



## WETLAND DELINEATION REPORT

**Project Name:** Tamarack Avenue at Evergreen Walk  
**Site Location:** South Windsor, Connecticut

**Prepared For:** Evergreen Walk, LLC  
**Contact:** Mr. John Finguerra

**F&O Project No:** 2000481.Y21

**Project Description:** construction of new road

**Date(s) of Investigation:** September 16, 2020

**Weather:** 70°F, Sunny

**Rainfall (last 24 hours):** 00.00 inches

### METHOD OF WETLAND/WATERCOURSE DELINEATION VERIFICATION

**Delineation:** ☒ Connecticut Inland Wetlands & Watercourses (CGS 22a-36 to 22a-45)  
☒ U.S. Army Corps of Engineers  
☐ Tidal Wetlands

**Flag Number Sequence:** A100-A108, B200-B206

**Field Plotted:** ☐ Site sketch ☐ Aerial photograph ☐ GPS (sub-meter) located  
☐ Site mapping: Title of Site Map  
Sheet No.: Scale: Contours: n/a ft.

### METHOD OF UPLAND SOIL DELINEATION

☒ Field Delineated ☐ Field confirmed NRCS soil mapping

### FIELD INVESTIGATION METHOD

☒ Spade & Auger ☐ Deep test pit (backhoe) ☐ Other: \_\_\_\_\_

### SOIL CONDITIONS

☒ Dry ☐ Moist ☐ Wet ☐ Frozen (\_\_\_\_ in.) ☐ Snow cover (\_\_\_\_ in.)

*The wetland and watercourses delineations of 2003 were verified in accordance with applicable local, state and federal statutes, regulations and guidance. Classification and mapping of soils on site were conducted in a manner consistent with the U.S. Department of Agriculture Soil Survey Manual (Soil Survey Staff, 1992). This delineation does not constitute an official wetland boundary until such time as it is accepted and approved by local, state or federal regulatory agencies.*

As Prepared By:

Michael E. Soares  
Registered Soil Scientist



## WETLAND DELINEATION REPORT

### METHODOLOGY

Inland wetlands and watercourses are regulated in the State of Connecticut by Connecticut General Statutes, Inland Wetlands and Watercourses Act, Chapter 440, sections 22a-36 to 22a-45. **Wetlands** are defined as “soil types designated as poorly drained, very poorly drained, alluvial, and floodplain by the National Cooperative Soils Survey.” **Watercourses** are defined as “rivers, streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs and all other bodies of water, natural or artificial, vernal or intermittent, public or private.” **Intermittent watercourses** are identified by “a defined permanent channel and bank and the occurrence of two or more of the following characteristics: (a) Evidence of scour or deposits of recent alluvium or detritus, (b) the presence of standing or flowing water for a duration longer than a particular storm incident, and (c) the presence of hydrophytic vegetation. “

Federal jurisdictional wetland boundaries are defined by 33 CFR 328-329. **Federal jurisdictional wetlands** are “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.” Federal wetlands were delineated in accordance with the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region* (Version 2.0, January 2012). Activities occurring within Inland Waters and Wetlands within the State of Connecticut are subject to approval by the US Army Corps of Engineers, New England District.

### RESULTS

#### SUMMARY OF SOILS

##### **Wetland Soils**

**Aquents:** Poorly to very poorly drained soils formed in human transported material or on excavated (cut) landscapes. No development to incipient B-horizon typical. Evidence of aquic moisture regime found where saturation results in redoximorphic features in upper 20 inches. No soils mapped as Aquents are mapped nor were observed at the site.

**Aquepts:** Poorly to very poorly drained soils with an aquic moisture regime and showing some soil development in the B-horizon. Publicly available mapping by the National Cooperative Soil Survey depicts the series Saco silt loam (Map Unit 108), located approximately in the area of the re-flagged wetland. This series consists of very deep, very poorly drained soils forming in silty alluvial sediments. These soils are typically nearly level and subject to frequent flooding.

**Saprists:** Very poorly drained soils comprised primarily of organic materials occurring through 16 inches or greater of the surface soil horizon. These soils occur in areas where the ground water table tends to fluctuate within the soils or in areas where the soils were aerobic during drier periods in the past. No soils mapped as Saprists are mapped nor were observed at the site.

##### **Upland Soils**

**Udorthents:** Well drained to excessively drained soils that have been disturbed by cutting or filling, and areas that are typically covered by buildings and pavement. No soils mapped as Udorthents are mapped at the site. However, development has areas to the south east, and north, of the site have been

## WETLAND DELINEATION REPORT

developed and are likely constructed with human-transported fill material. It is possible that soils within the re-flagged wetland and/or the intermittent stream have been disturbed, though the extent is unknown.

Two additional upland soils have been mapped at the site by the National Cooperative Soil Survey:

- Elmridge fine sandy loam (Map Unit 28) – very deep, moderately well-drained soils, which have formed in loam over clayey sediments. They nearly level to moderately steeply sloping deposits on glacial lake terraces and lake plains.
- Enfield silt loam (Map Unit 704) – very deep, well-drained soils, which have formed in silty mantle overlying glacial outwash nearly level to sloping deposits on glaciated outwash plains and terraces.

### SUMMARY OF WATERCOURSE AND HYDROLOGY

The site is located within the drainage basin of Plum Gulley Brook in the Subregional Basin of the Podunk River. At the site, the inland wetlands flagged in this field inspection border the north and south banks of an unnamed intermittent stream. The intermittent stream begins east of Buckland Road and flows northwesterly through the site to Plum Gulley Brook. At the time of the inspection, wet and dry sections of the stream bed were observed, and a scoured stream and established back were present throughout its course. Increased dryness can be attributed to moderate drought conditions experienced in the summer and early fall of 2020 (see Attachment: *CT Interagency Drought Working Group 8/26/2020 Press Release*).

At the eastern end of the site, the wetland narrows to the watercourse's banks. Moving northwest (i.e., downstream), the bordering wetlands widen into a predominantly emergent wetland, with pockets of forested and scrub-shrub wetlands. Emergent wetland vegetation includes (common name/*scientific name*): arrow-leaved tearthumb/*Persicaria sagittata*, purple loosestrife/*Lythrum salicaria*, cat-tail/*Typha latifolia*, devil's beggar-tick/*Bidens frondosa*, reed canary grass, and wrinkle-leaved goldenrod/*Solidago rugosa*. Forested and scrub-shrub wetland vegetation includes: red maple/*Acer rubrum*, gray dogwood/*Swida racemosa*, multiflora rose/*Rosa multiflora*, and speckled alder/*Alnus incana*.

An outfall and overgrown stormwater detention basin were observed immediately south of the flagged wetland. These elements of the local stormwater management system are not connected to the wetland or the intermittent stream discussed previously. No discharges or other stormwater-related infrastructure connected to the wetland or stream were observed, but it is presumed there are discharges from the surrounding commercial development and public roads.

### SUMMARY OF WETLAND FUNCTION & VALUES ASSESSMENT

A Function & Values assessment was conducted in the field of the wetland inspected on the site. The assessment determined that the wetland provides the following Principal and Secondary Functions:

- **Groundwater Recharge** (*Secondary*) – the capacity to interact with groundwater such that water from groundwater to surface water
- **Sediment, Pollutant & Nutrient Removal** (*Primary*) – the capacity to remove dissolved, suspended and floatable material from storm water runoff and prevent degradation of water quality.
- **Production Export** (*Primary*) – the capacity to produce and provide diverse food sources for wildlife

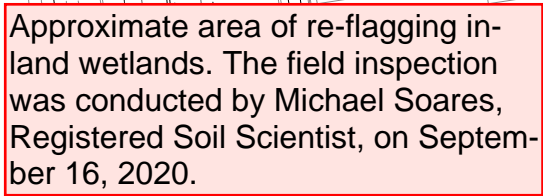


## WETLAND DELINEATION REPORT

For a description of the assessment's methodology and a record of the assessment, see the Attachment: *Function & Value Assessment Form*.

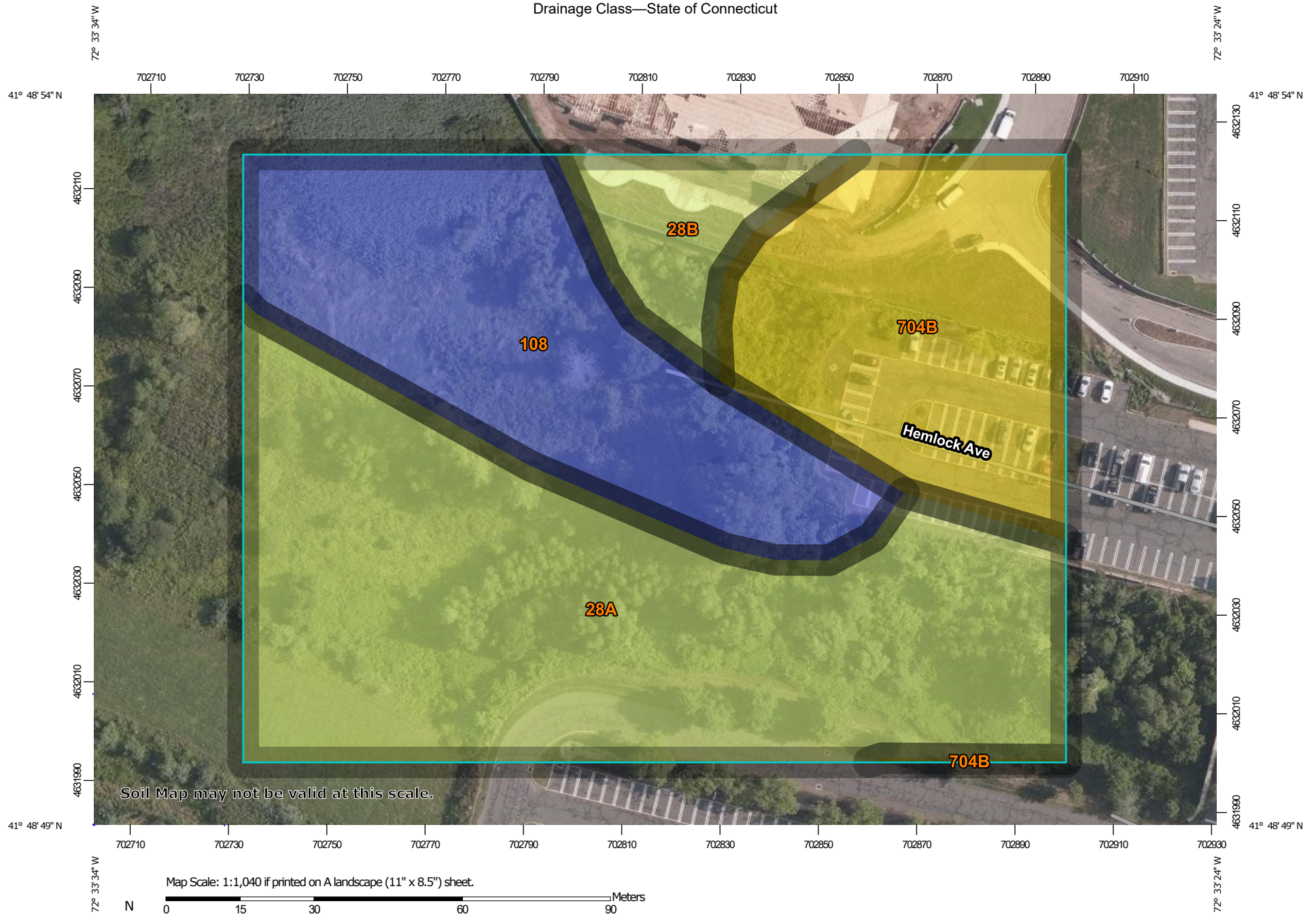
### ATTACHMENTS

- "Tamarack Avenue Preliminary Layout," depicting site and 2003 wetland delineation by Richard Snarski
- NRCS Soil Drainage Class Mapping
- USACE Wetland Determination Data Forms
- Function & Value Assessment Form
- *CT Interagency Drought Working Group 8/26/2020 Press Release*
- Site Photographs



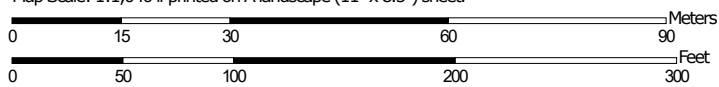


# Drainage Class—State of Connecticut



Soil Map may not be valid at this scale.

Map Scale: 1:1,040 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84



**Natural Resources  
Conservation Service**

Web Soil Survey  
National Cooperative Soil Survey

10/28/2020  
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## MAP LEGEND

### Area of Interest (AOI)







 Area of Interest (AOI)

### Soils

#### Soil Rating Polygons


	Excessively drained		Excessively drained
	Somewhat excessively drained		Somewhat excessively drained
	Well drained		Well drained
	Moderately well drained		Moderately well drained
	Somewhat poorly drained		Somewhat poorly drained
	Poorly drained		Poorly drained
	Very poorly drained		Very poorly drained
	Subaqueous		Subaqueous
	Not rated or not available		Not rated or not available

#### Soil Rating Lines






	Excessively drained
	Somewhat excessively drained
	Well drained
	Moderately well drained
	Somewhat poorly drained
	Poorly drained
	Very poorly drained
	Subaqueous
	Not rated or not available

#### Soil Rating Points


### Water Features

 Streams and Canals

### Transportation

	Rails
	Interstate Highways
	US Routes
	Major Roads
	Local Roads

### Background

 Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
Web Soil Survey URL:  
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: State of Connecticut  
Survey Area Data: Version 20, Jun 9, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 15, 2019—Aug 29, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Drainage Class

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
28A	Elmridge fine sandy loam, 0 to 3 percent slopes	Moderately well drained	2.4	47.1%
28B	Elmridge fine sandy loam, 3 to 8 percent slopes	Moderately well drained	0.3	6.2%
108	Saco silt loam	Very poorly drained	1.3	26.0%
704B	Enfield silt loam, 3 to 8 percent slopes	Well drained	1.1	20.8%
<b>Totals for Area of Interest</b>			<b>5.1</b>	<b>100.0%</b>

## Description

"Drainage class (natural)" refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized-excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained, and very poorly drained. These classes are defined in the "Soil Survey Manual."

## Rating Options

*Aggregation Method:* Dominant Condition

*Component Percent Cutoff:* None Specified

*Tie-break Rule:* Higher



Project/Site: Tamarack Avenue at Evergreen Walk City/County: South Windsor Sampling Date: 09/16/2020  
Applicant/Owner: Evergreen Walk, LLC State: CT Sampling Point: AW1  
Investigator(s): Michael Soares Section, Township, Range: Hartford County  
Landform (hillside, terrace, etc.): drainageway Local relief (concave, convex, none): level Slope (%):           
Subregion (LRR or MLRA): LRR R, MLRA 145 Lat: 41.814354 Long: -72.558128 Datum: CT State Plane 1983  
Soil Map Unit Name: Saco silt loam NWI classification: R4SBC

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

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

Wetland Hydrology Indicators:				Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)					
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)			
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input checked="" type="checkbox"/> Drainage Patterns (B10)			
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Moss Trim Lines (B16)			
<input type="checkbox"/> Water Marks (B1)	<input checked="" type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)			
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Crayfish Burrows (C8)			
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)			
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Stunted or Stressed Plants (D1)			
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> Geomorphic Position (D2)			
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Microtopographic Relief (D4)			
		<input checked="" type="checkbox"/> FAC-Neutral Test (D5)			
<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <input type="text"/> Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <input type="text" value="8"/> (includes capillary fringe)				<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks: Project site is located in a county classified by the state of Connecticut as "Stage 1 Incipient Drought: Emerging drought event, potentially impacting water supplies, agriculture, or natural ecosystems." ( <a href="https://portal.ct.gov/Water/Drought/Drought-Home">https://portal.ct.gov/Water/Drought/Drought-Home</a> )					

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

 Sampling Point: AW1

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)  Total Number of Dominant Species Across All Strata: <u>3</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover				<b>Prevalence Index worksheet:</b>  <table style="width: 100%;"> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>85</u></td> <td>x 1 = <u>85</u></td> </tr> <tr> <td>FACW species <u>27</u></td> <td>x 2 = <u>54</u></td> </tr> <tr> <td>FAC species <u>35</u></td> <td>x 3 = <u>105</u></td> </tr> <tr> <td>FACU species <u>5</u></td> <td>x 4 = <u>20</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>152</u> (A)</td> <td><u>264</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>1.74</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>85</u>	x 1 = <u>85</u>	FACW species <u>27</u>	x 2 = <u>54</u>	FAC species <u>35</u>	x 3 = <u>105</u>	FACU species <u>5</u>	x 4 = <u>20</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>152</u> (A)	<u>264</u> (B)	Prevalence Index = B/A = <u>1.74</u>	
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Column Totals: <u>152</u> (A)	<u>264</u> (B)																			
Prevalence Index = B/A = <u>1.74</u>																				
<b>Sapling/Shrub Stratum (Plot size: _____)</b>																				
1. <u>Swida racemosa</u>	<u>25</u>	<u>Yes</u>	<u>FAC</u>																	
2. <u>Alnus incana</u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
3. <u>Rosa multiflora</u>	<u>5</u>	<u>No</u>	<u>FACU</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
=Total Cover																				
<b>Herb Stratum (Plot size: _____)</b>																				
1. <u>Persicaria sagittata</u>	<u>40</u>	<u>Yes</u>	<u>OBL</u>	<b>Hydrophytic Vegetation Indicators:</b> <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> <u>2</u> - Dominance Test is >50% <u>X</u> <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <u>      </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Lythrum salicaria</u>	<u>30</u>	<u>Yes</u>	<u>OBL</u>																	
3. <u>Typha latifolia</u>	<u>15</u>	<u>No</u>	<u>OBL</u>																	
4. <u>Phalaris arundinacea</u>	<u>10</u>	<u>No</u>	<u>FACW</u>																	
5. <u>Solidago rugosa</u>	<u>10</u>	<u>No</u>	<u>FAC</u>																	
6. <u>Solidago gigantea</u>	<u>7</u>	<u>No</u>	<u>FACW</u>																	
7. <u>Solidago gigantea</u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
=Total Cover																				
<b>Woody Vine Stratum (Plot size: _____)</b>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
=Total Cover																				

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

**Hydrophytic Vegetation Present?**      Yes X      No \_\_\_\_\_

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

## SOIL

Sampling Point: AW1

[illegible]

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Tamarack Avenue at Evergreen Walk City/County: South Windsor Sampling Date: 09/16/2020  
 Applicant/Owner: Evergreen Walk, LLC State: CT Sampling Point: UPL1  
 Investigator(s): Michael Soares Section, Township, Range: Hartford County  
 Landform (hillside, terrace, etc.): upland Local relief (concave, convex, none): level Slope (%): 0  
 Subregion (LRR or MLRA): LRR R, MLRA 145 Lat: 41.814220 Long: -72.558890 Datum: CT State Plane 1983  
 Soil Map Unit Name: Elmridge fine sandy loam NWI classification: none

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

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

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

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:   		
Remarks: Project site is located in a county classified by the state of Connecticut as "Stage 1 Incipient Drought: Emerging drought event, potentially impacting water supplies, agriculture, or natural ecosystems." ( <a href="https://portal.ct.gov/Water/Drought/Drought-Home">https://portal.ct.gov/Water/Drought/Drought-Home</a> )		

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

 Sampling Point: UPL1

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Populus tremuloides</u>	5	Yes	FACU	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)  Total Number of Dominant Species Across All Strata: <u>6</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33.3%</u> (A/B)																
2. <u>Malus pumila</u>	5	Yes	UPL																	
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	10	=Total Cover		<b>Prevalence Index worksheet:</b>  <table style="width: 100%;"> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>20</u></td> <td>x 2 = <u>40</u></td> </tr> <tr> <td>FAC species <u>75</u></td> <td>x 3 = <u>225</u></td> </tr> <tr> <td>FACU species <u>25</u></td> <td>x 4 = <u>100</u></td> </tr> <tr> <td>UPL species <u>5</u></td> <td>x 5 = <u>25</u></td> </tr> <tr> <td>Column Totals: <u>125</u></td> <td>(A) <u>390</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.12</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>20</u>	x 2 = <u>40</u>	FAC species <u>75</u>	x 3 = <u>225</u>	FACU species <u>25</u>	x 4 = <u>100</u>	UPL species <u>5</u>	x 5 = <u>25</u>	Column Totals: <u>125</u>	(A) <u>390</u> (B)	Prevalence Index = B/A = <u>3.12</u>	
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Column Totals: <u>125</u>	(A) <u>390</u> (B)																			
Prevalence Index = B/A = <u>3.12</u>																				
Sapling/Shrub Stratum (Plot size: _____)																				
1. <u>Rosa multiflora</u>	15	Yes	FACU																	
2. _____																				
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	15	=Total Cover																		
Herb Stratum (Plot size: _____)																				
1. <u>Solidago rugosa</u>	75	Yes	FAC	<b>Hydrophytic Vegetation Indicators:</b> <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <u>      </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Solidago gigantea</u>	20	Yes	FACW																	
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
8. _____																				
9. _____																				
10. _____																				
11. _____																				
12. _____																				
	95	=Total Cover																		
Woody Vine Stratum (Plot size: _____)																				
1. <u>Vitis labrusca</u>	5	Yes	FACU	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
2. _____																				
3. _____																				
4. _____																				
	5	=Total Cover																		

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



## SOIL

Sampling Point: UPL1

[illegible]



# STATE OF CONNECTICUT

## OFFICE OF POLICY AND MANAGEMENT

### **CONNECTICUT INTERAGENCY DROUGHT WORKGROUP: FOUR COUNTIES ARE EXPERIENCING STAGE 2 DROUGHT CONDITIONS**

(Hartford) -- With precipitation across Connecticut three to seven inches below normal over the last 90 days, the state's Interagency Drought Workgroup has announced that the four northern counties (Litchfield, Hartford, Tolland, and Windham) are experiencing Stage 2 Drought conditions. Under the state's new drought plan adopted in 2018, Stage 2 has replaced the previously used "Drought Advisory" stage and identifies an emerging drought event, potentially impacting water supplies, agriculture, or natural ecosystems.

"We have experienced drier than normal conditions in the spring and summer," said Office of Policy & Management Undersecretary Martin Heft, who chairs the Interagency Drought Workgroup. "The combination of precipitation shortfalls and an extended period of excessive heat has impacted the state's water resources and increased demands upon them. Many water suppliers struggle to keep pace with increased consumer demand for outdoor water uses and impacts are also being experienced in the state's streams and agricultural and forest lands. We must begin early steps now to mitigate the potential for harm should the drought become prolonged."

Residents and businesses in Stage 2 counties are being asked to voluntarily take the following measures to aid in minimizing future drought impact:

- Reduce automatic outdoor irrigation
- Postpone the planting of any new lawns or vegetation
- Minimize overall water use by fixing leaky plumbing and fixtures
- Follow any additional conservation requests issued by water suppliers or municipalities

"Residents should not be alarmed, but should be mindful of their water consumption and take sensible steps to stretch water supplies and reduce impacts on other water uses and on the environment," Department of Public Health Acting Commissioner Dr. Deidre Gifford said.

Tips on water saving measures can be found on the Department of Public Health's website [here](#).

Stage 2 is the second of five stages of drought defined in the Connecticut Drought Response and Preparedness Plan. The Interagency Drought Workgroup classified the entire state as being at Stage 1 on June 19, when there were early signals of abnormally dry conditions. That stage is intended as a "heads up" regarding the possibility of a developing drought.

The decision to move to Stage 2 is based on an assessment of indicator data monitored by state and federal agencies, including precipitation, surface waters, groundwater, reservoirs, soil moisture, vegetation, and fire danger conditions. The state has experienced this level of drought four times in the past two decades, in 2002, 2007, 2010, and 2016. If conditions deteriorate further, the state could reach Stage 3, having reached that threshold only once before, in 2016.

The Interagency Drought Workgroup has moved the four northern counties to Stage 2 because precipitation shortfalls, reduced ground water levels, stream flows, and soil moisture impacts are especially pronounced there. Rainfall and droughts do not follow political boundaries, and impacts can be more severe at certain locations. Those who depend on private wells, fire or irrigation ponds, and other highly localized water resources should be especially mindful of local conditions, especially in places where previous droughts have affected supplies.

The State Interagency Drought Workgroup consists of representatives from the Department of Agriculture, Department of Emergency Services and Public Protection, Department of Energy and Environmental Protection, Department of Public Health, Office of Policy and Management, and Public Utilities Regulatory Authority, with assistance from the National Weather Service and United States Geological Survey. More information on the Interagency Drought Workgroup and the State Drought Plan are available [here](#).

###

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**Figure 1.** Emergent wetland bordering the south bank of the intermittent stream. Looking east.



**Figure 2.** Emergent wetland bordering the south bank of the intermittent stream. Looking north; trees in the background are in uplands north of the wetland.





**Figure 3.** Emergent wetland bordering the south bank of the intermittent stream. Looking west.



**Figure 4.** Stream bed of intermittent stream. Looking northwest (downstream).





**Figure 5.** Stream bed of intermittent stream. Looking southeast (upstream).