



JOSEPH R. THEROUX

~ CERTIFIED FORESTER/ SOIL SCIENTIST ~
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FORESTRY SERVICES ~ WETLAND IMPACT ASSESSMENTS
WETLAND DELINEATIONS AND PERMITTING ~ E&S/SITE MONITORING
WETLAND FUNCTION/VALUE ASSESSMENTS

3/22/2022

MR. JIM BERNARDO
BERNARDO SURVEYING LLC
102-A SPITHEAD RD.
WATERFORD, CT. 06385

RE: WETLAND DELINEATION, 69 FITCH HILL ROAD, MONTVILLE, CT.

DEAR MR. BERNARDO,

AT YOUR REQUEST I HAVE DELINEATED THE INLAND WETLANDS AND WATERCOURSES ON THE ABOVE REFERENCED PROPERTY.

THESE WETLANDS HAVE BEEN DELINEATED IN ACCORDANCE WITH THE STANDARDS OF THE NATIONAL COOPERATIVE SOIL SURVEY AND THE DEFINITIONS OF WETLANDS AND WATERCOURSES AS FOUND IN THE CONNECTICUT STATUTES, CHAPTER 440, SECTION 22A-38.

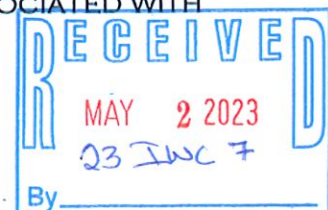
FLUORESCENT PINK FLAGS WITH A CORRESPONDING LOCATION NUMBER DELINEATE THE BOUNDARY OF THE INLAND WETLANDS.

FLAG SERIES WF- 1 THROUGH WF-187 DELINEATE THE HIGH-WATER MARK OF TRADING COVE BROOK, IT'S ADJACENT FLOODPLAIN AND ALLUVIAL SOILS, PALUSTRINE FORESTED & SCRUB-SHRUB INLAND WETLANDS AND ASSOCIATED INTERMITTENT WATERCOURSES.

IN NUMEROUS AREAS ALONG THE DELINEATION LINE HISTORIC EXCAVATIONS DOWN TO OR NEAR THE WATER TABLE ADJACENT TO THE INLAND WETLANDS HAVE FORMED HYDRIC SOIL CONDITIONS. THIS IS DUE TO THE PROLONGED WETNESS FOUND FROM THE SEASONALLY HIGH/PERCHED WATER TABLES IN THESE AREAS.

THESE WETLAND SOILS ARE CHARACTERIZED BY SHALLOW REDOXIMORPHIC FEATURES AND LOW CHROMA COLORS WITHIN 20 INCHES OF THE SOIL SURFACE.

THIS WETLAND COMPLEX EXTENDS FROM THE NORTHEASTERN PROPERTY CORNER, TO THE SOUTHWEST ALONG THE WESTERN PROPERTY BOUNDARY WHERE IT TERMINATES IN THE SOUTHWEST CORNER OF THE PARCEL. IN THIS AREA STORMWATER DISCHARGES FROM THE DRAINAGE SYSTEM ASSOCIATED WITH



LEFFINGWELL ROAD AND FITCH HILL ROAD ADD TO THE HYDROLOGY OF THE WETLANDS.

IT SHOULD BE NOTED THAT IN THE AREA OF WETLAND FLAGS WF-1 17 THROUGH WF-1 27, RECENT GRADING/EXCAVATION ACTIVITY HAS ENCROACHED INTO THE WETLANDS WHERE HISTORIC EXCAVATION, GRADING AND FILLING HAD PREVIOUSLY OCCURRED.

ATTACHED IS AN AERIAL PHOTO TAKEN IN 1990 THAT DEPICTS THE PROPERTY AND THE EXTENT OF THE AREAS WHERE GRAVEL WAS REMOVED, AND INTRUSIONS INTO THE WESTERN WETLAND COMPLEX OCCURRED. THIS IS EVIDENCED BY THE DISCOVERY OF VARIOUS FILL MATERIALS IN LARGE MOUNDS, EXCAVATED DEPRESSIONS IN THE WETLANDS AND BURIED ORGANIC "A" HORIZONS.

UNDOUBTEDLY, THESE HISTORIC DISTURBANCES ALSO OCCURRED PRIOR TO 1990, AS THE ATTACHED NRCS SOILS MAP DEPICTS THE MAJORITY OF THE SITE, INCLUDING THE WETLANDS AS UDORTHENTS-URBAN LAND COMPLEX, WHICH ARE DISTURBED, EXCAVATED OR FILLED SOIL COMPLEXES.

WETLAND FLAGS WF-1 A THROUGH 85A, WF 1 B THROUGH WF-1 3 B, WF-1 C THROUGH WF-1 6C AND WF-1 D THROUGH WF4D DELINEATE HYDRIC SOILS FOUND IN HISTORIC EXCAVATIONS AND GRADING INTO OR NEAR THE SEASONAL WATER TABLE IN THE CENTRAL PORTION OF THE PROPERTY.

TECHNICALLY THESE INLAND WETLANDS WOULD BE CLASSIFIED AS EMERGENT AND SCRUB-SHRUB WETLANDS.

THESE HYDRIC SOIL CONDITIONS HAVE FORMED DUE TO THE PROLONGED WETNESS FOUND FROM THE SEASONALLY HIGH/PERCHED WATER TABLES IN THESE AREAS.

THESE WETLAND SOILS ARE CHARACTERIZED BY SHALLOW REDOXIMORPHIC FEATURES AND LOW CHROMA COLORS WITHIN 20 INCHES OF THE SOIL SURFACE.

IN CONCLUSION, IF YOU HAVE ANY QUESTIONS CONCERNING THE DELINEATION OR THIS REPORT, PLEASE FEEL FREE TO CONTACT ME.

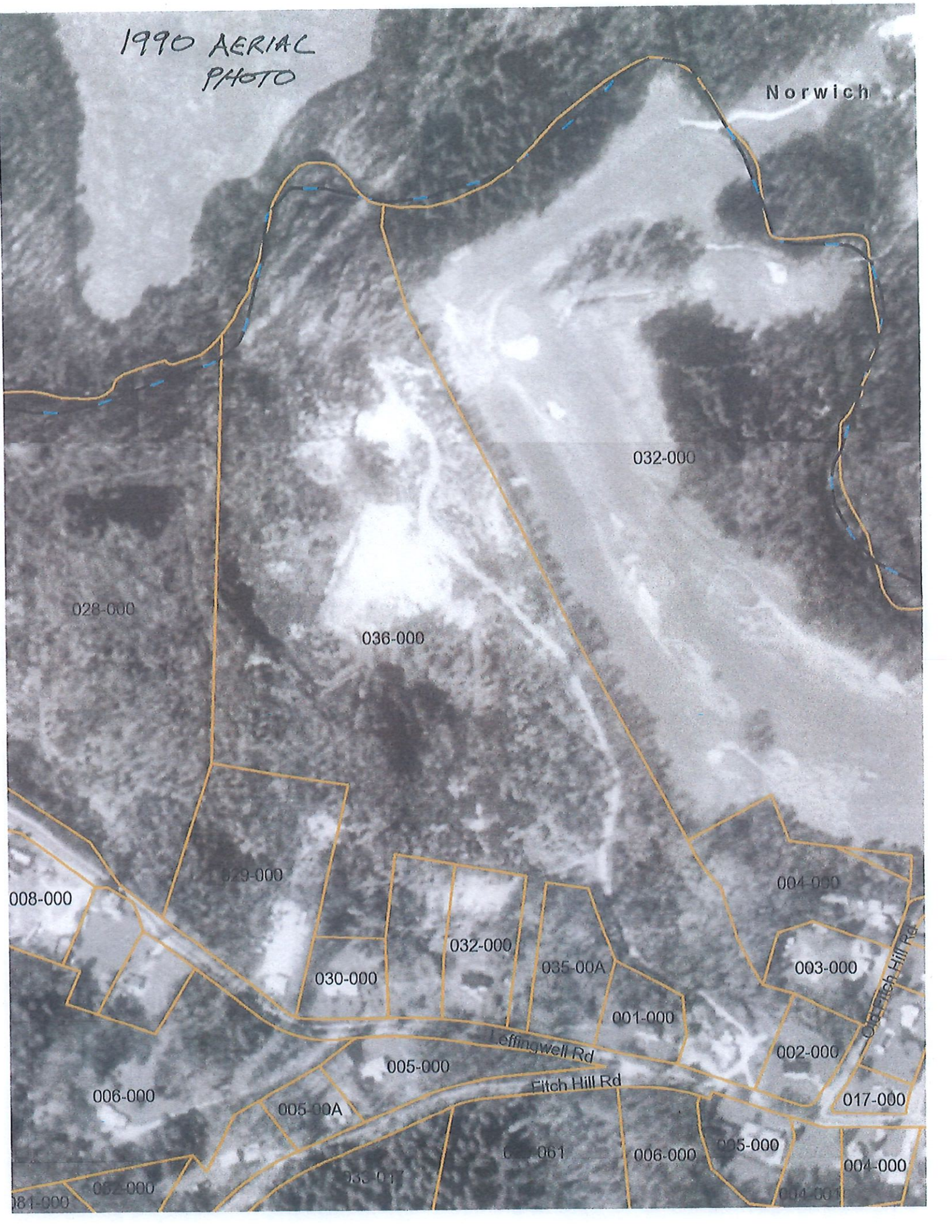
THANK YOU,

Joseph R. Theroux

JOSEPH R. THEROUX
CERTIFIED SOIL SCIENTIST
MEMBER SSSSNE, NSCSS, SSSA.

1990 AERIAL
PHOTO

Norwich



028-000

032-000

036-000

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Leffingwell Rd

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Fitch Hill Rd

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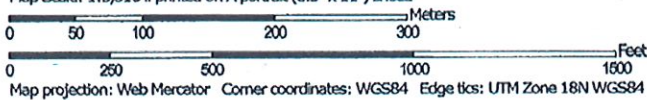
Old Fitch Hill Rd

Soil Map—State of Connecticut
(69 Fitch Hill Rd. Soils Map)




Soil Map may not be valid at this scale.

Map Scale: 1:5,310 if printed on A portrait (8.5" x 11") sheet.



MAP LEGEND

 Area of Interest (AOI)	 Spoil Area
 Soils	 Stony Spot
 Soil Map Unit Polygons	 Very Stony Spot
 Soil Map Unit Lines	 Wet Spot
 Soil Map Unit Points	 Other
 Special Point Features	 Special Line Features
 Blowout	 Water Features
 Borrow Pit	 Streams and Canals
 Clay Spot	 Transportation
 Closed Depression	 Rails
 Gravel Pit	 Interstate Highways
 Gravelly Spot	 US Routes
 Landfill	 Major Roads
 Lava Flow	 Local Roads
 Marsh or swamp	 Background
 Mine or Quarry	 Aerial Photography
 Miscellaneous Water	
 Perennial Water	
 Rock Outcrop	
 Saline Spot	
 Sandy Spot	
 Severely Eroded Spot	
 Sinkhole	
 Slide or Slip	
 Sodic Spot	

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
34B	Merrimac fine sandy loam, 3 to 8 percent slopes	2.0	3.0%
38C	Hinckley loamy sand, 3 to 15 percent slopes	11.8	18.2%
38E	Hinckley loamy sand, 15 to 45 percent slopes	6.7	10.3%
62D	Canton and Charlton fine sandy loams, 15 to 35 percent slopes, extremely stony	0.0	0.0%
103	Rippowam fine sandy loam	3.5	5.3%
306	Udorthents-Urban land complex	40.9	62.9%
703B	Haven silt loam, 3 to 8 percent slopes	0.2	0.3%
Totals for Area of Interest		65.0	100.0%