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5.25.2023  
East Hampton  
Land Use Dept.



REPORT DATE: May 25, 2023

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**REMA ECOLOGICAL SERVICES, LLC**

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## ON-SITE SOIL INVESTIGATION & WETLAND DELINEATION REPORT

### PROJECT NAME & SITE LOCATION:

+/- 2.3 acres (study area)

Minor Family Residence

Lake Drive, East Hampton, CT

REMA Job No.: 23-2604-EHM43

Field Investigation Date(s): 5/21/2023

Field Investigation Method(s):

Spade and Auger

Backhoe Test Pits

Other: \_\_\_\_\_

### REPORT PREPARED FOR:

Tucker Minor

198 Lake Drive

East Hampton, CT 06424

### Field Conditions:

Weather: Mostly sunny, 70s

Soil Moisture: moderate-high

Snow Depth: none

Frost Depth: none

### Purpose of Investigation:

Wetland Delineation/Flagging in Field

Wetland Mapping on Sketch Plan or Topographic Plan

High Intensity Soil Mapping by Soil Scientist

Medium Intensity Soil Mapping from *The Soil Survey of Connecticut Maps* (USDA-NRCS)

Other: \_\_\_\_\_

Base Map Source: CT Soil Survey web; USDA-NRCS) (attached), Figure A (attached)

Wetland Boundary Marker Series: RES-A-1 to RES-A-12, RES-1A-1 to RES-1A-20, and RES-B-1 to RES-B-9, tied to RES-1B-1 to RES-1B-6 (open lines)

General Site Description/Comments: The "the study area" or "site" is a roughly 2.3-acre portion of a larger +/- 15-acre property, accessed off of Lake Drive to the east, with frontage upon Markham Bay of Lake Pocotopaug, in East Hampton, CT (see Figure A, attached). In its present state the site includes deciduous wooded uplands and wetlands and a materials storage area along an existing driveway that leads to a single-family residence on Markham Bay. The soils within the study area are predominately undisturbed, derived from glacial till (i.e., unstratified sand, silt, and rock) deposits. The upland soils are the well-drained Canton and Charlton (62) fine sandy loams soil series complex, and the moderately well drained Sutton (51) soil series, while the wetland soils are the poorly and very poorly drained Ridgebury, Leicester, and Whitman (3) soil series complex. The regulated areas include a wetland corridor in the eastern portion of the study area, and an intermittent watercourse and associated wetland in the eastern portion. The former originates on the overall property, while the latter originates off-site at an emergent marsh, just south of Lake Drive. Dominant or common overstory vegetation within or adjacent to the delineated wetlands included red maple, ironwood, sugar maple, American elm, yellow birch, and tulip tree. The moderately dense understory included such species as spicebush, Japanese barberry, highbush blueberry, winterberry, arrowwood, multi-flora rose, and sweet pepperbush. Common herbs included skunk cabbage, jewelweed, cinnamon fern, woodfern, wild sarsaparilla, Canada mayflower, jack in the pulpit, sedges, including tussock, and grasses.

**ON-SITE SOIL INVESTIGATION & WETLAND DELINEATION REPORT (CONTINUED)**

**PROJECT NAME & SITE LOCATION:** +/- 2.3 acres (study area)  
Lake Drive, East Hampton, CT

**SOIL MAP UNITS****Upland Soils**

**Charlton very stony fine sandy loam (62).** This series consists of very deep, well drained coarse-loamy soils formed in friable, glacial till on uplands. They are nearly level to very steep soils on till plains and hills. The soils formed in acid glacial till derived mainly from schist, gneiss or granite. In tilled areas, these soils have a surface layer of dark brown fine sandy loam 8 inches thick. The subsoil from 8 to 26 inches is yellowish brown fine sandy loam and sandy loam. The substratum from 26 to 60 inches or more is grayish brown gravelly fine sandy loam.

**Canton stony fine sandy loam (62).** This series consists of deep, well drained soils formed in a coarse-loamy mantle underlain by sandy glacial till on uplands. They are nearly level to very steep soils on till plains and hills. The soils formed in acid glacial till derived mainly from schist, gneiss or granite. Typically, these soils have a surface layer of very dark grayish brown fine sandy loam 2 inches thick. The subsoil from 2 to 23 inches is yellowish brown fine sandy loam, gravelly fine sandy loam and gravelly sandy loam. The substratum from 23 to 60 inches is pale brown gravelly loamy sand.

**Sutton stony fine sandy loam (51).** This series consists of deep, moderately well drained loamy soils formed in friable, glacial till on uplands. They are nearly level to steeply sloping soils on till plains, low ridges and hills, being typically located on lower slopes and in slight depressions. The soils formed in acid glacial till derived mainly from schist, gneiss or granite. Typically, these soils have a surface layer of dark brown fine sandy loam 8 inches thick. The subsoil from 8 to 28 inches is yellowish brown, mottled fine sandy loam and sandy loam. The substratum from 28 to 60 inches or more is light olive brown fine sandy loam.

**Wetland Soils**

**Ridgebury fine sandy loam (3).** This soil series consists of deep, poorly and somewhat poorly drained soils formed in a coarse-loamy mantle underlain by firm, compact glacial till on uplands. They are nearly level to moderately steep soils on till plains, low ridges and drumloidal landforms. The soils formed in acid glacial till derived mainly from schist, gneiss or granite. Typically, these soils have a black sandy loam surface layer 6 inches thick. The mottled subsoil from 6 to 16 inches is olive gray sandy loam. The mottled substratum from 16 to 60 inches is a light olive brown and olive, very firm and brittle gravelly sandy loam.

**Leicester fine sandy loam (3).** This series, which is some Connecticut counties is found only in complex with the Ridgebury and Whitman series, consists of deep, poorly drained loamy soils formed in friable glacial till on uplands. They are nearly level to gently sloping soils in drainage ways and low lying positions on till covered uplands. The soils formed in acid glacial till derived mainly from schist, gneiss or granite. Typically, these soils have a surface layer of black fine sandy loam 6 inches thick. The subsoil from 6 to 23 inches is grayish brown, mottled fine sandy loam. The substratum from 26 to 60 inches or more is dark yellowish brown, mottled, friable, gravelly fine sandy loam.

ON-SITE SOIL INVESTIGATION & WETLAND DELINEATION REPORT (CONTINUED)

PROJECT NAME & SITE LOCATION: +/- 2.3 acres (study area)  
Lake Drive, East Hampton, CT

SOIL MAP UNITSWetland Soils

*Whitman fine sandy loam (3)*. This series, which is some Connecticut counties is only mapped in complex with the Ridgebury and Leicester series, consists of deep, very poorly drained soils formed in a coarse-loamy mantle underlain by firm, compact glacial till on uplands. They are nearly level and gently sloping soils on till plains, low ridges and drumloidal landforms. The soils formed in acid glacial till derived mainly from schist, gneiss or granite. Typically, these soils have a black fine sandy loam surface layer 8 inches thick. The mottled subsoil from 8 to 15 inches is gray sandy loam. The mottled substratum from 15 to 60 inches is firm, olive gray to gray dense glacial till.

Any accompanying soil logs and soil maps, and the on-site soil investigation narrative are in accordance with the taxonomic classification of the National Cooperative Soil Survey of the USDA Natural Resource Conservation Service, and with the Connecticut Soil Legend (DEP Bulletin No.5, 1983), as amended by USDA-NRCS. Jurisdictional wetland boundaries were delineated pursuant to the Connecticut General Statutes (CGS Sections 22a-36 to 22a-45), as amended. The site investigation was conducted and/or reviewed by the undersigned Registered Soil Scientist(s) [registered with the Society of Soil Scientists of Southern New England (SSSSNE) in accordance with the standards of the Federal Office of Personnel Management].

Respectfully submitted,

**REMA ECOLOGICAL SERVICES, LLC**

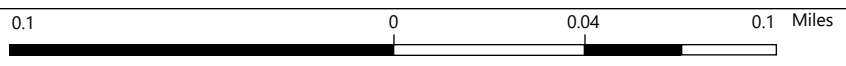


George T. Logan, MS, PWS, CSE  
Registered Professional Soil Scientist  
Field Investigator/Senior Reviewer



- Legend**
- Parcels for Protected Open Sp
  - Town Boundary
  - State Boundary
  - Town Boundary
  - Coastline
  - Light Gray Canvas Base

1: 2,257



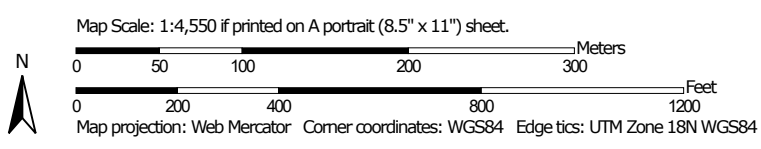
This map is intended for general planning, management, education, and research purposes only. Data shown on this map may not be complete or current. The data shown may have been compiled at different times and at different map scales, which may not match the scale at which the data is shown on this map.

**Notes**

Soil Map—State of Connecticut  
(198 Lake Drive, East Hampton, CT)



Soil Map may not be valid at this scale.




## MAP LEGEND

### Area of Interest (AOI)

 Area of Interest (AOI)

### Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

### Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

### 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 22, Sep 12, 2022

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

Date(s) aerial images were photographed: Jun 14, 2022—Oct 6, 2022

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.

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
3	Ridgebury, Leicester, and Whitman soils, 0 to 8 percent slopes, extremely stony	9.4	10.8%
17	Timakwa and Natchaug soils, 0 to 2 percent slopes	2.0	2.3%
46B	Woodbridge fine sandy loam, 0 to 8 percent slopes, very stony	4.0	4.6%
58B	Gloucester gravelly sandy loam, 3 to 8 percent slopes, very stony	6.0	6.8%
59D	Gloucester gravelly sandy loam, 15 to 35 percent slopes, extremely stony	1.6	1.8%
61B	Canton and Charlton fine sandy loams, 0 to 8 percent slopes, very stony	7.4	8.5%
61C	Canton and Charlton fine sandy loams, 8 to 15 percent slopes, very stony	3.3	3.8%
62C	Canton and Charlton fine sandy loams, 3 to 15 percent slopes, extremely stony	8.2	9.3%
62D	Canton and Charlton fine sandy loams, 15 to 35 percent slopes, extremely stony	16.8	19.2%
72C	Nipmuck-Brookfield complex, 3 to 15 percent slopes, very rocky	1.7	1.9%
72E	Nipmuck-Brookfield complex, 15 to 45 percent slopes, very rocky	4.2	4.8%
73C	Charlton-Chatfield complex, 0 to 15 percent slopes, very rocky	0.0	0.0%
73E	Charlton-Chatfield complex, 15 to 45 percent slopes, very rocky	2.6	2.9%
260D	Charlton-Urban land complex, 15 to 25 percent slopes	6.8	7.8%
273C	Urban land-Charlton-Chatfield complex, rocky, 3 to 15 percent slopes	7.4	8.4%
W	Water	6.1	7.0%
<b>Totals for Area of Interest</b>		<b>87.4</b>	<b>100.0%</b>