

# REQUEST FOR PROPOSAL

## Town of Norwich - Cellular Service Provider for Existing Communications Tower lease

**ISSUE DATE:** August 13, 2025

**QUESTIONS DUE BY:** August 28, 2025 4:00 pm

**DUE DATE and TIME:** September 24, 2025 4:00 pm

### **Request for Proposals:**

The Town of Norwich, Vermont is soliciting proposals from qualified Cellular Service Providers to lease currently unoccupied space and install appropriate wireless telecommunications equipment onto the Town's existing 180' Wireless Communications Tower at 24-26 New Boston Road, Norwich, VT 05055.

### **Introduction and Background:**

The Town of Norwich owns a 180' telecommunications tower constructed in 2013. The Tower is located on an approximately 25.8 acre parcel of Town owned land currently occupied by the Norwich DPW. The street address is 24-26 New Boston Road, Norwich, VT with coordinates of latitude 43°44'7.21" North and longitude 72°18'47.64" West.

The associated telecommunications "compound" consists of a 40'x40' chain linked fenced area with a 10'x12' equipment shelter (powered by a propane-powered emergency generator) located on the ground adjacent to the tower. Please see attached site plans and design specifications.

Currently the Town would like to find a tenant, or tenants, who would be interested in leasing equipment space on the tower and providing enhanced cellular service to the surrounding area.

Please see as addenda to this RFP four (4) documents detailing specific technical aspects of the 1) Site, 2) Tower, 3) Public Service Board Order, 4) Certificate of Public Good.

### **Proposal Information:**

**Proposals are due no later than 4:00 pm September 24, 2025.**

Questions shall be directed in writing, by 4pm on August 28, 2025, to Brennan Duffy, Town Manager, PO

Box 376, Norwich, VT 05055 or [bduffy@norwich.vt.us](mailto:bduffy@norwich.vt.us)

A site visit is encouraged and can be arranged by contacting the Town Manager.

In order to be considered responsive to this RFP, each submission shall send an electronic copy labeled TON – Cellular Services RFP Response via email to [bduffy@norwich.vt.us](mailto:bduffy@norwich.vt.us) by the date stipulated above.

## **Proposal Expectations and Requirements**

Proposals will be evaluated based on responsiveness to the RFP. Successful companies must demonstrate that they have the equipment, financial resources, and proven ability to provide the services required.

In order to assist in the evaluation process, please include the following information in the technical proposal:

### **A. Cover Letter**

### **B. Statement of Capability**

**1. Contact Information** - List the name of the company, address, contact person, phone number, and e-mail address.

**3. Firm's Capabilities** - Briefly describe three (3) similar projects which your company has completed in the past ten (10) years. Please provide references for each project.

### **C. Methodology**

1. Provide detail on the proposed Installation Type.
2. Provide detail on Construction Access and Needs.
3. Provide detail on site plans once completed.
4. Provide detail on Connectivity (provider and technology).
5. Provide a propagation map of expected coverage.
6. Provide detail on power configuration and longevity.

### **D. Lease Terms**

Provide a detailed description of a proposed annual lease agreement with the Town. Terms of a proposed lease agreement will be evaluated in making a decision.

## **Town Rights:**

The Town reserves the right to negotiate the lease terms with any and all companies that submit a proposal.

All proposals become the property of the Town upon submission. The cost of preparing, submitting, and presenting a proposal is the sole expense of the proposer. Revisions to the request for proposal will be posted on the Town's website. The Town of Norwich reserves the right to modify any technical and submission requirements associated with this request for proposals. The Town of Norwich reserves the right to reject any or all proposals or to award contracts in whole or in part, if this is held to be in the Town's best interest.

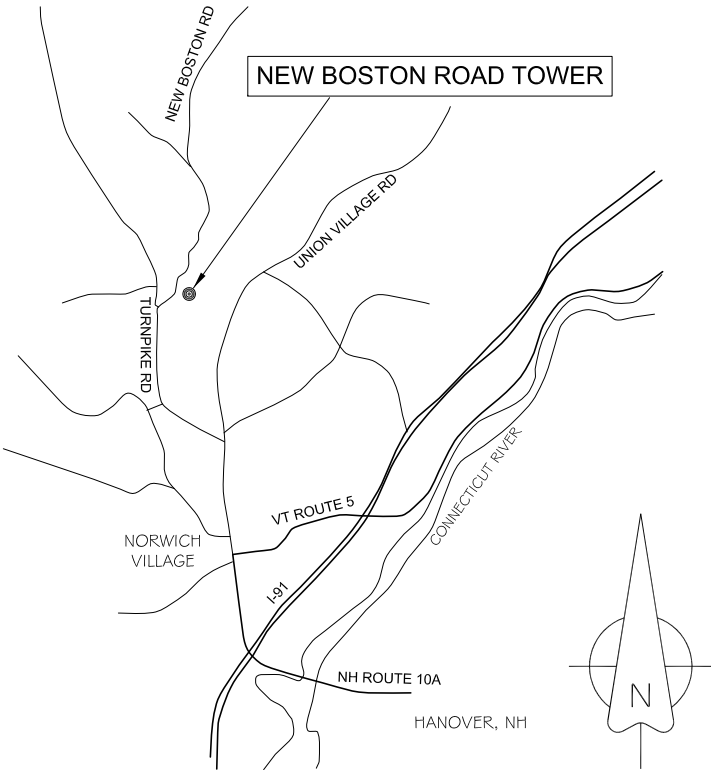
All plans, data, reports, and materials, in digital and hard copy form, used or created for this project will be delivered to and become the property of the Town upon completion.

**Scope of Work:**

The Town of Norwich is seeking a qualified cellular service provider to lease equipment space at the town's existing wireless telecommunications facility. The company would install appropriate equipment on the existing 180' tower during the construction/installation phase. The selected company will be provided with full access to the facility for the installation process and ongoing maintenance/servicing of equipment. The selected company will be responsible for all permitting and applicable approvals related to this new installation.

**Addenda:**

- 1) Site Plan
- 2) Tower Design specs
- 3) PSB Order, 9-11-2013
- 4) CPG #8103

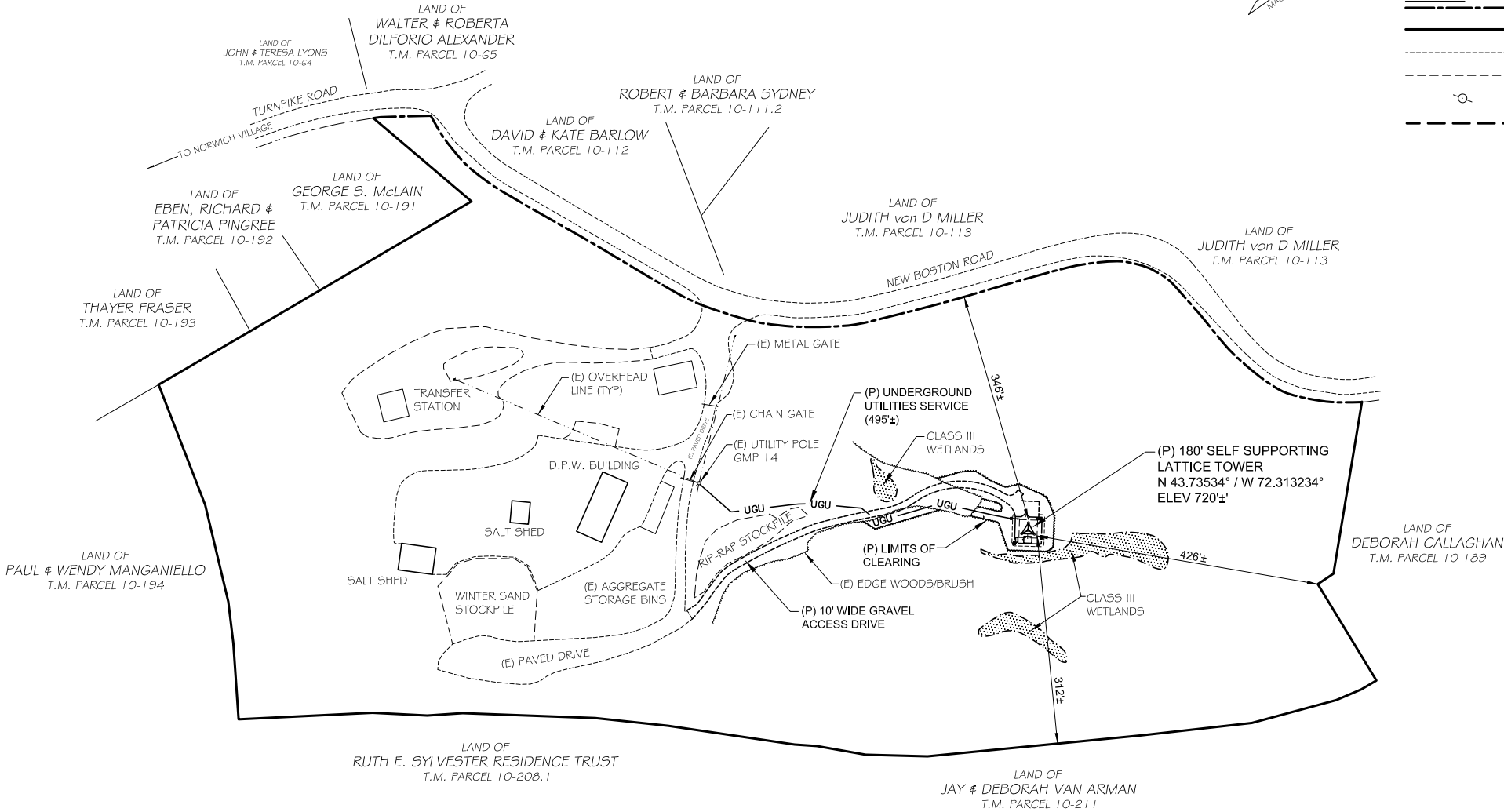
|   |  |  |  |   |  |   |  |                             |  |  |  |  |  |   |  |   |  |                 |  |                             |  |                            |  |  |  |             |  |
|---|--|--|--|---|--|---|--|-----------------------------|--|--|--|--|--|---|--|---|--|-----------------|--|-----------------------------|--|----------------------------|--|--|--|-------------|--|
| PROJECT INFORMATION   |  |  |  | SITE: NEW BOSTON ROAD TOWER   |  |   |  |                             |  |  |  |  |  |   |  |   |  |                 |  |                             |  |                            |  |  |  |             |  |
| SCOPE OF WORK:  |  | UNMANNED COMMUNICATIONS FACILITY; 180' SELF-SUPPORTING LATTICE TOWER, INSTALLATION OF ANTENNA AND RADIO EQUIPMENT WITHIN 40' x 40' FENCED COMPOUND |  |   |  |   |  |                             |  |  |  |  |  |   |  |   |  |                 |  |                             |  |                            |  |  |  |             |  |
| SITE ADDRESS:   |  | 24 NEW BOSTON ROAD<br>NORWICH , VERMONT  |  |   |  |   |  |                             |  |  |  |  |  |   |  |   |  |                 |  |                             |  |                            |  |  |  |             |  |
| PROPERTY OWNER:   |  | TOWN OF NORWICH  |  |   |  |   |  |                             |  |  |  |  |  |   |  |   |  |                 |  |                             |  |                            |  |  |  |             |  |
| LATITUDE:   |  | 43.735338°   |  | LONGITUDE:  |  | -72.313234°   |  | ELEVATION:                  |  | 720'± AMSL   |  | JURISDICTION:  |  | TOWN OF NORWICH, WINDSOR COUNTY, STATE OF VERMONT |  |   |  |                 |  |                             |  |                            |  |  |  |             |  |
| CURRENT USE:  |  | DEPARTMENT OF PUBLIC WORKS FACILITY  |  | PROPOSED USE:   |  | ADDITION OF TELECOMMUNICATIONS FACILITY   |  | NAME OF APPLICANT:          |  | TOWN OF NORWICH  |  |  |  |   |  |   |  |                 |  |                             |  |                            |  |  |  |             |  |
| RF REVISION DATE: 00/00/00  |  |  |  | LOCATION MAP  |  |   |  |                             |  | APPLICABLE BUILDING CODES & STANDARDS  |  |  |  |   |  |   |  |                 |  |                             |  |                            |  |  |  |             |  |
| DRAWING INDEX   |  |  |  | REV   |  | <div>DIRECTIONS:<br/>FROM NORWICH VILLAGE, PROCEED NORTH ON VT ROUTE 5 (MAIN ST), THROUGH THE VILLAGE TO TURNPIKE ROAD ON LEFT. PROCEED NORTHWEST ON TURNPIKE ROAD 1.0 MILES TO NEW BOSTON ROAD ON RIGHT. CONTINUE 500' NORTH ON NEW BOSTON ROAD TO THE ENTRANCE TO THE NORWICH DEPARTMENT OF PUBLIC WORKS FACILITY. BEAR LEFT UP HILL THROUGH TWO GATES TO THE DRIVE TO THE FACILITY ON LEFT AT TOP OF HILL.</div> <div>SITE ACCESS: LOCKED GATE</div>  |  |                             |  |  |  | <div>SUBCONTRACTOR'S WORK SHALL COMPLY WITH PROJECT STANDARDS AND SPECIFICATIONS. SUBCONTRACTOR WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION. THE EDITION OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.</div> <div>BUILDING CODE:<br/>VERMONT FIRE &amp; BUILDING SAFTEY CODE AND N.F.P.A. 70 NATIONAL ELECTRICAL CODE.</div> <div>FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL, METHODS OF CONSTRUCTION, OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.</div> |  |   |  |   |  |                 |  |                             |  |                            |  |  |  |             |  |
| 01 TITLE SHEET  |  | 02 OVERALL SITE PLAN   |  | 03 DETAILED SITE PLAN   |  |   |  |                             |  |  |  | 04 ELEVATIONS  |  | 05 NOTES  |  | 06 COMPOUND DETAILS   |  | 07 SITE DETAILS |  | 08 EROSION CONTROL PLAN     |  | 09 EROSION CONTROL DETAILS |  |  |  |             |  |
| A/E DOCUMENT APPROVALS  |  |  |  |   |  |   |  |                             |  | <div>PROJECT DESIGN TEAM</div> <div>PROJECT MANAGER<br/>NEIL FULTON<br/>TOWN MANAGER<br/>TOWN OF NORWICH<br/>300 MAIN STREET<br/>NORWICH, VT 05055</div> <div>SURVEY &amp; DRAFTING<br/>CHASE &amp; CHASE SURVEYORS &amp; SEPTIC DESIGNERS, INC.<br/>301 NORTH MAIN STREET<br/>BARRE, VT 05641</div> <div>SITE GRADING, DRAINAGE AND EROSION CONTROL<br/>BERNARD X. CHENETTE, PE<br/>CHENETTE ASSOCIATES, PC<br/>69 PLATEAU DRIVE - BERLIN<br/>BARRE, VT 05641</div> |  |  |  |   |  |   |  |                 |  |                             |  |                            |  |  |  |             |  |
| TITLE   |  | SIGNATURE  |  |   |  | DATE  |  |                             |  |  |  |  |  |   |  |   |  |                 |  |                             |  |                            |  |  |  |             |  |
| TOWN OF NORWICH:  |  |  |  |   |  |   |  |                             |  |  |  |  |  |   |  |   |  |                 |  |                             |  |                            |  |  |  |             |  |
| LANDLORD/OWNER:   |  |  |  |   |  |   |  |                             |  |  |  |  |  |   |  |   |  |                 |  |                             |  |                            |  |  |  |             |  |
| CONSTRUCTION MANAGER:   |  |  |  |   |  |   |  |                             |  |  |  |  |  |   |  |   |  |                 |  |                             |  |                            |  |  |  |             |  |
| RF ENGINEERS/OEM:   |  |  |  |   |  |   |  |                             |  |  |  |  |  |   |  |   |  |                 |  |                             |  |                            |  |  |  |             |  |
| THE FOLLOWING PARTIES HEREBY APPROVE AND ACCEPT THESE DOCUMENTS AND AUTHORIZE THE CONTRACTOR TO PROCEED WITH THE CONSTRUCTION DESCRIBED HEREIN, ALL DOCUMENTS ARE SUBJECT TO REVIEW BY THE LOCAL BUILDING DEPARTMENT AND MAY IMPOSE CHANGES OR MODIFICATIONS. |  |  |  |   |  |   |  |                             |  |  |  |  |  |   |  |   |  |                 |  |                             |  |                            |  |  |  |             |  |
| CONTACT & UTILITY INFORMATION   |  |  |  |   |  |   |  |                             |  |  |  |  |  |   |  |   |  |                 |  |                             |  |                            |  |  |  |             |  |
| CONTACT ENGINEERING:  |  | CONTACT CONSTRUCTION:  |  | CONTACT NEIL FULTON   |  | CONTACT NEIL FULTON   |  | COMPANY TOWN OF NORWICH     |  | COMPANY TOWN OF NORWICH  |  | PHONE NO (802) 649-1419  |  | PHONE NO (802) 649-1419                           |  |   |  |                 |  |                             |  |                            |  |  |  |             |  |
| UTILITIES: POWER:   |  | CAROL BURKE  |  | GREEN MOUNTAIN POWER  |  | (802) 234-5740 x 192  |  |                             |  |  |  |  |  |   |  |   |  |                 |  |                             |  |                            |  |  |  |             |  |
| TELECOM:  |  |  |  |   |  |   |  |                             |  |  |  |  |  |   |  |   |  |                 |  |                             |  |                            |  |  |  |             |  |
| TOWN OF NORWICH VERMONT   |  |  |  | 300 MAIN STREET<br>NORWICH, VT 05055<br>TEL. (802) 649-1419<br>FAX (802) 649-0123 |  |   |  | SITE: NEW BOSTON ROAD TOWER |  |  |  | 24 NEW BOSTON ROAD<br>NORWICH, VERMONT 05055<br>WINDSOR COUNTY   |  |   |  | SURVEY & DRAFTING<br>CHASE & CHASE SURVEYORS & SEPTIC DESIGNERS, INC.<br>301 NORTH MAIN STREET<br>BARRE, VT 05641 |  |                 |  | 4/22/13 - ISSUED FOR REVIEW |  |                            |  |  |  | TITLE SHEET |  |
| NO.   |  | DATE   |  | REVISIONS   |  | BY  |  | CHK                         |  | APPD   |  | SCALE: AS NOTED  |  | DESIGNED BY: N/A                                  |  | DRAWN BY: KKJ   |  | N/A             |  | DRAWING NUMBER              |  | REV                        |  |  |  |             |  |
|   |  |  |  |   |  |   |  |                             |  |  |  |  |  |   |  |   |  |                 |  | 01                          |  |                            |  |  |  |             |  |

PROJECT SITE DATA

SETBACKS (FROM STRUCTURE BASE):  
EAST BOUNDARY: 312±  
NORTH BOUNDARY: 426±  
NEW BOSTON RD.: 346±  
D.P.W. BUILDING: 590±  
  
TOTAL AREA OF DISTURBANCE : 0.62 AC.  
  
NEW IMPERVIOUS SURFACE: 9000 SQ.FT±

GENERAL NOTES

1. THIS PLAN IS BASED ON THE FOLLOWING SOURCES OF INFORMATION:  
A. A TOPOGRAPHIC SURVEY OF THE PROJECT SITE PERFORMED NOVEMBER 27, 2012 BY CHASE & CHASE SURVEYORS & SEPTIC DESIGNERS, INC.  
B. AN OVERLAY OF A PLAN ENTITLED "TOWN OF NORWICH, NEW BOSTON ROAD, NORWICH, VERMONT, RADIO TOWER SITE PLAN", DATED JULY 2, 2010 BY AMERICAN CONSULTING ENGINEERS & SURVEYORS, AS PROVIDED TO THE OFFICE BY A.C.E.S.  
C. TAX PARCEL MAPPING OF THE TOWN OF NORWICH.
2. PROPERTY LINE DATA IS BASED ON THE PLAN NOTED IN 1.B. ABOVE.
3. THE WET AREAS SHOWN HEREON HAVE NOT BEEN FIELD DELINEATED BY A QUALIFIED WETLANDS SPECIALIST. HOWEVER, THE AREAS WERE REVIEWED BY THE WETLANDS DIVISION OF THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION IN OCTOBER 2010 AND DETERMINED TO BE NON-REGULATORY, CLASS 3 WETLANDS. NO DISTRUBANCE IS PROPOSED WITHIN THE WET AREA AS MAPPED.
4. NO NOISE, NOISE, DUST OR ODOR WILL RESULT FROM THIS FACILITY.
5. THE FACILITY IS UNMANNED AND DOES NOT REQUIRE POTABLE WATER SUPPLY OR SEWAGE DISPOSAL.
6. CONNECTION OF ELECTRICAL AND TELECOM UTILITIES TO BE DETERMINED BY THE APPROPRIATE UTILITY COMPANY.
7. SUBCONTRACTOR SHALL LOCATE ALL UTILITIES PRIOR TO EXCAVATING.
8. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS REQUIRED FOR CONSTRUCTION.
9. SUBCONTRACTOR TO VERIFY ANTENNA ELEVATION AND AZIMUTH WITH RF ENGINEERING PRIOR TO INSTALLATION. SEE ANTENNA CONFIGURATION SHEETS FOR SITE SPECIFIC DETAILS.
10. APPLICANT DOES NOT PROPOSE ANY SIGNAGE IN ADDITION TO WHAT IS REQUIRED BY THE FCC.
11. NO LIGHTING IS PROPOSED FOR THE FACILITY.
12. FACILTY COMPOUND LAYOUT AS DIRECTED BY THE TOWN OF NORWICH.



OVERALL SITE PLAN  
SCALE: 1" = 100'

PROJECT SUMMARY

SITE NAME: NEW BOSTON ROAD TOWER  
SITE ADDRESS: 24 NEW BOSTON ROAD  
TAX MAP PARCEL: 10-190.1 & 10-190.2  
AREA OF PARCEL: 25 AC±  
CURRENT LAND USE: PUBLIC WORKS FACILITY  
APPLICANT: TOWN OF NORWICH  
300 MAIN STREET  
NORWICH, VT 05055

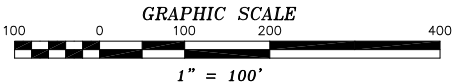
ZONING DISTRICT

TOWN OF NORWICH

HANDICAP REQUIREMENTS

THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAP ACCESS NOT REQUIRED.

CONTACT PERSON: NEIL FULTON  
CONTACT PHONE: (802)649-1419



DIG SAFE

The new Vermont Dig Safe state law requires that anyone who excavates within an underground utility easement or the area of a public right of way must notify utility companies at least 48 hours before digging. The utilities in Vermont which supply gas, electricity, telephone service, and cable television have many miles of underground facilities. In order to protect these underground facilities and meet the requirements of the law, the utilities have established a Public Utility Underground Facility Damage Prevention System called "DIG SAFE." One free phone call to the Center satisfies the law as all member utilities will be notified prior to the start of digging. So, call "DIG SAFE" before you dig--and be safe!

CALL 1-888-DIG-SAFE

TOWN OF NORWICH  
VERMONT

300 MAIN STREET  
NORWICH, VT 05055  
TEL. (802) 649-1419  
FAX (802) 649-0123

SITE: NEW  
BOSTON ROAD  
TOWER

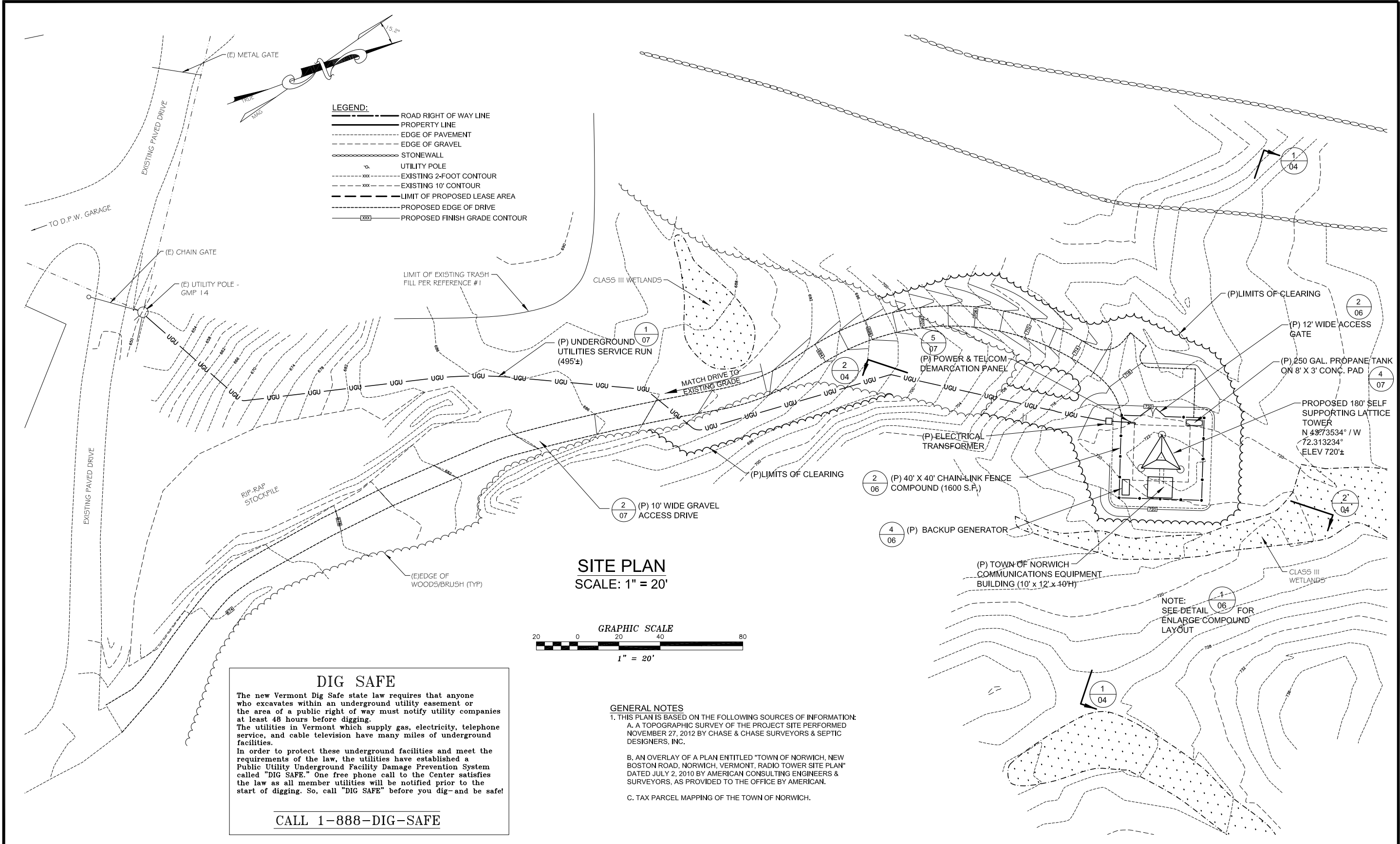
24 NEW BOSTON ROAD  
NORWICH, VERMONT 05055  
WINDSOR COUNTY

SURVEY & DRAFTING  
CHASE & CHASE SURVEYORS & SEPTIC DESIGNERS, INC.  
301 NORTH MAIN STREET  
BARRE, VT 05641

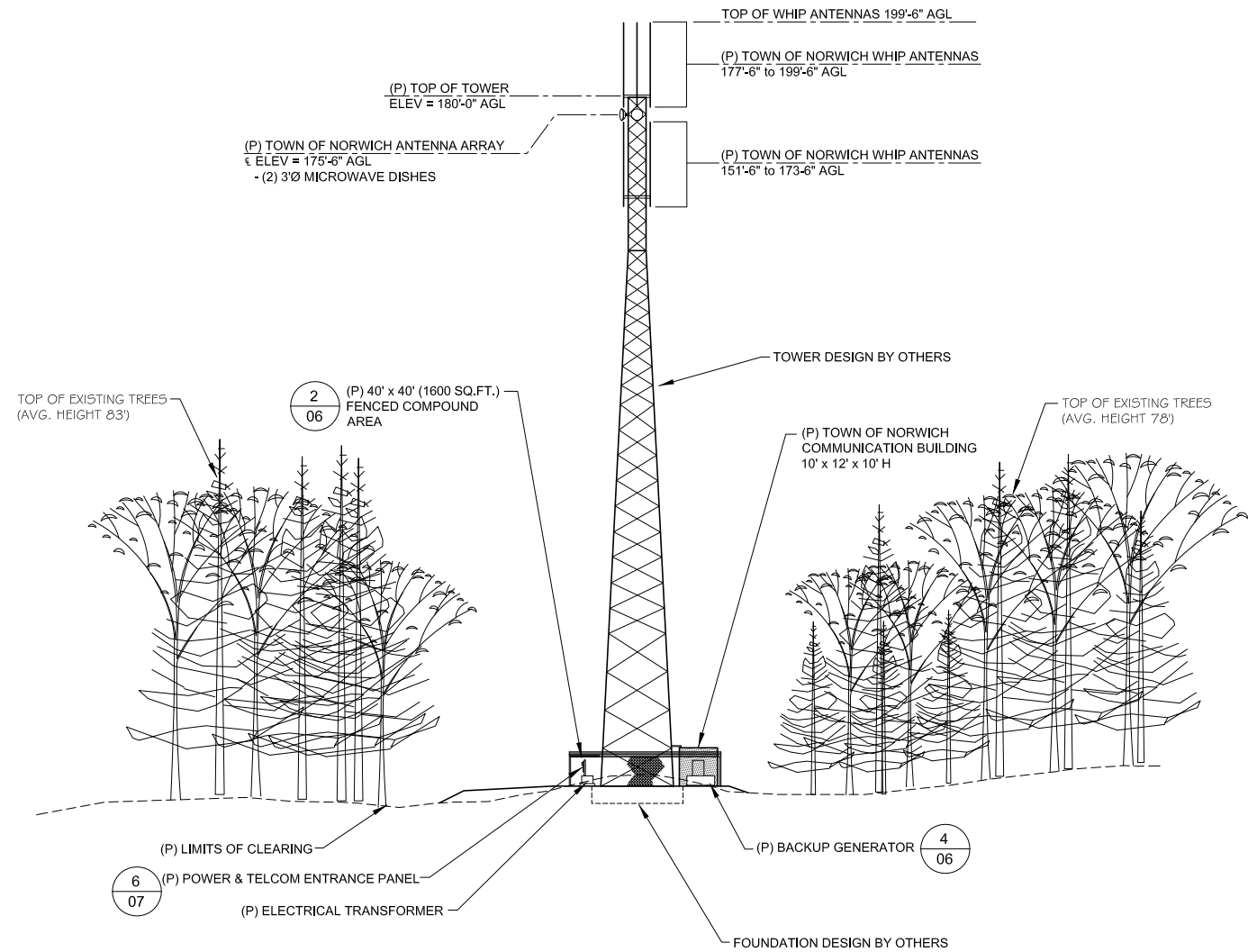
|                             |      |                  |
|-----------------------------|------|------------------|
| 4/22/13 - ISSUED FOR REVIEW |      |                  |
| NO.                         | DATE | REVISIONS        |
| SCALE: 1" = 100'            |      | DESIGNED BY: N/A |
|                             |      | DRAWN BY: KJ     |

OVERALL  
SITE PLAN

|                |  |     |
|----------------|--|-----|
| DRAWING NUMBER |  | REV |
| N/A            |  | 02  |



|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|----------------------------|---|-----------------------------------|--|--|-----------------------------|------|---------------------|-----------------------|-----|------|--|
| TOWN OF NORWICH<br>VERMONT | 300 MAIN STREET<br>NORWICH, VT 05055<br>TEL. (802) 649-1419<br>FAX (802) 649-0123 | SITE: NEW<br>BOSTON ROAD<br>TOWER | 24 NEW BOSTON ROAD<br>NORWICH, VERMONT 05055<br>WINDSOR COUNTY | SURVEY & DRAFTING<br>CHASE & CHASE SURVEYORS & SEPTIC DESIGNERS, INC.<br>301 NORTH MAIN STREET<br>BARRE, VT 05641                                |                             |      |                     | DETAILED<br>SITE PLAN |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  | SITE GRADING, DRAINAGE AND EROSION CONTROL<br>BERNARD X. CHENETTE, PE<br>CHENETTE ASSOCIATES, PC<br>69 PLATEAU DRIVE - BERLIN<br>BARRE, VT 05641 | 4/22/13 - ISSUED FOR REVIEW |      |                     |                       |     |      |  |
|                            |   |                                   |  |  | NO.                         | DATE | REVISIONS           | BY                    | CHK | APPD |  |
|                            |   |                                   |  |  | SCALE: 1" = 20'             |      | DESIGNED BY: BXC/NF | DRAWN BY: KJJ         |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                       |     |      |  |

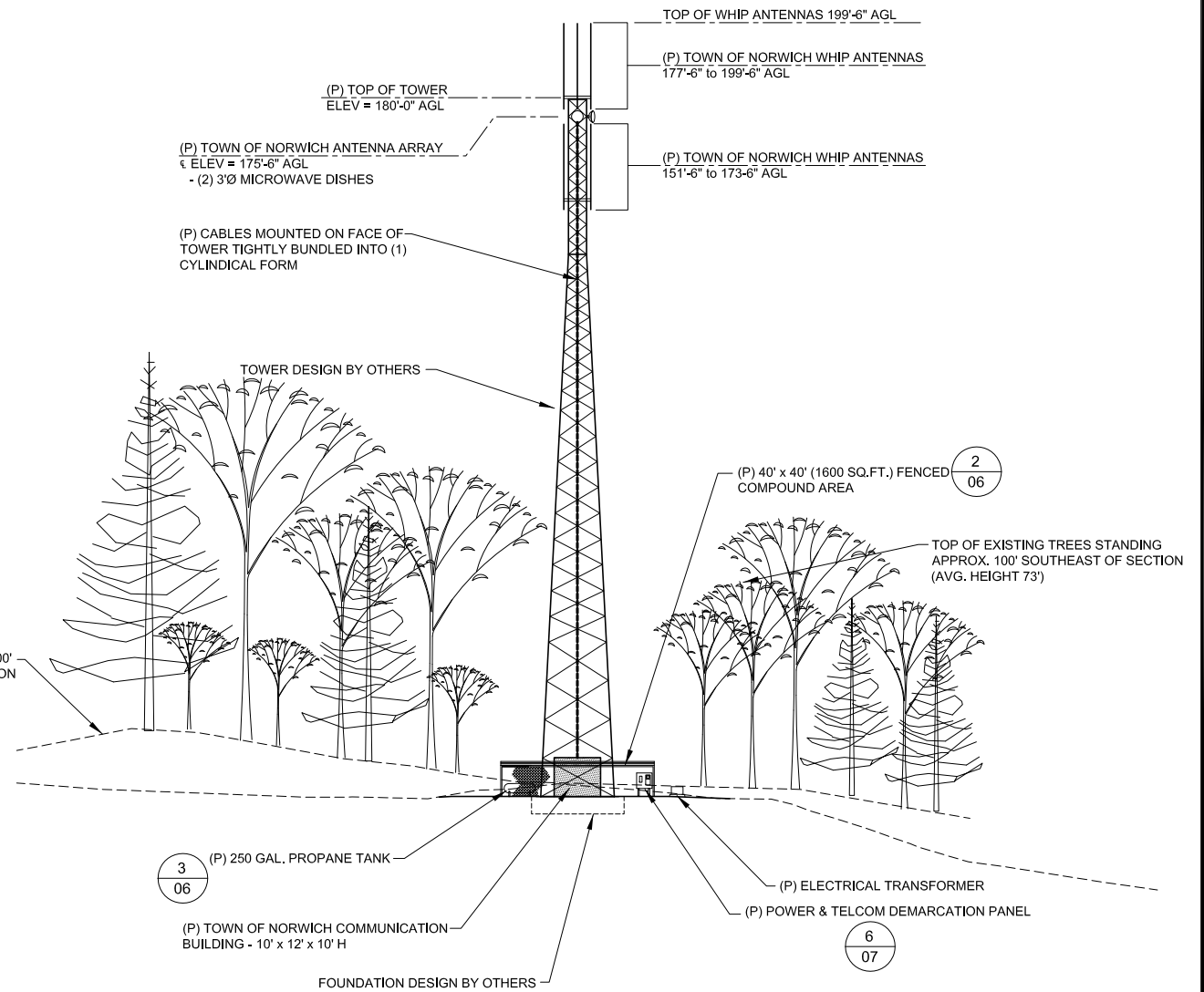


SOUTHEAST ELEVATION VIEW

SCALE: 1" = 20'H, 1" = 20' V

### GENERAL NOTES

1. TOWER SCHEMATIC PROVIDED BY FRED A. NUDD CORPORATION.
2. TOWER FINISH TO BE HOT-DIPPED GALVANIZED.
3. TOWER FOUNDATION DESIGN BY OTHERS.



NORTHEAST ELEVATION VIEW

SCALE: 1" = 20'H, 1" = 20' V

TOWN OF NORWICH  
VERMONT

300 MAIN STREET  
NORWICH, VT 05055  
TEL. (802) 649-1419  
FAX (802) 649-0123

**SITE: NEW  
BOSTON ROAD  
TOWER**

24 NEW BOSTON ROAD  
NORWICH, VERMONT 05055  
WINDSOR COUNTY

**SURVEY & DRAFTING**  
CHASE & CHASE SURVEYORS & SEPTIC DESIGNERS, INC.  
301 NORTH MAIN STREET  
BARRE, VT 05641

**SITE GRADING, DRAINAGE AND EROSION CONTROL**  
BERNARD X. CHENETTE, PE  
CHENETTE ASSOCIATES, PC  
69 PLATEAU DRIVE - BERLIN  
BARRE, VT 05641

|                             |                 |              |             |
|-----------------------------|-----------------|--------------|-------------|
| 4/22/13 - ISSUED FOR REVIEW |                 |              |             |
| NO.                         | DATE            | REVISIONS    | BY CHK APPD |
| SCALE: AS NOTED             | DESIGNED BY: KR | DRAWN BY: KJ |             |

### ELEVATIONS

|     | DRAWING NUMBER | REV |
|-----|----------------|-----|
| N/A | 04             |     |

GENERAL NOTES

1. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:
- CONTRACTOR -PRIME CONTRACTOR  
SUBCONTRACTOR -GENERAL CONTRACTOR (CONSTRUCTION)  
OWNER -VERMONT TELEPHONE COMPANY  
OEM -ORIGINAL EQUIPMENT MANUFACTURER
2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR.
3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
4. DRAWINGS PROVIDED HERE ARE NOT TO SCALE UNLESS OTHERWISE NOTED AND ARE INTENDED TO SHOW OUTLINE ONLY.
5. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
6. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
7. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CONTRACTOR.
8. SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND T1 CABLES, GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWING. ROUTING OF CONDUIT FOR POWER AND TELCO SHALL BE APPROVED BY OWNER OF SITE.
9. THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
10. SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OYNER'S DESIGNATED LOCATION
11. SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.
- SITE PLAN NOTES
1. THE SITE PLANS ARE BASED ON A TOPOGRAPHIC SURVEY OF THE PROJECT SITE PREFORMED NOVEMBER 27, 2012 BY CHASE & CHASE SURVEYORS & SEPTIC DESIGNERS, INC.
2. PROPERTY LINE DATA IS BASED ON A PLAN ENTITLED "TOWN OF NORWICH, NEW BOSTON ROAD, NORWICH, VERMONT, RADIO TOWER SITE PLAN" DATED JULY 2, 2010 BY AMERICAN CONSULTING ENGINEERS & SURVEYORS, AS PROVIDED TO THE OFFICE BY AMERICAN.
3. NO NOISE, NOISE, DUST OR ODOR WILL RESULT FROM THIS FACILITY.
4. THE FACILITY IS UNMANNED AND DOES NOT REQUIRE POTABLE WATER SUPPLY OR SEWAGE DISPOSAL.
5. CONNECTION OF ELECTRICAL AND TELECOM UTILITIES TO BE DETERMINED BY THE APPROPRIATE UTILITY COMPANY.
6. SUBCONTRACTOR SHALL LOCATE ALL UTILITIES PRIOR TO EXCAVATING.
7. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS REQUIRED FOR CONSTRUCTION.
8. SUBCONTRACTOR TO VERIFY ANTENNA ELEVATION AND AZIMUTH WITH RF ENGINEERING PRIOR TO INSTALLATION. SEE ANTENNA CONFIGURATION SHEETS FOR SITE SPECIFIC DETAILS.
9. APPLICANT DOES NOT PROPOSE ANY SIGNAGE IN ADDITION TO WHAT IS REQUIRED BY THE FCC.
10. NO LIGHTING IS PROPOSED FOR THE FACILITY.
11. FACILITY COMPOUND LAYOUT AS DIRECTED BY THE TOWN OF NORWICH.

SITE WORK GENERAL NOTES

1. THE SUBCONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
2. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK AREA, SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY CONTRACTOR. EXTREME CAUTION SHOULD BE USED BY THE SUBCONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. SUBCONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING & EXCAVATION.
3. AIL SITE WORK SHALL BE AS INDICATED ON THE DRAWINGS AND PROJECT SPECIFICATIONS.
4. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES, TOPSOIL AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
5. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF CONTRACTOR, OWNER AND/OR LOCAL UTILITIES.
6. SUBCONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION
7. THE SUBCONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE OWNERS SPECIFICATION FOR SITE SIGNAGE.

SOIL COMPACTION NOTES  
FOR SLAB ON GRADE:

1. EXCAVATE AS REQUIRED TO REMOVE VEGETATION AND TOPSOIL. EXPOSE UNDISTURBED NATURAL SUBGRADE AND PLACE SPECIFIED MATERIALS AS REQUIRED.
2. COMPACTION CERTIFICATION: AN INSPECTION AND WRITTEN CERTIFICATION BY A QUALIFIED GEOTECHNICAL TECHNICIAN OR ENGINEER IS ACCEPTABLE.
3. AS AN ALTERNATIVE TO INSPECTION AND WRITTEN CERTIFICATION, THE "UNDISTURBED SOIL" BASE SHALL BE COMPACTED WITH COMPACTION EQUIPMENT", LISTED BELOW, TO AT LEAST 90% MODIFIED PROCTOR MAXIMUM DENSITY PER ASTM D 1557 METHOD
4. COMPACTED SUBBASE SHALL BE UNIFORM AND LEVELED. PROVIDE 6" MINIMUM CRUSHED STONE OR GRAVEL COMPACTED IN 3" LIFTS ABOVE COMPACTED SOIL. GRAVEL SHALL BE NATURAL OR CRUSHED WITH 100% PASSING 1" SIEVE.
5. AS AN ALTERNATIVE TO ITEMS 2 AND 3 PROOF ROLL THE SUBGRADE SOILS WITH 5 PASSES OF A MEDIUM SIZED VIBRATORY PLATE COMPACTOR (SUCH AS BOMAG BPR 30/38) OR HAND-OPERATED SINGLE DRUM VIBRATORY ROLLER (SUCH AS BOMAG BW 55E). ANY SOFT AREAS THAT ARE ENCOUNTERED SHOULD BE REMOVED AND REPLACED WITH A WELL-GRADED GRANULAR FILL AND COMPACTED AS STATED ABOVE.
6. SOIL COMPACTION SHALL BE PERFORMED IN ACCORDANCE WITH TECHNICAL SPECIFICATION FOR CONSTRUCTION OF RADIO ACCESS NETWORK SITES.
- FOR OTHER AREAS ON SITE:
7. ALL OTHER AREAS OF FILL ON SITE INCLUDING ACCESS DRIVE, PARKING AND TURNAROUND AREAS SHALL BE PREPARED PER 1. ABOVE AND SPECIFIED MATERIALS PER APPLICABLE DETAIL PLACED IN MAXIMUM 12" LIFTS AND COMPACTED TO 90% MODIFIED PROCTOR MAXIMUM DENSITY.
8. CERTIFICATION OF COMPACTION SHALL BE PROVIDED AS PER 2. ABOVE.

COMPACTION EQUIPMENT:

HAND OPERATED DOUBLE DRUM, VIBRATORY ROLLER, VIBRATORY PLATE COMPACTOR OR JUMPING JACK COMPACTOR.

EROSION PREVENTION AND SEDIMENT CONTROL  
CONSTRUCTION NOTES:

- PROJECT IS DESIGNED TO ADHERE TO THE TERMS OF GENERAL PERMIT 3-9020 (2006, AMENDED 2008) FOR STORMWATER RUNOFF FROM CONSTRUCTION SITES. CONTRACTOR SHALL COMPLY WITH ITEMS LISTED BELOW. SITE OWNER/CONTRACTOR SHALL READ AND UNDERSTAND THE TERMS OF GENERAL PERMIT 3-9020 (2006, AMENDED 2008) AND THE LOW RISK SITE HANDBOOK FOR EROSION PREVENTION AND SEDIMENT CONTROL (VERMONT DEC, 2006).
1. PROJECT IS EXEMPT FROM STATE JURISDICTION FOR CONSTRUCTION GENERAL PERMITS (< 1 ac.). BECAUSE OF THE LOCATION AND STEEP SLOPES, CONTRACTOR SHALL ADHERE TO THE STANDARDS ESTABLISH BY THE 3-9020 PERMIT, AND ANY AND ALL ADDITIONAL CONDITIONS AS MIGHT BE IMPOSED BY THE TOWN OF NORWICH.
2. ALL AREAS MUST HAVE TEMPORARY OR PERMANENT STABILIZATION WITHIN 7 DAYS OF INITIAL DISTURBANCE. AFTER THIS TIME ANY DISTURBANCE IN THE AREA MUST BE STABILIZED AT THE END EACH WORK DAY.
3. ALL EROSION CONTROL MEASURES MUST BE INSPECTED AT A FREQUENCY OF EVERY 3 DAYS OR WITHIN 24 HOURS OF A PRECIPITATION EVENT CAUSING RUNOFF TO LEAVE CONSTRUCTION SITE, AND REPLACED OR REPAIRED AS NECCESARY.
- WINTER SEASON CONSTRUCTION NOTES  
(OCTOBER 15th - APRIL 15th)
- ADDITIONAL EROSION PREVENTION AND SEDIMENT CONTROL MEASURES MUST BE IMPLEMENTED DURING THE WINTER CONSTRUCTION SEASON IF EARTH DISTURBANCE IS PLANNED DURING THIS TIME. CONTRACTOR/LANDOWNER SHALL READ AND UNDERSTAND THE FOLLOWING ITEMS:
1. NON-VEGETATIVE PROTECTION MUST BE INSTALLED AFTER SEPTEMBER 15TH TO BARE SOILS INCLUDING EROSION CONTROL BLANKETS AND/OR HEAVY MULCH LAYER.
2. APPLY A MINIMUM OF 3 INCHES OF MULCH WITH AN 80-90% GROUND COVER. MULCH SHALL BE TRACKED OR STABILIZED WITH NETTING IN OPEN AREAS VURNERABLE TO WIND.
3. PROVIDE ENLARGED ACCESS POINTS TO THE SITE, STABIZLED TO PROVIDE FOR SNOW STOCKPILING.
4. LIMITS OF DISTURBANCE MOVED OR REPLACED TO REFLECT BOUNDARY OF WINTER WORK.
5. CLEARED SNOW SHALL BE STOCKPILED DOWNSLOPE OF ALL AREAS OF DISTURBANCE AND OUT OF STORMWATER TREATMENT STRUCTURES.
6. A MINIMUM 25 FOOT BUFFER SHALL BE MAINTAINED ON PERIMETER CONTROLS SUCH AS SILT FENCE.
7. IN AREAS OF DISTURBANCE THAT DRAIN TO A WATERBODY WITHIN 100 FEET, TWO ROWS OF SILT FENCE MUST BE INSTALLED ALONG THE CONTOUR.
8. DRAINAGE STRUCTURES MUST BE KEPT FREE AND CLEAR OF SNOW AND ICE DAMS.
9. SILT FENCE AND OTHER PRACTICES MUST BE INSTALLED AHEAD OF FROZEN GROUND.
10. DISTURBED SOILS MUST BE STABILIZED AT THE END OF EACH WORK DAY, UNLESS NO PRECIPITATION IS FORECAST WITHIN 24 HOURS AND WORK WILL RESUME WITHIN 24 HOURS IN THE SAME DISTURBED AREA. IN AREAS THAT COLLECT AND RETAIN RUNOFF SUCH AS HOUSE FOUNDATIONS AND UTILITY TRENCHES DAILY STABILIZATION IS NOT REQUIRED.
11. PRIOR TO STABILZIATION SNOW AND ICE SHALL BE REMOVED TO LESS THAN 1 INCH THICKNESS.

EROSION PREVENTION AND SEDIMENT CONTROL  
STABILZIATION NOTES:

1. N.A. GREEN S150 TURF REINFORECMENT FABRIC SHALL BE INSTALLED ON ALL SURFACES DISTRUBED BY THIS PROJECT NOT OTHERWISE SPECIFIED FOR STONE PROTECTION.
2. MATERIAL STOCKPILES SHALL BE RINGED WITH N.A. GREEN WS925 STRAW WATTLES IF THE SITE TO TO BE LEFT UNATTENDED. MULCH SHALL BE APPLIED IF NO WORK IS TO BE CONDUCTED FOR 3 DAYS OR MORE.
3. DISTURBED SOILS TO BE STABILZED AS FOLLOWS:
- CHANNEL SLOPE  
< 5% N.A. GREEN S150 OR EQUAL  
> 5% STONE RIP RAP OR NORTH AMERICAN GREEN SC250
- SIDE SLOPES  
>=2:1 NORTH AMERICAN GREEN S150 OR EQUAL
4. LIME MAY BE APPLIED TO ACHIEVE SOIL PH OF 6.5 FOR AREAS TO BE SEEDED.
5. APPLY COMMERCIAL FERTILIZER AT 1.0 LBS/1,000SQ. FT OF N20 AND K20, IF REQUIRED. NO PHOSPHOROUS SHALL BE APPLIED.
6. LIME AND FERTILIZER SHALL BE MIXED THOROUGHLY INTO THE SEEDBED DURING SOIL PREPARATION.
7. GRASSED CHANNELS SHALL HAVE A MIN. OF 3" OF TOPSOIL PRIOR TO SEEDING.
8. DISTURBED SOILS SHALL BE SEEDED ACCORDING TO THE FOLLOWING TABLE:

|   |               |           |                  |
|---|---------------|-----------|------------------|
| SEEDING RATES FOR TEMPORARY STABILIZATION:  |               |           |                  |
| APRIL 15 - SEPT. 15: RYEGRASS (ANNUAL OR PERENNIAL: 20 LBS/ACRE)  |               |           |                  |
| SEPT. 15 - APRIL 15: WINTER RYE (120 LBS/ACRE)  |               |           |                  |
| SEEDING RATES FOR FINAL STABILIZATION:  |               |           |                  |
| CHOOSE FROM:  | VARIETY       | LBS./ACRE | LBS./1000 SQ.FT. |
| BIRDSFOOT TREFOIL   | EMPIRE/PARDEE | 5*        | 0.1              |
| OR  |               |           |                  |
| COMMON WHITE CLOVER   | COMMON        | 8         | 0.2              |
| PLUS  |               |           |                  |
| TALL FESCUE   | KY-31/REBEL   | 10        | 0.25             |
| PLUS  |               |           |                  |
| REDTOP  | COMMON        | 2         | 0.05             |
| OR  |               |           |                  |
| RYEGRASS (PERENNIAL)  | PENNFINE/LINN | 5         | 0.1              |
| * - MIX 2.5 LBS. EACH OF EMPIRE AND PARDEE OR 2.5 LBS. OR BIRDSFOOT AND 2.5 LBS. WHITE CLOVER PER ACRE. |               |           |                  |

TOWN OF NORWICH  
VERMONT

300 MAIN STREET  
NORWICH, VT 05055  
TEL. (802) 649-1419  
FAX (802) 649-0123

SITE: NEW  
BOSTON ROAD  
TOWER

24 NEW BOSTON ROAD  
NORWICH, VERMONT 05055  
WINDSOR COUNTY

SURVEY & DRAFTING  
CHASE & CHASE SURVEYORS & SEPTIC DESIGNERS, INC.  
301 NORTH MAIN STREET  
BARRE, VT 05641

SITE GRADING, DRAINAGE AND EROSION CONTROL  
BERNARD X. CHENETTE, PE  
CHENETTE ASSOCIATES, PC  
69 PLATEAU DRIVE - BERLIN  
BARRE, VT 05641

4/22/13 - ISSUED FOR REVIEW

NO. DATE REVISIONS BY CHK APPD

SCALE: AS NOTED DESIGNED BY: BXC DRAWN BY: KJK

NOTES

DRAWING NUMBER

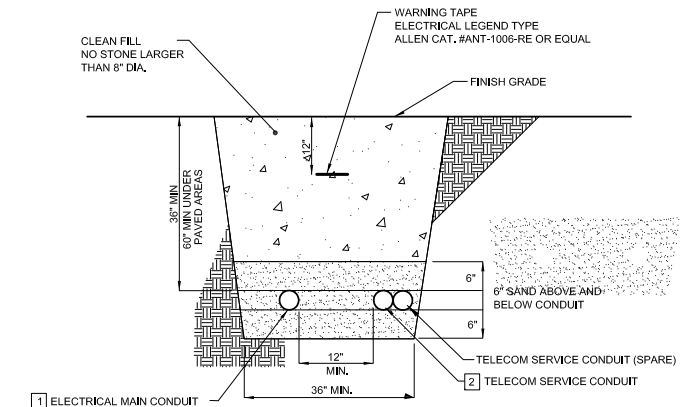
REV

N/A

05



EV



NOTE:  
ALL ELECTRICAL MAIN, ELECTRICAL SERVICE, TELEPHONE SERVICE AND CABLE TV SERVICE CONDUITS SHALL BE SCHEDULE 80 PVC.

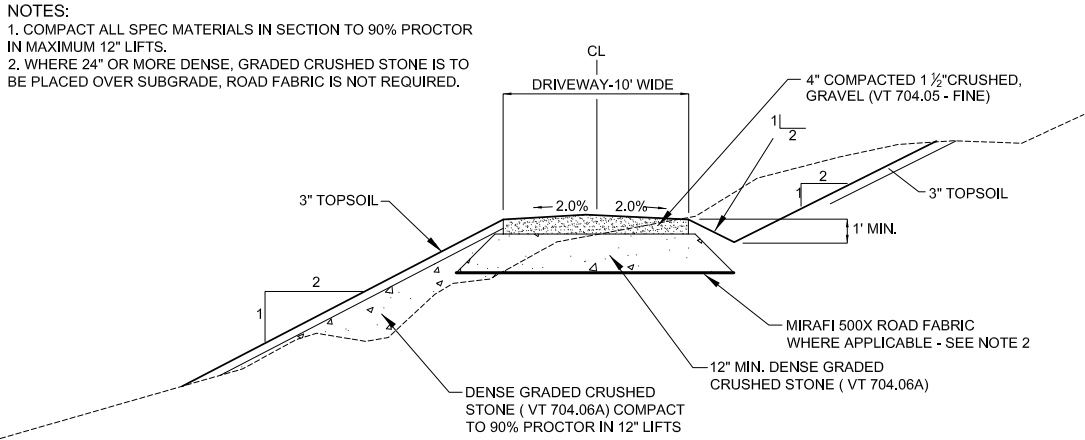
CONCRETE ENCASE ALL CONDUITS AT ALL UTILITY CROSSINGS. 10' MIN. EACH SIDE OF ALL CULVERT, WATER & SEWER CROSSINGS.

- KEYED NOTES:
- 1 ELECTRICAL MAIN CONDUIT SHALL BE 4" UNLESS OTHERWISE NOTED.
  - 2 TELECOM SERVICE CONDUIT SHALL BE 4" AND SHALL MAINTAIN 12" OF SEPARATION FROM ELECTRIC.

DETAIL - ELECTRICAL & TELECOM TRENCH

NOT TO SCALE

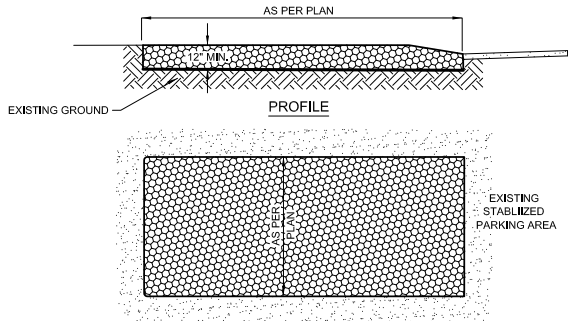
1  
07



DETAIL - GRAVEL ACCESS DRIVE/TURNAROUND

NOT TO SCALE

2  
07

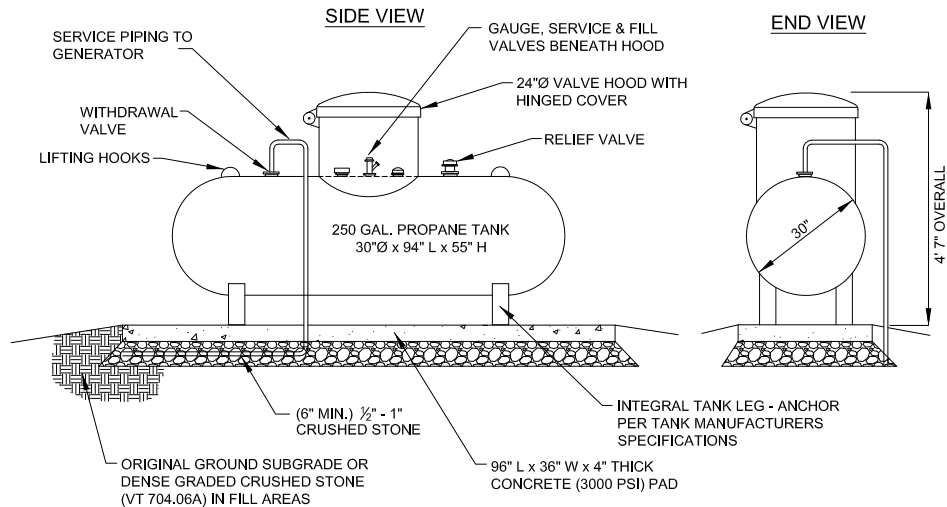


- NOTES:
- 1. STONE SHALL BE 1.5 TO 4 INCHES WITH A MINIMUM THICKNESS OF 12 INCHES.
  - 2. LENGTH, WIDTH AND RETURN RADIUS SHALL BE AS SHOWN ON THE APPLICABLE CONSTRUCTION STABILIZATION PLAN.
  - 3. MAINTENANCE OF ENTRANCE WILL BE NECESSARY TO PREVENT TRACKING OF SEDIMENT OFF SITE. THIS MAY INCLUDE ADDING STONE, AND/OR REMOVING AND REPLACING STONE.
  - 4. THE EMPLOYMENT OF APPROVED ALTERNATIVE METHODS OF REMOVING SEDIMENT FROM VEHICLE PRIOR TO EXITING SITE IS ENCOURAGED TO MINIMIZE REQUIRED MAINTENANCE OF STABILIZED ENTRANCE.

DETAIL - STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE

3  
07

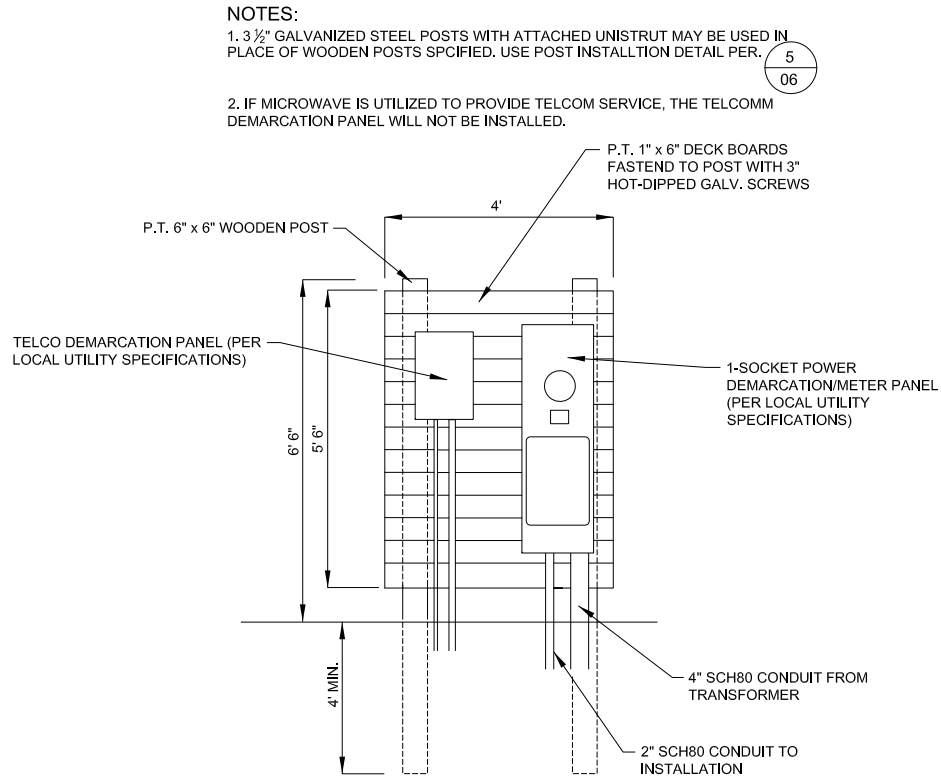


- NOTES:
- 1. PROPANE TANK TO BE AMERICAN WELDING & TANK MODEL #AWT250AGW, OR APPROVED EQUAL.
  - 2. TANK AND HOOD SHALL BE PAINTED WHITE.

DETAIL - 250 GALLON PROPANE TANK & MOUNTING PAD

NOT TO SCALE

4  
07



DETAIL - POWER & TELCOM DEMARCATION PANEL

NOT TO SCALE

6  
07

TOWN OF NORWICH  
VERMONT

300 MAIN STREET  
NORWICH, VT 05055  
TEL. (802) 649-1419  
FAX (802) 649-0123

SITE: NEW  
BOSTON ROAD  
TOWER

24 NEW BOSTON ROAD  
NORWICH, VERMONT 05055  
WINDSOR COUNTY

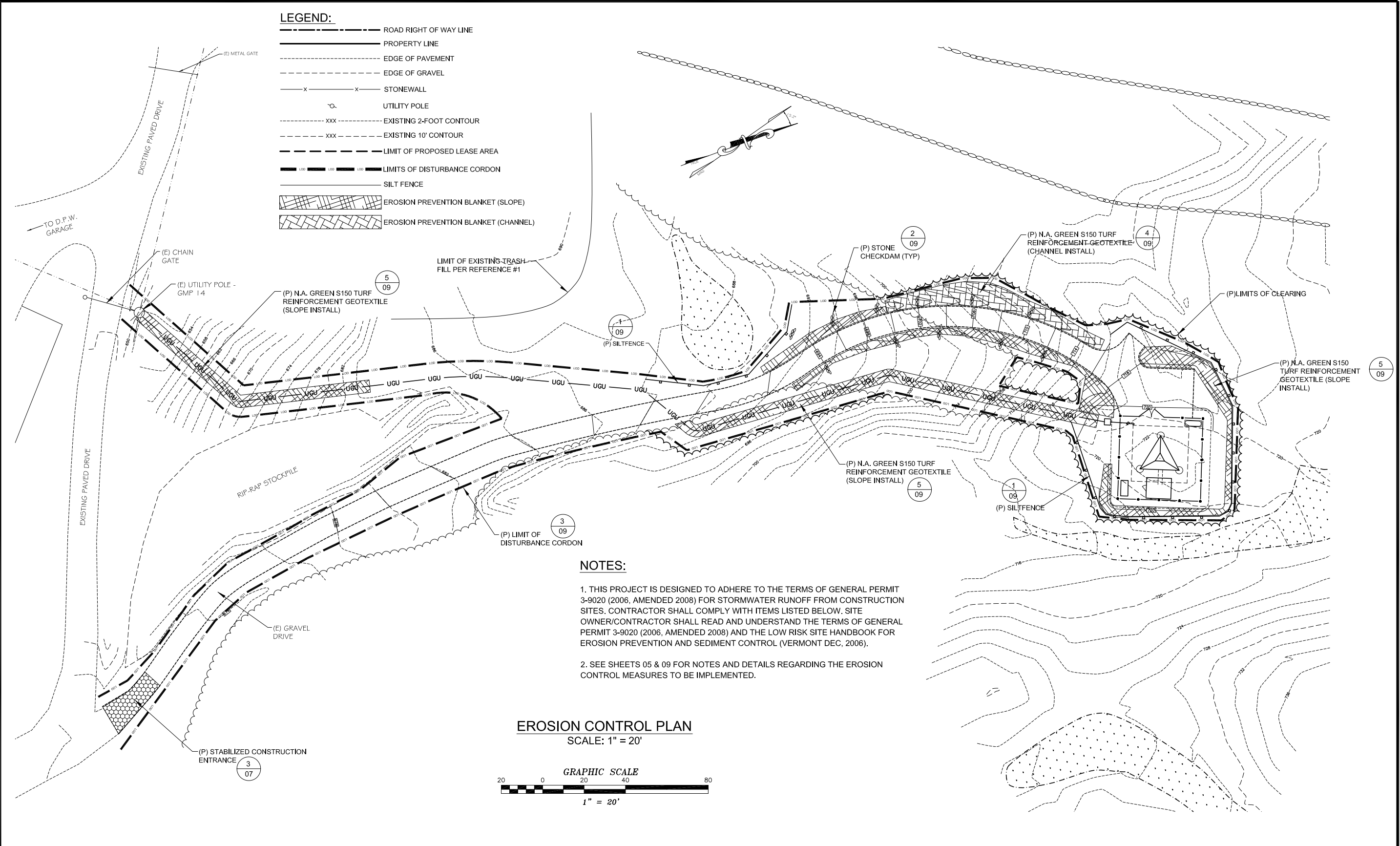
SURVEY & DRAFTING  
CHASE & CHASE SURVEYORS & SEPTIC DESIGNERS, INC.  
301 NORTH MAIN STREET  
BARRE, VT 05641

SITE GRADING, DRAINAGE AND EROSION CONTROL  
BERNARD X. CHENETTE, PE  
CHENETTE ASSOCIATES, PC  
69 PLATEAU DRIVE - BERLIN  
BARRE, VT 05641

|                             |                  |                |
|-----------------------------|------------------|----------------|
| 4/22/13 - ISSUED FOR REVIEW |                  |                |
| NO.                         | DATE             | REVISIONS      |
| SCALE: AS NOTED             | DESIGNED BY: N/A | DRAWN BY: K/KJ |

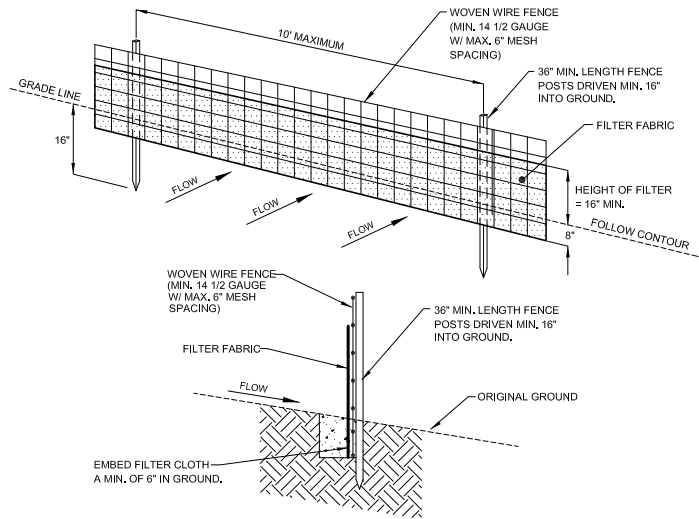
SITE  
DETAILS

|                |  |     |
|----------------|--|-----|
| DRAWING NUMBER |  | REV |
| N/A            |  | 07  |



|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|----------------------------|---|-----------------------------------|--|--|-----------------------------|------|---------------------|----------------------|-----|------|--|
| TOWN OF NORWICH<br>VERMONT | 300 MAIN STREET<br>NORWICH, VT 05055<br>TEL. (802) 649-1419<br>FAX (802) 649-0123 | SITE: NEW<br>BOSTON ROAD<br>TOWER | 24 NEW BOSTON ROAD<br>NORWICH, VERMONT 05055<br>WINDSOR COUNTY | SURVEY & DRAFTING<br>CHASE & CHASE SURVEYORS & SEPTIC DESIGNERS, INC.<br>301 NORTH MAIN STREET<br>BARRE, VT 05641                                |                             |      |                     | EROSION CONTROL PLAN |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  | SITE GRADING, DRAINAGE AND EROSION CONTROL<br>BERNARD X. CHENETTE, PE<br>CHENETTE ASSOCIATES, PC<br>69 PLATEAU DRIVE - BERLIN<br>BARRE, VT 05641 | 4/22/13 - ISSUED FOR REVIEW |      |                     |                      |     |      |  |
|                            |   |                                   |  |  | NO.                         | DATE | REVISIONS           | BY                   | CHK | APPD |  |
|                            |   |                                   |  |  | SCALE: 1" = 20'             |      | DESIGNED BY: BXC/KR | DRAWN BY: KJ/J       |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |
|                            |   |                                   |  |  |                             |      |                     |                      |     |      |  |

NOTE: FOR WINTER CONSTRUCTION, ALL SILT FENCE MUST BE IN PLACE PRIOR TO GROUND FREEZE-UP.



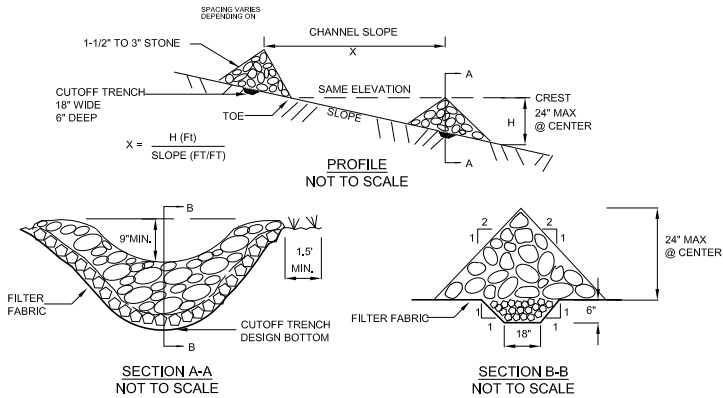
#### CONSTRUCTION SPECIFICATIONS

- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
- FILTER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 12 1/2 GAUGE, 6" MAXIMUM MESH OPENING.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
- PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

#### DETAIL - SILT FENCE

NOT TO SCALE

1  
09



#### CONSTRUCTION SPECIFICATIONS

- STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN IN THE PLAN.
- SET SPACING OF CHECK DAMS TO ASSUME THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
- EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
- PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
- ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE. MAXIMUM DRAINAGE AREA 2 ACRES.

#### DETAIL - TEMPORARY STONE CHECKDAM

NOT TO SCALE

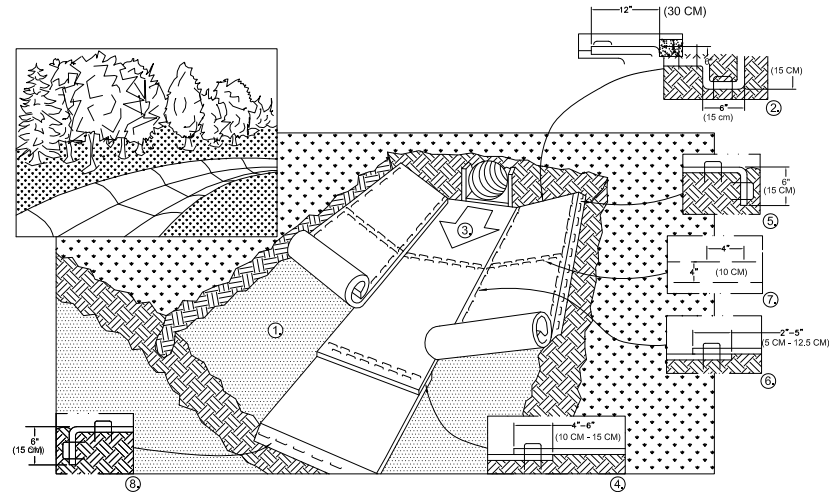
2  
09

- LIMIT OF DISTURBANCE CORDON SHALL BE 3-FOOT HIGH ORANGE "CONSTRUCTION" SAFETY FENCE OR APPROVED EQUIVALENT, AND SHALL BE LOCATED AS SHOWN ON THE SITE PLAN.
- SAID FENCE SHALL BE SUPPORTED BY STEEL "U" OR "T" TYPE POSTS PLACED AT MAXIMUM 16-FOOT INTERVALS.
- FENCE SHALL BE WIRE OR "ZIP" TIED TO THE SUPPORT POSTS.
- THE FENCE SHALL BE MAINTAINED IN A WORKMAN LIKE MANNER, AND SHALL REMAIN IN PLACE UNTIL FINAL SITE STABILIZATION IS ACHIEVED.

#### SPECIFICATION - LIMIT OF DISTURBANCE CORDON

NOT TO SCALE

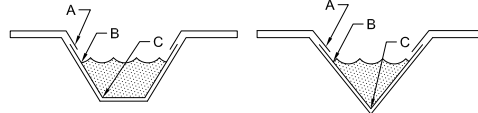
3  
09



- PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
- BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30 CM) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) ACROSS THE WIDTH OF THE BLANKET.
- ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
- PLACE CONSECUTIVE BLANKETS END OVER END (SHINGLE STYLE) WITH A 4" - 6" (10 CM - 15 CM) OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" (10 CM) APART AND 4" (10 CM) ON CENTER TO SECURE BLANKETS.
- FULL LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
- ADJACENT BLANKETS MUST BE OVERLAPPED APPROXIMATELY 2" - 5" (5 CM - 12.5 CM) (DEPENDING ON BLANKET TYPE) AND STAPLED.
- IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT (9 M - 12 M) INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" (10 CM) APART AND 4" (10 CM) ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
- THE TERMINAL END OF THE BLANKETS MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

NOTE:

\* IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY ANCHOR THE BLANKETS.



#### CRITICAL POINTS

- A. OVERLAPS AND SEAMS
- B. PROJECTED WATER LINE
- C. CHANNEL BOTTOM/SIDE SLOPE VERTICES

NOTE:

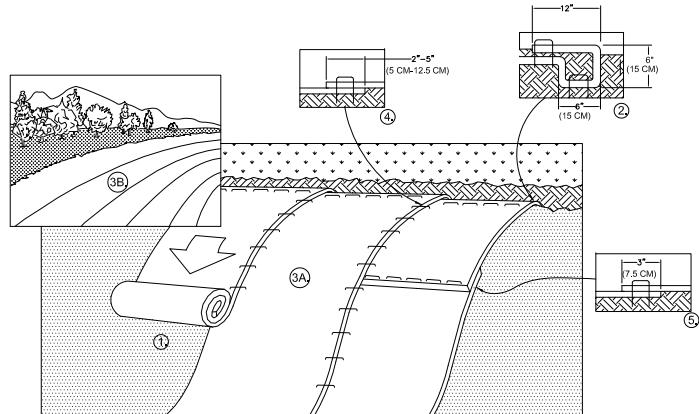
\* HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.

\*\* IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 cm) MAY BE NECESSARY TO PROPERLY ANCHOR THE BLANKETS.

#### DETAIL - TURF REINFORCEMENT GEOTEXTILE - CHANNEL INSTALLATION

NOT TO SCALE

4  
09



#### DETAIL - TURF REINFORCEMENT GEOTEXTILE - SLOPE INSTALLATION

NOT TO SCALE

5  
09

TOWN OF NORWICH  
VERMONT

300 MAIN STREET  
NORWICH, VT 05055  
TEL. (802) 649-1419  
FAX (802) 649-0123

SITE: NEW  
BOSTON ROAD  
TOWER

24 NEW BOSTON ROAD  
NORWICH, VERMONT 05055  
WINDSOR COUNTY

SURVEY & DRAFTING  
CHASE & CHASE SURVEYORS & SEPTIC DESIGNERS, INC.  
301 NORTH MAIN STREET  
BARRE, VT 05641

SITE GRADING, DRAINAGE AND EROSION CONTROL  
BERNARD X. CHENETTE, PE  
CHENETTE ASSOCIATES, PC  
69 PLATEAU DRIVE - BERLIN  
BARRE, VT 05641

|                             |                  |              |
|-----------------------------|------------------|--------------|
| 4/22/13 - ISSUED FOR REVIEW |                  |              |
| NO.                         | DATE             | REVISIONS    |
| BY: CHK APPD                |                  |              |
| SCALE: AS NOTED             | DESIGNED BY: BXC | DRAWN BY: KJ |

EROSION CONTROL  
DETAILS

|                |  |     |
|----------------|--|-----|
| DRAWING NUMBER |  | REV |
| N/A            |  | 09  |

## DESIGNED APPURTENANCE LOADING

| TYPE                                 | ELEVATION | TYPE                     | ELEVATION |
|--------------------------------------|-----------|--------------------------|-----------|
| (2) Celwave PD220                    | 185       | Nudd Side Arm            | 156       |
| (2) Celwave PD220                    | 185       | Nudd Side Arm            | 156       |
| (2) Celwave PD220                    | 185       | Nudd Side Arm            | 156       |
| 12' Low Profile Platform - Rotatable | 180       | Nudd Side Arm            | 156       |
| 4 FT DISH                            | 178.5     | Nudd 12' boom            | 148       |
| Nudd 12' boom                        | 175       | (6) 6' x 1' x 0.5' Panel | 148       |
| Nudd 12' boom                        | 175       | (6) 6' x 1' x 0.5' Panel | 148       |
| (6) 4' x 1' x 0.5' Panel             | 175       | (6) 6' x 1' x 0.5' Panel | 148       |
| (6) 4' x 1' x 0.5' Panel             | 175       | Nudd 12' boom            | 148       |
| (6) 4' x 1' x 0.5' Panel             | 175       | Nudd 12' boom            | 148       |
| 4 FT DISH                            | 175       | Nudd 12' boom            | 138       |
| Nudd 12' boom                        | 175       | (6) 6' x 1' x 0.5' Panel | 138       |
| (2) Celwave PD220                    | 163       | (6) 6' x 1' x 0.5' Panel | 138       |
| (2) Celwave PD220                    | 163       | (6) 6' x 1' x 0.5' Panel | 138       |
| (2) Celwave PD220                    | 163       | Nudd 12' boom            | 138       |
| Nudd Side Arm                        | 156       | Nudd 12' boom            | 138       |
| Nudd Side Arm                        | 156       |                          |           |

## MATERIAL STRENGTH

| GRADE    | Fy     | Fu     | GRADE | Fy     | Fu     |
|----------|--------|--------|-------|--------|--------|
| A500M-54 | 54 ksi | 70 ksi | A36   | 36 ksi | 58 ksi |

## TOWER DESIGN NOTES

- Tower is located in Windsor County, Vermont.
- Tower designed for Exposure C to the TIA-222-G Standard.
- Tower designed for a 90 mph basic wind in accordance with the TIA-222-G Standard.
- Tower is also designed for a 40 mph basic wind with 0.75 in ice. Ice is considered to increase in thickness with height.
- Deflections are based upon a 60 mph wind.
- Tower Structure Class III.
- Topographic Category 1 with Crest Height of 0.00 ft
- Weld together tower sections have flange connections.
- Connections use galvanized A325 bolts, nuts and locking devices. Installation per TIA/EIA-222 and AISC Specifications.
- Tower members are "hot dipped" galvanized in accordance with ASTM A123 and ASTM A153 Standards.
- Welds are fabricated with ER-70S-6 electrodes.
- TOWER RATING: 98.7%

ALL REACTIONS  
ARE FACTORED

MAX. CORNER REACTIONS AT BASE:

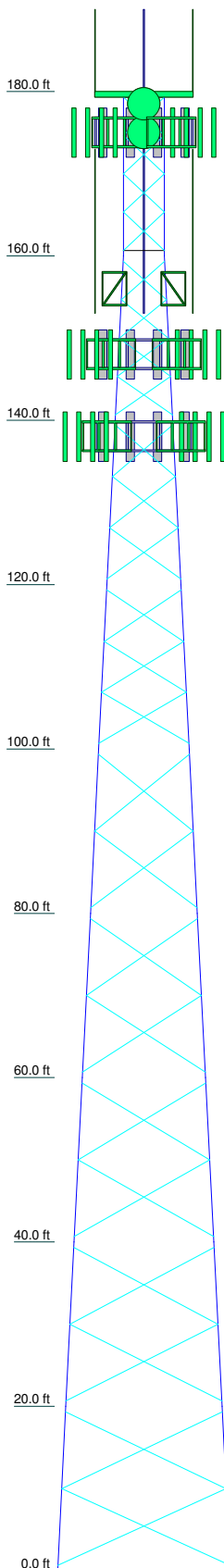
DOWN: 420444 lb  
UPLIFT: -380429 lb  
SHEAR: 41459 lb

AXIAL  
164260 lb  
SHEAR  
11740 lb  
MOMENT  
1329152 lb-ft

TORQUE 611 lb-ft  
40 mph WIND - 0.7500 in ICE

AXIAL  
49383 lb  
SHEAR  
67545 lb  
MOMENT  
7347058 lb-ft

TORQUE 1370 lb-ft  
REACTIONS - 90 mph WIND



| Section             | T1                | T2        | T3                | T4               | T5       | T6        | T7               | T8       | T9     |
|---------------------|-------------------|-----------|-------------------|------------------|----------|-----------|------------------|----------|--------|
| Legs                | P3x.216           | P4x.237   | P5x.258           | P6x.28           | P8x.322  | P8x.322   | P10x.365         |          |        |
| Leg Grade           |                   |           |                   |                  | A500M-54 |           |                  |          |        |
| Diagonals           | L1 3/4x1 3/4x3/16 | L2x2x3/16 | L2 1/2x2 1/2x3/16 | L2 1/2x2 1/2x1/4 | L3x3x1/4 | L3x3x5/16 | L3 1/2x3 1/2x1/4 | L4x4x1/4 |        |
| Diagonal Grade      |                   |           |                   |                  | A36      |           |                  |          |        |
| Top Girts           | L2x2x1/4          |           |                   |                  | N.A.     |           |                  |          |        |
| Bottom Girts        | L2x2x1/4          |           |                   |                  | N.A.     |           |                  |          |        |
| Face Width (ft)     | 5                 | 7         | 9                 | 11               | 13       | 15        | 17               | 19       | 21     |
| # Panels @ (ft)     | 8 @ 4.66667       | 3 @ 6.25  | 3 @ 6.22222       | 10 @ 9.33333     | 2096.2   | 3834.7    | 4183.9           |          |        |
| Weight (lb) 21999.6 | 887.6             | 1093.4    | 1440.6            | 2000.2           | 2611.9   | 2341.0    | 2996.2           | 3834.7   | 4183.9 |

|                |          |  |        |          |     |
|----------------|----------|--|--------|----------|-----|
| Phone:<br>FAX: | Job:     | <b>PRELIMINARY - NOT FOR FABRICATION</b>   |        |          |     |
|                | Project: | 180' SS Norwich, VT  |        |          |     |
|                | Client:  | Drawn by:  | App'd: |          |     |
|                | Code:    | TIA-222-G  | Date:  | 12/11/12 |     |
|                | Path:    | Z:\Bidding\Riskers Communications\KID 15078 180' SS Norwich 82 Tower\Layout 112-15078 Norwich.VT - 512.dwg |        |          |     |
|                |          |  |        | Scale:   | NTS |
|                |          |  |        | Dwg No.  | E-1 |

STATE OF VERMONT  
PUBLIC SERVICE BOARD

Docket No. 8103

Petition of the Town of Norwich for a certificate of )  
public good, pursuant to 30 V.S.A. § 248a, for the )  
installation of telecommunications equipment in )  
Norwich, Vermont )

Order entered: 9/11/2013

**I. INTRODUCTION**

In this Order, the Vermont Public Service Board ("Board") approves the application filed on July 22, 2013, by the Town of Norwich (the "Petitioner"), pursuant to 30 V.S.A. § 248a, and the Board's Amended Standards and Procedures Order ("Procedures Order"),<sup>1</sup> and grants the Petitioner a certificate of public good ("CPG") authorizing the installation of a new wireless telecommunications facility in Norwich, Vermont (the "Project").

**II. BACKGROUND**

This case involves a petition and prefiled testimony filed by the Petitioner requesting that the Board issue a CPG, pursuant to 30 V.S.A. § 248a, authorizing the installation of a new telecommunications facility.

On August 15, 2013, the Vermont Department of Public Service ("Department") filed a letter with the Board recommending that the Board issue an order approving the Project without further hearings or investigation.

---

<sup>1</sup>. *Amended order implementing standards and procedures for issuance of a certificate of public good for communications facilities pursuant to 30 V.S.A. § 248a*, Order issued August 10, 2011.

No other comments or requests for hearing regarding the Project have been filed with the Board.

The Board has determined that the petition and prefiled testimony have effectively addressed the substantive criteria of 30 V.S.A. § 248a. Consequently, we find that the procedure authorized by § 248a is sufficient to satisfy the public interest, and no hearings are required.

### **III. FINDINGS**

1. The Project involves the installation of a new wireless telecommunications facility in Norwich, Vermont. The objective of the project is to improve local radio communications for municipal services in the town and surrounding area. Dechert pf. at 1-6.

2. The Project is to be located on property owned by the Petitioner at 24-26 New Boston Road in Norwich, Vermont. The property is currently occupied by the Norwich Public Works Department. Dechert pf. at 3.

3. The Project involves the installation of a new lattice tower with antennas, equipment shelter, and associated operating and ancillary equipment within a new fenced compound on property owned by the Petitioner. The Project also includes the construction of an access road and running underground utilities to the compound. Dechert pf. at 3-5.

4. The tower will be 180' tall and will support three whip antennas, each measuring approximately 20' long, mounted at the top of the tower, two whip antennas, each measuring approximately 22' long, mounted at a centerline height of 163', and two dish antennas, each measuring 3' in diameter, mounted at a centerline height of 175'. The equipment shelter will be 10' by 12'. A propane-fueled backup generator and a 250-gallon propane tank will also be located within the facility compound. The facility will be located within a 40' by 40' gravel compound surrounded by an 8' high barbed-wire fence. The Project also includes the construction of an approximately 10' wide by 550' long access road extending from an existing paved road to the compound, and a parking and turnaround area. The total amount of earth disturbance for the Project will be approximately 27,000 square feet. Dechert pf. at 3-5; exh. PD-1.

**State Telecommunications Policy**

[30 V.S.A. § 248a(a)]

5. The Project is consistent with the goal of directing the benefits of improved telecommunications technology to all Vermonters pursuant to 30 V.S.A. § 202c(b). The Project will provide new service and improve existing wireless telecommunications service in this area. Boucher pf. at 3-4.

**Aesthetics, Historic Sites, Air and Water Purity,  
the Natural Environment, and Public Health and Safety**

[30 V.S.A. § 248a(c)(1)]

6. The Project will not have an undue adverse effect on aesthetics, historic sites, air and water purity, the natural environment, and the public health and safety. This finding is supported by findings 7 through 28, below.

**Public Health and Safety**

[30 V.S.A. § 248a(c)(1)]

7. The Project will not have an undue adverse impact on public health and safety. Dechert pf. at 13-14.

**Outstanding Resource Waters, Headwaters**

[10 V.S.A. §§ 1424a(d), 6086(a)(1)(A)]

8. The Project will have no impact on outstanding resource waters or headwaters. Dechert pf. at 8.

**Water and Air Pollution**

[10 V.S.A. § 6086(a)(1)]

9. The Project will not result in undue water or air pollution. This finding is supported by findings 10-18, below.

10. Noise associated with construction activities will be short term and will occur during the hours of 7:00 a.m. and 5:00 p.m. Monday through Friday, although occasional weekend work may be required. The Project will be located approximately 750' from the nearest residence and



ambient noise from the surrounding Public Works facility and Transfer station will mitigate any noise from the Project's construction or operation. Dechert pf. at 7-8.

11. The Radio Frequency Radiation associated with the Project will meet all standards prescribed by the Federal Communications Commission. Boucher pf. at 3.

**Waste Disposal**

[10 V.S.A. § 6086(a)(1)(B)]

12. The Project does not involve disposal of wastes or injection of any material into ground water or wells. Dechert pf. at 8.

**Water Conservation, Sufficiency of Water, and Burden on Existing Water Supply**

[10 V.S.A. §§ 6086(a)(1)(C), (a)(2) and (3)]

13. The Project will have minimal impact on water conservation measures, as the Project will not require water or sewer facilities. Dechert pf. at 7-8.

**Floodways**

[10 V.S.A. § 6086(a)(1)(D)]

14. The Project is not located in a floodway. Dechert pf. at 9.

**Streams**

[10 V.S.A. § 6086(a)(1)(E)]

15. The Project will not have an undue adverse impact on streams. Dechert pf. at 9.

**Shorelines**

[10 V.S.A. § 6086(a)(1)(F)]

16. The Project will not have an undue adverse impact on shorelines. Dechert pf. at 9.

**Wetlands**

[10 V.S.A. § 6086(a)(1)(G)]

17. The Project will not have an undue adverse impact on wetlands. Dechert pf. at 10.

**Soil Erosion**

[10 V.S.A. § 6086(a)(4)]

18. The Project will not cause unreasonable soil erosion or a reduction in the capacity of the land to hold water. All construction work will comply with Vermont standards and specifications for erosion and sediment control. Dechert pf. at 10.

**Transportation System**

[10 V.S.A. § 6086(a)(5)]

19. The Project will not cause unreasonable congestion or unsafe conditions with respect to use of the highways, waterways, railways, airports or airways, or other means of transportation, whether existing or proposed. Traffic to the unmanned site will be limited following construction. Dechert pf. at 11.

**Educational Services**

[10 V.S.A. § 6086(a)(6)]

20. The Project will not cause an unreasonable burden on the ability of a municipality to provide educational services. Educational services will not be affected by the Project. Dechert pf. at 11.

**Municipal Services**

[10 V.S.A. § 6086(a)(7)]

21. The Project will not place an unreasonable burden on the ability of the local government to provide municipal or governmental services. The Project will not require any additional municipal or governmental services and will enhance the ability of the municipality to provide radio communications for town service providers. Dechert pf. at 11.

**Aesthetics, Historic Sites, and Rare and Irreplaceable Natural Areas**

[10 V.S.A. § 6086(a)(8)]

22. The Project will not have an undue adverse effect on the scenic or natural beauty of the area, aesthetics, historic sites or rare and irreplaceable natural areas. This finding is supported by findings 23 through 28, below.

23. The Project will be located adjacent to the Town's Public Works facility and will be in context with the rural industrial nature of the area. Visibility of the Project will be mitigated by surrounding forest canopy and the irregular terrain where the Project will be located. Hodgetts pf. at 4-6.

24. The Project does not violate any clearly identified community standards contained in the relevant regional or town plans. Dechert pf. at 14-16.

25. The Project will not have an adverse impact on known historic sites. Dechert pf. at 12.

26. The Project will not have an adverse impact on rare and irreplaceable natural areas as no such areas were found within the Project area. Dechert pf. at 12.

27. The Project will not destroy or significantly imperil endangered species or necessary wildlife habitat as none were identified within the Project area. Dechert pf. at 12.

#### **IV. CONCLUSION**

Based upon all of the above evidence, the petition does not raise a significant issue with respect to the relevant substantive criteria of 30 V.S.A. § 248a, the public interest is satisfied by the procedures authorized in 30 V.S.A. § 248a, and the proposed Project will promote the general good of the State.

#### **V. ORDER**

IT IS HEREBY ORDERED, ADJUDGED AND DECREED by the Public Service Board of the State of Vermont that the installation and operation of communications facilities at the location specified in the above findings, by the Town of Norwich, in accordance with the evidence and plans submitted in this proceeding, will promote the general good of the State of Vermont in accordance with 30 V.S.A. § 248a(a), and a certificate of public good to that effect shall be issued in this matter.

Dated at Montpelier, Vermont, this 11<sup>th</sup> day September, 2013.

|                        |   |                |
|------------------------|---|----------------|
| <u>s/James Volz</u>    | ) |                |
|                        | ) | PUBLIC SERVICE |
|                        | ) |                |
| <u>s/David C. Coen</u> | ) | BOARD          |
|                        | ) |                |
|                        | ) | OF VERMONT     |
|                        | ) |                |

OFFICE OF THE CLERK

FILED: September 11, 2013

ATTEST: s/Susan M. Hudson  
Clerk of the Board

*NOTICE TO READERS: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Board (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary corrections may be made. (E-mail address: psb.clerk@state.vt.us)*

*Appeal of this decision to the Supreme Court of Vermont must be filed with the Clerk of the Board within thirty days. Appeal will not stay the effect of this Order, absent further order by this Board or appropriate action by the Supreme Court of Vermont. Motions for reconsideration or stay, if any, must be filed with the Clerk of the Board within ten days of the date of this decision and Order.*

STATE OF VERMONT  
PUBLIC SERVICE BOARD

Docket No. 8103

Petition of the Town of Norwich for a certificate of )  
public good, pursuant to 30 V.S.A. § 248a, for the )  
installation of telecommunications equipment in )  
Norwich, Vermont )

Entered: 9/11/2013

**CERTIFICATE OF PUBLIC GOOD ISSUED**  
**PURSUANT TO 30 V.S.A. SECTION 248a**

IT IS HEREBY CERTIFIED that the Public Service Board of the State of Vermont ("Board") this day found and adjudged that the installation and operation of the wireless telecommunications facility proposed by the Town of Norwich at 24-26 New Boston Road in Norwich, Vermont (the "Project"), will promote the general good of the State, subject to the following conditions:

1. Operation, construction, and maintenance of the Project shall be in accordance with the plans and evidence submitted in this proceeding. Any material deviation or substantial change in the Project is prohibited without prior Board approval. Failure to obtain advance approval from the Board for a material deviation or substantial change from the approved plans may result in the assessment of a penalty pursuant to 30 V.S.A. §§ 30 and 247.
2. The Project shall comply with applicable existing and future statutory requirements and Board Rules and Orders.
3. This Certificate of Public Good shall not be transferred without prior approval of the Board.

Dated at Montpelier, Vermont, this 11<sup>th</sup> day of September, 2013.

|                        |   |                |
|------------------------|---|----------------|
| <u>s/James Volz</u>    | ) |                |
|                        | ) | PUBLIC SERVICE |
|                        | ) |                |
| <u>s/David C. Coen</u> | ) | BOARD          |
|                        | ) |                |
|                        | ) | OF VERMONT     |
|                        | ) |                |

OFFICE OF THE CLERK

FILED: September 11, 2013

ATTEST: s/Susan M. Hudson  
Clerk of the Board

*NOTICE TO READERS: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Board (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary corrections may be made. (E-mail address: [psb.clerk@state.vt.us](mailto:psb.clerk@state.vt.us))*