

# **WETLAND DELINEATION**

FOR THE PROPERTY LOCATED AT:  
**0 MOUNTAIN ROAD**  
**MAP/BLOCK/LOT 25-2**  
**WILTON, CONNECTICUT**



REPORT PREPARED BY:  
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**March 10, 2023**

## SITE DESCRIPTION

The property is a flag lot located on the northern side of the intersection of Mountain Road and Indian Hill Road in Wilton, CT. This 2.82-acre site support a wooded area interrupted with streams and wetlands. The area undulates and it is pierced by several ledge outcrops and covered with large boulders concentrated within the wetland area. The site drains towards the east.

## METHODS

Wetland identification was performed on March 10, 2023. 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 1-27 along the southern and 28-49 along the northern edge of the wetland/watercourse system situated within the central portion of the lot. A wetland/watercourse system was also found within the middle section of the access way. Flags depicting this area were numbered 50-58 along the northern and 59-66 along the southern edge of this wetland/watercourse area.

## 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 large wetland/watercourse system which is located within the central portion of the lot. The system consists of a wetland area covered with boulders which drains into a perennial stream. The wetland is fed by a system of springs emerging from the south. This area is naturally wooded and continues through the adjacent properties. The second wetland/watercourse area was located within the access way. Two ponds overflowing into a stream channel were flagged. This area is also wooded with understory growth dominated by invasive species.

## **WETLAND SOILS**

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

### **3 - Ridgebury, Leicester, and Whitman soils, extremely stony**

This map unit consists of Ridgebury (40%), Leicester (35%), Whitman (15%), and other components (10%).

The *Ridgebury* series occurs in depressions and/or drainageways. This poorly drained soil is underlined by restrictive layer at the depth 20 to 30 inches. 9% of the surface area is covered with cobbles, stones or boulders. The parent material is a coarse-loamy lodgment till derived from granite and/or schist and/or gneiss. The slope is 0 to 5%.

#### **Typical profile**

- 0 to 5 inches: Fine sandy loam
- 5 to 14 inches: Fine sandy loam
- 14 to 21 inches: Fine sandy loam
- 21 to 60 inches: 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

The Whitman series occurs in depressions and/or drainage ways. This very poorly drained soil is underlined by a compacted restrictive layer at the depth of more than 12-20 inches. 9% of the surface area is covered with cobbles, stones or boulders. The parent material is a coarse-loamy lodgment till derived from granite and/or schist and/or gneiss. The slope is 0 to 2% and the depth to the groundwater table is about 0-12 inches.

#### Typical profile

- 0 to 1 inches: Slightly decomposed plant material
- 1 to 9 inches: Fine sandy loam
- 9 to 16 inches: Fine sandy loam
- 16 to 22 inches: Fine sandy loam
- 22 to 60 inches: Fine sandy loam

### **UPLAND SOILS**

#### **73C – Charlton-Chatfield complex, 3 to 15 percent slopes, very rocky**

The Chatfield series consists of moderately deep, well drained, and somewhat excessively drained soils formed in till. They are nearly level to very steep soils on glaciated plains, hills, and ridges. Slope ranges from 0 to 70 percent. Crystalline bedrock is at depth of 20 to 40 inches.

Typically the surface layer is very dark grayish brown loam with weak fine granular structures. The subsoil is dark brown loam and pale brown dry with medium subangular blocky structure. The substratum is brown flaggy silt loam with fine subangular blocky structure.

The Charlton series consists of very deep, well drained loamy soils formed in till. They are nearly level to very steep soils on till plains and hills. Slope ranges from 0 to 50 percent. Thickness of solum ranges from 20 to 38 inches. Depth to bedrock is commonly more than 6 feet.

Typically the surface layer is very dark brown fine sandy loam. The subsoil is strongly brown and yellowish brown fine sandy loam. The substratum is light olive brown gravelly sandy loam.

**75E—Hollis-Chatfield-Rock outcrop complex, 15 to 45 percent slopes**

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:



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