

Proposed Waterford Substation

325 Waterford Parkway North
Waterford, Connecticut

Prepared for



**Connecticut
Light & Power**

The Northeast Utilities System

Prepared by

VHB / Vanasse Hangen Brustlin, Inc.

54 Tuttle Place

Middletown, Connecticut 06457-1847

February 2008

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Introduction

The Applicant, The Connecticut Light and Power Company (“CL&P”), seeks to construct a new substation (the “Substation”) on property located at 325 Waterford Parkway North in Waterford, Connecticut (the “Property” or “Site”) for the purpose of increasing the capacity and the reliability of the electric power distribution system in Waterford and adjacent areas. The proposed Substation project is subject to the jurisdiction of the Connecticut Siting Council, pursuant to Title 16, Chapter 277a et seq. of the Connecticut General Statutes. However, local wetlands and zoning commissions are provided an opportunity to participate in the Council’s decision-making process with respect to the location of certain utility facilities, including substations.

The proposed Substation would address the need for additional distribution-system capacity and reliability in the Town of Waterford by establishing a new bulk power source. The Substation will be strategically positioned to facilitate connection to an existing 115-kV transmission line that extends through the northwest corner of the Property.

The *Site Location Map, USGS*, provided as Figure 1 depicts the approximate CL&P Property boundary location. A completed *Town of Waterford Conservation Commission Application for Inland Wetland/Watercourse Permit for Location Review* is attached as Appendix A.

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Project Description

Location Description

The 5-acre Property consists of undeveloped land located at the northeast intersection of Oil Mill Road and Waterford Parkway North. The Property was recently divided from a larger 55 ± acre parcel identified by the Waterford Assessor's Office on Map 88, as Lot 287. A new lot number has not yet been determined but the property has been assigned an address of 325 Waterford Parkway North. The 5-acre Property was purchased by CL&P on December 20, 2007 specifically with this Substation project in mind.

For the following reasons, the Property is well suited for the proposed Substation:

- An existing 115-kV transmission line currently exists immediately northwest the Property;
- The Property has sufficient access from a local road; and,
- Construction can be completed and the Substation can be operated with minimal effects on the surrounding environment.

Site Vicinity Characteristics

Surrounding land use in the vicinity of the Site consists of residential and undeveloped properties. The Site is abutted to the south (across Waterford Parkway North) by Interstate 95, to the north by a tree farm and residential property, to the east and west (across Oil Mill Road) by wooded undeveloped land. An exit ramp from I-95 south to

Waterford Parkway North is located immediately to the southeast across from the Site. A 2006 color aerial photograph depicting conditions in the vicinity is provided as Figure 2, *Site Location Map, Aerial*.

Proposed Activity

The proposed Substation would be located within an irregularly shaped fenced compound which would encompass a $47,578 \pm$ square foot area in the western portion of CL&P's 5-acre Property, just south of the existing transmission line corridor. A gravel access drive to the Substation will be established from Waterford Parkway North.

The undeveloped Property is predominantly occupied by early successional upland forest with narrow forested wetland areas bordering a perennial watercourse, which flows south through an eastern portion of the property. Two major habitat types exist on the Property including early successional forest and riparian corridor. A small forested wetland finger extends onto the Property from a palustrine forested wetland located to the northeast.

The wetlands and watercourse on the Property will not be directly affected by development and operation of the Substation. Limited construction activities are proposed to occur within the 100-foot upland review area (established by the Town of Waterford Conservation Commission) east of the watercourse on the Property.

Activities associated with construction of the proposed Substation include establishing an approximate 20-foot wide gravel access drive from Waterford Parkway North to the Substation and installing a culvert to facilitate the movement of surface water flows under the access drive. Surface waters will drain south and be treated through

biofiltration swales and a level spreader before discharging to the watercourse on the Property.

Mapped Soil Types

Digitally available updated soil survey information was obtained from the Natural Resources Conservation Service (NRCS). Soil classifications present on the Site are as follows:

Glacial Till (unstratified sand, silt & rock) deposited upland soils:

- Canton and Charlton soils (61B, 61C)

Glacial Till (unstratified sand, silt and rock) deposited wetland soils:

- Ridgebury, Leicester, and Whitman soils (3)

Glaciofluvial (stratified sand and gravel) deposited upland soils:

- Hinckley gravelly sandy loam (not mapped)
- Agawam fine sandy loam (29B)

Disturbed soils upland soils:

- Udorthents-Urban land complex (306)

Soil test pit data was collected by a registered soil scientist at Vanasse Hangen Brustlin, Inc. ("VHB") on October 26, 2007. Soil test pit descriptions and percolation rate data are within the *Soil Test Pit and Percolation Data Memo* provided in Appendix B.

Rare Species Habitat

CL&P reviewed the CTDEP's Natural Diversity Database (updated December 2007), 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 as depicted on the *Environmental Resources Screen Map* provided as Figure 3. Further,

CL&P submitted a letter request on January 15, 2008 to the CTDEP for concurrence. CL&P received confirmation in writing on January 28, 2008 that no known extant populations of federal or state Endangered, Threatened, and Special Concern species occur at the Property. *Correspondence between CL&P and CTDEP* is provided in Appendix C.

Wetland Descriptions

Wetlands were delineated by a Registered Soil Scientist at VHB on September 14, 2007. Details of the wetland delineation are within the *Wetland Delineation Report* provided in Appendix D.

A Riverine Upper Perennial wetland system (Wetland 1) transects the Site from northeast to southwest. This system consists of a perennial stream (WC 1-01X to 1-11 and WC 1-23 to 1-31) with associated bordering wetlands (WF 1-12 to 1-22). The stream flows through the Site within a well defined, possibly excavated, channel. At its southern extent the channel becomes less defined and bordering wetlands exist. The stream exits the property beneath Waterford Parkway North via a culvert. This stream functions as a discharge (or gaining stream) in its upper reaches then transitions to a recharge (losing stream) as it enters outwash deposits located on the Property.

Dominant vegetation within this system includes white ash (*Fraxinus Americana*), red maple (*Acer rubrum*), sweet pepperbush (*Clethra alnifolia*), spicebush (*Lindera benzoin*), winterberry (*Ilex verticillata*) and New York fern (*Thelypteris noveboracensis*).

A Palustrine Forested wetland system (Wetland 2; WF 2-01 to 2-07) exists within the eastern Site boundary. This wetland, a small shallow depressional system, is the westernmost portion of a larger wetland system that extends off-Site immediately east

of the northeast corner of the Site. Dominant vegetation in this wetland area includes black birch (*Betula lenta*), red cedar (*Juniperus virginiana*) and New York Fern.

Proposed Activities Relative to Nearby Wetlands and Impact Analysis

Construction of the proposed Substation will not result in any effects on wetlands or watercourses. Limited work is anticipated within the 100-foot upland review area of the perennial watercourse and its bordering wetlands located on the Property.

Proposed activities within the upland review area include grading, construction of a small 1,241 ± square foot portion of the fenced compound, and installation of a biofiltration swale and level spreader that will properly treat and direct surface water toward the watercourse.

Approximately 0.26-acre of the 100-foot upland review on the Property will be subject to proposed construction activities. Developed and disturbed areas within the upland review area will remain pervious to stormwater. Disturbed areas outside of the fenced area, including the biofiltration swale, will be properly revegetated with a variety of native plant species post construction.

Best Management Practices will 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. Silt fencing and hay bales will generally be installed around the perimeter of construction activities protecting nearby resources, including the nearby wetlands. Conservation seed mix containing native grasses and forbs will be used to stabilize exposed areas post construction.

The Waterford Substation includes the installation of two 60 Megavolt-Ampere transformers that would contain insulating oil. The transformer equipment would each have secondary containment consisting of a polyvinyl-lined sump, designed to hold 110% of a transformer's fluid capacity, and accidental spill prevention provisions 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, low oil level alarm, integral to the system, is monitored remotely and notifies 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.

Lighting would be available within the Substation yard to facilitate work at night, during inclement weather, or under emergency conditions. 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.

A map depicting *Existing/Proposed Conditions* is provided as Figure 4. *Location Review Concept Plans* depicting the proposed activities are provided in Appendix E.

Mitigation

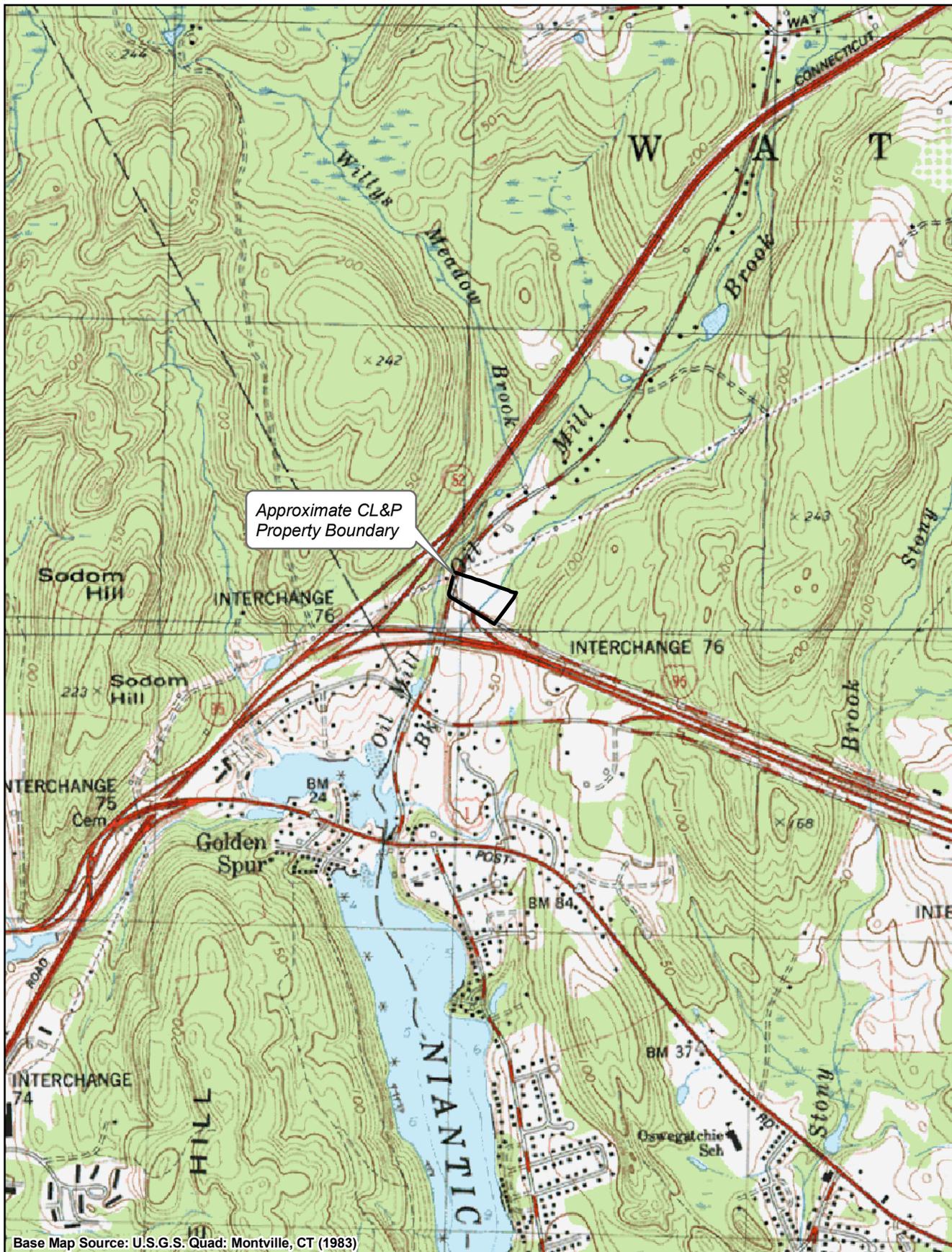
The upland review area east of the unnamed watercourse on the Property will be disturbed by grading activities, a small portion of the Substation area, and installation of biofiltration swales and a level spreader.

Mitigation will consist of CL&P's Best Management Practices for erosion and sediment control (see typical details on enclosed drawing CP-2 in Appendix E). Geotextile fabric sediment barriers will be placed between the Project and wetland resource areas during construction and maintained until the Site is stabilized and rehabilitated. Cut and fill slopes will not exceed 2 to 1 grades, and will be loamed and seeded.

As part of Site restoration, a New England conservation/wildlife seed mix will be planted in disturbed portions of the upland review area to provide both good erosion control and wildlife habitat value. Use of this seed mix, which contains native grasses, forbs, wildflowers and legumes, will provide a natural vegetative transition zone between upland and nearby wetland regimes.

Figures

Figure 1: Site Location Map, USGS



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

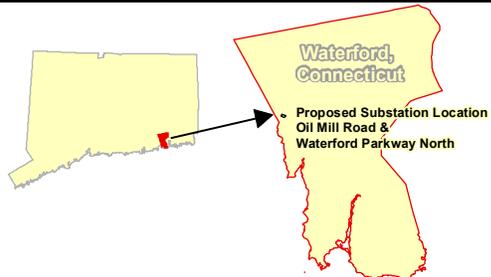


Figure 2: Site Location Map, Aerial

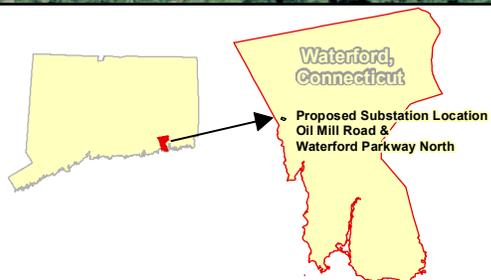


Base Map Source: 2006 color aerial photograph with 1 foot resolution

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



150 75 0 150
Feet



**Connecticut
Light & Power**

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Figure 3: Environmental Resources Screen Map

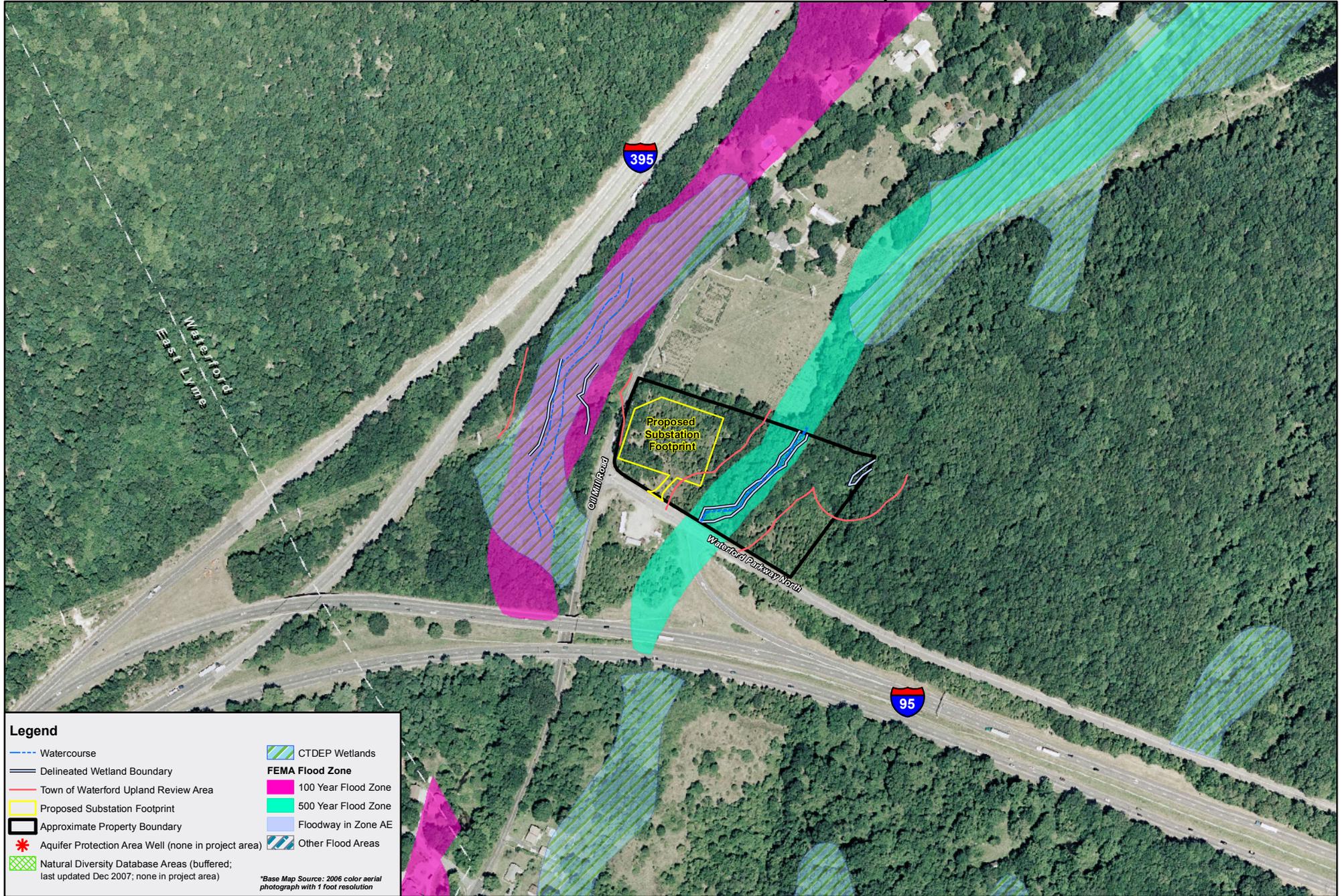
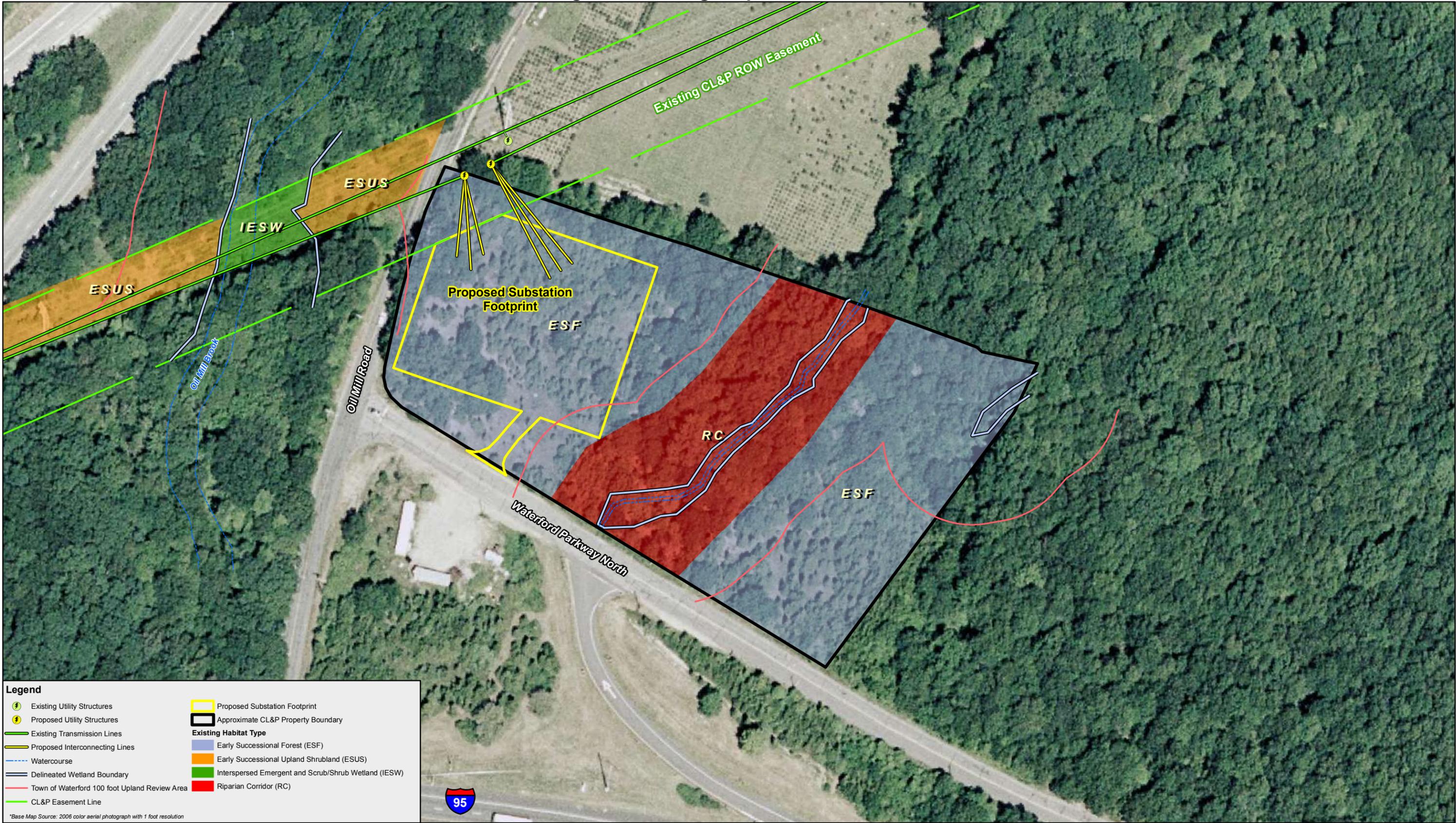


Figure 4: Existing/Proposed Conditions



Appendix A
Town of Waterford Conservation
Commission Application for Inland
Wetland/Watercourse Permit for
Location Review

TOWN OF WATERFORD Conservation Commission Application for Inland Wetland / Watercourse Permit for Location Review

"Under Section 16-50x(d)CGS"

Agency Use:

Type of Application:

Date Received: _____

Permitted Use, Section 4.1 _____

Received By: _____

Unregulated Activities, Section 4.2 _____

Application Number: _____

Regulated Activities, Section 6 _____ Fee: _____

1. Applicant: The Connecticut Light & Power Co. Phone: 860-665-6774
Address: P.O. Box 270, Hartford, CT 06141
107 Seldon Street, Berlin, CT 06037
2. Owner: Same as Applicant
3. Agent: Vanasse Hangen Brustlin, Inc. Phone: 860-632-1500
Address: 54 Tuttle Place, Middletown, CT 06457
E-Mail: Mike Libertine: mlibertine@vhb.com
4. Property Address: 325 Waterford Parkway North
5. Assessor's Map #: 88 Assessor's Parcel #: TBD
6. Abutting Property Owners - Complete Attached Form
7. Activity to be Reviewed and / or Licensed (attach sheet if necessary): Activity within 100-foot upland review area (please see project description narrative for details).
8. Description of Proposed Activity (attach sheet if necessary): Construction of 115-KV substation for interconnection with existing overhead transmission facilities.
9. Purpose of Activity (attach sheet if necessary): Please see Project Description narrative.
10. Acreage of Property: 5 +/- acres Acreage of Wetlands: 0.22 +/-
11. Acreage of Wetlands Altered: 0 12. Wetlands Mitigation Proposed: Project Narrative
13. DEP Reporting Form With Appropriate Attachments: N/A Yes: No: X
14. Section 7 and sections 8.1 & 8.2 of the Town of Waterford "Inland Wetlands and Watercourse Regulations" have been complied with: (Review attached check list) Yes: No:
The applicant / owner hereby gives the Commission, its agent and consultants the right of free access to any part of the property under consideration. The undersigned warrants the truth of all statements contained herein and in all supporting documents according to the best of his / her knowledge, information and belief.
Applicant: Date:
Owner: Date:
Agent: Date:

Appendix B

Soil Test Pit and Percolation Data Memo



Vanasse Hangen Brustlin, Inc.

54 Tuttle Place
Middletown, Connecticut 06457
860 632-1500
FAX 860 632-7879

Memorandum

To: The Connecticut Light and Power
Company

Date: November 1, 2007

Project No.: 41357.00

From: Matthew Davison
Registered Soil Scientist

Re: Soil Test Pit and Percolation Data
Oil Mill Road and Waterford Parkway N.
Waterford, Connecticut

An on-site investigation was conducted at the proposed NU substation location at Oil Mill Road and Waterford Parkway North in Waterford, Connecticut on October 26, 2007. The purpose of the investigation was to demonstrate that the soil characteristics on site are suitable for an on-site septic system and conform to the requirements of the Town of Waterford Zoning Requirements (Lot Design Standards Section 3.34.3b).

A total of eight test pits were excavated using a tire-mounted back hoe. Four test pits were excavated in each of two possible locations for an on-site septic system. The remaining four test pits were positioned to document that the proposed parcel conforms to the Town of Waterford lot design standards. Mr. George Calkins, Senior Sanitarian with Ledge Light Health District was on site to document pertinent data within each test pit and the percolation rates for the two possible septic locations. See attached map showing test pit (TP#) and percolation test (Perc#) locations. At each test pit, VHB soil scientist Matthew Davison recorded horizon depths, parent material, depth to bedrock, depth to free water, and depth to seasonal high water table. For each soil horizon the matrix color; texture; structure; grade consistence; quantity and size of roots; and the quantity, size, color and type of redoximorphic features were recorded. Appendix A contains the Test Pit logs. Test pits were backfilled and smoothed to return the area to its original grade on October 26, 2007.

Soils and Surficial Geology

The surficial geology of the Site is classified as glacial outwash deposits. According to the USDA Natural Resources Conservation Service (NRCS) Web Soil Survey, soils on the Site west of the stream, the location of the proposed development, are mapped primarily as Agawam fine sandy loam, with a small area of Udorthents in the southeast portion of this area. Field observations and test pit data reveal the characteristics of the soils on Site are more closely associated with the Hinckley soil series. Hinckley soils consist of coarse grained, excessively drained glacial outwash deposits containing a seasonal high water table greater than four feet below the ground surface.

Bedrock and Refusal

Test pits were excavated to between 84 and 92 inches deep. No confining layers (bedrock or dense till) were encountered in any of the test pits.

Groundwater and Seasonal High Water Table

Groundwater was not observed in any of the eight test pits. Test pits 1 and 4 showed evidence of iron concentrations at varying depths between 62 and 71 inches. Test pit 6 showed some evidence of

iron concentrations at depths of 40 inches and greater. No noticeable iron reductions were documented within any of the test pits. Fluctuation of the seasonal high water table in glacial outwash deposits in this type of landscape position is typically minimal (i.e., typically within 12 inches from the observed depth to groundwater). The observations of iron concentrations is not a reliable indicator of the seasonal high groundwater table since these features can be created by surface water percolating through the soil profile. Therefore, it is reasonable to assume that based on test pit observations and an understanding of the soil parent material the seasonal high water table in the vicinity of each test pit is estimated at or below the following depths: TP1 - 77 inches, TP2 - 72 inches, TP3 - 80 inches, TP4 - 76 inches, TP5 - 78 inches, TP6 - 72 inches, TP7 - 78 inches, TP8 - 80 inches.

Based on the percolation rates and Mr. Calkins' field and data review, Site soils are deemed suitable and in compliance with the Town's Zoning Regulations.

Appendix A

Soil Test Pit Descriptions

VHB Test Pit 1

Ap	0 to 12 inches	Dark brown (10YR 4/4) fine sandy loam; weak very fine granular structure; some medium roots; clear wavy boundary
Bw	12 to 30 inches	Light brown (2.5Y 6/6) very fine sandy loam; medium subangular blocky structure, friable (firm in place); common fine and medium roots; clear wavy boundary.
BC	30 to 56 inches	Light brown (2.5Y 5/6) coarse loamy sand; moderate fine and medium granular structure, friable (firm or cemented in place); 30% gravel, 10% cobbles, 10 % stones; clear wavy boundary.
C1	56 to 71 inches	Light olive brown (2.5Y 6/4) coarse sand; moderate medium granular structure, friable; clear wavy boundary.
C2	71 to 89 inches	Light brown (2.5Y7/4) fine sand; weak fine granular structure, friable; Pockets (possible concentrations) of 10YR 5/6

Bottom of excavation: 89 inches

Depth to free water: not observed

Seasonal high water table estimate: at or below 77 inches

Date: October 26, 2007

VHB Test Pit 2

Ap	0 to 10 inches	Dark brown (10YR 4/4) fine sandy loam; weak very fine granular structure; some medium roots; clear wavy boundary.
Bw	10 to 19 inches	Light brown (10 YR 5/6) very fine sandy loam; medium subangular blocky structure, friable (firm in place); common medium roots; clear wavy boundary.
BC	19 to 38 inches	Light brown (2.5Y 5/6) coarse loamy sand; moderate fine and medium granular structure, friable (cemented in place); 30% gravel, 10% cobbles, 10% stones.
C1	37 to 66 inches	Light brown (2.5Y 5/6) coarse sand; moderate fine and medium granular structure, friable (cemented in place); 30% stones, 10% gravel, 10% cobbles; clear wavy boundary.
C2	66 to 76 inches	Light olive brown (2.5Y 6/4) coarse sand and gravel; moderate medium and coarse granular structure, friable (cemented in place).
C3	76 to 84 inches	Light brown (10YR 5/6) coarse sand and gravel; moderate medium and coarse granular structure, friable.

Bottom of excavation: 84 inches

Depth to free water: not observed

Seasonal high water estimate: at or below 72 inches

Date: October 26, 2007

VHB Test Pit 3

Ap	0 to 10 inches	Dark brown (10YR 4/4) fine sandy loam; weak very fine granular structure; abundant fine and medium roots; clear wavy boundary.
Bw	10 to 24 inches	Light brown (10 YR 6/6) very fine sandy loam; medium subangular blocky structure, friable (firm in place); abundant fine roots at horizon boundary; clear wavy boundary.
C	24 to 92 inches	Light brown (2.5Y 6/6) coarse loamy sand; moderate fine and medium granular structure, friable (cemented in place); 30% gravel, 10% cobbles, 10% stones; a layer well sorted gravel (4" thick), medium and coarse granular structure exists at 48 inches; color changes to 2.5 YR 5/4 at approximately 48 inch depth

Bottom of excavation: 92 inches

Depth to free water: not observed

Seasonal high water table estimate: at or below 80 inches

Date: October 26, 2007

VHB Test Pit 4

Ap	0 to 6 inches	Dark brown (10YR 4/4) fine sandy loam; weak very fine granular structure; few fine and medium roots; clear wavy boundary.
Bw1	6 to 16 inches	Dark brown (10YR 5/4) very fine sandy loam; platy structure, friable (fragipan in place); 15 % stones and cobbles; clear wavy boundary.
Bw2	16 to 32 inches	Light brown (10YR 5/8) coarse sandy loam; moderate medium and coarse granular structure, friable (cemented in place); 30% gravel, 10% cobbles, 10% stones; clear wavy boundary.
C1	32 to 40 inches	Light yellowish brown (2.5Y 6/3) coarse sandy gravel; moderate coarse granular structure, friable (cemented in place); clear wavy boundary.
C2	40 to 50 inches	Light brown (10YR 4/6) coarse sand; moderate medium and coarse granular structure, friable; clear wavy boundary.
C3	50 to 62 inches	Light yellowish brown (2.5Y 6/3) coarse sandy gravel; moderate coarse granular structure, friable (cemented in place); medium faint to distinct concentrations (10YR 5/6) present; clear wavy boundary.
C4	62 to 68 inches	Light yellowish brown (2.5Y 6/3) very fine sand; structureless; some fine roots present; line of iron concentration (10YR 5/8) at top of horizon (in zone of texture change); clear wavy boundary.
C5	68 to 74 inches	Light yellowish brown (2.5Y 6/3) gravelly sand; medium granular structure; medium faint to distinct concentrations (10YR 5/6) present; clear wavy boundary.
C6	74 to 88 inches	Light yellowish brown (2.5Y 6/3) very fine sand; structureless; some fine roots present; line of iron concentration (10YR 5/8) at top of horizon (in zone of texture change).

Bottom of excavation: 88 inches

Depth to free water: not observed

Seasonal high water table estimate: at or below 76 inches

Date: October 26, 2007

VHB Test Pit 5

Ap	0 to 12 inches	Dark brown (10YR 4/4) fine sandy loam; weak very fine granular structure; few fine and medium roots; clear wavy boundary.
Bw	12 to 36 inches	Light brown (10 YR 4/6) very fine sandy loam; medium subangular blocky structure, friable (firm in place); abundant fine roots at horizon boundary; clear wavy boundary.
C1	36 to 80 inches	Light brown (10YR 5/6) coarse sandy gravel; medium and coarse granular structure, friable (cemented in place); some cobbles and stones.
C2	80 to 90 inches	Light olive brown (2.5Y 5/4) coarse sandy gravel; medium and coarse granular structure, friable (cemented in place).

Bottom of excavation: 90 inches

Depth to free water: not observed

Seasonal high water table estimate: at or below 78 inches

Date: October 26, 2007

VHB Test Pit 6

Ap	0 to 12 inches	Dark brown (10YR 4/4) fine sandy loam; weak very fine granular structure; few fine and medium roots; clear wavy boundary.
Bw	12 to 36 inches	Light brown (10YR 4/6) fine sandy loam; weak fine granular structure, friable; abundant fine roots; clear wavy boundary.
C	36 to 84 inches	Light brown (2.5Y 6/6) coarse sandy gravel; moderate medium and some coarse granular structure, friable (cemented in place); medium faint to distinct concentrations (10YR 5/6) present at 40 inches and below.

Bottom of excavation: 84 inches

Depth to free water: not observed

Seasonal high water table estimate: at or below 72 inches

Date: October 26, 2007

VHB Test Pit 7

Ap	0 to 9 inches	Dark brown (10YR 4/4) fine sandy loam; weak very fine granular structure; few fine and medium roots; clear wavy boundary.
BC	9 to 30 inches	Light brown (10YR 6/6) coarse sand and gravel; moderate medium and coarse granular structure; abundant fine roots; clear wavy boundary.
C	30 to 90 inches	Light brown (10YR 5/6) stratified sand and gravel; fine, medium and coarse granular structure, friable (cemented in place); some cobbles and stones present.

Bottom of excavation: 90 inches

Depth to free water: not observed

Seasonal high water table estimate: at or below 78 inches

Date: October 26, 2007

VHB Test Pit 8

Ap	0 to 9 inches	Dark brown (10YR 4/4) fine sandy loam; weak very fine granular structure; few fine and medium roots; clear wavy boundary.
Bw	9 to 26 inches	Light brown (10YR 4/6) fine sandy loam; weak fine granular structure, friable; abundant fine roots; clear wavy boundary.
C1	26 to 40 inches	Light brown (10YR 5/6) coarse sandy gravel; moderate medium and coarse granular structure, friable (cemented in place); 10% cobbles; clear wavy boundary.
C2	40 to 92 inches	Light brown (10YR 4/6) coarse sandy gravel; moderate medium and coarse granular structure, friable (cemented in place); 30% cobbles; 10% stones.

Bottom of excavation: 92 inches

Depth to free water: not observed

Seasonal high water table estimate: at or below 80 inches

Date: October 26, 2007

Appendix C

Correspondence between CL&P and CTDEP



January 15, 2008

Ms. Dawn McKay, Biologist/Environmental Analyst
Connecticut Department of Environmental Protection
Natural Resources Center
Environmental and Geographic Information Center
Natural Diversity Data Base
79 Elm Street, Store Level
Hartford, CT 06106-5127

Re: Proposed Substation
287 Waterford Parkway North
Waterford, Connecticut

Dear Ms. McKay:

The Connecticut Light and Power Company ("CL&P") is considering the development of a new 115-kV substation for interconnection with existing overhead transmission facilities off Waterford Parkway North, in Waterford, Connecticut (the "Site"). The new substation is necessary to meet an increasing demand for electricity in the Waterford area. The proposed development of a new substation requires CL&P to submit an application to the Connecticut Siting Council for a Certificate of Environmental Compatibility and Public Need. Consultation with your office is part of the application process.

The 5-acre Site currently exists as undeveloped land and is covered with moderate tree growth, with some small clearings and limited growth in its central portion. An easement area with overhead electric transmission lines is present in the northwest corner of the Site. The new 115-kV substation facility will interconnect with the existing transmission lines that extend generally east to west immediately north of the Site.

CL&P has reviewed the Natural Diversity Data Base's (NDDDB) December 2007 GIS layer of "State and Federally Listed Endangered, Threatened, and Special Concern Species and Significant Natural Communities", and based on your criteria, we have determined that our proposed project does **not** present a potential conflict with a *listed species or significant natural community* (please refer to the attached NDDDB Screen map).

We respectfully request your written concurrence with our findings to support our application with the Connecticut Siting Council. At your earliest convenience, please forward the correspondence to my attention. Thank you in advance for your prompt consideration of this request. Should you have any questions, I may be reached at (860) 665-4861 or via email at marotsa@nu.com.

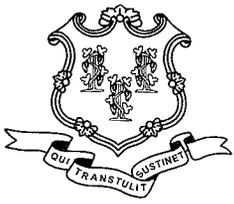
Sincerely,

NORTHEAST UTILITIES SERVICE COMPANY

Scott A. Marotta
Environmental Scientist

Enclosures

cc: D. Biondi, Northeast Utilities Service Company



STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION



January 28, 2008

Mr. Scott Marotta
Northeast Utilities Service Company
P.O. Box 270
Hartford, CT 06141-0270

Re: Proposed Substation, 287 Waterford
Parkway North, North Waterford

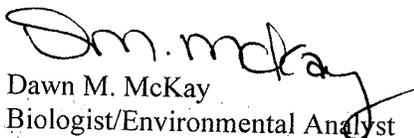
Dear Mr. Marotta:

I have reviewed Natural Diversity Data Base maps and files regarding the area delineated on the map you provided for the proposed new 115-kV sub-station for interconnection with existing overhead transmission facilities off Waterford Parkway North in Waterford, 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

Appendix D

Wetland Delineation Report



Vanasse Hangen Brustlin, Inc.

WETLANDS DELINEATION REPORT

Date: November 20, 2007
Project No.: 41357.00
Prepared For: The Connecticut Light and Power Company
Site Location: Oil Mill Road (ROW) & Waterford Parkway North
Waterford, CT
Site Map: Wetlands Sketch Map, Dated September 14, 2007
Inspection Date: September 14, 2007
Field Conditions: Weather: sunny, low 80's General Soil Moisture: dry
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

Local Regulated Upland Review Areas: Wetlands: 100 feet Watercourses: 100 feet

Field Numbering Sequence of Wetlands Boundary: WC 1-01X to WC 1-11, WF 1-12 to 1-22, WC 1-23 to 1-31, WF 2-01 to 2-07

[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

54 Tuttle Place
Middletown, Connecticut 06457-1847
860.632.1500 ■ FAX 860.632.7879
email: info@vhb.com
www.vhb.com

Attachments

-
- Wetland Delineation Field Form
 - Soil Map
 - Soil Report
 - Wetland Delineation Sketch Map
 - Wetland Delineation Map



Wetland Delineation Field Form

Project Address:	Oil Mill Road & Waterford Parkway North	Project Number:	41357.00
Inspection Date:	September 14, 2007	Inspector:	Matthew Davison
Wetland I.D.:	Wetland & Watercourse 1		

Field Conditions:	Weather: sunny, low 80s	Snow Depth: 0
	General Soil Moisture: dry	Frost Depth: 0
Type of Wetland Delineation:	Connecticut <input checked="" type="checkbox"/>	
	ACOE <input checked="" type="checkbox"/>	
	Tidal <input type="checkbox"/>	
Field Numbering Sequence: WC 1-01X to 1-11, WF 1-12 to 1-22, WC 1-23 to 1-31		

WETLAND HYDROLOGY:

NONTIDAL

Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>	Permanently Flooded <input checked="" type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input checked="" type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated – seepage <input type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments: Perennial watercourse with associated wetland soils.		

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 checked="" type="checkbox"/>	Palustrine <input type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: Perennial watercourse		

CLASS:

Emergent <input type="checkbox"/>	Scrub-shrub <input type="checkbox"/>	Forested <input checked="" type="checkbox"/>
Open Water <input checked="" type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: Perennial watercourse		

WATERCOURSE TYPE:

Perennial <input checked="" type="checkbox"/>	Intermittent <input type="checkbox"/>	Tidal <input type="checkbox"/>
Comments:		

SPECIAL AQUATIC HABITAT:

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

Wetland Delineation Field Form (Cont.)

MAPPED SOILS:

SOIL SERIES	WET	UP	NRCS MAPPED	FIELD IDD/ CONFIRMED
Canton and Charlton	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Ridgebury and Leicester	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Agawam	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Udorthent	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

DOMINANT PLANTS:

sweet pepperbush	
spicebush	
white ash	
winterberry	
New York fern	

WETLAND NARRATIVE:

Perennial watercourse flows through property from north to south. Watercourse channel is well defined, a result of stones placed along each bank during previous agricultural land use. Barbed wire remnants along streambanks and adjacent old field habitat are further evidence of previous land use. Watercourse exits property through culvert under Waterford Parkway North. Stream banks are less defined in this area and narrow forested bordering wetlands and wetland soils exist to each side of the stream.

Wetland Delineation Field Form

Project Address:	Oil Mill Road & Waterford Parkway North	Project Number:	41357.00
Inspection Date:	September 14, 2007	Inspector:	Matthew Davison
Wetland I.D.:	Wetland 2		

Field Conditions:	Weather: sunny, low 80s	Snow Depth: 0
	General Soil Moisture: dry	Frost Depth: 0
Type of Wetland Delineation:	Connecticut <input checked="" type="checkbox"/>	
	ACOE <input checked="" type="checkbox"/>	
	Tidal <input type="checkbox"/>	
Field Numbering Sequence: WF 2-01 to 2-07		

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 checked="" type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments:		

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: Associated with larger wetland system to east.		

CLASS:

Emergent <input 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: Associated with larger wetland system to east.		

WATERCOURSE TYPE:

Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>	Tidal <input type="checkbox"/>
Comments:		

SPECIAL AQUATIC HABITAT:

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

Wetland Delineation Field Form (Cont.)

MAPPED SOILS:

SOIL SERIES	WET	UP	NRCS MAPPED	FIELD IDD/ CONFIRMED
Canton and Charlton	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Ridgebury and Leicester	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Agawam	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

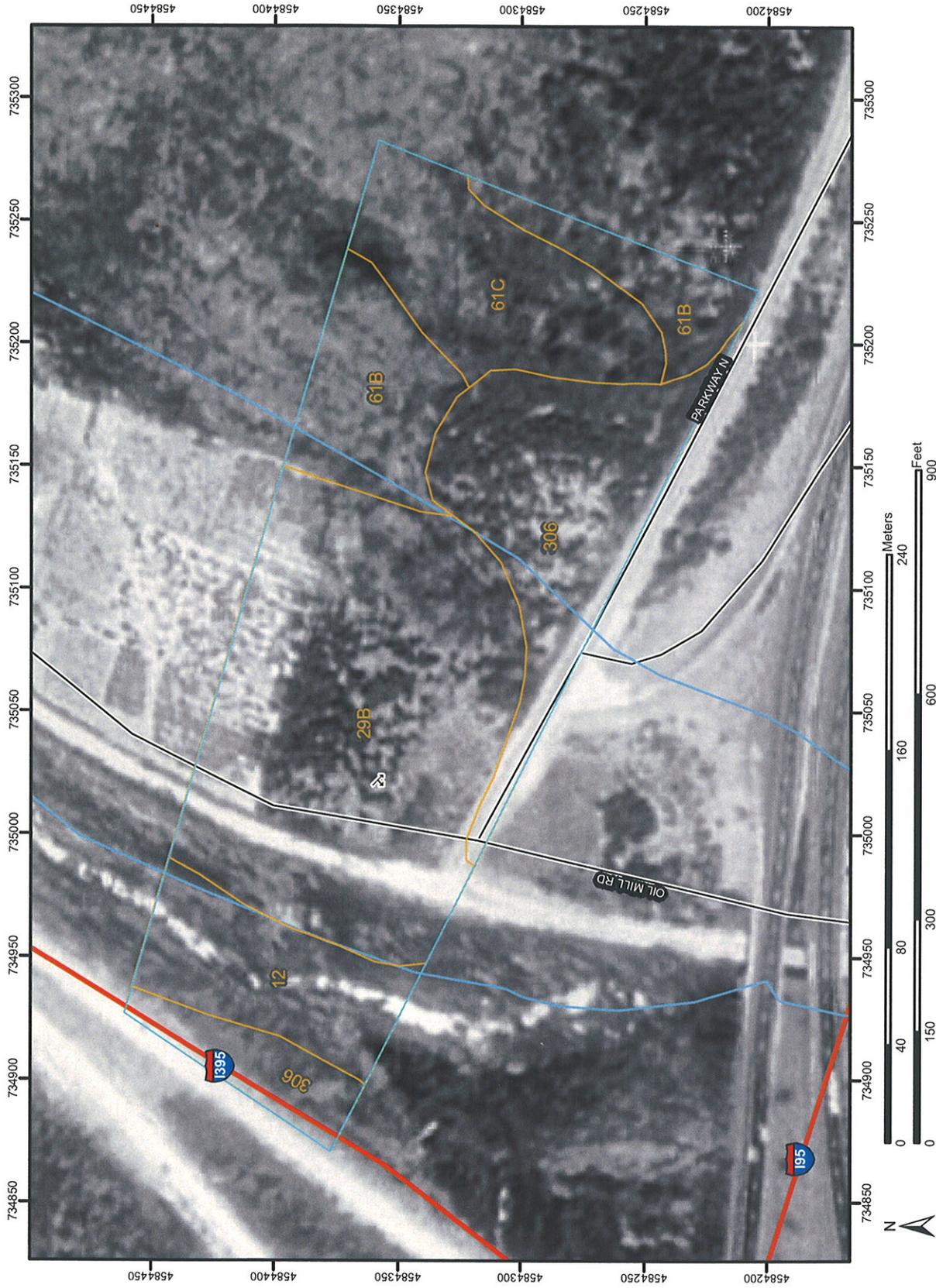
DOMINANT PLANTS:

New York fern	
black birch	
red cedar	

WETLAND NARRATIVE:

Small finger of wetland located immediately east of proposed property boundary. This wetland is an extension of a larger system, including a probable vernal pool located approximately 100 feet northeast and off the site. This area exists at a contact point between upland till and glacial outwash soils.

Soil Map--State of Connecticut
(Oil Mill Road & Waterford Parkway North, Waterford, CT)



MAP LEGEND

Area of Interest (AOI)		Area of Interest (AOI)		Very Stony Spot
Soils		Soil Map Units		Wet Spot
Special Point Features		Blowout		Other
	Borrow Pit	Special Line Features		Gully
	Clay Spot			Other
	Closed Depression	Political Features		Cities
	Gravel Pit	Municipalities		Urban Areas
	Gravelly Spot	Water Features		Oceans
	Landfill			Streams and Canals
	Lava Flow	Transportation		Rails
	Marsh	Roads		Interstate Highways
	Mine or Quarry			US Routes
	Miscellaneous Water			State Highways
	Perennial Water			Local Roads
	Rock Outcrop			Other Roads
	Saline Spot			
	Sandy Spot			
	Severely Eroded Spot			
	Sinkhole			
	Slide or Slip			
	Sodic Spot			
	Spoil Area			
	Stony Spot			

MAP INFORMATION

Original soil survey map sheets were prepared at publication scale. Viewing scale and printing scale, however, may vary from the original. Please rely on the bar scale on each map sheet for proper map measurements.

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

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: 4/12/1991

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
12	Raypol silt loam	1.3	10.1%
29B	Agawam fine sandy loam, 3 to 8 percent slopes	4.9	39.4%
61B	Canton and Charlton soils, 3 to 8 percent slopes, very stony	1.7	14.0%
61C	Canton and Charlton soils, 8 to 15 percent slopes, very stony	1.7	13.6%
306	Udorthents-Urban land complex	2.8	22.9%
Totals for Area of Interest (AOI)		12.4	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: 12—Raypol silt loam

Raypol Silt Loam This map unit is in the Connecticut Valley Major Land Resource Area. The mean annual precipitation is 37 to 50 inches (940 to 1270 millimeters) and the average annual air temperature is 45 to 52 degrees F. (7 to 11 degrees C.) This map unit is 80 percent Raypol soils. 20 percent minor components. Raypol soils This component occurs on outwash plain terrace, depression, and drainageway landforms. The parent material consists of eolian deposits over sandy and gravelly glaciofluvial deposits. The slope ranges from 0 to 3 percent and the runoff class is low. The depth to a restrictive feature is greater than 60 inches. The drainage class is poorly drained. The slowest permeability within 60 inches is about 0.57 in/hr (moderate), with about 7.3 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 6 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 4w Typical Profile: 0 to 8 inches; silt loam 8 to 12 inches; very fine sandy loam 12 to 20 inches; silt loam 20 to 26 inches; silt loam 26 to 29 inches; very fine sandy loam 29 to 52 inches; stratified very gravelly coarse sand to loamy fine sand 52 to 65 inches; stratified very gravelly coarse sand to loamy 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: 61B—Canton and Charlton soils, 3 to 8 percent slopes, very stony

Canton And Charlton Soils, 3 To 8 Percent Slopes, Very Stony 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 45 percent Canton soils, 35 percent Charlton soils. 20 percent minor components Canton soils This component occurs on upland hill landforms. The parent material consists of melt-out till 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 5.6 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 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 6s Typical Profile: 0 to 1 inches; moderately decomposed plant material 1 to 3 inches; gravelly fine sandy loam 3 to 15 inches; gravelly loam 15 to 24 inches; gravelly loam 24 to 30 inches; gravelly loam 30 to 60 inches; very gravelly loamy sand Charlton soils This component occurs on upland hill landforms. The parent material consists of melt-out till derived from granite, schist, 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 0.57 in/hr (moderate), with about 6.4 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 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 6s Typical Profile: 0 to 4 inches; fine sandy loam 4 to 7 inches; fine sandy loam 7 to 19 inches; fine sandy loam 19 to 27 inches; gravelly fine sandy loam 27 to 65 inches; gravelly fine sandy loam

Map Unit: 61C—Canton and Charlton soils, 8 to 15 percent slopes, very stony

Canton And Charlton Soils, 8 To 15 Percent Slopes, Very Stony 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 45 percent Canton soils, 35 percent Charlton soils. 20 percent minor components Canton soils This component occurs on upland hill landforms. The parent material consists of melt-out till 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 5.6 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 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 6s Typical Profile: 0 to 1 inches; moderately decomposed plant material 1 to 3 inches; gravelly fine sandy loam 3 to 15 inches; gravelly loam 15 to 24 inches; gravelly loam 24 to 30 inches; gravelly loam 30 to 60 inches; very gravelly loamy sand Charlton soils This component occurs on upland hill landforms. The parent material consists of melt-out till derived from granite, schist, 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 0.57 in/hr (moderate), with about 6.4 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 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 6s Typical Profile: 0 to 4 inches; fine sandy loam 4 to 7 inches; fine sandy loam 7 to 19 inches; fine sandy loam 19 to 27 inches; gravelly fine sandy loam 27 to 65 inches; gravelly fine sandy loam

Map Unit: 306—Udorthents-Urban land complex

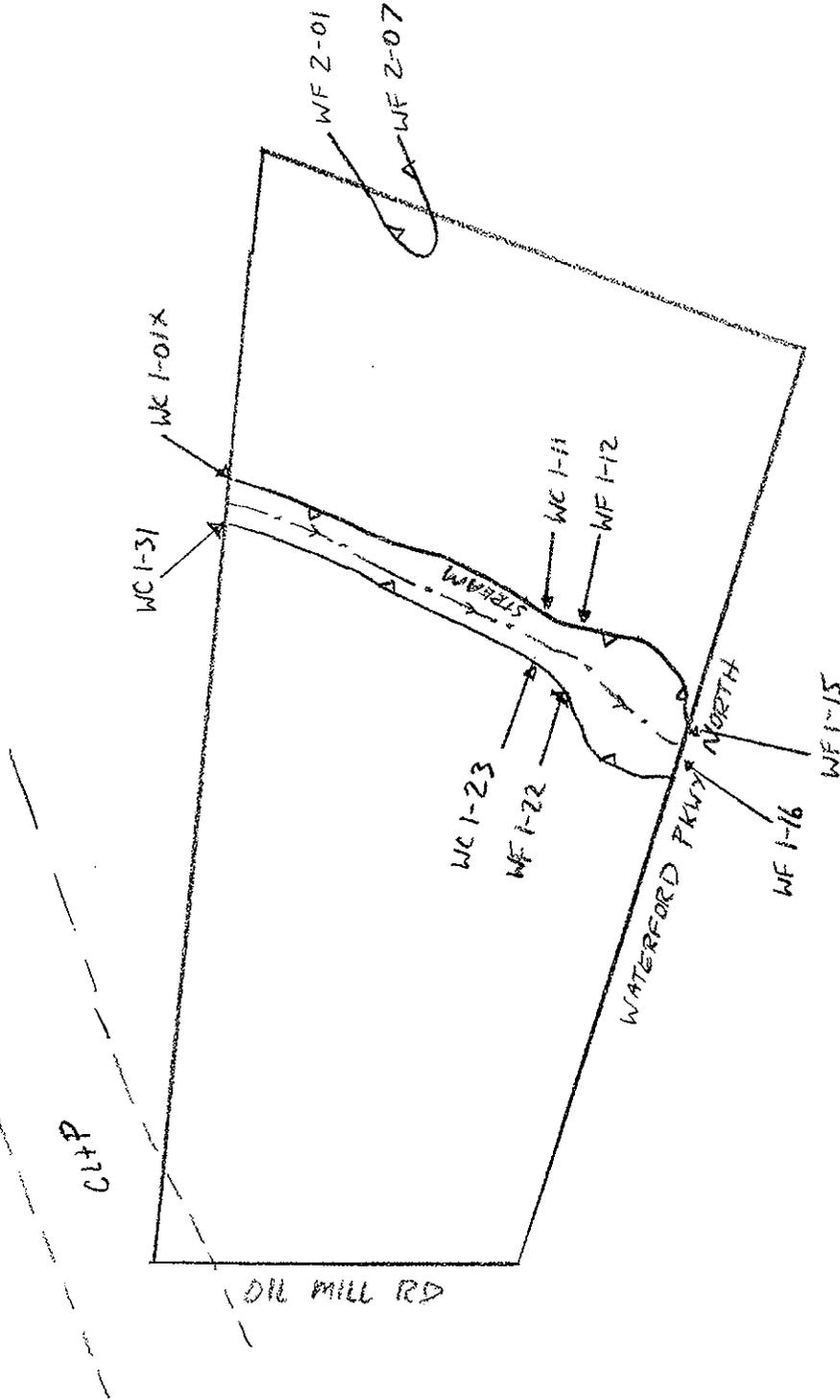
Udorthents-Urban Land Complex This map unit is in the New England and Eastern New York Upland, Southern Part Connecticut Valley Major Land Resource Area. The mean annual precipitation is 32 to 50 inches (813 to 1270 millimeters) and the average annual air temperature is 45 to 55 degrees F. (7 to 13 degrees 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

WETLAND FLAGGING SKETCH

VHB, Inc.
54 Tuttle Place
Middletown, CT 06457



Note: the information shown on this sketch, including the wetland boundary, is approximate. This map is intended for surveying purposes only.

SITE LOCATION: Oil Mill Rd & Waterford Parkway North, Waterford CT
FLAGGED BY: Matthew Davison
DATE: September 14, 2007

Appendix D Wetland Delineation Report

Appendix E

Location Review Concept Plans

Concept Plans

Issued for: **Location Review**

Date Issued: February 4, 2008

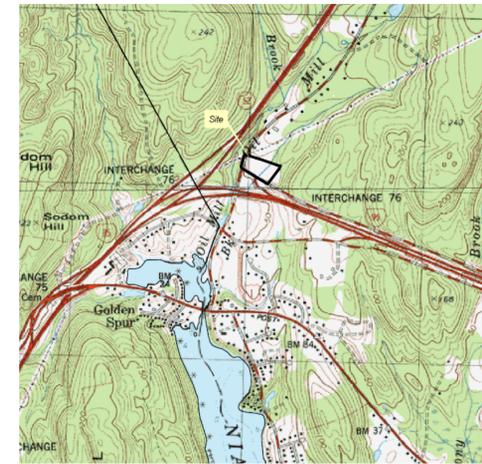
Latest Issue: February 4, 2008

Index

No.	Drawing Title	Latest Issue
Cp-1	Layout Plan	02/04/08
Cp-2	Grading, Drainage & Erosion Ctrl. Plan	02/04/08
Reference Drawings		
Sv-1	Property Survey	10/15/07

Waterford Substation

325 Waterford Parkway North
Waterford, Connecticut



Site Location Map ↑ 0 1000 2000 Feet

* Property Information

Owner:

The Connecticut Light and Power Company
P.O. Box 270
Hartford, Connecticut 061414-0270
(860) 605-5000

Applicant:

The Connecticut Light and Power Company
P.O. Box 270
Hartford, Connecticut 061414-0270
(860) 605-5000

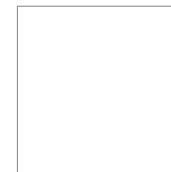
Assessor's Plat: Map 88

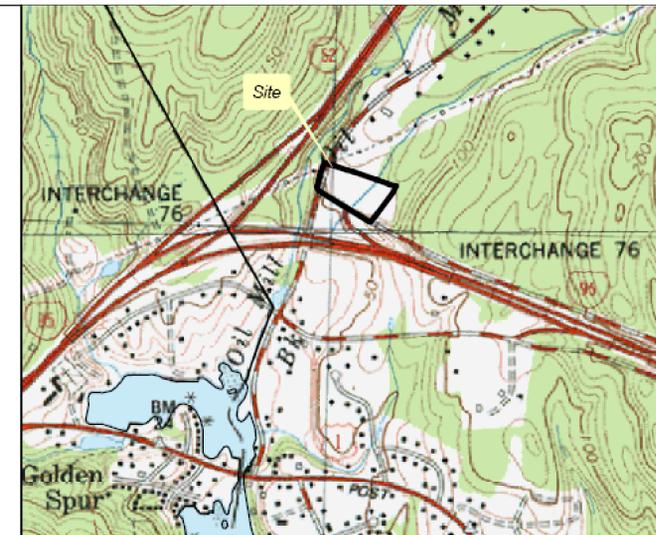
Lot: 287

* **Note: CL&P purchased (December 2007) five acres of a 55±acre parcel. No parcel lot number has been established for the new 5 acre piece. The parcel has been assigned a street address as shown above.**



Vanasse Hangen Brustlin, Inc.
Transportation
Land Development
Environmental Services





1000 0 1000 2000
SCALE IN FEET



**Connecticut
Light & Power**

The Northeast Utilities System

Progress Print
Not For Construction

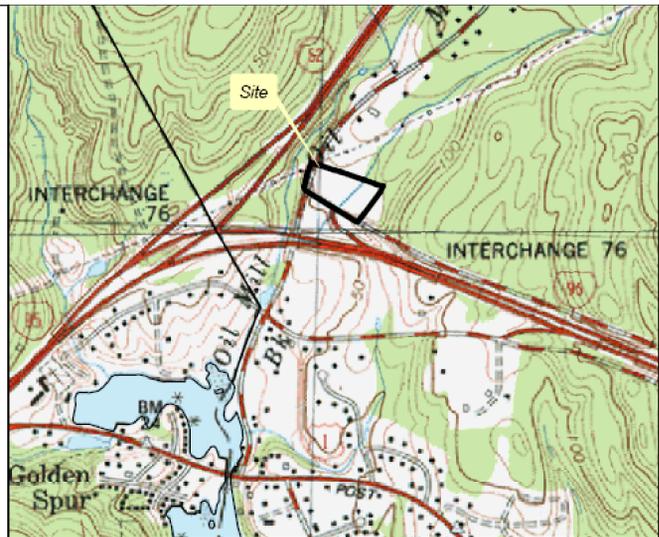
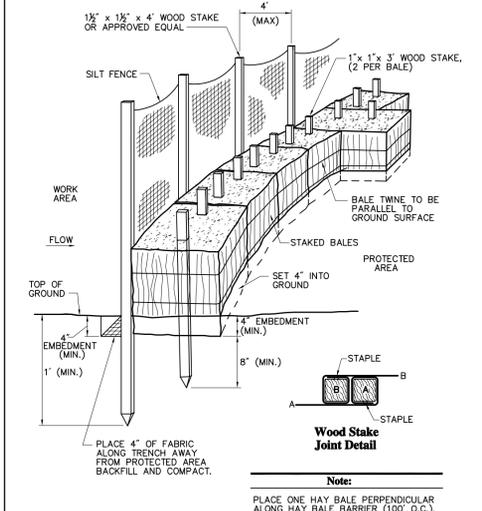
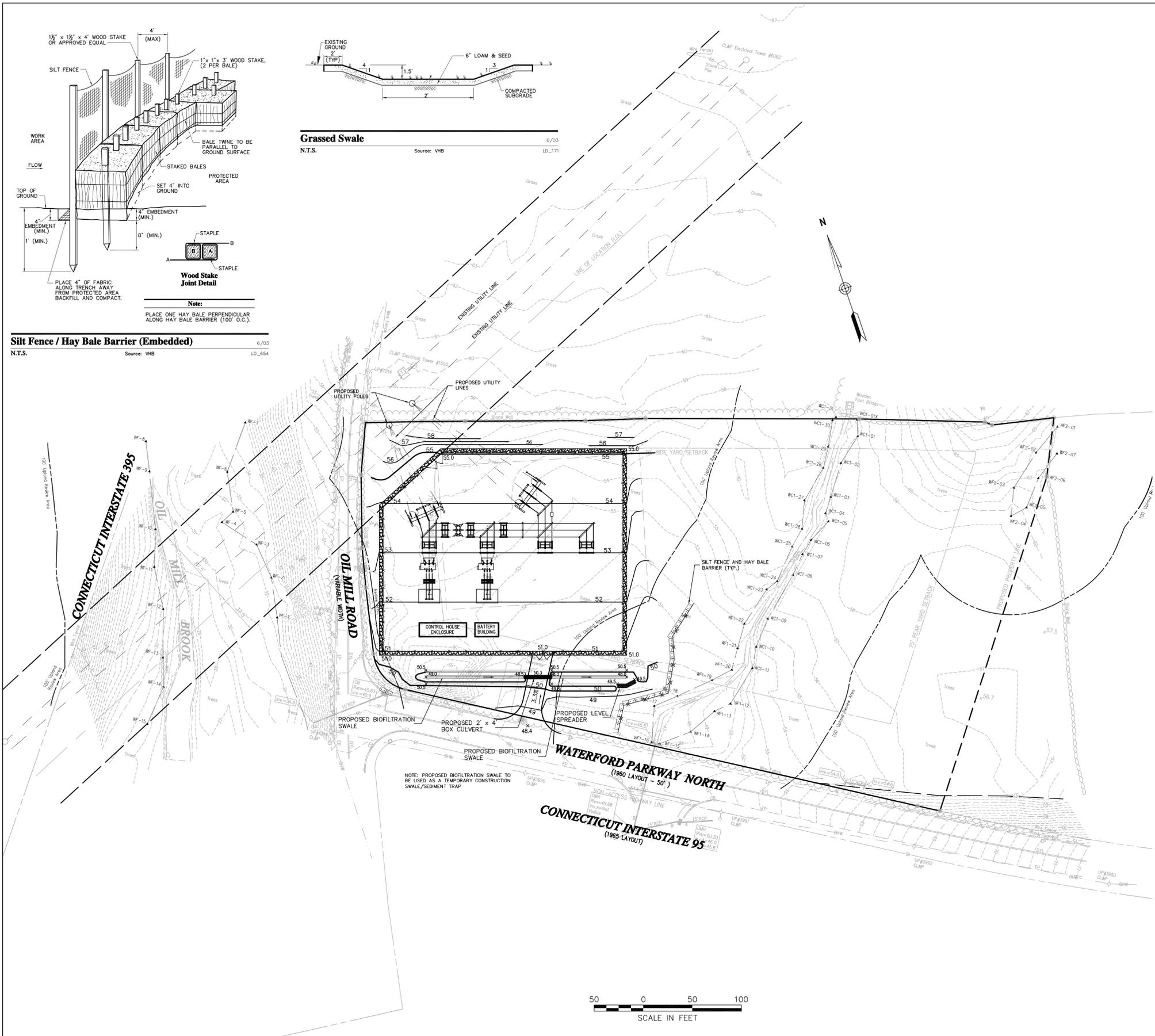
VHB Vanasse Hangen Brustlin, Inc.
Transportation • Land Development • Environmental Services
54 Tuttle Place, Middletown, Connecticut 06457-1847
Tel: 860 632-1500 • Fax: 860 632-7879

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

CAO
GENERATED
DWG

				NORTHEAST UTILITIES SERVICE CO.			
				FOR THE CONNECTICUT LIGHT & POWER COMPANY			
				TITLE			
				Layout Plan Waterford Substation			
				Waterford, Connecticut			
BY	CHKD	APP	APP	DATE	DATE	DATE	DATE
				02/04/08			
SCALE				1"=50'		DWG. NO.	Cp-1
MF NO.	DATE	REVISIONS	BY	CHK	APP	APP	

50 0 50 100
SCALE IN FEET



**Connecticut
Light & Power**
The Northeast Utilities System

Progress Print
Not For Construction

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

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

CAD GENERATED DWG

				NORTHEAST UTILITIES SERVICE CO.			
				FOR THE CONNECTICUT LIGHT & POWER COMPANY			
				TITLE Grading, Drainage & Erosion Ctrl. Plan Waterford Substation Waterford, Connecticut			
BY	CHKD	APP	APP	DATE	DATE	DATE	DATE
				02/04/08			
SCALE	1"=50'			DWG. NO.		CP-2	
MF NO.	DATE	REVISIONS	BY	CHK	APP	APP	

