

August 14, 2024

APT Project No.: CT361530

Prepared For: Langan Engineering and Environmental Services
Long Wharf Maritime Center
555 Long Wharf Drive, New Haven, CT 06511

Site Name: Waterford Fire Station

Site Address: 439 and 441 Boston Post Road, Waterford, Connecticut

Date of Investigation: 6/20/2024

Field Conditions: **Weather:** Sunny, mid 80's
Soil Moisture: dry to moist

Wetland/Watercourse Delineation Methodology¹:

- ☒ Connecticut Inland Wetlands and Watercourses
☐ Connecticut Tidal Wetlands

Municipal Upland Review Area: **Wetlands:** 100 feet **Watercourses:** 100 feet

The wetlands inspection was performed by²:



Matthew Gustafson, Registered Soil Scientist

Enclosures: Wetland Delineation Field Forms & Wetland Inspection Map

This report is provided as a brief summary of findings from APT's wetland investigation of the referenced Study Area that consists of proposed development activities and areas generally within 200 feet.³ If applicable, APT is available to provide a more comprehensive wetland impact analysis upon receipt of site plans depicting the proposed development activities and surveyed location of identified wetland and watercourse resources.

¹ Wetlands and watercourses were delineated in accordance with applicable local, state and federal statutes, regulations and guidance.

² All established wetlands boundary lines are subject to change until officially adopted by local, state, or federal regulatory agencies.

³ APT has relied upon the accuracy of information provided by Langan Engineering and Environmental Services regarding the location and limits of the Site for the purposes of identifying wetlands and watercourses.

Attachments

- Wetland Delineation Field Forms
- Wetland Inspection Map

Wetland Delineation Field Form

Wetland I.D.:	Wetland 1	
Flag #'s:	WF 1A-01 to 1A-06 and 1-01 to 1-23	
Flag Location Method:	Site Sketch ☒	GPS (sub-meter) located ☒

WETLAND HYDROLOGY:

NONTIDAL ☒

Intermittently Flooded ☒	Artificially Flooded ☐	Permanently Flooded ☐
Semipermanently Flooded ☐	Seasonally Flooded ☐	Temporarily Flooded ☐
Permanently Saturated ☐	Seasonally Saturated/seepage ☒	Seasonally Saturated/perched ☐
Comments: Wetland 1 consists of an interior intermittent watercourse with narrow bordering areas of seasonal saturation from hillside seepage and base hydrology.		

TIDAL ☐

Subtidal ☐	Regularly Flooded ☐	Irregularly Flooded ☐
Irregularly Flooded ☐		
Comments: None		

WETLAND TYPE:

SYSTEM:

Estuarine ☐	Riverine ☐	Palustrine ☒
Lacustrine ☐	Marine ☐	
Comments: None		

CLASS:

Emergent ☒	Scrub-shrub ☐	Forested ☒
Open Water ☐	Disturbed ☐	Wet Meadow ☐
Comments: Northern limits consist of emergent vegetation as a result of routine maintenance associated with the agricultural use of the adjacent parcel with forested portions in the central and southern extents.		

WATERCOURSE TYPE:

Perennial ☐	Intermittent ☒	Tidal ☐
Watercourse Name: Unnamed		
Comments: Northerly flow with a 3-foot-wide sandy bottom channel transitioning to silty/mucky bottom toward the southern extents.		

Wetland Delineation Field Form (Cont.)

SPECIAL AQUATIC HABITAT:

Vernal Pool Yes ☐ No ☒ Potential ☐	Other ☐
Vernal Pool Habitat Type: None	
Comments: None	

SOILS:

Are field identified soils consistent with NRCS mapped soils?	Yes ☒	No ☐
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DOMINANT PLANTS:

Sensitive Fern (<i>Onoclea sensibilis</i>)	Green Bulrush (<i>Scirpus atrovirens</i>)
Skunk Cabbage (<i>Symplocarpus foetidus</i>)	Multiflora Rose* (<i>Rosa multiflora</i>)
Jewelweed (<i>Impatiens capensis</i>)	Mugwort* (<i>Artemisia vulgaris</i>)
Joe Pye Weed (<i>Eupatorium maculatum</i>)	Purple Loosestrife* (<i>Lythrum salicaria</i>)
Soft Rush (<i>Juncus effuses</i>)	Golden Rod (<i>Solidago</i> sp.)
Common Cattail (<i>Typha latifolia</i>)	Red Maple (<i>Acer rubrum</i>)
Yellow Iris (<i>Iris pseudacorus</i>)	Lurid Sedge (<i>Carex lurida</i>)
Japanese Stiltgrass (<i>Microstegium vimineum</i>)	Soft Rush (<i>Juncus effuses</i>)

* denotes Connecticut Invasive Species Council invasive plant species

GENERAL COMMENTS:

All-Points Technology Corp., P.C. ("APT") performed a wetland investigation of three adjoining parcels that is comprised of the Oswegatchie Fire Company #4 building located at 441 Boston Post Road (US Route 1) in Waterford, Connecticut and two smaller adjoining parcels held under common ownership. The location of the proposed fire station addition consists of maintained lawn surrounded by asphalt access drives within an upland area. APT identified two (2) wetlands located on and along the Site boundary.

Wetland 1 is located along the northern parcel boundary of the fire station parcel wrapping along the eastern end of the Site. A northern flowing intermittent watercourse is present within the wetland interior containing a 3-foot wide sandy bottom channel that transitions to a mucky/silty bottom as the complex extends east. Within the northern limits of the wetland just off the Site a farm road crosses the complex where flows are conveyed through an RCP culvert. Routine maintenance is evident within this area as vegetation is suppressed to mainly an emergent community. A narrow hillside seep bordering the intermittent stream is located to the east of the Site draining north. The remaining portions of the complex consist of a forested overstory. Hillside seepage and baseflows makeup the contributing hydrology of this complex.

Wetland Delineation Field Form

Wetland I.D.:	Wetland 2	
Flag #'s:	WF 2-01 to 2-16 (closed loop)	
Flag Location Method:	Site Sketch ☒	GPS (sub-meter) located ☒

WETLAND HYDROLOGY:

NONTIDAL ☒

Intermittently Flooded ☐	Artificially Flooded ☐	Permanently Flooded ☐
Semipermanently Flooded ☐	Seasonally Flooded ☐	Temporarily Flooded ☐
Permanently Saturated ☒	Seasonally Saturated/seepage ☒	Seasonally Saturated/perched ☐
Comments: Wetland 2 is a depressional swale feature historically altered through development of the Site.		

TIDAL ☐

Subtidal ☐	Regularly Flooded ☐	Irregularly Flooded ☐
Irregularly Flooded ☐		
Comments: None		

WETLAND TYPE:

SYSTEM:

Estuarine ☐	Riverine ☐	Palustrine ☒
Lacustrine ☐	Marine ☐	
Comments: None		

CLASS:

Emergent ☒	Scrub-shrub ☐	Forested ☒
Open Water ☐	Disturbed ☒	Wet Meadow ☐
Comments: Areas of sparse forest cover within western extend with emergent and disturbed vegetation present within the steeply sloping swale feature.		

WATERCOURSE TYPE:

Perennial ☐	Intermittent ☐	Tidal ☐
Watercourse Name: None		
Comments: None		

Wetland Delineation Field Form (Cont.)

SPECIAL AQUATIC HABITAT:

Vernal Pool Yes ☐ No ☒ Potential ☐	Other ☐
Vernal Pool Habitat Type: None	
Comments: None	

SOILS:

Are field identified soils consistent with NRCS mapped soils?	Yes ☒	No ☐
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DOMINANT PLANTS:

Jewelweed (<i>Impatiens capensis</i>)	Common Cattail (<i>Typha latifolia</i>)
Sensitive Fern (<i>Onoclea sensibilis</i>)	Multiflora Rose* (<i>Rosa multiflora</i>)
Poison Ivy (<i>Toxicodendron radicans</i>)	Mugwort* (<i>Artemisia vulgaris</i>)
Red Maple (<i>Acer rubrum</i>)	Asiatic Bittersweet* (<i>Celastrus orbiculatus</i>)
Pin Cherry (<i>Prunus pensylvanica</i>)	Bladder Sedge (<i>Carex intumescens</i>)

* denotes Connecticut Invasive Species Council invasive plant species

GENERAL COMMENTS:

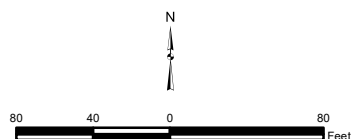
Wetland 2 is primarily located in the eastern-central portion of the Site straddling along the boundaries of the three adjoining parcels that comprise the Site. Flows from this complex are conveyed to Wetland 1 via a 36-inch metal culvert located at the eastern end of Wetland 2 (discharging to the far eastern seep extents of Wetland 1) which outlets proximate to wetland flag WF 1-16. The jurisdictional boundary of Wetland 2 is characterized by steep fill/alterd slopes within a swale type feature with connectivity to another depressional area to the west, forming a 'T-shaped' wetland feature. This wetland has experienced varying degrees of alteration from historic activities and development of the Site and consists of bordering areas of seasonal saturation with intermittent flooding which drains northeast. Vegetative communities predominantly consist of disturbed emergent vegetation with a sparse forest cover in the western extents.



Legend

- Site
- Proposed Building Addition
- Approximate Parcel Boundary
- Culvert
- Wetland Flag
- 100' Upland Review Area
- Delineated Wetland Boundary
- Approximate Wetland Area

Map Notes:
Base Map Source: 2019 CT Aerial Imagery (CTECO)
Map Scale: 1 inch = 100 feet
Map Date: August 2024



Wetland Inspection Map

Proposed Development
Oswegatchie Fire Company #4
441 Boston Post Road
Waterford, Connecticut