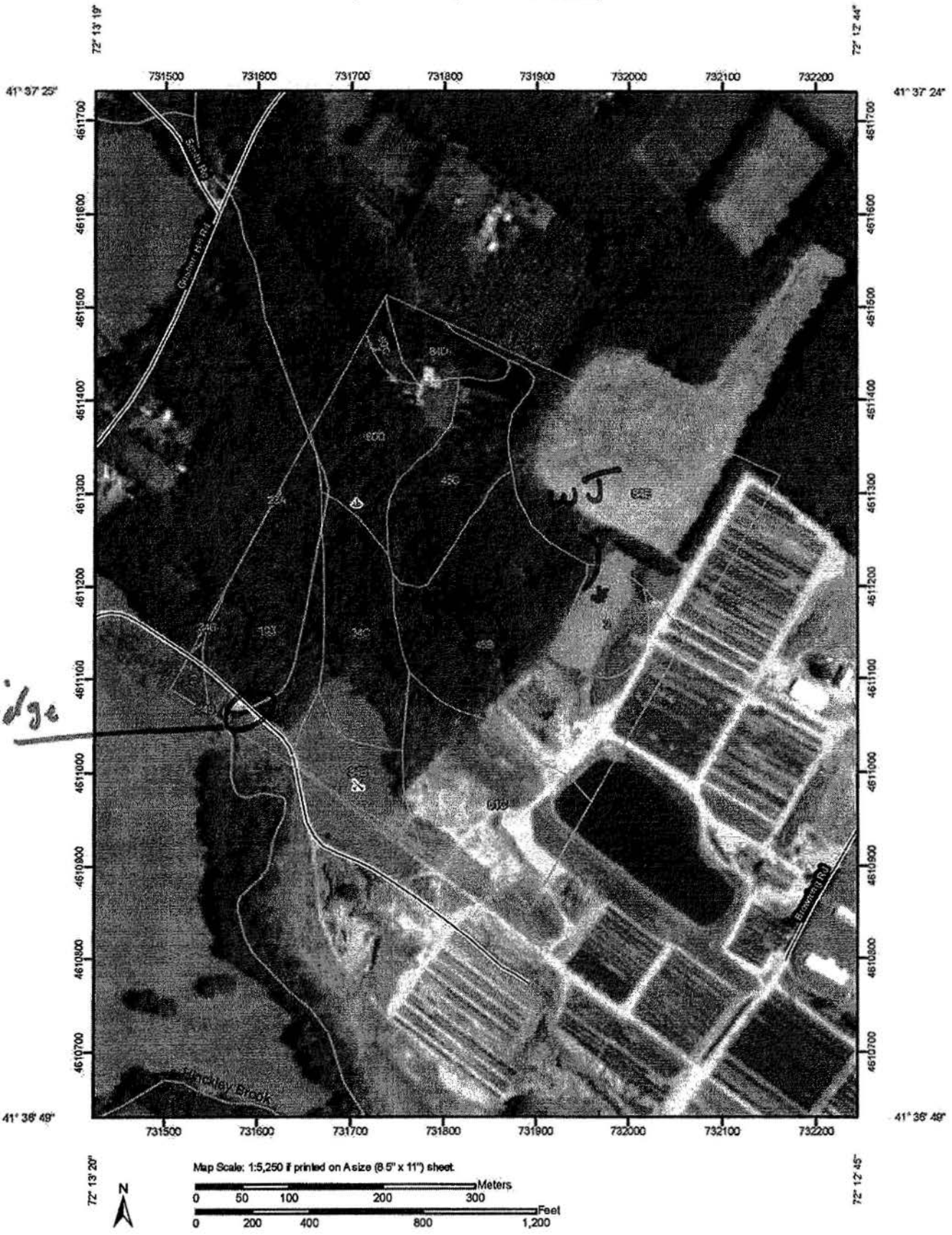
Type: None

Depth (inches): 22

Hydric Soil Present? Yes ____ No ✓

Remarks:

Soil Map—State of Connecticut
(William's Nursery - Pride's Corner Farm)



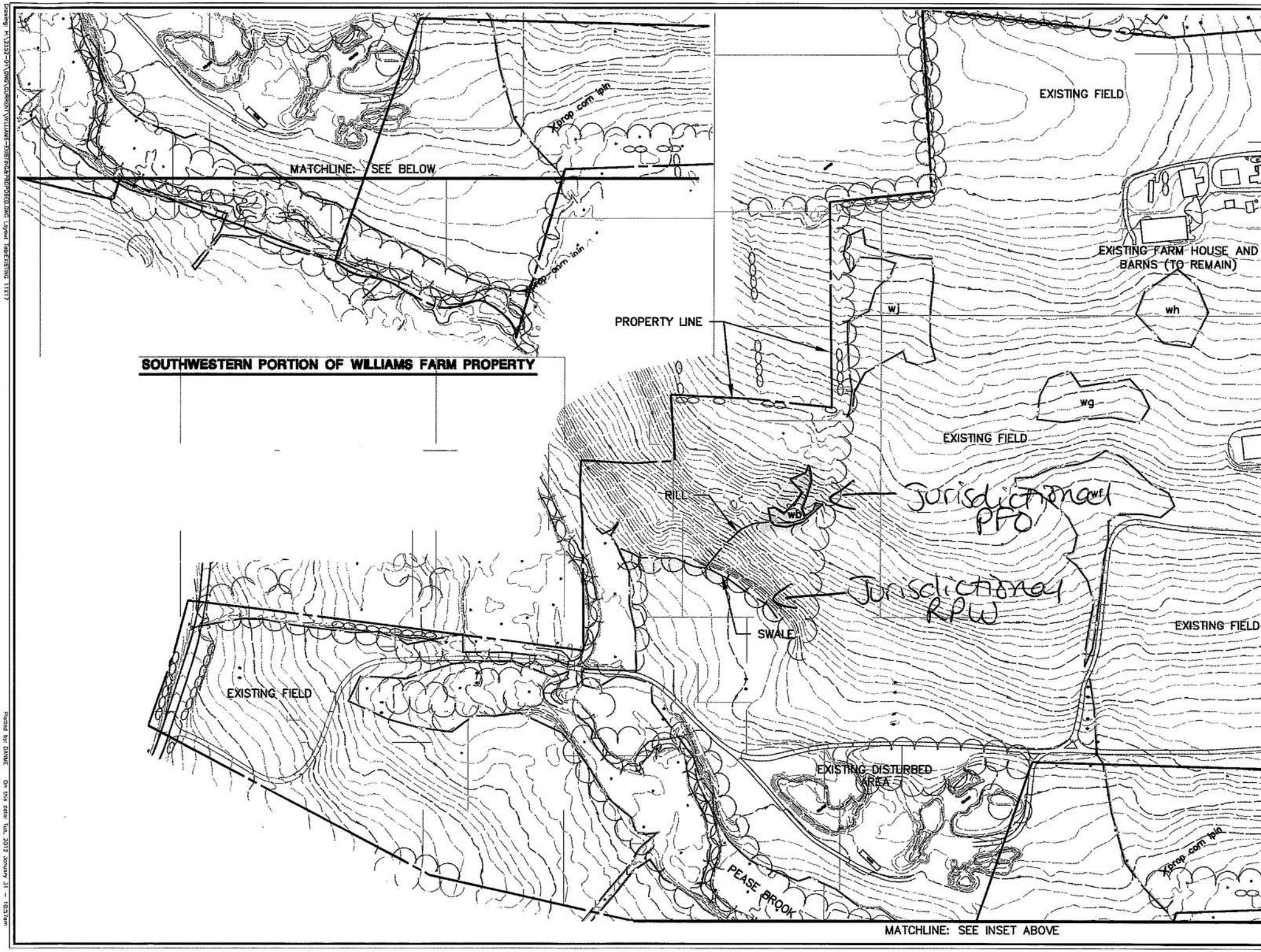
bridge

USDA Natural Resources Conservation Service

Web Soil Survey
National Cooperative Soil Survey

Map Unit Legend

State of Connecticut (CT600)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
2	Ridgebury fine sandy loam	2.1	3.6%
13	Walpole sandy loam	0.4	0.6%
23A	Sudbury sandy loam, 0 to 5 percent slopes	0.0	0.0%
34B	Merrimac sandy loam, 3 to 8 percent slopes	2.3	4.0%
34C	Merrimac sandy loam, 8 to 15 percent slopes	4.8	8.2%
45B	Woodbridge fine sandy loam, 3 to 8 percent slopes	12.2	20.9%
45C	Woodbridge fine sandy loam, 8 to 15 percent slopes	4.4	7.6%
60C	Canton and Charlton soils, 8 to 15 percent slopes	0.5	0.9%
60D	Canton and Charlton soils, 15 to 25 percent slopes	4.4	7.6%
61C	Canton and Charlton soils, 8 to 15 percent slopes, very stony	7.2	12.4%
84B	Paxton and Montauk fine sandy loams, 3 to 8 percent slopes	11.3	19.5%
84D	Paxton and Montauk fine sandy loams, 15 to 25 percent slopes	1.6	2.8%
103	Rippowam fine sandy loam	7.0	12.0%
Totals for Area of Interest		58.2	100.0%



2006-1542

2006-1542

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:NAE-Prides Corner Farm - Williams Nursery - Wetland WJ #2006-1542

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State:Connecticut County/parish/borough: New London City: Lebanon
Center coordinates of site (lat/long in degree decimal format): Lat. 41 37 07 ° N, Long. 72 12 56° W.
Universal Transverse Mercator:
Name of nearest waterbody: unnamed tributary of Pease Brook
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Yantic River
Name of watershed or Hydrologic Unit Code (HUC): 01100003-Thames

☒ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc…) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

☐ Office (Desk) Determination. Date:
☒ Field Determination. Date(s): Janauary 17, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** "*navigable waters of the U.S.*" within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [*Required*]

☐ Waters subject to the ebb and flow of the tide.
☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Pick List** "*waters of the U.S.*" within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [*Required*]

1. **Waters of the U.S.**
   a. **Indicate presence of waters of U.S. in review area (check all that apply):** [1]
      ☐ TNWs, including territorial seas
      ☐ Wetlands adjacent to TNWs
      ☐ Relatively permanent waters[2] (RPWs) that flow directly or indirectly into TNWs
      ☐ Non-RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
      ☐ Impoundments of jurisdictional waters
      ☐ Isolated (interstate or intrastate) waters, including isolated wetlands

   b. **Identify (estimate) size of waters of the U.S. in the review area:**
      Non-wetland waters: linear feet: width (ft) and/or acres.
      Wetlands: acres.

   c. **Limits (boundaries) of jurisdiction** based on: **Pick List**
      Elevation of established OHWM (if known): .

2. **Non-regulated waters/wetlands (check if applicable):**[3]
   ☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
   Explain: **Wetland WJ (1.36 acres) is a maintained farm field located to the east of the approximate northwest corner of the parcel, see "SITE PLAN - EXISTING CONDITIONS". This wetland is isolated from wetland WB and the RPW located to the south; it is approximately 450 feet from the RPW. There is an erosional swale feature that runs north/south through uplands between WJ and the intermittent stream. This feature was most likely created by the large spoil piles located to the east; water draining from the piles and overland runoff is being shunted down the**

[1] Boxes checked below shall be supported by completing the appropriate sections in Section III below.
[2] For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).
[3] Supporting documentation is presented in Section III.F.

conveyance, contributing to this feature. Based on these characteristics, the conveyance is not considered a waters feature. In addition, based on the lack of a definitive surface connection to the RPW and the limited function of this maintained farm field in regard to its use as wildlife habitat and a food source and breeding area, a definiteive ecological connection does not exist; hence, WJ is considered an isolated feature and not jurisdictional for the Corps.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. **TNW**
   Identify TNW: .

   Summarize rationale supporting determination: .

2. **Wetland adjacent to TNW**
   Summarize rationale supporting conclusion that wetland is "adjacent": .

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. **Characteristics of non-TNWs that flow directly or indirectly into TNW**

   (i) General Area Conditions:
   Watershed size: **Pick List**
   Drainage area: **Pick List**
   Average annual rainfall: inches
   Average annual snowfall: inches

   (ii) Physical Characteristics:
   (a) Relationship with TNW:
   ☐ Tributary flows directly into TNW.
   ☐ Tributary flows through **Pick List** tributaries before entering TNW.

   Project waters are **Pick List** river miles from TNW.
   Project waters are **Pick List** river miles from RPW.
   Project waters are **Pick List** aerial (straight) miles from TNW.
   Project waters are **Pick List** aerial (straight) miles from RPW.
   Project waters cross or serve as state boundaries. Explain: N/A.

   Identify flow route to TNW[5]: .
   Tributary stream order, if known: .

[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.
[5] Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

(b) General Tributary Characteristics (check all that apply):

Tributary is: ☐ Natural
☐ Artificial (man-made). Explain: .
☐ Manipulated (man-altered). Explain: .

Tributary properties with respect to top of bank (estimate):
Average width: feet
Average depth: feet
Average side slopes: **Pick List.**

Primary tributary substrate composition (check all that apply):

☐ Silts	☐ Sands	☐ Concrete
☐ Cobbles	☐ Gravel	☐ Muck
☐ Bedrock	☐ Vegetation. Type/% cover:	
☐ Other. Explain: .		

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: .
Presence of run/riffle/pool complexes. Explain: .
Tributary geometry: **Pick List**
Tributary gradient (approximate average slope): %

(c) Flow:
Tributary provides for: **Pick List**
Estimate average number of flow events in review area/year: **Pick List**
Describe flow regime: .
Other information on duration and volume: .

Surface flow is: **Pick List.** Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .
☐ Dye (or other) test performed: .

Tributary has (check all that apply):
☐ Bed and banks
☐ OHWM[6] (check all indicators that apply):

☐ clear, natural line impressed on the bank	☐ the presence of litter and debris
☐ changes in the character of soil	☐ destruction of terrestrial vegetation
☐ shelving	☐ the presence of wrack line
☐ vegetation matted down, bent, or absent	☐ sediment sorting
☐ leaf litter disturbed or washed away	☐ scour
☐ sediment deposition	☐ multiple observed or predicted flow events
☐ water staining	☐ abrupt change in plant community
☐ other (list):	

☐ Discontinuous OHWM.[7] Explain: .

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

☒ High Tide Line indicated by:	☐ Mean High Water Mark indicated by:
☐ oil or scum line along shore objects	☐ survey to available datum;
☐ fine shell or debris deposits (foreshore)	☐ physical markings;
☐ physical markings/characteristics	☐ vegetation lines/changes in vegetation types.
☐ tidal gauges	
☐ other (list):	

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain: .
Identify specific pollutants, if known: .

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[6]A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.
[7]Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width): .
- ☐ Wetland fringe. Characteristics: .
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings: .
  - ☐ Fish/spawn areas. Explain findings: .
  - ☐ Other environmentally-sensitive species. Explain findings: .
  - ☐ Aquatic/wildlife diversity. Explain findings: .

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Wetland size: acres

Wetland type. Explain: .

Wetland quality. Explain: .

Project wetlands cross or serve as state boundaries. Explain: .

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain: .

Surface flow is: **Pick List**

Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .

- ☐ Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:

- ☐ Directly abutting
- ☐ Not directly abutting
  - ☐ Discrete wetland hydrologic connection. Explain: .
  - ☐ Ecological connection. Explain: .
  - ☐ Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW.

Project waters are **Pick List** aerial (straight) miles from TNW.

Flow is from: **Pick List.**

Estimate approximate location of wetland as within the **Pick List** floodplain.

(ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: .

Identify specific pollutants, if known: .

(iii) Biological Characteristics. Wetland supports (check all that apply):

- ☐ Riparian buffer. Characteristics (type, average width): .
- ☐ Vegetation type/percent cover. Explain: .
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings: .
  - ☐ Fish/spawn areas. Explain findings: .
  - ☐ Other environmentally-sensitive species. Explain findings: .
  - ☐ Aquatic/wildlife diversity. Explain findings: .

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: **Pick List**

Approximately ( ) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)

Summarize overall biological, chemical and physical functions being performed: .

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .

2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: Wetland WJ is located less than 500 feet from the RPW; however, based on its limited ecological functions and the lack of a definitive surface connection, the wetland does not have a significant physical, chemical or biological effect on the integrity of downstream TNWs.

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
   - ☒ TNWs: linear feet width (ft), Or, acres.
   - ☒ Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**
   - ☒ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
   - ☒ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: .

Provide estimates for jurisdictional waters in the review area (check all that apply):
- ☒ Tributary waters: linear feet width (ft).
- ☒ Other non-wetland waters: acres.
  Identify type(s) of waters: .

3. **Non-RPWs[8] that flow directly or indirectly into TNWs.**
   ☒ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

   Provide estimates for jurisdictional waters within the review area (check all that apply):
   - ☒ Tributary waters: linear feet width (ft).
   - ☒ Other non-wetland waters: acres.
     Identify type(s) of waters: .

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**
   ☒ Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
   - ☒ Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

   - ☒ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

   Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**
   ☒ Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.

   Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**
   ☒ Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

   Provide estimates for jurisdictional wetlands in the review area: acres.

7. **Impoundments of jurisdictional waters.[9]**
   As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
   - ☒ Demonstrate that impoundment was created from "waters of the U.S.," or
   - ☒ Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
   - ☒ Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):[10]
- ☒ which are or could be used by interstate or foreign travelers for recreational or other purposes.
- ☒ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- ☒ which are or could be used for industrial purposes by industries in interstate commerce.
- ☒ Interstate isolated waters. Explain: .
- ☒ Other factors. Explain: .

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[8] See Footnote # 3.
[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
[10] **Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

Identify water body and summarize rationale supporting determination: .

Provide estimates for jurisdictional waters in the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .
☐ Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):
☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
☒ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
☐ Prior to the Jan 2001 Supreme Court decision in "*SWANCC*," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
☒ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:**Wetland WJ is located less than 500 feet from the RPW; however, based on its limited ecological functions and the lack of a definitive surface connection, the wetland does not have a significant physical, chemical or biological effect on the integrity of downstream TNWs.**
☐ Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☒ Wetlands: 1.36 acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):
☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:SITE PLAN - EXISTING CONDITIONS January 21, 2012.
☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
☒ Office concurs with data sheets/delineation report.
☐ Office does not concur with data sheets/delineation report.
☐ Data sheets prepared by the Corps: .
☐ Corps navigable waters' study: .
☐ U.S. Geological Survey Hydrologic Atlas: .
☐ USGS NHD data.
☐ USGS 8 and 12 digit HUC maps.
☐ U.S. Geological Survey map(s). Cite scale & quad name: .
☐ USDA Natural Resources Conservation Service Soil Survey. Citation: .
☒ National wetlands inventory map(s). Cite name:Google Earth.
☒ State/Local wetland inventory map(s):Connecticut Environmental Conditions Online.
☐ FEMA/FIRM maps: .
☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date):multiple years - see file.
or ☒ Other (Name & Date):Project Manager photos #s 3-10, 13, 14 and 15 - see file .
☒ Previous determination(s). File no. and date of response letter:Preliminary Determination NAE # 2006-1542 September 26, 2007.
☐ Applicable/supporting case law: .
☐ Applicable/supporting scientific literature: .
☐ Other information (please specify): .

B. ADDITIONAL COMMENTS TO SUPPORT JD: .

(1)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Pride's Corner Farm - "Williams" City/County: Lebanon / New London Sampling Date: 8/24/06

Applicant/Owner: Pride's Corner Farm State: CT Sampling Point: WJ-WET

Investigator(s): W. Root Section, Township, Range:

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): Concave Slope (%): 3-8%

Subregion (LRR or MLRA): Lat: 41.61724 Long: -72.21623 Datum:

Soil Map Unit Name: Ridgebury / Woodbridge NWI classification: PEM

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

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

Are Vegetation Y, Soil N, or Hydrology N 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 ____	**Is the Sampled Area within a Wetland?** Yes ✓ No ____
Hydric Soil Present?	Yes ✓	No ____	
Wetland Hydrology Present?	Yes ✓	No ____	If yes, optional Wetland Site ID: WJ-Farm fields

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

This is a formed field in a nursery setting. Vegetation is hay + herbs. Natural state is forested (Pfo).

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 ✓	Depth (inches): ____
Water Table Present?	Yes ____	No ✓	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ✓	No ____	Depth (inches): 14"

Wetland Hydrology Present? Yes ✓ No ____

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

Remarks:

Prides Corner Farm - Williams

(2)

VEGETATION – Use scientific names of plants.

Sampling Point: WJ-wet

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1. None - Farm field			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1. None - Farm field			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 80 sf)			
1. Dactylus glomerata	30	Y	FACU
2. Phleum pratense	30	Y	FACU
3. Taraxacum officinale	5	N	FACU-
4. Juncus effusus	15	N	FACW+
5. Onoclea sensibilis	15	N	FACW
6. Scirpus cyperinus	5	N	FACW+
7.			
8.			
9.			
10.			
11.			
12.			
	100 = Total Cover		
Woody Vine Stratum (Plot size:)			
1. None - Farm field			
2.			

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:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

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

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Prides Corner Farm - Williams

(3)

SOIL

Sampling Point: WJ-wet

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
0-9	10yr 2/2		10yr 5/8	2	C	M	fsl	Oxid rhizo.
9-14	10yr 5/2		10yr 5/8	10	C	M	fsl	
14-18	2.5y 5/2		10yr 5/8	15	C	M	fsl	
			10yr 5/2	2	D	M	fsl	

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ 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 (F21)
- ___ 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: "hardpan"

Depth (inches): 18"

Hydric Soil Present? Yes ✓ No ___

Remarks:

(1)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Pride's Corner Farm - "Williams" City/County: Lebanon / New London Sampling Date: 8/24/06

Applicant/Owner: Pride's Corner Farm State: CT Sampling Point: WJ-upl

Investigator(s): W. Root Section, Township, Range: _____

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave Slope (%): 3-8%

Subregion (LRR or MLRA): _____ Lat: 41.61724 Long: -72.21623 Datum: _____

Soil Map Unit Name: Ridgebury / Woodbridge NWI classification: PEM

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

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

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

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

This is "dry" portion of farmed field

HYDROLOGY

Wetland Hydrology Indicators: None

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

Wetland Hydrology Present? Yes _____ No ✓

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

Pride's Corner Farm - Williams (2)

VEGETATION – Use scientific names of plants. Sampling Point: WJ-upl

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1. None			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		

Sapling/Shrub Stratum (Plot size:)			
1. None			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		

Herb Stratum (Plot size: 80 sf)			
1. Dactylis glomerata	40	Y	FACU
2. Phleum pratense	40	Y	FACU
3. Taraxacum officinale	5	N	FACU-
4. Daucus carota	5	N	UPL
5. Plantago major	5	N	FACU
6. Trifolium pratense	5	N	FACU-
7.			
8.			
9.			
10.			
11.			
12.			
	100 = Total Cover		

Woody Vine Stratum (Plot size:)			
1. None			
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:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ___ 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Definitions of Vegetation Strata:

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

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

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

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

Hydrophytic Vegetation Present? Yes ___ No ✓

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

Fields are mowed regularly which encourages hay/grass.

Prides Corner Farm - Williams

(3)

SOIL

Sampling Point: WJ-upl

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
0-9	10yr 3/3		—				fsl	
9-14	10yr 4/4		—				fsl	
14-18	2.5Y 4/4		7.5YR 5/8	2	C	M	fsl	

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

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

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ 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 (F21)
- ___ 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: "hardpan"

Depth (inches): 24"

Hydric Soil Present? Yes ____ No ✓

Remarks:

Soil Map—State of Connecticut
(William's Nursery - Pride's Corner Farm)

Map Unit Legend

State of Connecticut (CT600)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
2	Ridgebury fine sandy loam	2.1	3.6%
13	Walpole sandy loam	0.4	0.6%
23A	Sudbury sandy loam, 0 to 5 percent slopes	0.0	0.0%
34B	Merrimac sandy loam, 3 to 8 percent slopes	2.3	4.0%
34C	Merrimac sandy loam, 8 to 15 percent slopes	4.8	8.2%
45B	Woodbridge fine sandy loam, 3 to 8 percent slopes	12.2	20.9%
45C	Woodbridge fine sandy loam, 8 to 15 percent slopes	4.4	7.6%
60C	Canton and Charlton soils, 8 to 15 percent slopes	0.5	0.9%
60D	Canton and Charlton soils, 15 to 25 percent slopes	4.4	7.6%
61C	Canton and Charlton soils, 8 to 15 percent slopes, very stony	7.2	12.4%
84B	Paxton and Montauk fine sandy loams, 3 to 8 percent slopes	11.3	19.5%
84D	Paxton and Montauk fine sandy loams, 15 to 25 percent slopes	1.6	2.8%
103	Rippowam fine sandy loam	7.0	12.0%
Totals for Area of Interest		58.2	100.0%

Drawing: H:\2552-01\DWG\CURRENT\WILLIAMS-EXISTING&PROPOSED.DWG Layout Tab:EXISTING 11X17

Plotted by: DANVE On this date: Tue, 2012 January 31 - 10:57am

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 23-Feb-2012

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: New England District, NAE-2011-00178-JD1

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State :	CT - Connecticut
County/parish/borough:	New Haven
City:	Madison
Lat:	41.2684
Long:	-72.64587
Universal Transverse Mercator	Folder UTM List *UTM list determined by folder location* • NAD83 / UTM zone 18N Waters UTM List *UTM list determined by waters location* • NAD83 / UTM zone 18N

Name of nearest waterbody:
Name of nearest Traditional Navigable Water (TNW):
Name of watershed or Hydrologic Unit Code (HUC):

☐ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc¿) are associated with the action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION:

☑ Office Determination Date: 23-Feb-2012

☐ Field Determination Date(s): ☐

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION

There appear to be"navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.

☑ Waters subject to the ebb and flow of the tide.

☑ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain: Neck River is navigable and supports interstate commerce

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

1. Waters of the U.S.
a. Indicate presence of waters of U.S. in review area:[1]

Water Name	Water Type(s) Present
Simonian walkway	TNWs, including territorial seas

b. Identify (estimate) size of waters of the U.S. in the review area:

Area: (m^2)
Linear: (m)

(c) Flow:
Not Applicable.

Surface Flow is:
Not Applicable.

Subsurface Flow:
Not Applicable.

Tributary has:
Not Applicable.

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction:

High Tide Line indicated by:
Not Applicable.

Mean High Water Mark indicated by:
Not Applicable.

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality;general watershed characteristics, etc.).
Not Applicable.

(iv) Biological Characteristics. Channel supports:
Not Applicable.

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:
(a) General Wetland Characteristics:
Properties:
Not Applicable.

(b) General Flow Relationship with Non-TNW:

Flow is:
Not Applicable.

Surface flow is:
Not Applicable.

Subsurface flow:
Not Applicable.

(c) Wetland Adjacency Determination with Non-TNW:
Not Applicable.

(d) Proximity (Relationship) to TNW:
Not Applicable.

(ii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Not Applicable.

(iii) Biological Characteristics. Wetland supports:
Not Applicable.

3. Characteristics of all wetlands adjacent to the tributary (if any):

All wetlands being considered in the cumulative analysis:
Not Applicable.

Identify water body and summarize rationale supporting determination:
Not Applicable.

Provide estimates for jurisdictional waters in the review area:
Not Applicable.

F. NON-JURISDICTIONAL WATERS. INCLUDING WETLANDS

☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements:

☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce:

☐ Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based soley on the "Migratory Bird Rule" (MBR):

☐ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (Explain):

☐ Other (Explain):

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (ie., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment:
Not Applicable.

Provide acreage estimates for non-jurisdictional waters in the review area, that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.
Not Applicable.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD
(listed items shall be included in case file and, where checked and requested, appropriately reference below):
Not Applicable.

B. ADDITIONAL COMMENTS TO SUPPORT JD:
Not Applicable.

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[1]-Boxes checked below shall be supported by completing the appropriate sections in Section III below.

[2]-For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

[3]-Supporting documentation is presented in Section III.F.

[4]-Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

[5]-Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

[6]-A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

[7]-Ibid.

[8]-See Footnote #3.

[9]-To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[10]-Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 14-May-2012

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: New England District, NAE-2011-01919-JD1

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State :	CT - Connecticut
County/parish/borough:	Fairfield
City:	Stamford
Lat:	41.03925
Long:	-73.5478
Universal Transverse Mercator	Folder UTM List *UTM list determined by folder location* • NAD83 / UTM zone 18N Waters UTM List *UTM list determined by waters location* • NAD83 / UTM zone 18N
Name of nearest waterbody:	
Name of nearest Traditional Navigable Water (TNW):	
Name of watershed or Hydrologic Unit Code (HUC):	

☐ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc¿) are associated with the action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION:

☑ Office Determination Date: 21-Feb-2012

☐ Field Determination Date(s): ☐

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION

There are"navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.

☑ Waters subject to the ebb and flow of the tide.

☑ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain: The West Branch of Stamford Harbor supports interstate commerce and a Federal Navigation Channel.

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area:[1]

Water Name	Water Type(s) Present
28 Southfield 2011 - marina	TNWs, including territorial seas

b. Identify (estimate) size of waters of the U.S. in the review area:

Area: (m^2)

Linear: (m)

c. Limits (boundaries) of jurisdiction:

based on:

OHWM Elevation: (if known)

2. Non-regulated waters/wetlands:[3]

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1.TNW

TNW Name	Summarize rationale supporting determination:
28 Southfield 2011 - marina	The West Branch of Stamford Harbor supports interstate commerce, a Federal Navigation Channel and is an ebb and flow system.

2. Wetland Adjacent to TNW

Not Applicable.

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size:

Drainage area:

Average annual rainfall: inches

Average annual snowfall: inches

(ii) Physical Characteristics

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through [ ] tributaries before entering TNW.

:Number of tributaries

Project waters are river miles from TNW.

Project waters are river miles from RPW.

Project Waters are aerial (straight) miles from TNW.

Project waters are aerial(straight) miles from RPW.

☐ Project waters cross or serve as state boundaries.

Explain:

Identify flow route to TNW:[5]

Tributary Stream Order, if known:
Not Applicable.

(b) General Tributary Characteristics:
Tributary is:
Not Applicable.

Tributary properties with respect to top of bank (estimate):
Not Applicable.

Primary tributary substrate composition:
Not Applicable.

Tributary (conditions, stability, presence, geometry, gradient):
Not Applicable.

(c) Flow:
Not Applicable.

Surface Flow is:
Not Applicable.

Subsurface Flow:
Not Applicable.

Tributary has:
Not Applicable.

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction:

High Tide Line indicated by:
Not Applicable.

Mean High Water Mark indicated by:
Not Applicable.

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality;general watershed characteristics, etc.).
Not Applicable.

(iv) Biological Characteristics. Channel supports:
Not Applicable.

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:
(a) General Wetland Characteristics:

Properties:
Not Applicable.

(b) General Flow Relationship with Non-TNW:
Flow is:
Not Applicable.

Surface flow is:
Not Applicable.

Subsurface flow:
Not Applicable.

(c) Wetland Adjacency Determination with Non-TNW:
Not Applicable.

(d) Proximity (Relationship) to TNW:
Not Applicable.

(ii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Not Applicable.

(iii) Biological Characteristics. Wetland supports:
Not Applicable.

3. Characteristics of all wetlands adjacent to the tributary (if any):
All wetlands being considered in the cumulative analysis:
Not Applicable.

Summarize overall biological, chemical and physical functions being performed:
Not Applicable.

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Significant Nexus: Not Applicable

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE:

1. TNWs and Adjacent Wetlands:

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m²)
28 Southfield 2011 - marina	TNWs, including territorial seas	-	204.386688

Total:		**0**	**204.386688**

2. RPWs that flow directly or indirectly into TNWs:
Not Applicable.

Provide estimates for jurisdictional waters in the review area:
Not Applicable.

3. Non-RPWs that flow directly or indirectly into TNWs:[8]
Not Applicable.

Provide estimates for jurisdictional waters in the review area:
Not Applicable.

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.
Not Applicable.

Provide acreage estimates for jurisdictional wetlands in the review area:
Not Applicable.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs:
Not Applicable.

Provide acreage estimates for jurisdictional wetlands in the review area:
Not Applicable.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs:
Not Applicable.

Provide estimates for jurisdictional wetlands in the review area:
Not Applicable.

7. Impoundments of jurisdictional waters:[9]
Not Applicable.

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS:[10]
Not Applicable.

Identify water body and summarize rationale supporting determination:
Not Applicable.

Provide estimates for jurisdictional waters in the review area:
Not Applicable.

F. NON-JURISDICTIONAL WATERS. INCLUDING WETLANDS

☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements:

☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce:

☐ Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based soley on the "Migratory Bird Rule" (MBR):

☐ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (Explain):

☐ Other (Explain):

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (ie., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment:
Not Applicable.

Provide acreage estimates for non-jurisdictional waters in the review area, that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.
Not Applicable.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD
(listed items shall be included in case file and, where checked and requested, appropriately reference below):
Not Applicable.

B. ADDITIONAL COMMENTS TO SUPPORT JD:
Not Applicable.

1-Boxes checked below shall be supported by completing the appropriate sections in Section III below.

2-For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

3-Supporting documentation is presented in Section III.F.

4-Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

5-Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

6-A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

7-Ibid.

8-See Footnote #3.

9 -To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

10-Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 27-Apr-2012

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: New England District, NAE-2012-00713-JD1 Indian River Shellfish LLP L-11-1 Madison CT

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State :	CT - Connecticut
County/parish/borough:	Middlesex
City:	Clinton
Lat:	41.28955
Long:	-72.5269
Universal Transverse Mercator	Folder UTM List *UTM list determined by folder location* • NAD83 / UTM zone 18N Waters UTM List *UTM list determined by waters location* • NAD83 / UTM zone 18N
Name of nearest waterbody:	Madison Bay
Name of nearest Traditional Navigable Water (TNW):	Long Island Sound
Name of watershed or Hydrologic Unit Code (HUC):	

☐ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc¿) are associated with the action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION:

☑ Office Determination Date: 27-Apr-2012

☐ Field Determination Date(s): ☐

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION

There are"navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.

☑ Waters subject to the ebb and flow of the tide.

☑ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain: Tidal coastal estuary

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area:[1]

Water Name	Water Type(s) Present
12-713 Shellfish Lease L-11-1 NW	TNWs, including territorial seas

b. Identify (estimate) size of waters of the U.S. in the review area:

Area: (m^2)
Linear: (m)

c. Limits (boundaries) of jurisdiction:

based on:
OHWM Elevation: (if known)

2. Non-regulated waters/wetlands:[3]

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1.TNW

TNW Name	Summarize rationale supporting determination:
12-713 Shellfish Lease L-11-1 NW	Tidal estuary of Atlantic Ocean

2. Wetland Adjacent to TNW
Not Applicable.

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:
Watershed size:
Drainage area:
Average annual rainfall: inches
Average annual snowfall: inches

(ii) Physical Characteristics
(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through [ ] tributaries before entering TNW.

:Number of tributaries

Project waters are river miles from TNW.
Project waters are river miles from RPW.
Project Waters are aerial (straight) miles from TNW.
Project waters are aerial(straight) miles from RPW.

☐ Project waters cross or serve as state boundaries.

Explain:

Identify flow route to TNW:[5]

Tributary Stream Order, if known:
Not Applicable.

(b) General Tributary Characteristics:

Tributary is:
Not Applicable.

Tributary properties with respect to top of bank (estimate):
Not Applicable.

Primary tributary substrate composition:
Not Applicable.

Tributary (conditions, stability, presence, geometry, gradient):
Not Applicable.

(c) Flow:
Not Applicable.

Surface Flow is:
Not Applicable.

Subsurface Flow:
Not Applicable.

Tributary has:
Not Applicable.

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction:

High Tide Line indicated by:
Not Applicable.

Mean High Water Mark indicated by:
Not Applicable.

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality;general watershed characteristics, etc.).
Not Applicable.

(iv) Biological Characteristics. Channel supports:
Not Applicable.

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:
(a) General Wetland Characteristics:
Properties:
Not Applicable.

(b) General Flow Relationship with Non-TNW:

Flow is:
Not Applicable.

Surface flow is:
Not Applicable.

Subsurface flow:
Not Applicable.

(c) Wetland Adjacency Determination with Non-TNW:
Not Applicable.

(d) Proximity (Relationship) to TNW:
Not Applicable.

(ii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Not Applicable.

(iii) Biological Characteristics. Wetland supports:
Not Applicable.

3. Characteristics of all wetlands adjacent to the tributary (if any):

All wetlands being considered in the cumulative analysis:
Not Applicable.

Summarize overall biological, chemical and physical functions being performed:
Not Applicable.

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Significant Nexus: Not Applicable

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE:

1. TNWs and Adjacent Wetlands:

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m^2)
12-713 Shellfish Lease L-11-1 NW	TNWs, including territorial seas	-	8093.712000000000000000000000000000002
Total:		**0**	**8093.712000000000000000000000000000002**

2. RPWs that flow directly or indirectly into TNWs:
Not Applicable.

Provide estimates for jurisdictional waters in the review area:
Not Applicable.

3. Non-RPWs that flow directly or indirectly into TNWs:[8]
Not Applicable.

Provide estimates for jurisdictional waters in the review area:

Not Applicable.

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.
Not Applicable.

Provide acreage estimates for jurisdictional wetlands in the review area:
Not Applicable.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs:
Not Applicable.

Provide acreage estimates for jurisdictional wetlands in the review area:
Not Applicable.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs:
Not Applicable.

Provide estimates for jurisdictional wetlands in the review area:
Not Applicable.

7. Impoundments of jurisdictional waters:[9]
Not Applicable.

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS:[10]
Not Applicable.

Identify water body and summarize rationale supporting determination:
Not Applicable.

Provide estimates for jurisdictional waters in the review area:
Not Applicable.

F. NON-JURISDICTIONAL WATERS. INCLUDING WETLANDS

☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements:

☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce:

☐ Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based soley on the "Migratory Bird Rule" (MBR):

☐ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (Explain):

☐ Other (Explain):

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (ie., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment:
Not Applicable.

Provide acreage estimates for non-jurisdictional waters in the review area, that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.
Not Applicable.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD
(listed items shall be included in case file and, where checked and requested, appropriately reference below):
Not Applicable.

B. ADDITIONAL COMMENTS TO SUPPORT JD:
Not Applicable.

---

[1]-Boxes checked below shall be supported by completing the appropriate sections in Section III below.

[2]-For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

[3]-Supporting documentation is presented in Section III.F.

[4]-Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

[5]-Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

[6]-A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

[7]-Ibid.

[8]-See Footnote #3.

[9] -To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[10]-Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 06-Jul-2012

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: New England District, NAE-2002-03042-JD1

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State :	CT - Connecticut
County/parish/borough:	New London
City:	Mystic
Lat:	41.35056
Long:	-71.96694
Universal Transverse Mercator	Folder UTM List *UTM list determined by folder location* • NAD83 / UTM zone 19N Waters UTM List *UTM list determined by waters location* • NAD83 / UTM zone 19N
Name of nearest waterbody:	Mystic River
Name of nearest Traditional Navigable Water (TNW):	Mystic River
Name of watershed or Hydrologic Unit Code (HUC):	

☑ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc¿) are associated with the action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION:

☑ Office Determination Date: 06-Jul-2012

☐ Field Determination Date(s): ☐

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION

There are"navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.

☑ Waters subject to the ebb and flow of the tide.

☑ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain: The Mystic River Federal Navigation Channel is located in the Mystic River at the project location.

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area:[1]

Water Name	Water Type(s) Present
Seaport Marine - float extension 02-3042	TNWs, including territorial seas

b. Identify (estimate) size of waters of the U.S. in the review area:

Area: (m²)

Linear: (m)

c. Limits (boundaries) of jurisdiction:

based on:

OHWM Elevation: (if known)

2. Non-regulated waters/wetlands:[3]

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1.TNW

TNW Name	Summarize rationale supporting determination:
Seaport Marine - float extension 02-3042	The Mystic River Federal Navigation Channel is located in the Mystic River at the project site.

2. Wetland Adjacent to TNW
Not Applicable.

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:
Watershed size:
Drainage area:
Average annual rainfall: inches
Average annual snowfall: inches

(ii) Physical Characteristics
(a) Relationship with TNW:
☐ Tributary flows directly into TNW.
☐ Tributary flows through [ ] tributaries before entering TNW.
:Number of tributaries

Project waters are river miles from TNW.
Project waters are river miles from RPW.
Project Waters are aerial (straight) miles from TNW.
Project waters are aerial(straight) miles from RPW.

☐ Project waters cross or serve as state boundaries.
Explain:

Identify flow route to TNW:[5]

Tributary Stream Order, if known:
Not Applicable.

(b) General Tributary Characteristics:
Tributary is:
Not Applicable.

Tributary properties with respect to top of bank (estimate):
Not Applicable.

Primary tributary substrate composition:
Not Applicable.

Tributary (conditions, stability, presence, geometry, gradient):
Not Applicable.

(c) Flow:
Not Applicable.

Surface Flow is:
Not Applicable.

Subsurface Flow:
Not Applicable.

Tributary has:
Not Applicable.

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction:

High Tide Line indicated by:
Not Applicable.

Mean High Water Mark indicated by:
Not Applicable.

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality;general watershed characteristics, etc.).
Not Applicable.

(iv) Biological Characteristics. Channel supports:
Not Applicable.

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:
(a) General Wetland Characteristics:
Properties:
Not Applicable.

(b) General Flow Relationship with Non-TNW:
Flow is:
Not Applicable.

Surface flow is:
Not Applicable.

Subsurface flow:
Not Applicable.

(c) Wetland Adjacency Determination with Non-TNW:
Not Applicable.

(d) Proximity (Relationship) to TNW:
Not Applicable.

(ii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Not Applicable.

(iii) Biological Characteristics. Wetland supports:
Not Applicable.

3. Characteristics of all wetlands adjacent to the tributary (if any):
All wetlands being considered in the cumulative analysis:

Not Applicable.

Summarize overall biological, chemical and physical functions being performed:
Not Applicable.

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Significant Nexus: Not Applicable

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE:

1. TNWs and Adjacent Wetlands:

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m²)
Seaport Marine - float extension 02-3042	TNWs, including territorial seas	-	18.580608
Total:		0	18.580608

2. RPWs that flow directly or indirectly into TNWs:
Not Applicable.

Provide estimates for jurisdictional waters in the review area:
Not Applicable.

3. Non-RPWs that flow directly or indirectly into TNWs:[8]
Not Applicable.

Provide estimates for jurisdictional waters in the review area:
Not Applicable.

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.
Not Applicable.

Provide acreage estimates for jurisdictional wetlands in the review area:
Not Applicable.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs:
Not Applicable.

Provide acreage estimates for jurisdictional wetlands in the review area:
Not Applicable.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs:
Not Applicable.

Provide estimates for jurisdictional wetlands in the review area:
Not Applicable.

7. Impoundments of jurisdictional waters:[9]
Not Applicable.

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS:[10]
Not Applicable.

Identify water body and summarize rationale supporting determination:
Not Applicable.

Provide estimates for jurisdictional waters in the review area:
Not Applicable.

F. NON-JURISDICTIONAL WATERS. INCLUDING WETLANDS

- ☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements:
- ☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce:
- ☐ Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based soley on the "Migratory Bird Rule" (MBR):
- ☐ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (Explain):

- ☐ Other (Explain):

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (ie., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment:
Not Applicable.

Provide acreage estimates for non-jurisdictional waters in the review area, that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.
Not Applicable.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD
(listed items shall be included in case file and, where checked and requested, appropriately reference below):
Not Applicable.

B. ADDITIONAL COMMENTS TO SUPPORT JD:
Not Applicable.

---

[1]-Boxes checked below shall be supported by completing the appropriate sections in Section III below.

[2]-For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

[3]-Supporting documentation is presented in Section III.F.

[4]-Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

[5]-Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

[6]-A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

[7]-Ibid.

[8]-See Footnote #3.

[9] -To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[10]-Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 03-Apr-2012

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: New England District, NAE-2010-01277-JD1

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State :	CT - Connecticut
County/parish/borough:	Fairfield
City:	Darien
Lat:	41.04579
Long:	-73.48251
Universal Transverse Mercator	Folder UTM List *UTM list determined by folder location* • NAD83 / UTM zone 18N Waters UTM List *UTM list determined by waters location* • NAD83 / UTM zone 18N
Name of nearest waterbody:	
Name of nearest Traditional Navigable Water (TNW):	
Name of watershed or Hydrologic Unit Code (HUC):	

☐ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc¿) are associated with the action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION:

☑ Office Determination Date: 03-Apr-2012

☐ Field Determination Date(s): ☐

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION

There are"navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.

☑ Waters subject to the ebb and flow of the tide.

☑ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain: The Goodwives River is subject to the ebb and flow of the tide and supports interstate commerce and recreational boating.

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area:[1]

Water Name	Water Type(s) Present
Darien - marina expansion & dredge site	TNWs, including territorial seas

b. Identify (estimate) size of waters of the U.S. in the review area:

Area: (m²)

Linear: (m)

c. Limits (boundaries) of jurisdiction:

based on:

OHWM Elevation: (if known)

2. Non-regulated waters/wetlands:[3]

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1.TNW

TNW Name	Summarize rationale supporting determination:
Darien - marina expansion & dredge site	The Goodwives River is subject to the ebb and flow of the tide and supports interstate commerce and recreational boating.

2. Wetland Adjacent to TNW
Not Applicable.

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:
Watershed size:
Drainage area:
Average annual rainfall: inches
Average annual snowfall: inches

(ii) Physical Characteristics
(a) Relationship with TNW:
☐ Tributary flows directly into TNW.
☐ Tributary flows through [ ] tributaries before entering TNW.
:Number of tributaries

Project waters are river miles from TNW.
Project waters are river miles from RPW.
Project Waters are aerial (straight) miles from TNW.
Project waters are aerial(straight) miles from RPW.

☐ Project waters cross or serve as state boundaries.
Explain:

Identify flow route to TNW:[5]

Tributary Stream Order, if known:
Not Applicable.

(b) General Tributary Characteristics:
Tributary is:
Not Applicable.

Tributary properties with respect to top of bank (estimate):
Not Applicable.

Primary tributary substrate composition:
Not Applicable.

Tributary (conditions, stability, presence, geometry, gradient):
Not Applicable.

(c) Flow:
Not Applicable.

Surface Flow is:
Not Applicable.

Subsurface Flow:
Not Applicable.

Tributary has:
Not Applicable.

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction:

High Tide Line indicated by:
Not Applicable.

Mean High Water Mark indicated by:
Not Applicable.

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality;general watershed characteristics, etc.).
Not Applicable.

(iv) Biological Characteristics. Channel supports:
Not Applicable.

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:
(a) General Wetland Characteristics:
Properties:
Not Applicable.

(b) General Flow Relationship with Non-TNW:
Flow is:
Not Applicable.

Surface flow is:
Not Applicable.

Subsurface flow:
Not Applicable.

(c) Wetland Adjacency Determination with Non-TNW:
Not Applicable.

(d) Proximity (Relationship) to TNW:
Not Applicable.

(ii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Not Applicable.

(iii) Biological Characteristics. Wetland supports:
Not Applicable.

3. Characteristics of all wetlands adjacent to the tributary (if any):
All wetlands being considered in the cumulative analysis:

Not Applicable.

Summarize overall biological, chemical and physical functions being performed:
Not Applicable.

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Significant Nexus: Not Applicable

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE:

1. TNWs and Adjacent Wetlands:

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m²)
Darien - marina expansion & dredge site	TNWs, including territorial seas	-	5667.08544
Total:		0	5667.08544

2. RPWs that flow directly or indirectly into TNWs:
Not Applicable.

Provide estimates for jurisdictional waters in the review area:
Not Applicable.

3. Non-RPWs that flow directly or indirectly into TNWs:[8]
Not Applicable.

Provide estimates for jurisdictional waters in the review area:
Not Applicable.

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.
Not Applicable.

Provide acreage estimates for jurisdictional wetlands in the review area:
Not Applicable.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs:
Not Applicable.

Provide acreage estimates for jurisdictional wetlands in the review area:
Not Applicable.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs:
Not Applicable.

Provide estimates for jurisdictional wetlands in the review area:
Not Applicable.

7. Impoundments of jurisdictional waters:[9]
Not Applicable.

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS:[10]
Not Applicable.

Identify water body and summarize rationale supporting determination:
Not Applicable.

Provide estimates for jurisdictional waters in the review area:
Not Applicable.

F. NON-JURISDICTIONAL WATERS. INCLUDING WETLANDS

- ☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements:
- ☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce:
- ☐ Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based soley on the "Migratory Bird Rule" (MBR):
- ☐ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (Explain):

- ☐ Other (Explain):

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (ie., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment:
Not Applicable.

Provide acreage estimates for non-jurisdictional waters in the review area, that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.
Not Applicable.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD
(listed items shall be included in case file and, where checked and requested, appropriately reference below):

Data Reviewed	Source Label	Source Description
--Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant	Docko - project plans	Dock Modifications and New Dredging, Town of Darien, Fairfield County, Connecticut, Goodwives River, Darien Boat Club" in four sheets, dated, December 5, 2011.

B. ADDITIONAL COMMENTS TO SUPPORT JD:
Not Applicable.

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[1]-Boxes checked below shall be supported by completing the appropriate sections in Section III below.

[2]-For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

[3]-Supporting documentation is presented in Section III.F.

[4]-Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

[5]-Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

[6]-A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

[7]-Ibid.

[8]-See Footnote #3.

[9] -To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[10]-Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.