WILLIAM KENNY ASSOCIATES
LANDSCAPE ARCHITECTURE ▪ ECOLOGICAL SERVICES

February 26, 2025

Mr. Sean Melisi, P.E.
Bridge Street Partners, LLC
8 Huntington Street
Suite 171
Shelton, CT 06484

Re: Wetland and Watercourse Delineation
804 Fountain Street & Wilbur Cross Parkway Right-of-Way, Woodbridge, Connecticut

Dear Mr. Melisi:

As requested, we visited the referenced properties and land within the adjacent CT DOT Wilbur Cross Parkway right-of-way to determine the presence or absence of wetlands and/or watercourses, to demarcate (flag) the boundaries of wetlands and watercourses identified, and to identify onsite soil types. This letter includes the methods and results of our investigation, which we completed January 24, 2025 and February 26, 2025. In summary, two inland wetland and watercourse systems were identified and delineated within the right-of-way. The first system, which is located in the western portion of the limit of investigation, is an intermittent watercourse that extends and flows from a culvert at the northernmost extent of the system and flows a short distance to another culvert which is located in the southeast. The majority of the system, however, extends and flows from south to north and combines with the first segment before exiting the property via a culvert, beneath the Wilbur Cross Parkway. The second system, which is located immediately south of 804 Fountain Street, is a woodland wetland. An apparent watercourse, Bishops Pond, is located west of the property.

Regulatory Definitions

The Inland Wetlands and Watercourses Act (Connecticut General Statutes §22a-38) defines inland wetlands as "land, including submerged land...which consists of any soil types designated as poorly drained, very poorly drained, alluvial, and floodplain." Watercourses are defined in the act as "rivers, streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs and all other bodies of water, natural or artificial, vernal or intermittent, public or private, which are contained within, flow through or border upon the state or any portion thereof." The Act defines Intermittent Watercourses as having a defined permanent channel and bank and the occurrence of two or more of the following characteristics: A) evidence of scour or deposits of recent alluvium or detritus, B) the presence of standing or flowing water for a duration longer than a particular storm incident, and C) the presence of hydrophytic vegetation.

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Methodology

A second order soil survey in accordance with the principles and practices noted in the USDA publication *Soil Survey Manual* (1993) was completed at the subject site. The classification system of the National Cooperative Soil Survey was used in this investigation. Soil map units identified at the project site generally correspond to those included in the *Soil Survey of the State of Connecticut* (USDA 2005).

Wetland determinations were completed based on the presence of poorly drained, very poorly drained, alluvial, or floodplain soils. Soil types were identified by observation of soil morphology (soil texture, color, structure, etc.). To observe the morphology of the property's soils, test pits and/or borings (maximum depth of two feet) were completed at the site.

Intermittent watercourse determinations were made based on the presence of a defined permanent channel and bank and the occurrence of two or more of the following characteristics: A) evidence of scour or deposits of recent alluvium or detritus, B) the presence of standing or flowing water for a duration longer than a particular storm incident, and C) the presence of hydrophytic vegetation.

Off-site wetland and watercourse determinations were based on observations made from the project site and public right-of-ways of offsite topography, vegetation and hydrological conditions and on a review of the *Soil Survey of the State of Connecticut* (USDA 2005) and Town wetland maps. Based on these observations, conclusions were made regarding the approximate location of off-site wetlands and watercourses.

Unless noted otherwise, onsite wetland boundaries were demarcated (flagged) with pink surveyor's tape (hung from vegetation) or small flags (on wire stakes) labeled "William Kenny Associates" that are generally spaced a maximum of every 50 feet. Complete boundaries are located along the lines that connect these sequentially numbered flags. The wetland boundaries are subject to change until adopted by local, state, or federal regulatory agencies.

Results

The approximate 8.0-acre project property includes 804 Fountain Street in Woodbridge, Connecticut and the adjacent CT DOT Wilbur Cross Parkway right-of-way. Fountain Street borders the northern boundary of the property and Wilbur Cross Parkway borders the eastern boundary. Property improvements include an abandoned and dilapidated single-family residence. Vegetative cover at the property is a broadleaved deciduous woodland.

Two inland wetland and watercourse systems were identified and delineated. The first system, which is located in the western portion of the limit of investigation, is an intermittent watercourse that extends and flows from a culvert at the northernmost extent of the system and flows a short distance to another culvert which is located in the southeast. The majority of the system, however, extends and flows from south to north and combines with the first segment before exiting the property via a culvert, beneath the Wilbur Cross Parkway. The second system, which is located immediately south of 804 Fountain Street, is a woodland wetland. An apparent watercourse, Bishops Pond, is located west of the property. Wetland soils are primarily poorly drained fine and formed from glacial till deposits or are forming from human altered deposits. The approximate locations of the systems are

shown on the attached map. The boundaries of the systems were marked at the site with flags numbered 1 to 61 and 70 to 80.

Five soil map units were identified on the property (two wetland and three upland). Each map unit represents a specific area on the landscape and consists of one or more soils for which the unit is named. Other soils (inclusions that are generally too small to be delineated separately) may account for 10 to 15 percent of each map unit. The mapped units are identified in the following table by name and symbol and typical characteristics (parent material, drainage class, high water table, depth to bedrock, and slope). These characteristics are generally the primary characteristics to be considered in land use planning and management. A description of each characteristic and their land use implications follows the table. A complete description of each soil map unit can be found in the *Soil Survey of the State of Connecticut* (USDA 2005), and at *https://soilseries.sc.egov.usda.gov/osdname.aspx.* On the days of the review, there was no soil frost and less than one inch of snow cover. The upland soil was moist and the wetland soil was wet to inundated. The sky was clear and air temperatures were ranged from 40's º F to 50's º F.

Map Unit		Parent Material	Slope (%)	Drainage Class	High Water Table			Depth To Bedrock (in)
Sym.	Name				Depth (ft)	Kind	Mos.	
	Upland Soil							
50	Sutton fine sandy loam	Loose Glacial Till	3-8	Moderately Well Drained	1.5-3.5	Apparent	Nov-Apr	>60
73	Charlton	Loose Glacial Till	0-50	Well Drained	>6.0	--	--	>60
	Chatfield Fine sandy loam	Loose Glacial Till	0-70	Well Drained	>6.0	--	--	20-40
75	Hollis-	Loose Glacial Till	0-5	Well Drained	>6.0	--	--	<20
	Chatfield Rock Outcrop	Loose Glacial Till	3-15	Well Drained	>6.0	--	--	20-40
	Wetland Soil							
1	Aquents	Excavated or Filled Soil (>2 feet)	0-3	Poorly Drained	0.0-1.5	Apparent	Nov-May	>60
3	Ridgebury	Compact Glacial Till	0-8	Poorly Drained	0.0-1.5	Perched	Nov-May	>60
	Leicester	Loose glacial Till	0-3	Poorly Drained	0.0-1.5	Apparent	Nov-May	>60
	Whitman extremely stony fine sandy loam	Compact Glacial Till	0-3	Very Poorly Drained	0.0-1.5	Perched	Sep-Jun	>60

Parent material is the unconsolidated organic and mineral material in which soil forms. Soil inherits characteristics, such as mineralogy and texture, from its parent material. Glacial till is unsorted, nonstratified glacial drift consisting of clay, silt, sand, and boulders transported and deposited by glacial ice. Glacial outwash consists of gravel, sand, and silt, which are commonly stratified and deposited by glacial melt water. Alluvium is material such as sand, silt, or clay, deposited on land by streams. Organic deposits consist of decomposed plant and animal parts.

A soil's texture affects the ease of digging, filling, and compacting and the permeability of a soil. Generally sand and gravel soils, such as outwash soils, have higher permeability rates than most glacial till soils. Soil permeability affects the cost to design and construct subsurface sanitary disposal facilities and, if too slow or too fast, may preclude their use. Outwash soils are generally excellent sources of natural aggregates (sand and gravel) suitable for commercial use, such as construction sub base material. Organic layers in soils can cause movement of structural footings. Compacted glacial till layers make excavating more difficult and may preclude the use of subsurface sanitary disposal systems or increase their design and construction costs if fill material is required.

Generally, soils with steeper slopes increase construction costs, increase the potential for erosion and sedimentation impacts, and reduce the feasibility of locating subsurface sanitary disposal facilities.

Drainage class refers to the frequency and duration of periods of soil saturation or partial saturation during soil formation. Seven classes of natural drainage classes exist. They range from excessively drained, where water is removed from the soil very rapidly, to very poorly drained, where water is removed so slowly that free water remains at or near the soil surface during most of the growing season. Soil drainage affects the type and growth of plants found in an area. When landscaping or gardening, drainage class information can be used to assure that proposed plants are adapted to existing drainage conditions or that necessary alterations to drainage conditions (irrigation or drainage systems) are provided to assure plant survival.

High water table is the highest level of a saturated zone in the soil in most years. The water table can affect the timing of excavations; the ease of excavating, constructing, and grading; and the supporting capacity of the soil. Shallow water tables may preclude the use of subsurface sanitary disposal systems or increase design and construction costs if fill material is required.

The depth to bedrock refers to the depth to fixed rock. Bedrock depth affects the ease and cost of construction, such as digging, filling, compacting, and planting. Shallow depth bedrock may preclude the use of subsurface sanitary disposal systems or increase design and construction costs if fill material is required.

Conclusions

Today, we investigated the properties at 804 Fountain Street in Woodbridge, Connecticut and adjacent CT DOT Wilbur Cross Parkway right-of-way and identified and delineated two inland wetland and watercourse systems. Thank you for the opportunity to assist you. If you should have any questions or comments, please do not hesitate to contact us.

Sincerely,

William L. Kenny, PWS, PLA
Soil Scientist

Enclosure

Ref. No. 5132

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SOIL LEGEND

UPLAND
50 *SUTTON FINE SANDY LOAM*
73 *CHARLTON-CHATFIELD COMPLEX*
75 *HOLLIS-CHATFIELD-ROCK OUTCROP COMPLEX*

WETLAND
1 *AQUENTS*
3 *RIDGEBURY, LEICESTER AND WHITMAN SOILS*

NOTES:
- *INFORMATION SHOWN ON THIS DRAWING, INCLUDING THE WETLAND BOUNDARY, IS APPROXIMATE. THE BOUNDARY IS NOT A SURVEYED REPRESENTATION OF WHAT WAS FIELD MARKED (FLAGGED).*
- *WETLAND AND SOIL INFORMATION PROVIDED BY WILLIAM KENNY ASSOC. OTHER INFORMATION TAKEN FROM A A CT ENVIRONMENTAL CONDITIONS ONLINE MAP.*
- ***50, 73, 75, 1*** *AND* ***3*** *ARE SOIL MAPPING UNIT SYMBOLS. SEE WETLAND DELINEATION REPORT FOR THE SOIL MAP UNIT NAMES AND ADDITIONAL RELATED INFORMATION.*

I CERTIFY THAT THIS WETLAND MAP SUBSTANTIALLY REPRESENTS THE SOILS AND WETLANDS MAPPED IN THE FIELD

WILLIAM L. KENNY, SOIL SCIENTIST

WETLAND & WATERCOURSE MAP

804 FOUNTAIN STREET
WOODBRIDGE, CONNECTICUT

SCALE: NOT TO SCALE
DATE: FEBRUARY 26, 2025

Ref. No. 5132

NORTH