



REMA

REPORT DATE: November 12, 2022

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REMA ECOLOGICAL SERVICES, LLC

164 East Center Street, Suite 8
Manchester, CT 06040

860.649.REMA (7362)

ON-SITE SOIL INVESTIGATION & WETLAND DELINEATION REPORT

PROJECT NAME & SITE LOCATION:

+/- 3.01-acre (study area)
137 Babbling Brook Road
Torrington, CT

REMA Job No.: 22-2543-TOR10

Field Investigation Date(s): 11/10/2022

Field Investigation Method(s):

- Spade and Auger
- Backhoe Test Pits
- Other: _____

REPORT PREPARED FOR:

James & Kelly Mazarelli
137 Babbling Brook Road
Torrington, CT

Field Conditions:

Weather: Mostly sunny, 60s
Soil Moisture: moderate-high
Snow/Frost Depth: w/a

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-31 (open line)

General Site Description/Comments: The "study area", or "site", is a +/- 3.01-acre residential property, in Torrington, CT. In its present state the study area includes a single-family residence, areas of lawn and ornamental plantings, and forested uplands and wetlands. To the rear and downhill of the residence a portion of a southerly flowing intermittent watercourse was piped sometime around 2012, per aerial photography, and two small ponds were created at the inlet and outlet of the pipe. The undisturbed on-site soils are derived from glacial till (i.e., unstratified sand, silt and rock), while the disturbed soils are derived from sandy/gravelly fill. The disturbed upland soils, where past filling and grading has occurred, are mapped as udorthents (308), while the undisturbed upland soils are identified as the moderately well drained woodbridge (47) fine sandy loam soil series, and the well-drained Paxton and Montauk (84) soil series complex. The undisturbed wetland soils are the poorly drained and very poorly drained Ridgebury, Leicester and Whitman (3) soil series complex, while the disturbed wetland soils are mapped as Aquents (308w), and are generally found at or near the delineated wetland boundary, especially in the vicinity of the previously piped watercourse. The regulated on-site resources include open water ("southern pond"), forested swamp, with seasonally saturated and saturated hydrologic regimes, and marsh ("northern pond"), with a semi-permanently flooded hydrologic regime. A significant proportion of delineated wetland has been maintained as lawn. Dominant overstory vegetation associated with the delineated resources includes red maple, hemlock, white pine, and yellow birch. Understory vegetation includes spicebush, highbush blueberry, willows, mountain laurel, silky dogwood, cinnamon fern, swamp dewberry, wood ferns, sedges, purple willowherbs, narrow-leaved cattail, golden saxifrage, rough bedstraw, sticktights, wool grass, goldenrods, asters, and soft and path rush. Lianas include poison ivy, and fox grape.

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

PROJECT NAME & SITE LOCATION: (+/- 3.01 acres) ("study area")
137 Babbling Brook Road, Torrington, CT

SOIL MAP UNITS**Upland Soils**

Udorthents (308). This soil mapping unit consists of well drained to moderately well drained soils that have been altered by cutting, filling, or grading. The areas either have had two feet or more of the upper part of the original soil removed or have more than two feet of fill material on top of the original soil. Udorthents or Made Land soils can be found on any soil parent material but are typically fluvial on glacial till plains and outwash plains and stream terraces.

Woodbridge fine sandy loam (45). This series consists of deep, moderately well 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. In tilled areas, these soils typically have a very dark grayish brown fine sandy loam surface layer 7 inches thick. The subsoil from 7 to 30 inches is dark yellowish brown and light olive brown fine sandy loam, mottled below 18 inches. The substratum from 30 to 60 inches is light olive brown, very firm and brittle gravelly fine sandy loam.

Paxton fine sandy loam (84). This series consists of deep, well drained soils formed in a coarse-loamy mantle underlain by firm, compact glacial till on uplands. They are nearly level to very steep soils on till plains, low ridges and drumloidal landforms. The soils formed in acid glacial till derived mainly from schist, gneiss or granite. In tilled areas, these soils have a dark brown fine sandy loam surface layer 8 inches thick. The subsoil from 8 to 26 inches is dark yellowish brown and olive brown fine sandy loam. The substratum from 26 to 60 inches is olive, very firm and brittle gravelly fine sandy loam.

Montauk loam (84). This series consists of very deep, well drained soils formed in till derived primarily from granitic materials. These soils are on upland till plains and moraines. Slope ranges from 0 to 35 percent. Saturated hydraulic conductivity is moderately high or high in the solum and low to moderately high in the substratum. Mean annual temperature is about 49 degrees F, and mean annual precipitation is about 45 inches. Thickness of the solum and depth to the firm till substratum typically ranges from 20 to 38 inches but the range currently includes 18 to 38. Rock fragments range from 3 to 35 percent in the solum and 5 to 50 percent in the C horizon. The soil ranges from extremely acid to moderately acid throughout.

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: (+/- 3.01 acres) ("study area")
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SOIL MAP UNITS

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.

Aquents (308w). This soil map unit consists of poorly drained and very poorly drained, disturbed land areas. They are most often found on landscapes which have been subject to prior filling and/or excavation activities. In general, this soil map unit occurs where two or more feet of the original soil surface has been filled over, graded or excavated. The Aquents are characterized by a seasonal to prolonged high ground water table and either support or are capable of supporting wetland vegetation. Aquents are recently formed soils which have an aquic moisture regime. An aquic moisture regime is associated with a reducing soil environment that is virtually free of dissolved oxygen because the soil is saturated by groundwater or by water of the capillary fringe. The key feature is the presence of a ground water table at or very near to the soil surface for a period of fourteen days or longer during the growing season.

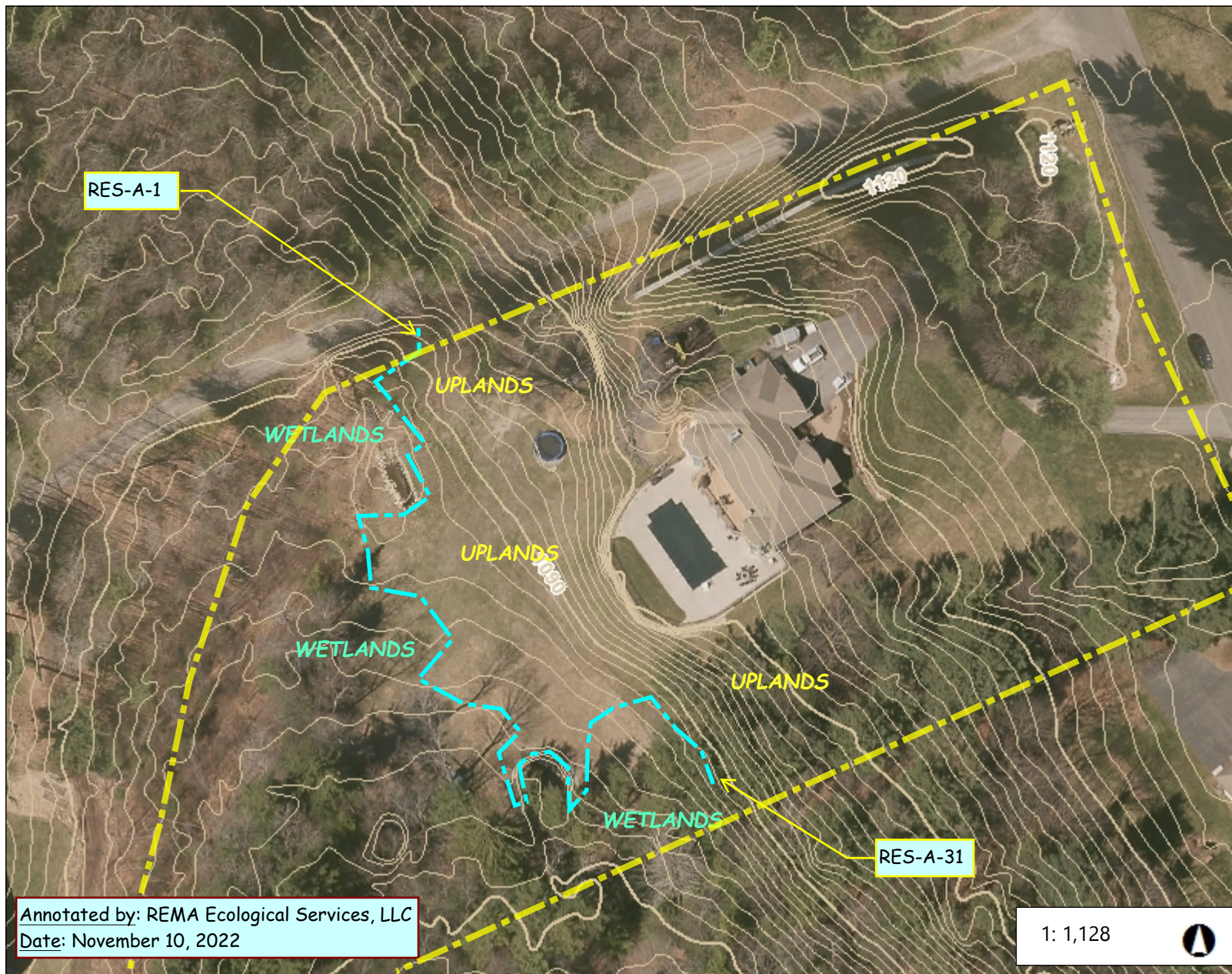
Any accompanying soil logs and soil maps, and the on-site soil investigation narrative are in accordance with the taxonomic classification of the National Cooperative Soil Survey of the USDA Natural Resource Conservation Service, and with the Connecticut Soil Legend (DEP Bulletin No.5, 1983), as amended 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 Soil Scientist
Field Investigator/Senior Reviewer



Legend

Light Gray Canvas Base

Annotated by: REMA Ecological Services, LLC
Date: November 10, 2022

1: 1,128



Notes

0.0 0 0.02 0.0 Miles

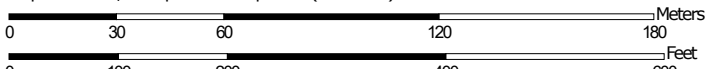
This map is intended for general planning, management, education, and research purposes only. Data shown on this map may not be complete or current. The data shown may have been compiled at different times and at different map scales, which may not match the scale at which the data is shown on this map.

Soil Map—State of Connecticut
(137 Babbling Brook Road, Torrington, CT)



Soil Map may not be valid at this scale.

Map Scale: 1:2,110 if printed on A portrait (8.5" x 11") 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

11/7/2022
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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 12, 2020—Sep 15, 2020

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	2.8	13.3%
47C	Woodbridge fine sandy loam, 3 to 15 percent slopes, extremely stony	4.0	18.8%
62C	Canton and Charlton fine sandy loams, 3 to 15 percent slopes, extremely stony	2.4	11.1%
84B	Paxton and Montauk fine sandy loams, 3 to 8 percent slopes	1.4	6.6%
86C	Paxton and Montauk fine sandy loams, 3 to 15 percent slopes, extremely stony	10.7	50.1%
Totals for Area of Interest		21.3	100.0%