

# **WETLAND DELINEATION**

FOR THE PROPERTY LOCATED AT:  
**94 BENTWOOD DRIVE**  
STAMFORD, CONNECTICUT



REPORT PREPARED BY:  
**ALEKSANDRA MOCH**  
**SOIL & WETLAND SCIENTIST**  
CERTIFIED PROFESSIONAL IN EROSION  
AND SEDIMENT CONTROL  
GEOLOGIST/HYDROGEOLOGIST

**April 13, 2022**

## **SITE DESCRIPTION**

The property is located on the southern side of Bentwood Drive in Stamford, CT. This two-acre site supports a single-family residence with a driveway. The area slopes gently towards the south. The site is maintained as a lawn with several trees scattered throughout the area.

## **METHODS**

Wetland identification was performed on April 13, 2022. This site was evaluated in terms of the presence of poorly drained, very poorly drained, alluvial, and/or floodplain soils and submerged land. The soil types were identified by observation of soil morphology including soil texture, structure, color, etc. Numerous soil samples were taken using an auger. Sampling began within the typical wetland area and continued toward the upland. Soil morphology was observed at soil sampling points along the transect lines perpendicular to the wetland boundary. At each transect, the boundary between the upland and wetland was marked with orange surveyor's tape labeled "WET". Each flag was numbered sequentially 1-14 around a slope wetland area situated within the northern portion of the site, 15-25 along a wetland associated with a pond and 26-33 along the eastern side of a section of a stream channel located within the northwestern corner of the property.

## **WETLANDS/WATERCOURSES REGULATORY DEFINITION**

The Inland Wetlands and Watercourses Act (Connecticut General Statutes section 22a-38) defines inland wetlands as *land, including submerged land...which consists of any soil types designated as poorly drained, very poorly drained, alluvial, and floodplain.*

The terms poorly drained and very poorly drained describes the drainage classes of the soil, which are based on frequency and duration of periods of soil saturation due to the fluctuations of ground water table. The terms alluvial and floodplain describe the processes in which the soils were formed.

Watercourses are defined in the statutes 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, which are contained within, flow through or border upon the state or any portion thereof.*

Intermittent watercourse: is determined by a defined permanent channel and bank and the occurrence of two or more of the following characteristics:

- Evidence of scour or deposits of recent alluvium or detritus,
- Presence of standing or flowing water for a duration longer than a particular storm incident, and

- Presence of hydrophytic vegetation.

## **WETLAND/WATERCOURSE DESCRIPTION**

The areas flagged in the field consist of a perennial stream entering the site from the street culvert, a man-made pond established within a wetland area and a slope wetland. The stream flows along the western property line and feeds the pond situated within the southern section of the property. The slope wetland is located within the northern portion of the site. This area is fed by a few springs intercepting the ground at the toe of a slope.

## **WETLAND SOILS**

The soils were classified using soil criteria and maps developed by United States Department of Agriculture, Natural Resources Conservation Service.

### **4 – Leicester fine sandy loam**

The *Leicester* series occurs in depressions and/or drainage ways. This poorly drained soil is underlined by a compacted restrictive layer at the depth of more than 80 inches. 9% of the surface area is covered with cobbles, stones or boulders. The parent material is a coarse-loamy melt-out till derived from granite and/or schist and/or gneiss. The slope is 0 to 5% and the depth to the groundwater table is about 0-18 inches.

#### Typical profile

- *0 to 1 inches*: Moderately decomposed plant material
- *1 to 7 inches*: Fine sandy loam
- *7 to 10 inches*: Fine sandy loam
- *10 to 18 inches*: Fine sandy loam
- *18 to 24 inches*: Fine sandy loam
- *24 to 43 inches*: Gravelly fine sandy loam
- *43 to 65 inches*: Gravelly fine sandy loam

## **UPLAND SOILS**

### **75C—Hollis-Chatfield-Rock outcrop complex, 0 to 15 percent slopes, very rocky**

The *Hollis* series consists of somewhat excessively drained moderately deep soils formed in loamy melt-out till derived from granite and/or schist and/or gneiss. They occur on hills or ridges.

#### Typical profile

- *0 to 1 inches*: Highly decomposed plant material
- *1 to 6 inches*: Gravelly fine sandy loam
- *6 to 9 inches*: Channery fine sandy loam

- *9 to 15 inches*: Gravelly fine sandy loam
- *15 to 80 inches*: Bedrock

The *Chatfield* series consists of moderately deep, well drained soils formed in till. They are nearly level to very steep soils on glaciated plains, hills, and ridges. Slope ranges from 15 to 45 percent. Crystalline bedrock is at depth of 20 to 40 inches.

Typical profile

- *0 to 1 inches*: Highly decomposed plant material
- *1 to 6 inches*: Gravelly fine sandy loam
- *6 to 15 inches*: Gravelly fine sandy loam
- *15 to 29 inches*: Gravelly fine sandy loam
- *29 to 80 inches*: Unweathered bedrock

Certified by:



Aleksandra Moch  
Soil and Wetland Scientist

