



*Vanasse Hangen Brustlin, Inc.*

September 6, 2006

Ref: 40999.08

Mr. Keith Coppins  
Optasite, Inc.  
One Research Drive, Suite 200C  
Westborough, MA 01581

Re: NEPA Compliance Documentation  
Pine Grove Cemetery  
940 Meriden Road  
Waterbury, CT  
Optasite ID #CT-999-096

Dear Mr. Coppins,

Vanasse Hangen Brustlin, Inc. (VHB) has been retained by Optasite, Inc. (Optasite) to review environmental resource information outlined in 47 CFR Ch.1 § 1.1307 sections (a) and (b) for environmental consequences pursuant to the Federal Communications Commission ("FCC or Commission") requirements. Optasite is proposing to construct a new wireless telecommunications facility on portions of the Pine Grove Cemetery property located at 940 Meriden Road in Waterbury, Connecticut (Optasite ID #CT-999-0096). Optasite plans to construct a ±120-foot tall monopole, attach carrier antennae onto the monopole, and install associated future ground equipment at the base of the monopole within a proposed ±60-foot by ±60-foot chain-link fenced-enclosed compound area. The proposed compound area will be situated within an approximate 100-foot by 100-foot ground lease area. Access to the facility will be provided via an existing asphalt-paved drive that extends in a westerly direction off of Meriden Road, followed by a proposed ±12-foot wide gravel road that will extend in a northerly direction towards the compound area. Based on information provided by Optasite, the coordinates for the proposed facility are 41° 33' 11.80" north Latitude and 72° 59' 36.10" west Longitude. Specifically, VHB reviewed source information outlined below to determine if the proposed facility will be located in an environmentally sensitive area.

#### National Environmental Policy Act (NEPA) Requirements

As a licensing agency, the FCC complies with NEPA by requiring its licensees to review their proposed actions for environmental consequences. Rules implementing NEPA are found at Title 47 of the Code of Federal Regulations, Part 1, Subpart I, rule sections 1.1301 to 1.1319.

Section 1.1305 of these rules, state that the Commission "has found no common pattern which would enable it to specify" any particular Commission action as a "major action" under NEPA. Thus, section 1.1306 of the Rules "categorically excluded from environmental processing" all Commission actions except for those specifically identified in section 1.1307. If a licensee's proposed action falls within one of the categories of 1.1307, section 1.1308(a) requires the licensee to consider the potential environmental effects from its

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

construction of antenna facilities or structures, and disclose those effects in an environmental assessment (EA) which is filed with the Commission for review.

VHB has reviewed the following source information for identification, location, and impacts to environmentally sensitive areas:

1. **Officially designated wilderness areas** - State of Connecticut, Department of Environmental Protection (CTDEP) Geographic Information System (GIS) data layers, CTDEP Natural Resources Center and Natural Diversity Data Base (NDDDB). See attached NEPA screen map prepared by VHB, Inc. and letter from CTDEP.
2. **Officially designated wildlife preserve** – CTDEP GIS data layers, CTDEP Natural Resources Center and NDDDB. See attached NEPA screen map and letter from CTDEP.
3. **Threatened or Endangered Species or designated critical habitats** – CTDEP GIS data, CTDEP's Natural Resources Center and NDDDB, and United States Department of Interior – Fish and Wildlife Service, (USFWS) New England Field Office. See attached NEPA screen map and letters from USFWS and CTDEP.
4. **National Register of Historic Places** – State of Connecticut Commission on Cultural & Tourism, Historic Preservation & Museum Division, State Historic Preservation Officer (SHPO); National Register and Reported Archeological Sites Connecticut Geographic Information System data layer provided by Heritage Consultants, LLC; and public notice. See attached NEPA screen map prepared by VHB, Inc., letter SHPO, and a copy of the public notice published in the Waterbury Republican-American on June 19, 2006.
5. **Indian Religious Sites** - State of Connecticut, Connecticut Commission on Cultural & Tourism, Historic Preservation & Museum Division SHPO, National Register and Reported Archeological Sites Connecticut Geographic Information System data layer provided by Heritage Consultants, LLC, and all interested Native American Tribes (NAT) and/or Native Hawaiian Organizations (NHO) identified on FCC's online Tower Construction Notification System (TCNS). As identified via TCNS, VHB has notified the Mashantucket Pequot Tribe and the Narragansett Indian Tribe. See attached SHPO letter and appropriate correspondence from NATs.
6. **Flood Plain** – Flood Insurance Rate Maps (FIRM) by Federal Emergency Management Agency (FEMA) Federal Insurance Administration, Office of Risk Assessment 50 C Street, SW Washington, DC 20472; CTDEP GIS data layer. See attached NEPA screen map prepared by VHB, Inc.
7. **Significant change in surface features** – Based on field observations and information provided by Sprint PCS and its contractors, the proposed activity by Sprint PCS does not appear to involve a significant change in surface features or result in wetland fill, deforestation or water diversion. See attached letter prepared by VHB, Inc. dated August 31, 2006.
8. **High Intensity white lights located in residential neighborhoods** – No lighting information was provided to VHB. However, we understand that no lighting is required on this facility.



Mr. Keith Coppins  
Optasite, Inc.  
Page 3

Based on the information currently available, VHB has found **that the proposed facility does not fall under any of the listed categories of Section 1.1307 under the NPA.** The NEPA checklist and NEPA screen map, which outlines the location of the site and the location of the environmental resources, agency correspondence, and a copy of the current Site Plans are attached to this letter.

Very truly yours,

VANASSE HANGEN BRUSTLIN, INC.



Nicole Dentamaro  
Environmental Scientist

Attachments

cc: Christine Scanlon, Optasite (2 copies)  
Julie D. Kohler, Esq., Cohen and Wolf, PPC. (4 copies)



<b>Contact Name:</b> Keith Coppins	<b>Site type (choose one):</b> <input checked="" type="checkbox"/> Raw land <input type="checkbox"/> Tower colo* <input type="checkbox"/> Other colo*	<b>Optasite Cascade ID #:</b> CT-999-096	<b>Site Name &amp; Address:</b> Pine Grove Cemetery 940 Meriden Road Waterbury, CT
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**NEPA Land Use Screening Checklist**

FCC NEPA Category	Consulting Agency to Contact	SSEO Document Reference	Check appropriate box(es) below			
			No Adverse Impact	Potential Adverse Impact	Exempt from Review*	CNPA Applies**
1. Designated Wilderness Areas	National Park Service, US Forest Service, Bureau of Land Management (BLM), CTDEP GIS data layers and Natural Diversity Data Base (NDDB)	Section 3.4.1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Designated Wildlife Preserves	National Park Service, US Forest Service, BLM, CTDEP GIS data layers and NDDB	Section 3.4.1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Threatened or Endangered Species & Critical Habitats	CTDEP NDDB, US Fish & Wildlife Service - Field Office (USF&WS)	Section 3.4.2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Historic Places	State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer (THPO); Public Notice	Section 3.4.3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Indian Religious Sites	SHPO, Tower Construction Notification System (TCNS) website - Native American Tribes (NATs), and/or Native Hawaiian Organizations (NHOs), Bureau of Indian Affairs (BIA)	Section 3.4.4	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Floodplain	Federal Emergency Management Agency (FEMA)	Section 3.4.5	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Wetlands & Surface Waterways	US Army Corps of Engineers (ACOE)	Section 3.4.6	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. High Intensity White Lights in Residential Neighborhoods	Lighting information, if applicable, to be provide by client via FAA form or other relevant lighting documentation - N/A	Section 3.4.7	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

\*For collocation projects that are not subject to exemption under the CNPA, NEPA Land Use Screening Categories 4 and 5 are only required. The remaining categories are categorically excluded.

\*\*Based on the CNPA the collocation project is exempt from Section 106 review.

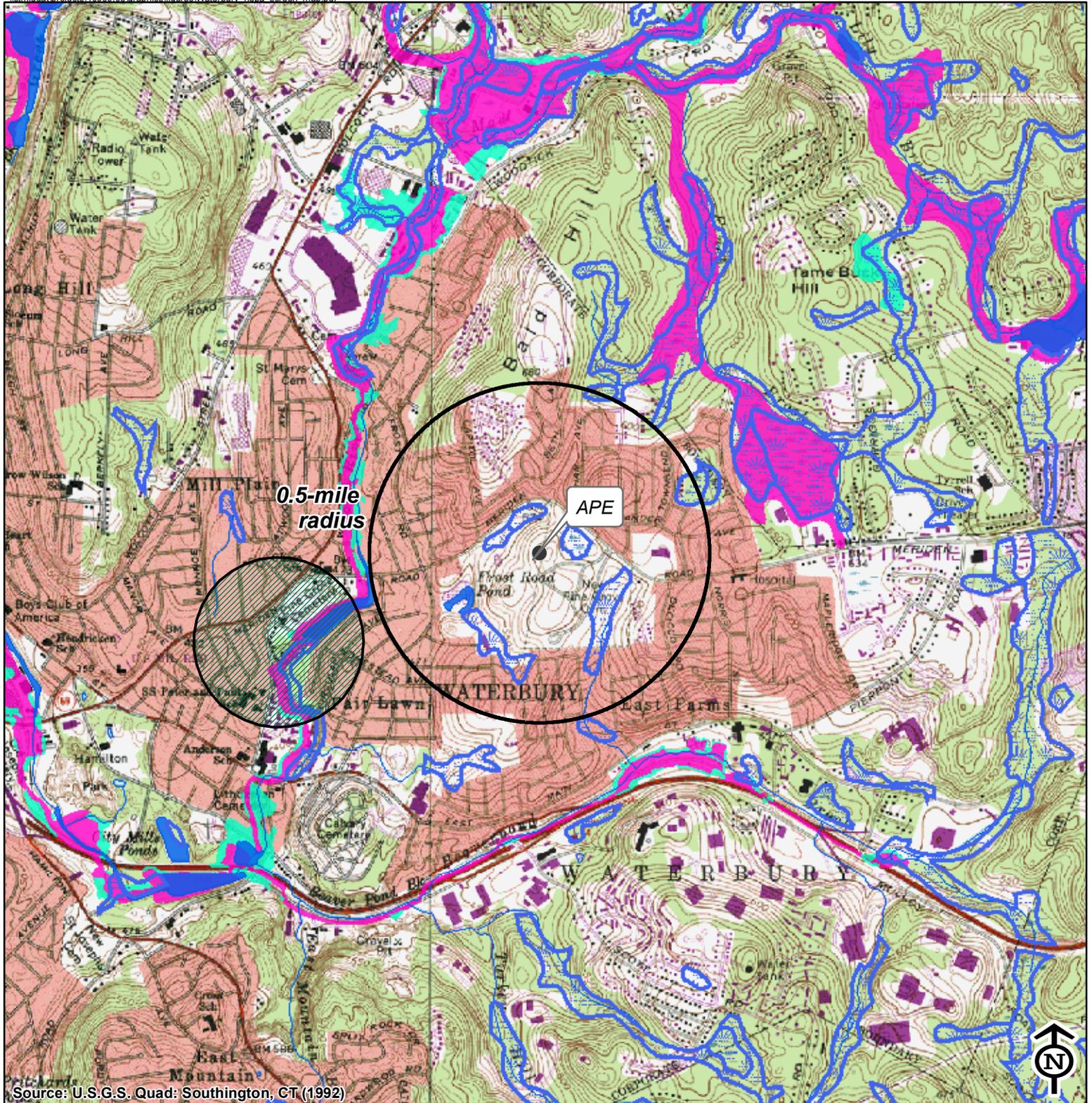
Prepared By: Nicole Dentamaro  
(print name): Nicole Dentamaro

Company: Vanasse Hangen Brustlin, Inc.  
Date: September 6, 2006

**The undersigned has reviewed and approved this Checklist prior to commencement of site construction.**

By: \_\_\_\_\_  
Site Development Manager or Director

Date: \_\_\_\_\_



Source: U.S.G.S. Quad: Southington, CT (1992)

- Area of Potential Effect (APE)
- ▨ Natural Diversity Database Threatened and Endangered Species (updated June 2005, buffered)
- National Register Historic Sites\*
- ▨ National Register Historic Districts\*
- ▨ Reported Archaeological Sites (buffered)\*\*
- Open Water
- ▨ Wetlands
- Floodplains**
- 100 Year Floodplain
- 500 Year Floodplain
- ▨ Floodway
- Protected Properties (Federal; CT DEP 2002 data)**
- State Forest
- State Park
- ▨ DEP Owned Waterbody
- State Park Scenic Reserve
- ▨ Historic Preserve
- ▨ Natural Area Preserve
- ▨ Fish Hatchery
- ▨ Flood Control
- ▨ Other
- ▨ State Park Trail
- ▨ Water Access
- ▨ Wildlife Area
- ▨ Wildlife Sanctuary
- ▨ Protected Properties (Federal; 2002)

**Vanasse Hangen Brustlin, Inc.**

**NEPA Screen Map**

**Optasite ID# CT-999-0096**

**Lat: 41 33 11.80 Long: 72 59 36.10**

**Pine Grove Cemetery**

**940 Meriden Road**

**Waterbury, Connecticut**

**July 18, 2006**



\* no historic resources within 1/2 mile of APE  
 \*\* no reported archaeological resources located within APE



STATE OF CONNECTICUT  
DEPARTMENT OF ENVIRONMENTAL PROTECTION



June 13, 2006

Ms. Nicole Dentamaro  
Transportation Land Development  
Environmental Services  
54 Tuttle Place  
Middletown, CT 06457-1847

Re: Proposed Wireless Facility,  
Pine Grove Cemetary, 940 Meriden Rd,  
Waterbury

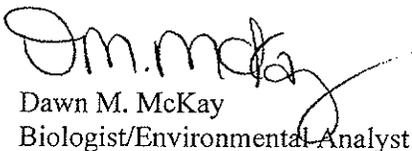
Dear Ms. Dentamaro:

I have reviewed Natural Diversity Data Base maps and files regarding the area delineated on the map you provided for the proposed wireless telecommunications facility on Pine Grove Cemetary in Waterbury, 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



# United States Department of the Interior

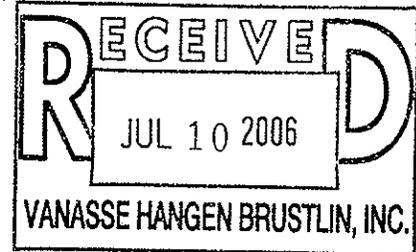


FISH AND WILDLIFE SERVICE  
New England Field Office  
70 Commercial Street, Suite 300  
Concord, New Hampshire 03301-5087

July 6, 2006

Reference:	<u>Project</u>	<u>Location</u>
	Tower replacement	Guilford, CT, Ref: 41176.00
	Tower	Waterbury, CT, Ref: 40999.08

Nicole Dentamaro  
Vanasse Hangen Brustlin, Inc.  
54 Tuttle Place  
Middletown, CT 06457-1847



Dear Ms. Dentamaro:

This responds to your recent correspondence requesting information on the presence of federally-listed and/or proposed endangered or threatened species in relation to the proposed activity(ies) referenced above.

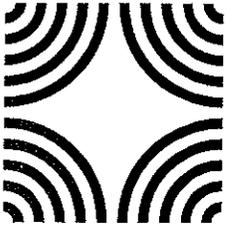
Based on information currently available to us, no federally-listed or proposed, threatened or endangered species or critical habitat under the jurisdiction of the U.S. Fish and Wildlife Service are known to occur in the project area(s). Preparation of a Biological Assessment or further consultation with us under Section 7 of the Endangered Species Act is not required.

This concludes our review of listed species and critical habitat in the project location(s) and environs referenced above. No further Endangered Species Act coordination of this type is necessary for a period of one year from the date of this letter, unless additional information on listed or proposed species becomes available.

Thank you for your coordination. Please contact us at 603-223-2541 if we can be of further assistance.

Sincerely yours,

Michael J. Amaral  
Endangered Species Specialist  
New England Field Office



Connecticut Commission on Culture & Tourism

July 12, 2006

Historic Preservation  
& Museum Division

Ms. Nicole Dentamaro  
Vanasse Hangen Brustlin Inc.  
54 Tuttle Place  
Middletown, CT 06457-1847

59 South Prospect Street  
Hartford, Connecticut  
06106

(v) 860.566.3005  
(f) 860.566.5078

Subject: Telecommunications Facilities  
940 Meriden Road – Pine Grove Cemetery  
Waterbury, CT  
Optasite #CT-999-0096

Dear Ms. Dentamaro:

The State Historic Preservation Office has reviewed the above-named project. This office expects that the proposed undertaking will have no effect on historic, architectural, or archaeological resources listed on or eligible for the National Register of Historic Places.

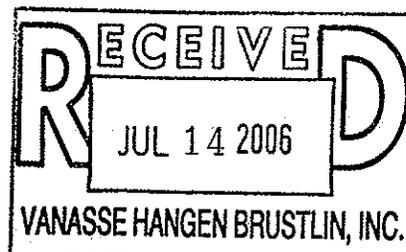
This office appreciates the opportunity to have reviewed and commented upon the proposed undertaking.

This comment is provided in accordance with the National Historic Preservation Act and the Connecticut Environmental Policy Act.

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

Sincerely,

J. Paul Loether  
Division Director and Deputy  
State Historic Preservation Officer



# RepublicanAmerican

389 Meadow Street - P.O. Box 2090  
Waterbury, CT 06722-2090

Phone: 203-574-3636 Fax: 203-573-0090 Toll Free: 800-992-3232  
e mail: advbilling@rep-am.com

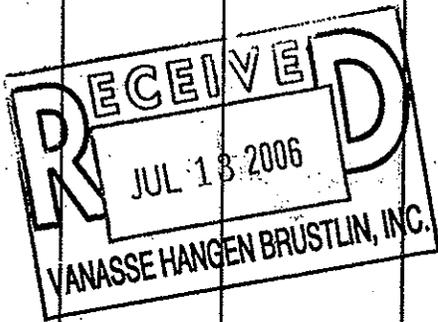
Customer	A/C #	Billing Period
VANASSE HANGEN BRUSTLIN, INC. (VHB)	37777	06/01/06-06/30/06

PAYMENT TERMS	30 DAYS
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TOTAL AMOUNT DUE	\$ 0.00
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Fed EIN 06-0581760

DATE	AD# / INV #	CUST ORDER #	PUB	DESCRIPTION	SIZE	BILLED UNITS	TIMES RUN	RATE	BILLED AMOUNT
06/19/06	RA0049924 / INV000084701	ck#2089	RA	Previous Balance					\$0.00
06/19/06	30559			PUBLIC NOTICE Optasite Inc. is proposing to install a new w	1x	35.000	1	\$2.2000	\$77.00
				RA0049924					-\$77.00
<b>TOTAL AMOUNT DUE</b>									<b>\$0.00</b>



**PUBLIC NOTICE**  
Optasite Inc. is proposing to install a new wireless telecommunication facility, consisting of a 120-foot tall monopole antenna, and associated ground equipment, at 940 Meriden Road in Waterbury, Connecticut. This facility will provide improved wireless coverage to areas of Waterbury.

Parties interested in submitting comments regarding any potential effects of the proposed facility on historic properties may do so by sending comments to Vanasse Hangen Brustlin, Inc., 54 Tuttle Place, Middletown, CT 06457, to the attention of Nicole DeRitamaro. Questions about this proposed project may be submitted via regular mail, email to ndr@vhb.com, or by calling (860) 632-1500 ext. 2317.

VHB will be accepting comments and/or questions within 30 days of the date of this publication. Therefore, all comments or questions regarding this matter should be postmarked/submitted by no later than July 19, 2006.  
RA June 19, 2006

Past due balance accrues finance charge of 1.5% per month All charges include any applicable Connecticut State sales tax

REMITTANCE ADVICE - PLEASE RETURN WITH PAYMENT	REMITTANCE ADDRESS	REPUBLICAN AMERICAN PO BOX 2090 WATERBURY, CT 06722-2290
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CUSTOMER	A/C #	BILLING PERIOD	TOTAL AMOUNT DUE	AMOUNT REMITTED
VANASSE HANGEN BRUSTLIN, INC. (VH)	37777	06/01/06-06/30/06	\$ 0.00	

CREDIT CARD #	
EXPIRATION DATE	
SIGNATURE	

VANASSE HANGEN BRUSTLIN, INC. (VHB)  
54 TUTTLE PLACE  
MIDDLETOWN CT 06457

CHECK #	
---------	--



7-15-06

Ms. Nicole Dentamaro,  
Environmental Scientist  
Vanasse Hangen Brustlin, Inc.  
54 Tuttle Place  
Middletown, CT 06457-1847

Re: PRELIMINARY ARCHAEOLOGICAL ASSESSMENT OF  
TELECOMMUNICATIONS TOWER CT-999-0096 LOCATED AT 940 MERIDEN  
ROAD IN WATERBURY, CONNECTICUT  
TCNS # 16555

Dear Ms. Dentamaro,

This is in response to the letter you sent July 6, 2006, I have been away on travel for a couple of weeks and just returned to the office this past week.

I have reviewed the Preliminary Archaeological Assessment entitled "PRELIMINARY ARCHAEOLOGICAL ASSESSMENT OF TELECOMMUNICATIONS TOWER CT-999-0096 LOCATED AT 940 MERIDEN ROAD IN WATERBURY, CONNECTICUT" submitted by Heritage Consultants, LLC.

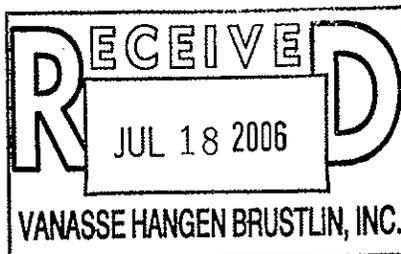
The research design and testing strategy meets acceptable professional standards, and agree with the recommendations and conclusions.

Please keep me informed of any further developments with respect to this project.

Sincerely,

A handwritten signature in cursive script that reads "Kathleen Knowles".

Kathleen Knowles,  
Tribal Historic Preservation Officer  
Mashantucket Pequot Tribe



MASHANTUCKET PEQUOT MUSEUM  
& RESEARCH CENTER

110 Pequot Trail, PO Box 3180  
Mashantucket, CT 06338  
Phone: 860 396 6800  
Fax: 860 396 6850  
[www.pequotmuseum.org](http://www.pequotmuseum.org)



Federal Communications Commission  
Washington DC 20554

Proposed Construction of Communications Facilities  
Notification of Final Contacts

OPTASITE  
NICOLE DENTAMARO  
54 TUTTLE PLACE  
MIDDLETOWN, CT 06457



Date: 08/17/2006  
Reference Number: 0520665

Dear Applicant:

This letter addresses the proposed communications facilities listed below that you have referred to the Federal Communications Commission (Commission) for purposes of contacting federally recognized Indian Tribes, including Alaska Native Villages (collectively Indian Tribes), and Native Hawaiian Organizations (NHOs), as specified by Section IV.G of the Nationwide Programmatic Agreement (NPA). Consistent with the procedures outlined in the Commission's recent Declaratory Ruling,<sup>1</sup> we have contacted the Indian Tribes or NHOs identified in the attached Table for the projects listed in the attached Table. You referred these projects to us between 08/10/2006 and 08/17/2006. Our contact with these Indian Tribes or NHOs was sent on 08/17/2006.

Thus, as described in the Declaratory Ruling,<sup>2</sup> if you or Commission staff do not receive a statement of interest regarding a particular project from any Tribe or NHO within 20 calendar days of 08/17/2006, your obligations under Section IV of the NPA with respect to these Indian Tribes or NHOs are complete.<sup>3</sup> If an Indian Tribe or NHO responds that it is interested in participating within the 20 calendar day period, the Applicant must involve it in the review as set forth in the NPA, and may not begin construction until the process set forth in the NPA is completed.

You are reminded that Section IX of the NPA imposes independent obligations on an Applicant when a previously unidentified site that may be a historic property, including an archeological property, is discovered during construction or after the completion of review.<sup>4</sup> In such instances, the Applicant must cease construction and promptly notify, among others, any potentially affected Indian Tribe or NHO. An Indian Tribe's or NHO's failure to express interest in participating in pre-construction review of an undertaking does not necessarily mean it is not interested in archeological properties or human remains that may inadvertently be discovered during construction. Hence, an Applicant is still required to notify

<sup>1</sup> See Clarification of Procedures for Participation of Federally Recognized Indian Tribes and Native Hawaiian Organizations Under the Nationwide Programmatic Agreement, *Declaratory Ruling*, FCC 05-176 (released October 6, 2005) (Declaratory Ruling).

<sup>2</sup> *Id* § 8-10.

<sup>3</sup> We note that, under the Declaratory Ruling, an expression of interest by an Indian Tribe or NHO addressed solely to the Commission staff during the 20-day period is sufficient even if it does not contact the Applicant.

<sup>4</sup> *Id* at § 11.

any potentially affected Indian Tribe or NHO of any such finds pursuant to Section IX or other applicable law.

Sincerely,

Dan Abeyta  
Assistant Chief  
Spectrum and Competition Policy Division  
Wireless Telecommunications Bureau

#### LIST OF PROPOSED COMMUNICATIONS TOWERS

TCNS#: 16555 Referred Date: 08/10/2006 Location: 940 Meriden Road, Waterbury, CT  
Tribe Name: Narragansett Indian Tribe

TCNS#: 16323 Referred Date: 08/10/2006 Location: 1919 Boston Post Road, Guilford, CT  
Tribe Name: Narragansett Indian Tribe

TCNS#: 15547 Referred Date: 08/10/2006 Location: 651 Paddock Avenue, Meriden, CT  
Tribe Name: Narragansett Indian Tribe

#### LEGEND:

\* - Notification numbers are assigned by the Commission staff for sites where initial contact was not made through TCNS.



APPROXIMATE SCALE 400 FE  
0

NATIONAL FLOOD INSURANCE PROGRAM

**FIRM**  
FLOOD INSURANCE RATE MAP

CITY OF  
**WATERBURY,  
CONNECTICUT**  
NEW HAVEN COUNTY

PANEL 8 OF 12  
(SEE MAP INDEX FOR PANELS NOT PRINTED)

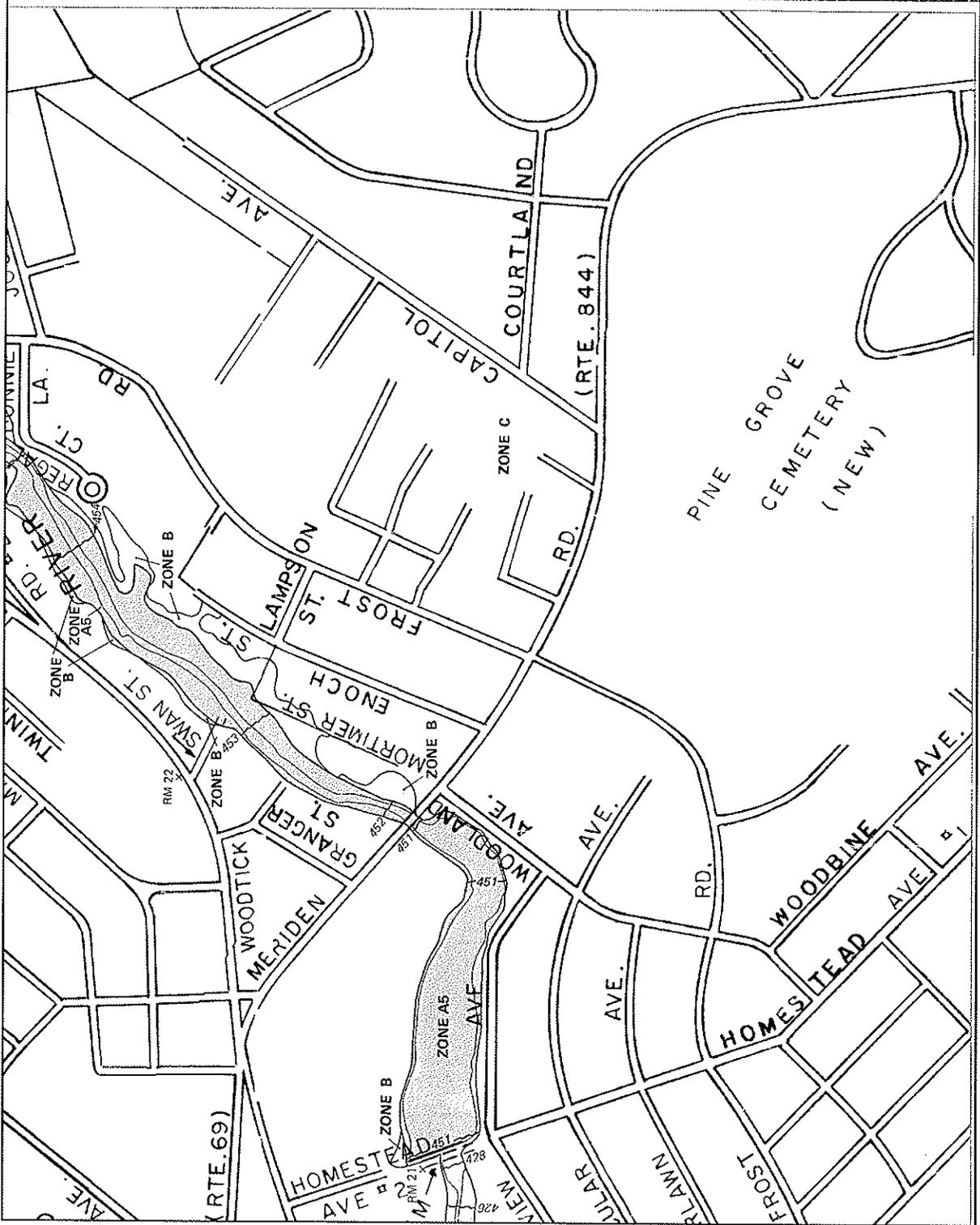
COMMUNITY-PANEL NUMBER  
090091 0008 B

EFFECTIVE DATE:  
NOVEMBER 1, 1978



U.S. DEPARTMENT OF HOUSING  
AND URBAN DEVELOPMENT  
FEDERAL INSURANCE ADMINISTRATION

This is an official copy of a portion of the above referenced flood map. It is for informational purposes only. This map does not reflect changes in flood hazard areas or flood insurance rates. For the latest information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at [www.fema.gov](http://www.fema.gov)





**Memorandum**

To: Chuck Regulbuto  
Optasite, Inc.  
One Research Drive, Suite 200C  
Westborough, MA 01581

Date: August 31, 2006

Project No.: 40999.08

From: Sara Fusco  
Soil Scientist

Re: Wetland Inspection  
Proposed Telecommunication Facility  
940 Meriden Road  
Waterbury, CT

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Vanasse Hangen Brustlin, Inc. (VHB) has completed on-site investigations to determine if wetlands and/or watercourses are located on the above-referenced Site. VHB has relied upon the accuracy of information provided by Optasite, Inc. regarding the proposed lease area, access road, and utility easement locations for identifying wetlands and watercourses within and proximate to said locations.

VHB understands that Optasite, Inc. proposes to construct a wireless telecommunication facility at 940 Meriden Road in Waterbury, Connecticut (the "Site"). The facility will include an approximate 100-foot by 100-foot fenced compound area that will house a 120-foot monopole and associated telecommunication equipment and structures. Access to the Site will be gained via a proposed 12-foot gravel access drive from an existing asphalt drive. Wetlands identified and delineated on the property include a small potential vernal pool, a large palustrine wetland system and a small man made depressional wetland; refer to the attached Wetlands Delineation Report for further detail. No wetlands or watercourses were identified within 300 feet of proposed development activities. The nearest wetland is the man made depression (Wetland 3) located approximately 325 feet east of the proposed lease area. Therefore, proposed development activities will not directly or indirectly affect wetlands or watercourses and will not have a significant adverse effect on wetland resources of the City of Waterbury.

Enclosure

Ccc: Julie Kohler, Esq. Cohen and Wolf PPC



*Vanasse Hangen Brustlin, Inc.*

**WETLANDS DELINEATION REPORT**

**Date:** August 31, 2006  
**Project No.:** 40999.08  
**Prepared For:** Chuck Regalbuto  
Project Manager  
Optasite, Inc.  
One Research Drive, Suite 200C  
Westborough, MA 01581

**Site Location:** 940 Meriden Road  
Waterbury, CT

**Site Map:** Sketch Map, 8/31/06 – S. Fusco

**Inspection Date:** August 31, 2006

**Field Conditions:** Weather: sunny, mid 70's  
Snow Depth: 0 inches  
General Soil Moisture: moist  
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:** WF1-01 to WF1-06; WF2-01 to WF2-17;  
WF2A-01 to WF2A-20; WF3-01 to WF3-04

*[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 by:      The wetlands delineation was reviewed by:

*Sara Fusco DG*

Sara Fusco  
Soil Scientist

*Dean Gustafson*

Dean Gustafson  
Professional Soil Scientist

Enclosures (4)

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

# Attachments



- 
- <sup>TM</sup> Wetland Delineation Field Form
  - <sup>TM</sup> Soil Map
  - <sup>TM</sup> Soil Report
  - <sup>TM</sup> Wetland Delineation Sketch Map

### Wetland Delineation Field Form

Project Name:	Optasite, Waterbury CT	Project Number:	40999.08
Inspection Date:	8/31/06	Inspector:	B. Fusco
Wetland I.D.:	1		

Field Conditions:	Weather: Sunny, mid 70's	Snow Depth:	0
	General Soil Moisture: Moist	Frost Depth:	0
Type of Wetland Delineation:	Connecticut <input checked="" type="checkbox"/>		
	ACOE <input type="checkbox"/>		
	Tidal <input type="checkbox"/>		
Field Numbering Sequence:	WFI-01 to WFI-06		

**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:		

**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 Marsh <input type="checkbox"/>	Scrub-shrub <input type="checkbox"/>	Forested <input checked="" type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	
Comments:		

**WATERCOURSE TYPE:**

Upper Perennial <input type="checkbox"/>	Lower Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>
Tidal <input type="checkbox"/>		
Comments: N/A		

**SPECIAL AQUATIC HABITAT:**

Vernal Pool <input checked="" type="checkbox"/>	Other <input type="checkbox"/>	
Comments: 1/2 1000 <input type="checkbox"/>		

**DOMINANT PLANTS:**

Red Maple	
Winterberry	
High bush blueberry	

### Wetland Delineation Field Form

Project Name:	Optasite, Waterbury Ct	Project Number:	40999.08
Inspection Date:	8/31/06	Inspector:	S. Fusco
Wetland I.D.:	2		

Field Conditions:	Weather: Sunny, mid 70's	Snow Depth:	0
	General Soil Moisture: Moist	Frost Depth:	0
Type of Wetland Delineation:	Connecticut <input checked="" type="checkbox"/>		
	ACOE <input type="checkbox"/>		
	Tidal <input type="checkbox"/>		
Field Numbering Sequence: WF2-01 to WF2-17			

**WETLAND HYDROLOGY:**

**Nontidal**

Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input checked="" type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input checked="" type="checkbox"/>	Seasonally Saturated - seepage <input 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:		

**Class**

Emergent Marsh <input type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	
Comments:		

**WATERCOURSE TYPE:**

Upper Perennial <input type="checkbox"/>	Lower Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>
Tidal <input type="checkbox"/>		
Comments: N/A		

**SPECIAL AQUATIC HABITAT:**

Vernal Pool <input type="checkbox"/>	Other <input type="checkbox"/>	
Comments: water impounded by berm/enclosure		

**DOMINANT PLANTS:**

Red Maple	elderberry
Silky dogwood	tussock sedge
Spicebush	cattail
Peppercorn	Stemweed
Spirea	cinnamon fern
winterberry	skunk cabbage
High bush blueberry	tulip poplar

dense stand of Japanese Knotweed at edge near drive

### Wetland Delineation Field Form

Project Name:	Optasite, Waterbury CT	Project Number:	40999.08
Inspection Date:	8/31/06	Inspector:	S. Fusco
Wetland I.D.:	2A		

Field Conditions:	Weather: Sunny, mid 70's	Snow Depth:	0
	General Soil Moisture: Moist	Frost Depth:	0
Type of Wetland Delineation:	Connecticut <input checked="" type="checkbox"/>		
	ACOE <input type="checkbox"/>		
	Tidal <input type="checkbox"/>		
Field Numbering Sequence:	WFAA-01 to WFAA-20		

**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:		

**Class**

Emergent Marsh <input type="checkbox"/>	Scrub-shrub <input type="checkbox"/>	Forested <input checked="" type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	
Comments:		

**WATERCOURSE TYPE:**

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

**SPECIAL AQUATIC HABITAT:**

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

**DOMINANT PLANTS:**

Red maple	Highbush blueberry
tulip poplar	black birch
green ash	yellow birch
Spicebush	
pepperbush	
Silene cabbage	
Jack-in-the-pulpit	

### Wetland Delineation Field Form

Project Name:	Optasite, Waterbury	Project Number:	40999.08
Inspection Date:	8/31/06	Inspector:	S. Fusco
Wetland I.D.:	3		

Field Conditions:	Weather: Sunny, mid 70's	Snow Depth:	0
	General Soil Moisture: moist	Frost Depth:	0
Type of Wetland Delineation:	Connecticut <input checked="" type="checkbox"/>		
	ACOE <input type="checkbox"/>		
	Tidal <input type="checkbox"/>		
Field Numbering Sequence: WF3-01 to WF3-04			

**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: man made depression at toe slope +/- 100 ft		

**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 Marsh <input type="checkbox"/>	Scrub-shrub <input type="checkbox"/>	Forested <input checked="" type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	
Comments:		

**WATERCOURSE TYPE:**

Upper Perennial <input type="checkbox"/>	Lower Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>
Tidal <input type="checkbox"/>		
Comments: N/A		

**SPECIAL AQUATIC HABITAT:**

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

**DOMINANT PLANTS:**

Cinnamon fern	
Skunk cabbage	



# SOIL SURVEY OF STATE OF CONNECTICUT

## MAP LEGEND

	Soil Map Units
	Cities
	Detailed Counties
	Detailed States
	Interstate Highways
	Roads
	Rails
	Water
	Hydrography
	Oceans
	Escarpment, bedrock
	Escarpment, non-bedrock
	Gulley
	Levee
	Slope
	Blowout
	Borrow Pit
	Clay Spot
	Depression, closed
	Eroded Spot
	Gravel Pit
	Gravelly Spot
	Gulley
	Lava Flow
	Landfill
	Marsh or Swamp
	Miscellaneous Water
	Rock Outcrop
	Saline Spot
	Sandy Spot
	Slide or Slip
	Sinkhole
	Sodic Spot
	Spoil Area
	Stony Spot
	Very Stony Spot
	Perennial Water
	Wet Spot

## MAP INFORMATION

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>

Coordinate System: UTM Zone 18

Soil Survey Area: State of Connecticut  
 Spatial Version of Data: 3  
 Soil Map Compilation Scale: 1:12000

Map comprised of aerial images photographed on these dates:  
 4/3/1991; 4/12/1991; 4/13/1992

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 Summary

## State of Connecticut

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
3	Ridgebury, Leicester, and Whitman soils, extremely stony	13.8	13.2
17	Timakwa and Natchaug soils	2.7	2.6
47C	Woodbridge fine sandy loam, 2 to 15 percent slopes, extremely stony	4.9	4.7
52C	Sutton fine sandy loam, 2 to 15 percent slopes, extremely stony	10.5	10.0
60B	Canton and Charlton soils, 3 to 8 percent slopes	8.0	7.6
60C	Canton and Charlton soils, 8 to 15 percent slopes	16.6	15.8
60D	Canton and Charlton soils, 15 to 25 percent slopes	0.1	0.1
62C	Canton and Charlton soils, 3 to 15 percent slopes, extremely stony	23.0	22.0
62D	Canton and Charlton soils, 15 to 35 percent slopes, extremely stony	12.8	12.2
260C	Charlton-Urban land complex, 8 to 15 percent slopes	2.4	2.3
284B	Paxton-Urban land complex, 3 to 8 percent slopes	1.1	1.0
284C	Paxton-Urban land complex, 8 to 15 percent slopes	4.9	4.7
306	Udorthents-Urban land complex	4.1	3.9

# Map Unit Description (Brief)

State of Connecticut

[Only those map units that have entries for the selected non-technical description categories are included in this report]

Map Unit: 3 - Ridgebury, Leicester, and Whitman soils, extremely stony

Description Category: SOI

## Ridgebury, Leicester And Whitman Soils, Extremely 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 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 40 percent Ridgebury soils, 35 percent Leicester soils, 15 percent Whitman soils, 10 percent minor components.

### Ridgebury soils

This component occurs on upland drainageway and depression landforms. The parent material consists of lodgement till derived from granite, schist, and gneiss. The slope ranges from 0 to 5 percent and the runoff class is very low. The depth to a restrictive feature is 20 to 30 inches to densic material. The drainage class is poorly drained. The slowest permeability within 60 inches is about 0.00 in/hr (very slow), with about 2.5 inches (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 about 3 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 7s

#### Typical Profile:

0 to 1 inches; slightly decomposed plant material  
1 to 5 inches; fine sandy loam  
5 to 14 inches; fine sandy loam  
14 to 21 inches; fine sandy loam  
21 to 60 inches; sandy loam

### Leicester soils

This component occurs on upland drainageway and depression landforms. The parent material consists of melt-out till derived from granite, schist, and gneiss. The slope ranges from 0 to 5 percent and the runoff class is very 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 7.4 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 about 9 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 7s

#### Typical Profile:

0 to 1 inches; moderately decomposed plant material  
1 to 7 inches; fine sandy loam  
7 to 10 inches; fine sandy loam  
10 to 18 inches; fine sandy loam  
18 to 24 inches; fine sandy loam  
24 to 43 inches; gravelly fine sandy loam  
43 to 65 inches; gravelly fine sandy loam

### Whitman soils

This component occurs on upland drainageway and depression landforms. The parent material consists of lodgement till derived from gneiss, schist, and granite. The slope ranges from 0 to 2 percent and the runoff class is very low. The depth to a restrictive feature is 12 to 20 inches to densic material. The drainage class is very poorly drained. The slowest permeability within 60 inches is about 0.00 in/hr (very slow), with about 1.9 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 occasional. The minimum depth to a seasonal water table, when present, is about 0 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 7s

#### Typical Profile:

0 to 1 inches; slightly decomposed plant material  
1 to 9 inches; fine sandy loam  
9 to 16 inches; fine sandy loam  
16 to 22 inches; fine sandy loam  
22 to 60 inches; fine sandy loam

# Map Unit Description (Brief)

State of Connecticut

Map Unit: 17 - Timakwa and Natchaug soils

Description Category: SOI

## Timakwa And Natchaug Soils

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 52 degrees F. (7 to 11 degrees C.) This map unit is 45 percent Timakwa soils, 40 percent Natchaug soils. 15 percent minor components.

### Timakwa soils

This component occurs on depression landforms. The parent material consists of woody organic material over sandy and gravelly glaciofluvial deposits. The slope ranges from 0 to 2 percent and the runoff class is negligible. The depth to a restrictive feature is greater than 60 inches. The drainage class is very poorly drained. The slowest permeability within 60 inches is about 5.95 in/hr (rapid), with about 16.2 inches (very high) available water capacity. The weighted average shrink-swell potential in 10 to 60 inches is about 3.9 LEP (moderate). The flooding frequency for this component is rare. The ponding hazard is frequent. The minimum depth to a seasonal water table, when present, is about 4 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 5w

#### Typical Profile:

0 to 10 inches; muck  
10 to 21 inches; muck  
21 to 24 inches; muck  
24 to 37 inches; muck  
37 to 47 inches; very gravelly loamy coarse sand  
47 to 60 inches; gravelly loamy very fine sand

### Natchaug soils

This component occurs on depression landforms. The parent material consists of woody organic material over loamy alluvium, loamy glaciofluvial deposits, or loamy till. The slope ranges from 0 to 2 percent and the runoff class is negligible. The depth to a restrictive feature is greater than 60 inches. The drainage class is very poorly drained. The slowest permeability within 60 inches is about 0.20 in/hr (moderately slow), with about 15.6 inches (very high) available water capacity. The weighted average shrink-swell potential in 10 to 60 inches is about 3.9 LEP (moderate). The flooding frequency for this component is rare. The ponding hazard is frequent. The minimum depth to a seasonal water table, when present, is about 0 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 5w

#### Typical Profile:

0 to 2 inches; peat  
2 to 4 inches; peat  
4 to 6 inches; muck  
6 to 11 inches; muck  
11 to 18 inches; muck  
18 to 24 inches; muck  
24 to 33 inches; fine sandy loam  
33 to 36 inches; fine sandy loam  
36 to 80 inches; loam

## Map Unit Description (Brief)

State of Connecticut

Map Unit: 47C - Woodbridge fine sandy loam, 2 to 15 percent slopes, extremely stony

Description Category: SOI

### Woodbridge Fine Sandy Loam, 2 To 15 Percent Slopes, Extremely 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 80 percent Woodbridge soils. 20 percent minor components.

### Woodbridge soils

This component occurs on upland drumlin and hill landforms. The parent material consists of lodgement till derived from schist, granite, and gneiss. The slope ranges from 2 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 moderately well drained. The slowest permeability within 60 inches is about 0.00 in/hr (very slow), with about 3.9 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 7s

### Typical Profile:

0 to 7 inches; fine sandy loam  
7 to 18 inches; fine sandy loam  
18 to 26 inches; fine sandy loam  
26 to 30 inches; fine sandy loam  
30 to 43 inches; gravelly fine sandy loam  
43 to 65 inches; gravelly fine sandy loam

Map Unit: 52C - Sutton fine sandy loam, 2 to 15 percent slopes, extremely stony

Description Category: SOI

### Sutton Fine Sandy Loam, 2 To 15 Percent Slopes, Extremely 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 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 2 to 15 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 7.3 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 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 7s

### Typical Profile:

0 to 1 inches; moderately decomposed plant material  
1 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 Description (Brief)

State of Connecticut

Map Unit: 60B - Canton and Charlton soils, 3 to 8 percent slopes

Description Category: SOI

## Canton And Charlton Soils, 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 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 2e

#### 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 2e

#### 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 Description (Brief)

State of Connecticut

Map Unit: 60C - Canton and Charlton soils, 8 to 15 percent slopes

Description Category: SOI

## Canton And Charlton Soils, 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 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 3e

#### 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 3e

#### 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 Description (Brief)

State of Connecticut

Map Unit: 60D - Canton and Charlton soils, 15 to 25 percent slopes

Description Category: SOI

## Canton And Charlton Soils, 15 To 25 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 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 15 to 25 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 4e

#### 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 15 to 25 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 4e

#### 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 Description (Brief)

State of Connecticut

Map Unit: 62C - Canton and Charlton soils, 3 to 15 percent slopes, extremely stony

Description Category: SOI

## Canton And Charlton Soils, 3 To 15 Percent Slopes, Extremely 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 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 7s

#### 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 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 7s

#### 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 Description (Brief)

State of Connecticut

Map Unit: 62D - Canton and Charlton soils, 15 to 35 percent slopes, extremely stony

Description Category: SOI

### Canton And Charlton Soils, 15 To 35 Percent Slopes, Extremely 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 15 to 35 percent and the runoff class is medium. 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 7s

#### 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 15 to 35 percent and the runoff class is medium. 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 7s

#### 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 Description (Brief)

State of Connecticut

Map Unit: 260C - Charlton-Urban land complex, 8 to 15 percent slopes

Description Category: SOI

### Charlton-Urban Land Complex, 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 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 40 percent Charlton soils, 35 percent Urban Land, 25 percent minor components.

#### 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 3e

#### 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

#### Urban Land

Urban land is land mostly covered by streets, parking lots, buildings, and other structures of urban areas. The slope ranges from 8 to 15 percent and the runoff class is very high. The Nonirrigated Land Capability Class is 8

Map Unit: 284B - Paxton-Urban land complex, 3 to 8 percent slopes

Description Category: SOI

### Paxton-Urban Land Complex, 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 40 percent Paxton soils, 35 percent Urban Land, 25 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 3 to 8 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 2e

#### 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

#### 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 8 percent and the runoff class is very high. The Nonirrigated Land Capability Class is 8

## Map Unit Description (Brief)

State of Connecticut

Map Unit: 284C - Paxton-Urban land complex, 8 to 15 percent slopes

Description Category: SOI

### Paxton-Urban Land Complex, 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 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 40 percent Paxton soils, 35 percent Urban Land, 25 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

#### Urban Land

Urban land is land mostly covered by streets, parking lots, buildings, and other structures of urban areas. The slope ranges from 8 to 15 percent and the runoff class is very high. The Nonirrigated Land Capability Class is 8

Map Unit: 306 - Udorthents-Urban land complex

Description Category: SOI

### 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









**Optasite**  
 OPTASITE, INC.  
 10226 CANTON ROAD  
 WILTON, MA 01897

**CHA**  
 CLOUDS HARBOR & ASSOCIATES LLP  
 375 MAIN STREET, SUITE 200  
 WILTON, MA 01897  
 TEL: (508) 531-1111

DATE: 11/14/2017  
 15333 - 1002 - 1807

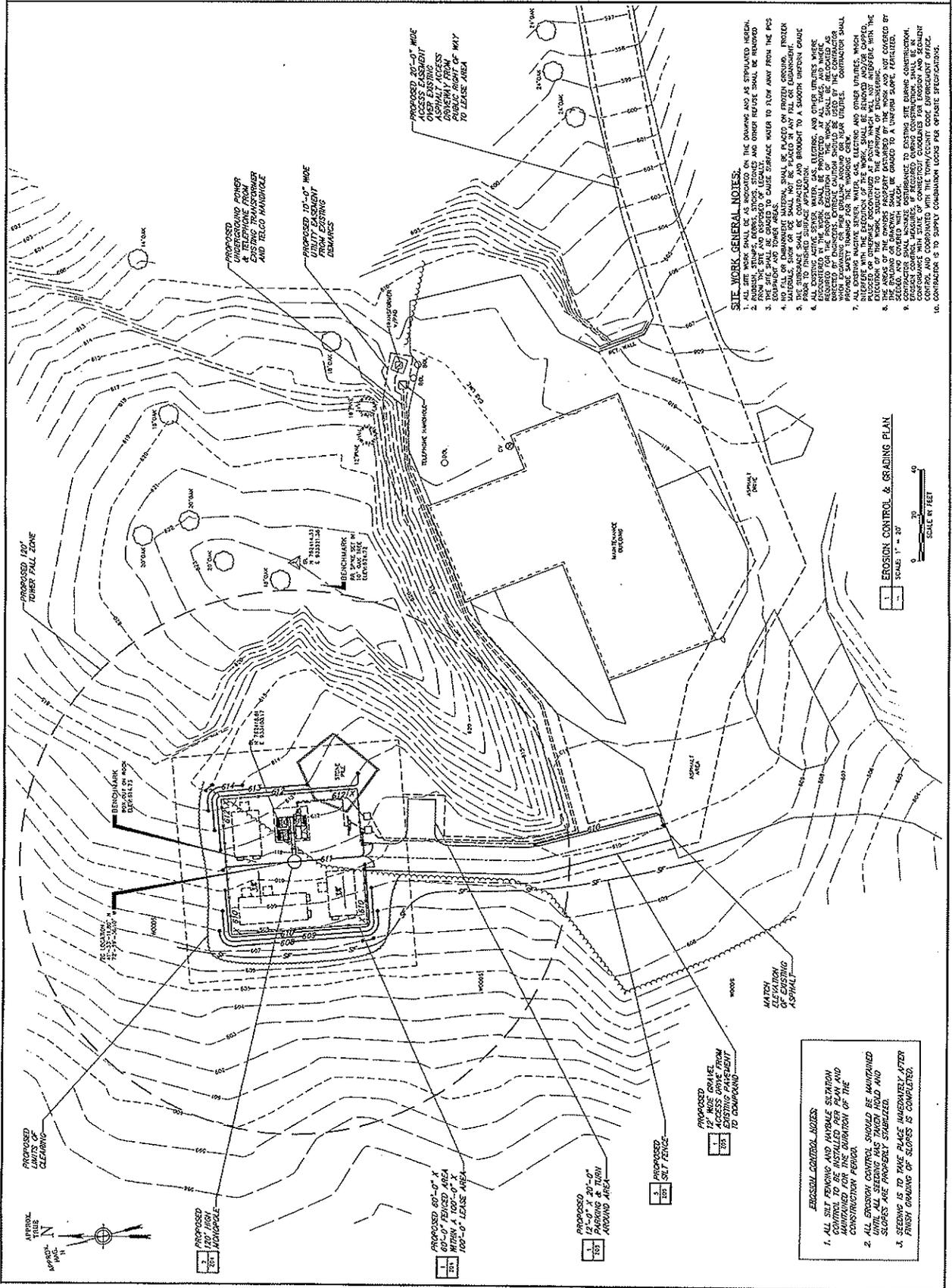
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10	ISSUED FOR REVIEW	11/14/2017	JPS

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO REPRODUCE THIS DRAWING.

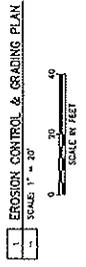
SITE NO.: CT-999-0096  
 SITE NAME: WATERBURY, CT  
 SITE ADDRESS: 940 MERIDIAN ROAD  
 WATERBURY, CT 05705  
 NEW HAVEN COUNTY

SHEET TITLE: EROSION CONTROL & GRADING PLAN

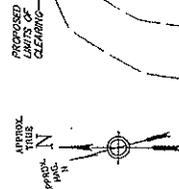
SHEET NUMBER: 703



- SITE WORK GENERAL NOTES:**
1. ALL SITE WORK SHALL BE AS SHOWN ON THE DRAWINGS AND AS STIPULATED HEREIN.
  2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE STATE AND DEPARTMENT OF LOCAL AFFAIRS.
  3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE STATE AND DEPARTMENT OF LOCAL AFFAIRS.
  4. NO FILL OR DRAINAGE MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN GROUND SHALL BE REMOVED AND REPLACED WITH FRESH EARTH.
  5. THE SURFACE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH WORKING GRADE PRIOR TO FINISHED SURFACE APPLICATION.
  6. ALL EXISTING UTILITIES SHALL BE PROTECTED. AT ALL TIMES, AND WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE STATE AND DEPARTMENT OF LOCAL AFFAIRS.
  7. ALL EXISTING MAJOR UTILITIES, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH ARE SHOWN ON THE DRAWINGS, SHALL BE PROTECTED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE STATE AND DEPARTMENT OF LOCAL AFFAIRS.
  8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE STATE AND DEPARTMENT OF LOCAL AFFAIRS.
  9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE STATE AND DEPARTMENT OF LOCAL AFFAIRS.
  10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE STATE AND DEPARTMENT OF LOCAL AFFAIRS.



- EROSION CONTROL NOTES:**
1. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED FOR THE DURATION OF THE CONSTRUCTION PERIOD.
  2. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED FOR THE DURATION OF THE CONSTRUCTION PERIOD.
  3. EROSION CONTROL MEASURES SHALL BE MAINTAINED FOR THE DURATION OF THE CONSTRUCTION PERIOD.



PROPOSED 120' TOWER FALL ZONE

PROPOSED 120' HIGH MONOPOLE

PROPOSED 60'-0" X 60'-0" FENCED AREA WITHIN A 100'-0" X 100'-0" LEASE AREA

PROPOSED 12'-0" X 20'-0" SILT FENCE

PROPOSED 12' WIDE GRADE, 12' HIGH SLOPE PROTECTIVE WALL WITH 10' WIDE GRASS STRIP TO COMPANION

PROPOSED 12' WIDE GRADE, 12' HIGH SLOPE PROTECTIVE WALL WITH 10' WIDE GRASS STRIP TO COMPANION

PROPOSED 12' WIDE GRADE, 12' HIGH SLOPE PROTECTIVE WALL WITH 10' WIDE GRASS STRIP TO COMPANION

MAINTENANCE ELEVATION OF EXISTING ASPHALT

WOODS

WOODS

WOODS

WOODS

WOODS

WOODS

WOODS

WOODS

PROPOSED 120' TOWER FALL ZONE



**Optasite**  
 (( ))  
 OPTASITE, INC.  
 1000 WEST 10TH STREET  
 WESTMINSTER, CO. 80540

CH-4 PROJECT NO.  
 15304 - 102 - 1601

**CHA**  
 CHA ENGINEERING & ARCHITECTURE, P.C.  
 104 MAIN STREET, SUITE 210  
 WESTMINSTER, CO. 80540  
 PHONE: (303) 441-1111  
 WWW.CHAEA.COM

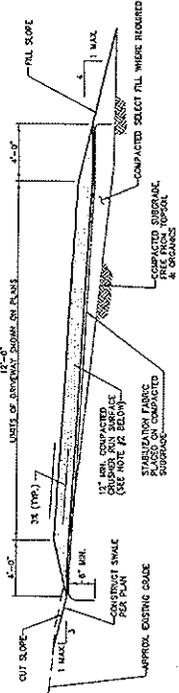
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10	ISSUED FOR CONSTRUCTION	08/12/01	CH	CH

IT IS A VIOLATION OF LAW FOR ANY PERSON  
 UNLESS THEY ARE ACTING UNDER THE DIRECTION  
 OF A LICENSED PROFESSIONAL ENGINEER,  
 TO REPRODUCE THIS DOCUMENT.

SITE NO.  
 CT-999-0096  
 SITE NAME  
 WATERBURY, CT  
 SITE ADDRESS  
 940 MERIDEN ROAD  
 WATERBURY, CT  
 06705  
 NEW HAVEN COUNTY

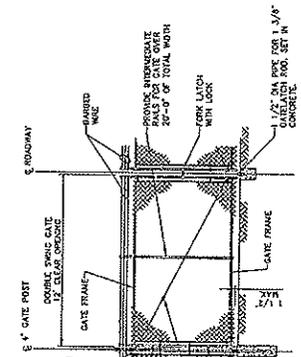
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SHEET NUMBER  
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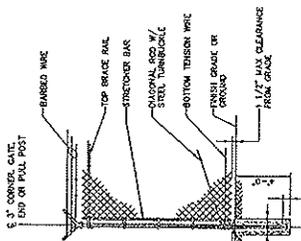


NOTES: 1. WHERE REQUIRED BY THE ENGINEER, THE PROPOSED DRIVEWAY SHALL BE CONSTRUCTED AND FILL WITH SAND, GRAVEL OR SAND-GRAN. THE FILL SHALL BE PLACED WITH THE FOLLOWING GRADATIONS: 3" PASSING: 100%; 4" PASSING: 100%; 5" PASSING: 100%; 6" PASSING: 100%; 7.5" PASSING: 85-100%; 10" PASSING: 60-100%; 15" PASSING: 40-100%; 20" PASSING: 25-100%; 30" PASSING: 10-100%; 48" PASSING: 0-100%. 2. SAND, GRAVEL OR SAND-GRAN NOT PERMITTED FOR DRIVEWAY SURFACE. MATERIAL TO BE FREE FROM ORGANICS AND CONCRETES. 3. SAND, GRAVEL OR SAND-GRAN TO BE PLACED WITH THE FOLLOWING GRADATIONS: 3" PASSING: 100%; 4" PASSING: 100%; 5" PASSING: 100%; 6" PASSING: 100%; 7.5" PASSING: 85-100%; 10" PASSING: 60-100%; 15" PASSING: 40-100%; 20" PASSING: 25-100%; 30" PASSING: 10-100%; 48" PASSING: 0-100%. 4. SAND, GRAVEL OR SAND-GRAN TO BE PLACED WITH THE FOLLOWING GRADATIONS: 3" PASSING: 100%; 4" PASSING: 100%; 5" PASSING: 100%; 6" PASSING: 100%; 7.5" PASSING: 85-100%; 10" PASSING: 60-100%; 15" PASSING: 40-100%; 20" PASSING: 25-100%; 30" PASSING: 10-100%; 48" PASSING: 0-100%. 5. SAND, GRAVEL OR SAND-GRAN TO BE PLACED WITH THE FOLLOWING GRADATIONS: 3" PASSING: 100%; 4" PASSING: 100%; 5" PASSING: 100%; 6" PASSING: 100%; 7.5" PASSING: 85-100%; 10" PASSING: 60-100%; 15" PASSING: 40-100%; 20" PASSING: 25-100%; 30" PASSING: 10-100%; 48" PASSING: 0-100%. 6. SAND, GRAVEL OR SAND-GRAN TO BE PLACED WITH THE FOLLOWING GRADATIONS: 3" PASSING: 100%; 4" PASSING: 100%; 5" PASSING: 100%; 6" PASSING: 100%; 7.5" PASSING: 85-100%; 10" PASSING: 60-100%; 15" PASSING: 40-100%; 20" PASSING: 25-100%; 30" PASSING: 10-100%; 48" PASSING: 0-100%. 7. SAND, GRAVEL OR SAND-GRAN TO BE PLACED WITH THE FOLLOWING GRADATIONS: 3" PASSING: 100%; 4" PASSING: 100%; 5" PASSING: 100%; 6" PASSING: 100%; 7.5" PASSING: 85-100%; 10" PASSING: 60-100%; 15" PASSING: 40-100%; 20" PASSING: 25-100%; 30" PASSING: 10-100%; 48" PASSING: 0-100%. 8. SAND, GRAVEL OR SAND-GRAN TO BE PLACED WITH THE FOLLOWING GRADATIONS: 3" PASSING: 100%; 4" PASSING: 100%; 5" PASSING: 100%; 6" PASSING: 100%; 7.5" PASSING: 85-100%; 10" PASSING: 60-100%; 15" PASSING: 40-100%; 20" PASSING: 25-100%; 30" PASSING: 10-100%; 48" PASSING: 0-100%. 9. SAND, GRAVEL OR SAND-GRAN TO BE PLACED WITH THE FOLLOWING GRADATIONS: 3" PASSING: 100%; 4" PASSING: 100%; 5" PASSING: 100%; 6" PASSING: 100%; 7.5" PASSING: 85-100%; 10" PASSING: 60-100%; 15" PASSING: 40-100%; 20" PASSING: 25-100%; 30" PASSING: 10-100%; 48" PASSING: 0-100%. 10. SAND, GRAVEL OR SAND-GRAN TO BE PLACED WITH THE FOLLOWING GRADATIONS: 3" PASSING: 100%; 4" PASSING: 100%; 5" PASSING: 100%; 6" PASSING: 100%; 7.5" PASSING: 85-100%; 10" PASSING: 60-100%; 15" PASSING: 40-100%; 20" PASSING: 25-100%; 30" PASSING: 10-100%; 48" PASSING: 0-100%.

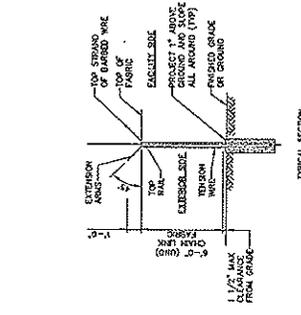
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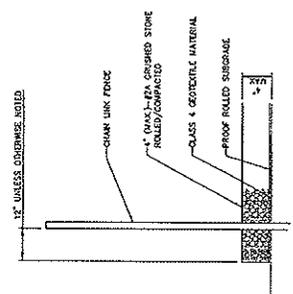
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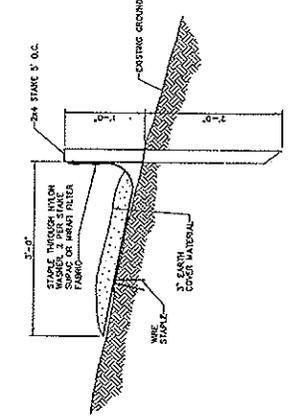
3. WOVEN WIRE CORNER, GATE END OR PULL POST  
 NO SCALE



4. WOVEN WIRE FENCE  
 NO SCALE



5. SITE AREA SUBGRADING  
 NO SCALE



6. SILT FENCE DETAIL  
 NO SCALE