

OPTASITE TOWERS LLC

TECHNICAL REPORT

PROPOSED GROTON
TOWER FACILITY

GROTON, CONNECTICUT

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

Table of Contents

	<u>Page</u>
<u>Introduction</u>	3
<u>Section 1</u>	
Site Justification	4
<u>Section 2</u>	
Site Search Process	5
<u>Section 3: Site A</u>	
General Facility Description	8
Topographic Survey with Site Identified	
Key Map	
Site Access Map	
Compound Plan	
Site Evaluation Report	9
Facilities and Equipment Specification	11
Tower Elevation	
Environmental Assessment Statement	12
Power Density Analysis	

Introduction

Optasite Towers LLC (“Optasite”) hereby submits this Technical Report to the Town of Groton and the Town of Ledyard pursuant to Section 16-507 of the Connecticut General Statutes. Optasite proposes to install a wireless telecommunications facility (the “Facility”) on a 3.66 acre parcel owned by JFM Enterprises LLC located at 1294 Pleasant Valley Road North, Groton. This Facility is being proposed to allow Omnipoint Communications, Inc. (“T-Mobile”) and other federally licensed wireless carriers to provide service in this area. The purpose of this Technical Report is to provide the Towns of Groton and Ledyard with information concerning the need for the proposed Facility (Section 1), the site selection process (Section 2), the Facility design and any environmental effects associated with the proposed Facility (Sections 3, 4 and 5).

SECTION 1

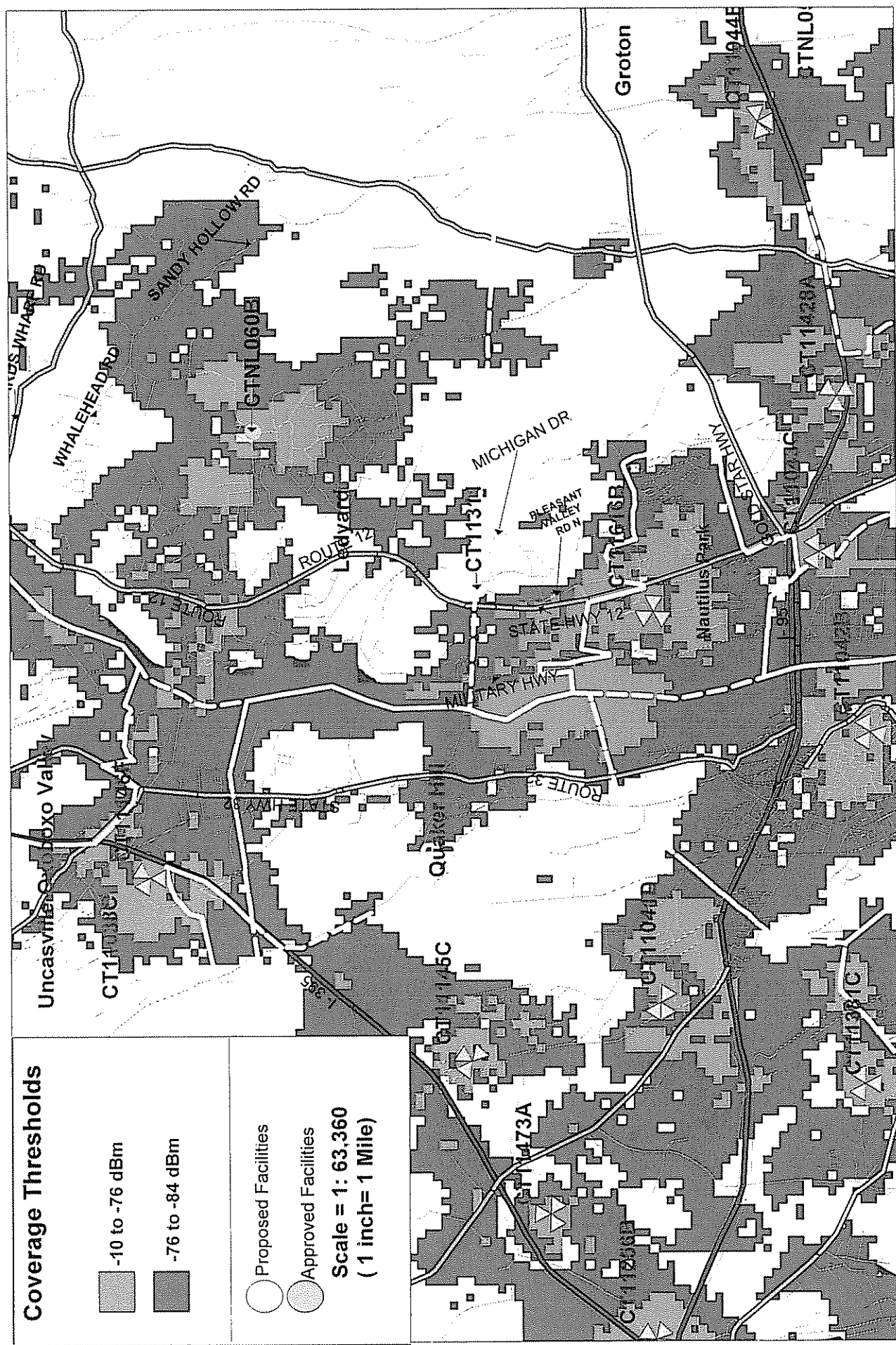
Site Justification

This Section provides information regarding the identification of a specific need for the proposed Facility.

The Groton site is necessary to provide wireless coverage in the northern section of Groton and southern section of Ledyard, specifically along Route 12 and State Highway 32.

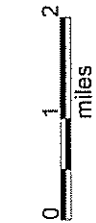
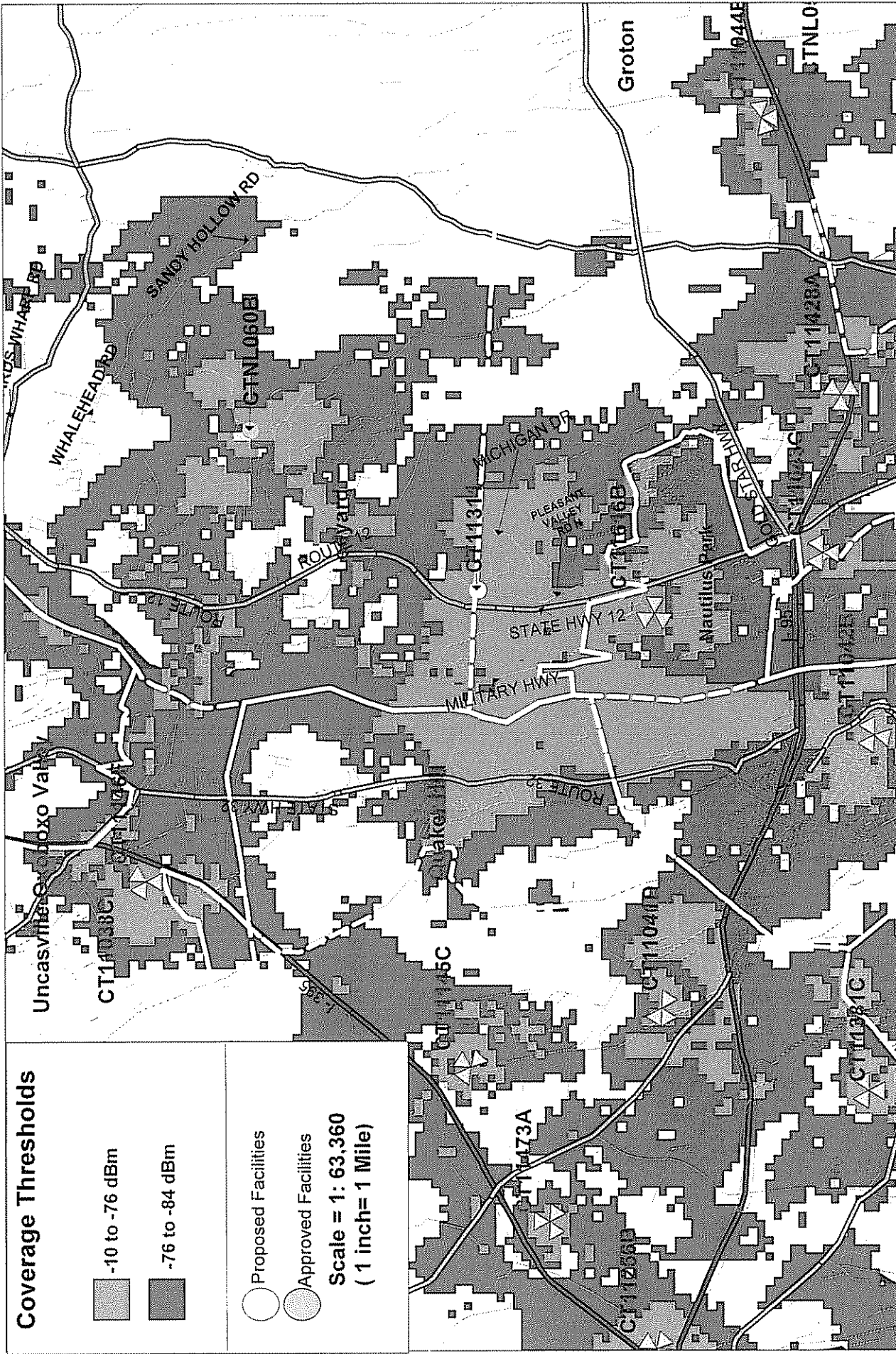
Included herein are coverage propagation plots prepared by T-Mobile (1) existing coverage from surrounding sites; (2) predicted coverage from the proposed site with antennas mounted at a minimum centerline height of 137' above grade level ("AGL"); and (3) coverage from the proposed site with existing and approved sites.

Together, these propagation maps confirm the need for a site in the area and the effectiveness the proposed site in meeting the coverage needs for the area. These propagation plots clearly demonstrate a need for the proposed Facility in Groton.



Existing On Air and Approved T-Mobile Coverage





T-Mobile Existing and Approved Coverage with proposed CT11311 Groton at 137' AGL
(Model Tuned with drive data to show coverage on Navy base)

SECTION 2

Site Search Process

Section 16-50j-74(j) of the Regulations of Connecticut State Agencies requires the applicant to submit a statement that describes “the narrowing process by which other possible sites were considered and eliminated.” In accordance with this requirement, the descriptions of the general site search process, the identification of the target search area and the alternative locations considered for development of the proposed Groton Facility are provided below.

As a tower developer, Optasite bases its decision to seek out a site in an area based on its knowledge and understanding of existing weaknesses in the systems of the several wireless carriers operating in the area and/or consultation with individual carriers. A target area is chosen central to the area in which the coverage and/or capacity needs have been identified. The area targeted is the geographical location where the installation of a site would, based on general radio frequency engineering and system design standards, be likely to address the identified problem. Optasite’s goal is to locate sites that will provide for orderly integration into the existing wireless systems of multiple carriers.

Optasite is sensitive to State and local desires to minimize the construction of new towers, and does not initiate searches in areas with known acceptable structures. In the northern Groton area, there are no existing towers or transmission line structures with sufficient height. Any existing towers are too far from the target area to provide adequate coverage or the owners have rejected Optasite’s solicitations.

In general, Optasite first studies the area to determine whether industrial or commercial areas or areas which have appropriate environmental and land use characteristics are present. Potential locations are studied by radio frequency engineers to determine whether the locations will meet the technical requirements for a site in the area. The list of potential locations is further refined based on the willingness of property owners to make their property available. Analysis of potential environmental effects and benefits may further narrow the alternatives. In each site search, the weight afforded to relevant factors may vary depending on the nature of the area and the availability of potential sites.

Optasite investigated numerous properties in the area of the JFM Enterprises property at 1294 Pleasant Valley Road North. Optasite discussed locating the tower on an adjoining parcel owned by the same owners as JFM Enterprises at 1276 Pleasant Valley Road North. However, since this property is currently residential, the facility was better sited on the parcel that was commercially developed. Optasite also investigated locating the property at 336 Briar Hill Road. However, that property is listed in the Groton Assessor’s Office as “undevelopable” and, therefore, Optasite ceased its investigation. The property investigated at 103 South Road, currently houses a 45’ guyed latticed tower that had been used for a two-way trucking radio system in the past. The owners have repeatedly declined offers to locate a tower on their property. When approached for this tower, they declined again. Optasite investigated a site at 0 Pleasant Valley Road North which is the Trident Park Navy Housing property. The property does not have sufficient room available for the construction of a new tower. Finally, Optasite considered the

property at 0 Route 12. This property is the Navy Sub Base also housing an existing water tank. T-Mobile attempted to collocate at this location and they were denied.

The property on which the proposed sites are located is superior to all others reviewed. Owned by JFM Enterprises, it is approximately a 3.66 acre parcel that is largely wooded. Based on its elevation and location, a Facility within the property would provide adequate coverage along Route 12 and State Highway 32. The site is remote from surrounding properties. Topographical features and vegetation afford significant screening of the proposed site. In addition, Optasite will utilize an existing asphalt and gravel driveway to access the site so that all of the natural screening provided by the trees in the front of the Property on Pleasant Valley Road North will remain.

SECTION 3

PROPOSED SITE

**1294 PLEASANT VALLEY ROAD NORTH
Groton, Connecticut**

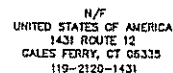
Land of
JFM Enterprises

Assessor's Identification Number: 1780104701431

3.66 Acres

GENERAL FACILITY DESCRIPTION

The proposed Groton Facility is a 50' x 50' leased area located in the north-central portion of an approximately 3.66 acre parcel at 1294 Pleasant Valley Road North in Groton ("Site"). The parcel is currently used as dog boarding and grooming business as well as a horse paddock. The Site would consist of a 140-foot self-supporting monopole tower designed to accommodate four sets of antennas and a 50' x 50' site compound designed to accommodate the related equipment either in single-story equipment buildings or on concrete pads. Initially, antennas and related equipment for T-Mobile's use would be installed. The tower and equipment buildings would be enclosed by an 8-foot high security fence and gate, which could be screened. Vehicle access to the Site would extend from Pleasant Valley Road North along an existing asphalt driveway continuing over an existing gravel driveway through a new gravel driveway. Underground utility connections would extend from existing utility service along Pleasant Valley Road North.



TOWN OF LEDYARD
TOWN OF GROTON

N/F
UNITED STATES OF AMERICA SUBMARINE
BASE C/O MAIN SITE
O ROUTE 12
GROTON, CT 06340
P.I.N.: 176010265199 E

N/Y
ROBERT E JR & ROSEMARY ROHNER
1434 ROUTE 12
GALES FERRY, CT 06335
MAILING ADDRESS:
15318 CARAVEL DRIVE
CORPUS CHRSTI, TX 78418
133-2120-1434

N/T
JAMES L. & MARGARET S. MATHEWS
1319 BALDWIN HILL RD
GALES FERRY, CT 06335
133-140-1318

N/F
UNITED STATES OF AMERICA
1318 BALDWIN HILL RD
GALES FERRY, CT 06335
MAILING ADDRESS:
NAVAL FAC ENG CMD H DIVISION
BLOC 77L
PHILADELPHIA, PA 19112-5094
133-140-1318

PROPOSED
50'-0" X 50'-0"
LEASE AREA

N/F
ANDREW E & JENNIFER MACIEROWSKI
1276 PLEASANT VALLEY RD NORTH
GROTON, CT 06340
P.I.N.: 178010462625

SURVEY NOTES:

1. THIS SURVEY HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THROUGH 20-300b-20 AND THE "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996. THE BOUNDARY LINES SHOWN ON THIS PLAN WERE OBTAINED FROM OTHER MAPS AND RECORDS AND OTHER SOURCES OF INFORMATION. IT IS NOT TO BE CONSTRUED AS HAVING BEEN OBTAINED AS THE RESULT OF A FIELD SURVEY, AND IS SUBJECT TO SUCH CHANGE AS AN ACCURATE FIELD SURVEY MAY DISCLOSE.

TYPE OF SURVEY: COMPILED PLAN

BOUNDARY DETERMINATION CATEGORY: NONE

CLASS OF ACCURACY: HORIZONTAL CLASS A-2
VERTICAL CLASS V-2
TOPOGRAPHIC CLASS T-2

2. PROPERTY LINE SHOWN HEREON ARE FROM RECORD DEEDS PLOTS AND TAX MAPS AS OVERLAIN ON ANY DOCUMENTATION OR OTHER EVIDENCE THAT MAY HAVE BEEN LOCATED DURING THE TOPOGRAPHIC SURVEY. A PROPERTY SURVEY WAS NOT PERFORMED BY CLOUGH HARBOUR & ASSOCIATES LLP AND AS A RESULT THE PROPERTY LINES SHOWN ARE APPROXIMATE AND DO NOT PRESENT A PROPERTY/BOUNDARY OPINION

3. BASE MAPPING PREPARED BY CLOUGH HARBOUR & ASSOCIATES LLP FROM AN OCTOBER 2006 FIELD SURVEY

4. NORTH ORIENTATION IS TRUE NORTH BASED ON GPS OBSERVATIONS TAKEN AT THE TIME OF THE FIELD SURVEY.

5. UNDERGROUND UTILITIES, STRUCTURES AND FACILITIES HAVE BEEN SHOWN FROM SURFACE LOCATIONS AND MEASUREMENTS OBTAINED FROM A FIELD SURVEY. THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHER UTILITIES WHICH THE EXISTENCE OF ARE NOT KNOWN. SIZE, TYPE AND LOCATION OF ALL UTILITIES AND STRUCTURES MUST BE VERIFIED BY PROPER AUTHORITIES PRIOR TO ANY AND ALL CONSTRUCTION. CALL DIG SAFE PRIOR TO SUBSURFACE ACTIVITY

6. SUBJECT TO ANY STATEMENT OF FACTS THAT AN UP-TO-DATE ABSTRACT OF TITLE WOULD DISCLOSE

7. SUBJECT TO ALL RIGHTS, EASEMENTS, COVENANTS OR RESTRICTIONS OF RECORD

B. LATITUDE/LONGITUDE/ELEVATIONS WERE OBTAINED UTILIZING NGS CORS BASE STATION NAMED "CIGR". LATITUDE/LONGITUDE ARE REFERENCED TO NAD83 CONNECTICUT ZONE. COORDINATES SHOWN ARE IN U.S. FEET, EXPRESSED IN U.S. SURVEY FEET. ELEVATIONS ARE REFERENCED TO NAVD83. TOP OF STRUCTURE HEIGHT AS SHOWN, IF ANY, DETERMINED BY VERTICAL ANGLE OR BY ACTUAL LOCATION.
INFORMATION SHOWN BASED ON FAA 2C CERTIFICATION ACCURACY LEVEL DEFINED AS;
HORIZONTAL: ±50 FEET / 15 METERS
VERTICAL: ±20 FEET / 6 METERS

9. SITE FALLS WITHIN ZONE "C" DEFINED AS AREAS OF MINIMAL FLOODING AS SHOWN ON FLOOD INSURANCE RATE MAP, TOWN OF GROTON, CONNECTICUT, NEW LONDON COUNTY, PANEL 2 OF 11. COMMUNITY PANEL NUMBER 090097 0002 C. REVISED AUGUST 15, 1984

10. WETLAND SHOWN BASE ON FIELD DELINEATED POINTS ESTABLISHED BY VANASSE HANGER
BRUSTLIN, INC. DATED 10-30-06

MAP REFERENCES:

1. ASSESSOR'S TAX MAP TOWN OF LEDYARD CONNECTICUT SHEET 133 OF 144, PREPARED BY
CHARLES A. MAGUIRE & ASSOCIATES, INC.

PROPOSED 20' WIDE
ACCESS EASEMENT—

PROPOSED 20' WIDE
UTILITY EASEMENT—

1 ABUTTERS MAP

SCALE: 1" = 40' FULL SIZE
SCALE: 1" = 80' 11 X 17

0 40 80

SCALE IN FEET

Optasite

OPTASITE, INC.
1 RESEARCH DRIVE SUITE 200C
WESTBOROUGH, MA 01581

Drawing Copyright © 2006 Clough Harbour & Associates LLP

CHIA

CLOUGH HARBOUR & ASSOCIATES LLP
2139 State Deane Highway, Suite 212 Rocky Hill, CT 06067-2331
Mail: (860) 257-4357 www.cloughharbour.com

CHA PROJECT NO:
15363 - 1008 - 1601

[illegible]

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

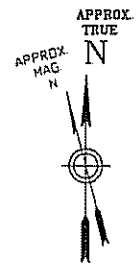
SITE ID:
CT-999-0108
SITE NAME:
NEW LONDON
SITE ADDRESS:
1294 PLEASANT VALLEY
ROAD NORTH
GROTON, CT 06340
NEW LONDON COUNTY

SHEET TITLE

ABUTTERS MAP

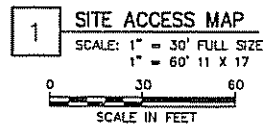
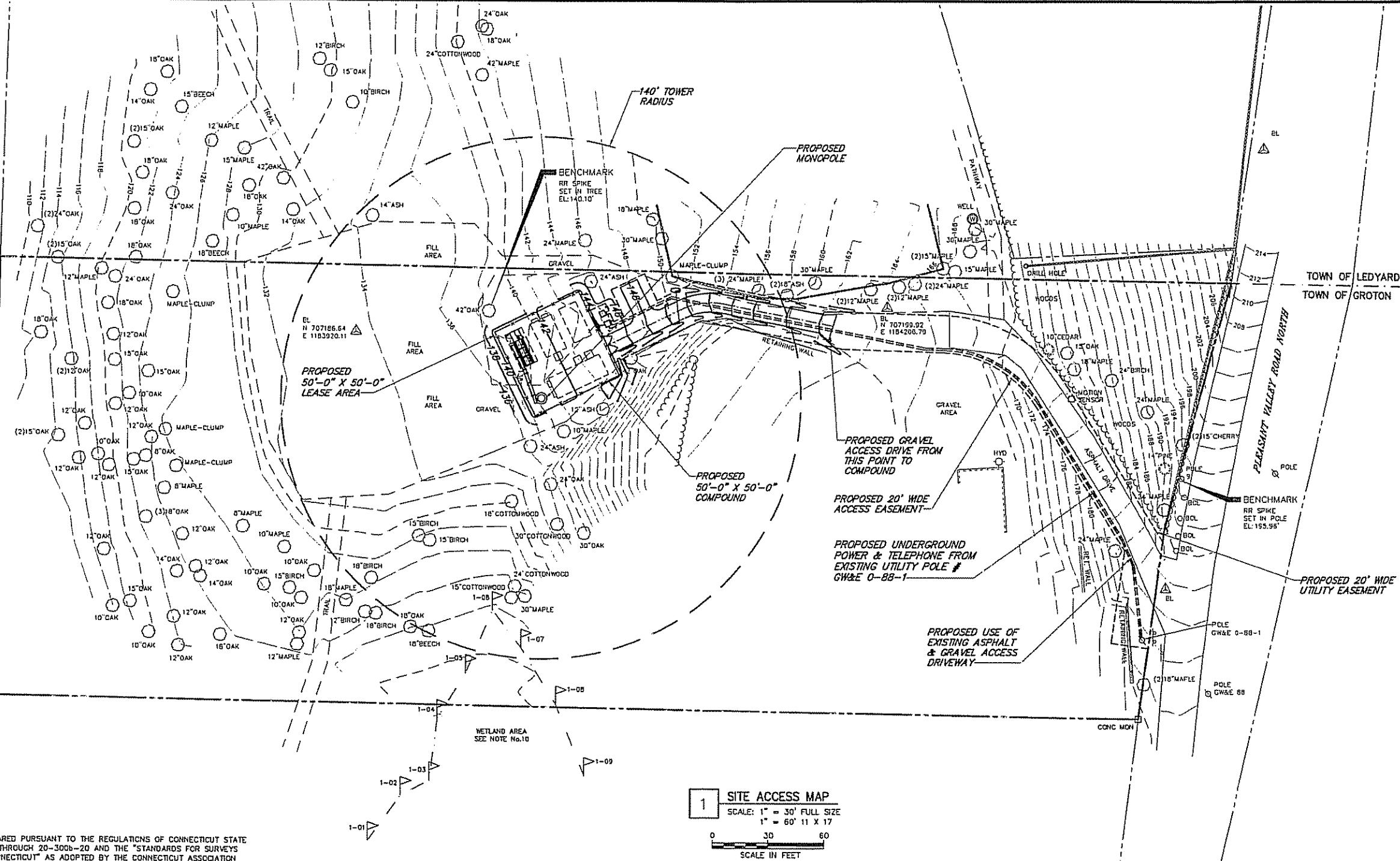
SHEET NUMBER

A01



TOWN OF LEDYARD
TOWN OF GROTON

ROUTE 1P



SURVEY NOTES:

1. THIS SURVEY HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THROUGH 20-300b-20 AND THE "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS INC. ON SEPTEMBER 26, 1998. THE BOUNDARY LINES SHOWN ON THIS PLAN WERE COMPILED FROM OTHER MAPS, RECORD RESEARCH OR OTHER SOURCES OF INFORMATION. IT IS NOT TO BE CONSTRUED AS HAVING BEEN OBTAINED AS THE RESULT OF A FIELD SURVEY, AND IS SUBJECT TO SUCH CHANGE AS AN ACCURATE FIELD SURVEY MAY DISCLOSE.

TYPE OF SURVEY: COMPILED PLAN

BOUNDARY DETERMINATION CATEGORY: NONE

CLASS OF ACCURACY: HORIZONTAL CLASS A-2
VERTICAL CLASS V-2
TOPOGRAPHIC CLASS T-2

2. PROPERTY LINE SHOWN HEREON ARE FROM RECORD DEEDS, PLOTS AND TAX MAPS AS OVERLAIN ON ANY MONUMENTATION OR OTHER EVIDENCE THAT MAY HAVE BEEN LOCATED DURING THE TOPOGRAPHIC SURVEY. A PROPERTY SURVEY WAS NOT PERFORMED BY CLOUGH HARBOUR & ASSOCIATES LLP AND AS A RESULT THE PROPERTY LINES SHOWN ARE APPROXIMATE AND DO NOT PRESENT A PROPERTY/BOUNDARY OPINION.

3. BASE MAPPING PREPARED BY CLOUGH HARBOUR & ASSOCIATES LLP FROM AN OCTOBER 2006 FIELD SURVEY.

4. NORTH ORIENTATION IS TRUE NORTH BASED ON GPS OBSERVATIONS TAKEN AT THE TIME OF THE FIELD SURVEY.

5. UNDERGROUND UTILITIES, STRUCTURES AND FACILITIES HAVE BEEN SHOWN FROM SURFACE LOCATIONS AND MEASUREMENTS OBTAINED FROM A FIELD SURVEY. THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHER UTILITIES WHICH THE EXISTENCE OF ARE NOT KNOWN. SIZE, TYPE AND LOCATION OF ALL UTILITIES AND STRUCTURES MUST BE VERIFIED BY PROPER AUTHORITIES PRIOR TO ANY AND ALL CONSTRUCTION. CALL DIG SAFE PRIOR TO SUBSURFACE ACTIVITY.

6. SUBJECT TO ANY STATEMENT OF FACTS THAT AN UP-TO-DATE ABSTRACT OF TITLE WOULD DISCLOSE.

7. SUBJECT TO ALL RIGHTS, EASEMENTS, COVENANTS OR RESTRICTIONS OF RECORD.

8. LATITUDE/LONGITUDE/ELEVATIONS WERE OBTAINED UTILIZING NGS CORS BASE STATION NAMED "CTGR". LATITUDE/LONGITUDE ARE REFERENCED TO NAD83 CONNECTICUT ZONE. COORDINATES SHOWN, IF ANY, ARE EXPRESSED IN U.S. SURVEY FEET. ELEVATIONS ARE REFERENCED TO NAVD83. TOP OF STRUCTURE HEIGHT AS SHOWN, IF ANY, DETERMINED BY VERTICAL ANGLE OR BY ACTUAL LOCATION. INFORMATION SHOWN BASED ON FAA 2C CERTIFICATION ACCURACY LEVEL DEFINED AS:
HORIZONTAL: ±50 FEET / 15 METERS
VERTICAL: ±20 FEET / 6 METERS

9. SITE FALLS WITHIN ZONE "C" DEFINED AS AREAS OF MINIMAL FLOODING AS SHOWN ON FLOOD INSURANCE RATE MAP, TOWN OF GROTON, CONNECTICUT, NEW LONDON COUNTY, PANEL 2 OF 11 COMMUNITY PANEL NUMBER 090097 0002 C. REVISED AUGUST 15, 1984.

10. WETLAND SHOWN BASE ON FIELD DELINEATED POINTS ESTABLISHED BY VANASSE HANGER BRUSTLIN, INC. DATED 10-30-08.

MAP REFERENCES:

1. ASSESSOR'S TAX MAP TOWN OF LEDYARD CONNECTICUT, SHEET 133 OF 144, PREPARED BY CHARLES A. MAGUIRE & ASSOCIATES, INC.

((()))
Optasite

OPTASITE, INC.
1 RESEARCH DRIVE, SUITE 200C
WESTBOROUGH, MA 01581

Drawing Copyright © 2006 Clough Harbour & Associates LLP

CHA

CLOUGH HARBOUR & ASSOCIATES LLP
2139 Stiles Deane Highway, Suite 212 Rocky Hill, CT 06067-2336
Main: (860) 257-4557 www.cloughharbour.com

CHA PROJECT NO:
15363 - 1006 - 1601

NO.	SUBMITTAL
0	11/14/06 ISSUED FOR REVIEW
BY: PAL	CHK: PAL APP'D: JPS
1	11/22/06 REVISED PER COMMENTS
BY: PAL	CHK: PAL APP'D: JPS
2	12/07/06 REVISED PER COMMENTS
BY: PAL	CHK: PAL APP'D: JPS
3	12/08/06 CHANGED TOWER HEIGHT
BY: PAL	CHK: PAL APP'D: JPS

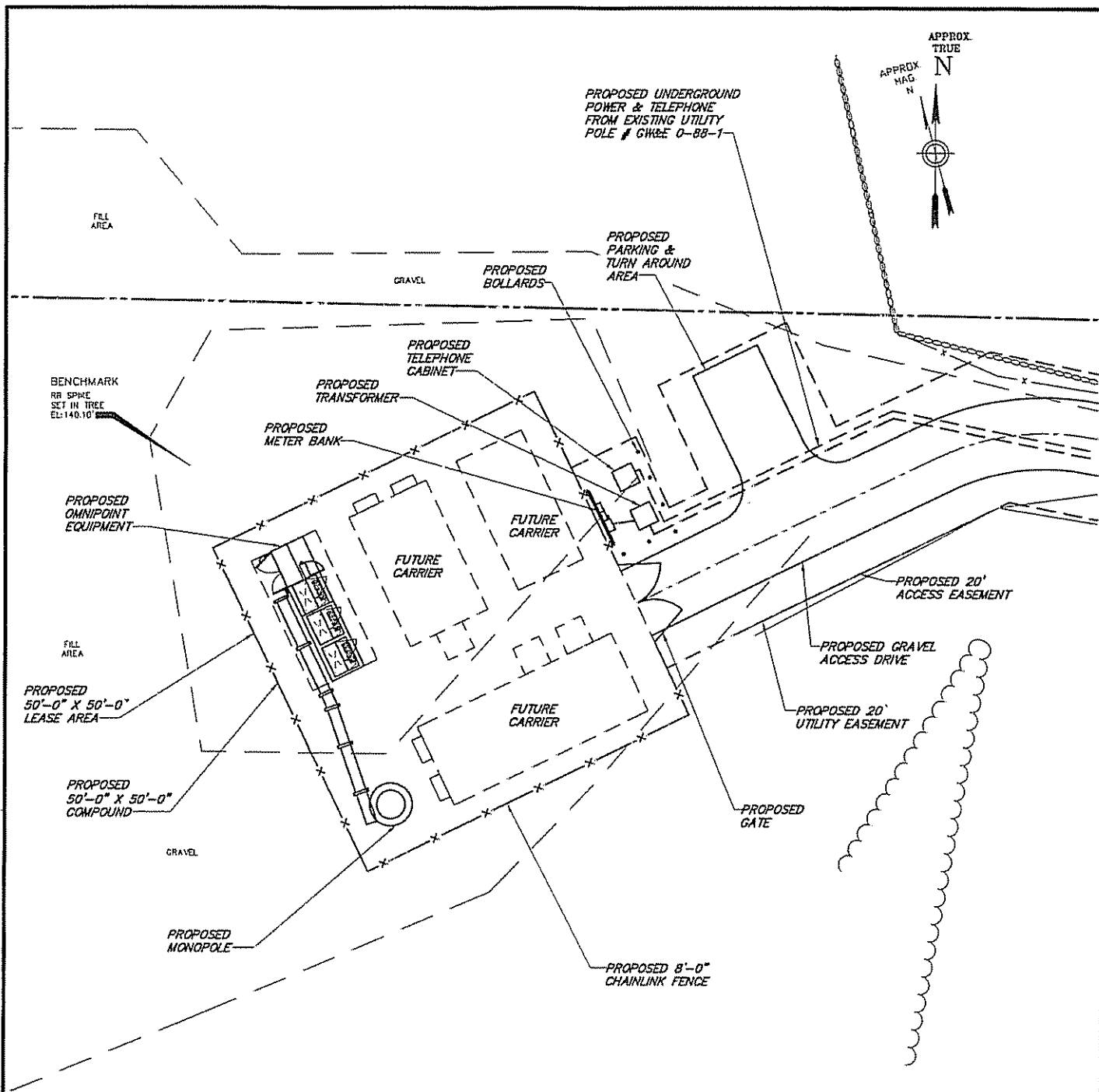
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER TO ALTER THIS DOCUMENT.

SITE ID:
CT-999-0108
SITE NAME:
NEW LONDON
SITE ADDRESS:
1294 PLEASANT VALLEY
ROAD NORTH
GROTON, CT 06340
NEW LONDON COUNTY

SHEET TITLE
SITE ACCESS MAP

SHEET NUMBER

A02



1 COMPOUND PLAN
 SCALE: 1" = 20'
 0 10 20
 SCALE IN FEET

BASEMAP NOTES:

1. BASEMAP INFORMATION OBTAINED FROM A SURVEY PERFORMED BY CLOUGH HARBOUR & ASSOCIATES LLP IN OCTOBER 2006.

Drawing Copyright © 2006 Clough Harbour & Associates LLP

CHA

CLOUGH HARBOUR & ASSOCIATES LLP
 2130 Glen Denea Highway, Suite 212 Rocky Hill, CT 06067-2336
 Tel: (860) 337-4557 • www.cloughharbour.com

CHA PROJ. NO. - 13363-100B

Optasite

OPTASITE, INC.
 1 RESEARCH DRIVE, SUITE 200C
 WESTBOROUGH, MA 01581

SITE ID:
 CT-999-0108
 SITE NAME:
 NEW LONDON
 SITE ADDRESS:
 1294 PLEASANT VALLEY ROAD NORTH
 GROTON, CT 06340
 NEW LONDON COUNTY

SHEET TITLE:
 COMPOUND PLAN

DATE:
 12/07/06

REVISION:
 2

SITE EVALUATION REPORT

I. LOCATION

- A. COORDINATES: 41°-23'-59.9" N, 72°04'45.2" W
- B. GROUND ELEVATION: 142' AMSL
- C. USGS MAP: New London, CT and Uncasville, CT
- D. SITE ADDRESS: 1294 Pleasant Valley Road North, Groton , CT
- E. ZONING WITHIN ¼ MILE OF SITE: Land within ¼ mile of the proposed site is zoned RU 20.

II. DESCRIPTION

- A. SITE SIZE: 50' x 50'
LESSOR'S PARCEL: 3.66 acres
- B. TOWER TYPE/HEIGHT: Monopole/140' AGL
- C. SITE TOPOGRAPHY AND SURFACE: The site topography is relatively flat, however the access road is steep. The proposed site is located in the north-central portion of the parcel.
- D. SURROUNDING TERRAIN, VEGETATION, WETLANDS, OR WATER:
The lessor's parcel is largely undeveloped except for a dog kennel and grooming facilities. There is a small portion of wetlands 105 feet south of the Site.
- E. LAND USE WITHIN ¼ MILE OF SITE: Some of the ¼ mile radius surrounding the site is residential. To the west of the Site is a submarine base owned by the United States Navy and to the east is a United States Navy housing facility.

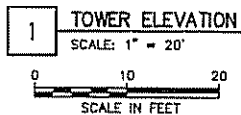
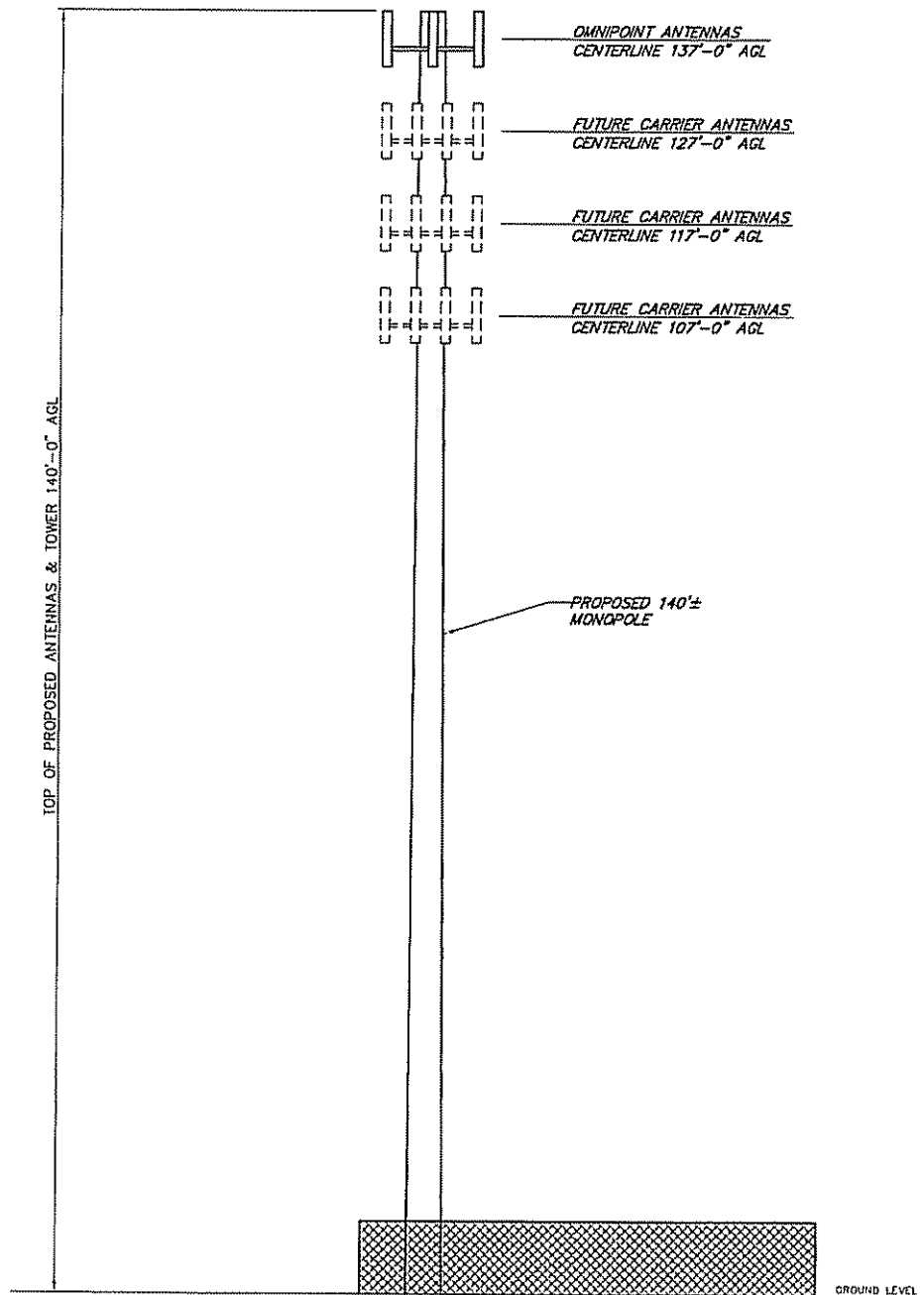
III. FACILITIES

- A. POWER COMPANY: Connecticut Light and Power
- B. POWER PROXIMITY TO SITE: Power is available from a distribution line that runs along Pleasant Valley Road North to a point on the property near the proposed site.
- C. TELEPHONE COMPANY: AT&T and SNET.

- D. PHONE SERVICE PROXIMITY: same as power.
- E. VEHICLE ACCESS TO SITE: Vehicular access to the Site would utilize existing access from Pleasant Valley Road North, then extend along an existing asphalt driveway 180 feet, then extend along an existing gravel driveway 60 feet, then end along a new gravel driveway a distance of approximately 130 feet.
- F. OBSTRUCTION: None.
- G. CLEARING AND FILL REQUIRED: Minimal clearing and minimal grading would be required for development of the access drive. No trees larger than 6" diameter would be removed. The site only requires a 130 foot addition to an existing gravel driveway. Development of the site compound will require minimal clearing and minimal grading. Detailed plans would be provided to the Connecticut Siting Council in a Development and Management Plan after Council approval of the proposed Facility.

IV. LEGAL

- A. PURCHASE [] LEASE [X]
- B. OWNER: JFM Enterprises, LLC
- C. ADDRESS: 1276 Pleasant Valley Road North, Groton CT 06340
- D. DEED ON FILE AT: New London County Registry of Deeds
Vol. 774, page 624



Drawing Copyright © 2006 Clough Harbour & Associates LLP

CHA

CLOUGH HARBOUR & ASSOCIATES LLP
2130 East Drive Highway, Suite 219 - Rocky Hill, CT 06067-2338
Phone: (860) 237-4527 • www.cha-ct.com

CHA PROJ. NO. = 15363-1006

Optasite

OPTASITE, INC.
1 RESEARCH DRIVE SUITE 200C
WESTBOROUGH, MA 01581

SITE ID:
CT-999-0108
SITE NAME:
NEW LONDON
SITE ADDRESS:

1294 PLEASANT VALLEY ROAD NORTH
GROTON, CT 06340
NEW LONDON COUNTY

SHEET TITLE:
TOWER ELEVATION

DATE:
12/08/06

REVISION:
2

FACILITIES AND EQUIPMENT SPECIFICATION
(NEW TOWER & EQUIPMENT)

I. TOWER SPECIFICATIONS:

A. MANUFACTURER: TBD

B. TYPE: Monopole

C. HEIGHT: 140' DIMENSIONS: Approx. 5' diameter at base
Approx. 1 ½' diameter at top

II. TOWER LOADING:

A. T-MOBILE – up to 12 panel antennas

1. MODEL: Panel antennas, model TBD

2. DIMENSIONS: Approximately 5' in length

3. POSITION ON TOWER: Antenna centerline of 137' AGL on full
platforms

4. TRANSMISSION LINES: up to 18 internal to the monopole

B. Future carriers - TBD

III. ENGINEERING ANALYSIS AND CERTIFICATION:

In accordance with Electronic Industries Association Standard EIA/TIA-222-E
“Structural Standards for Steel Antenna Towers and Antenna Support Structures”
for New London County, the tower would be designed to withstand pressures
equivalent to a 115 MPH wind with three-quarter inch solid ice accumulation. The
foundation design would be based on soil conditions at the site.

ENVIRONMENTAL ASSESSMENT STATEMENT

I. PHYSICAL IMPACT

A. WATER FLOW AND QUALITY

No water flow and/or water quality changes are anticipated as a result of the construction or operation of the Facility. The equipment used will discharge no pollutants to wetland and watercourse areas or to area groundwater. Best management practices will be used during construction to control storm water and erosion.

B. AIR QUALITY

Under ordinary operating conditions, the equipment that would be used at this Facility would emit no air pollutants of any kind. For limited periods during power outages, a portable generator might be utilized.

C. LAND

Minimal clearing and minimal grading would be required for development of the access drive. Development of the site compound will require minimal clearing and grading. The remaining land of the lessor would remain unchanged by the construction and operation of the Facility.

D. NOISE

The equipment to be in operation at the proposed site after construction would emit no noise other than the installed heating, air conditioning and ventilation systems. A generator would be employed during power outages. Some noise is anticipated during cell site construction, which is expected to take approximately four to six weeks.

E. POWER DENSITY

The worst-case calculation of power density for operation of T-Mobile's antennas at the Facility would be approximately 2.6431% of the applicable FCC/ANSI standards.

F. VISIBILITY


The potential visibility of the proposed Facility was assessed using a viewshed map (attached) with an approximate two-mile radius. As shown, the primary areas of visibility would be to the west of the Site. Most of the areas of year-round visibility would be over open water of the Thames River in the area of the submarine base.

II. SCENIC, NATURAL, HISTORIC & RECREATIONAL VALUES


The parcel on which the site is located appears to exhibit no scenic, natural or recreational characteristics that would be affected by the proposed site. Review under the National Environmental Policy Act, including the Connecticut Department of Environmental Protection Natural Diversity Data Base and the State Historic Preservation Officer, is pending.

***Town of
Groton
Connecticut***


Legend

 Proposed Monopole Location (Includes area of visibility approximately 500 feet around facility)














Photographs - To be determined

 Photographic Locations (Color coded to correspond to areas of visibility)









**Year Round Visibility
(Approximately 584 Acres; Results to be finalized pending balloon float and in-field reconnaissance)*

 Anticipated Seasonal Visibility
(To be determined pending balloon float and in-field reconnaissance)





Protected Properties (CT DEP)

-  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 (Municipal)

-  Cemetery
-  Preservation
-  Conservation
-  Existing Preserved Open Space
-  Recreation
-  General Recreation
-  School
-  Uncategorized

Other Symbols

-  DEP Boat Launches
-  Scenic Road (State and Local)
-  Town Line
-  Protected Properties (Federal)

**Note: Approximately 495 acres of the total year-round visibility occurs over open water on the Thames River. Visibility contained within the US Naval Reservation is approximately 47 acres.*