

Cowen EcoDesign, LLC

Ecological Design, Wetland, Biological and Soil Sciences

November 15, 2023

Zachary Cash
zachcash22@gmail.com

**RE: 257 Chesterfield Road
Montville, CT**

Dear Mr. Cash;

I am writing to report the results of a wetland investigation conducted at the referenced site on August 3, 2022. The work was conducted according to the requirements of the CT Inland Wetlands and Watercourses Acts. Inland Wetlands are defined as areas of poorly drained, very poorly drained, floodplain, and alluvial soils, as delineated by a soil scientist. Watercourses are defined as bogs, swamps, or marshes, as well as lakes, ponds, rivers, streams, etc., whether natural or man-made, permanent or intermittent. Watercourses may be delineated by any competent professional.

The wetlands were delineated by walking across the parcel in question and examining the upper 20" of the soil profile with a spade and auger. Those areas meeting the requirements noted above were marked with pink plastic flagging tape numbered WL1-27. Non-wetland test holes were marked with blue plastic flagging.

SOILS

The wetlands consist of:

- 3 Ridgebury, Leicester, and Whitman soils, 0 to 8 percent slopes, extremely stony
- 103 Rippowam fine sandy loam

Ridgebury Soils

This component occurs on upland drainageway and depression landforms. The parent material consists of lodgement till derived from granite, schist, and gneiss. The slope ranges from 0 to 5 percent and the runoff class is very low. The depth to a restrictive feature is 20 to 30 inches to densic material. The drainage class is poorly drained.

Leicester Soils

This component occurs on upland drainageway and depression landforms. The parent material consists of melt-out till derived from granite, schist, and gneiss. The slope ranges from 0 to 5 percent and the runoff class is very low. The depth to a restrictive feature is greater than 60 inches. The drainage class is poorly drained.

Whitman Soils

This component occurs on upland drainageway and depression landforms. The parent material consists of lodgement till derived from gneiss, schist, and granite. The slope ranges from 0 to 2 percent and the runoff class is very low. The depth to a restrictive feature is 12 to 20 inches to densic material. The drainage class is very poorly drained.

Rippowam soils

This component occurs on depression and flood plain landforms. The parent material consists of alluvium. The slope ranges from 0 to 3 percent and the runoff class is very low. The depth to a restrictive feature is greater than 60 inches. The drainage class is poorly drained.

The non-wetland soils were not examined in detail, except as was necessary to determine the presence or absence of wetlands.

Non-wetland Soils

46C Woodbridge fine sandy loam, 8 to 15 percent slopes, very stony

84B Paxton and Montauk fine sandy loams, 3 to 8 percent slopes

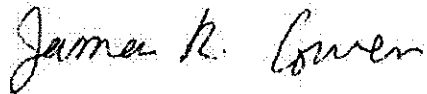
The Woodbridge soil is on drumlins on uplands, hills on uplands. Slopes are 2 to 15 percent. The parent material consists of coarse-loamy lodgment till derived from granite and/or schist and/or gneiss. Depth to a root restrictive layer, densic material, is 20 to 40 inches. The natural drainage class is moderately well drained.

Sutton soils

The Paxton component is on drumlins on uplands, hills on uplands, till plains on uplands. Slopes are 3 to 8 percent. The parent material consists of coarse-loamy lodgment till derived from granite and/or schist and/or gneiss. Depth to a root restrictive layer, densic material, is 20 to 40 inches. The natural drainage class is well drained.

The Montauk is on drumlins on uplands, hills on uplands. Slopes are 3 to 8 percent. The parent material consists of coarse-loamy lodgment till derived from granite and/or coarse-loamy lodgment till derived from gneiss and/or coarse-loamy lodgment till derived from gneiss and/or coarse-loamy lodgment till derived from granite. Depth to a root restrictive layer, densic material, is 20 to 38 inches. The natural drainage class is well drained.

Respectfully submitted,



submitted electronically

James R. Cowen
Registered Soil Scientist
Certified Professional Wetland Scientist