



**Connecticut
Light & Power**

The Northeast Utilities System

**MUNICIPAL CONSULTATION FILING
Connecticut General Statutes Section 16-50I (e)**

FOR A

**CERTIFICATE OF ENVIRONMENTAL
COMPATIBILITY AND PUBLIC NEED**

FOR THE

Sherwood Substation

**6 New Creek Road
Westport, Connecticut**

September 2009

Submitted to:

**Town of Westport Chief Elected Official
Westport, Connecticut**

Submitted by:

**The Connecticut Light & Power Company
107 Selden Street
Berlin, CT 06037**

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A. SUMMARY DESCRIPTION AND LOCATION OF THE PROJECT

The Applicant, The Connecticut Light and Power Company (“CL&P”), seeks to construct a new bulk power 115-kilovolt (“kV”) to 13.8-kV substation (the “Sherwood Substation” or “Substation”) on CL&P property located at 6 New Creek Road in Westport, Connecticut (the “Property” or “Site”). The Sherwood Substation would improve reliability and add needed distribution delivery-system capacity to serve the growing electric power demands in the Greens Farms section and immediately adjacent portions of the southeast area of Westport. In addition, the Sherwood Substation would eliminate the need for temporary equipment now in use.

The current system configuration of existing substations will not meet the Town’s growing electric demand and future reliability needs. Currently, the electric load in town is being served on the distribution side from two substations in Westport and on the transmission side by three bulk power substations, two in Westport and one in Weston. Growing peak demands are straining the capacity of these substations. The addition of a new bulk power substation in Westport would create a more robust and reliable system that would serve the growing needs of the Town while effectively alleviating loads on the existing substations.

The Substation would be located on a 2.56-acre parcel (6 New Creek Road) identified by the Westport Assessor’s Office on Map G06, as Lot 5. The Property was acquired by CL&P in 2008 for the specific purpose of building a substation. The Property location is identified on a United States Geological Survey (“USGS”) and aerial photograph provided as Figure A-1 (*Site Location Map, USGS*) and Figure A-2 (*Site Location Map, Aerial*), respectively. The Property lies immediately south of existing overhead transmission circuits and active railroad in the southern portion of Westport and is currently occupied by a single-family dwelling.

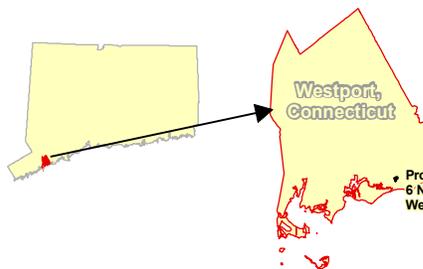
Figure A-1: Site Location Map, USGS



VHB Vanasse Hangen Brustlin, Inc.
Transportation Land Development Environmental Services



1,000 500 0 1,000
Feet



Proposed Substation Location
6 New Creek Road
Westport, Connecticut



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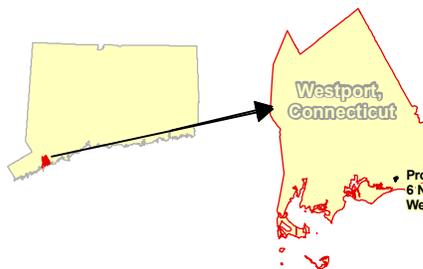
Figure A-2: Site Location Map, Aerial



VHB Vanasse Hangen Brustlin, Inc.
Transportation Land Development Environmental Services



150 75 0 150
Feet



Proposed Substation Location
6 New Creek Road
Westport, Connecticut



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B. PURPOSE OF THE APPLICATION

CL&P intends to apply to the Connecticut Siting Council (“CSC” or the “Council”) for a Certificate of Environmental Compatibility and Public Need (“Certificate”) for the Sherwood Substation project (the “Project”). The purpose of this Project is to increase electric distribution system capacity and improve reliability in the Town of Westport by establishing a new bulk-power substation in the Greens Farms section of town. The current system configuration of existing substations will not meet the Town’s growing electric demand and future reliability needs.

C. STATUTORY AUTHORITY FOR APPLICATION

Pursuant to the Public Utility Environmental Standards Act, Conn. Gen. Stat. § 16-50g et seq., CL&P has an obligation to consult with all municipalities in which the primary or alternative plans for a substation facility are proposed and all municipalities within 2,500 feet of the proposed Substation. The Substation is proposed to be located on the Property in the Town of Westport; the nearest neighboring municipality is the Town of Fairfield, located approximately 4,700 feet east of the Property.

Specifically, Conn. Gen. Stat. § 16-50l(e) requires that:

... at least sixty days prior to the filing of an application with the council, the applicant shall consult with the municipality in which the facility may be located and with any other municipality required to be served with a copy of the application under subdivision (1) of subsection (b) of this section concerning the proposed and alternative site locations of the facility.... Such consultation with the municipality shall include, but not be limited to good faith efforts to meet with the chief elected official of the municipality. At the time of the consultation, the applicant shall provide the chief elected official with any technical reports concerning the public need, the site selection process and the environmental effects of the proposed facility.

This Municipal Consultation Filing (“MCF”) provides information and technical reports concerning the need, site selection process, and potential environmental effects of the Sherwood Substation, as required by Conn. Gen. Stat. § 16-50l(e). The MCF process is designed to solicit public input to CL&P’s development of an application for a Certificate from the CSC. The MCF is a key initial step in the CSC’s comprehensive regulatory process that governs the siting of a substation. The goals of this municipal consultation process are to:

- Provide information about the Sherwood Substation to the Town of Westport; and
- Obtain input and feedback from the Town concerning the Substation.

The public can obtain information about the Sherwood Substation at the Town Hall offices and the Westport Public Library.

C.1 Municipal Participation During The Consultation Process

On many occasions over the past twelve months, CL&P has consulted with Town of Westport officials, including First Selectman Gordon F. Joseloff, regarding the electric service provided by CL&P to the Westport community and CL&P's desire to improve the reliability of that service. On April 12, 2009, CL&P officials also met with Mr. Joseloff, the Director of Planning and Zoning, Laurence Bradley, the Conservation Director, Alicia Mozian, and the Director of Public Works, Stephen Edwards. Based on the Town's growing need for additional electrical distribution capacity and to improve system reliability, CL&P determined that a new substation would be required in Westport. After evaluating several sites, CL&P considers the Property to be the most suitable.

As part of the State review process, Connecticut law provides a mechanism for input by certain town land use agencies on electric substation locations. Specifically, Conn. Gen. Stat. §16-50x(d) permits zoning commissions and inland wetland commissions to "regulate and restrict the proposed location" of such public utility facilities. CL&P filed "Location Review" submissions with the Westport Conservation Commission and the Planning and Zoning Commission (the "P&Z") on May 14, 2009.

At the request of the Town, a June 8, 2009 site walk was hosted by CL&P for Town staff and members of the P&Z and Conservation Commission to familiarize themselves with the Property and the proposed project. On June 9, 2009, the Town's Conservation Analyst, Lynne Krynicki, provided her written comments to CL&P. CL&P responded to these comments in a June 17, 2009 letter.

On June 11, 2009, CL&P gave a presentation to the P&Z at its regular meeting. At its next working session on June 25, 2009, the P&Z discussed and agreed upon its preliminary findings and subsequently provided a recommendations letter (dated June 26, 2009) to the Council. CL&P responded to the P&Z on September 23, 2009. CL&P similarly presented the Substation to the Conservation Commission on June 17, 2009. One member of the public spoke and asked questions. The Conservation Commission indicated that the minutes of their meeting would serve as its comments. CL&P responded to the Conservation Commission meeting minutes on September 23, 2009.

CL&P also met with the Westport Architectural Review Board (the “ARB”) on June 14, 2009 to present the Substation. The ARB expressed a preference for painting the control enclosures an earth tone color (either green or brown), incorporating dense, tall plantings into the site landscaping, and inclusion of a decorative gate at the Site entrance. Copies of correspondence between CL&P and the Town are included as Appendix A.

Conn. Gen. Stat. § 16-50l(e) requires a proponent to file an MCF with the affected municipality and outlines the duties and responsibilities of a municipality during the consultation period preceding the filing of an application for a Certificate by the proponent with the Council. Under § 16-50l(e), once the applicant submits the MCF:

[t]he municipality may conduct public hearings and meetings as it deems necessary for it to advise the applicant of its recommendations concerning the proposed facility. Within sixty days of the initial consultation, the municipality shall issue its recommendations to the applicant. No later than fifteen days after submitting an application to the council, the applicant shall provide to the council all materials provided to the municipality and a summary of the consultations with the municipality including all recommendations issued by the municipality.

CL&P is submitting this MCF for review and comment by the Town of Westport. The filing of the MCF with the Chief Elected Official of the municipality begins the required 60-day review process by the municipality. During the municipal consultation process, CL&P is seeking additional comments from representatives of the municipality and from the interested public for consideration; any such comments will be addressed in the CSC review process. This approach provides an opportunity for CL&P to address municipal concerns prior to submitting the formal application to the Council.

C.2 Public Outreach

CL&P sent out information by mail on May 19, 2009 to 28 residences in the vicinity to introduce the Substation. CL&P received a response from residents at 10 Clayton Street whose primary interest was additional screening of the temporary CL&P transformer at Sasco Creek Substation. This issue was subsequently resolved to the residents' satisfaction.

On June 9, 2009, CL&P presented the Substation to Greens Farms Academy. At the request of Greens Farms Academy, CL&P provided copies of preliminary landscaping concept plans and a digital video disc (DVD) discussing electric and magnetic fields. Greens Farms Academy also expressed interest in CL&P exploring pedestrian improvements to New Creek Road and its intersection with Maple Lane to provide for the enhanced safety of students using the nearby rail station for access to the school. CL&P is committed to resolving the Academy's concerns. CL&P also presented the Project to members of the Greens Farms Association on June 9, 2009.

C.3 Description of Filing Contents

This filing presents information concerning the Applicant, conditions at the Property and the Project, including:

- the Substation's location and design;
- the various alternatives considered to date and the process by which the proposed Site was identified;
- the need for construction and operation of the Substation; and
- its potential effects on the environment.

D. LEGAL NAME AND ADDRESS OF APPLICANT

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107 Selden Street
Berlin, CT 06037

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E. APPLICANT CONTACTS

Correspondence and other communications with regard to the Sherwood Substation should be addressed to, and notices, orders and other papers should be served upon, the following:

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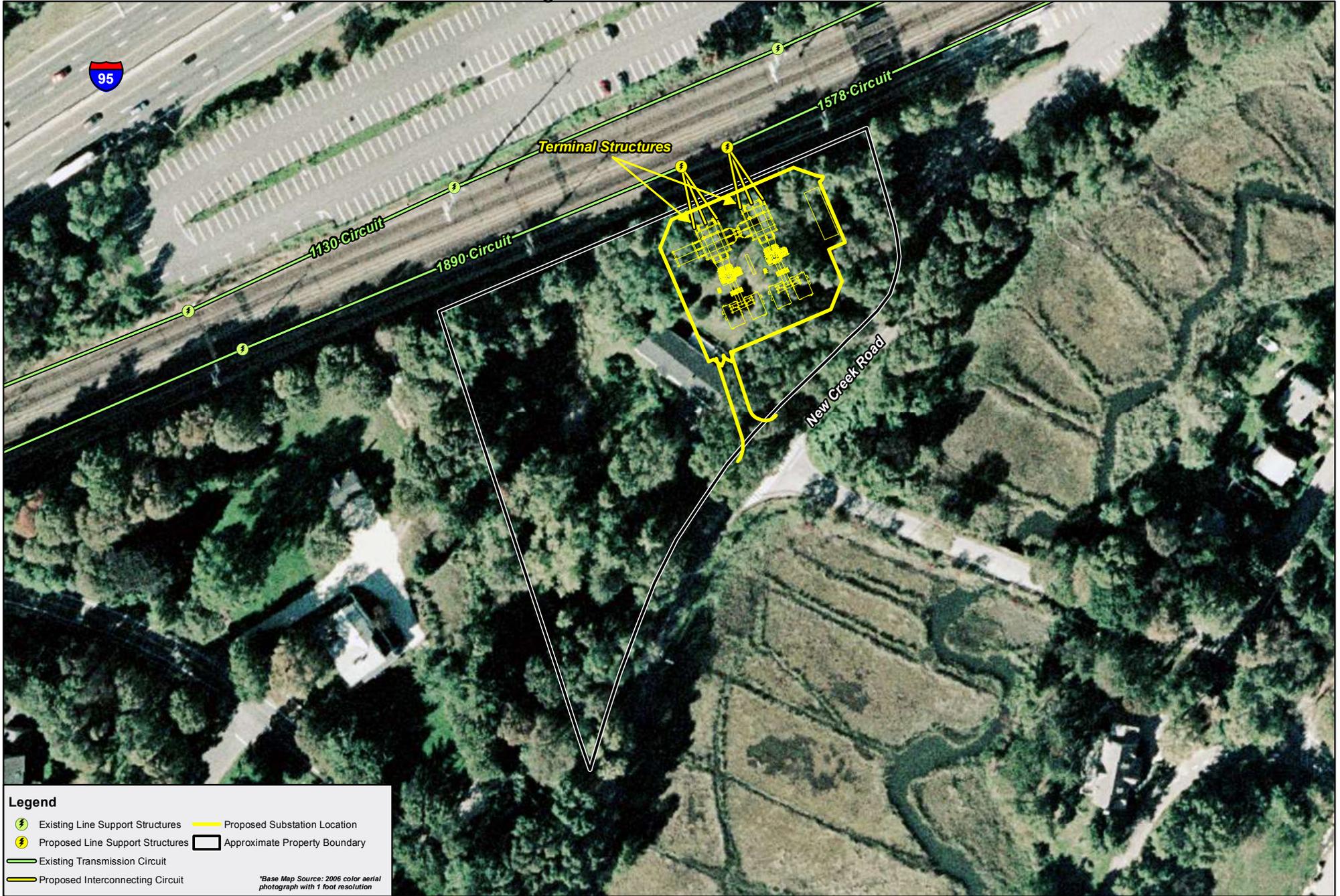
F. DESCRIPTION OF FACILITY

The Property was acquired in 2008 for the purpose of building a bulk power substation. The 2.56-acre Property consists of a residential house parcel located at 6 New Creek Road. The Property is identified by the Westport Assessor's Office on Map G06, as Lot 5.

The Substation would be accessible from New Creek Road and would be located to the south of the existing overhead transmission line and railroad corridor. Two 115-kV circuits (#1130 & #1890) exist within this corridor (see Figure F-1, *Substation Location*). The Substation would occupy an irregular shaped area of 20,610± square feet (measuring approximately 137 feet by 200 feet at its longest dimensions) to be covered with a trap rock surface and secured by a seven-foot high chain link fence topped with one foot of barbed wire (three strands). The Property would accommodate the construction and operation of the Substation while allowing adequate space for extensive landscaping.

At present, the 1130 and 1890 circuits are routed west to east with respect to the Property. The centerline of the 1890 circuit is approximately 23 feet to the north of the Property's northerly border and the centerline of the 1130 circuit is approximately 120 feet to the north of the Property's northerly border. The existing 1890 circuit would be rerouted into the Substation. The segment of the existing 1890 circuit to the east of the Property would be renamed the 1578 circuit; the remaining segment of the existing circuit to the west of the Property would remain the 1890 circuit.

Figure F-1: Substation Location



Legend

-  Existing Line Support Structures
-  Proposed Line Support Structures
-  Existing Transmission Circuit
-  Proposed Interconnecting Circuit
-  Proposed Substation Location
-  Approximate Property Boundary

*Base Map Source: 2006 color aerial photograph with 1 foot resolution



Connecting the Substation to the existing 1890 circuit requires the installation of two new steel monopoles, similar in size to those currently occupying the transmission line corridor. The interconnections between the Substation and the new transmission line poles would be accomplished by installing two new line-terminal structures (approximately 50 feet in height) within the Substation. The Substation would also be outfitted with a circuit breaker, seven disconnect switches, five circuit switchers and two 60-Megavolt-Ampere (MVA) power transformers which would step down the voltage from 115 kV to 13.8 kV. A third transformer position would be provided to accommodate a temporary, mobile transformer for emergency conditions. Four metal switchgear enclosures, each approximately 21 feet long, 14 feet wide and 14 feet high would be installed to provide the switching equipment, relaying and control equipment as well as the battery and charger associated with the distribution equipment. In addition to the switchgear enclosures, a metal control enclosure, approximately 48 feet long by 14 feet wide by 14 feet high, would be installed at the east end of the Substation. This enclosure would be designed to house the protective relaying and control equipment as well as the battery and charger associated with the transmission equipment. A new, approximately 15-foot wide access drive originating from New Creek Road to the Substation would be established east of the existing driveway. The existing residential driveway would be eliminated and associated pavement removed. The existing residence located on the Property would also be removed as part of the Project.

Technical specifications and related information are presented in Appendix B (*Site Plan Drawings*).

Development of the Substation requires protective relay system changes within the existing control enclosures at Norwalk Harbor, Glenbrook, and Sasco Creek Substations. These upgrades are required for the safe and proper operation of the Substation.

F.1 Estimated Cost of the Project

The estimated cost for the siting, design, and construction of the Substation and supporting infrastructure is approximately \$18,500,000.

F.2 Facility Service Life

The Substation equipment and supporting infrastructure would have a service life of approximately 40 years and would be capable of capacity increases during this time.

G. NEED FOR FACILITY

The purpose of the Project is to increase electric distribution system capacity and improve reliability in the Town of Westport by establishing a new bulk power substation in the New Creek Road and Greens Farms Road area. The Sherwood Substation would not only replace CL&P's existing Greens Farms Substation and the temporary Sasco Creek Substation transformer, while providing new capacity for future demand, but also strengthen the reliability of the entire electric distribution system in Westport by providing a source of electricity in closer proximity to the load, decreasing feeder lengths and utilizing new state-of-the-art equipment.

Currently, the electric load in Westport is being served from two small distribution substations in Westport, and three bulk power substations, two in Westport and one in Weston. The two small distribution substations receive power at 27.6 kV via distribution feeders and supply electricity to Westport customers at 13.8 kV. The three bulk power substations receive power directly from the 115-kV transmission system (which accounts for their designation as "bulk power" substations) and also supply electricity to customers at 13.8 kV.

The two small distribution substations in Westport are: Greens Farms Substation, located on Post Road East, east of Colonial Road and Westport Substation, located on Main Street, north of Canal Street. The two bulk power substations in Westport are: Compo Substation, located off Compo Road South, between Interstate 95 ("I-95") and the railroad, and Sasco Creek Substation, located on Clayton Street, off Maple Lane, on property operated by Metro-North Railroad ("Metro-North") and owned by the State of Connecticut Department of Transportation ("ConnDOT"). Presently, Metro-North is allowing CL&P to operate a temporary power

transformer at Sasco Creek Substation. The third bulk power substation is Weston Substation, located off Weston Road, opposite Timber Mill Lane, in Weston.

Figures G-1 and G-2 depict the locations of the surrounding substations and their respective service areas in Westport before and after the Sherwood Substation would be in service.

Since the summer of 2005, the demands placed on the existing substations serving Westport, especially Greens Farms Substation, have strained the ability of CL&P to provide reliable service. For example, on August 2, 2005, one of the two 12.5-MVA power transformers at Greens Farms Substation failed due to loading issues. The failed power transformer resulted in the loss of service to over 1450 customers. (See Table G-1)

Table G-1: August 2, 2005 Outage Summary

Feeder	Customers Without Service	Outage Duration (minutes)
1	684	56
2	391	79
3	383	62
Total	1458	—

Figure G-1: Existing Westport Area Substation System

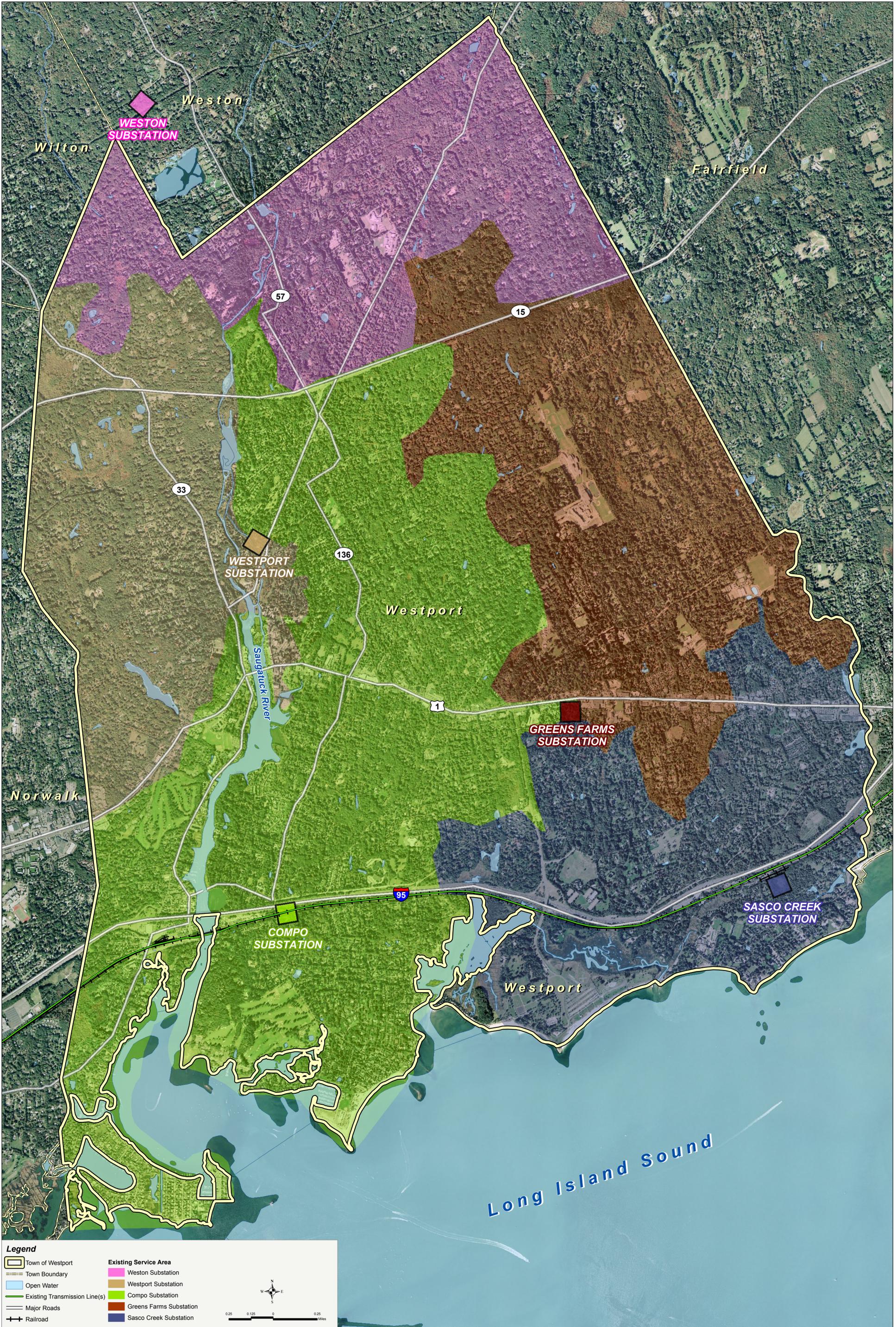
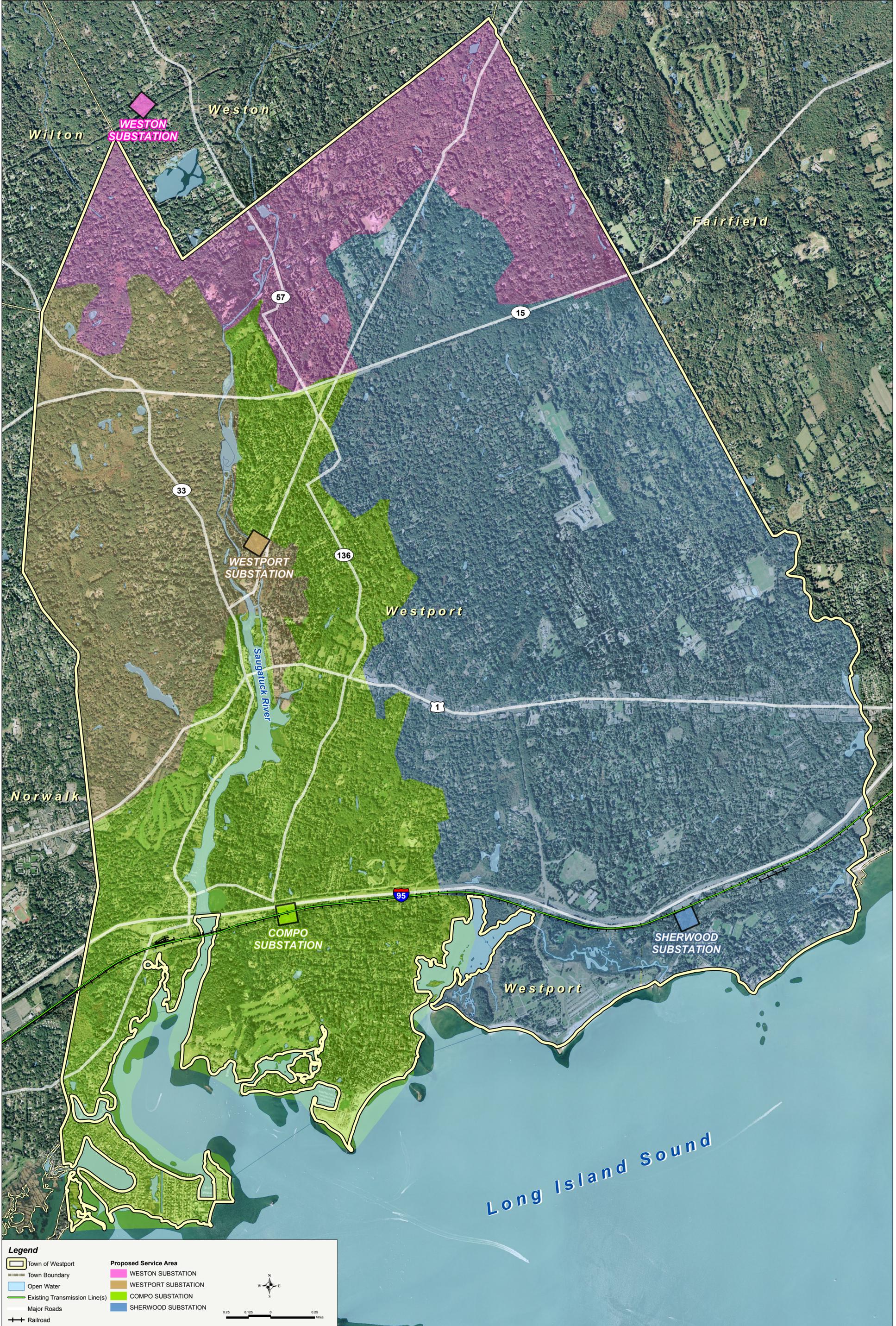


Figure G-2: Future Westport Area Substation System



Legend

Town of Westport	Proposed Service Area
Town Boundary	WESTON SUBSTATION
Open Water	WESTPORT SUBSTATION
Existing Transmission Line(s)	COMPO SUBSTATION
Major Roads	SHERWOOD SUBSTATION
Railroad	

To restore power, customers were temporarily transferred to alternate sources. A mobile transformer was then installed, and most of the load was transferred back to Greens Farms Substation until the summer peak period ended. In addition to repairing the failed power transformer and placing it back into service, two temporary modifications were performed to off-load Greens Farms Substation before the 2006 summer load peak. These temporary modifications are still in use and will remain in place until a permanent solution (new bulk substation) is complete.

The first temporary modification was the installation of a 9.375-MVA, 27.6- to 13.8-kV power transformer in May 2006 at Greens Farms Substation, increasing capacity. The second temporary modification was the installation of a 17.9-MVA, 115- to 13.8-kV power transformer at Sasco Creek Substation in July 2006 to off-load Greens Farms Substation. CL&P received permission from Metro-North Railroad/ConnDOT to install the power transformer on a temporary basis at Sasco Creek Substation.

CL&P requested such permission to provide time to determine and put in place a permanent resolution. This transformer position in Sasco Creek Substation is temporary because Metro-North/ConnDOT needs to have the space available for railroad purposes. Consequently, CL&P has planned to remove its transformer from Sasco Creek Substation by no later than 2012.

Additionally, to address a future overload of the 27.6- to 13.8-kV power transformers at Weston Substation, a temporary 20-MVA, 27.6- to 13.8-kV power transformer was installed within the substation in May 2007. This transformer can back-up Greens Farms Substation due to its proximity to Weston.

Significantly, all of these measures are temporary to alleviate the strain on Greens Farms Substation and to keep the system operating in a reliable manner. However, these measures do not address load growth in Westport due to increased demand for electricity from the residential sector, including the replacement of smaller homes with larger homes, as well as commercial and industrial development, which must be satisfied by the creation of additional capacity. That additional capacity cannot be supplied by the existing substations.

Peak electric demand increased substantially from 2004 to 2008 for the load serving Westport. Based on conservative planning projections of 2% increases per year, thereafter peak demand will increase as illustrated in Table G-2 below.

Table G-2: Estimated Peak Electric Demand in MVA

Substation	2009	2010	2011	2012	2013	2014	2015
Greens Farms	20.90	21.32	21.74	22.18	22.62	23.08	23.54
Sasco Creek	10.60	10.81	11.03	11.25	11.47	11.70	11.94
Westport	16.60	16.93	17.27	17.62	17.97	18.33	18.69
Compo	46.00	46.92	47.86	48.82	49.79	50.79	51.80
Weston	25.00	25.50	26.01	26.53	27.06	27.60	28.15
Total	119.10	121.48	123.91	126.40	128.91	131.50	134.12
Note: Projections are based on 2% annual 13.8-kV load growth							

Sherwood Substation would replace the older, space-constrained Greens Farms Substation and the temporary transformer at Sasco Creek Substation.

The peak load on each of the existing substations serving customer demand in Westport is provided in Table G-3 below, along with the re-calculated capacity, once the Sherwood Substation is in service in 2012.

Table G-3: Area Substation Peak Load in MVA - 2012

Substation	Before	After
Sherwood	0	55.82
Greens Farms	22.18	0
Sasco Creek	11.25	0
Westport	17.62	8.00
Compo	48.82	38.50
Weston	26.53	24.08
Total	126.40	126.40
Note: These loads are 13.8-kV loads.		

In addition to providing much needed capacity, Sherwood Substation would strengthen the reliability of electric service throughout Westport in the following ways:

- provide a new 115- to 13.8-kV bulk power substation closer to the load;
- replace the aging 27.6- to 13.8kV Greens Farms Substation;
- eliminate the need to rely on temporary measures including the temporary transformers at Sasco Creek and Weston Substations;
- reduce distribution feeder length thereby creating fewer opportunities for prolonged outages resulting from damage to feeders caused by weather events, motor vehicle accidents and animal contacts;
- create an effective back-up so that power could be restored instantaneously if one transformer failed; and
- utilize new, state-of-the-art equipment.

Enhanced system reliability resulting from the Sherwood Substation would also directly benefit larger customers in Westport. For example, Nyala Farms Corporate Center, located on Nyala Road and the largest commercial customer in Westport, is normally supplied by Compo Substation and has an automatic back-up tie with Greens Farms Substation via a recloser loop scheme. In 2012, Nyala Farms Corporate Center would normally be supplied by the more reliable and closer Sherwood Substation with an automatic back-up supply from Compo Substation via a recloser loop scheme.

G.1 System Alternatives

CL&P considered alternative system options to meet the challenges in Westport. However, the available options evaluated would not result in a distribution system that is as reliable and flexible as the system that would result from the Project and, ultimately, would not eliminate the need for the Sherwood Substation to meet projected system capacity requirements. The Sherwood Substation was found to be the preferred solution based, in part, on the following:

- Proximity to existing transmission system;
- Proximity to customer load; and
- Proximity to existing distribution feeders.

G.1.1 Absence of Expansion Options at Existing Substations

CL&P initially evaluated expansion opportunities at neighboring substations. However, these substations cannot be expanded due to site and system constraints, as explained below.

Greens Farms Substation

Constructed over 50 years ago (1956), Greens Farms Substation is located on an approximately 17,000-square-foot parcel of land. It is surrounded by dense commercial properties to the north, east and west and residential properties to the south. Due to the configuration of the property and its small size, there is no room within the fenced area for additional equipment or to expand at this site. This distribution substation is supplied by two 27.6-kV feeders, one from Norwalk Substation and the second from Weston Substation, both sources being over four miles from the load, adding more exposure that can adversely affect reliability.

Westport Substation

Constructed over 75 years ago (in 1930), Westport Substation is located on an approximately 11,300-square-foot parcel of land. It is surrounded by commercial and residential properties. Like Greens Farms Substation, there is no space for expansion. Although Westport Substation is the oldest of the area substations, it serves a more unique function in terms of the type of facilities and the area served, specifically the downtown Westport underground network cable system. This distribution substation is supplied by two overhead 27.6-kV feeders from Norwalk Substation and two underground 27.6-kV feeders from Weston Substation. It has three power transformers, two of which supply a very small portion of the overhead distribution system and the 4.8-kV underground network cable system for downtown Westport. The third transformer supplies one overhead distribution feeder at 13.8 kV. Adding capacity to the 27.6-kV system would be less reliable than the proposed Project.

Compo Substation

Constructed 50 years ago (in 1959), Compo Substation is located on an approximately 11,700-square-foot parcel of land. It is located between I-95 to the north and the railroad to the south. This substation was upgraded in the mid-1990s to a 115-kV supply, but due to physical limitations, CL&P is unable to further expand it to provide more capacity.

Weston Substation

Constructed over 65 years ago (in 1944), Weston Substation is located on a 96,000± square foot parcel of land. It is supplied by the 115-kV transmission system, but is not a viable option for extending further into Westport due to its distance from the load center and physical expansion limitations.

Sasco Creek Substation

Constructed in 1983, Sasco Creek Substation was established to exclusively supply electricity to the railroad. In the mid 1990s, a temporary transformer was installed at Sasco Creek Substation to serve CL&P's customers while the Compo Substation was converted to 115-kV supply. However, Sasco Creek Substation is not a viable option for expansion since CL&P does not own this substation and will not be allowed to maintain the existing temporary transformer past 2012.

A summary of the site and system constraints for each of these substations is included in Table G-4 below.

Table G-4: System Alternative Summary Table

Substation	Capacity	Site Constraints	System Constraints
Greens Farms	25 MVA	No room for expansion	Distribution feeder positions, substation capacity, supply feeder capacity
Westport 4.8 kV 13.8 kV	6.75 MVA 12.5 MVA	No room for expansion	Distribution feeder positions, substation capacity, supply feeder capacity
Compo	55 MVA	No room for expansion	Distribution feeder positions
Weston 13.8 kV 27.6 kV	45 MVA 82 MVA	Little room for expansion	Distance from load center
Sasco Creek	17.9 MVA	Temporary location (ConnDOT property)	NA

G.1.2 Conclusions

Based on CL&P’s alternatives analysis, construction of a new bulk substation in Westport is the best solution to create a more reliable electric distribution system in Westport with capacity to meet future demand. Furthermore, the Sherwood Substation would replace the older Greens Farms Substation with a substation that has capacity to handle the growing electric load and eliminate the need for the temporary transformer at Sasco Creek Substation.

H. EXISTING CONDITIONS

An *Existing Conditions Map*, depicting current conditions on the Property, its access, abutting properties, and several key features discussed herein, is provided as Figure H-1. The purpose of this section is to describe current conditions on the Property. A detailed discussion of the Substation's effects on the environment is provided in Section K of this document.

H.1. Existing Development

The developed Property encompasses approximately 2.56 acres. The parcel is identified by the Westport Assessor's Office on Map G06 as Lot 5. The Property was purchased by CL&P on June 18, 2008, specifically for this Project. According to the Tax Assessor's field card, the Property is zoned "AAA", which is defined by the Town of Westport as a "Residential District."

A single-family residence (built in 1966) and a bituminous driveway exist on the Property. On-site topography can be characterized as generally sloping down from east to west with elevations ranging between 24 and 8 feet above mean sea level. The eastern part of the Site is elevated approximately four feet above the grade of New Creek Road, and is relatively flat. The site slopes downward approximately ten feet towards the western side of the lot where a wetland traverses from north to south. The existing commuter railroad is located along the northern lot boundary at a grade approximately 10 to 12 feet above the lot.

Surrounding land use consists of an interstate highway, railroad, residential and undeveloped properties. The Site is located immediately south of a multi-use transportation and energy infrastructure corridor, consisting of existing overhead transmission lines, railroad tracks, commuter parking lots and I-95.

Figure H-1: Existing Conditions Map

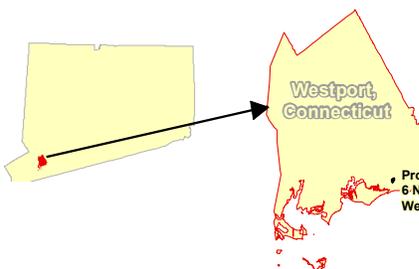
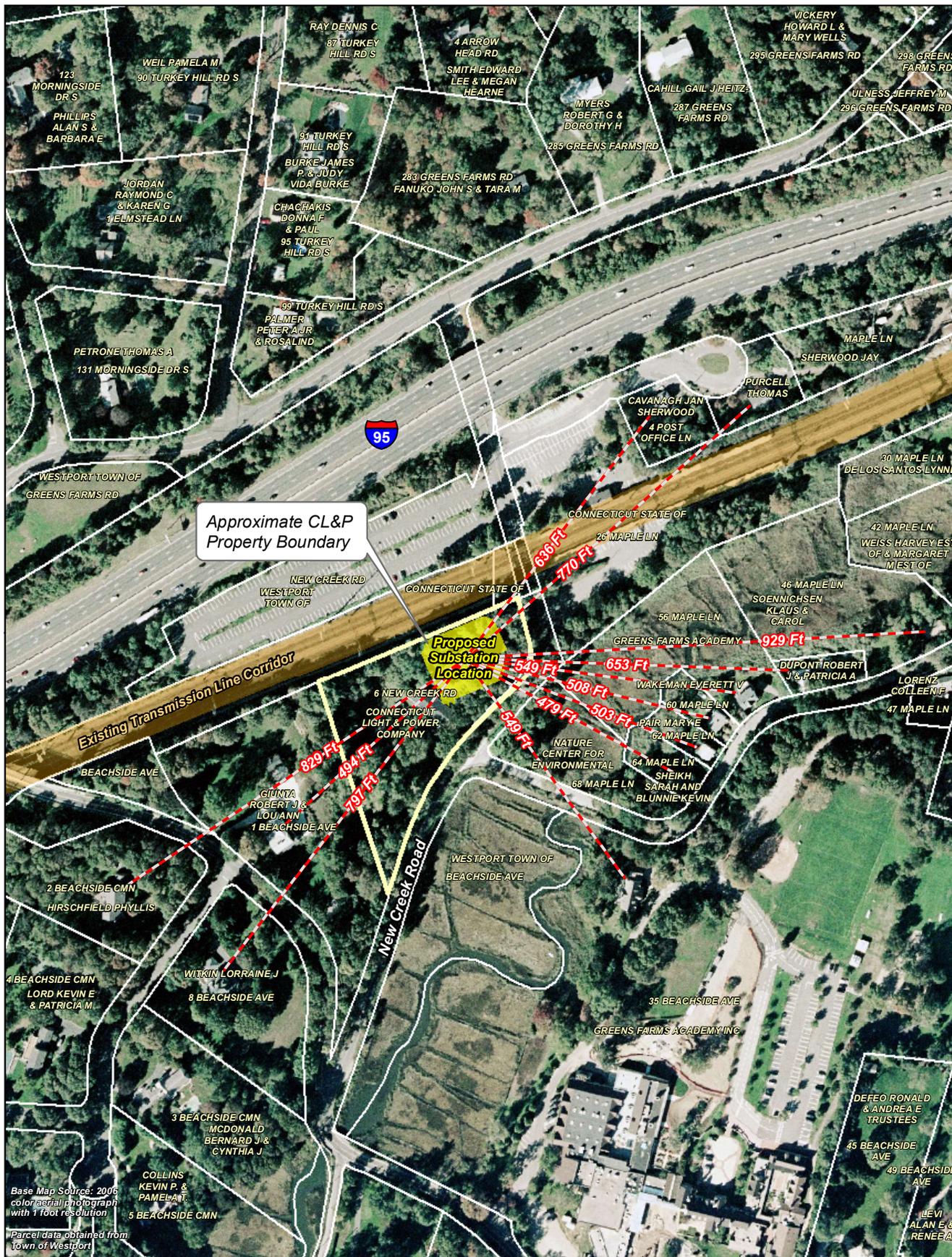


The Greens Farms train station is located to the east across New Creek Road. New Creek Road abuts the Property to the south; a tidal wetland area and the Greens Farms Brook are located farther to the south across New Creek Road. A residential home abuts the Property to the west. Figure H-2 (*Nearest Residences*) depicts the locations and distances of surrounding residences to the Substation.

Several alternate site locations along the transmission line corridor were evaluated for development of the Substation (see Section I, *Alternative Sites Evaluated*, of this MCF). For the following reasons, the Property is well suited for the Sherwood Substation:

- Two existing 115-kV transmission lines are located immediately to the north, providing for a direct connection without the need for substantial additional infrastructure and/or rights-of-way (“ROW”) with associated clearing;
- There are optimal interconnection opportunities to existing distribution feeders along New Creek Road, Greens Farms Road, and Maple Lane;
- The Property has sufficient size and shape and access from a local road; and
- Construction can be completed and the Substation can be operated with minimal effects on the surrounding environment.

Figure H-2: Nearest Residences



Proposed Substation Location
6 New Creek Road
Westport, Connecticut



Connecticut Light & Power

The Northeast Utilities System

H.2. Site Access

The Site has frontage along New Creek Road.

H.3. Wetlands and Watercourses

A palustrine forested/emergent wetland system transects the Property from north to south. This wetland is seasonally inundated with diffuse surface water flows conveyed from north to south. The northern portion is ponded, likely resulting from a historic, man-made earthen impoundment located centrally within this system. This system originates in the vicinity of the northern Site boundary at the base of a large fill slope associated with the Metro-North rail line; however, no inlet structure or other source of inputs was visibly evident. The hydrology for this system likely originates from surface flows and groundwater interception. At its southern extent, flows become channelized within a watercourse feature before outleting into a 15-inch reinforced concrete pipe located on the southern Site boundary. Flows are then conveyed from this freshwater system beneath New Creek Road to a tidal salt marsh associated with Greens Farms Brook to the south. The on-site freshwater wetland is not subject to tidal influence due to its elevation and separation from the tidal wetland. Dominant vegetation includes red maple (*Acer rubrum*), white ash (*Fraxinus Americana*), cattail (*Typha latifolia*), silky dogwood (*Cornus amomum*), sensitive fern (*Onoclea sensibilis*) and tussock sedge (*Carex stricta*).

A tidal salt marsh wetland system exists across New Creek Road to the south and east. The tidal wetland boundary nearest the Property is generally identified by the toe of fill slope associated with the embankment of New Creek Road. This tidal salt marsh wetland system is bisected by Maple Lane. The marsh habitats are connected by a culvert under Maple Lane that conveys flows from Greens Farms Brook (a.k.a., New Creek). Both salt marsh systems border on this tidal perennial watercourse. The tidal wetland edge has been historically disturbed by fill

material generally associated with the New Creek Road and Maple Lane road embankments. This disturbance is reflected in the dominance of common reed (*Phragmites australis*), a non-native invasive species, and indicative of the historic disturbances in these locals. The interior of these marsh habitats are dominated by native salt marsh grasses and forbs.

Wetlands were delineated by a Registered Soil Scientist at Vanasse Hangen Brustlin, Inc. on February 6, 2009 and May 4, 2009. Details of the wetland delineations are included in Appendix C, *Wetlands Delineation Report* and *Tidal Wetlands Delineation Report*.

H.4. Vegetation and Wildlife

In addition to the wetland vegetation, the Site is currently vegetated with mature trees, including: white pine (*Pinus Strobus*), red oak (*Quercus Rubra*), sycamore (*Platanus occidentalis*), black locust (*Robinia pseudoacacia*), black cherry (*Prunus Serotina*), white ash (*Fraxinus Americana*), and red maple (*Acer rubrum*). Landscaped shrubs, including juniper (*Juniperus communis*), rhododendron (*Rhododendron*), yew (*Taxus Canadensis*), and burning bush (*Euonymus alatus*) exist primarily west of the house on the upland slope adjacent to the wetlands. Lawn (grassed) areas surround the on-site residence.

Being located in a mixed land use setting, the Property likely supports transient wildlife common to Connecticut's coastal communities. No significant or extensive wildlife habitat exists on the 2.56-acre parcel, which is surrounded on three sides by transportation corridors (including the railroad to the north and New Creek Road to the east and south).

H.5. Rare, Threatened, and Endangered Species

CL&P reviewed the Connecticut Department of Environmental Protection ("CTDEP") Natural Diversity Database (NDDDB) which identifies general areas of concern with regard to

state and federally listed endangered, threatened, and special concern species and significant natural communities. No areas of concern with regard to threatened or endangered species and/or significant natural communities were identified at or in the vicinity of the Site. Further, CL&P submitted a letter request on May 19, 2008 to the CTDEP for concurrence of its preliminary findings. CL&P received written confirmation on June 19, 2008 that no known extant populations of federal or state endangered, threatened, and special concern species occur at the Property. The *CTDEP Correspondence* is provided in Appendix D.

H.6. Water Supply Areas

Groundwater below and near the Property is classified by the CTDEP as a GB groundwater area. GB is defined as groundwater within a historically highly urbanized area or an area of intense industrial activity and where public water supply service is available. Such groundwater may not be suitable for human consumption without treatment due to waste discharges, spills or leaks of chemicals or land use impacts. Properties along New Creek Road and in the vicinity are provided potable water by the Aquarian Water Company.

The Greens Farms Brook which is located south of the Property is classified as “B”. These surface waters are designated for: habitat for fish and other aquatic life and wildlife; recreation; navigation; and industrial and agricultural water supply.

There are no public water supply wells within a two-mile radius of the Site. The Property is not located within an Aquifer Protection Area.

H.7. Scenic Areas

Based on information contained in the Town of Westport’s 2007 Plan of Conservation and Development, the Property is depicted on a Scenic Resources Map as being located within a

scenic area that encompasses the Town's coastline. No scenic views are identified at the Site or within its immediate vicinity. Beachside Avenue, located approximately 0.25 mile to the south is listed as a locally-designated scenic road.

H.8. Historic and Archaeological Resources

Results of a preliminary Cultural Resources Reconnaissance Survey revealed that four previous archaeological investigations were completed in the vicinity of the Property and six single archaeological sites had been recorded in the area. The previous investigations documented use of the area by Native Americans. Review of available historic maps and aerial images of the area dating back to 1856 suggests that the Property consisted of an undeveloped, likely wooded, piece of land throughout the mid-nineteenth century up until 1966, when the residence was built.

Subsurface investigation was conducted to determine whether cultural resources are present at the Site. Fieldwork for this investigation consisted of pedestrian survey, systematic subsurface testing, mapping, and photo-documentation.

Additional archaeological investigation of the Project area (i.e., the 1.0± acre proposed for the Substation) was undertaken in the form of excavation of 10 shovel test pits. The shovel test pits were excavated at 50-foot intervals along three survey transects spaced 50 feet apart. During examination of the Site, no evidence of cultural features and no cultural material were identified within any of the completed shovel tests. As a result, no additional testing of the Project area was recommended.

CL&P submitted documentation of the archaeological survey prepared by Heritage Consultants, LLC for determination from the SHPO regarding the potential effect or no effect of

the Project on cultural resources on May 19, 2009. The SHPO responded in writing on May 21, 2009 that the Project boundaries lack historical and architectural importance and that no additional archaeological investigation is warranted with respect to the proposed undertaking. *SHPO Correspondence* is provided in Appendix E.

H.9. Natural Resources

Site bedrock and surficial geology was determined by reviewing the Environmental GIS Data for Connecticut 2003 Edition compiled by the CTDEP. Bedrock geology underlying the majority of the Property is mapped as Golden Hill Schist, a gray to silvery, medium to coarse grained schist and granofels. No bedrock outcroppings are visibly apparent on the Site. Surficial soils at the Property are mapped as sand, which is composed mainly of very course-to-fine sand and is commonly in well sorted layers.

H.10. Floodplain Areas

Portions of the Site are located within the 100-year floodplain (located at 11 feet above sea level) and 500-year floodplain, based on the National Geodetic Vertical Datum of 1929 as depicted on *FEMA Map*, Panel Number 090019 0002B, revised December 4, 1984. However, the activities associated with the Substation would be located entirely outside of the 100-year and 500-year floodplains. No coastal velocity flood zones are mapped on the Site or nearby salt marsh.

H.11. Recreational Areas

There are no recreational areas directly abutting the Property. However, several recreational areas are located within a one mile radius of the Property. Greens Farms Academy

(which has athletic fields), Burying Hill Beach and Sherwood Island State Park are located to the south and southwest within one-quarter mile of the Property.

H.12. Seismic Areas

The USGS-National Earthquake Reduction Program has developed a series of maps that depict the estimated probability that certain levels of ground shaking from an earthquake will occur within a given period of time. USGS takes into account the seismic history of an area and the expected decrease in intensity with distance from the epicenter. Based on a review of USGS-National Earthquake Reduction Program maps and information obtained by the Weston Observatory (a geophysical research laboratory), there are no seismic areas located at the Property or within its immediate area.

H.13. Noise

The Property includes a single family residence. Existing noise levels emanating from the Property are below those established for residential areas by the CTDEP's noise control regulations (RCSA Title 22a, §22a-69-1 to 22a-69-7.4). Contributing factors for noise generation in the area are traffic noises generated from the adjacent railroad, I-95 and the surrounding local road system.

H.14. Lighting

Currently, lighting facilities present on the Property are limited to those associated with the single family residence.

H.15. Coastal Zone Management Areas

As defined in Conn. Gen. Stat. § 22a-94(a), the Connecticut Coastal Area includes the land and water within numerous towns, including the Town of Westport. A subset of the Coastal

Area, called the Coastal Boundary, represents an area within which activities regulated or conducted by coastal municipalities must be consistent with the Coastal Management Act. The Property is located within the Coastal Boundary.

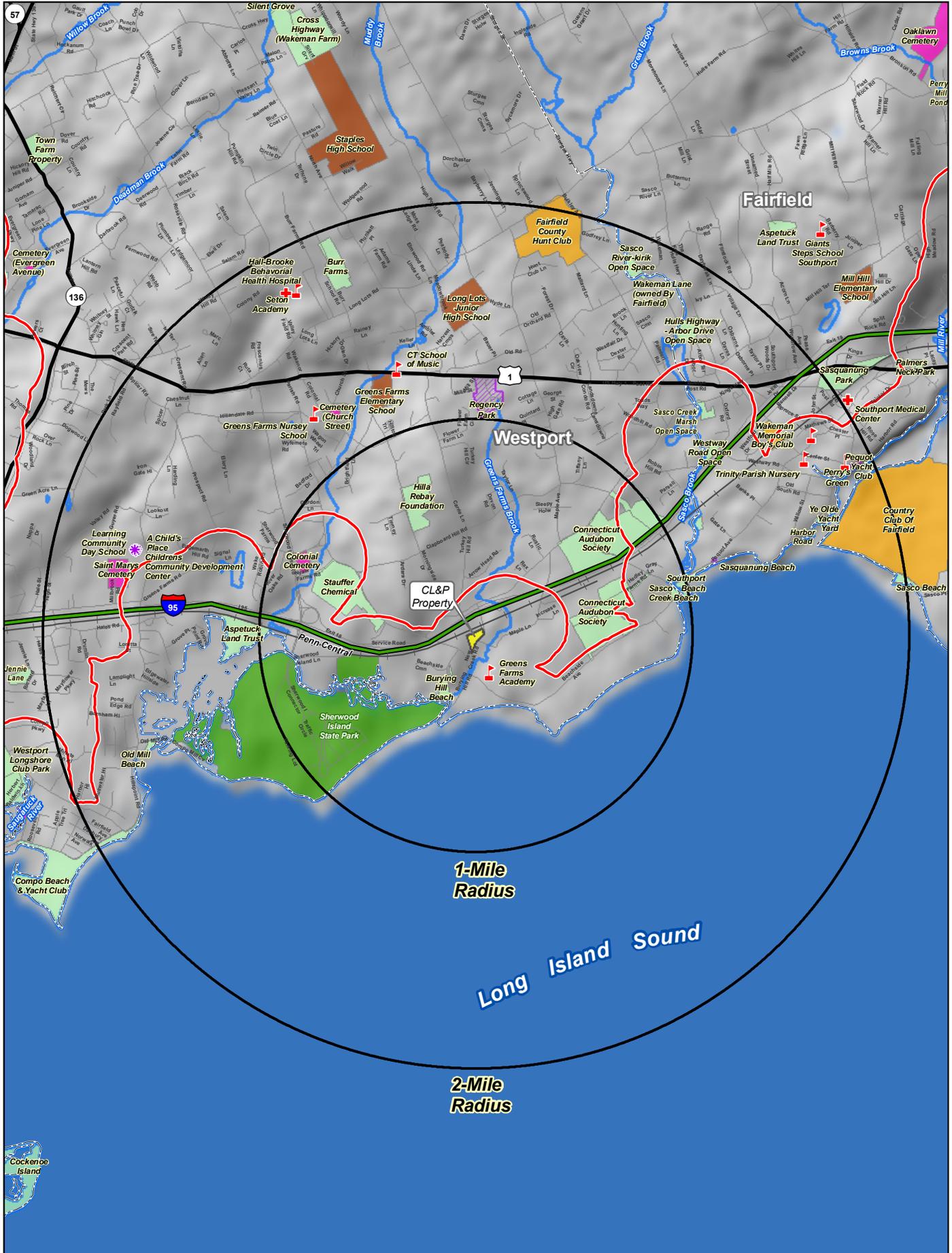
H.16. Other Surrounding Features

Table H-1 lists non-residential features within two miles of the Property. Figure H-3 (*Surrounding Features*) depicts the nearest locations of non-residential development.

Table H-1: Non-Residential Features within Two Miles of the Property in Westport

Name	Address (all locations in Westport, except where noted)	Location from Property
Schools		
Greens Farms Academy	35 Beachside Avenue	0.2 mile southeast
Greens Farms Elementary School	17 Morningside Drive	1.2 miles northwest
Long Lots Elementary School	13 Hyde Lane	1.5 miles north
Learning Community Day School	90 Hillspoint Road	1.6 miles west
Hillspoint Pre-School	90 Hillspoint Road	1.6 miles west
Child Daycare Facilities		
Greens Farms Nursery School	71 Hillandale Road	1.2 miles northwest
Trinity Parish Nursery	55 Myrtle Avenue, Fairfield	1.75 miles northeast
Playgrounds		
Greens Farms Elementary School	17 Morningside Drive	1.2 miles northwest
Hospitals		
Southport Medical Center	1735 Post Road, Fairfield	2 miles northeast
Parks/Beaches		
Burying Hill Beach	Burying Hill Road	0.25 mile southwest
Sherwood Island State Park	Sherwood Island Connector	0.25 mile south
Southport Beach	Pequot Avenue, Fairfield	1.0 mile northeast
Sasco Creek Beach	Sasco Beach Road, Fairfield	1.0 mile northeast
Group Homes		none identified within two miles
Licensed Youth Camps		none identified within two miles
Hunting or Wildlife Management Areas		none within two miles

Figure H-3: Surrounding Features



Legend:

- | | | | |
|------------------------|--------------------|-------------------------------------|-------------------------------|
| CL&P Property Boundary | Points of Interest | CTDEP Owned Property | Cemetery |
| Coastal Boundary | School | State Park | General Recreation |
| Watercourse | Daycare | CTDEP Municipal Property/Open Space | Existing Preserved Open Space |
| Railroad | Hospital | School | Uncategorized |
| Town Boundary | | | |

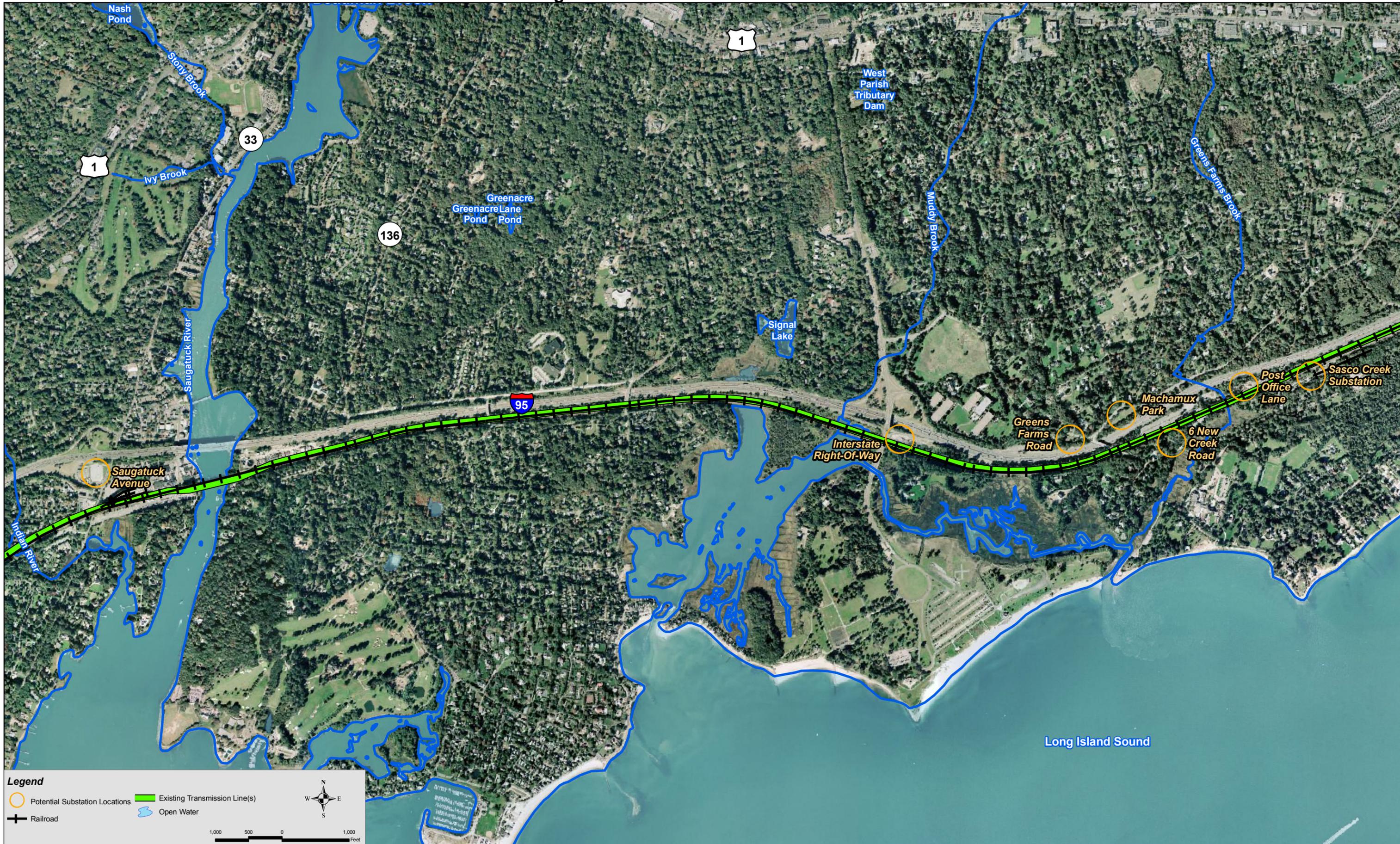
I. ALTERNATIVE SITES EVALUATED

CL&P identified an area in Westport, Connecticut where additional bulk substation capacity is needed (i.e., the “load pocket”). In this case, the Westport load pocket area is bordered on the south by Long Island Sound, to the east by the Westport/Fairfield Line, to the north by Easton Road, and to the west by Compo Road (Route 136).

At present, the Town is supplied power from three substations with no ability to increase capacity at these facilities as discussed in Section G-1. The most viable solution to address this need is to construct a new bulk power substation in the Greens Farms section of Westport. The primary selection criteria for the location of a new bulk-power substation are: proximity to an existing 115-kV transmission circuit; proximity to the distribution load pocket; and, accessibility to and from a public road. Locating the facility near an existing 115-kV transmission circuit avoids new transmission line construction and ROW acquisitions. A site centrally located within the load pocket minimizes distribution circuit lengths and enhances contingency tie capabilities with distribution circuits emanating from adjacent substations. Additionally, direct access to a substation site is important to minimize land clearing for new road construction and to reduce overall environment impacts along the transmission line corridor.

Seven site locations in Westport were identified and evaluated to determine their potential viability for development of the new Substation. These locations are depicted on Figure I-1, *Alternate Sites Evaluated*.

Figure I-1: Alternative Sites Evaluated



Legend

- Potential Substation Locations
- Existing Transmission Line(s)
- Open Water
- Railroad

1,000 500 0 1,000 Feet

The following major criteria were used to determine the most suitable location for construction of this new Substation:

- Proximity to distribution load pocket and existing feeders;
- Proximity to existing transmission electrical circuits;
- Ease of access;
- Earthwork requirements;
- Sufficient size and shape;
- Zoning and land-use constraints;
- Wildlife and habitat;
- Wetlands, vernal pools, watercourses and floodplains; and
- Proximity to public water supply watershed and/or aquifer protection areas.

The New Creek Road Property best satisfied the criteria and is therefore the most feasible location. A summary of the potential site locations is provided below.

I.1 6 New Creek Road (the Property)

This 2.56-acre site is situated in the center of the load pocket area and immediately south of a multi-use transportation and energy infrastructure corridor; its location provides for direct connections to an existing 115-kV transmission circuit resulting in minimal, additional infrastructure needs. There are also optimal connection opportunities to the existing distribution feeder network along New Creek Road, Greens Farms Road, and Maple Lane. The Property has sufficient size and shape to provide for substantial landscaping to screen the Substation from surrounding areas, and has direct access from New Creek Road. In summary, 6 New Creek Road possesses the following characteristics:

- Direct connections are available to existing 115-kV transmission circuit;
- Optimal connections can be made to existing distribution feeders;
- Sufficient room to establish vegetative screening;

- Direct access from New Creek Road;
- No wetland impacts would occur as a result of construction or operation of the Substation; and
- The Site is not located in an aquifer protection area.

I.2 Terminus of Post Office Lane (between I-95 and Metro-North Railroad)

Located adjacent to transportation corridor, this 2± acre site provides relatively short interconnections to an existing 115-kV circuit; however, connections to the existing distribution network serving the load area would require bundling several new overhead circuits onto one existing line along Greens Farms Road. The site's configuration would limit CL&P's ability to fit all of the required equipment within the substation at this location, as it could only accommodate two transformers with no room for a mobile transformer position. Access to the parcel and utility infrastructure would require obtaining an easement from a third party; upon further investigation, it was determined that an easement would not be made available.

Negotiations with the landowner were unsuccessful and the parcel is not available for purchase.

In summary, this location is not viable due to the following considerations.

- Site configuration limits ability to fit all required equipment within substation; the site could only accommodate two transformers with no room for a mobile transformer position;
- Connections to existing distribution network would require bundling several new overhead circuits onto one existing line on Greens Farms Road;
- Potential wetland impacts exist;
- Parcel would require an access/utility easement from third party; easement not available; and
- Parcel not available for purchase.

I.3 Machamux Park

This 1.5-acre parcel is a town park located south of Greens Farms Road and north of I-95. During discussions with CL&P representatives, the Town indicated that there were no Town-owned properties available for CL&P. This site in particular is used for passive recreation and archaeological resources likely exist. This property is relatively flat and open, requiring minimal clearing and earthwork activities, and access could be directly gained from Greens Farms Road. However, connections to the existing transmission circuit would require extensive new infrastructure and connections to an existing distribution network would require bundling several new overhead circuits onto one existing line on Greens Farms Road. Several homes are located immediately to the north of this property. Even if the parcel were available, several limitations exist, as summarized below.

- Connections to an existing transmission circuit would require extensive new infrastructure;
- Connections to existing distribution network would require bundling several new overhead circuits onto one existing line on Greens Farms Road;
- Potential archaeological resources exist; and
- Numerous homes are located in the immediate vicinity.

I.4 Interstate Right-of-Way, north of Sherwood Island Connector

This parcel is of sufficient size (three acres) to accommodate the substation, but it has several technical and physical limitations. Although interconnection with the existing 115-kV transmission circuit to the south would be relatively easy, this property is located west of the load area and would present substantial challenges for connecting to the existing distribution facilities which are located over 3,500 feet to the north. Access to the site would have to be gained directly from the highway ramp, requiring ConnDOT approvals. Historic dumping has

occurred on this property, raising the likelihood of significant excavation and disposal of contaminated media, and resulting in substantial earthwork requirements to accommodate a substation at this location.

This site has limited development potential for CL&P due to:

- Its location west of load area;
- Poor connection possibilities to existing distribution network;
- Substantial earthwork would be required for substation development; and
- Access would have to be gained directly from the highway ramp.

I.5 West of existing Sasco Creek Substation

At the site of CL&P's temporary transformer, Metro-North and ConnDOT will not allow development of a permanent substation for non-railroad-related uses. Technically, the 1.08-acre site possesses some positive features, most notably the existing infrastructure. A 115-kV line loop exists to the nearby 1890 circuit which could be brought inside a new substation to supply new power transformers. In addition, the site is accessible from Clayton Street off Maple Lane and is of sufficient size to accommodate the substation facility with two transformer positions. On the negative side, the existing transformer and substation are located in a residential neighborhood and there have been complaints historically by nearby residents. Regardless of the potential opportunities, this site is not feasible for further consideration because:

- Metro-North will not allow development of a permanent substation for use other than railroad; and
- Several neighboring residences are located in close proximity.

I.6 Saugatuck Avenue at Exit 17, south side of I-95

Roughly 1.5 acres in size, this site is nestled between Saugatuck Avenue to the east, I-95 to the north, and the I-95 northbound entrance ramp to the south and west. This property is currently developed and partially paved; clearing and earthwork requirements would be minimal. However, the site is located west of the load center and an existing business would require relocation. Further, connection to the existing transmission circuits would require extensive new infrastructure. There are numerous neighboring residences located along Ferry Lane West, Indian Hill Road and Hiawatha Lane immediately south of this property. In summary, this site was not considered further because:

- Connection to existing transmission circuits would require extensive new infrastructure;
- Numerous neighboring residences are located immediately to the south; and
- Redevelopment would impact an existing business operation.

I.7 Wooded Lot across from #247 Greens Farms Road

Approximately 1.2 acres of this wooded portion of the ConnDOT/I-95 Right-of-Way, located south of Greens Farms Road and immediately east of Beachside Avenue, could accommodate the substation. Connection to the existing 115-kV circuits would require crossing I-95 and installing several new support structures and interconnections. Connecting to the existing distribution network serving the load area would require bundling several new overhead circuits onto one existing line along Greens Farms Road. Significant clearing of trees that currently buffer the neighborhood north of the Interstate would be required. The area also slopes down approximately 20 to 30 feet from Greens Farms Road to the Interstate and would require significant earth work to develop a site to accommodate the substation pad. Numerous homes

are located to the west and north along Greens Farms Road. The following developmental constraints limit this site's potential;

- Connection to the existing 115-kV circuit would require extensive new infrastructure;
- Poor connection possibilities to existing distribution network;
- Substantial clearing and earth work would be required; and
- Several residences are located in the immediate area.

I.8 Summary

Seven sites were evaluated for development of the Sherwood Substation. Expansion of the existing Sasco Creek Substation, where CL&P currently houses a temporary transformer, is not viable for future development because ConnDOT and Metro-North are unwilling to commit uses other than those dedicated to the railroad. The privately-owned parcel located at the terminus of Post Office Lane was originally considered a viable alternative; however, it is not available for purchase. In addition, further evaluation of CL&P's long-term needs and the site's configuration, showed that this parcel would provide fewer long-term benefits because it does not have sufficient space for more than two transformer positions. The Property at 6 New Creek Road, initially deemed a viable alternative to Sasco Creek, is the most suitable location due primarily to its proximity to an existing circuit, accessibility to optimal feeder interconnections, and sufficient size to establish ample vegetative screening.

The other sites evaluated have technical, physical and/or environmental constraints and are not considered viable alternatives for development of the new Substation.

J. SAFETY AND RELIABILITY INFORMATION

The Substation would be constructed in full compliance with the standards of the National Electrical Safety Code, the Connecticut Department of Public Utility Control, and good utility practice. In the event that an energized line or substation equipment fails, protective relaying equipment would immediately remove the equipment from service, thereby protecting the public and the remaining equipment within the Substation.

The Sherwood Substation would be equipped with measures to ensure continued service in the event of outages or faults on transmission or substation equipment. Continued reliability would be achieved by incorporating a “loop through” design configuration for the existing 115-kV overhead transmission line, transformer protection, and redundant automatic protective relaying equipment.

Protective relaying equipment would be provided to automatically detect abnormal system conditions (e.g., a faulted overhead transmission line) and would send a protective trip signal to circuit breakers to isolate the faulted section of the transmission system. The protective relaying schemes would include fully redundant primary and backup equipment so that a failure of one scheme would not require the portion of the system being monitored by the protective relaying equipment to be removed from service.

The protective relaying and associated equipment, along with a Supervisory Control and Data Acquisition (“SCADA”) system for remote control and equipment monitoring by the Connecticut Valley Electric Exchange (“CONVEX”) System Operator, would be housed in a weatherproof, environmentally-controlled electrical equipment enclosure.

CL&P incorporates IEEE/ANSI and NFPA standards for fire protection in its substation design and operates these facilities to minimize the impact of fire, in the unlikely event it occurs. CL&P also trains its employees and the local fire department on the safe methods to deal with a substation fire. The control enclosure would be locked and equipped with fire extinguishers, as well as smoke detectors that would be monitored from a remote location. Smoke detection would automatically activate an alarm at CONVEX and the system operators would then take appropriate action.

Additional devices would constantly monitor the Substation to alert CL&P of any abnormal or emergency situations. The perimeter of the Substation would be enclosed by a seven-foot high chain link fence topped with an additional foot of three strands of barbed wire to discourage unauthorized entry and/or vandalism. The Substation entrance would be gated and locked. Lighting would be available within the Substation yard to facilitate work at night or during inclement weather.

CL&P would install sumps to serve as oil-spill containment reservoirs around the proposed transformers. The sumps would be sized with sufficient capacity to contain a spill in the event of an inadvertent release of oil. CL&P plans to install an Imbiber Beads Drain Protection System® for the sump, similar to containment systems installed at other CL&P substations.

K. EFFECTS ON THE ENVIRONMENT

The development of the Sherwood Substation would not have any long-term adverse effects on the existing environment and ecology, nor would it affect the scenic, historic and recreational values of the vicinity. A *Proposed Conditions Map* is included as Figure K-1.

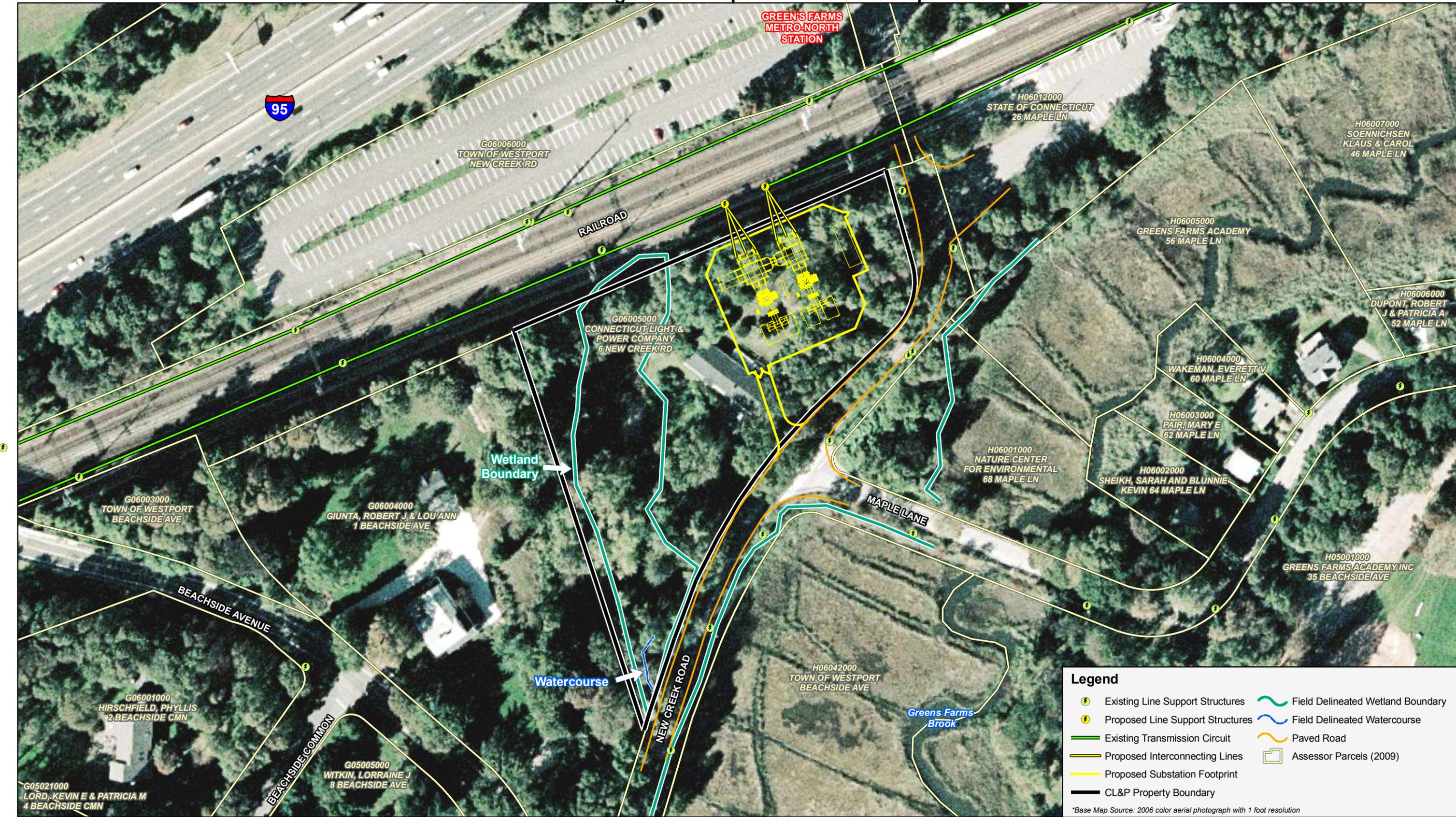
K.1. Public Health and Safety

The Sherwood Substation would be designed to applicable CL&P, industry, State, and local codes and standards and would not pose a safety concern or create undue hazard to the general public. The Substation would not consume any raw materials, would not produce any by-products and would be unmanned during normal operating conditions. Applicable signage would be installed alerting the general public of the dangers of high voltage associated with the Substation.

K.2. Local, State and Federal Land Use Plans

The Project is consistent with local, State, and Federal land use plans. Local land use application processes do not specifically apply to the Project. However, the Project has been designed to meet the intent of local land use regulations. CL&P has met with Town officials and provided Location Review submissions to Westport's Conservation Commission and Planning and Zoning Commission. These Commissions provided comments which have been addressed by CL&P.

Figure K-1: Proposed Conditions Map



K.3. Existing and Future Development

The Sherwood Substation would benefit the community by improving electrical service for existing development in the Town and surrounding areas, as well as supporting additional development through enhanced reliability and the capacity to serve additional load. The Town of Westport currently has two older distribution substations and one temporary substation. None of the existing substations have the ability to expand.

The Substation would be situated immediately south of the existing overhead transmission line corridor, generally in the eastern portion of the Property. The Substation would be located within an irregularly shaped fenced compound that would encompass a 20,610 ± square foot area (measuring approximately 137 feet by 200 feet at its longest dimensions). Connecting the Substation to the existing transmission circuit requires the installation of two new steel monopoles within the railroad ROW immediately north of the Site. These new structures would be similar in size to those currently occupying the transmission line corridor, and two new line-terminal structures within the Substation.

K.4. Roads

A new 15-foot wide gravel driveway would be developed to serve as entry/egress from New Creek Road to the Substation. A bituminous concrete apron would be provided at the entrance of the Property along New Creek Road, north of the junction with Maple Lane. This would serve as the only access to the Site once the Substation is operative. The existing driveway and associated pavement would be removed.

During construction of the Substation, the driveway would be stabilized with stone, and anti-tracking mats would be installed to prevent tracking of soil onto local streets. Upon

completion of the Project, the driveway off New Creek Road would be finished with a gravel base and gated. After construction is completed, approximately three to four vehicular trips per month to the Property would be anticipated for maintenance and inspection activities.

K.5. Wetlands

No direct impacts to on-site wetlands would occur as a result of construction or operation of the Substation. No portion of the 20,610± square foot Substation fenced compound would be located within wetlands and none of the Substation components/structures would be situated within 50 feet of the on-site wetlands. A small section of the Substation's northwest corner (consisting of trap rock and fencing) would fall within 50 feet of the wetlands.

No impacts to the tidal wetland system located across New Creek Road would occur.

K.6. Wildlife and Vegetation

The Substation would occupy what is currently a developed residential building lot. Construction of the Substation would require the removal of several existing trees and landscape shrubs, but would not have significant adverse effects on wildlife or habitat values.

Any effects on wildlife and wildlife habitat would be minimal and limited to temporary disturbances during construction. The Property is currently used by wildlife species that are typically generalists, commonly found in the area, and adaptable to habitat modifications. The wetland habitat found on the Property would remain intact and the adjoining upland area to its east would be enhanced, ultimately increasing its wildlife value. Based on the habitat types found on the Property and surrounding area, species diversity and abundance should be maintained after the Substation is completed and operational.

K.6.1. Rare, Threatened, and Endangered Species

No state or federally endangered, threatened or special concern species have been identified on the Property. Based on current CTDEP NDDB review criteria, the proposed Substation project does not present a potential conflict with a listed or significant natural community. CL&P received confirmation in writing on June 19, 2008 that no known extant populations of federal or state endangered, threatened, and special concern species occur at the Property (refer to *CTDEP Correspondence*, in Appendix D).

K.7. Water Supply Areas

There are no known public water supply wells located in the vicinity of the Property. The transformers at the Sherwood Substation would contain mineral oil. However, this equipment would have secondary containment and accidental spill prevention provisions in place. Based on these design considerations, the Project would have no adverse environmental effect on the water resources.

K.8. Historic and Archaeological Resources

Based on the consultation with the SHPO, the Property lacks historical and architectural importance. As a result, no impacts to historic/cultural resources are anticipated.

K.9. Noise

After the Substation is placed in service, infrequent impulse noise would be generated from switching and circuit breaker opening and closing. The impulse noise levels and steady-state transformer noise levels are not expected to exceed the levels permitted at the Property line by CTDEP's noise control regulations.

The construction and testing of the Substation facilities is expected to occur over a 12- to 18-month period. In general, construction hours would be from 7 a.m. to 5 p.m., Monday through Friday. Site preparation, including grading and installation of foundations, would take place during the initial 6 months of construction and involve the use of earth-moving equipment and construction vehicles.

The installation and testing of equipment would take approximately nine months and would involve the use of cranes to unload and install structural elements and large equipment. The installation of the 115-kV line and Substation terminal structures, interconnection of the supply lines to the Substation, and connections to the distribution system would occur outside of normal work hours because these activities necessitate taking critical transmission and/or distribution equipment out of service. As a result, this work would be scheduled for off-peak electrical demand hours and coordinated with the Town.

K.10. Floodplains

Although portions of the Site are located within the 100-year floodplain and 500-year floodplain, the activities associated with the Substation would be located entirely outside of these areas.

K.11. Seismic Areas

As with all substations constructed by CL&P, this Substation would meet or exceed the State Building Code, which includes seismic loading, wind loading, and snow and ice loadings, among others.

K.12. Lighting

The Sherwood Substation would have low-level lighting for safety and security purposes. These lights would be recessed or activated manually to minimize visual effects at night. Lighting would not affect existing residences in the vicinity of the Property. Additional lighting capability would exist in the Substation to allow for work at night under abnormal or emergency conditions.

K.13. Natural Resources

No adverse effects are anticipated on natural resources occurring at and/or nearby the Property. Vegetative clearing and earthwork would be required for construction of the Substation; however, no impacts to wetlands would occur. Select areas within 75 feet of the wetland resource on the Property would be disturbed by grading activities, a small (northwest) corner of the Substation (which would include a breaker arrangement), and installation of an infiltration trench and a level spreader. Cut and fill slopes would not exceed two to one (2:1) grades, and would be loamed and seeded where not incorporated into a landscape plan or Wetland Buffer Enhancement Area.

Existing trees that require removal at the Property, several of which are non-native species, would be replaced with a variety of specimens, the majority of which are native to the region. CL&P also proposes to enhance the buffer area between the Substation and the adjacent wetland resource.

K.14. Coastal Zone Management Areas

The Site falls within the Coastal Area Management Boundary, as defined by Conn. Gen. Stat. § 22a-94(a). No tidal wetlands/ watercourses or coastal resources are located on the Site. A tidal (wetland) salt marsh is located approximately 50 feet from the Site immediately

southeast of New Creek Road. Greens Farms Brook flows within the marsh interior. An on-site inland freshwater wetland system discharges to the tidal marsh via a 15-inch culvert beneath New Creek Road. The on-site freshwater wetland is not subject to tidal influence due to its elevation.

The Project would not result in adverse impacts to coastal resources as defined in the Connecticut Coastal Management Act (CCMA). The CCMA identifies eight adverse impacts to coastal resources. This section provides a definition of each adverse impact for each resource area and explains why the Project would not adversely affect each resource.

- 1) *Degrading **water quality** of coastal waters by introducing significant amounts of suspended solids, nutrients, toxics, heavy metals or pathogens, or through the significant alteration of temperature, pH, dissolved oxygen or salinity.*

The Project would not affect water quality within the adjacent tidal marsh or Greens Farms Brook. Erosion and sediment controls would be established as required by CTDEP Bulletin 34 *Connecticut Guidelines for Soil and Erosion and Sediment Control, dated 2002*. Stormwater generated by the Project would be adequately treated, both in quantity and quality, in general accordance with the 2004 CT Stormwater Quality manual.

- 2) *Degrading **existing circulation patterns of coastal waters** by impacting tidal exchange or flushing rates, freshwater input, or existing basin characteristics and channel contours.*

The Property is currently developed and outside of tidally influenced areas and as such would not impact current drainage or circulation patterns.

- 3) *Degrading **natural erosion patterns** by significantly altering littoral transport of sediments in terms of deposition or source reduction.*

The Project would not affect littoral transport of sediments.

- 4) *Degrading **natural or existing drainage patterns** by significantly altering groundwater flow and recharge and volume of runoff.*

Drainage patterns would not be significantly altered by the Project. It is anticipated that the proposed stormwater treatment practices would maintain or increase groundwater recharge at the Site and not increase runoff for the 5-, 10- and 25-year design storms.

- 5) *Increasing the hazard of **coastal flooding** by significantly altering shoreline configurations or bathymetry, particularly within high velocity flood zones.*

Portions of the Site occur within the 100-year and 500-year floodplains; however, the proposed activities would be located outside of the 100-year and 500-year floodplains and would not affect the shoreline configuration.

- 6) *Degrading **visual quality** by significantly altering the natural features of vistas and viewpoints.*

The Project is located approximately 1,000 feet from the nearest coastal resource and would not degrade the visual quality of the area. The Project consists of demolishing an existing residential structure and constructing the Substation in the eastern portion of the Site. The Substation would be located at a ground elevation approximately 4 to 8 feet lower than what exists today. Planned landscaping would incorporate earthen berms and extensive vegetative screening, resulting in the lower portions of the Substation being largely out of view.

- 7) *Degrading or destroying **essential wildlife, finfish or shellfish habitat** by significantly altering the composition, migration patterns, distribution, breeding or other population characteristics of the natural species or significantly altering the natural components of the habitat.*

No essential wildlife, finfish or shellfish habitat exist on portions of the Property planned for construction activities.

- 8) *Degrading tidal wetlands, beaches and dunes, rocky shorefronts, and bluffs and escarpments by significantly altering their natural characteristics or function.*

The Project would not alter the natural characteristics of any coastal resource area as none exist on the Site.

K.15. Other Surrounding Features

No adverse effects are anticipated to the facilities listed in Table H-1, primarily because of their sufficient distance from the Substation and/or the presence of the existing transportation and utility infrastructure corridor.

L. MITIGATION MEASURES

CL&P has incorporated measures into all phases of Project development and implementation to promote protection of the environment in accordance with federal, State and local requirements.

L.1 Pre-Construction Considerations

Before any construction activities occur, CL&P would prepare a Development and Management Plan (“D&M Plan”), which must be approved by the CSC. The D&M Plan would include *CL&P’s 2005 Construction Best Management Practices*, which are designed to minimize or eliminate potential adverse environmental effects that may result from construction activities. The D&M Plan would include specific procedures and information on erosion and sedimentation control, spill prevention and control, construction staffing and hours, traffic control, and provisions for restoration and landscaping after construction of the Substation. The D&M Plan would also provide contact information should questions or concerns arise during construction or operation of the facility.

Prior to commencement of construction, CL&P intends to install erosion controls at the limits of work in accordance with the approved D&M Plan and the *2002 Connecticut Guidelines for Soil Erosion and Sedimentation Control*. The erosion controls would be inspected and maintained throughout the course of the Project until final site stabilization has been achieved.

L.2 Construction-Related Activities

All construction activities would be conducted in accordance with the required D&M Plan as approved by the CSC. The siting and design of the Substation provides for a sufficient setback from on-site wetlands. Vegetation loss resulting from the development would be

compensated by establishing a substantial natural buffer of tree and shrub landscaping and enhancement of the upland area adjacent to the wetlands. The Substation would be graded to contain and treat stormwater runoff on the Property via an infiltration trench. The remainder of the stormwater would infiltrate through the gravel base of the Substation or would be allowed to run off through vegetated uplands.

Approximately 20,458 square feet (0.46 acre) within 75 feet of on-site wetlands would be disturbed as a result of the proposed construction activities. These activities include grading, construction of a portion of the fenced Substation compound (2,132 square feet or 0.05 acre), installation of the infiltration trench and level spreader to treat stormwater, and landscaping.

Best Management Practices would be utilized in accordance with the *2002 Connecticut Guidelines for Erosion and Sediment Control* throughout the course of construction activities at the Site and maintained until disturbed areas have been stabilized. Geotextile fabric sediment barriers would be placed between the development footprint and wetland resource areas during construction and maintained until the Site is stabilized and rehabilitated.

L.3 Post-Construction Features

Upon completion of construction activities, all disturbed/exposed areas would be stabilized and re-vegetated. These areas would be dressed with topsoil and seeded with a New England conservation/wildlife mix, to establish a cover of native grasses, forbs, wildflowers and legumes that would provide both soil stability and wildlife habitat value. Erosion controls would remain in place until final site stabilization is achieved.

Select areas within 75 feet of the on-site wetlands would be disturbed by grading activities, including a small (northwest) corner of the Substation (which would include a breaker

arrangement) and installation of an infiltration trench and a level spreader. Mitigation would consist of enhancements to the buffer area between the Substation and the adjacent wetland resource and CL&P's Best Management Practices for erosion and sediment control (see typical details on enclosed drawing CP-4 in Appendix B, *Site Plans*). A combination of seed mixes containing native grasses and forbs would be used post construction to stabilize all exposed areas, including those within the proposed landscaped areas.

Areas along the east side of the on-site wetland resource would be undersown with a New England wet mix to create a wetland meadow environment. The adjoining upland area to the east, currently occupied by a portion of an existing driveway, lawn and landscaped areas would be undersown with a New England conservation mix to establish a tall meadow; non-native plant species (excluding mature trees) and lawn would be removed within this area and trees and shrub species native to the region would be planted. Along the south and east portions of the Site, a low meadow mix would be used in combination with landscaping of native trees. A Concept Planting Plan is provided in Appendix B, *Site Plans*.

All of the 20,458± square feet of disturbance within 75 feet of the on-site wetland resource would be pervious to stormwater following Site construction activities. This represents a net gain of 4,012± square feet (0.09 acre) of pervious surfaces within this area from existing conditions, due to the conversion of the on-site residence and paved driveway to landscaping.

The Project includes the installation of two 60-MVA transformers that would contain insulating (mineral) oil. The transformer equipment would each have secondary containment designed to hold 110 percent of a transformer's fluid capacity, and accidental spill prevention

measures in place. CL&P proposes to install Imbiber Bead® Containment Systems for the sumps, similar to containment systems installed at other CL&P substations, to assist in preventing oil discharges from the containment sumps. Further, a low oil level alarm that is integral to the system would be monitored remotely and would notify CL&P in the event of abnormal conditions. Periodic inspections of the sumps are performed by CL&P personnel to promote proper functioning of the systems. Based on these design considerations, the Project would have no adverse environmental effect.

CL&P would provide extensive landscaping around the Substation perimeter, resulting in the fencing and lower portions of internal equipment being largely out of view. Lighting would be available within the Substation yard to facilitate work at night under emergency conditions and during inclement weather. The Substation would have low-level lighting for safety and security purposes. However, these lights would be recessed or activated manually to minimize visual effects at night. Lighting would not extend beyond the limit of the fenced area.

L.4 Construction Sequencing

The general construction sequence for the Substation and line interconnection would include:

- Installation of erosion and sedimentation control measures;
- Construction of the access drive;
- Removal of the existing residential dwelling and driveway;
- Removal of trees and shrubs within the areas to be graded;
- Preparation of the Site (cut, fill, grading);
- Installation of Substation foundations, conduits and grounding grid;
- Spreading trap rock;
- Installation of steel structures and Substation equipment;
- Installation of transmission line interconnections;
- Commissioning the Substation;
- Completion of Site restoration activities; and
- Removal of erosion and sedimentation control measures.

M. HEALTH AND SAFETY

M.1 Electric and Magnetic Fields

Electric fields (“EF”) are produced within the surrounding area of a conducting object (e.g., a wire) when a voltage is applied to it. EF are measured in units of kilovolts per meter (“kV/m”). The level of an EF near to energized power line depends on the applied voltage, the distance between the conductors, and the distance to the measurement location.

Magnetic fields (“MF”) are produced within the surrounding area of a conductor or device which is carrying an electric current. MF are measured in units of milliGauss (“mG”). The level of a MF near to line conductors carrying current depends on the magnitude of the current, the distance between conductors, and the distance from the conductors to the measurement location.

Both electric and magnetic fields decrease rapidly as the distance from the source increases, and even more rapidly from electric equipment in comparison to line conductors. EF are further weakened by obstructions such as trees and building walls, while MF pass through most obstructions. In the case of parallel lines of circuit conductors, the levels of EF and MF are also dependent on the phasing of the circuits.

The highest levels of electric and magnetic fields around the perimeter fence of a substation occur where transmission and distribution circuits cross over or under the substation boundary. The levels of fields from substation equipment decrease rapidly with distance, reaching very low levels at relatively short distances beyond the fenced-in equipment. Substation-caused MF off the property of a substation will commonly be in the same range as the background MF levels in homes, which commonly range up to four (4) mG.

Existing Magnetic Fields on Boundaries of the Property

At and beyond the Property boundaries of the Substation, the predominant existing sources of power-frequency electric and magnetic fields (“EMF”) emanate from the 1130 and 1890 transmission line conductors, which are routed west to east with respect to the Property. The centerline of the 1890 Line’s towers, which are mounted on the railroad catenary structures, is approximately 23 feet to the north of the Property’s northerly border; the centerline of the 1130 Line’s monopoles is approximately 120 feet to the north of the Property’s northerly border. The two circuits as they are constructed today utilize phasings such that cancelation of their power-frequency magnetic fields is optimum.

The magnetic fields of the existing circuits were calculated using peak loads at the time of this project proposal and projected seasonal maximum 24-hour average current five years after the Substation is placed in service (proposed for January 2012), consistent with the Connecticut Siting Council’s *Electric and Magnetic Field Best Management Practices for the Construction of Electric Transmission Lines in Connecticut*, dated December 14, 2007.

The magnetic fields resulting from the existing line configuration in 2009 were calculated along a path perpendicular to the existing lines that extend 300 feet from each of the existing transmission lines. This path is labeled “Line West” on the Figure M-1, *Locations of EMF Calculations* and summary values are provided in Table M-1.

Figure M-1: Locations of EMF Calculations

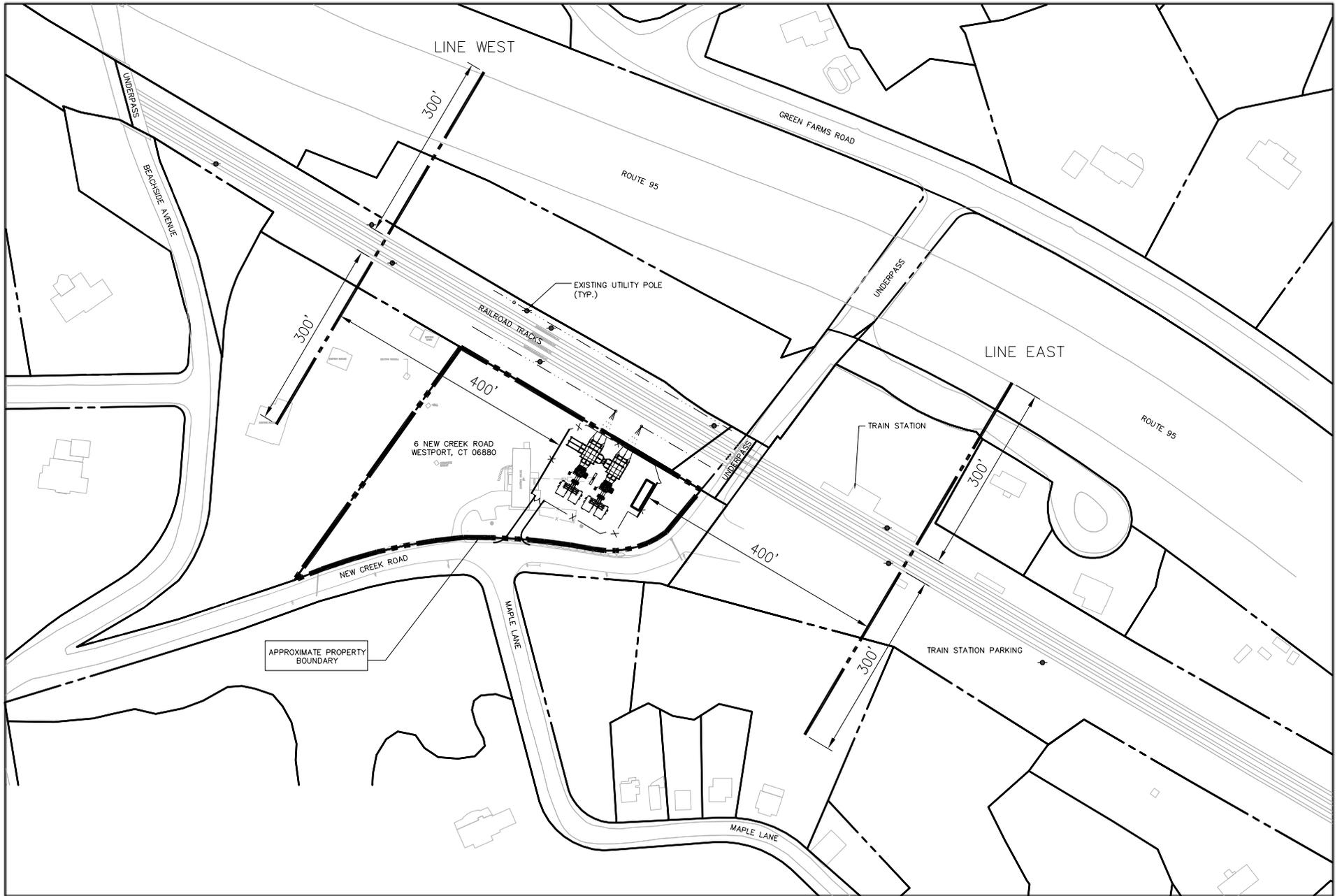


Table M-1 - Existing Magnetic Fields in 2009

Location along Perpendicular Path – Line West	Magnetic Field (mG) at Peak Load	Magnetic Field (mG) at Average Load
300 feet north of the northern most transmission circuit (1130)– North of the Property	0.60	0.39
Beneath northern most transmission circuit (1130)	28.95	18.82
Beneath southern most transmission circuit (1890)	40.76	26.50
300 feet south of the southern most transmission circuit (1890) – West of the Property	0.21	0.13

Changes That Would Affect Magnetic Fields

The existing 1890 transmission circuit would be looped into the proposed Substation. The segment of the existing 1890 transmission circuit to the east of the Property would be renamed the 1578 transmission circuit; the remaining segment of this transmission circuit to the west of the Property would remain the 1890 transmission circuit. The distribution of loads on these transmission circuits would change slightly. Under the proposed transmission line configuration, the 1578 transmission circuit would normally be providing electric power to service the area covered by the proposed Substation, hence resulting in an increase in projected load flowing during peak and seasonal maximum 24-hour average current five years after the proposed Substation is placed in service. The projected peak load on the 1578 transmission circuit is 521 amps; the 1890 transmission circuit is 315 amps; the 1130 transmission circuit is 664 amps. While the loads flowing on the 1130 transmission circuit remain nearly unchanged

after the proposed Substation is placed in service, an increase of 33 percent in peak loads is projected on the 1578 transmission circuit once the proposed Substation is placed in service.

The fence of the Substation would be approximately 40 feet at its closest point from any Property line, specifically the northerly Property line. At this distance, the Substation equipment within the fenced area would not noticeably contribute to any change in magnetic fields along the Property lines. However, there would be a subtle change to the existing magnetic field levels at points on and beyond the Property lines due to the change in loads flowing in the looped transmission line into the Substation.

Projected Electric and Magnetic Fields on Boundaries of the Property

CL&P made calculations of the projected magnetic field levels along two paths that run perpendicular to transmission lines. These paths are located 400 feet to the west and 400 feet to the east of the proposed Substation and are referred to herein as Line West and Line East, respectively (see Figure M-1, *Locations of EMF Calculations*). The location of Line West was specifically chosen since the closest residential dwelling is located along this calculation path at about 300 feet south of the nearest transmission line and 150 feet from the Substation's westerly Property boundary.

The magnetic fields of the existing lines were calculated using peak loads at the time of this Project proposal and projected seasonal maximum 24-hour average current five years after the Substation is placed in service. The transmission circuits connecting to the Substation were modeled with minimum ground clearance of 40 feet to accommodate the extra heights of the catenary structures which also support the railroad facilities. In addition, the proposed

modifications to the transmission lines include reverse phasing techniques to provide optimum cancelation of the power-frequency magnetic fields.

Table M-2 tabulates projected magnetic field levels along calculation paths Line West and Line East after the proposed Substation is placed in service.

Table M-2 - Projected Magnetic Field Levels¹

Line West		
Location along Perpendicular Path – Line West	Magnetic Field (mG) at Peak Load	Magnetic Field (mG) at Average Load
300 feet north of the northern most transmission circuit (1130)– North of the Property	0.58	0.37
Beneath northern most transmission circuit (1130)	28.62	18.61
Beneath southern most transmission circuit (1890)	53.21	34.58
300 feet south of the southern most transmission circuit (1890) – West of the Property	0.26	0.17
Line East		
300 feet north of the northern most transmission circuit (1130) – North of the Property	0.59	0.38
Beneath northern most transmission circuit (1130)	27.51	17.88
Beneath southern most transmission circuit (1578)	33.09	21.51
300 feet south of the southern most transmission circuit (1578) – East of the Property	0.19	0.12

¹ Projected magnetic fields were calculated from loads 5-years after Sherwood Substation is placed in service in 2012.

Consistent with the Connecticut Siting Council's *Electric and Magnetic Field Best Management Practices for the Construction of Electric Transmission Lines in Connecticut*, the design of the Substation incorporates field management practices as follows:

- The Substation has been located very close to an existing transmission line so that the length of Substation entry spans is very short.
- Reverse phasing would be used to optimize magnetic field cancelation. While the line loads projected on the 1890 transmission circuit during peak conditions are expected to decrease, the magnetic field levels would increase by 0.05 mG at a point 300 feet south along Line West. The magnetic fields at this same point would increase 0.04 mG during the seasonal 24-hour average load conditions, five years after the Substation is placed in service. This is due to the fact that the 1890 transmission circuit would provide less cancellation of the magnetic fields caused by the 1130 transmission circuit.
- The magnetic field levels would decrease at a point 300 feet north along Line West and on both ends of Line East, in both line-load scenarios.
- The Substation equipment has been located at a sufficient distance from Property lines so that this equipment makes no noticeable contribution to magnetic field levels along these Property lines.

There are no state or federal limits for electric or magnetic field levels at the property line of a substation. However, the Institute of Electrical and Electronic Engineers (“IEEE”) and the International Commission on Non-ionizing Radiation Protection (“ICNIRP”) have issued guideline limits for long-term public exposures to these fields. These limits are:

	<u>Magnetic Field (mG)</u>
IEEE	9,040
ICNIRP	833

The existing and proposed levels of magnetic fields at and beyond the Property lines are typical for all similar substations and well below these IEEE and ICNIRP limits. Based on these aforementioned guidelines and science peer group reviews of epidemiological and laboratory studies, these magnetic field exposure levels would not pose an undue safety or health hazard to persons or property at or adjacent to the Property.

M.2 Site Security

A seven-foot-high chain link fence topped with one foot of barbed wire (three strands) would enclose the Substation yard to prevent unauthorized access. The Substation yard would also be gated and locked. All gates would be padlocked at the end of the work day during construction activities and at all times once the Substation is in service. Appropriate signage would be posted at the Substation alerting the general public of high voltage facilities located within the Substation. Should equipment experience a failure, protective relaying would immediately remove the equipment from service, thereby protecting the public and the equipment within the Substation. Other devices installed within the Substation would constantly monitor the equipment to alert CL&P of any abnormal or emergency situations.

M.3 Traffic Considerations and Hours of Operation

Access would be gained from the proposed, at-grade driveway to be established along New Creek Road. Post-construction site conditions would not substantially affect existing traffic patterns. Once construction of the Substation is complete, the facility may be remotely operated, with personnel on site only for periodic inspections, maintenance and emergency work.

N. PROJECT SCHEDULE

Construction is expected to occur over a period of 12 to 18 months with the Substation in service in January 2012.

**Westport Conservation Commission
Correspondence**

TO: Conservation Commission
FROM: Lynne Krynicki, Conservation Analyst
DATE: June 9, 2009

RE: Proposed CL&P Sub-station, 6 New Creek Rd.

Currently, the property at 6 New Creek Road is developed with a single family residence. The property is a 2.56 acre parcel with a band of wetlands on the westerly side of the parcel that discharges to a tidal marsh to the south across New Creek Road.

The proposal by the Connecticut Light and Power is to construct a new substation on this parcel which would encompass a 20,610 s.f. area in the eastern portion of the property, just south of the existing transmission line and railroad corridor.

The substation area would be covered with a trap rock surface and secured by a seven-foot high chain link fence topped with one foot of barbed wire. CL&P is proposed to provide extensive landscaping around the Substation perimeter.

The emergent wetland system on site is seasonally inundated with diffuse surface water flows conveyed from north to south. The hydrology for this system likely originates from surface flows and groundwater interception. At the southern end of the wetland system, water flows outlet through a 15 inch reinforced concrete pipe continues beneath New Creek Road and into a tidal salt marsh. The on-site freshwater wetland is not subject to tidal influence due to its elevation and separation from the tidal wetland by a partially clogged culvert.

The Town of Westport is being given an opportunity to supply comments and recommendations to the Connecticut Siting Council with regard to project impact for the proposed CL&P substation at 6 New Creek Road. The reason the project is not coming to the Commission during a formal public hearing under the Regulations for the Protection and Preservation of Wetlands and Watercourses for the Town of Westport is because utilities are exempt from local land use control pursuant to Chapter 277a Section 16-50x

of the Connecticut General Statutes. Instead, these proposals are reviewed by the Connecticut Siting Council who invites local land use agencies to offer recommendations for their consideration of which they could require as conditions of their approval.

A formal presentation of the proposed project will be given by the project engineer from the firm of Vanasse Hangan Brustlin, Inc. at our meeting on June 17th. This will be a public meeting but not a public hearing. Members of the public may be present and will be able to ask questions.

Alicia and I were very happy to have had as many Commissioners available for the site walk on Monday morning. We have prepared a list of our comments and concerns which we formulated from the site walk and review of the plans and would like them to have them serve as discussion points for the meeting on the 17th along with your own. After the meeting, we will gather your comments and recommendations and then prepare a letter for consideration to the Connecticut Siting Council.

Discussion Points for 6 New Creek Road Substation

With regard to prudent and feasible alternatives that we would normally consider:

- 1.** What is the need for an upgrade? Further explain why the existing substation on Post Road cannot be upgraded.
What did the recently and newly installed 345 kv transmission line through Fairfield County do to improve service and why didn't that project solve the public need?
- 2.** The amount of large and mature trees on the site to be removed seems excessive and their removal will eliminate the natural screening of the site that they currently provide. Their removal seems to be necessitated by the proposed screening berms (3) and the proposed entry location off New Creek Road. However, two of the three berms appear to be for screening of the commercial or non-residential uses to the north, east and south.
- 3.** The western berm closest to the wetland is proposed to provide requested screening to the only residence adjacent to the site located on Beachside Avenue. As the residence is at a significantly higher

elevation than the substation, coniferous screening on the easterly property line of the Beachside Avenue property may be a preferred alternative. In this way, their view will be blocked as they look down onto the property below them.

4. The proposed western berm is of concern as it is approximately 20ft at its closest point and approximately 50 ft at its farthest point from the wetland. The landscape position of this berm is a back slope and the slope gradient to the west is approximately 20%. There is a significant potential for erosion of the slopes. Erosion and sediment control is of utmost importance as the wetland discharge is directly to a large, viable tidal marsh across New Creek Rd.
5. As an alternative to the proposed eastern and southern berms, coniferous screening could instead, be installed at the limit of disturbance and/or perhaps along the property line with appropriate species.
6. Given the amount of proposed regrading and the excessive amount of tree removal associated with the berms, it is staff opinion that Low Impact Development principles have not been exercised to their full potential.
7. The proposed removal of 4,012 square feet of impervious area and the replanting of a manicured lawn area with wetland species is commendable. There is currently manicured lawn along a large portion of the westerly edge of the wetland boundary.
8. The proposed construction activity appears to be taking place within the existing septic system area. Proper abandonment or removal of this system, in keeping with the Health Department requirements should be exercised.
9. As an added note, the Substation includes the installation of transformers that would contain insulating (mineral) oil. The transformer equipment would each have secondary containment designed to hold 110% of a transformer's fluid capacity, and accidental spill prevention measures in place. Further, a low oil level alarm would notify CL&P in the event of abnormal conditions.

With regard to additional information that would be helpful in reviewing the proposal:

- 10.** A formal landscape plan for the proposed revegetation (with the exception of the wetland enhancement area) was not submitted with the application package and was not available at the time of the site walk.
- 11.** Details of the proposed retaining wall around the substation perimeter have not been included in the plans.
- 12.** The wetland line as being utilized for this project has been flagged and verified by two wetland scientists. The Town wetland line is not being used as it was more restrictive. Ordinarily, the Town wetland boundary would be amended prior to hearing the development proposal. In this case, the Conservation Department will take on this responsibility and will use the reports submitted by CL&P from two different soil scientists. We ask that CL&P supply us with reports and electronic data to help us with the amendment. The map amendment will be filed by the Town of Westport at its expense as CL&P, a utility company, is exempt from local regulations and requirements.



**Northeast
Utilities System**

107 Selden Street, Berlin, CT 06037
Northeast Utilities Service Company
P.O. Box 270
Hartford, CT 06141-0270

John R. Morissette
Manager – Transmission Siting and Permitting
Tel: (860) 665-2036

June 17, 2009

Ms. Alicia Mozian
Conservation Director
Town of Westport
110 Myrtle Avenue
Westport, CT 06880

**Re: Conservation Analyst Comments
Proposed Sherwood Substation
New Creek Road
Westport, Connecticut**

Dear Ms. Mozian:

The following excerpts are from comments made by Westport Conservation Analyst Lynne Krynicki in a memo dated June 9, 2009. The Connecticut Light and Power Company (CL&P) responses to these comments are provided.

Comment 1: What is the need for an upgrade? Further explain why the existing substation on Post Road cannot be upgraded. What did the recently and newly installed 345 kv transmission line through Fairfield County do to improve service and why didn't that project solve the public need?

Response: The purpose of the project is to increase electric distribution system capacity and improve reliability in the Town of Westport by establishing a new bulk-power substation in the New Creek Road and Greens Farms Road area. CL&P will provide a detailed need statement in the municipal consultation filing and Connecticut Siting Council (CSC) application. The CSC will closely evaluate need issues.

Comment 2: The amount of large and mature trees on the site to be removed seems excessive and their removal will eliminate the natural screening of the site that they currently provide. Their removal seems to be necessitated by the proposed screening berms (3) and the proposed entry location off New Creek Road. However, two of the three berms appear to be for screening of the commercial or non-residential uses to the north, east and south.

Response: Tree removal is a result of grading and earth removal associated with establishing the substation compound, construction and operation access, demolition of the existing house, and connections to existing overhead power lines. Establishing the proposed earthen berms would not require the removal of any additional trees. Several factors influence the final construction and operation work areas, including the extent of the tree canopies with respect to the substation boundary (for safety reasons, CL&P requires a minimum of 10 feet around the substation to be free of obstructions, including limbs); the need for construction lay down areas; sufficient

overhead space for the use of cranes and other equipment with boom arms; and, the installation of a sub-grade grounding grid that can extend up to 15 feet beyond the fence line depending upon soil conditions.

All of the trees located on the west, south and east sides of the proposed substation are deciduous and offer limited screening for approximately half the year. The majority of these deciduous trees are Norway maple, a non-native invasive species, many of which are in declining health, and red oak. The earthen berms are designed to provide textural contouring of the landscaping and offer minimal screening by themselves, and thus could be eliminated. However, their elimination would not reduce the number of trees requiring removal.

Comment 3: The western berm closest to the wetland is proposed to provide requested screening to the only residence adjacent to the site located on Beachside Avenue. As the residence is at a significantly higher elevation than the substation, coniferous screening on the easterly property line of the Beachside Avenue property may be a preferred alternative. In this way, their view will be blocked as they look down onto the property below them.

Response: CL&P is currently engaged in conversations with the westerly neighbor to develop a mutually beneficial landscape plan that would effectively screen the substation from this adjacent property. CL&P believes that, to the extent possible, this neighbor's preferences should receive strong consideration.

Comment 4: The proposed western berm is of concern as it is approximately 20 ft at its closest point and approximately 50 ft at its farthest point from the wetland. The landscape position of this berm is a back slope and the slope gradient to the west is approximately 20%. There is a significant potential for erosion of the slopes. Erosion and sediment control is of utmost importance as the wetland discharge is directly to a large, viable tidal marsh across New Creek Rd.

Response: The westernmost earthen berm is proposed to be located within the approximate footprint of the existing residence and, to a lesser extent, a portion of the bituminous driveway. The net result would be a significant reduction in impervious surface. Further, a minimal area of the berm would drain towards the wetland, as the majority of the berm is designed to pitch eastward, back towards the substation fence, where storm water runoff would be intercepted by the proposed infiltration trench. Once seeded and landscaped, this area would provide a gentler grade than existing conditions farther west, between it and the wetlands. As depicted on the *Proposed Layout Site Development Plan C-3* within the Location Review document, two rows of erosion and sedimentation control measures would be installed to ensure no impacts to wetlands during construction. These controls would remain in place until the entire wetland restoration area has been completely stabilized (i.e., plantings have been successfully established).

Comment 5: As an alternative to the proposed eastern and southern berms, coniferous screening could instead be installed at the limit of disturbance and/or perhaps along the property line with appropriate species.

Response: As depicted on CL&P's proposed landscape concept plan, conifers dominate the proposed plantings, particularly surrounding three sides of the substation, with a foreground planting scheme consisting of low meadow grasses and a mix of understory flowering trees and overstory shade trees extending out towards the property boundary. The coniferous screening

could be extended from the substation out towards the road, if preferable to the Commission. Again, the berms in and of themselves are not intended as screening elements. The berms could be omitted from the design; however, there would be no advantage with respect to decreasing the number of trees requiring removal.

Comment 6: Given the amount of proposed regrading and the excessive amount of tree removal associated with the berms, it is staff opinion that Low Impact Development principles have not been exercised to their full potential.

Response: The limits of clearing associated with regrading and earth removal are necessitated by the existing grades along New Creek Road and the driveway grades required for vehicular truck access to the substation. As explained above, tree removal is a result of the work area required for establishing the compound, its access, demolition of the existing house, and connection to overhead power lines. Establishing the earthen berms does not require the removal of additional trees. In order to minimize impact to the wetlands and surrounding areas during construction, a double row of silt fence and hay bales are proposed. Once construction activities are completed, this upland area (which is currently a lawn and ornamental landscaped slope) would be enhanced by establishing a tall woodland meadow environment (consisting of native grasses and trees). Additionally, a stone trench has been designed to intercept runoff from the compound and infiltrate into the ground. The infiltration trench will prevent runoff from entering directly into the wetlands. The creation of the berm on the western side of the trench would ensure that compound runoff infiltrates through the stone trench instead of flowing into the wetlands.

Comment 7: The proposed removal of 4,012 square feet of impervious area and the replanting of a manicured lawn area with wetland species is commendable. There is currently manicured lawn along a large portion of the westerly edge of the wetland boundary.

Response: The removal of the existing residence and bituminous driveway and subsequent replacing with pervious surface features as well as the substantial landscaping planned for the site collectively result in minimal storm water runoff increases, if any at all, at the site.

Comment 8: The proposed construction activity appears to be taking place within the existing septic system area. Proper abandonment or removal of this system, in keeping with the Health Department requirements should be exercised.

Response: CL&P will consult with the Health Department before abandoning or removing the existing septic system.

Comment 9: As an added note, the Substation includes the installation of transformers that would contain insulating (mineral) oil. The transformer equipment would each have secondary containment designed to hold 110% of a transformer's fluid capacity, and accidental spill prevention measures in place. Further, a low oil level alarm would notify CL&P in the event of abnormal conditions.

Response: CL&P has successfully used these types of containment systems, which are approved by the Connecticut Department of Environmental Protection, at several of its substations throughout Connecticut

With regard to additional information that would be helpful in reviewing the proposal:

1. *A formal landscape plan for the proposed revegetation (with the exception of the wetland enhancement area) was not submitted with the application package and was not available at the time of the site walk.*

CL&P has provided an initial landscape concept plan to the Commission.

2. *Details of the proposed retaining wall around the substation perimeter have not been included in the plans.*

The proposed retaining wall would extend roughly 125 feet along the north side of the substation, adjacent to the rail line. Beginning in the northeast corner at a height of approximately 40 inches above finished grade, the wall would extend westward and slope down to meet existing (and final) grade in the northwest corner. A preliminary detail of the retaining wall is enclosed.

3. *The wetland line as being utilized for this project has been flagged and verified by two wetland scientists. The Town wetland line is not being used as it was more restrictive. Ordinarily, the Town wetland boundary would be amended prior to hearing the development proposal. In this case, the Conservation Department will take on this responsibility and will use the reports submitted by CL&P from two different soil scientists. We ask that CL&P supply us with reports and electronic data to help us with the amendment. The map amendment will be filed by the Town of Westport at its expense as CL&P, a utility company, is exempt from local regulations and requirements.*

The enclosed *Wetland Boundaries* figure, depicting the Town's existing wetland boundary and that of VHB's, was previously submitted to the Town of Westport. The VHB delineation reflects a greater total area than the Town's depiction. As a means of comparison, VHB's delineation encompasses approximately 34,242 square feet while the Town depicts approximately 16,349 square feet. The central portion of the wetland actually extends farther to the east and significantly more to the north than shown on the Town's map, in closer proximity to the substation footprint (see the area of wetland flags 8 through 12 on the attached figure). Therefore, the Town's existing boundary is actually less restrictive than that delineated by VHB. CL&P will coordinate with the Town and provide appropriate reports and electronic data to facilitate the Town's amendment.

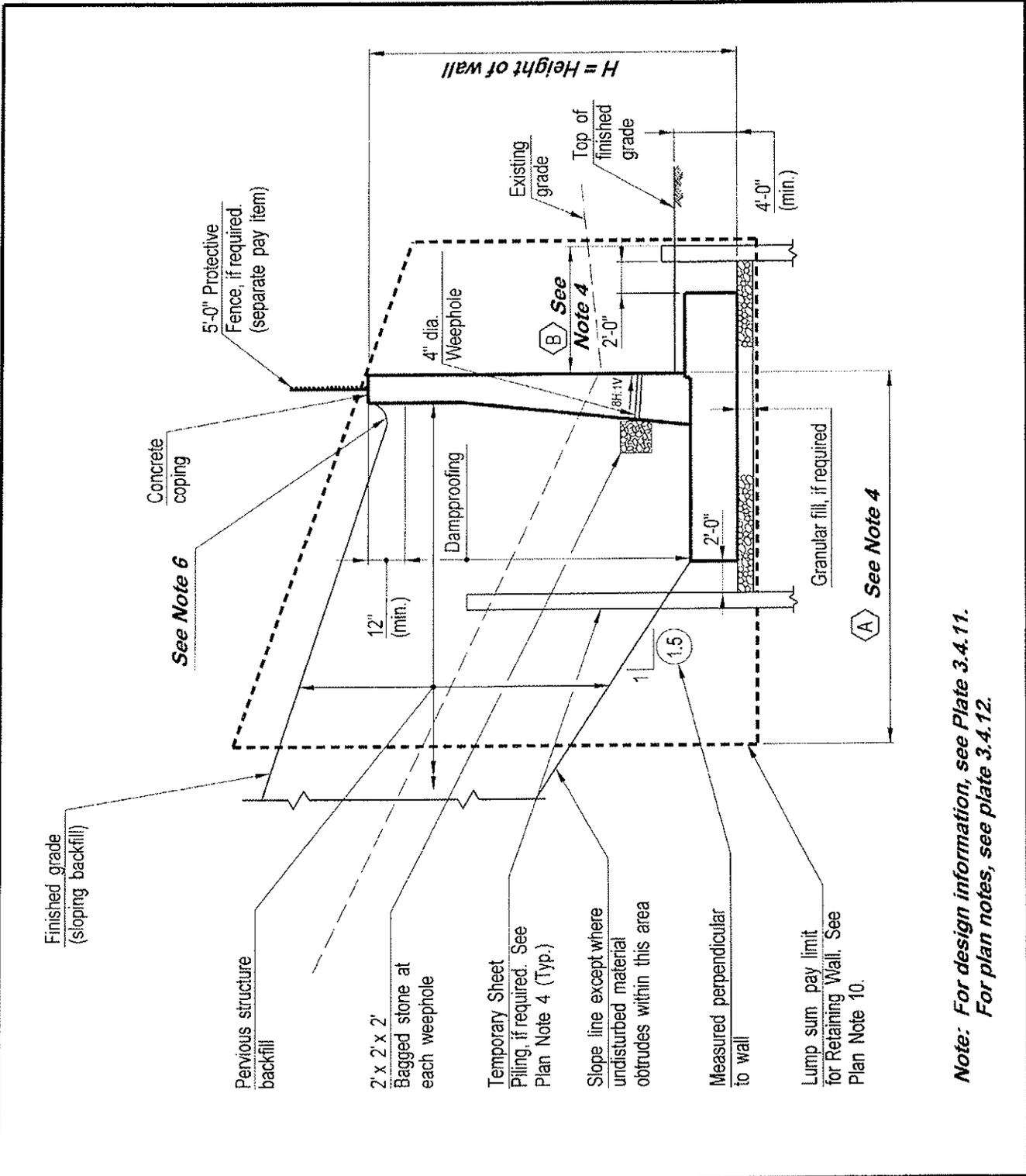
Should you have any questions on this matter, please direct them to Ms. Amanda Mayhew of my staff at 860-665-6953. We look forward to meeting with your Commission on June 17, 2009.

Respectfully submitted,

NORTHEAST UTILITIES SERVICE COMPANY
John R. Morissette

by  _____

Enclosures



Finished grade (sloping backfill)

See Note 6

Concrete coping

5'-0" Protective Fence, if required. (separate pay item)

H = Height of wall

Existing grade

Top of finished grade

4'-0" (min.)

See Note 4

4" dia Weephole

2'-0"

Dampproofing

Granular fill, if required

See Note 4

12" (min.)

1.5

Previous structure backfill

Concrete coping

2' x 2' x 2' Bagged stone at each weephole

Temporary Sheet Piling, if required. See Plan Note 4 (Typ.)

Slope line except where undisturbed material obtrudes within this area

Measured perpendicular to wall

Lump sum pay limit for Retaining Wall. See Plan Note 10.

Note: For design information, see Plate 3.4.11. For plan notes, see plate 3.4.12.

**CONNECTICUT
BRIDGE DESIGN
MANUAL**

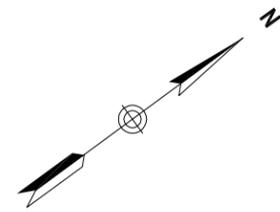
**TYPICAL SECTION
CAST-IN-PLACE
REINFORCED CONCRETE
(SLOPING BACKFILL)**

Issue Date:	10/03
Revision Date:	
Plate Number:	3.4.9c

PRELIMINARY

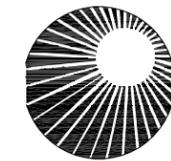
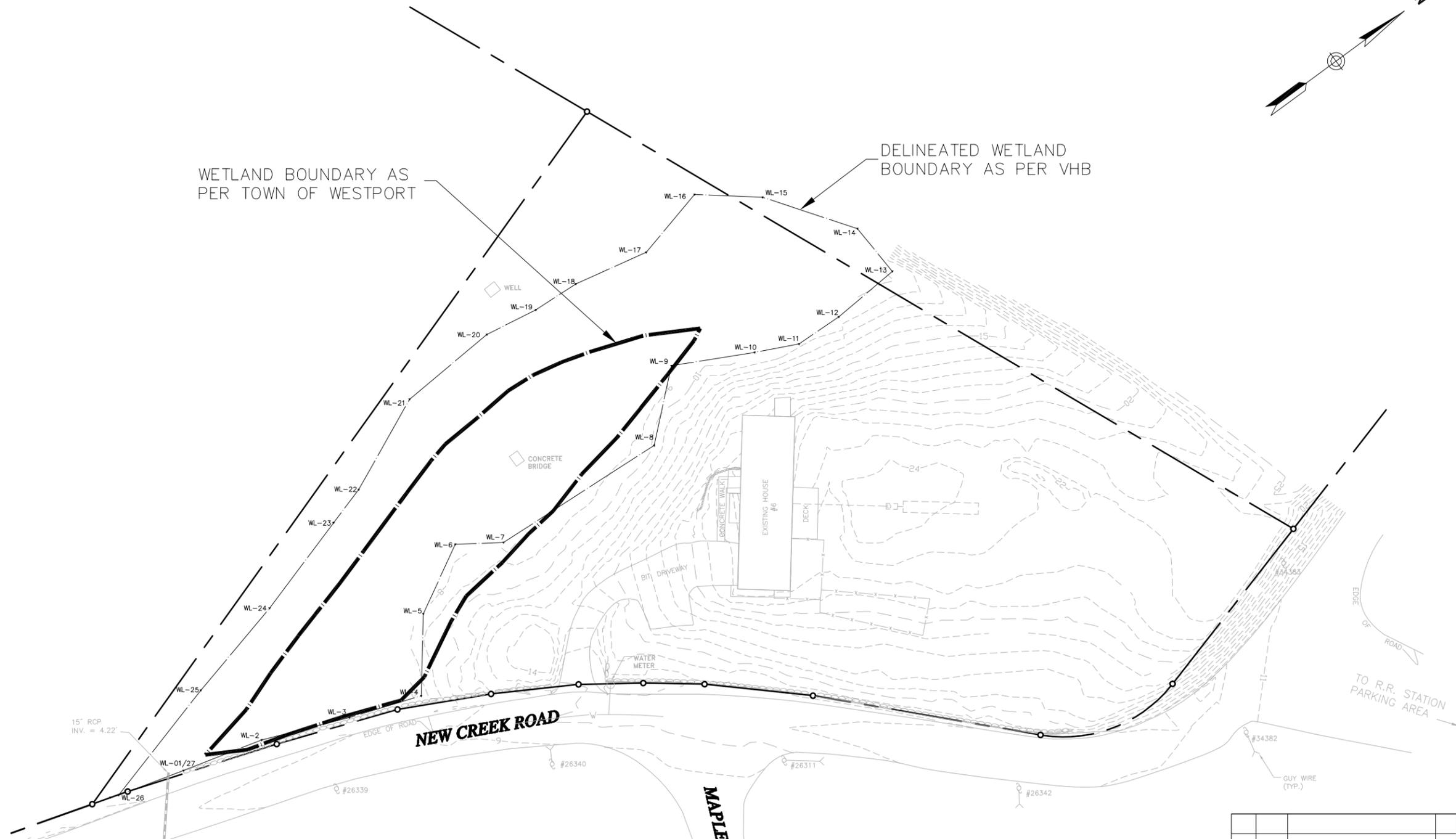


LOCUS MAP
1000 0 1000 2000
SCALE IN FEET



WETLAND BOUNDARY AS PER TOWN OF WESTPORT

DELINEATED WETLAND BOUNDARY AS PER VHB



Connecticut Light & Power

The Northeast Utilities System

VHB Vanasse Hangen Brustlin, Inc.
Transportation • Land Development • Environmental Services
54 Tule Place, Middletown, Connecticut 06457-1847
Tel: 860 632-1500 • Fax: 860 632-7879

PLANS AND SPECIFICATIONS ARE SUBJECT TO REVISIONS PENDING FINAL SITING COUNCIL APPROVAL

THE WETLAND BOUNDARY, AS DELINEATED IN THE FIELD BY VHB, IS DETERMINED IT TO BE SUBSTANTIALLY CORRECT AS SHOWN HEREON.

MATTHEW DAVISON, REGISTERED SOIL SCIENTIST

30 0 30 60
SCALE IN FEET

Northeast Utilities Service Co. FOR CONNECTICUT LIGHT & POWER COMPANY					
TITLE SHERWOOD SUBSTATION WETLAND BOUNDARIES					
WESTPORT, CONNECTICUT					
BY	SDK	CHKD	MD	APP	MPL
DATE	MAY 12, 2009	DATE	MAY 12, 2009	DATE	MAY 12, 2009
H-SCALE	1"=30'	SIZE	11x17	FIELD BOOK & PAGES	
V-SCALE	NA	V.S.		R.E.DWG.	
NO.	DATE	AS BUILT REVISIONS	BY	CHK	APP
R.E. PROJ. NUMBER: 41448				NUSCO W-1	



WESTPORT, CONNECTICUT
CONSERVATION DEPARTMENT

TOWN HALL - 110 MYRTLE AVENUE
WESTPORT, CONNECTICUT 06880
(203) 341-1170 • FAX (203) 341-1088

July 16, 2009

John R. Morissette
Manager-Transmission Siting and Permitting
107 Belden Street
Berlin, CT 06037

Re: Proposed Sherman Substation, 6 New Creek Rd., Westport, CT

Dear Mr. Morissette:

As requested, the Westport Conservation Commission conducted a field inspection on June 8, 2009 and on June 17, 2009 held a public meeting in which they were presented with the proposed plans for a new substation at 6 New Creek Rd. The minutes of that public meeting are attached for your review. Also included are Conservation Department staff comments to the Commission that were prepared after the site visit. Comments received back from NU were also reviewed by the Commission.

It is our understanding that you will soon be moving into the Municipal Consultation Filing phase of the process at which time revised plans will be submitted to us for review. We are also of the understanding that the proposed landscape plans for the property will most likely be changed to take into considerations concerns and discussions with the abutting residential property owner on Beachside Avenue. We will be withholding formal comments to the Siting Council until these plans have been reviewed.

Thank you for the opportunity to comment.

Sincerely,

Alicia Mozian
Conservation Director

Corr-out/6 New Creek Rd./june 17 mins



**WESTPORT CONNECTICUT
CONSERVATION COMMISSION**

TOWN HALL - 110 MYRTLE AVENUE
WESTPORT, CONNECTICUT 06880
(203) 341-1170 • FAX (203) 341-1153

**MINUTES
WESTPORT CONSERVATION COMMISSION
JUNE 17, 2009**

The June 17, 2009 of the Westport Conservation Commission was called to order at 7:00 p.m. in the Auditorium of the Westport Town Hall.

ATTENDANCE

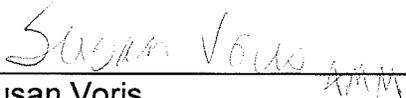
Commission Members:

Gerald Kagan, Vice-Chair
Bill Blaufuss, Alternate
Lanning Bryer
W. Fergus Porter, Alternate
Jennifer Tooker, Alternate

Staff Members:

Lynne Krynicki, Conservation Analyst
Susan Voris, Recording Secretary

This is to certify that these minutes and resolutions were filed with the Westport Town Clerk within 7 days of the June 17, 2009 Public Hearing of the Westport Conservation Commission pursuant to Section 1-225 of the Freedom of Information Act.



Susan Voris
Recording Secretary

Kris Aberg of Northeast Utilities stated the proposal would address the needs of two aging substations and the temporary substation with the construction of this proposed substation. He indicated CL&P purchased the property on New Creek Road because the site is fairly isolated and is adjacent to a transportation area. The proposal calls for two transmission lines coming into the site with two transformers. He stated this would supply a very reliable power source. He added that if one transformer went down the other would be able to accommodate the power needs. He stated the substation would take up 20,000 s.f. The site would be surrounded by a 7' chain link fence topped by 1 foot of barbed wire. He stated they hope to begin work by the end of 2010 and bring the proposed substation online in time for the 2011 summer season.

Mr. Bryer asked about the adjacent neighbors.

Mr. Swan stated they have one neighbor, the Guinta's at 1 Beachside Avenue. Metro North Railroad is the neighbor to the north.

Mr. Kagan asked how the power would be leaving the site.

Mr. Aberg stated the power would leave the site underground to the power lines.

Mr. Swan noted there would be six circuits leaving the site.

Mr. Kagan asked how the circuits would be leaving the site since there are wetlands going through the site.

Mr. Swan stated they are looking for input at this stage. He noted they would not begin site work for 18 months.

Mike Libertine, Environmental Engineer, stated there is a wetland on the west side of the site and is approximately 2/3 of an acre in size. He stated they are currently in the process of establishing the wetland boundary. He stated there would be activity within 75 feet of the wetlands. There will be a 1/2 acre developed under this proposal. The proposal calls for the removal of the existing home and the bituminous asphalt. He stated they are proposing to install landscaping including significant trees and shrubs. He indicated they would be including meadow grass in the landscaping. The plan includes a double row of silt fence and hay bales used to protect the wetlands. He stated the site development would be on the plateau but indicated there will be significant grading.

Mr. Kagan asked if there are any plans to have a biofiltration area off the gravel area.

Mr. Libertine stated the plan would establish an infiltration trench on the western side of the substation. The proposal includes a slight berm pitched back toward the substation to protect the wetlands. He stated that he did not believe there would be drainage issues on this site based on the amount of trap rock being used and since the site is underlain by sand and gravel.

Mr. Kagan asked if there were any PCP's in transformers.

Mr. Libertine stated there are not. He noted there are sumps proposed that would deal with any petroleum leaks and designed to capture 110% of the fluids in transformers.

Mr. Kagan asked if the system would be alarmed.

Mr. Aberg stated there is an alarm to let know if there is an oil pressure change.

Mr. Kagan noted it is a long driveway from the road to the substation gates. He asked if a gate could be installed so that access to the site could be observed.

Mr. Libertine noted this was discussed at the Planning & Zoning meeting. They have committed to incorporating a privacy gate a car length and a half off road. He stated the security gate must be kept in place.

Mr. Bryer noted the number of trees being removed from the site. He asked what would be done to protect the wetlands after the tree removal.

Mr. Libertine stated that all trees in the construction footprint and which overhang the substation have to be removed. He indicated they are committed to saving as many trees as possible. He noted they would be adding substantial plantings for screening including 14' trees. He stated they would stabilize the site during construction and tree removal.

Mr. Kagan asked about the Control and Battery Area.

Mr. Aberg stated there would be two batteries. The batteries would be installed inside a steel building with a concrete footing. He indicated there would be a tray underneath the batteries.

Mr. Swan reviewed the permitting process. He stated the application is in the Locational Review Period through the summer. They plan to file the Municipal Consultation Plan in September to solicit further town comments. They hope to file the final application with the Siting Council in November with hope that they receive approval in summer 2010.

Brian Cleary of 28 Railroad Place noted comments by the applicant that it is rare for there to be issues to be at substations. The applicant stated that battery leakage is rare but the batteries are monitored. He asked what are the impacts of having the substation within 75' of the wetlands and asked if there are any studies to back that up. He asked about the liability issues with the Arby's substation and what happens with that site once the new substation is operational. He questioned whether this proposal is the best solution for Westport.

Mr. Swan stated Mr. Cleary's questions are valid and must be addressed as part of the Siting Council application. He stated the purpose of the meeting was to address the locational review information. He added that all Mr. Cleary's questions would be addressed with filing in Municipal consultation plan. He indicated they were not prepared to address Mr. Cleary's questions at this moment.

Mr. Kagan asked Mr. Cleary to put his comments in writing and submit them to the staff to be included in comments to CL&P, so they may be addressed in the September application to the town.

Mr. Cleary agreed.

Mr. Swan noted they will be meeting with ARB and have met with neighbors. He stated they are definitely looking for comments from the community.

Mr. Porter asked staff if the response from CL&P to the comments made at the field visit was adequate.

Ms. Krynicki indicated the presentation this evening indicates CL&P is in the process of addressing the neighbor's concerns.. She noted the staff and Commission will have an opportunity to review the revised plans and to make formal comments to the Siting Council.

Marianne Barbino Dubuque, attorney for CL&P, stated filing an application with the Siting Council is a three-step process. The first step is the locational review, which is a part of the Public Utilities Act. The next step is the Municipal Review, which allows a 60-day review by the town prior to the final step of submitting an application to the Siting Council. She stated that they are looking for comments and if they have not addressed the concerns raised at the field trip, they need to hear it. She added the comments would be incorporated into the plan. She indicated that once they file the application with the Siting Council, there would be a hearing in Westport to allow public testimony with an



**Northeast
Utilities System**

107 Selden Street, Berlin, CT 06037
Northeast Utilities Service Company
P.O. Box 270
Hartford, CT 06141-0270

John R. Morissette
Manager – Transmission Siting and Permitting
Tel: (860) 665-2036

September 23, 2009

Ms. Alicia Mozian
Conservation Director
Town of Westport
110 Myrtle Avenue
Westport, CT 06880

**Re: Proposed Sherman Substation
New Creek Road
Westport, Connecticut**

Dear Ms. Mozian:

The Connecticut Light and Power Company (CL&P) reviewed the Conservation Commission's minutes from the June 17, 2009 meeting and offers the following responses to issues discussed at that time:

- **Feeders:** In response to Mr. Kagan's question as to how power would leave the site, CL&P indicated that distribution circuits would exit via underground routes. Mr. Kagan then asked where the circuits would be leaving the site since there are wetlands going through the site. CL&P envisions the underground circuits extending from the proposed Substation southward, under the proposed driveway (or under land immediately adjacent to it), and across New Creek Road to interconnect with the existing distribution pole network in the area. As such, no on-site wetland resources would be affected.
- **Erosion and Sedimentation Measures (revised):** The conceptual site plan presented in the Location Review documents included a double row of silt fence and hay bales to protect wetland resources. The two rows of erosion and sedimentation (E&S) measures were designed because of moderate slopes created by incorporation of a landscaping berm on the west side of the Substation. However, in response to the Commission's concerns with respect to a berm in this location, CL&P has elected to eliminate this feature, which ultimately negates a need for the double row of E&S controls. Our revised site plan, which will be presented in the Municipal Consultation Filing, depicts a single row of E&S measures to protect the wetland.
- **Privacy gate:** CL&P has agreed to install a decorative entrance gate along the driveway, as requested by both this Commission and the Town's Architecture Review Board. We expect to present design alternatives and to receive guidance as to the Town's preference.
- **Landscape Plan:** We are still working on the landscaping plan and a revised concept plan will be presented in the Municipal Consultation Filing. At this time, we envision new plantings for screening will be approximately 10 to 12 feet high, at the tallest point.

Please note that although the minutes refer to VHB working on establishing the wetland boundary, in fact the wetland boundary at the site was previously established, verified, and mapped prior to the June 17, 2009 meeting, and that delineation was provided as part of the submission to the Commission. There may have been some confusion at the time of the meeting because CL&P was in the process of providing electronic data to the Town to assist the Commission in establishing updated Town mapping of the parcel.

Finally, as you may recall, Mr. Brian Cleary spoke at the Commission's meeting, at which time he was asked to submit his questions in writing. As of this date, we have not received any questions from Mr. Cleary.

We hope you find this information useful. Should you have any further questions, please direct them to Ms. Amanda Mayhew of my staff at 860-665-6953. We look forward to continuing our working relationship with the Commission.

Respectfully submitted,

NORTHEAST UTILITIES SERVICE COMPANY



John R. Morissette

cc: Mr. Gordon F. Joseloff, First Selectman, Town of Westport

**Westport Planning & Zoning Commission
Correspondence**



WESTPORT CONNECTICUT

PLANNING & ZONING
TOWN HALL, 110 MYRTLE AVENUE
WESTPORT, CONNECTICUT 06880
(203) 341-1030 • (203) 341-1079
(203) 454-6145 - fax

June 26, 2009

S. Derek Phelps, Executive Director
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

RE: 6 New Creek Road: Application by Northeast Utilities System for a new electrical substation on property owned by Connecticut Light & Power pursuant to Connecticut General Statute 16-50x (d) with final approval by the Connecticut Siting Council in a Res AAA zone, PID # G06005000

Dear Mr. Phelps:

Pursuant to Connecticut General Statute 16-50x (d) the Westport Planning & Zoning Commission has reviewed the above referenced project and hereby makes the following findings and recommendations:

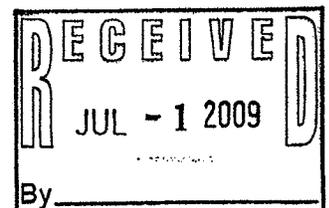
1. Seek a review by the Architecture Review Board for items such as fencing and any proposed structures to help soften the appearance of the proposed facility
2. Enhance landscape screening to further reduce the visual impacts on surrounding properties. They should also minimize to the greatest extent possible the removal of existing natural vegetation.
3. Consider reducing the height of the proposed structures to 40 feet. This would make the proposed improvements more in keeping the Town's zoning regulations and more in scale with surround residential structures.
4. Have the drainage plans reviewed by the Westport DPW Engineering Dept. to insure that drainage and run-off impacts are minimized.
5. Have the sedimentation and erosion control plan reviewed by the Conservation Commission staff prior to any construction activity on site.

The Westport Planning and Zoning Commission hopes that this comments are helpful and can be incorporated into the final approvals for the project. Thank you for the opportunity to comment on this project.

Sincerely,

Laurence Bradley, AICP
Planning and Zoning Director

Cc: Gordon F. Joseloff, First Selectman
Alicia Mozian, Conservation Director
Steve Edwards, DPW Director
✓Chris Swan, CL&P





**Northeast
Utilities System**

107 Selden Street, Berlin, CT 06037
Northeast Utilities Service Company
P.O. Box 270
Hartford, CT 06141-0270

John R. Morissette
Manager – Transmission Siting and Permitting
Tel: (860) 665-2036

September 23, 2009

Mr. Laurence I. Bradley, AICP
Planning and Zoning Director
Town Hall
110 Myrtle Avenue
Westport, CT 06880

**Re: Proposed Sherman Substation
New Creek Road
Westport, Connecticut**

Dear Mr. Bradley:

In response to comments provided to S. Derek Phelps, Executive Director of the Connecticut Siting Council, in your letter of June 26, 2009, The Connecticut Light & Power Company (“CL&P”) offers the following responses:

1. Seek a review by the Architecture Review Board (ARB) for items such as fencing and any proposed structures to help soften the appearance of the proposed facility.

CL&P met with the ARB on June 14, 2009. The ARB expressed a preference for painting the control enclosures an earth tone color (either brown or green), incorporating dense, tall plantings into the landscaping, and considering a decorative gate for the site entrance. CL&P has agreed to paint the enclosures and install a decorative entrance gate. CL&P is working on the landscaping plan and expects to return to the ARB for further discussions during the Municipal Consultation Filing (MCF) process.

2. Enhance landscape screening to further reduce the visual impacts on surrounding properties...[and] minimize to the greatest extent possible the removal of existing natural vegetation.

The landscaping plan includes dense plantings of numerous native tree and shrub species to provide for screening of the facility. A copy of the CL&P’s revised Concept Planting Plan will be included in the MCF.

Existing trees at the site are characteristic of a suburban landscape and include a mix of mature non-native, planted native, and naturally occurring native tree species. Norway maple, considered non-native and potentially invasive, is the most prevalent species on the site. Efforts to retain or protect existing site trees should be based primarily on tree health with consideration given to species and suitable growing space. An inspection of trees located along the north and west sides of New Creek Road revealed that virtually all trees in

areas near the roadway suffer from defects, various stages of disease, and poor tree form. The high proportion of compromised trees is specific to this area of the site indicating some type of deficient soil condition or disturbance related to historic activities. Resources allocated to protecting and retaining the existing trees in this area would be fruitless. Resources would be more effectively allocated toward identifying and correcting the soil conditions that are causing tree disease in this area. Amending soil conditions and planting appropriate trees in this area will more effectively utilize this growing space and provide the desired screening.

3. Consider reducing the height of the proposed structures to 40 feet.

The height of the line terminal structures within the proposed substation is 40 feet. However, part of the equipment mounted on these structures would extend approximately 4 additional feet above the 40-foot height. This would result in the maximum height of any substation equipment reaching 44.5 feet above grade. Please note that CL&P would be reducing the at-grade elevation in the area where the line terminal structures are installed from an existing 22-foot elevation down to 18 feet or less. The net result is that the top of the highest piece of substation equipment would be no more than 40 feet above the existing grade.

4. Have the drainage plans reviewed by the Westport DPW Engineering Department to insure that drainage and run-off impacts are minimized.

CL&P provided a drainage analysis to Mr. James Kousidis of the Westport DPW Engineering Department for review and comment.

5. Have the sedimentation and erosion control plan reviewed by the Conservation Commission staff prior to any construction activity on the site.

As part of its upcoming MCF, CL&P will include sedimentation and erosion control measures on its Site Plans. As the process continues through Application to the Connecticut Siting Council, the Town will continue to have an opportunity to review and comment on these plans.

We hope you find this information beneficial. Should you have any further questions, please direct them to Ms. Amanda Mayhew of my staff at 860-665-6953. We look forward to continuing our working relationship with the Commission.

Respectfully submitted,

NORTHEAST UTILITIES SERVICE COMPANY



John R. Morissette

cc: Mr. Gordon F. Joseloff, First Selectman, Town of Westport

Site Plans

Issued for: **Municipal Consultation Filing**

Date Issued: September 23, 2009

Latest Issue: September 23, 2009

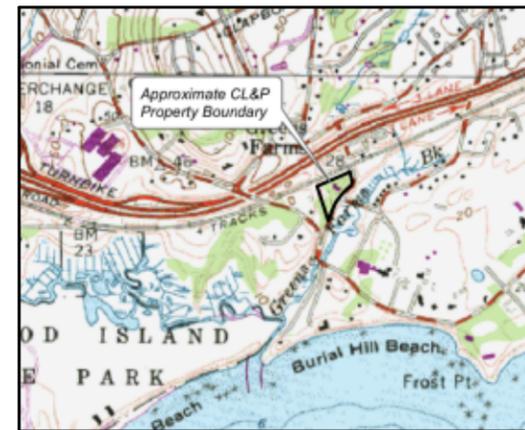
Index

No.	Drawing Title	Latest Issue
C-1	Overall Site Plan	09/23/09
C-2	Layout and Materials Plan	09/23/09
C-3	Site Development Plan	09/23/09
C-4	Erosion and Sediment Control Plan	09/23/09
C-5	Site Details	09/23/09
C-6	Site Details	09/23/09

Reference Drawings		
22632	Boundary and Topographic Survey	04/08
25805-33002	Preliminary Plans and Sections	05/12/09
1542	Concept Planting Plan	09/21/09

Sherwood Substation

6 New Creek Road
Westport, Connecticut



Site Location Map ↑ 0 1000 2000 Feet

Property Information

Owner:
The Connecticut Light and Power Company
P.O. Box 270
Hartford, Connecticut 06141-0270
(860) 605-5000

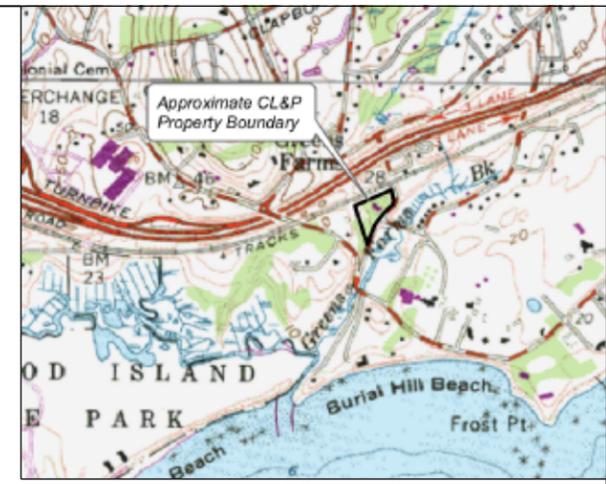
Applicant:
The Connecticut Light and Power Company
P.O. Box 270
Hartford, Connecticut 06141-0270
(860) 605-5000

Assessor's Plat- Map: G06
Lot: 005

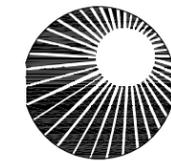


Vanasse Hangen Brustlin, Inc.
Transportation
Land Development
Environmental Services





LOCUS MAP
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 SCALE IN FEET

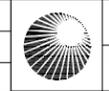


**Connecticut
 Light & Power**

The Northeast Utilities System



PLANS AND SPECIFICATIONS ARE SUBJECT TO REVISIONS PENDING FINAL SITING COUNCIL APPROVAL



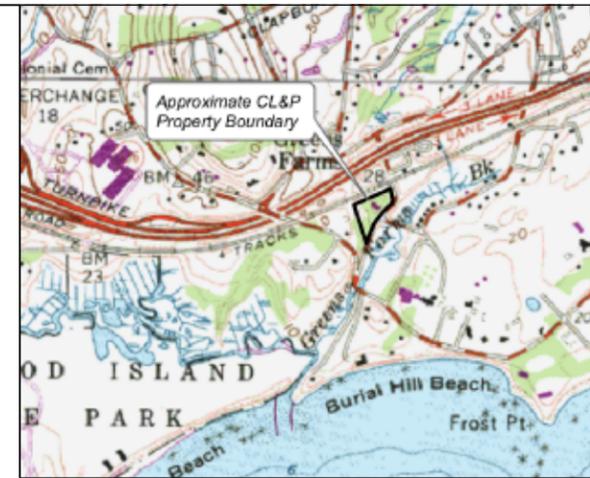
Northeast Utilities Service Co.
 FOR CONNECTICUT LIGHT & POWER COMPANY

TITLE
**SHERWOOD SUBSTATION
 PROPOSED LAYOUT
 OVERALL SITE PLAN
 WESTPORT, CONNECTICUT**

BY	SDK	CHKD	PV	APP	MPL	APP
DATE	SEPT. 23, 2009	DATE	SEPT. 23, 2009	DATE	SEPT. 23, 2009	DATE
H-SCALE	1"=200'	SIZE	11x17	FIELD BOOK & PAGES		
V-SCALE	NA	V.S.		R.E.DWG.		

NO.	DATE	AS BUILT REVISIONS	BY	CHK	APP	APP	R.E. PROJ. NUMBER: 41448	NUSCO	C-1
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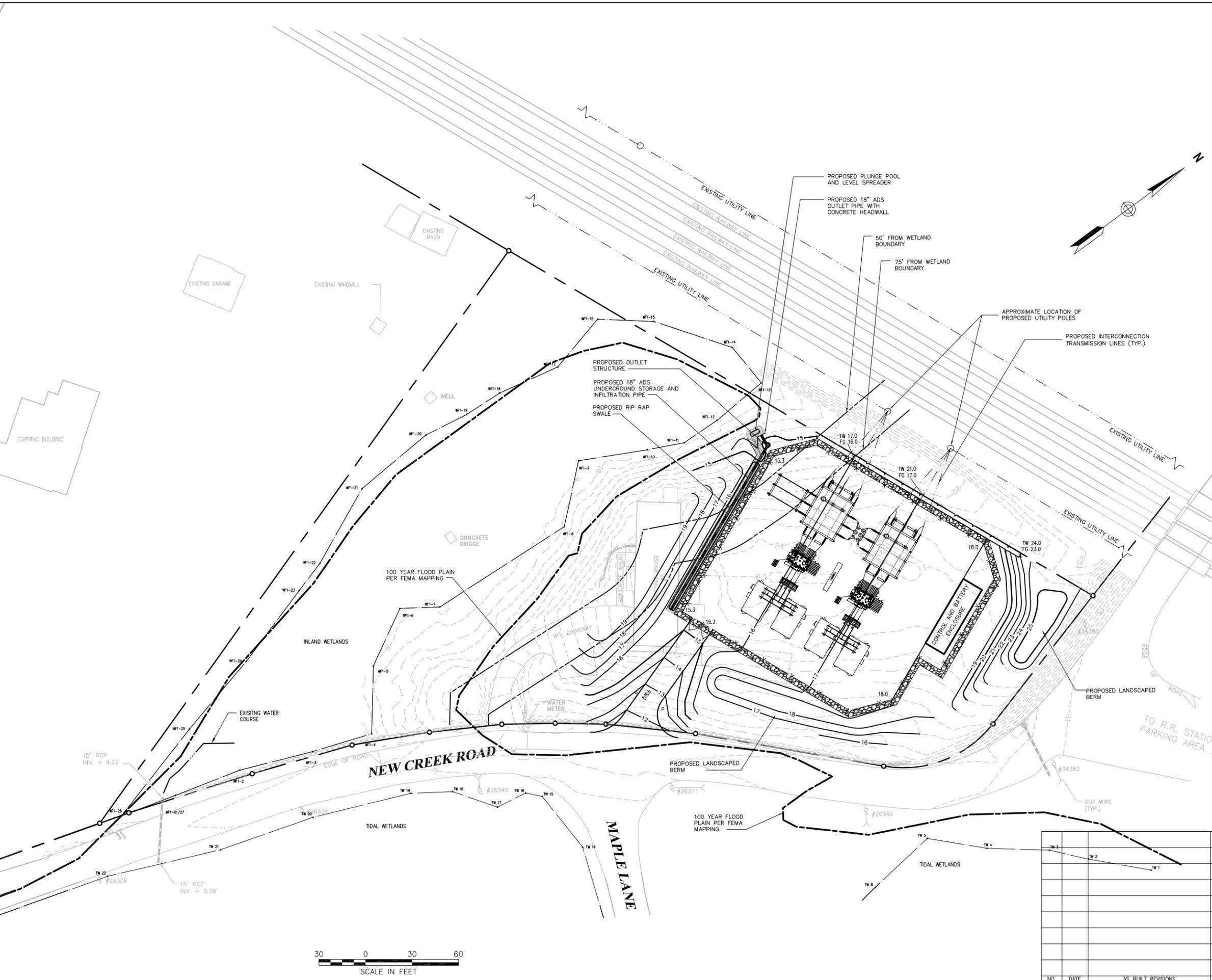
100 0 100 200
 SCALE IN FEET



LOCUS MAP
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 SCALE IN FEET



Connecticut Light & Power
 The Northeast Utilities System



30 0 30 60
 SCALE IN FEET

VHB Vanasse Hangen Brustlin, Inc.
 Transportation • Land Development • Environmental Services
 54 Tuttle Place, Middletown, Connecticut 06457-1047
 Tel: 860 632-1500 • Fax: 860 632-7879

PLANS AND SPECIFICATIONS ARE SUBJECT TO REVISIONS PENDING FINAL SITING COUNCIL APPROVAL

		Northeast Utilities Service Co. FOR CONNECTICUT LIGHT & POWER COMPANY				
		TITLE SHERWOOD SUBSTATION PROPOSED LAYOUT SITE DEVELOPMENT PLAN WESTPORT, CONNECTICUT				
BY	SDK	CHKD	PV	APP	MPL	APP
DATE	SEPT. 23, 2009	DATE	SEPT. 23, 2009	DATE	SEPT. 23, 2009	DATE
H-SCALE	1"=60'	SIZE	11x17	FIELD BOOK & PAGES		
V-SCALE	NA	V.S.		R.E.DWG.		
NO.	DATE	AS BUILT	REVISIONS	BY	CHK	APP
R.E. PROJ. NUMBER: 41448				NUSCO C-3		

Temporary Erosion and Sedimentation Control Maintenance

THE SITE CONTRACTOR WILL BE RESPONSIBLE FOR IMPLEMENTING EACH CONTROL SHOWN ON THE SEDIMENTATION AND EROSION CONTROL PLAN.

THE SITE CONTRACTOR WILL INSPECT ALL SEDIMENT AND EROSION CONTROL STRUCTURES PERIODICALLY AND AFTER EACH RAINFALL EVENT. RECORDS OF THE INSPECTIONS WILL BE PREPARED AND MAINTAINED ON-SITE BY THE CONTRACTOR.

SILT SHALL BE REMOVED FROM BEHIND BARRIERS IF GREATER THAN 6-INCHES DEEP OR AS NEEDED.

DAMAGED OR DETERIORATED ITEMS WILL BE REPAIRED IMMEDIATELY AFTER IDENTIFICATION.

THE UNDERSIDE OF HAY BALES SHOULD BE KEPT IN CLOSE CONTACT WITH THE EARTH AND RESET AS NECESSARY.

SEDIMENT THAT IS COLLECTED IN STRUCTURES SHALL BE DISPOSED OF PROPERLY AND COVERED IF STORED ON-SITE.

IF A TEMPORARY SEDIMENT TRAP IS USED: INSPECT THE TEMPORARY SEDIMENT TRAP AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF A RAINFALL EVENT TO DETERMINE THE CONDITIONS OF THE BASINS DURING CONSTRUCTION. CLEAN OUT SEDIMENT BASINS WHEN ACCUMULATION REACHES 12" SEDIMENT LEVELS SHALL BE MARKED WITHIN THE SEDIMENT STORAGE AREA BY STAKES. DO NOT ALLOW ACCUMULATED SEDIMENTS TO FLUSH INTO WETLAND AREAS.

EROSION CONTROL STRUCTURES SHALL REMAIN IN PLACE UNTIL ALL DISTURBED EARTH HAS BEEN SECURELY STABILIZED. AFTER REMOVAL OF STRUCTURES, DISTURBED AREAS SHALL BE REGRADED AND STABILIZED AS SOON AS PRACTICAL.

MAINTAIN THE CONSTRUCTION ENTRANCE IN A CONDITION WHICH WILL PREVENT TRACKING AND WASHING OF SEDIMENTS ONTO PAVED SURFACES.

NOTE: MORE DETAILED EROSION CONTROL AND CONSTRUCTION METHODS TO FOLLOW THE MATERIAL HANDLING REPORT.

Erosion and Sedimentation Control Techniques

THE FOLLOWING EROSION AND SEDIMENTATION CONTROLS SHALL BE EMPLOYED BY THE CONTRACTOR DURING THE EARTHWORK AND CONSTRUCTION PHASES OF THE PROJECT IN ACCORDANCE WITH THE CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL.

SILT FENCING

IN AREAS WHERE HIGH RUNOFF VELOCITIES OR HIGH SEDIMENT LOADS ARE EXPECTED, HAY BALE BARRIERS WILL BE BACKED UP WITH SILT FENCING. THIS SEMI-PERMEABLE BARRIER MADE OF A SYNTHETIC POROUS FABRIC WILL PROVIDE ADDITIONAL PROTECTION. THE SILT FENCES AND HAY BALE BARRIER WILL BE REPLACED AS DETERMINED BY PERIODIC FIELD INSPECTIONS.

HAY BALE BARRIERS

HAY BALE BARRIERS WILL BE PLACED TO TRAP SEDIMENT TRANSPORTED BY RUNOFF BEFORE IT REACHES THE DRAINAGE SYSTEM OR LEAVES THE CONSTRUCTION SITE. BALES WILL BE SET AT LEAST FOUR INCHES INTO THE EXISTING GROUND TO MINIMIZE UNDERCUTTING BY RUNOFF.

CATCH BASIN PROTECTION

NEWLY CONSTRUCTED AND EXISTING CATCH BASINS WILL BE PROTECTED WITH SILT SACKS THROUGHOUT CONSTRUCTION.

GRAVEL AND CONSTRUCTION ENTRANCE/EXIT

A TEMPORARY CRUSHED-STONE CONSTRUCTION ENTRANCE/EXIT WILL BE CONSTRUCTED. A CROSS SLOPE WILL BE PLACED IN THE ENTRANCE TO DIRECT RUNOFF AND SEDIMENT AWAY FROM FLOWING INTO PUBLIC RIGHTS-OF-WAY.

VEGETATIVE SLOPE STABILIZATION

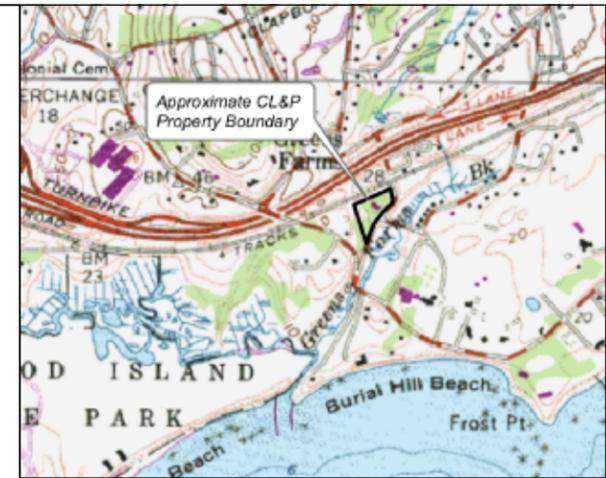
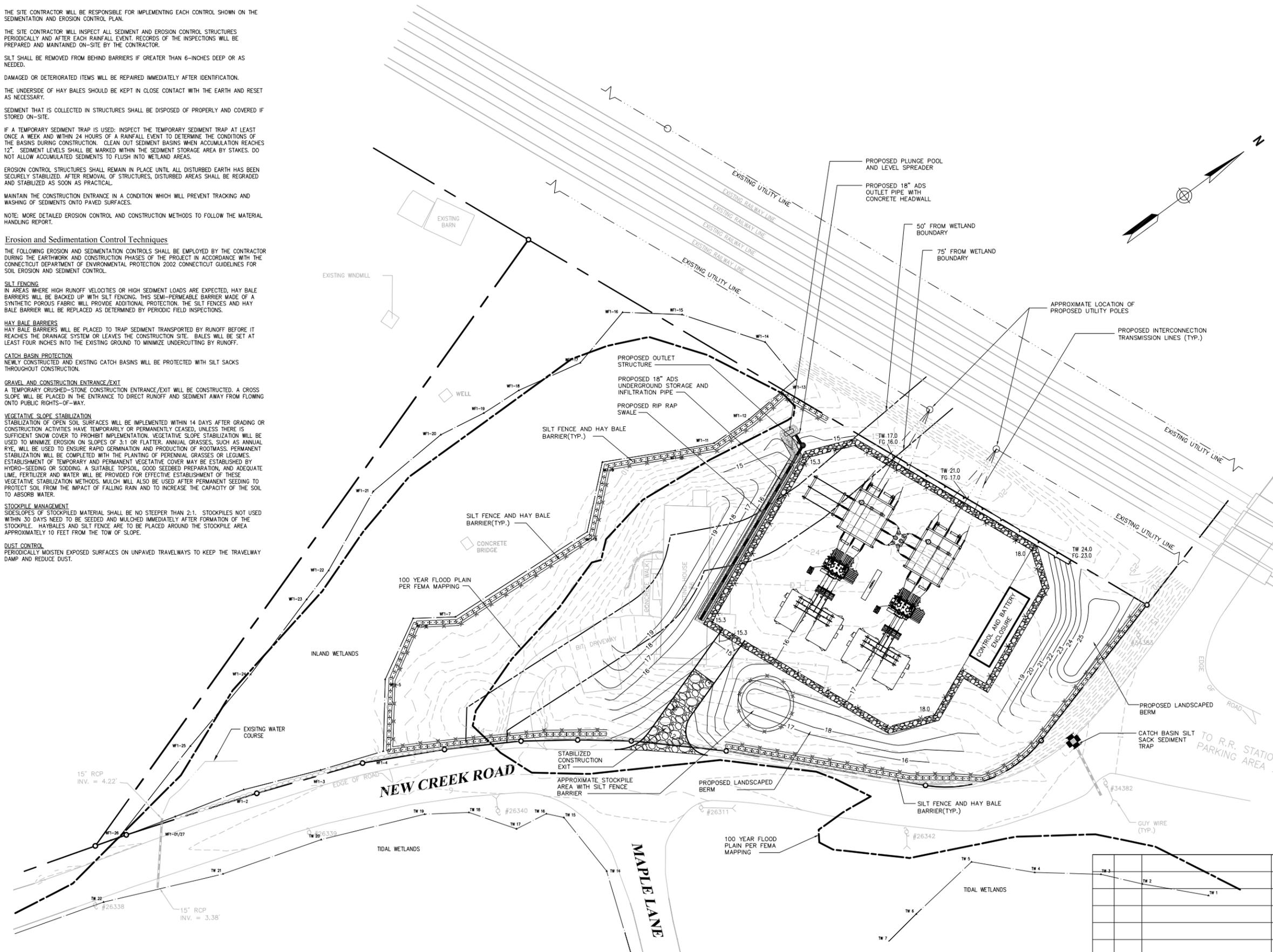
STABILIZATION OF OPEN SOIL SURFACES WILL BE IMPLEMENTED WITHIN 14 DAYS AFTER GRADING OR CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, UNLESS THERE IS SUFFICIENT SNOW COVER TO PROHIBIT IMPLEMENTATION. VEGETATIVE SLOPE STABILIZATION WILL BE USED TO MINIMIZE EROSION ON SLOPES OF 3:1 OR FLATTER. ANNUAL GRASSES, SUCH AS ANNUAL RYE, WILL BE USED TO ENSURE RAPID GERMINATION AND PRODUCTION OF ROOTMASS. PERMANENT STABILIZATION WILL BE COMPLETED WITH THE PLANTING OF PERENNIAL GRASSES OR LEGUMES. ESTABLISHMENT OF TEMPORARY AND PERMANENT VEGETATIVE COVER MAY BE ESTABLISHED BY HYDRO-SEEDING OR SODDING. A SUITABLE TOPSOIL, GOOD SEEDING PREPARATION, AND ADEQUATE LIME, FERTILIZER AND WATER WILL BE PROVIDED FOR EFFECTIVE ESTABLISHMENT OF THESE VEGETATIVE STABILIZATION METHODS. MULCH WILL ALSO BE USED AFTER PERMANENT SEEDING TO PROTECT SOIL FROM THE IMPACT OF FALLING RAIN AND TO INCREASE THE CAPACITY OF THE SOIL TO ABSORB WATER.

STOCKPILE MANAGEMENT

SIDESLOPES OF STOCKPILED MATERIAL SHALL BE NO STEEPER THAN 2:1. STOCKPILES NOT USED WITHIN 30 DAYS NEED TO BE SEEDED AND MULCHED IMMEDIATELY AFTER FORMATION OF THE STOCKPILE. HAYBALES AND SILT FENCE ARE TO BE PLACED AROUND THE STOCKPILE AREA APPROXIMATELY 10 FEET FROM THE TOW OF SLOPE.

DUST CONTROL

PERIODICALLY MOISTEN EXPOSED SURFACES ON UNPAVED TRAVELWAYS TO KEEP THE TRAVELWAY DAMP AND REDUCE DUST.



LOCUS MAP
1000 0 1000 2000
SCALE IN FEET



Connecticut Light & Power

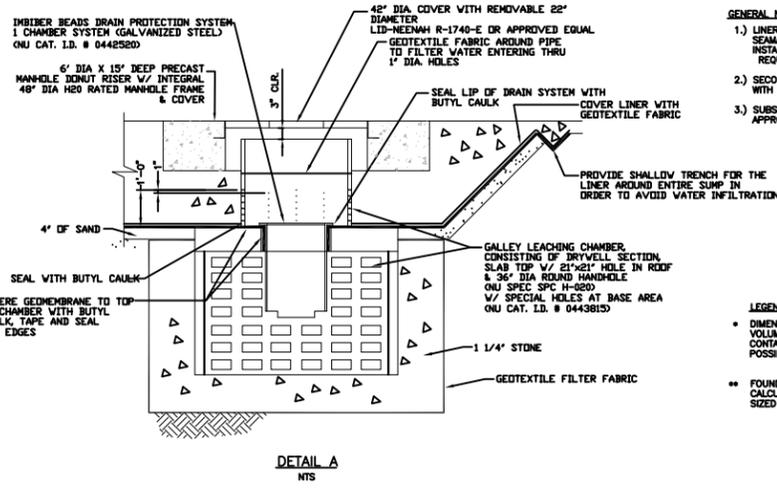
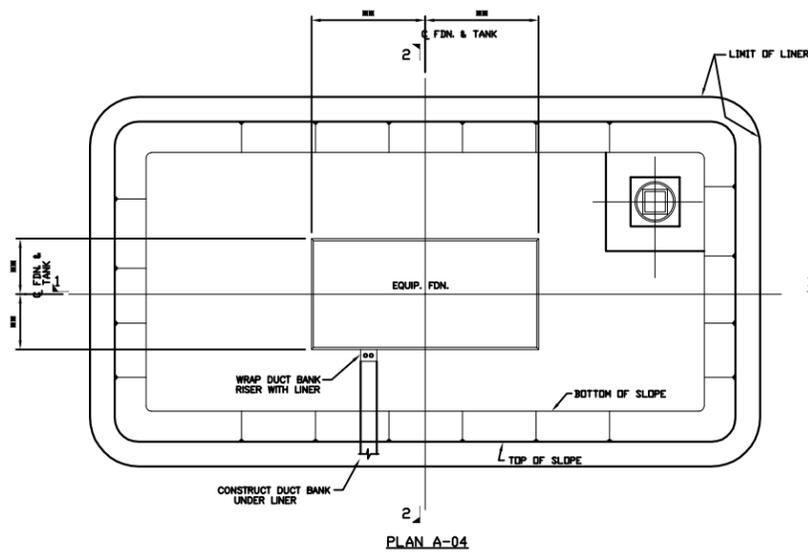
The Northeast Utilities System



PLANS AND SPECIFICATIONS ARE SUBJECT TO REVISIONS PENDING FINAL SITING COUNCIL APPROVAL

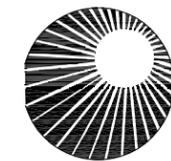
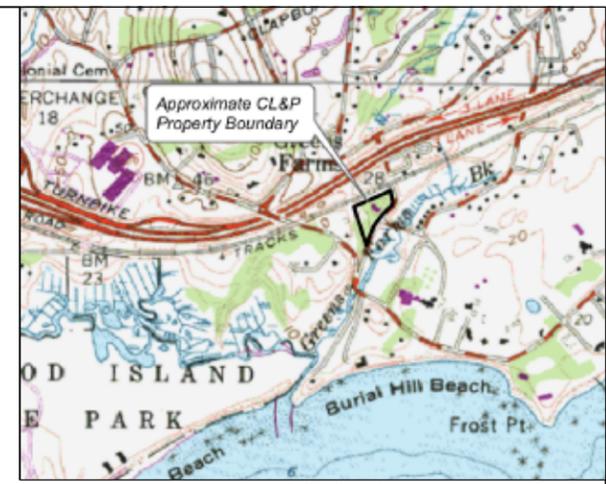
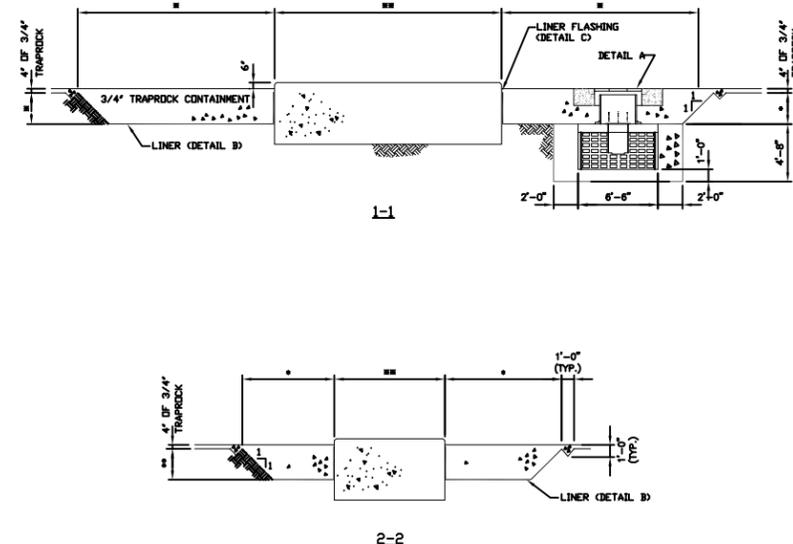
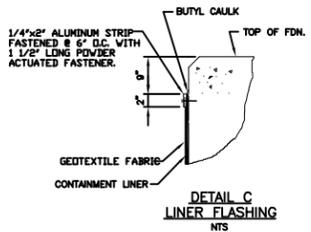
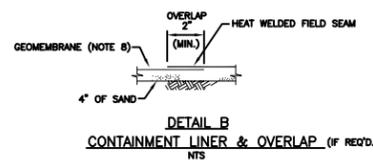
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Northeast Utilities Service Co.					
FOR CONNECTICUT LIGHT & POWER COMPANY					
TITLE: SHERWOOD SUBSTATION PROPOSED LAYOUT EROSION AND SEDIMENT CONTROL PLAN WESTPORT, CONNECTICUT					
BY	SDK	CHKD	PV	APP	MPL
DATE	SEPT. 23, 2009	DATE	SEPT. 23, 2009	DATE	SEPT. 23, 2009
H-SCALE	1"=60'	SIZE	11x17	FIELD BOOK & PAGES	
V-SCALE	NA	V.S.		R.E.DWG.	
NO.	DATE	AS BUILT REVISIONS		BY	CHK APP
R.E. PROJ. NUMBER: 41448				NUSCO C-4	



- GENERAL NOTES**
- 1) LINER MATERIAL TO BE PETROGARD VI BY MPC OR SEAMAN F130 XR-5, OR ENGINEERING APPROVED EQUIVALENT. INSTALL IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS.
 - 2) SECONDARY CONTAINMENT DESIGN SHALL BE IN ACCORDANCE WITH NJ SUBSTATION STD. SUB-047.
 - 3) SUBSTITUTIONS OR MODIFICATION OF THIS DESIGN MUST BE APPROVED BY NJ CIVIL ENGINEERING PRIOR TO DESIGN.

- LEGEND**
- DIMENSIONS DETERMINED BY REQUIRED CONTAINMENT VOLUME AND SITE CONGESTION. TRANSFORMER CONTAINMENT VOLUME IS TO BE SIZED FOR LARGEST POSSIBLE TRANSFORMER.
 - FOUNDATION DIMENSION DETERMINED BY SITE SPECIFIC CALCULATION. TRANSFORMER FOUNDATIONS ARE TO BE SIZED FOR THE LARGEST POSSIBLE TRANSFORMER.



Connecticut Light & Power

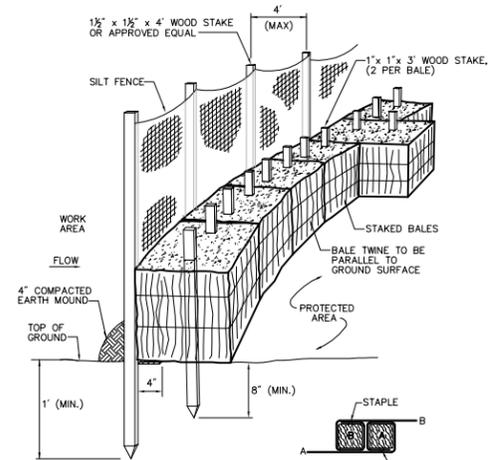
The Northeast Utilities System

Typical Transformer Foundation and Secondary Containment
 N.T.S. Source: NU

VHB Vanasse Hangen Brustlin, Inc.
 Transportation • Land Development • Environmental Services
 54 Tuttle Place, Middletown, Connecticut 06457-1847
 Tel: 860 632-1500 • Fax: 860 632-7879

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										Northeast Utilities Service Co. FOR CONNECTICUT LIGHT & POWER COMPANY	
										TITLE SHERWOOD SUBSTATION PROPOSED LAYOUT SITE DETAILS WESTPORT, CONNECTICUT	
BY	SDK	CHKD	PV	APP	MPL	APP					
DATE	SEPT. 23, 2009	DATE	SEPT. 23, 2009	DATE	SEPT. 23, 2009	DATE					
H-SCALE	NONE	SIZE	11x17	FIELD BOOK	& PAGES						
V-SCALE	NA	V.S.		R.E.DWG.							
NO.	DATE	AS BUILT	REVISIONS	BY	CHK	APP	APP	R.E. PROJ. NUMBER: 41448		NUSCO	C-5

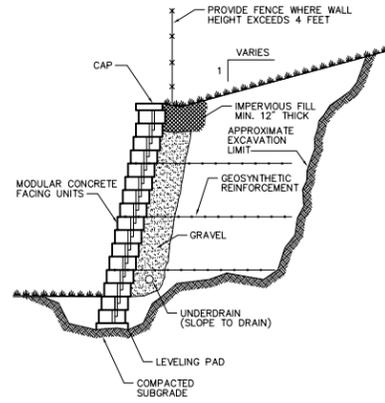


Wood Stake Joint Detail

Notes

PLACE ONE HAY BALE PERPENDICULAR ALONG HAY BALE BARRIER (100' O.C.).

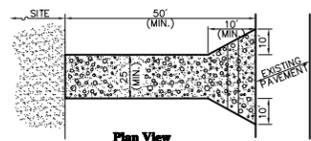
Silt Fence / Hay Bale Barrier 6/03
 N.T.S. Source: VHB LD_655



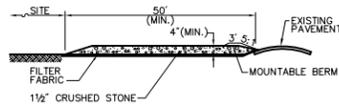
Notes

DETAIL PROVIDED FOR GENERAL INFORMATION ONLY. STAMPED FINAL DESIGN OF MODULAR WALL SYSTEM TO BE PROVIDED BY WALL MANUFACTURER BASED ON GEOTECHNICAL ENGINEERS' RECOMMENDATIONS.

Modular Retaining Wall 6/08
 N.T.S. Source: VHB LD_750



Plan View

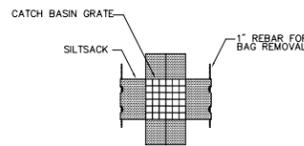


Cross-section

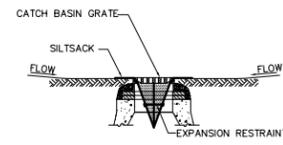
Notes:

- ENTRANCE WIDTH SHALL BE A TWENTY-FIVE (25) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY. BERM SHALL BE PERMITTED. PERIODIC INSPECTION AND MAINTENANCE SHALL BE PROVIDED AS NEEDED.
- STABILIZED CONSTRUCTION EXIT SHALL BE REMOVED PRIOR TO FINAL FINISH MATERIALS BEING INSTALLED.

Stabilized Construction Exit 6/03
 N.T.S. Source: VHB LD_682



Plan View

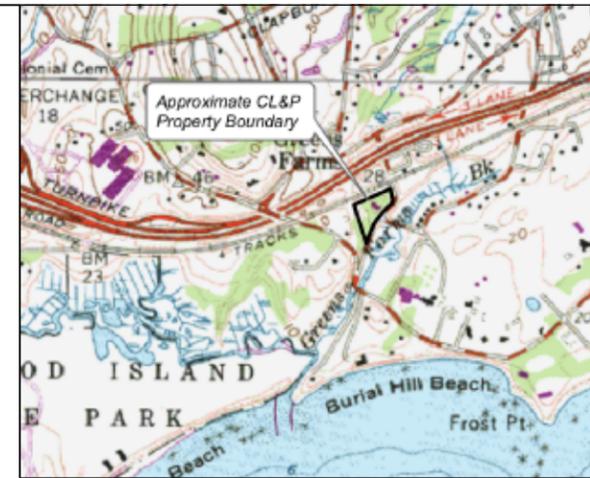


Section View

Notes:

- INSTALL SILTSACK IN ALL CATCH BASINS WHERE INDICATED ON THE PLAN BEFORE COMMENCING WORK OR IN PAVED AREAS AFTER BINDER COURSE IS PLACED AND HAY BALES HAVE BEEN REMOVED.
- GRATE TO BE PLACED OVER SILTSACK.
- SILTSACK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND CLEANING OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED. MAINTAIN UNTIL UPSTREAM AREAS HAVE BEEN PERMANENTLY STABILIZED.

Siltsack Sediment Trap 6/08
 N.T.S. Source: VHB LD_674



LOCUS MAP
 1000 0 1000 2000
 SCALE IN FEET



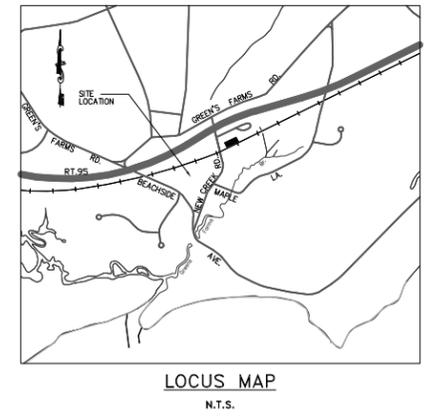
Connecticut Light & Power

The Northeast Utilities System



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 Northeast Utilities Service Co. FOR CONNECTICUT LIGHT & POWER COMPANY									
TITLE SHERWOOD SUBSTATION PROPOSED LAYOUT SITE DETAILS WESTPORT, CONNECTICUT									
BY	SDK	CHKD	PV	APP	MPL	APP			
DATE	SEPT. 23, 2009	DATE	SEPT. 23, 2009	DATE	SEPT. 23, 2009	DATE			
H-SCALE	NONE	SIZE	11x17	FIELD BOOK & PAGES					
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NO.	DATE	AS BUILT REVISIONS		BY	CHK	APP	R.E. PROJ. NUMBER: 41448	NUSCO	C-6



N/F
NEW YORK, NEW HAVEN, &
HARTFORD RAILROAD COMPANY

N/F
MICHAEL JOHNSON

PARCEL AREA:
112031 SQ.FT.
2.57 ACRES

FLOOD ZONE "A6"
SEE NOTE 6

EXISTING 50'
WETLANDS SETBACK

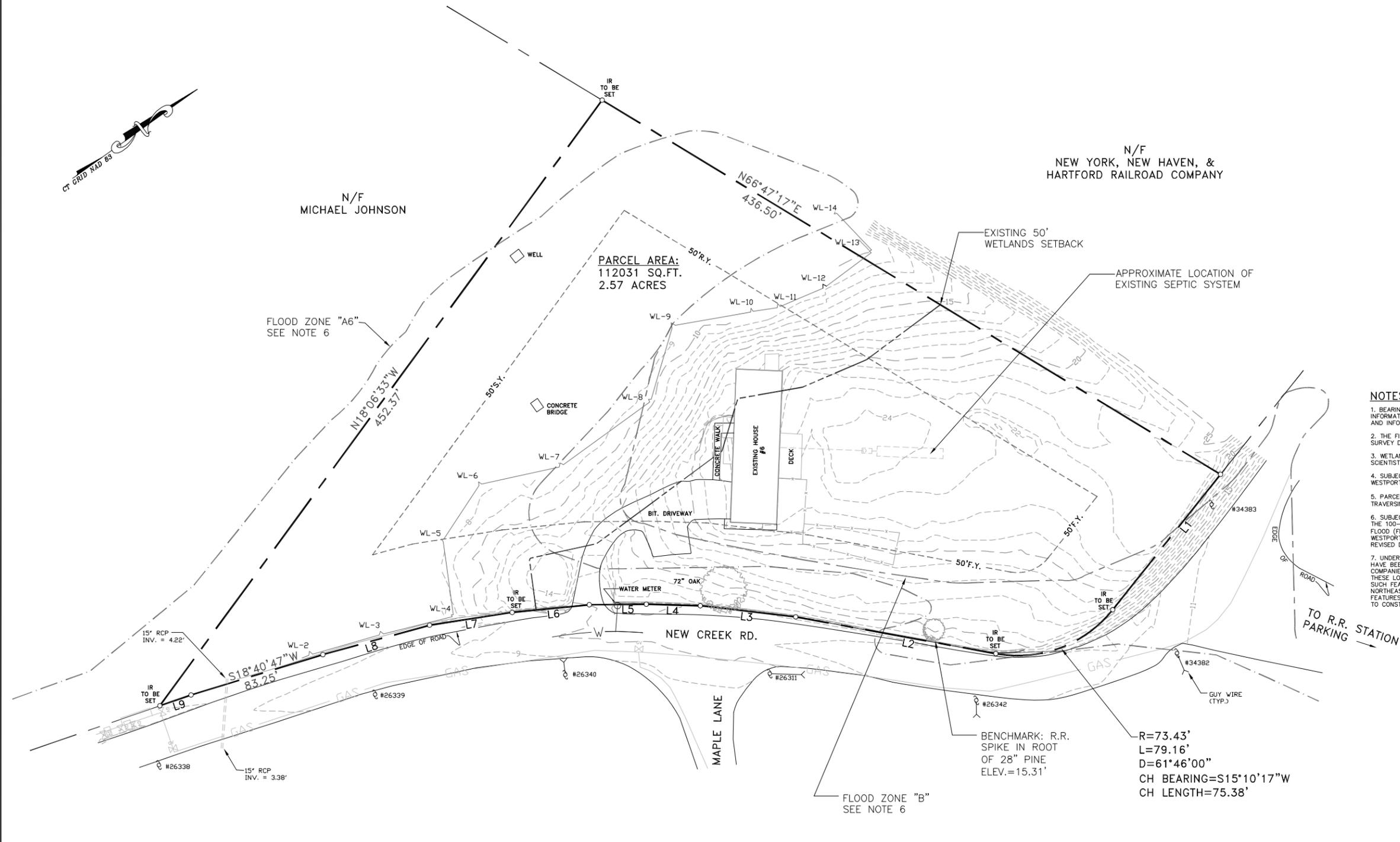
APPROXIMATE LOCATION OF
EXISTING SEPTIC SYSTEM

NOTES:

1. BEARINGS AND ELEVATIONS SHOWN ARE NAD 83 AND NAVD 88 RESPECTIVELY, COORDINATE INFORMATION DERIVED FROM GPS DATA COLLECTED BY NORTHEAST UTILITY SURVEY DEPARTMENT AND INFORMATION PROVIDED BY THE STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION.
2. THE FIELD SURVEY SHOWN WAS PERFORMED ON THE GROUND BY NORTHEAST UTILITIES SURVEY DEPARTMENT IN APRIL 2008.
3. WETLAND FLAGS SHOWN WERE FIELD DELINEATED BY COLLIN DUNCAN, CERTIFIED SOIL SCIENTIST, IN APRIL 2008.
4. SUBJECT PARCEL SHOWN IS LOCATED IN "ZONE AAA" AS SHOWN ON THE TOWN OF WESTPORT ZONING MAP, TAX MAP G6, LOT 5.
5. PARCEL SHOWN SUBJECT TO POSSIBLE "RIGHTS OF OTHERS IN AND TO THE STREAM TRAVERSING THE PREMISES".
6. SUBJECT PARCEL SHOWN IS LOCATED PARTLY IN FLOOD ZONE "B" AREAS BETWEEN LIMITS OF THE 100-YEAR AND 500-YEAR FLOOD AND PARTLY IN FLOOD ZONE "A6" AREAS OF 100-YEAR FLOOD (FLOOD ELEVATION 11), AS SHOWN ON FLOOD INSURANCE RATE MAP "FIRM" TOWN OF WESTPORT, CONNECTICUT, FAIRFIELD COUNTY, COMMUNITY PANEL NUMBER 090019 00028, REVISED DATE: DECEMBER 4, 1984.
7. UNDERGROUND UTILITY, STRUCTURE AND FACILITY LOCATIONS DEPICTED AND NOTED HEREON HAVE BEEN COMPILED, IN PART, FROM RECORD MAPPING SUPPLIED BY THE RESPECTIVE UTILITY COMPANIES OR GOVERNMENTAL AGENCIES, FROM PAROL TESTIMONY AND FROM OTHER SOURCES. THESE LOCATIONS MUST BE CONSIDERED AS APPROXIMATE IN NATURE. ADDITIONALLY, OTHER SUCH FEATURES MAY EXIST ON THE SITE, THE EXISTENCE OF WHICH ARE UNKNOWN TO NORTHEAST UTILITIES SURVEY DEPARTMENT. THE SIZE LOCATION AND EXISTENCE OF ALL SUCH FEATURES MUST BE FIELD DETERMINED AND VERIFIED BY THE APPROPRIATED AUTHORITIES PRIOR TO CONSTRUCTION. CALL BEFORE YOU DIG: 1.800.922.4455.

MAP REFERENCES:

1. SURVEY PREPARED FOR THOMAS F. HUGHES ET ALS, WESTPORT, CONN. SCALE: 1" = 60', DATE: DEC. 30, 1965. BY CHARLES S. LYMAN.
2. SURVEY PREPARED FOR ALBERT V. T. DAY, WESTPORT, CONN. SCALE: 1" = 60', DATE: MARCH 1957.
3. PROPERTY OF NICHOLAS S. HILL JR. GREENS FARMS, WESTPORT CONN. SCALE: 1" = 40', DATE: JAN. 31, 1926. BY ALFRED H. TERRY.
4. SURVEY OF PREMISES LOCATED AT 1 BEACHSIDE AVENUE, WESTPORT, CT, SCALE: 1" = 50', DATE: DECEMBER 16, 2003 REVISED THROUGH MARCH 9, 2004. BY AIDAN C. MCCANN.
5. RIGHT OF WAY AND TRACK MAP THE NEW YORK NEW HAVEN AND HARTFORD R.R. CO. OPERATED BY THE NEW YORK NEW HAVEN AND HARTFORD R.R. CO. FROM WOODLAWN TO NEW HAVEN STATION 1815+20 TO STATION 1868+00, TOWN OF WESTPORT, STATE OF CONN. SCALE: 1" = 100', DATE: JUNE 30, 1915.



FLOOD ZONE "B"
SEE NOTE 6

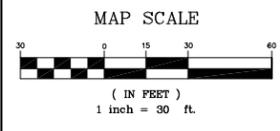
BENCHMARK: R.R. SPIKE IN ROOT OF 28" PINE ELEV.=15.31'
R=73.43'
L=79.16'
D=61°46'00"
CH BEARING=S15°10'17"W
CH LENGTH=75.38'

LINE TABLE

	BEARING	DISTANCE
L1	S15°-42'-43"E	104.47'
L2	S46°-03'-27"W	122.94'
L3	S42°-19'-47"W	58.03'
L4	S37°-18'-07"W	32.66'
L5	S35°-08'-47"W	34.43'
L6	S30°-01'-57"W	46.85'
L7	S26°-53'-37"W	50.52'
L8	S20°-19'-17"W	66.86'
L9	S16°-40'-27"W	20.00'

LEGEND:

- PROPERTY LINE
- BUILDING LINE
- WETLANDS
- WETLANDS 50' SETBACK
- CHAINLINK FENCE
- ZONE A-6 FLOOD ZONE
- ZONE B FLOOD ZONE
- MAJOR CONTOUR
- MINOR CONTOUR
- GAS MAIN
- WATER MAIN
- STONE WALL
- UTILITY POLE
- GAS VALVE



THIS SURVEY AND MAP HAS BEEN PREPARED IN ACCORDANCE WITH SECTIONS 20-300b-1 THRU 20-300b-20 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES-MINIMUM STANDARD FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT AS ENDORSED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS INC. IT IS A ZONING LOCATION SURVEY, BOUNDARY DETERMINATION CATEGORY DEPENDANT RESURVEY, CONFORMING TO HORIZONTAL ACCURACY CLASS A-2 AND A TOPOGRAPHIC SURVEY CONFORMING TO TOPOGRAPHIC ACCURACY CLASS T-2. THE PURPOSE OF THIS SURVEY AND MAP IS TO ENABLE DETERMINATION OF COMPLIANCE OR NON-COMPLIANCE WITH APPLICABLE MUNICIPAL OR STATUTORY REQUIREMENTS.

TO THE BEST OF MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

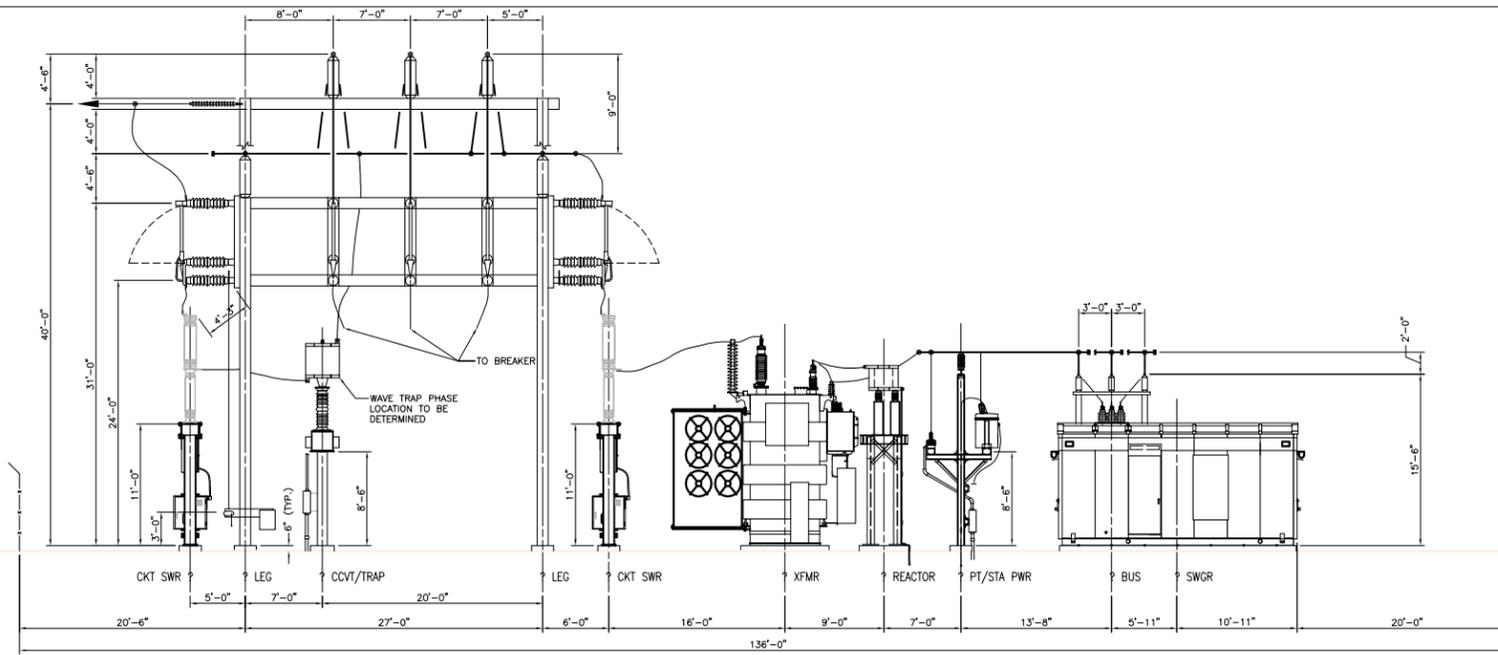
SHAWN A. SOUTHWORTH, LS #70288
ANY ORIGINAL OR DUPLICATE OF THIS MAP IS NOT VALID UNLESS IT BEARS THE EMBOSSED SEAL OF THE SURVEYOR WHOSE REGISTRATION NUMBER APPEARS ABOVE. NO OTHER CERTIFICATION OR WARRANTY IS EXPRESSED OR IMPLIED.

Northeast Utilities Service Co.
FOR THE CONNECTICUT LIGHT & POWER COMPANY

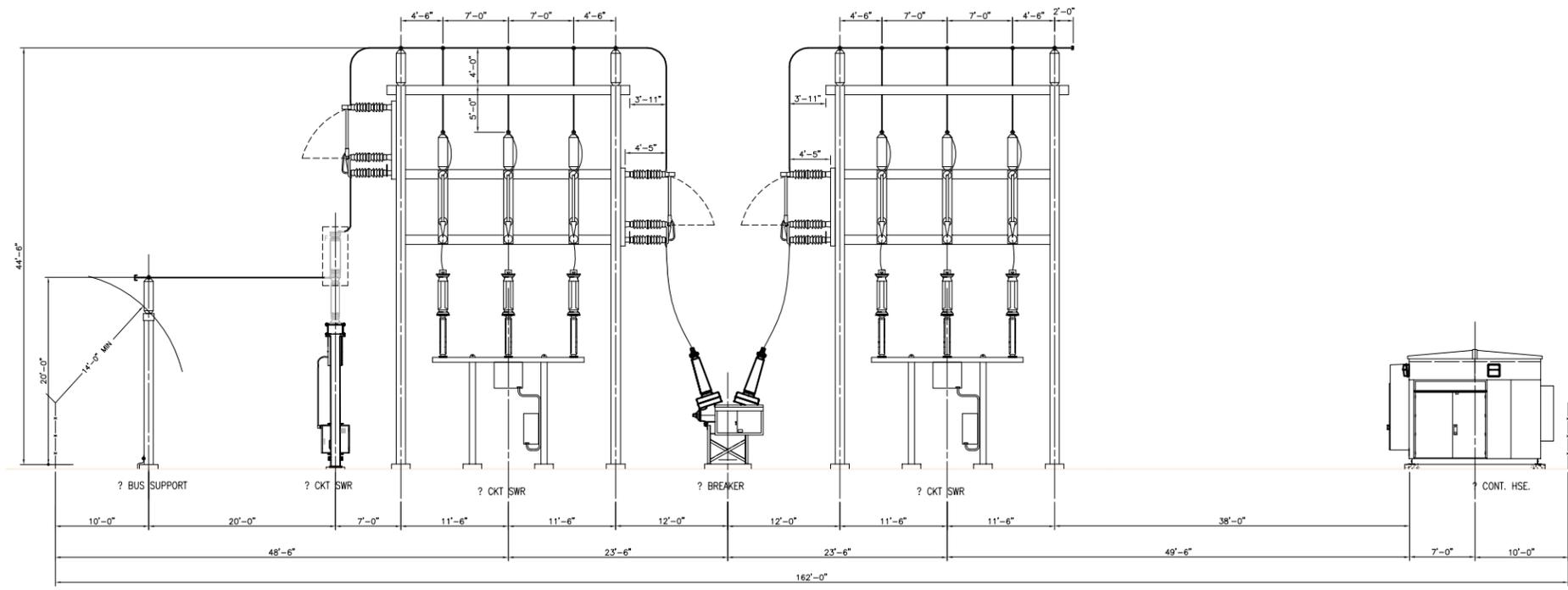
TITLE: SHERWOOD 18P SUBSTATION BOUNDARY & TOPOGRAPHIC SURVEY
6 NEW CREEK RD., WESTPORT, CONNECTICUT

BY	HMZ	CHKD	SAS	APP	APP
DATE	4/08	DATE	4/08	DATE	DATE
H-SCALE	1" = 30'	SIZE	ARCH D	FIELD BOOK & PAGES	
V-SCALE		V.S.		R.E.DWG.	22632
R.E. PROJ. NUMBER	158-03.169			NUSCO	

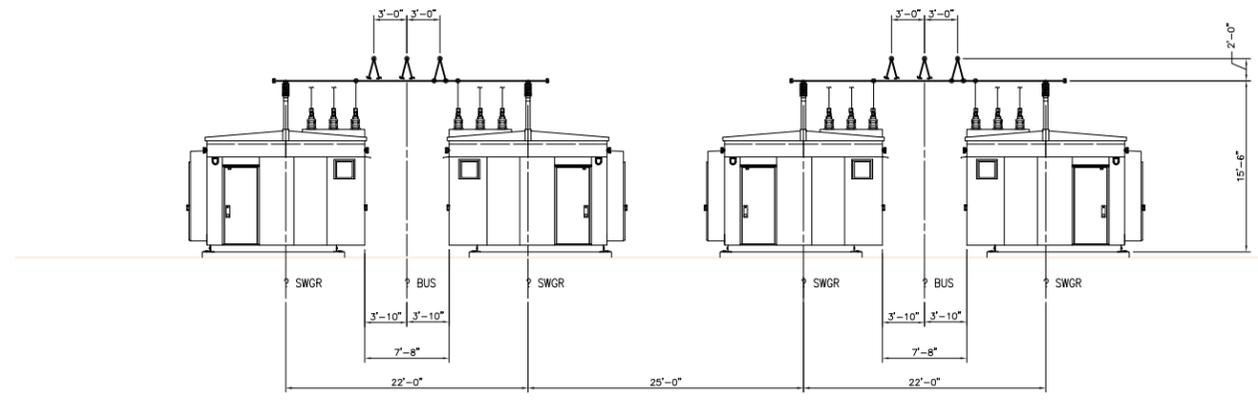
09/24/2008 4:16pm - eutilities - F:\158-WESTPORT_C\03-SUBSTATION\SHERWOOD-TEMP FILE\22632.dwg



SECTION A-A



SECTION B-B



SECTION C-C

- LEGEND**
- E EXPANSION CONNECTION OR EXPANSION BUS SUPPORT
 - F,R FIXED CONNECTION OR RIGID BUS SUPPORT
 - S SLIP BUS SUPPORT
 - ⊗ DISCONNECT SWITCH MANUAL OPERATING MECHANISM
 - ⊙ DISCONNECT SWITCH MOTOR OPERATING MECHANISM
 - ⊕ DISCONNECT SWITCH GROUND SWITCH MANUAL OPERATING MECHANISM
 - OUTDOOR LIGHT, 400W HPS
 - △ HIGH STRENGTH INSULATOR
 - ⊠ EXTRA HIGH STRENGTH INSULATOR
 - ⊞ ITEM NUMBER

REV A - AFTER CHANGES
NO BEFORE

REVISIONS DURING CONSTRUCTION			
NO.	DATE	AS BUILT REVISIONS	BY

		Northeast Utilities Service Co. FOR CONNECTICUT LIGHT & POWER COMPANY	
TITLE SHERWOOD 18P PRELIMINARY SECTIONS A-A AND B-B OPTION 2 PLAN & SECTIONS WESTPORT, CONNECTICUT			
BY	ZKN	CHKD	EMS
DATE	03/09	DATE	03/09
SCALE	N.T.S.	SIZE	FIELD BOOK & PAGES
		V.S.	R.E.DWG.
NO.	DATE	AS BUILT REVISIONS	BY

ISSUED FOR
PRELIMINARY
05/12/09

**Appendix C – Wetlands & Tidal
Wetlands Delineation Reports**



WETLANDS DELINEATION REPORT

Vanasse Hangen Brustlin, Inc.

Date: February 18, 2009
Project No.: 41448.00
Prepared For: The Connecticut Light and Power Company
Site Location: 6 New Creek Road
Westport, Connecticut
Site Map: Wetland Flag Survey Map, Dated February 9, 2009
Inspection Date: February 6, 2009
Field Conditions: Weather: partly sunny, 30's General Soil Moisture: moist
Snow Depth: 2 inches Frost Depth: 0-3 inches

Type of Wetlands Identified and Delineated:

Connecticut Inland Wetlands and Watercourses
Tidal Wetlands
U.S. Army Corps of Engineers

Local Regulated Upland Review Areas: Wetlands: 75 feet Watercourses: 75 feet

Field Numbering Sequence of Wetlands Boundary: VHB WF 1-01/27 (closed loop)

[as depicted on attached wetland sketch map]

The classification systems of the National Cooperative Soil Survey, the U.S. Department of Agriculture, Natural Resources Conservation Service, County Soil Survey Identification Legend, Connecticut Department of Environmental Protection and United States Army Corps of Engineers New England District were used in this investigation.

All established wetlands boundary lines are subject to change until officially adopted by local, state, or federal regulatory agencies.

The wetlands delineation was conducted and reviewed by:


Matthew Davison
Registered Soil Scientist

Enclosures

Attachments



-
- Wetland Delineation Field Form
 - Soil Map
 - Soil Report
 - Wetland Flag Survey Map

Wetland Delineation Field Form

Project Address:	6 New Creek Road Westport, Connecticut	Project Number:	41448.00
Inspection Date:	February 6, 2009	Inspector:	Matthew Davison
Wetland I.D.:	Wetland 1		

Field Conditions:	Weather: partly sunny, 30s	Snow Depth: variable (0-2 inches)
	General Soil Moisture: moist	Frost Depth: variable (0-3 inches)
Type of Wetland Delineation:	Connecticut <input checked="" type="checkbox"/>	
	ACOE <input checked="" type="checkbox"/>	
	Tidal <input type="checkbox"/>	
Field Numbering Sequence: VHB WF 1-01 to 1-27 (closed loop)		

WETLAND HYDROLOGY:

NONTIDAL

Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input checked="" type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated – seepage <input type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments: Portions of this system are seasonally flooded.		

TIDAL

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>	
Comments: N/A		

WETLAND TYPE:

SYSTEM:

Estuarine <input type="checkbox"/>	Riverine <input type="checkbox"/>	Palustrine <input checked="" type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments:		

CLASS:

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input type="checkbox"/>	Forested <input checked="" type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: This system is predominantly forested, with emergent vegetation present within seasonally ponded areas.		

WATERCOURSE TYPE:

Perennial <input type="checkbox"/>	Intermittent <input checked="" type="checkbox"/>	Tidal <input type="checkbox"/>
Comments: An intermittent watercourse feature flows through the wetland interior.		

SPECIAL AQUATIC HABITAT:

Vernal Pool <input type="checkbox"/>	Other <input type="checkbox"/>	
Comments: N/A		

Wetland Delineation Field Form (Cont.)

MAPPED SOILS:

SOIL SERIES (Map Unit Symbol)	WET	UP	NRCS MAPPED	FIELD IDD/ CONFIRMED
Raypol silt loam (12)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Walpole sandy loam (13)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Udorthents-Urban land complex (306)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

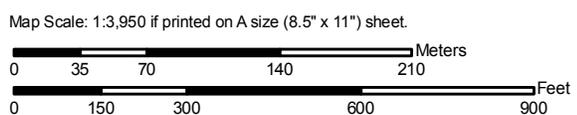
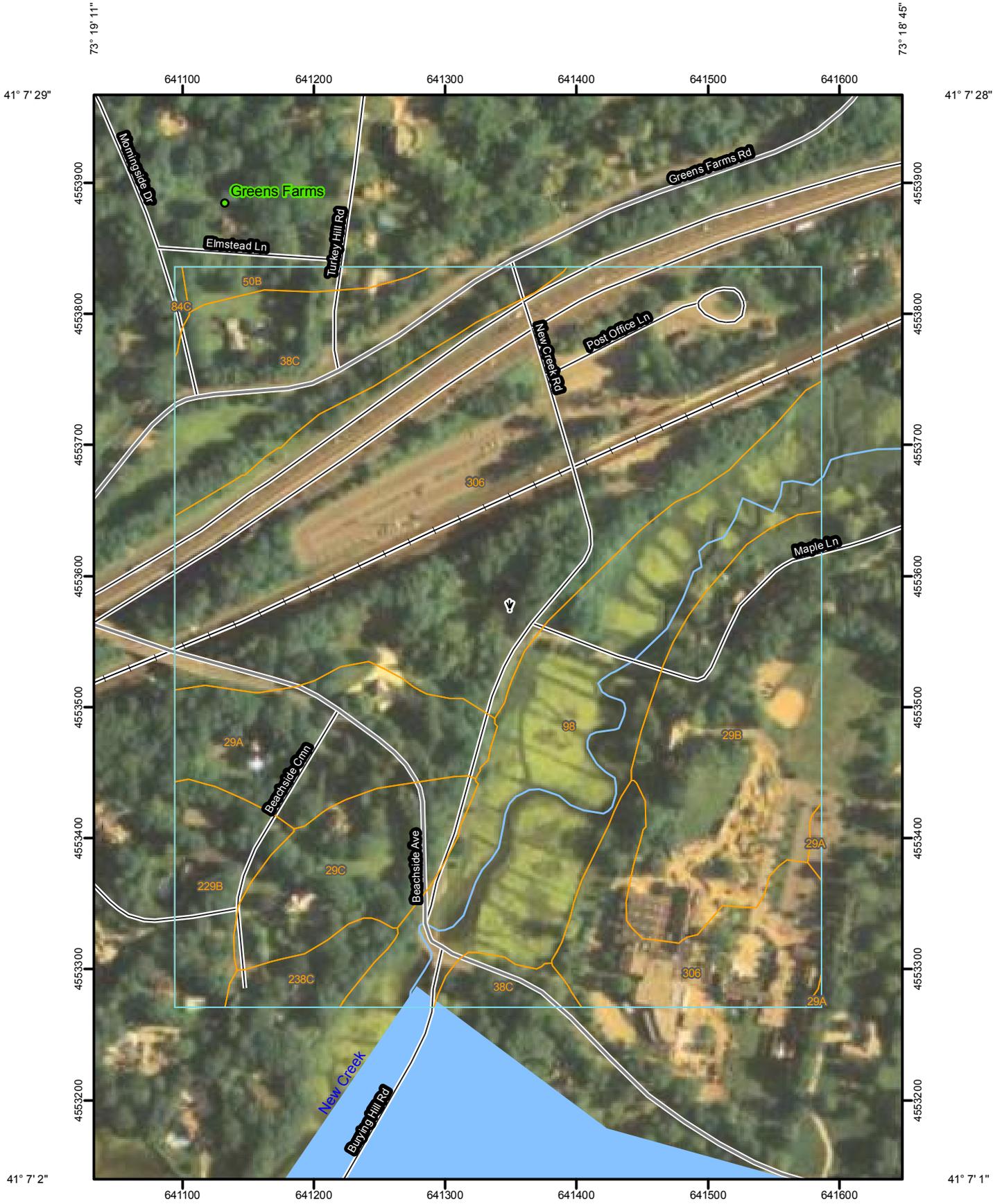
DOMINANT PLANTS:

red maple	tussock sedge
white ash	
cattail	
silky dogwood	
sensitive fern	

WETLAND NARRATIVE:

Wetland is a palustrine forested/emergent wetland system bordering a small intermittent watercourse feature which transects the Site from north to south. The watercourse feature is characterized by diffuse flows and generally lacks a well defined bank and channel. This system originates in the vicinity of the north Site boundary at the base of a large fill slope associated with the Metro North rail line; however, no outlet structure was evident. The hydrology for this system likely originates from surface flows and groundwater interception. A 15 inch reinforced concrete pipe (RCP) located on the southern Site boundary outlets flows from this freshwater system beneath New Creek Road to a tidal salt marsh associated with Green Farms Brook to the south.

Soil Map—State of Connecticut
 (6 New Creek Road, Westport, Connecticut)



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Units

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

-  Gully
-  Short Steep Slope
-  Other

Political Features

-  Cities

Water Features

-  Oceans
-  Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

MAP INFORMATION

Map Scale: 1:3,950 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:12,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
 Coordinate System: UTM Zone 18N NAD83

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 6, Mar 22, 2007

Date(s) aerial images were photographed: 8/5/2006

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

State of Connecticut (CT600)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
29A	Agawam fine sandy loam, 0 to 3 percent slopes	5.0	7.3%
29B	Agawam fine sandy loam, 3 to 8 percent slopes	8.5	12.4%
29C	Agawam fine sandy loam, 8 to 15 percent slopes	3.8	5.5%
38C	Hinckley gravelly sandy loam, 3 to 15 percent slopes	6.8	9.9%
50B	Sutton fine sandy loam, 3 to 8 percent slopes	0.8	1.2%
84C	Paxton and Montauk fine sandy loams, 8 to 15 percent slopes	0.1	0.2%
98	Westbrook mucky peat	11.3	16.4%
229B	Agawam-Urban land complex, 0 to 8 percent slopes	2.4	3.4%
238C	Hinckley-Urban land complex, 3 to 15 percent slopes	1.2	1.7%
306	Udorthents-Urban land complex	28.8	41.9%
Totals for Area of Interest		68.7	100.0%

Map Unit Description (Brief)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the selected area. The map unit descriptions in this report, along with the maps, can be used to determine the composition and properties of a unit. A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

The "Map Unit Description (Brief)" report gives a brief, general description of the major soils that occur in a map unit. Descriptions of nonsoil (miscellaneous areas) and minor map unit components may or may not be included. This description is written by the local soil scientists responsible for the respective soil survey area data. A more detailed description can be generated by the "Map Unit Description" report.

Additional information about the map units described in this report is available in other Soil Data Mart reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the Soil Data Mart reports define some of the properties included in the map unit descriptions.

Report—Map Unit Description (Brief)

State of Connecticut

Description Category: SOI

Map Unit: 29A—Agawam fine sandy loam, 0 to 3 percent slopes

Agawam Fine Sandy Loam, 0 To 3 Percent Slopes This map unit is in the Connecticut Valley New England and Eastern New York Upland, Southern Part Major Land Resource Area. The mean annual precipitation is 32 to 50 inches (813 to 1270 millimeters) and the average annual air temperature is 45 to 50 degrees F. (7 to 10 degrees C.) This map unit is 80 percent Agawam soils. 20 percent minor components. Agawam soils This component occurs on valley and outwash plain terrace landforms. The parent material consists of eolian deposits over glaciofluvial deposits derived from schist, granite, and gneiss. The slope ranges from 0 to 3 percent and the runoff class is negligible. The depth to a restrictive feature is greater than 60 inches. The drainage class is well drained. The slowest permeability within 60 inches is about 1.98 in/hr (moderately rapid), with about 4.8 inches (moderate) available water capacity. The weighted average shrink-swell potential in 10 to 60 inches is about 1.5 LEP (low). The flooding frequency for this component is none. The ponding hazard is none. The minimum depth to a seasonal water table, when present, is greater than 6 feet. The maximum calcium carbonate within 40 inches is none. The maximum amount of salinity in any layer is about 0 mmhos/cm (nonsaline). The Nonirrigated Land Capability Class is 1 Typical Profile: 0 to 8 inches; fine sandy loam 8 to 14 inches; fine sandy loam 14 to 24 inches; fine sandy loam 24 to 60 inches; stratified very gravelly coarse sand to fine sand

Map Unit: 29B—Agawam fine sandy loam, 3 to 8 percent slopes

Agawam Fine Sandy Loam, 3 To 8 Percent Slopes This map unit is in the Connecticut Valley New England and Eastern New York Upland, Southern Part Major Land Resource Area. The mean annual precipitation is 32 to 50 inches (813 to 1270 millimeters) and the average annual air temperature is 45 to 50 degrees F. (7 to 10 degrees C.) This map unit is 80 percent Agawam soils. 20 percent minor components. Agawam soils This component occurs on valley and outwash plain terrace landforms. The parent material consists of eolian deposits over glaciofluvial deposits derived from schist, granite, and gneiss. The slope ranges from 3 to 8 percent and the runoff class is low. The depth to a restrictive feature is greater than 60 inches. The drainage class is well drained. The slowest permeability within 60 inches is about 1.98 in/hr (moderately rapid), with about 4.8 inches (moderate) available water capacity. The weighted average shrink-swell potential in 10 to 60 inches is about 1.5 LEP (low). The flooding frequency for this component is none. The ponding hazard is none. The minimum depth to a seasonal water table, when present, is greater than 6 feet. The maximum calcium carbonate within 40 inches is none. The maximum amount of salinity in any layer is about 0 mmhos/cm (nonsaline). The Nonirrigated Land Capability Class is 2e Typical Profile: 0 to 8 inches; fine sandy loam 8 to 14 inches; fine sandy loam 14 to 24 inches; fine sandy loam 24 to 60 inches; stratified very gravelly coarse sand to fine sand

Map Unit: 29C—Agawam fine sandy loam, 8 to 15 percent slopes

Agawam Fine Sandy Loam, 8 To 15 Percent Slopes This map unit is in the New England and Eastern New York Upland, Southern Part Connecticut Valley Major Land Resource Area. The mean annual precipitation is 32 to 50 inches (813 to 1270 millimeters) and the average annual air temperature is 45 to 50 degrees F. (7 to 10 degrees C.) This map unit is 80 percent Agawam soils. 20 percent minor components. Agawam soils This component occurs on valley and outwash plain terrace landforms. The parent material consists of eolian deposits over glaciofluvial deposits derived from schist, granite, and gneiss. The slope ranges from 8 to 15 percent and the runoff class is low. The depth to a restrictive feature is greater than 60 inches. The drainage class is well drained. The slowest permeability within 60 inches is about 1.98 in/hr (moderately rapid), with about 4.8 inches (moderate) available water capacity. The weighted average shrink-swell potential in 10 to 60 inches is about 1.5 LEP (low). The flooding frequency for this component is none. The ponding hazard is none. The minimum depth to a seasonal water table, when present, is greater than 6 feet. The maximum calcium carbonate within 40 inches is none. The maximum amount of salinity in any layer is about 0 mmhos/cm (nonsaline). The Nonirrigated Land Capability Class is 3e Typical Profile: 0 to 8 inches; fine sandy loam 8 to 14 inches; fine sandy loam 14 to 24 inches; fine sandy loam 24 to 60 inches; stratified very gravelly coarse sand to fine sand

Map Unit: 38C—Hinckley gravelly sandy loam, 3 to 15 percent slopes

Hinckley Gravelly Sandy Loam, 3 To 15 Percent Slopes This map unit is in the New England and Eastern New York Upland, Southern Part Major Land Resource Area. The mean annual precipitation is 40 to 50 inches (1016 to 1270 millimeters) and the average annual air temperature is 45 to 55 degrees F. (7 to 13 degrees C.) This map unit is 80 percent Hinckley soils. 20 percent minor components. Hinckley soils This component occurs on valley outwash plain, terrace, kame, and esker landforms. The parent material consists of sandy and gravelly glaciofluvial deposits derived from schist, granite, and gneiss. The slope ranges from 3 to 15 percent and the runoff class is low. The depth to a restrictive feature is greater than 60 inches. The drainage class is excessively drained. The slowest permeability within 60 inches is about 5.95 in/hr (rapid), with about 2.3 inches (very low) available water capacity. The weighted average shrink-swell potential in 10 to 60 inches is about 1.5 LEP (low). The flooding frequency for this component is none. The ponding hazard is none. The minimum depth to a seasonal water table, when present, is greater than 6 feet. The maximum calcium carbonate within 40 inches is none. The maximum amount of salinity in any layer is about 0 mmhos/cm (nonsaline). The Nonirrigated Land Capability Class is 4e Typical Profile: 0 to 8 inches; gravelly sandy loam 8 to 20 inches; very gravelly loamy sand 20 to 27 inches; very gravelly sand 27 to 42 inches; stratified cobbly coarse sand to extremely gravelly sand 42 to 60 inches; stratified cobbly coarse sand to extremely gravelly sand

Map Unit: 50B—Sutton fine sandy loam, 3 to 8 percent slopes

Sutton Fine Sandy Loam, 3 To 8 Percent Slopes This map unit is in the New England and Eastern New York Upland, Southern Part Major Land Resource Area. The mean annual precipitation is 37 to 49 inches (940 to 1244 millimeters) and the average annual air temperature is 45 to 52 degrees F. (7 to 11 degrees C.) This map unit is 80 percent Sutton soils. 20 percent minor components. Sutton soils This component occurs on upland hill landforms. The parent material consists of melt-out till derived from granite, gneiss, and schist. The slope ranges from 3 to 8 percent and the runoff class is low. The depth to a restrictive feature is greater than 60 inches. The drainage class is moderately well drained. The slowest permeability within 60 inches is about 0.57 in/hr (moderate), with about 7.5 inches (high) available water capacity. The weighted average shrink-swell potential in 10 to 60 inches is about 1.5 LEP (low). The flooding frequency for this component is none. The ponding hazard is none. The minimum depth to a seasonal water table, when present, is about 24 inches. The maximum calcium carbonate within 40 inches is none. The maximum amount of salinity in any layer is about 0 mmhos/cm (nonsaline). The Nonirrigated Land Capability Class is 2w Typical Profile: 0 to 6 inches; fine sandy loam 6 to 12 inches; fine sandy loam 12 to 24 inches; fine sandy loam 24 to 28 inches; fine sandy loam 28 to 36 inches; gravelly fine sandy loam 36 to 65 inches; gravelly sandy loam

Map Unit: 84C—Paxton and Montauk fine sandy loams, 8 to 15 percent slopes

Paxton And Montauk Fine Sandy Loams, 8 To 15 Percent Slopes This map unit is in the New England and Eastern New York Upland, Southern Part Major Land Resource Area. The mean annual precipitation is 35 to 50 inches (889 to 1270 millimeters) and the average annual air temperature is 45 to 52 degrees F. (7 to 11 degrees C.) This map unit is 55 percent Paxton soils, 30 percent Montauk soils. 15 percent minor components. Paxton soils This component occurs on upland hill and drumlin landforms. The parent material consists of lodgement till derived from granite, gneiss, and schist. The slope ranges from 8 to 15 percent and the runoff class is medium. The depth to a restrictive feature is 20 to 40 inches to densic material. The drainage class is well drained. The slowest permeability within 60 inches is about 0.00 in/hr (very slow), with about 3.4 inches (moderate) available water capacity. The weighted average shrink-swell potential in 10 to 60 inches is about 1.5 LEP (low). The flooding frequency for this component is none. The ponding hazard is none. The minimum depth to a seasonal water table, when present, is about 24 inches. The maximum calcium carbonate within 40 inches is none. The maximum amount of salinity in any layer is about 0 mmhos/cm (nonsaline). The Nonirrigated Land Capability Class is 3e Typical Profile: 0 to 8 inches; fine sandy loam 8 to 15 inches; fine sandy loam 15 to 26 inches; fine sandy loam 26 to 65 inches; gravelly fine sandy loam Montauk soils This component occurs on upland hill and drumlin landforms. The parent material consists of sandy lodgement till derived from granite and gneiss. The slope ranges from 8 to 15 percent and the runoff class is low. The depth to a restrictive feature is 20 to 38 inches to densic material. The drainage class is well drained. The slowest permeability within 60 inches is about 0.00 in/hr (very slow), with about 3.3 inches (moderate) available water capacity. The weighted average shrink-swell potential in 10 to 60 inches is about 1.5 LEP (low). The flooding frequency for this component is none. The ponding hazard is none. The minimum depth to a seasonal water table, when present, is about 27 inches. The maximum calcium carbonate within 40 inches is none. The maximum amount of salinity in any layer is about 0 mmhos/cm (nonsaline). The Nonirrigated Land Capability Class is 3e Typical Profile: 0 to 4 inches; fine sandy loam 4 to 14 inches; fine sandy loam 14 to 25 inches; sandy loam 25 to 39 inches; gravelly loamy coarse sand 39 to 60 inches; gravelly sandy loam

Map Unit: 98—Westbrook mucky peat

Westbrook Mucky Peat This map unit is in the New England and Eastern New York Upland, Southern Part Connecticut Valley Major Land Resource Area. The mean annual precipitation is 40 to 50 inches (1016 to 1270 millimeters) and the average annual air temperature is 48 to 52 degrees F. (9 to 11 degrees C.) This map unit is 80 percent Westbrook soils. 20 percent minor components. Westbrook soils This component occurs on coastal plain salt marsh and tidal marsh landforms. The parent material consists of herbaceous organic material over loamy drift or marine deposits. The slope ranges from 0 to 2 percent and the runoff class is negligible. The depth to a restrictive feature is 0 to 51 inches to salic. The drainage class is very poorly drained. The slowest permeability within 60 inches is about 0.00 in/hr (very slow), with about 4.4 inches (moderate) available water capacity. The weighted average shrink-swell potential in 10 to 60 inches is about 8.4 LEP (high). The flooding frequency for this component is frequent. The ponding hazard is frequent. The minimum depth to a seasonal water table, when present, is about 6 inches. The maximum calcium carbonate within 40 inches is none. The maximum amount of salinity in any layer is about 60 mmhos/cm (strongly saline). The Nonirrigated Land Capability Class is 8 Typical Profile: 0 to 10 inches; mucky peat 10 to 40 inches; mucky peat 40 to 48 inches; mucky peat 48 to 64 inches; silt loam 64 to 99 inches; silt loam

Map Unit: 229B—Agawam-Urban land complex, 0 to 8 percent slopes

Agawam-Urban Land Complex, 0 To 8 Percent Slopes This map unit is in the Connecticut Valley New England and Eastern New York Upland, Southern Part Major Land Resource Area. The mean annual precipitation is 32 to 50 inches (813 to 1270 millimeters) and the average annual air temperature is 45 to 50 degrees F. (7 to 10 degrees C.) This map unit is 40 percent Agawam soils, 35 percent Urban Land. 25 percent minor components. Agawam soils This component occurs on valley outwash plain and terrace landforms. The parent material consists of eolian deposits over glaciofluvial deposits derived from schist, granite, and gneiss. The slope ranges from 0 to 8 percent and the runoff class is very low. The depth to a restrictive feature is greater than 60 inches. The drainage class is well drained. The slowest permeability within 60 inches is about 1.98 in/hr (moderately rapid), with about 4.8 inches (moderate) available water capacity. The weighted average shrink-swell potential in 10 to 60 inches is about 1.5 LEP (low). The flooding frequency for this component is none. The ponding hazard is none. The minimum depth to a seasonal water table, when present, is greater than 6 feet. The maximum calcium carbonate within 40 inches is none. The maximum amount of salinity in any layer is about 0 mmhos/cm (nonsaline). The Nonirrigated Land Capability Class is 2e Typical Profile: 0 to 8 inches; fine sandy loam 8 to 14 inches; fine sandy loam 14 to 24 inches; fine sandy loam 24 to 60 inches; stratified very gravelly coarse sand to fine sand Urban Land Urban land is land mostly covered by streets, parking lots, buildings, and other structures of urban areas. The slope ranges from 0 to 8 percent and the runoff class is very high. The Nonirrigated Land Capability Class is 8

Map Unit: 238C—Hinckley-Urban land complex, 3 to 15 percent slopes

Hinckley-Urban Land Complex, 3 To 15 Percent Slopes This map unit is in the New England and Eastern New York Upland, Southern Part Major Land Resource Area. The mean annual precipitation is 40 to 50 inches (1016 to 1270 millimeters) and the average annual air temperature is 45 to 55 degrees F. (7 to 13 degrees C.) This map unit is 40 percent Hinckley soils, 35 percent Urban Land. 25 percent minor components. Hinckley soils This component occurs on valley outwash plain, esker, kame, and terrace landforms. The parent material consists of sandy and gravelly glaciofluvial deposits derived from granite, gneiss, and schist. The slope ranges from 3 to 15 percent and the runoff class is low. The depth to a restrictive feature is greater than 60 inches. The drainage class is excessively drained. The slowest permeability within 60 inches is about 5.95 in/hr (rapid), with about 2.3 inches (very low) available water capacity. The weighted average shrink-swell potential in 10 to 60 inches is about 1.5 LEP (low). The flooding frequency for this component is none. The ponding hazard is none. The minimum depth to a seasonal water table, when present, is greater than 6 feet. The maximum calcium carbonate within 40 inches is none. The maximum amount of salinity in any layer is about 0 mmhos/cm (nonsaline). The Nonirrigated Land Capability Class is 4e Typical Profile: 0 to 8 inches; gravelly sandy loam 8 to 20 inches; very gravelly loamy sand 20 to 27 inches; very gravelly sand 27 to 42 inches; stratified cobbly coarse sand to extremely gravelly sand 42 to 60 inches; stratified cobbly coarse sand to extremely gravelly sand Urban Land Urban land is land mostly covered by streets, parking lots, buildings, and other structures of urban areas. The slope ranges from 3 to 15 percent and the runoff class is very high. The Nonirrigated Land Capability Class is 8

Map Unit: 306—Udorthents-Urban land complex

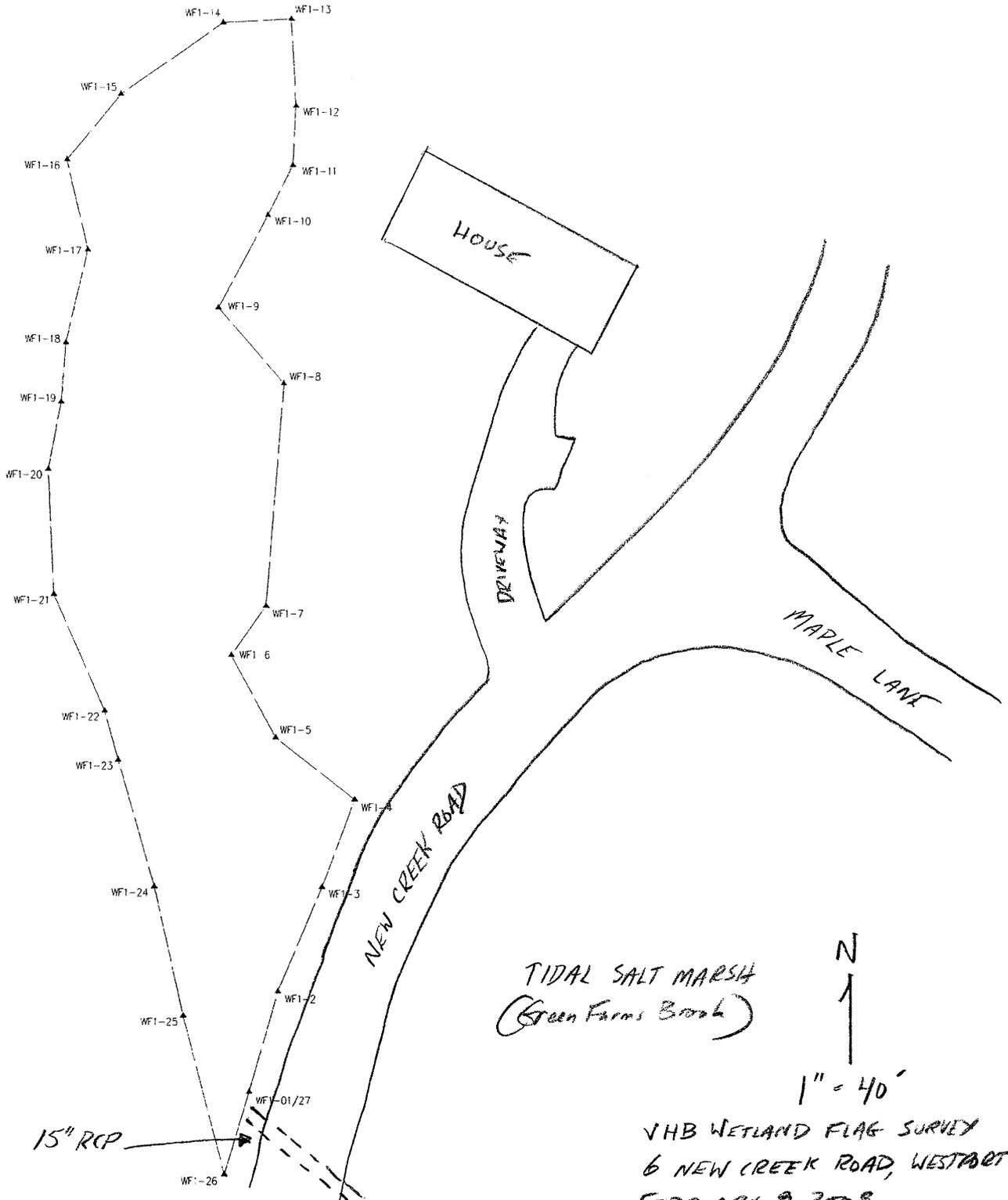
Udorthents-Urban Land Complex This map unit is in the New England and Eastern New York Upland, Southern Part Connecticut Valley Major Land Resource Area. The mean annual precipitation is 32 to 50 inches (813 to 1270 millimeters) and the average annual air temperature is 45 to 55 degrees F. (7 to 13 degrees C.) This map unit is 50 percent Udorthents soils, 35 percent Urban Land. 15 percent minor components. Udorthents soils This component occurs on cut (road, railroad, etc.), railroad bed, road bed, spoil pile, urban land, fill, and spoil pile landforms. The slope ranges from 0 to 25 percent and the runoff class is medium. The depth to a restrictive feature varies, but is commonly greater than 60 inches. The drainage class is typically well drained. The slowest permeability within 60 inches is about 0.00 in/hr (very slow), with about 9.0 inches (high) available water capacity. The weighted average shrink-swell potential in 10 to 60 inches is about 1.4 LEP (low). The flooding frequency for this component is none. The ponding hazard is none. The minimum depth to a seasonal water table is greater than 60 inches. The maximum calcium carbonate within 40 inches is none. The maximum amount of salinity in any layer is about 0 mmhos/cm (nonsaline). The Nonirrigated Land Capability Class is 3e Typical Profile: 0 to 5 inches; loam 5 to 21 inches; gravelly loam 21 to 80 inches; very gravelly sandy loam Urban Land Urban land is land mostly covered by streets, parking lots, buildings, and other structures of urban areas. The slope ranges from 0 to 35 percent and the runoff class is very high. The Nonirrigated Land Capability Class is 8

Data Source Information

Soil Survey Area: State of Connecticut

Survey Area Data: Version 6, Mar 22, 2007

METRO NORTH RAIL LINE



TIDAL SALT MARSH
(Green Farms Brook)

N
↑
1" = 40'

VHB WETLAND FLAG SURVEY
6 NEW CREEK ROAD, WESTPORT
FEBRUARY 9, 2009
MATTHEW DAVISON



Vanasse Hangen Brustlin, Inc.

TIDAL WETLANDS DELINEATION REPORT

Date: May 4, 2009
Project No.: 41448.00
Prepared For: The Connecticut Light and Power Company
Site Location: 6 New Creek Road
Westport, Connecticut
Site Map: Tidal Wetland Sketch Map, dated April 25, 2009
Inspection Date: April 25, 2009
Field Conditions: Weather: sunny, mid 70's General Soil Moisture: moist
Snow Depth: 0 inches Frost Depth: 0 inches

Type of Wetlands Identified and Delineated:

Connecticut Inland Wetlands and Watercourses
Tidal Wetlands
U.S. Army Corps of Engineers

Field Numbering Sequence of Wetlands Boundary: VHB TW 1 to 11; TW 12 to 23

[as depicted on attached wetland sketch map]

The tidal wetland classification system of the Connecticut Department of Environmental Protection was used in this investigation.

All established wetlands boundary lines are subject to change until officially adopted by local, state, or federal regulatory agencies.

The tidal wetlands delineation was conducted by:



Dean Gustafson
Senior Wetland Scientist

Enclosures

Attachments



-
- Wetland Delineation Field Form
 - Tidal Wetlands Vegetation Inventory
 - Tidal Wetland Sketch Map

Wetland Delineation Field Form

Project Address:	6 New Creek Road Westport, Connecticut	Project Number:	41448.00
Inspection Date:	4/25/09	Inspector:	Dean Gustafson, Sr. Wetland Scientist
Wetland I.D.:	Tidal Wetland 1		

Field Conditions:	Weather: sunny, mid 70's	Snow Depth: 0 inches
	General Soil Moisture: moist	Frost Depth: 0 inches

Type of Wetland Delineation:	CT Inland	<input type="checkbox"/>
	CT Tidal	<input checked="" type="checkbox"/>
	ACOE	<input type="checkbox"/>

Field Numbering Sequence: TW 1 to 11 & TW 12 to 23
--

WETLAND HYDROLOGY:

NONTIDAL

Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated – seepage <input type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments: N/A		

TIDAL

Subtidal <input type="checkbox"/>	Regularly Flooded <input checked="" type="checkbox"/>	Irregularly Flooded <input checked="" type="checkbox"/>
Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>	
Comments: mosquito ditches have altered the tidal salt marsh hydrology		

WETLAND TYPE:

SYSTEM:

Estuarine <input checked="" type="checkbox"/>	Riverine <input type="checkbox"/>	Palustrine <input type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: associated with the ebb and flow from Greens Farms Brook, a tidal stream		

CLASS:

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: tidal salt marsh wetland habitat		

WATERCOURSE TYPE:

Perennial <input checked="" type="checkbox"/>	Intermittent <input type="checkbox"/>	Tidal <input checked="" type="checkbox"/>
Comments: tidal salt marsh borders Greens Farms Brook (a.k.a., New Creek)		

SPECIAL AQUATIC HABITAT:

Vernal Pool <input type="checkbox"/>	Other <input type="checkbox"/>	
Comments: N/A		

Tidal Wetlands Vegetation Inventory

Proposed Sherwood 18P Substation

New Creek Road

Westport, Connecticut

April 25, 2009

Tidal Salt Marsh North (Wetland Flags TW 1 to 11)

Cover Type	% Cover	Dominant Species
Shrubs	U	High-tide bush (<i>Iva frutescens</i>)
Herbaceous	M	Salt grass (<i>Districhlis spicata</i>)
	M	Salt hay grass (<i>Spartina patens</i>)
	C	Common reed (<i>Phragmites australis</i>)
	U	Narrow-leaved cattail (<i>Typha angustifolia</i>)

Tidal Salt Marsh South (Wetland Flags TW 12 to 23)

Cover Type	% Cover	Dominant Species
Shrubs	U	High-tide bush (<i>Iva frutescens</i>)
Herbaceous	M	Salt grass (<i>Districhlis spicata</i>)
	M	Salt hay grass (<i>Spartina patens</i>)
	U	Smooth cordgrass (<i>Spartina alterniflora</i>)
	M	Common reed (<i>Phragmites australis</i>)
	U	Narrow-leaved cattail (<i>Typha angustifolia</i>)
	S	Woody glasswort (<i>Salicornia virginica</i>)

Percent cover codes:

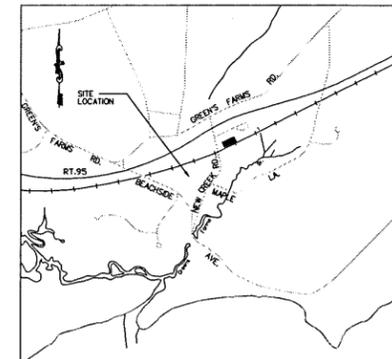
(A)bundant (> 64%)

(C)ommon (40 - 64%)

(M)oderate (20 - 39%)

(U)ncommon (5 - 19%)

(S)carce (< 5%)



LOCUS MAP
N.T.S.

N/F
NEW YORK, NEW HAVEN, &
HARTFORD RAILROAD COMPANY

N/F
MICHAEL JOHNSON

PARCEL AREA:
112031 SQ.FT.
2.57 ACRES

FLOOD ZONE "A6"
SEE NOTE 6

EXISTING 50'
WETLANDS SETBACK

APPROXIMATE LOCATION OF
EXISTING SEPTIC SYSTEM

NOTES:

1. BEARINGS AND ELEVATIONS SHOWN ARE NAD 83 AND NAVD 88 RESPECTIVELY. COORDINATE INFORMATION DERIVED FROM GPS DATA COLLECTED BY NORTHEAST UTILITY SURVEY DEPARTMENT AND INFORMATION PROVIDED BY THE STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION
2. THE FIELD SURVEY SHOWN WAS PERFORMED ON THE GROUND BY NORTHEAST UTILITIES SURVEY DEPARTMENT IN APRIL 2008
3. WETLAND FLAGS SHOWN WERE FIELD DELINEATED BY COLLIN DUNCAN, CERTIFIED SOIL SCIENTIST, IN APRIL 2008
4. SUBJECT PARCEL SHOWN IS LOCATED IN ZONE "AAA" AS SHOWN ON THE TOWN OF WESTPORT ZONING MAP TAX MAP 06, LOT 5
5. PARCEL SHOWN SUBJECT TO POSSIBLE "RIGHTS OF OTHERS IN AND TO THE STREAM TRAVERSING THE PREMISES"
6. SUBJECT PARCEL SHOWN IS LOCATED PARTLY IN FLOOD ZONE "B" AREAS BETWEEN LIMITS OF THE 100-YEAR AND 500-YEAR FLOOD AND PARTLY IN FLOOD ZONE "A6" AREAS OF 100-YEAR FLOOD (FLOOD ELEVATION 11), AS SHOWN ON FLOOD INSURANCE RATE MAP "FIRM" TOWN OF WESTPORT, CONNECTICUT, FAIRFIELD COUNTY, COMMUNITY PANEL NUMBER 090019 00028, REVISED DATE: DECEMBER 4, 1984
7. UNDERGROUND UTILITY, STRUCTURE AND FACILITY LOCATIONS DEPICTED AND NOTED HEREON HAVE BEEN COMPILED, IN PART, FROM RECORD MAPPING SUPPLIED BY THE RESPECTIVE UTILITY COMPANIES OR GOVERNMENTAL AGENCIES, FROM PAROL TESTIMONY AND FROM OTHER SOURCES. THESE LOCATIONS MUST BE CONSIDERED AS APPROXIMATE IN NATURE. ADDITIONALLY, OTHER SUCH FEATURES MAY EXIST ON THE SITE, THE EXISTENCE OF WHICH ARE UNKNOWN TO NORTHEAST UTILITIES SURVEY DEPARTMENT. THE SIZE LOCATION AND EXISTENCE OF ALL SUCH FEATURES MUST BE FIELD DETERMINED AND VERIFIED BY THE APPROPRIATED AUTHORITIES PRIOR TO CONSTRUCTION. CALL BEFORE YOU DIG: 1.800.922.4455.

MAP REFERENCES:

1. SURVEY PREPARED FOR THOMAS F. HUGHES ET AL, WESTPORT, CONN. SCALE: 1" = 60', DATE: DEC 30, 1965 BY CHARLES S. LYMAN
2. SURVEY PREPARED FOR ALBERT V. T. DAY, WESTPORT, CONN. SCALE: 1" = 60', DATE: MARCH 1957
3. PROPERTY OF NICHOLAS S. HILL JR GREENS FARMS, WESTPORT CONN. SCALE: 1" = 40', DATE: JAN 31, 1926 BY ALFRED H. TERRY
4. SURVEY OF PREMISES LOCATED AT 1 BEACHSIDE AVENUE, WESTPORT, CT. SCALE: 1" = 50', DATE: DECEMBER 16, 2003 REVISED THROUGH MARCH 9, 2004, BY AIDAN C. MCCANN
5. RIGHT OF WAY AND TRACK MAP THE NEW YORK NEW HAVEN AND HARTFORD R.R. CO. FROM WOODLAWN TO NEW HAVEN STATION 1815+20 TO STATION 1868+00, TOWN OF WESTPORT, STATE OF CONN SCALE: 1" = 100', DATE: JUNE 30, 1915

LINE TABLE

	BEARING	DISTANCE
L1	S15°-42'-43" E	104.47'
L2	S46°-03'-27" W	122.94'
L3	S42°-19'-47" W	58.03'
L4	S37°-18'-07" W	32.66'
L5	S35°-08'-47" W	34.43'
L6	S30°-01'-57" W	46.85'
L7	S26°-53'-37" W	50.52'
L8	S20°-19'-17" W	66.86'
L9	S16°-40'-27" W	20.00'

- LEGEND:
- PROPERTY LINE
 - BUILDING LINE
 - WETLANDS
 - WETLANDS 50' SETBACK
 - CHAINLINK FENCE
 - ZONE A-6 FLOOD ZONE
 - ZONE B FLOOD ZONE
 - MAJOR CONTOUR
 - MINOR CONTOUR
 - GAS MAIN
 - WATER MAIN
 - STONE WALL
 - UTILITY POLE
 - GAS VALVE

THIS SURVEY AND MAP HAS BEEN PREPARED IN ACCORDANCE WITH SECTIONS 20- 300b-1 THRU 20-300b-20 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES-MINIMUM STANDARD FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT AS ENDORSED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS INC. IT IS A ZONING LOCATION SURVEY, BOUNDARY DETERMINATION CATEGORY DEPENDANT RESURVEY, CONFORMING TO HORIZONTAL ACCURACY CLASS 4-2 AND A TOPOGRAPHIC SURVEY CONFORMING TO TOPOGRAPHIC ACCURACY CLASS 1-2. THE PURPOSE OF THIS SURVEY AND MAP IS TO ENABLE DETERMINATION OF COMPLIANCE OR NON-COMPLIANCE WITH APPLICABLE MUNICIPAL OR STATUTORY REQUIREMENTS.

TO THE BEST OF MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON

SHAWN A. SOUTHWORTH, LS #70288
ANY ORIGINAL OR DUPLICATE OF THIS MAP IS NOT VALID UNLESS IT BEARS THE EMBOSSED SEAL OF THE SURVEYOR WHOSE REGISTRATION NUMBER APPEARS ABOVE. NO OTHER CERTIFICATION OR WARRANTY IS EXPRESSED OR IMPLIED.

VANASSE HANGEN BRUSTLIN, INC.

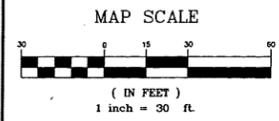
TIDAL WETLAND SKETCH

Northeast Utilities Service Co.
FOR THE CONNECTICUT LIGHT & POWER COMPANY

TITLE
SHERWOOD 18P SUBSTATION
BOUNDARY & TOPOGRAPHIC SURVEY

BY	CHKD	SAS	APP	APP
DATE 4/08	DATE 4/08	DATE	DATE	DATE
H-SCALE 1" = 30'	V-SIZE	ARCH D	FIELD BOOK & PAGES	R.E.DWG. 22632
R.E. PROJ. NUMBER 150-03.169	NUSCO			

4/25/09 DEG



TW 23

TIDAL SALT MARSH
SOUTH

TW 12

GREENS FARMS
BROOK

TW 11



TIDAL SALT MARSH
NORTH

TW 1

NEW CREEK RD.

MAPLE LANE

BENCHMARK: R.R.
SPIKE IN ROOF
OF 20" PINE
ELEV.=15.31'

R=73.43'
L=79.16'
D=61°46'00"
CH BEARING=S15°10'17"W
CH LENGTH=75.38'

50'R.Y.

50'F.Y.

15' RCP
INV. = 4.22'

15' RCP
INV. = 3.38'

S18°40'47"W
83.25'

#26339

#26311

#26342

#34382

#34383

CONCRETE BRIDGE

EXISTING HOUSE

DECK

BIT. DRIVEWAY

WATER METER

72" OAK

IR TO BE SET

**Appendix D – CTDEP
Correspondence**



STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION



June 19, 2008

Scott Marotta
Northeast Utilities System
P.O. Box 270
Hartford, CT 06141-0270

Re: Proposed Substation, 6 New Creek
Road, Westport

Dear Mr. Marotta:

I have reviewed Natural Diversity Data Base maps and files regarding the area delineated on the map you provided for the proposed substation at 6 New Creek Road in Westport, Connecticut. According to our information there are no known extant populations of Federal or State Endangered, Threatened or Special Concern Species that occur at the site in question.

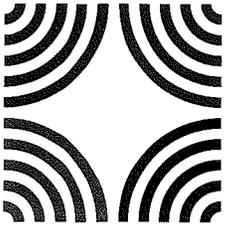
Natural Diversity Data Base information includes all information regarding critical biological resources available to us at the time of the request. This information is a compilation of data collected over the years by the Natural Resources Center's Geological and Natural History Survey and cooperating units of DEP, private conservation groups and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Consultations with the Data Base should not be substitutes for on-site surveys required for environmental assessments. Current research projects and new contributors continue to identify additional populations of species and locations of habitats of concern, as well as, enhance existing data. Such new information is incorporated into the Data Base as it becomes available.

Please contact me if you have further questions at 424-3592. Thank you for consulting the Natural Diversity Data Base. Also be advised that this is a preliminary review and not a final determination. A more detailed review may be conducted as part of any subsequent environmental permit applications submitted to DEP for the proposed site.

Sincerely,

Dawn M. McKay
Biologist/Environmental Analyst

DMM/blm



Connecticut Commission on Culture & Tourism

May 21, 2009

Historic Preservation
and Museum Division

One Constitution Plaza
Second Floor
Hartford, Connecticut
06103

860.256.2800
860.256.2763 (f)

Ms. Amanda M. Mayhew
Northeast Utilities System
107 Selden Street
Berlin, CT 06037

Subject: CL&P Sherwood Substation
6 New Creek Road
Westport, CT

Dear Ms. Mayhew:

The State Historic Preservation Office has reviewed the reconnaissance survey prepared by Heritage Consultants LLC concerning the above-named project. In the opinion of the State Historic Preservation Office, the archival and archaeological methodologies employed by Heritage Consultants LLC are consistent with our *Environmental Review Primer for Connecticut's Archaeological Resources*.

In the opinion of the State Historic Preservation Office, 6 New Creek Road lacks historic and architectural importance and is not eligible for the National Register of Historic Places. This office concurs with Heritage Consultants LLC's assessment that no additional archaeological investigations appear warranted with respect to the proposed undertaking. We believe that the proposed undertaking will have no effect upon Connecticut's cultural heritage.

This office recommends that Heritage Consultants LLC consult with the Office of State Archaeology at the University of Connecticut (Storrs) concerning the professional transfer of all field notes, photographs, and artifactual materials generated by the archaeological investigations.

For further information please contact Dr. David A. Poirier, Staff Archaeologist.

Sincerely,


David Bahlman
Deputy State Historic Preservation Officer

cc: Bellantoni, George

CONNECTICUT
www.cultureandtourism.org