JMM WETLAND CONSULTING SERVICES, LLC

23 Horseshoe Ridge Road
Newtown, CT 06482
Phone: 203-364-0345

REPORT DATE: September 8, 2020

ON-SITE SOIL INVESTIGATION REPORT

PROJECT NAME & SITE LOCATION:
Project Site
818 Sullivan Avenue
South Windsor, Connecticut

JMM Job No.: 20-2662-SWN-9
Field Investigation Date(s): 8/27/2020
Field Investigation Method(s):
- ☒ Spade and Auger
- ☐ Backhoe Test Pits
- ☐ Other:

REPORT PREPARED FOR:
Mr. Allan Borghesi
Borghesi Building & Engineering Co., Inc.
2155 East Main Street
Torrington, CT 06790

Field Conditions:
Weather: Rain, 70's
Soil Moisture: Moist
Snow Depth: N/A
Frost Depth: N/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 USDA-NRCS Web Soil Survey Maps
- ☐ Other:

Base Map Source: USDA-NRCS Web Soil Survey (attached)

Wetland Boundary Marker Series: JMM-1 to JMM-9

General Site Description/Comments: The site is located north of Sullivan Avenue, in South Windsor, CT. The site is currently comprised of an existing car wash facility, a residence, maintained lawn, landscaped areas, paved/gravel parking areas and drives, forested upland areas, and forested, wet maintained lawn, and wet meadow wetland areas (see Figure 1, attached). Specifically, JMM review a portion of the overall site for regulated wetlands at this time (JMM Study Area). The study area is located in the easternmost portion of the site and within approximately 100-feet from any proposed activities. The soil types within the study were found to be mainly disturbed throughout the upland areas and primarily undisturbed within the regulated wetland areas. The undisturbed soils are derived from glaciolacustrine (i.e., stratified sand, silt and clay) deposits. Any undisturbed upland soils were comprised of the moderately well drained Elmridge (28) soil series. The disturbed upland soils were mapped as the Udorthents-Urban Land (306) mapping complex. The undisturbed wetland soils were identified as the poorly to very poorly drained Scitico, Shaker, and Maybid (9) soil series complex. The regulated areas associated with the study area consist of a mix of wet maintained lawn and wet meadow communities located along the northern and eastern parts of the study area (JMM-#-series). Typical vegetation observed within the study area's regulated areas included such species as common elderberry, cattail, Joe-pye-weed, purple loosestrife, sedges, rushes, grasses, sensitive fern, goldenrods, and New York ironweed, to name a few.

DATE: 9/8/2020

ON-SITE SOIL INVESTIGATION REPORT (CONTINUED)

PROJECT NAME & SITE LOCATION: Project Site
818 Sullivan Avenue, South Windsor, CT

SOIL MAP UNITS

Wetland Soils

Scitico silt loam (9): This soil was formerly mapped in Connecticut as **Scantic**. The Scitico series consists of deep, poorly drained soils formed in silty and clayey glacial lacustrine sediments. They are in nearly level to gently sloping lowlands on glacial lacustrine or marine sediment terraces. Typically, these soils have a very dark grayish brown silt loam surface layer 6 inches thick. The subsoil from 6 to 24 inches is dark gray, mottled silty clay loam. The substratum from 24 to 60 inches is dark grayish brown, mottled, silty clay. Varved layers of silts and clays in the substratum often extend to very deep depths.

Shaker fine sandy loam (9). The Shaker series consists of deep, poorly drained soils formed in a coarse-loamy mantle over clayey lacustrine sediments. They are nearly level to moderately steeply sloping soils on glacial lacustrine terraces. Typically, these soils have a very dark grayish brown fine sandy loam surface layer 6 inches thick. The subsoil from 6 to 25 inches is light brownish gray, mottled sandy loam. The substratum from 25 to 60 inches is dark yellowish brown, mottled, silty clay. This soil was formerly mapped in Connecticut as **Swanton.**

Maybrid silt loam (9). The Maybid series consists of deep, very poorly drained soils formed in silty and clayey glacial lacustrine sediments. They are in level to depressional areas on old glacial lakebeds or marine sediment terraces. Typically, these soils have a very dark gray silt loam surface layer 6 inches thick. The subsoil from 6 to 20 inches is gray, mottled silty clay loam. The substratum from 20 to 60 inches is gray, mottled, silty clay. Varved layers of silts and clays in the substratum often extend to very deep depths. This soil was formerly mapped in Connecticut as **Biddeford.**

Upland Soils

Elmridge (28) very fine sandy loam. The Elmridge series consists of deep, moderately well drained soils formed in a coarse-loamy mantle over clayey lacustrine sediments derived mainly from Triassic rocks. They are nearly level to moderately steeply sloping soils on glacial lacustrine terraces. Typically, these soils have a very dark grayish brown fine sandy loam surface layer 6 inches thick. The subsoil from 6 to 25 inches is dark yellowish brown, mottled fine sandy loam. The substratum from 25 to 60 inches is olive brown, mottled, silty clay. This soil was formerly mapped in Connecticut as **Elmwood.**

Udorthents-Urban Land complex (306). 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-Urban Land* 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.

DATE: 9/8/2020

ON-SITE SOIL INVESTIGATION REPORT (CONTINUED)

PROJECT NAME & SITE LOCATION: Project Site
818 Sullivan Avenue, South Windsor, CT

SOIL MAP UNITS

See previous page

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). 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].

All wetland boundary lines established by the undersigned Soil Scientist are subject to change until officially adopted by, local, state, and federal regulatory agencies.

Respectfully submitted,

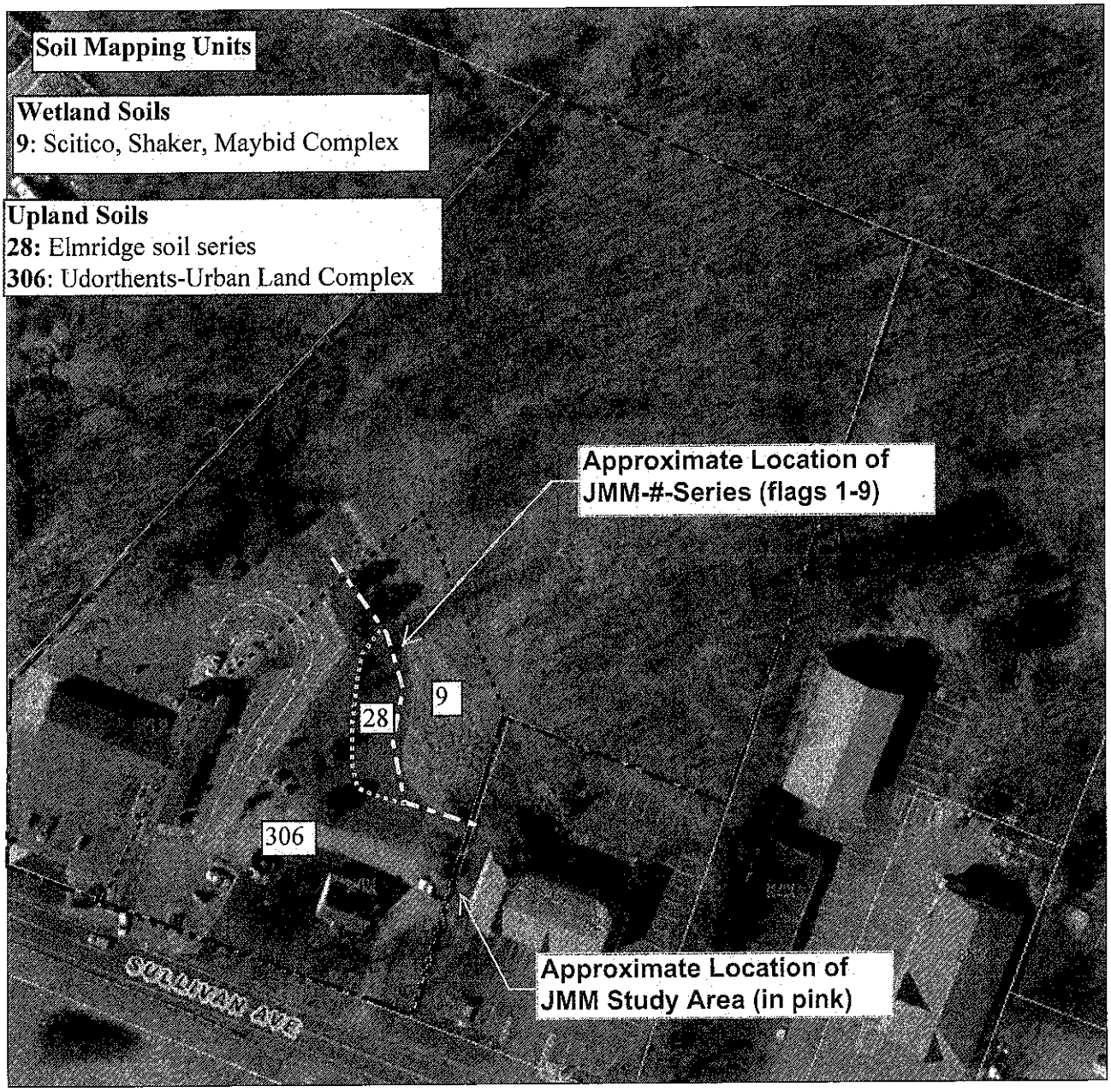
JMM WETLAND CONSULTING SERVICES, LLC

James M. McManus, MS, CPSS
Certified Professional Soil Scientist
Field Investigator/Reviewer

FIGURE 1: 818 Sullivan Avenue, South Windsor, CT
Town GIS Aerial Photo Showing the Approximate Location of Regulated Wetland, Soil Series, and Property Boundaries.

Town of South Windsor

Geographic Information System (GIS)



MAP DISCLAIMER - NOTICE OF LIABILITY

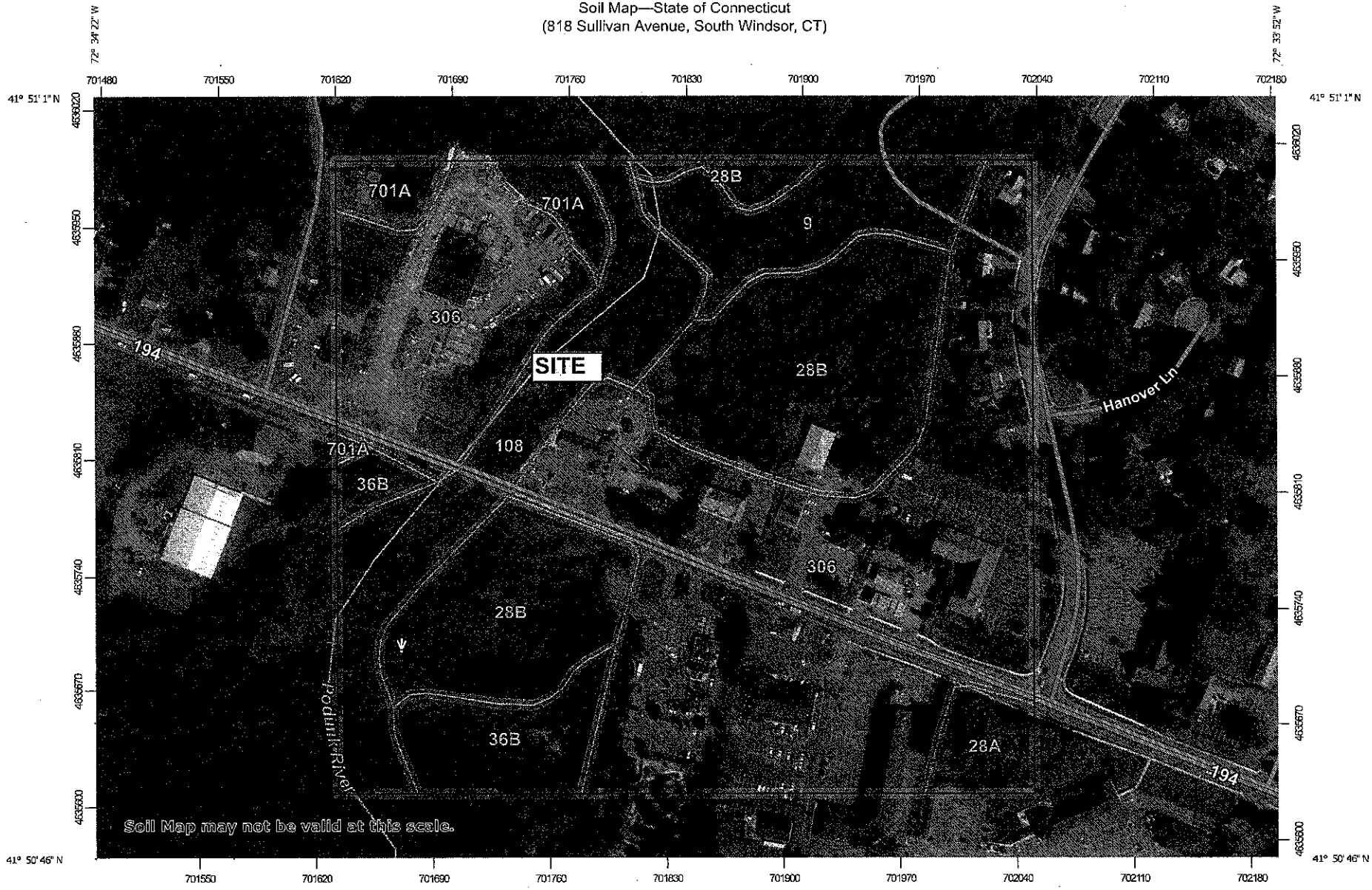
This map is for assessment purposes only. It is not for legal description or conveyances. All information is subject to verification by any user. The Town of South Windsor and its mapping contractors assume no legal responsibility for the information contained herein.

Approximate Scale: 1 inch = 100 feet

0 100 Feet

N W E S

Soil Map—State of Connecticut
(818 Sullivan Avenue, South Windsor, CT)



Map Scale: 1:3,240 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 45 90 180 270

Feet
0 150 300 600 900

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

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 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: Aug 24, 2019—Oct 24, 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.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
9	Scitico, Shaker, and Maybid soils	2.5	6.2%
28A	Elmridge fine sandy loam, 0 to 3 percent slopes	0.9	2.2%
28B	Elmridge fine sandy loam, 3 to 8 percent slopes	8.7	21.9%
36B	Windsor loamy sand, 3 to 8 percent slopes	2.1	5.4%
108	Saco silt loam	4.6	11.5%
306	Udorthents-Urban land complex	19.7	49.7%
701A	Ninigret fine sandy loam, 0 to 3 percent slopes	1.2	3.1%
Totals for Area of Interest		**39.6**	**100.0%**