NORSE ENVIRONMENTAL SERVICES, INC.
92 Middlesex Road, Unit 4
Tyngsboro, MA 01879
TEL. (978) 649-9932 • FAX (978) 649-7582
Website: www.norseenvironmental.com

January 4, 2021

Sullivan Engineering Group
PO Box 2004
Woburn, Ma. 01888
Re: 357 Porter Street
Melrose, Ma. 02176

Sir;

Norse Environmental Services, Inc. delineated the wetland at the above site on 12/9/20. The wetland is a small oval shaped depression to the rear of the property marked in the field with blue ribbon and aluminum tags labeled 1A - 11A. It is vegetated with red maple (Acer rubrum), hemlock (Tsunga canadensis), gray dogwood (Cornus racemosa), glossy buckthorn (Rhamnus frangula) and sensitive fern (Onoclea sensibilis).

The wetland is an isolated pocket. It is shallow and holds standing water in some rainfall events. It would not be jurisdictional under 310 CMR 10.00 but is protected under the Melrose Wetland Ordinance.

The site is mapped by the NRCS as a Charlton-Urban land-Hollis complex. These are an ablation till, typically with areas of ledge nearby. This nearly level to rolling complex consists of very deep, well drained Charlton soils; areas of Urban land; and shallow, somewhat excessively drained Hollis soils on uplands. The soils and Urban land in this complex are so intermingled that it was not practical to map them separately. This complex is about 40 percent Charlton soils, 40 percent Urban land, 10 percent Hollis soils, and 10 percent other soils. Up to 2 percent of the surface is bedrock outcrop

No perennial streams are shown on the USGS mapping within 200' of the property. The FIRM map show no Bordering Land Subject to Flooding or the 100-year floodplain. No priority habitat is listed by the Natural Heritage Mapping. In addition, there are no certified or potential vernal pools located on the property.

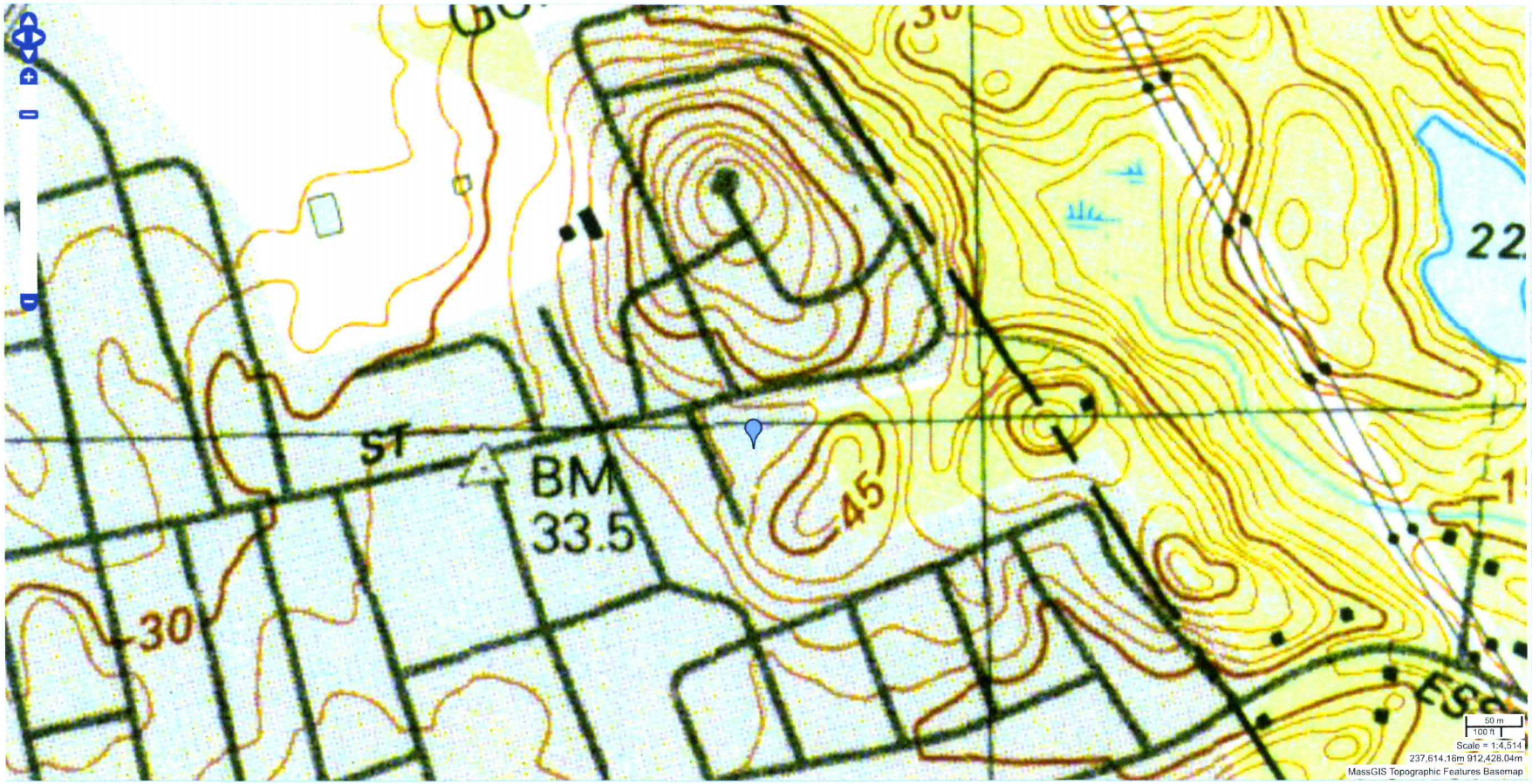
Enclosed are maps of the site. If you have any questions or concerns, please do not hesitate to call.

Sincerely,

Steven Eriksen

OLIVER: MassGIS's Online Mapping Tool Please take our user survey

357 PORTER STREET melrc Zoom to a town



Available Data Layers

Search data layers

- Census 2010
- Coastal and Marine Features
- Conservation / Recreation
- Cultural Resources
- Environmental Monitoring (testin
- Images
  - Elevation with Shaded Relief
  - Impervious Surface
  - Aerial Photos (Ortho Imagery
  - USGS Topographic Maps
    - USGS Quads Last Revise
    - USGS Topographic Maps
    - USGS Topographic Maps
    - USGS Historical Coastal T
  - Wind Speed

Active Data Layers

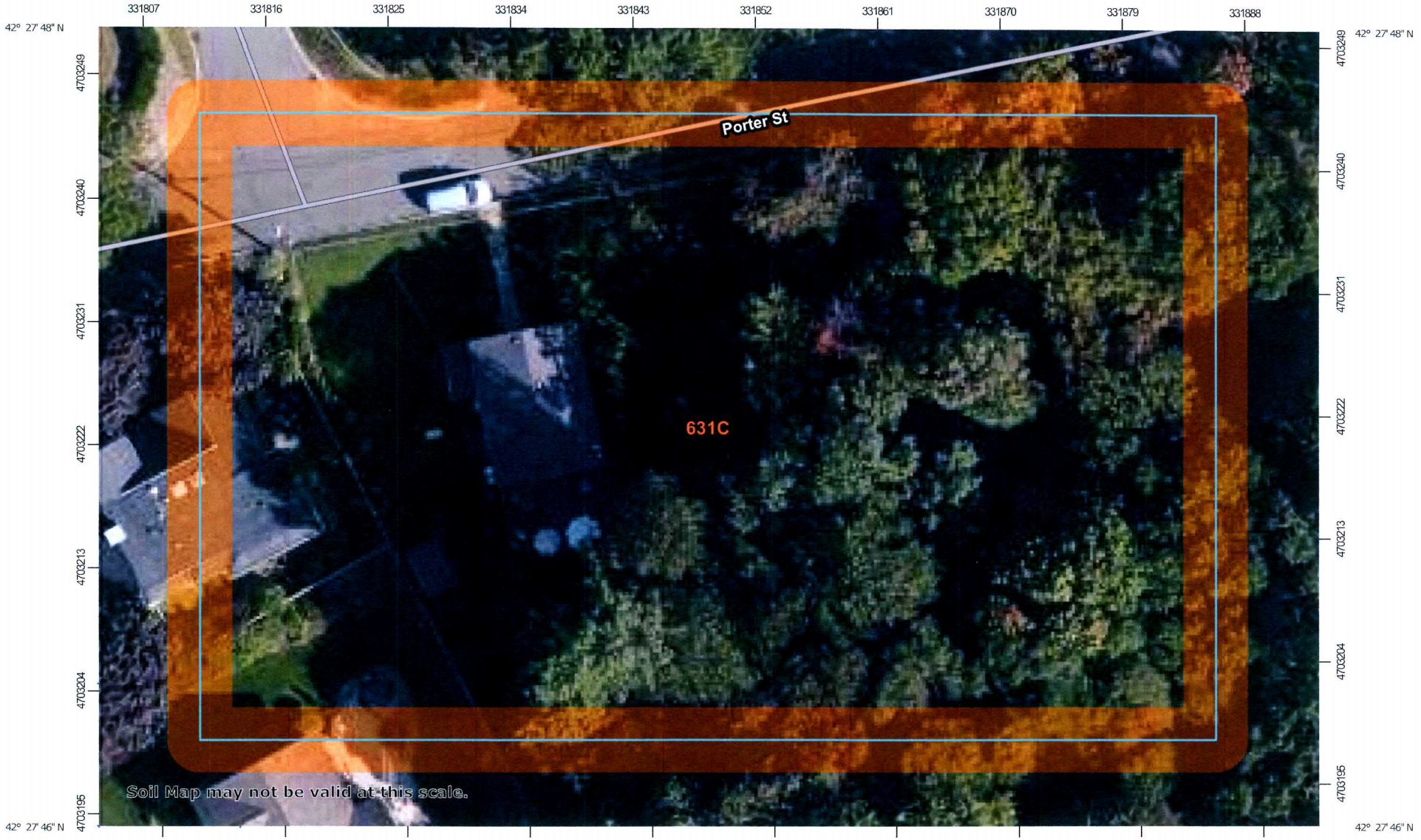
Check all Uncheck all

- USGS Topographic Maps
- Tax Parcels for Query
- Detailed Features
- Tax Parcels for Display
- Structures

Legend

Tax Parcels for Query

Soil Map—Middlesex County, Massachusetts
(357 Porter Street - Melrose)



Map Scale: 1:411 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 5 10 20 30

Feet
0 15 30 60 90

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
631C	Charlton-Urban land-Hollis complex, 3 to 15 percent slopes, rocky	0.8	100.0%
Totals for Area of Interest		**0.8**	**100.0%**

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 1:25,000.

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: Middlesex County, Massachusetts
Survey Area Data: Version 20, Jun 9, 2020

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

Date(s) aerial images were photographed: Sep 11, 2019—Oct 5, 2019

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.

National Flood Hazard Layer FIRMette

FEMA

71°3'2"W 42°28'N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

71°2'25"W 42°27'34"N

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone I*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represen an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 12/4/2020 at 10:10 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

OLIVER: MassGIS's Online Mapping Tool Please take our user survey

Available Data Layers

Search data layers

- Conservation / Recreation
  - Areas of Critical Environment
  - Community Preservation Act
  - Natural Heritage Data
    - BioMap2
    - NHESP Ecoregions
    - NHESP Certified Vernal P
    - NHESP Estimated Habitat
    - NHESP Natural Communi
    - NHESP Priority Habitats o
    - Potential Vernal Pools
  - Office of Fishing and Boating
  - Openspace
  - The Scenic Landscape Invent
  - Trails

Active Data Layers

Check all Uncheck all

- Potential Vernal Pools
- NHESP Priority Habitats o
- NHESP Estimated Habitat
- NHESP Certified Vernal P
- Tax Parcels for Query
- Detailed Features
- Tax Parcels for Display

Legend

Potential Vernal Pools

NHESP Priority Habitats of Rare Spec

NHESP Estimated Habitats of Rare W

NHESP Certified Vernal Pools

Tax Parcels for Query