



May 2, 2022

Mr. Mark DiLungo
The Bluffs, LLC
c/o DFG Electric, Inc.
218 Foxon Road
East Haven, CT 06513

**Re: Wetland and Watercourse Delineation - The Bluffs
161 Foxon Road (Route 80) and 31 and 100 Sperry Lane
East Haven, Connecticut
SLR #141.15956.00001**

Dear Mr. DiLungo,

At your request, on April 28, 2022, Megan Raymond, registered soil scientist and professional wetland scientist of SLR International Corporation (SLR), visited the approximately 51-acre subject property located at the former Camp Murray Girl Scouts camp on Sperry Lane, approximately 300 feet north of Foxon Road (Route 80) in East Haven, Connecticut (Figure 1). The purpose of the site investigation was to determine the presence or absence of wetlands and/or watercourses and delineate boundaries of wetlands and watercourses, as defined by local, state, and federal statutes. In summary, one watercourse system was delineated consisting of a freshwater pond, three intermittent watercourse reaches, and one vernal watercourse that drain south through the central portion of the site.

The subject site, located within a moderately developed residential, commercial, and open-space region of northern East Haven, is accessed to the north from Sperry Lane, a private, dead-end road that extends approximately 0.5 mile north from Foxon Road (Route 80). The site consists of three parcels: the central parcel (31 Sperry Lane) covers approximately 45 acres and is abutted to the southwest by an approximately 5-acre parcel (100 Sperry Lane) and to the south by a narrow, approximately 1-acre parcel (161 Foxon Road) that extends 500 feet to Foxon Road. The site is bounded by undeveloped forested land to the north and east, and by single-family residences to the south along Foxon Road. East Haven High School abuts the site to the northwest.

The majority of the property is comprised of upland hardwood deciduous forested land, though an approximately 2-acre pond exists in the northeast. The property slopes generally from north to south, with elevations ranging from 230 feet near the northern site boundary to 70 feet along the southern boundary. Until 2014 the site existed as the Camp Murray Girl Scouts camp and features of this former use remain on site including cabins and outbuildings, an outdoor swimming pool complex, and several unimproved roads. The site has been unmaintained over recent years. Invasive species including Japanese barberry (*Berberis thunbergii*), multiflora rose (*Rosa multiflora*), wineberry (*Rubus phoenicolasius*), and oriental bittersweet (*Celastrus orbiculatus*) are replete on site, as are fallen mature trees remnant of a high-intensity storm system, which caused considerable damage in summer 2020.

The subject site is located within the central portion of the 25.6 square mile Farm River watershed, which extends from southwest Durham to southern East Haven. Located approximately 0.25 mile south of the subject site, the Farm River flows approximately 6.5 miles southwest to drain to Long Island Sound. No Federal Emergency Management Agency (FEMA) floodplains or special flood hazard areas exist on site.

On the day of the site investigation, weather conditions were overcast with an air temperature of approximately 50°F.

Soils were examined using a Dutch auger. Geospatial data was accessed via the United States Department of Agriculture – Natural Resources Conservation Service (USDA-NRCS) web soil survey mapping. The soil survey mapping is appended (Figure 2). The survey identifies the following soil mapping unit with associated NRCS map number in the project area:

- Branford silt loam (30B) – well drained
- ~~Cheshire fine sandy loam (33D) – well drained~~
- Cheshire-Holyoke complex (77C) – well drained
- Holyoke-Rock outcrop complex (78) – well drained
- Wethersfield loam (89C) – well drained

The site investigation revealed much of the site to contain well drained, upland soils in concurrence with the NRCS soil mapping. A small vernal watercourse system was identified and delineated within the central portion of the site containing early formation hydric soils. Sequentially numbered blue flags delineating the boundary of wetland and watercourse resources were attached to sturdy vegetation within the study area and the locations were recorded using a handheld Global Positioning System (GPS) unit with submeter accuracy. The flag locations and numbers are depicted on the attached wetlands and watercourses map, Figure 3, and described further below.

The 2-acre pond was delineated on site in 2017 by SLR and the boundary presented on Figure 3 is derived from this earlier investigation. Wetlands and watercourses delineated during the April 28, 2022, survey include three intermittent watercourse (IWC) reaches and one vernal watercourse. While discontinuous, these features are connected through a combination of diffuse and channelized overland flow forming an approximately 900-linear-foot drainage course from the southern outlet of the pond to the cross culvert on Sperry Lane. South of the northernmost IWC segment, the drainage corridor is bisected by a dirt road crossing, which lacks any formal water diversion infrastructure. Therefore, seasonal flows flood the roadway as water continues to drain toward the central IWC segment and vernal watercourse feature to the south.

The vernal watercourse delineated on site is represented by wetland flags 1a through 5a. The approximately 1,500-square-foot depression feature extends approximately 175 linear feet across and contained 12 to 24 inches of standing water on the day of the site investigation. This feature is hydrologically connected to the pond and is fed by an Intermittent watercourse to the north and groundwater discharge, and outlets to a rill at its southern boundary. Though soils within this feature are not poorly drained, very poorly drained, alluvial or floodplain, the morphology of the depression and its



connection to ephemeral lotic surface water warrant protection as a vernal watercourse under the Connecticut Inland Wetlands and Watercourses Act. No evidence of vernal pool breeding was observed within the depression. As of the December 2021 Natural Diversity Data Base (NDDB) mapping, no habitat for state listed species is mapped on site, although an NDDB polygon exists just off site to the southeast, associated with the Farm River.

Thank you for the opportunity to assist you. If there are any questions regarding this report or the regulated resources on this site, I may be reached at (203) 344-7889 or mraymond@slrconsulting.com.

Sincerely,

SLR International Corporation

A handwritten signature in black ink, appearing to read "Megan B. Raymond".

Megan B. Raymond, MS, PWS, CFM
Principal Scientist, Wetlands & Waterways Lead

Attachments: Figures: Locus Map
Wetland Map
Soil Map
Photos

141.15956.00001.m222.ltr



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 Date Saved: 4/29/2022
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SLR
 195 CHURCH STREET
 7TH FLOOR
 NEW HAVEN, CT 06511
 203.344.7887

PROJECT LOCATION
 THE BLUFFS MULTIFAMILY ELDERLY HOUSING
 THE BLUFFS, LLC
 31 AND 100 SPERRY LANE AND 161 FOXON ROAD
 EAST HAVEN, CONNECTICUT

SCALE 1" = 1,000' DATE 4/29/2022 PROJ. NO. 141.15956.00001	
FIG. 1	

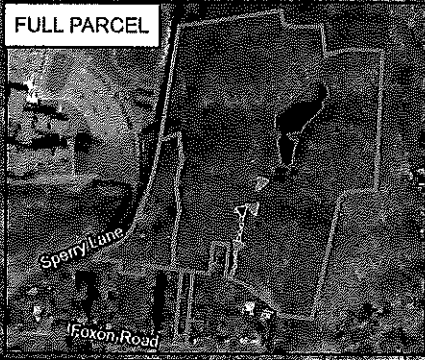
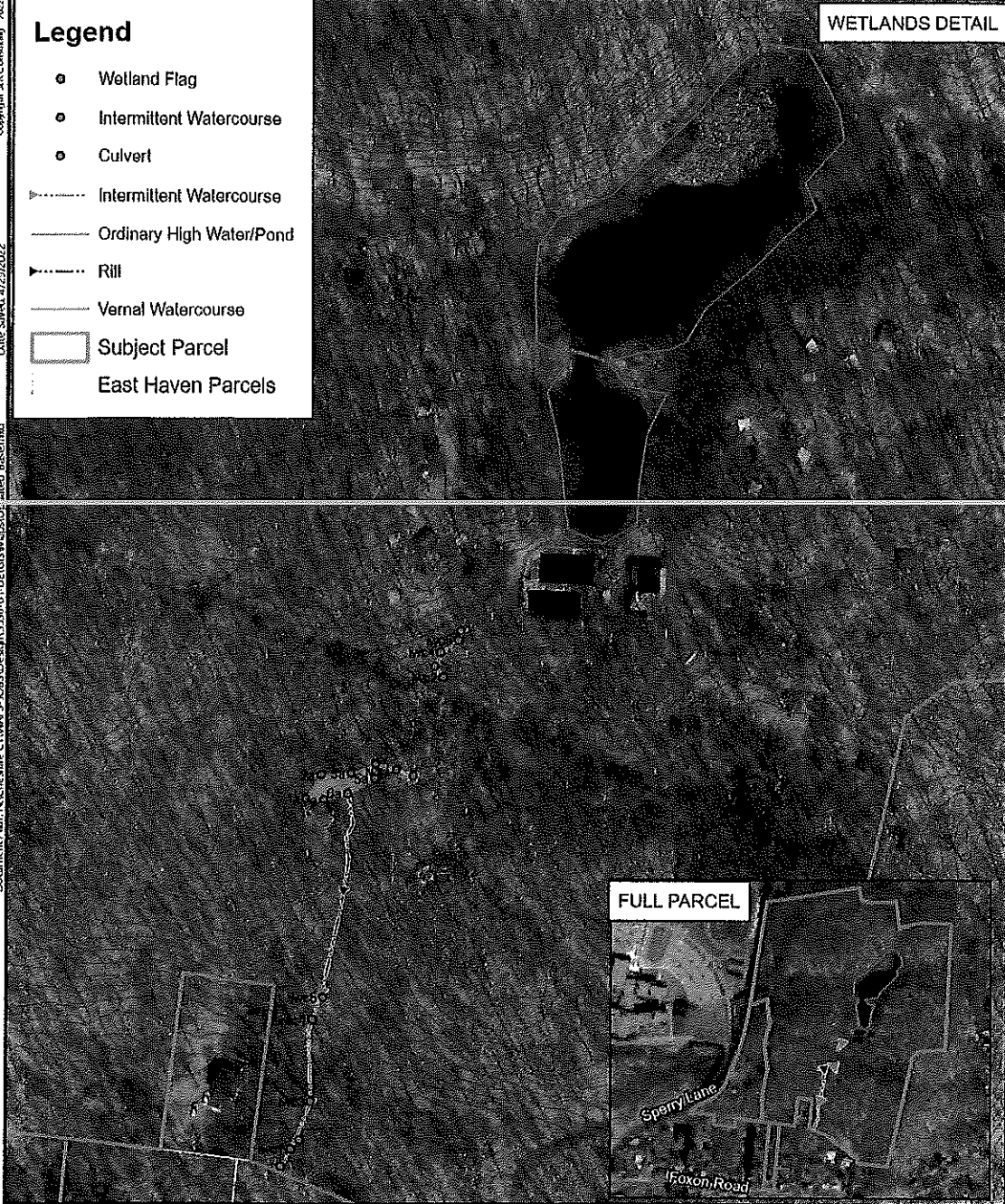
Copyright: JBC Consulting 2022
Date: Sheet 4/29/2022

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Legend

- Wetland Flag
- Intermittent Watercourse
- Culvert
- Intermittent Watercourse
- Ordinary High Water/Pond
- Rill
- Vernal Watercourse
- Subject Parcel
- East Haven Parcels

WETLANDS DETAIL



195 CHURCH STREET
7TH FLOOR
NEW HAVEN, CT 06511
203.344.7887

WETLANDS AND WATERCOURSES

THE BLUFFS MULTIFAMILY ELDERLY HOUSING
THE BLUFFS, LLC
31 AND 100 SPERRY LANE AND 161 FOXON ROAD
EAST HAVEN, CONNECTICUT



SCALE 1" = 150'

DATE 4/29/2022

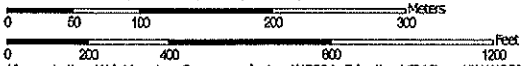
141.15956.00001
PROJ. NO.

FIG. 2

Soil Map—State of Connecticut
(Sperry Lane)







































Map Scale: 1:4,360 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge ticks: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)	 Spoil Area
 Area of Interest (AOI)	 Stony Spot
Soils	 Very Stony Spot
 Soil Map Unit Polygons	 Wet Spot
 Soil Map Unit Lines	 Other
 Soil Map Unit Points	 Special Line Features
Special Point Features	Water Features
 Blowout	 Streams and Canals
 Borrow Pit	Transportation
 Clay Spot	 Rails
 Closed Depression	 Interstate Highways
 Gravel Pit	 US Routes
 Gravelly Spot	 Major Roads
 Landfill	 Local Roads
 Lava Flow	Background
 Marsh or swamp	 Aerial Photography
 Mine or Quarry	
 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 21, Sep 7, 2021

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

Date(s) aerial images were photographed: Data not available.

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
30B	Branford silt loam, 3 to 8 percent slopes	1.2	2.3%
63B	Cheshire fine sandy loam, 3 to 8 percent slopes	2.2	4.3%
77C	Cheshire-Holyoke complex, 3 to 15 percent slopes, very rocky	10.9	21.5%
78C	Holyoke-Rock outcrop complex, 3 to 15 percent slopes	3.4	6.7%
78E	Holyoke-Rock outcrop complex, 15 to 45 percent slopes	32.8	64.7%
89C	Wethersfield loam, 3 to 15 percent slopes, extremely stony	0.2	0.4%
Totals for Area of Interest		50.8	100.0%

Client Name:
The Bluffs, LLC

Site Location:
31 and 100 Sperry Lane and 161 Foxon Road
East Haven, CT

Project No.
141.15956.00001

Photo No. Date:
1 4/28/2022

Direction Photo Taken:
Northwest

Description:
Vernal watercourse



Photo No. Date:
2 4/28/2022

Direction Photo Taken:
East

Description:
Seasonal hydrology



Client Name:
The Bluffs, LLC

Site Location:
31 and 100 Sperry Lane and 161 Foxon Road
East Haven, CT

Project No.
141.15956.00001

Photo No. Date:
3 4/28/2022

Direction Photo Taken:
North

Description:
Intermittent watercourse

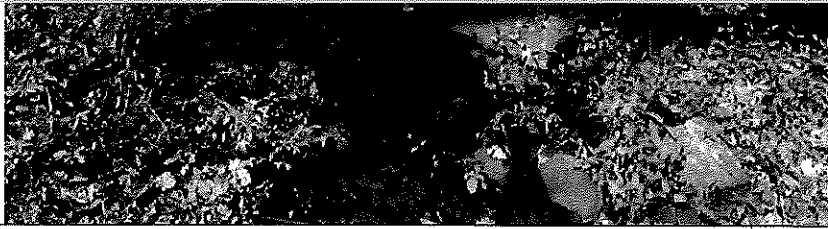


Photo No. Date:
4 4/28/2022

Direction Photo Taken:
North

Description:
Pond

