



240 LEIGH FARM ROAD, SUITE 230  
DURHAM, NC 27707

ECO-SITE NUMBER: NH-0002  
T-MOBILE SITE NUMBER: 4NB0203A  
T-MOBILE DESIGN: 4SEC-67D97DB

#### SITE ADDRESS

144 MEADERBORO ROAD  
ROCHESTER, NH 03867  
STRAFFORD COUNTY  
LATITUDE: 43° 18' 38.28" (43.310633°) N  
LONGITUDE: 71° 03' 13.95" (71.053875°) W  
PARCEL ID #: 232-16-3  
ZONING: AGRICULTURAL

MUNICIPALITY:  
STRAFFORD COUNTY

STATE:  
NEW HAMPSHIRE

TOWER TYPE:  
MONOPINE

TOWER HEIGHT:  
145' (145' TO HIGHEST APPURTENANCE)

NUMBER OF CARRIERS:  
0 EXISTING, 1 PROPOSED

USE:  
PROPOSED TELECOMMUNICATIONS TOWER  
AND UNMANNED EQUIPMENT

CONSULTANT  
NB+C ENGINEERING SERVICES, LLC  
100 APOLLO DRIVE, SUITE 303  
CHELMSFORD, MA 01824  
PHONE: (978) 856-8308  
ATTN.: PATRICK CORBETT

PROJECT SUMMARY

DEVELOPER  
ECO-SITE  
240 LEIGH FARM ROAD, SUITE 415  
DURHAM, NC 27707  
PHONE: (919) 636-6810  
ATTN: TBD

POWER COMPANY  
EVERSOURCE  
ATTN.: TBD  
PHONE: 1 (888) 783-6617

TELEPHONE COMPANY  
TBD  
PHONE: TBD  
ATTN.: CUSTOMER SERVICE

PROPERTY OR TOWER OWNER  
MATTHEW G. SCRUTON  
195 TEN ROD ROAD  
ROCHESTER, NH 03867

CONTACTS

#### PLANNING BOARD APPROVAL

SIGNATURE *John S. Chief Planner* DATE *6/3/20*  
SIGNATURE \_\_\_\_\_ DATE *Certified*  
SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_  
SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_  
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SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

#### FLOOD PLAIN NOTE

SITE IS LOCATED WITHIN FEMA FLOOD MAP AREA X (AREA OF MINIMAL FLOODING) AS PER F.I.R.M. MAP #33017C0195D, COMMUNITY PANEL #195 OF 405, DATED MAY 17TH, 2005.

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CITY OF ROCHESTER NH DEPARTMENT OF  
BUILDING, ZONING, AND LICENSING SERVICES  
CITY HALL  
31 WAKEFIELD STREET  
ROCHESTER, NH 03867

PERMIT INFORMATION



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STRAFFORD COUNTY  
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#### CURRENT ISSUE DATE:

10/10/19

#### ISSUED FOR:

FINAL

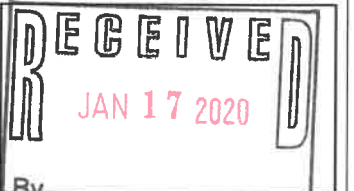
#### REV.: DATE: ISSUED FOR: BY:

0	02/18/19	CONSTRUCTION	PRC
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4	10/10/19	REVISED	MJS

#### CONSULTANT:



#### CONSULTANT:



By: \_\_\_\_\_  
DRAWN BY: CHK: \_\_\_\_\_ APV: \_\_\_\_\_  
DFR PRC PRC

#### LICENSER:



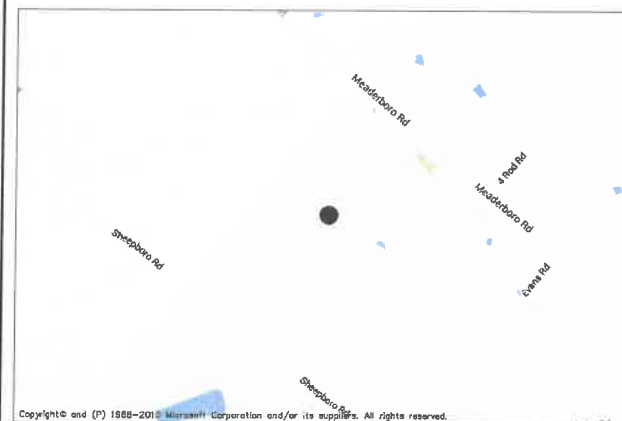
#### SHEET TITLE:

COVER SHEET

#### SHEET NUMBER: REVISION:

T1 4

018893000



#### VICINITY MAP

FROM BOSTON LOGAN INTERNATIONAL AIRPORT:  
TAKE I-90 E TO MA-1A N. IN 2.5 MILES TURN SLIGHTLY LEFT ONTO  
MA-60 W. IN 1.0 MILES, AT THE TRAFFIC CIRCLE, TAKE THE 3RD EXIT  
ONTO MA-60 W/SQUIRE RD HEADING TO MALDEN. IN 0.9 MILES AT THE  
TRAFFIC CIRCLE, TAKE THE 1ST EXIT ONTO THE US-1 N RAMP TO  
NEWBURYPORT. MERGE ONTO US-1 N. CONTINUE ON US-1N FOR 8.27  
MILES AND TAKE THE I-95 N RAMP TO NEW HAMPSHIRE/MAINE.  
MERGE ONTO I-95 N. IN 37.9 MILES TAKE EXIT 4 TO MERGE ONTO  
NH-16 N/US-4 W TOWARD WHITE MTS. IN 20.3 MILES TAKE EXIT 13  
TOWARD CONCORD. IN 0.3 MILES TURN LEFT ONTO WASHINGTON ST.  
IN 1.3 MILES TURN RIGHT ONTO ESTES RD. IN 1.4 MILES CONTINUE  
ONTO MEADERBORO RD. SITE ACCESS DRIVE WILL BE LOCATED  
APPROXIMATELY 1.4 MILES ON THE LEFT.

DRIVING DIRECTIONS

SITE WORK GENERAL NOTES:

- THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR IS TO POT HOLE UTILITY LOCATES POST MARKING TO VERIFY UTILITY LOCATES ARE CORRECT.
- ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, 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 CONTRACTOR/SUBCONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES.
- ALL SITE WORK SHALL BE AS INDICATED ON THE DRAWINGS AND PROJECT SPECIFICATIONS.
- IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
- 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 THE CONTRACTOR, OWNER AND/OR LOCAL UTILITIES.
- THE OWNER SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION FOR SITE SIGNAGE (TO BE INSTALLED BY CONTRACTOR).
- THE SITE SHALL BE GRADED TO CAUSE CAUSE SURFACE WATER TO FLOW AWAY FROM THE BTS EQUIPMENT AND TOWER AREAS.
- NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.
- THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
- THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION AS SPECIFIED ON THE PROJECT SPECIFICATIONS.
- CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.

CONTRACTOR SHALL NOT INSTALL EQUIPMENT THAT WILL IMPEDE DOOR OR ACCESS PANELS.

STRUCTURAL STEEL NOTES:

- ALL STEEL WORK SHALL BE PAINTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND IN ACCORDANCE WITH ASTM A36 UNLESS NOTED OTHERWISE.
- ALL WELDING SHALL BE PERFORMED USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL OF STEEL CONSTRUCTION". PAINTED SURFACES SHALL BE TOUCHED UP.
- BOLTED CONNECTIONS SHALL BE ASTM A325 BEARING TYPE (3/4"Ø) CONNECTIONS AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.
- NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8"Ø ASTM A307 BOLTS UNLESS NOTED OTHERWISE.
- INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER MANUFACTURER'S RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR CONTRACTOR APPROVAL WHEN DRILLING HOLES IN CONCRETE. SPECIAL INSPECTIONS, REQUIRED BY GOVERNING CODES SHALL BE PERFORMED IN ORDER TO MAINTAIN MANUFACTURER'S MAXIMUM ALLOWABLE LOADS.

CONCRETE AND REINFORCING STEEL NOTES:

- ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST-IN-PLACE CONCRETE.
- ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE. SLAB FOUNDATION DESIGN ASSUMING ALLOWABLE SOIL BEARING PRESSURE OF 2000 PSF
- REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE. SPLICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, U.N.O.
- THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:

4.1. CONCRETE CAST AGAINST EARTH	3 IN.
4.2. CONCRETE EXPOSED TO EARTH OR WEATHER OR NOT CAST AGAINST THE GROUND:	
4.2.1. #6 AND LARGER	2 IN.
4.2.2. #5 AND SMALLER & WWF	1 1/2 IN
4.3. CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR NOT CAST AGAINST THE GROUND:	
4.3.1. SLAB AND WALLS	3/4 IN.
4.3.2. BEAMS AND COLUMNS	1 1/2 IN.
- A CHAMFER 3/4" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UND. IN ACCORDANCE WITH ACI 301 SECTION 4.2.4

MASONRY NOTES:

- HOLLOW CONCRETE MASONRY UNITS SHALL MEET A.S.T.M. SPECIFICATION C90, GRADE N. TYPE 1. THE SPECIFIED DESIGN COMPRESSIVE STRENGTH OF CONCRETE MASONRY (F<sub>m</sub>) SHALL BE 1500 PSI.
- MORTAR SHALL MEET THE PROPERTY SPECIFICATION OF A.S.T.M. C270 TYP. "S" MORTAR AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI.
- GROUT SHALL MEET A.S.T.M. SPECIFICATION C475 AND HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 2000 PSI.
- CONCRETE MASONRY SHALL BE LAID IN RUNNING (COMMON) BOND.
- WALL SHALL RECEIVE TEMPORARY BRACING. TEMPORARY BRACING SHALL NOT BE REMOVED UNTIL GROUT IS FULL CURED.

GENERAL NOTES:

- FOR THE PURPOSE OF CONSTRUCTION DRAWINGS, THE FOLLOWING DEFINITIONS SHALL APPLY:

CONTRACTOR -	GENERAL CONTRACTOR
SUBCONTRACTOR -	SUBCONTRACTOR HIRED BY GENERAL CONTRACTOR.
OWNER -	ECO-SITE
OEM -	ORIGINAL EQUIPMENT MANUFACTURER
- PRIOR TO THE SUBMISSION OF BID, THE CONTRACTOR 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 THE OWNER.
- ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LOWS, 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.
- DRAWINGS PROVIDED WERE DESIGNED AND SCALED TO 11x17 FORMAT.
- UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE OWNER.
- CONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND T1 CABLES, GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWINGS.
- THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
- CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY.
- CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.
- CONSTRUCTION SHALL COMPLY WITH ECO-SITE MASTER SPECIFICATIONS AND THESE DRAWINGS; WHERE A CONFLICT EXISTS IT IS THE CONTRACTORS RESPONSIBILITY TO NOTIFY THE OWNER.
- NOTHING CONTAINED IN THESE DRAWINGS SHALL CREATE ANY CONTRACTUAL RELATIONSHIP BETWEEN ANY SUBCONTRACTOR(S) AND ECO-SITE.
- CONTRACTOR SHALL HOLD HARMLESS ECO-SITE AND ITS REPRESENTATIVES FROM ALL SUITS, ACTIONS, OR CLAIMS OF ANY KIND BROUGHT ABOUT AS A RESULT OF ANY INJURIES OR DAMAGES SUSTAINED BY PERSON(S) OR PROPERTY DURING THE CONSTRUCTION OF THIS PROJECT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS FOR ANY AND ALL PERSONS, INCLUDING SUBCONTRACTORS, ON SITE AS REQUIRED BY CURRENT OSHA STANDARDS; INCLUDING BUT NOT LIMITED TO:

- PERSONAL PROTECTIVE & LIFE SAVING EQUIPMENT
- SIGNS, SIGNALS, AND BARRICADES
- TOOLS - HAND AND POWER
- ELECTRICAL
- FALL PROTECTION
- EXCAVATIONS
- CONCRETE AND MASONRY CONSTRUCTION
- STEEL ERECTION
- POWER TRANSMISSION AND DISTRIBUTION
- CRANES AND DERRICKS IN CONSTRUCTION.

ABBREVIATIONS

AGL	ABOVE GRADE LEVEL
BTS	BASE TRANSCEIVER STATION
(E)	EXISTING
MIN.	MINIMUM
NTS	NOT TO SCALE
REF	REFERENCE
RF	RADIO FREQUENCY
TBD	TO BE DETERMINED
TBR	TO BE RESOLVED
TYP	TYPICAL
REQ.	REQUIRED
EGR	EQUIPMENT GROUND RING
AWG	AMERICAN WIRE GAUGE
MGB	MASTER GROUND BUSS
EG	EQUIPMENT GROUND
BCW	BARE COPPER WIRE
SIAD	SMART INTEGRATED ACCESS DEVICE
GEN	GENERATOR
IGR	INTERIOR GROUND RING (HALO)
RBS	RADIO BASE STATION
U.N.O.	UNLESS NOTED OTHERWISE

SYMBOLS

	SOLID GROUND BUSS BAR
	SOLID NEUTRAL BUSS BAR
	SUPPLEMENTAL GROUND CONDUCTOR
	2-POLE THERMAL-MAGNETIC CIRCUIT BREAKER
	SINGLE-POLE THERMAL-MAGNETIC CIRCUIT BREAKER
	CHEMICAL GROUND ROD
	DISCONNECT SWITCH
	METER
	EXOTHERMIC WELD (CADWELD) (UNLESS NOTED OTHERWISE)
	MECHANICAL WELD
	3/4"Ø x 10'-0" COPPER CLAD STEEL GROUND ROD
	3/4"Ø x 10'-0" COPPER CLAD STEEL GROUND ROD w/ INSPECTION SLEEVE
	GROUNDING WIRE

Eco-Site

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CONSULTANT:



CONSULTANT:



DRAWN BY:CHK.:APV.:

DFR	PRC	PRC
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LICENSER:



SHEET TITLE:

GENERAL  
NOTES

SHEET NUMBER:REVISION:

GN1

4

018893000



ELECTRICAL INSTALLATION NOTES:

- ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE LOCAL CODES.
- CONDUIT ROUTINGS ARE SCHEMATIC. SUBCONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED.
- WIRING, RACEWAY AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC.
- ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC.
- CABLES SHALL NOT BE ROUTED THROUGH LADDER-STYLE CABLE TRAY RUNGS.
- EACH END OF EVERY POWER, POWER PHASE CONDUCTOR (I.E. HOTS), GROUNDING AND T1 CONDUCTOR AND CABLE SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2" PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC AND OSHA.
- ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH PLASTIC TAPE PER COLOR SCHEDULE. ALL EQUIPMENT SHALL BE LABELED WITH THEIR VOLTAGE RATING, BRANCH CIRCUIT ID NUMBERS (I.E. PANEL BOARD AND CIRCUIT ID'S).
- PANEL BOARDS (ID NUMBERS) AND INTERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH PLASTIC LABELS.
- ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.
- POWER, CONTROL AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE CONDUCTOR (#14 AWG OR LARGER), 600V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90° C (WET & DRY) OPERATION LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED UNLESS OTHERWISE SPECIFIED.
- SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE CONDUCTOR (#6 AWG OR LARGER), 600V, OIL RESISTANT THHN OR THWN-2 GREEN INSULATION CLASS B STRANDED COPPER CABLE RATED FOR 90° C (WET & DRY) OPERATION LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED UNLESS OTHERWISE SPECIFIED.
- POWER, CONTROL AND EQUIPMENT GROUND WIRING NOT IN TUBING OR CONDUIT SHALL BE MULTI-CONDUCTOR, TYPE TC CABLE (#14 AWG OR LARGER), 600V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90° C (WET & DRY) OPERATION WITH OUTER JACKET LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED UNLESS OTHERWISE SPECIFIED.
- ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP-STYLE, COMPRESSION WIRE LUGS AND WIRE NUTS BY THOMAS AND BETTS (OR EQUAL). LUGS AND WIRE NUTS SHALL BE RATED FOR OPERATION AT NO LESS THAN 75° C (90° C IF AVAILABLE).
- RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND NEC.
- ELECTRICAL METALLIC TUBING (EMT) OR RIGID NONMETALLIC CONDUIT (I.E. RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80 FOR LOCATIONS SUBJECT TO PHYSICAL DAMAGE) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.
- ELECTRICAL METALLIC TUBING (EMT), ELECTRICAL NONMETALLIC TUBING (ENT) OR RIGID NONMETALLIC CONDUIT (RIGID PVC, SCHEDULE 40) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
- GALVANIZED STEEL INTERMEDIATE METALLIC CONDUIT (IMC) SHALL BE USED FOR OUTDOOR LOCATIONS ABOVE GRADE.
- RIGID NONMETALLIC CONDUIT (I.E. RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80) SHALL BE USED UNDERGROUND; DIRECT BURIED, IN AREAS OF OCCASIONAL LIGHT VEHICLE TRAFFIC OR ENCASED IN REINFORCED CONCRETE IN AREAS OF HEAVY VEHICLE TRAFFIC.
- LIQUID-TITE FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
- CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION-TYPE AND APPROVED FOR THE LOCATION USED. SET SCREW FITTINGS ARE NOT ACCEPTABLE.
- CABINETS, BOXES AND WIRE WAYS SHALL BE LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND NEC.
- WIREWAYS SHALL BE EPOXY-COATED (GRAY) AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARDS; SHALL BE PANDUIT TYPE E (OR EQUAL); AND RATED NEMA 1 (OR BETTER).

ELECTRICAL INSTALLATION NOTES CONTINUED:

- EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES AND PULL BOXES SHALL BE GALVANIZED OR EPOXY-COATED SHEET STEEL. SHALL MEET OR EXCEED UL 50 AND RATED NEMA 1 (OR BETTER) INDOORS OR NEMA 3 (OR BETTER) OUTDOORS.
- METAL RECEPTACLE, SWITCH AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY-COATED OR NON-CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1; AND RATED NEMA 1 (OR BETTER) INDOORS OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
- NONMETALLIC RECEPTACLE, SWITCH AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2; AND RATED NEMA 1 (OR BETTER) INDOORS OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
- THE SUBCONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CONTRACTOR BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.
- THE SUBCONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD AGAINST LIFE AND PROPERTY.
- INSTALL PLASTIC LABEL ON THE METER CENTER IDENTIFYING SPECIFIC CARRIER.

KEY NOTES: (SEE GROUNDING PLAN DIAGRAM - SHEET E-2)

- TOWER GROUNDING: EXTEND #2 SOLID TINNED CU WIRE FROM BURIED GROUND RING TO TOWER AND MAKE EXOTHERMIC CONNECTION.
- GROUND ROD: COPPER CLAD STEEL, 3/4"Ø X TEN (10) FEET LONG.
- ICE BRIDGE SUPPORT POST GROUNDING: EXTEND #2 TINNED CU WIRE FROM BURIED GROUND RING TO ALL ICE BRIDGE SUPPORT POST WITH CADWELD CONNECTION WELD.
- FENCE GROUNDING: IF FENCE IS WITHIN 6' OF GROUNDING RING, EXTEND #2 TINNED CU WIRE FROM BURIED GROUND RING TO FENCE CORNER POSTS AND EXOTHERMICALLY WELDED. BOND INTERMEDIATE POST IF REQUIRED TO MAINTAIN 25' MAX. SPACING.
- TOWER GROUNDING BAR: EXTEND #2 TINNED CU WIRE FROM BURIED GROUND RING UP TO THE TOWER GROUND BAR AND MAKE A MECHANICAL CONNECTION. SECURE GROUND BAR DIRECTLY TO TOWER WITH ISOLATOR KIT USING STAINLESS STEEL MOUNTING MATERIAL.
- MULTI TENANT UTILITY FRAME: BOND METER, TEL CO BOX AND FRAME POST TO COMPOUND GROUND RING WITH MECHANICAL CONNECTION AT CABINET AND EXOTHERMIC WELD AT GROUND RING.
- ANTENNA GROUND BAR: MOUNT GROUND BAR DIRECTLY TO THE TOWER AT TOP OF COAX RUNS. SECURE TO TOWER WITH ISOLATOR KIT USING STAINLESS STEEL MOUNTING MATERIAL.
- FENCE/GATE: BOND ALL FENCE POSTS AND GATES TO COMPOUND GROUND RING WITH EXOTHERMIC WELDS.
- EXTERIOR GFCI RECEPTACLE GROUNDING: EXTEND #2 TINNED CU WIRE FROM BURIED GROUND RING TO THE EXTERIOR GFCI RECEPTACLE AND MAKE A MECHANICAL CONNECTION.
- SSC AND FCOA, SHALL BE MECHANICALLY LUGGED WITH EXOTHERMIC WELD TO THE GROUND RING (OR MECHANICALLY LUGGED TO A BUS BAR PLACED BETWEEN THEM ON THE PAD, WHICH IS THEN WELDED TO THE GROUND RING. UTILITY H-FRAME POSTS AND ICEBRIDGE SHALL BE WELDED.

GREENFIELD GROUNDING NOTES:

- ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION AND AC POWER GES'S) SHALL BE BONDED TOGETHER AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.
- THE SUBCONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 11000 AND 81) FOR GROUND ELECTRODE SYSTEMS. THE SUBCONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.
- THE SUBCONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT AND PROVIDE TESTING RESULTS.
- METAL CONDUIT AND TRAY SHALL BE GROUNDED AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH #6 AWG COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
- METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BTS EQUIPMENT.
- EACH BTS CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, #6 AWG STRANDED COPPER OR LARGER FOR INDOOR BTS; 32 AWG SOLID TINNED COPPER FOR OUTDOOR BTS.
- ALL EXTERIOR GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING SHALL BE #2 AWG SOLID TINNED COPPER UNLESS OTHERWISE INDICATED.
- ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
- USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED.
- EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
- ALL GROUND CONNECTION ABOVE GRADE (INTERIOR AND EXTERIOR) SHALL BE FORMED USING HIGH PRESS CRIMPS.
- COMPRESSION GROUND CONNECTIONS MAY BE REPLACED BY EXOTHERMIC WELD CONNECTIONS.
- ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE TOWER GROUND BAR.
- APPROVED ANTIOXIDANT COATINGS (I.E. CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
- ALL EXTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.
- MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
- BOND ALL METALLIC OBJECTS WITHIN 6 FT. OF MAIN GROUND WIRES WITH (1) #2 AWG TIN-PLATED COPPER GROUND CONDUCTOR.
- GROUND CONDUCTORS USED IN THE FACILITY GROUND AND LIGHTNING PROTECTION SYSTEMS SHALL NOT BE ROUTED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METALLIC CONDUITS, METAL SUPPORT CLIPS OR SLEEVES THROUGH WALL OR FLOORS, WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OF LOCAL CONDITIONS, NON-METALIC MATERIAL SUCH AS PVC PLASTIC CONDUIT SHALL BE USED. WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (E.G. NONMETALLIC CONDUIT PROHIBITED BY LOCAL CODE) THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT.



PROJECT INFORMATION:

ECO SITE ID# NH-0002  
T-MOBILE SITE #: 4NB0203A  
144 WEAVERBROOK ROAD  
ROCKFESTER, VT 03867  
STRAFFORD COUNTY  
LATITUDE: 43.310533°  
LONGITUDE: -71.053875°

CURRENT ISSUE DATE:

10/10/19

ISSUED FOR:

FINAL

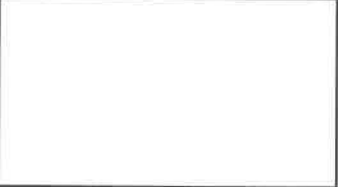
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0	02/18/19	CONSTRUCTION	PRC
1	03/01/19	REVISED	PRC
2	04/04/19	REVISED	MJS
3	07/22/19	REVISED	MJS
4	10/10/19	REVISED	MJS

CONSULTANT:



CONSULTANT:



DRAWN BY:CHK.:APV.:

DFR	PRC	PRC
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LICENSER:



SHEET TITLE:

GENERAL  
NOTES

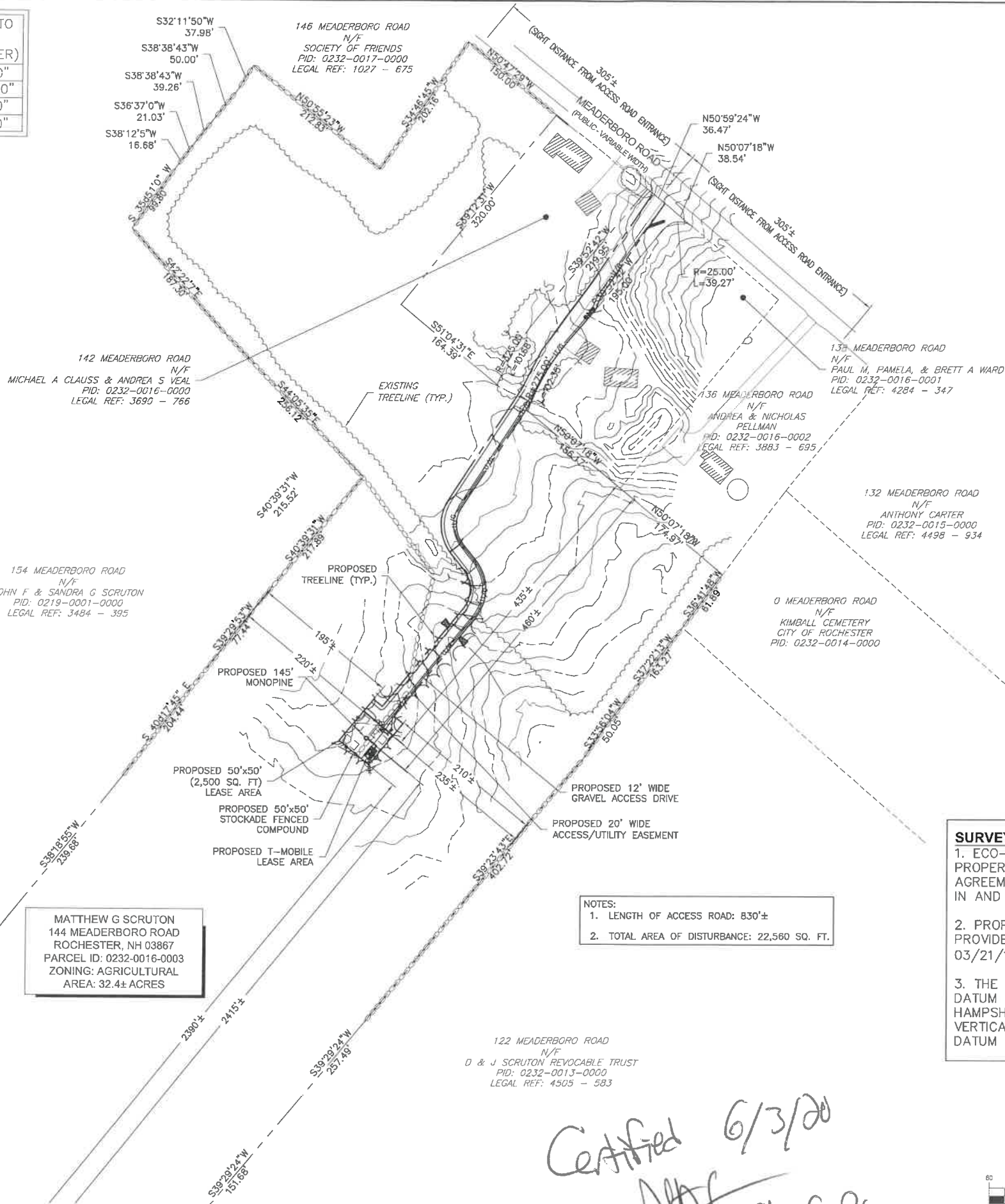
SHEET NUMBER:REVISION:

GN2

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018893000

TOWER SETBACKS TO PROPERTY LINES (FROM TOWER CENTER)	
NORTH	435'-0"
SOUTH	2,415'-0"
EAST	235'-0"
WEST	220'-0"



- NOTES:
1. LENGTH OF ACCESS ROAD: 830'±
  2. TOTAL AREA OF DISTURBANCE: 22,560 SQ. FT.

ZONING INFORMATION		
JURISDICTION:	STRAFFORD COUNTY	
ZONING:	AGRICULTURAL	
DIMENSION	REQUIRED	PROPOSED ±
FRONT YARD SETBACK:	85'	435± (COMPOUND)
SIDE YARD SETBACK:	25'	195± (COMPOUND)
REAR YARD SETBACK:	25'	2,390± (COMPOUND)
MAXIMUM TOWER HEIGHT:	N/A	145'
TOWER SETBACK:	N/A	460'± / 235'± / 2,415±
LOT AREA:	32.40 ± ACRES	
(ALL MEASUREMENTS ARE IN FEET ± UNLESS OTHERWISE NOTED)		
NOTES:		
1) SITE PLAN IS THE RESULT OF A SURVEY AND LOCAL GIS INFORMATION COMBINED. SURVEY CONDUCTED BY PFS LAND SURVEYING, INC.		
2) ALL SETBACKS SHOWN ARE FROM PROPOSED EQUIPMENT TO EXISTING PROPERTY LINES.		

LEGEND	
---	PROPERTY LINE - SUBJECT PARCEL
---	PROPERTY LINE - ABUTTERS
-x-x-	EXISTING FENCE LINE
---	EXISTING ROAD
▨	EXISTING BUILDING



**SURVEY NOTE:**

1. ECO-SITE STAFF SHALL COORDINATE WITH THE PROPERTY OWNER TO OBTAIN THE PROPER EASEMENT AGREEMENTS TO CONSTRUCT AND MAINTAIN EQUIPMENT IN AND AROUND THE TOWER COMPOUND.
2. PROPOSED COMPOUND LAYOUT BASED ON SURVEY PROVIDED BY PFS LAND SURVEYING, INC. DATED 03/21/18.
3. THE HORIZONTAL DATUM IS THE NORTH AMERICAN DATUM OF 1983. THE COORDINATE SYSTEM IS THE NEW HAMPSHIRE COORDINATE SYSTEM, MAINLAND ZONE. THE VERTICAL DATUM IS THE NORTH AMERICAN VERTICAL DATUM OF 1988.

1 OVERALL SITE PLAN  
11"x17" SCALE: 1" = 160'  
22"x34" SCALE: 1" = 80'



Certified 6/3/20  
Chief Planner



PROJECT INFORMATION:

**ECO SITE ID# NH-0002**  
**T-MOBILE SITE #: 4NB0203A**

184 MEADERBORO ROAD  
ROCHESTER, NH 03867  
STRAFFORD COUNTY

LATITUDE: 43.310633°  
LONGITUDE: -71.053875°

CURRENT ISSUE DATE:

**10/10/19**

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REV. DATE	ISSUED FOR	BY
0 02/18/19	CONSTRUCTION	PRC
1 03/01/19	REVISED	PRC
2 04/04/19	REVISED	MJS
3 07/22/19	REVISED	MJS
4 10/10/19	REVISED	MJS

CONSULTANT:

**NB+C**  
**TOTALLY COMMITTED.**

NB+C ENGINEERING SERVICES, LLC.  
100 APOLLO DRIVE, SUITE 303  
CHELMSFORD, MA 01824  
(978) 656-8303

CONSULTANT:

DRAWN BY:	CHK.:	APV.:
DFR	PRC	PRC

LICENSER:

STATE OF NEW HAMPSHIRE  
KALPAKARAN KOLANDAYAN  
No. 13868  
LICENSED PROFESSIONAL ENGINEER  
NH PROFESSIONAL ENGINEER NO. 13868

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SHEET TITLE:

**OVERALL SITE PLAN**

SHEET NUMBER: REVISION:

**C1** **4**  
018893000





PROJECT INFORMATION:  
**ECO SITE ID# NH-0002**  
**T-MOBILE SITE #: 4NB0203A**  
144 VADDERBORO ROAD  
ROCKFESTER, NH 03867  
STRAFFORD COUNTY  
LATITUDE: 43.316633°  
LONGITUDE: -71.053875°

CURRENT ISSUE DATE:  
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CONSULTANT:  
**NB+C**  
**TOTALLY COMMITTED.**  
NB+C ENGINEERING SERVICES, LLC.  
100 APOLLO DRIVE, SUITE 303  
CHELMSFORD, MA 01824  
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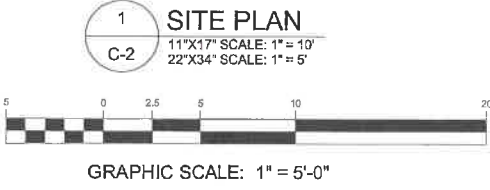
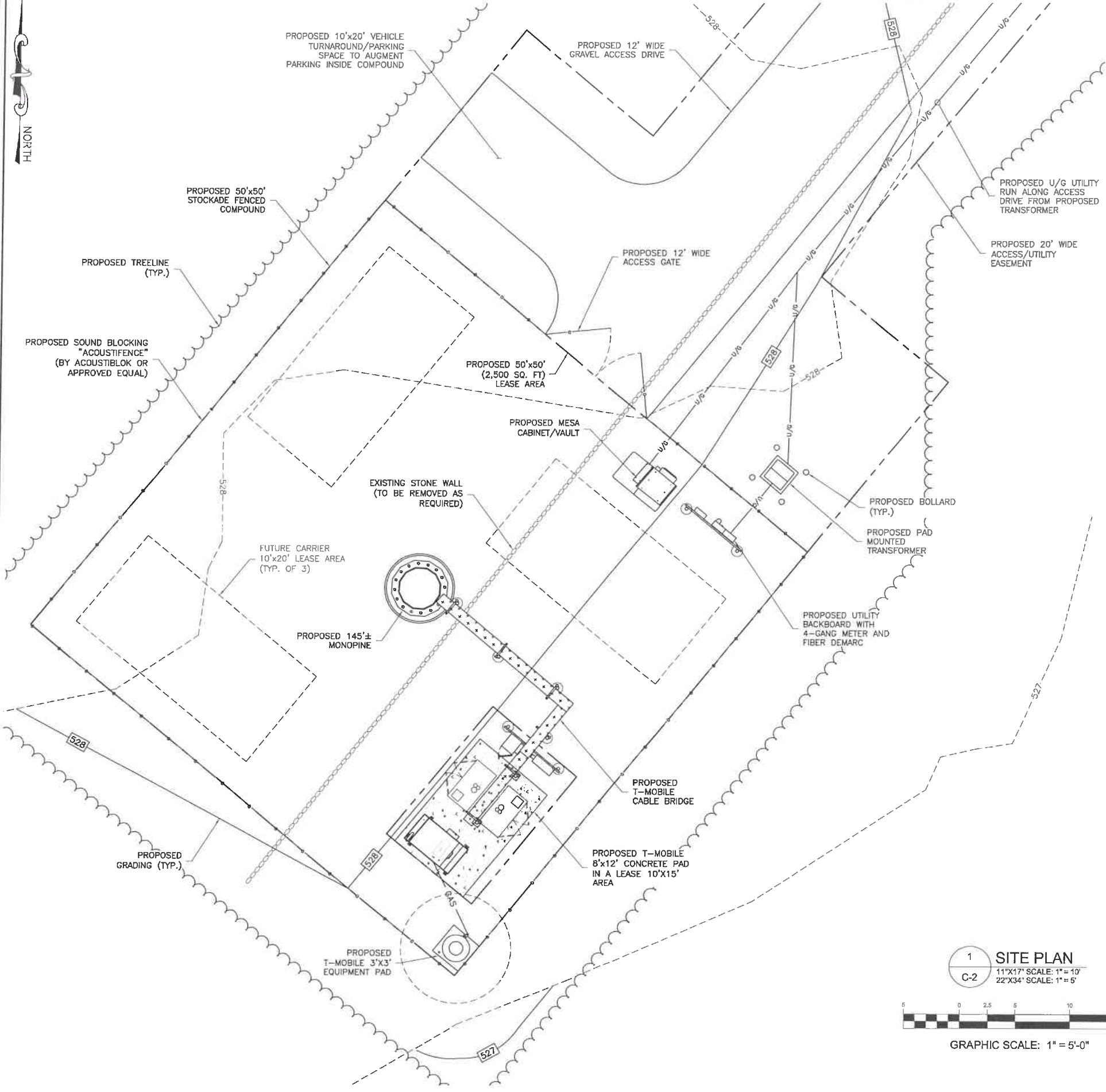
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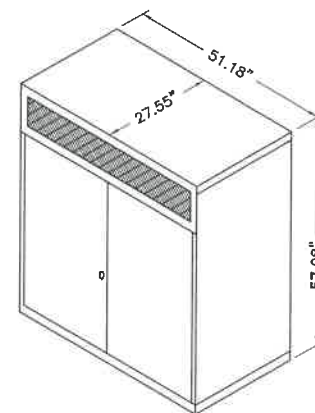
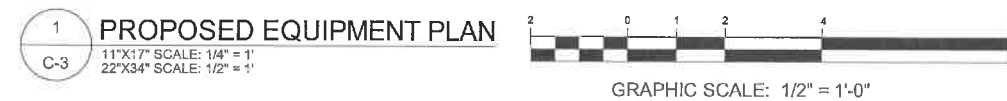
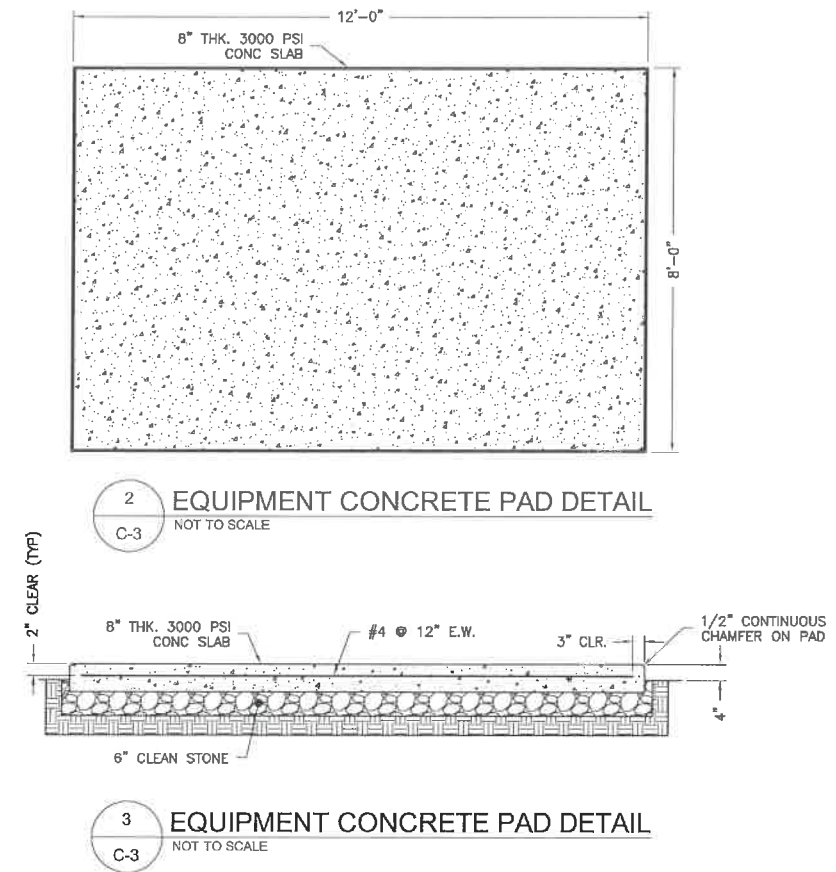
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DFR PRC PRC

LICENSER:  
  
KRUPA KARAN, P.E.  
NH PROFESSIONAL ENGINEER LIC. #13868  
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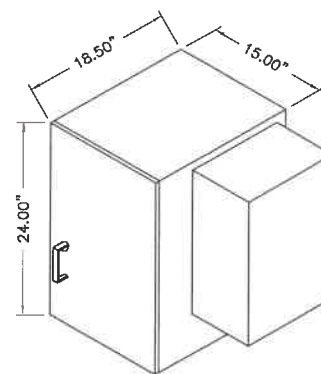
SHEET TITLE:  
**SITE PLAN**  
SHEET NUMBER: C2  
REVISION: 4  
018893000

- GENERAL NOTES:**
- ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE DRAWINGS AND SPECIFICATIONS. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE STATE, LOCAL AND NATIONAL CODES, ORDINANCES AND OR REGULATIONS APPLICABLE TO THIS PROJECT.
  - THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES AND SHALL CHECK ALL DIMENSIONS. ALL DISCREPANCIES SHALL BE CALLED TO THE ATTENTION OF THE ECO-SITE CONSTRUCTION MANAGER AND/OR ENGINEER AND BE RESOLVED BEFORE PROCEEDING WITH WORK. WHERE THERE IS A CONFLICT BETWEEN DRAWING AND ECO-SITE SPECIFICATIONS, THE ECO-SITE CONSTRUCTION MANAGER SHOULD BE CONTACTED FOR CLARIFICATION.
  - ALL INFORMATION SHOWN ON THE DRAWINGS RELATIVE TO EXISTING CONDITIONS IS GIVEN AS THE BEST PRESENT KNOWLEDGE, BUT WITHOUT GUARANTEE OF ACCURACY. WHERE ACTUAL CONDITIONS CONFLICT WITH THE DRAWINGS, THEY SHALL BE REPORTED TO THE ECO-SITE CONSTRUCTION MANAGER AND/OR ENGINEER SO THAT PROPER REVISIONS MAY BE MADE. MODIFICATION OF DETAILS OF CONSTRUCTION SHALL NOT BE MADE WITHOUT WRITTEN APPROVAL OF THE CONSTRUCTION MANAGER AND/OR ENGINEER.
  - CONTRACTOR SHALL REVIEW AND BE FAMILIAR WITH SITE CONDITIONS AS SHOWN ON THE ATTACHED SITE PLAN AND/OR SURVEY DRAWINGS.
  - ALL FINISHED GRADES SHALL SLOPE MINIMUM 1/4 IN/FT. AWAY FROM EQUIPMENT IN ALL DIRECTIONS. CONTRACTOR SHALL SLOPE SWALES AS REQUIRED ALONG EXISTING TERRAIN TO DRAIN AWAY FROM COMPOUND AND ACCESS DRIVE.
  - THE PROPOSED TOWER AND TOWER FOUNDATIONS WERE DESIGNED BY OTHERS. TOWER INFORMATION PROVIDED ON THESE PLANS ARE PROVIDED FOR REFERENCE PURPOSES ONLY. TOWER DIMENSIONS SHOWN ON THIS PLAN ARE FOR TOWER CENTER LOCATION. DO NOT SCALE. NOTIFY ENGINEER OR ECO-SITE CONSTRUCTION MANAGER OF ANY CONFLICTS OR DISCREPANCIES. CONTRACTOR TO OBTAIN COPY OF TOWER DESIGN DRAWINGS FROM ECO-SITE CONSTRUCTION MANAGER TO CONFIRM COAX ROUTING AND ANTENNA MOUNT INFORMATION.
  - THE CONTRACTOR SHALL PROVIDE ADEQUATE EXCAVATION SLOPING, SHORING, BRACING, AND GUYS IN ACCORDANCE WITH ALL NATIONAL, STATE, AND LOCAL SAFETY ORDINANCES.
  - UPON COMPLETION OF CONSTRUCTION, CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE CAUSED BY CONSTRUCTION ACTIVITIES TO THE EXISTING ACCESS ROAD AND COMPOUND GRAVEL AREAS. ANY NEW FILL MATERIALS SHALL BE COMPACTED.
  - THE CONTRACTOR IS HEREBY NOTIFIED THAT PRIOR TO COMMENCING CONSTRUCTION, HE IS RESPONSIBLE FOR CONTACTING THE UTILITY COMPANIES INVOLVED AND SHALL REQUEST A VERIFICATION AT THE CONSTRUCTION SITE OF THE LOCATIONS OF THEIR UNDERGROUND UTILITIES AND WHERE THEY MAY POSSIBLY CONFLICT WITH THE PLACEMENT OF IMPROVEMENTS AS SHOWN ON THESE PLANS. THE CONTRACTOR OR ANY SUBCONTRACTOR FOR THIS CONTRACT WILL BE REQUIRED TO NOTIFY STATE 811 48 HOURS IN ADVANCE OF PERFORMING ANY UTILITIES DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE REPAIRED BY THE CONTRACTOR, AT NO EXPENSE TO THE OWNER.
  - CONTRACTOR TO PROVIDE DUMPSTER AND PORTABLE TOILET FACILITY DURING CONSTRUCTION.
  - CONTRACTOR TO PROVIDE STYMIIE LOCK OR EQUIVALENT AS APPROVED BY ECO-SITE CONSTRUCTION MANAGER.
- SURVEY NOTE:**
- ECO-SITE STAFF SHALL COORDINATE WITH THE PROPERTY OWNER TO OBTAIN THE PROPER EASEMENT AGREEMENTS TO CONSTRUCT AND MAINTAIN EQUIPMENT IN AND AROUND THE TOWER COMPOUND.
  - PROPOSED COMPOUND LAYOUT BASED ON SURVEY PROVIDED BY PFS LAND SURVEYING, INC. DATED 03/21/18 AND SITE VISIT ON 05/09/16.
- COAX NOTE:**
- ROUTE COAX UP TOWER PER TOWER DESIGN DRAWINGS BY TOWER OWNER.





- NOTES:
1. WEIGHT OF BTS UNIT IS 727.52 LBS (330 KG)  
(WEIGHT IS WITHOUT BATTERIES).
  2. BASE FRAME NOT SHOWN

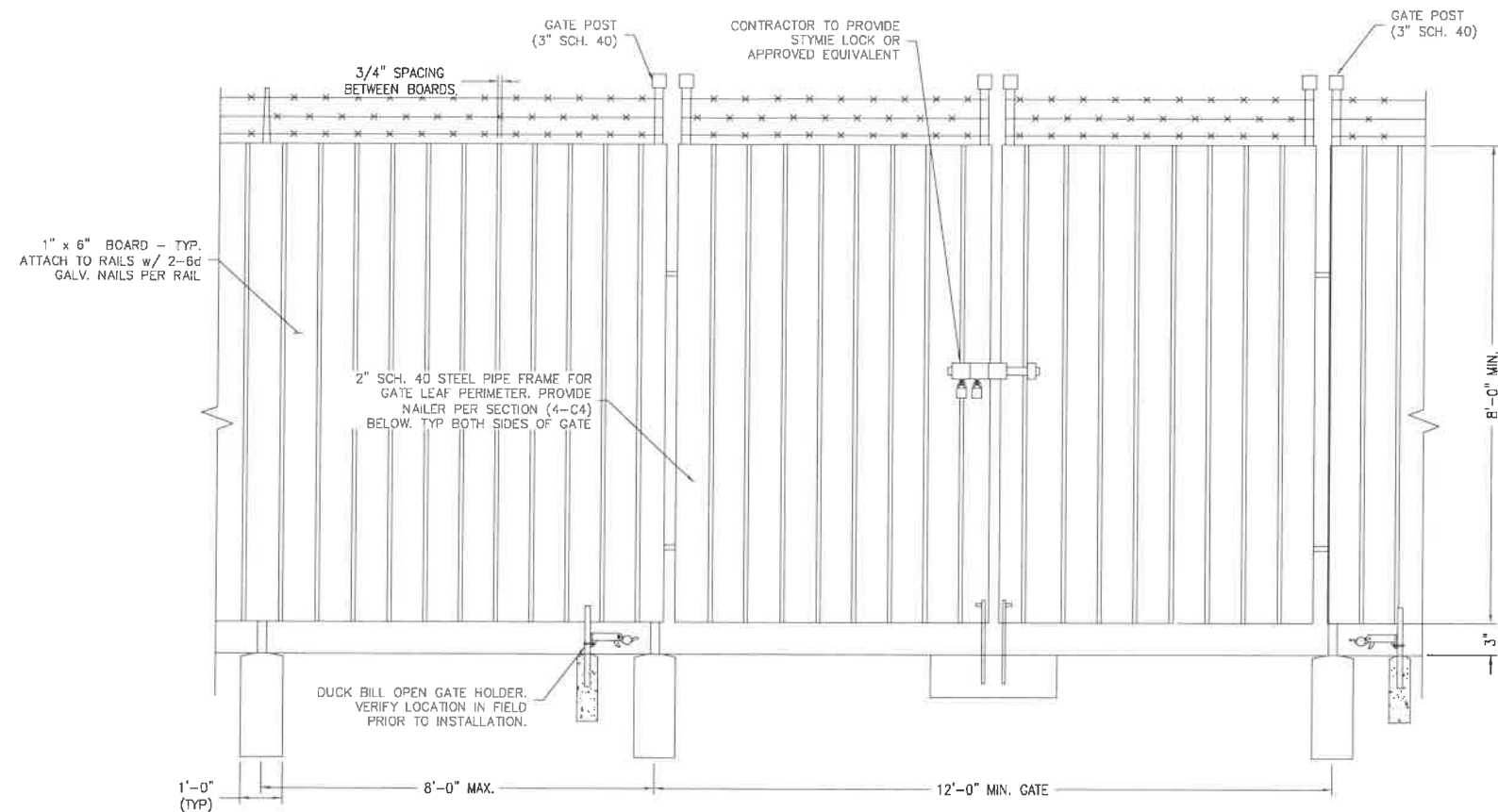


- NOTES:**  
1. WEIGHT OF CABINET IS 67 LBS. (15.8 KG)  
(WEIGHT IS EMPTY CABINET WITH SIDE  
MOUNTED THERMOELECTRIC COOLING OPTION).

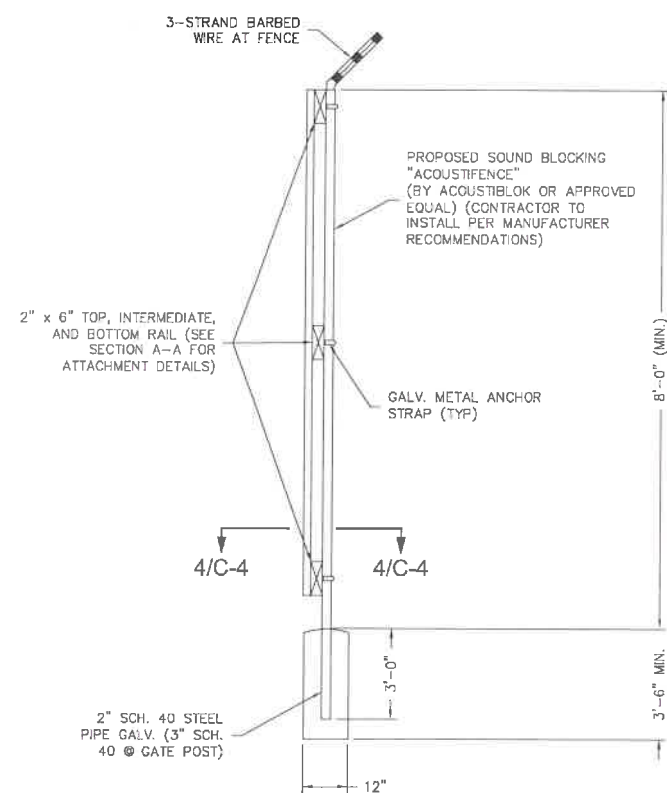




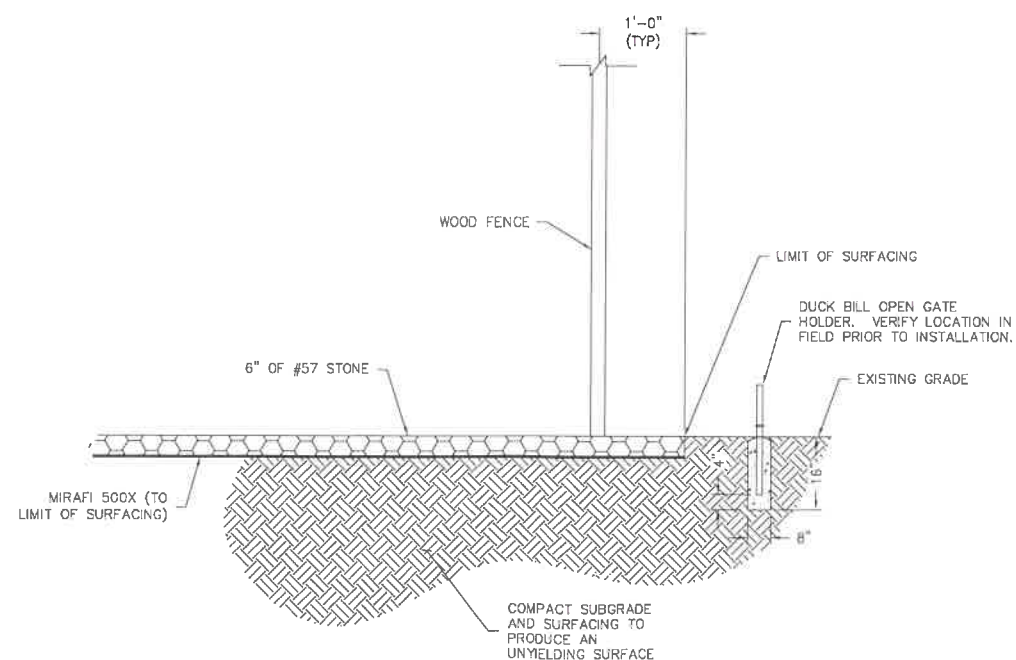
1. USE 3000-PSI CONCRETE, FULLY CONSOLIDATED AROUND THE POST.
2. WHERE THE POST IS SET IN ROCK OR CONCRETE, CORE A HOLE 12" DEEP AND 1" LARGER IN DIAMETER THAN THE POST. SET THE POST AND GROUT IN PLACE USING NON-SHRINK GROUT.
3. ALL POSTS MUST BE PLUMB AND ALIGNED WITH ONE ANOTHER IN BOTH HORIZONTAL AND VERTICAL PLANES.
4. CORNER AND GATEPOSTS FOR CHAIN LINK FENCES SHALL EXTEND ABOVE THE TOP STRAND OF BARBED WIRE TO PROVIDE TENSIONING FOR THE BARBED WIRE.
5. PROVIDE MIDRAILS AND BRACING AT ALL CORNER POSTS WHERE THE FENCE CHANGES DIRECTION BY MORE THAN 30 DEGREES.
6. THE GRADE OF THE SITE AND INSTALLATION OF THE FENCE SHALL PROVIDE FOR NO MORE THAN A 1" GAP BETWEEN THE BOTTOM OF THE FENCE MATERIAL AND FINISH GRADE.
7. CONTRACTOR SHALL PROVIDE HOLD OPEN DEVICES FOR ALL GATES AT THE SPECIFIED OPEN POSITIONS, DRIVEN PIPE TYPE RECEIVERS ARE NOT AUTHORIZED.
8. ALL WOOD SHALL BE SOUTHERN YELLOW PINE OR SPRUCE PINE FIR, NO. 2 OR BTR AND PRESSURE TREATED.



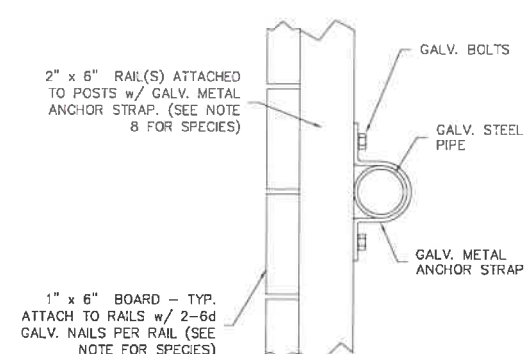
1 WOODEN FENCE AND GATE ELEVATION  
NOT TO SCALE



2 SIDE ELEVATION VIEW  
C-4 NOT TO SCALE



3 SITE COMPOUND SURFACE DETAIL  
C-4 NOT TO SCALE



4 FENCE SECTION  
NOT TO SCALE



**ECO SITE ID# NH-0002**  
**T-MOBILE SITE #: 4NB0203A**

10/10/19

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3	07/22/19	REVISED	MJS
4	10/10/19	REVISED	MJS



**NB+C<sup>TM</sup>**  
**TOTALLY COMMITTED.**

**NB+C ENGINEERING SERVICES, LLC.**  
 100 APOLLO DRIVE, SUITE 303  
 CHELMSFORD, MA 01824  
 (978) 856-8308

DRAWN BY:CHK.:APV.:		
DFR	PRC	PRC

[illegible]

### FENCE GATE AND COMPOUND DETAILS

## C4

4

018893000

PROJECT INFORMATION:

**ECO SITE ID# NH-0002**  
**T-MOBILE SITE #: 4NB0203A**  
 144 WEAVERBROOK ROAD  
 ROCHESTER, VT 05857  
 STRATTON CO. VT  
 LATITUDE: 43.510533°  
 LONGITUDE: -71.053875°

CURRENT ISSUE DATE:

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CONSULTANT:

**NB+C**  
**TOTALLY COMMITTED.**  
 NB+C ENGINEERING SERVICES, LLC.  
 100 APOLLO DRIVE, SUITE 305  
 CHELSEA, MA 01824  
 (978) 896-9306

CONSULTANT:

DRAWN BY: CHK.: APV.:

DFR PRC PRC

LICENSER:

STATE OF NEW HAMPSHIRE  
 KRUPAKARAN KOLANDAYE  
 No. 13888  
 LICENSED PROFESSIONAL ENGINEER  
 KRUPAKARAN KOLANDAYE, P.E.  
 NH PROFESSIONAL ENGINEER LIC. #13888  
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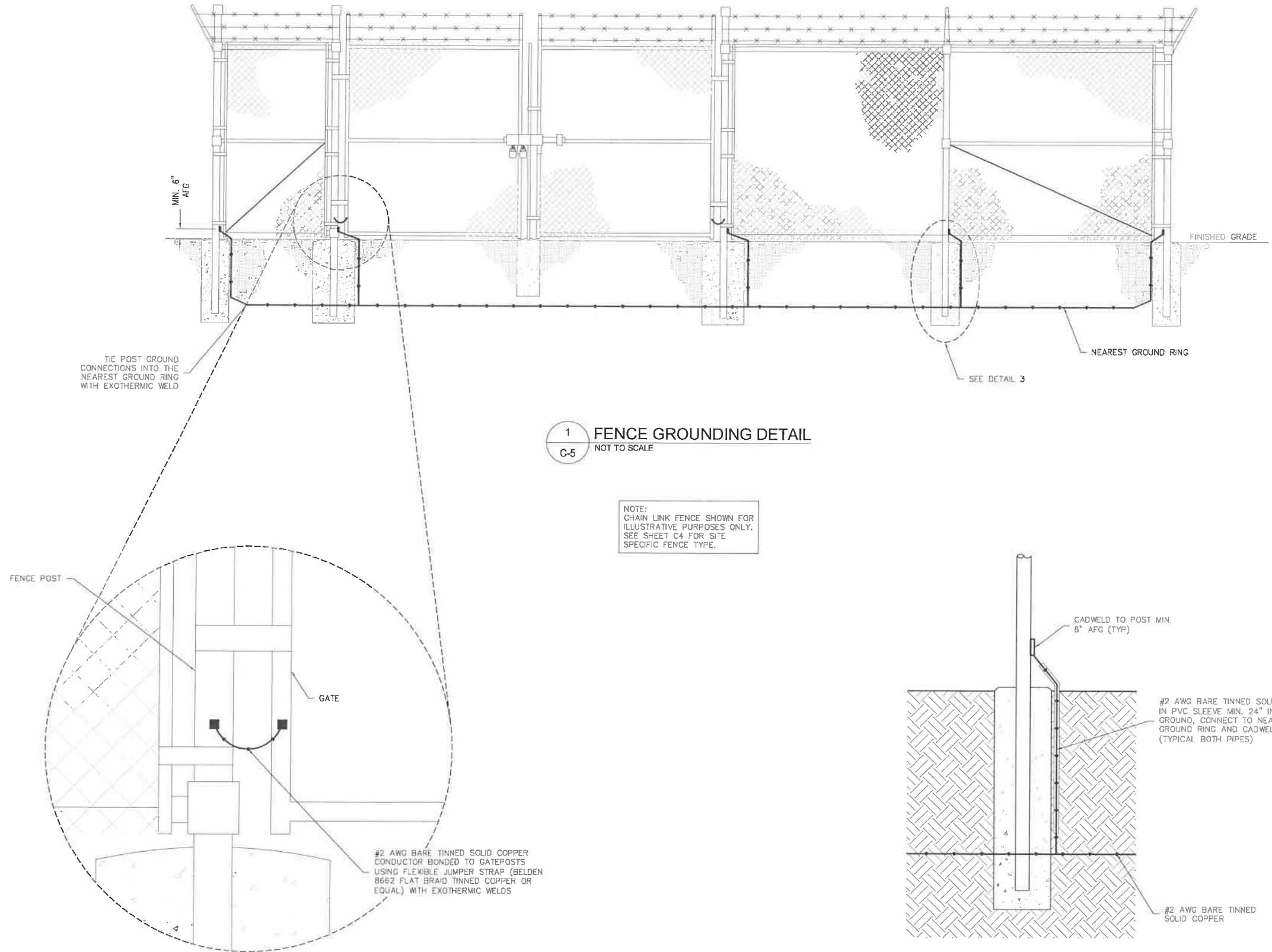
FENCE  
 GROUNDING  
 DETAILS

SHEET NUMBER: REVISION:

C5

4

018893000







Geo-Site

PROJECT INFORMATION:

ECO SITE ID# NH-0002  
T-MOBILE SITE #: 4NB0203A

LATITUDE: -  
LONGITUDE: -

CURRENT ISSUE DATE:

10/10/19

ISSUED FOR:

FINAL

REV. DATE: ISSUED FOR: BY:

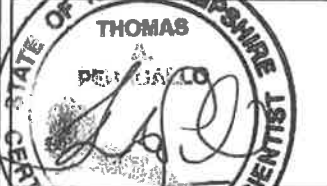
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2	04/04/19	REVISED	MJS
3	07/22/19	REVISED	MJS
4	10/10/19	REVISED	MJS

CONSULTANT:

**NB+C**  
TOTALLY COMMITTED.

NB+C ENGINEERING SERVICES, LLC.  
100 APOLLO DRIVE, SUITE 303  
CHELSEA, MA 01824  
(978) 209-8200

CONSULTANT:



DRAWN BY: CHC

WETLAND PRC

LICENSER:

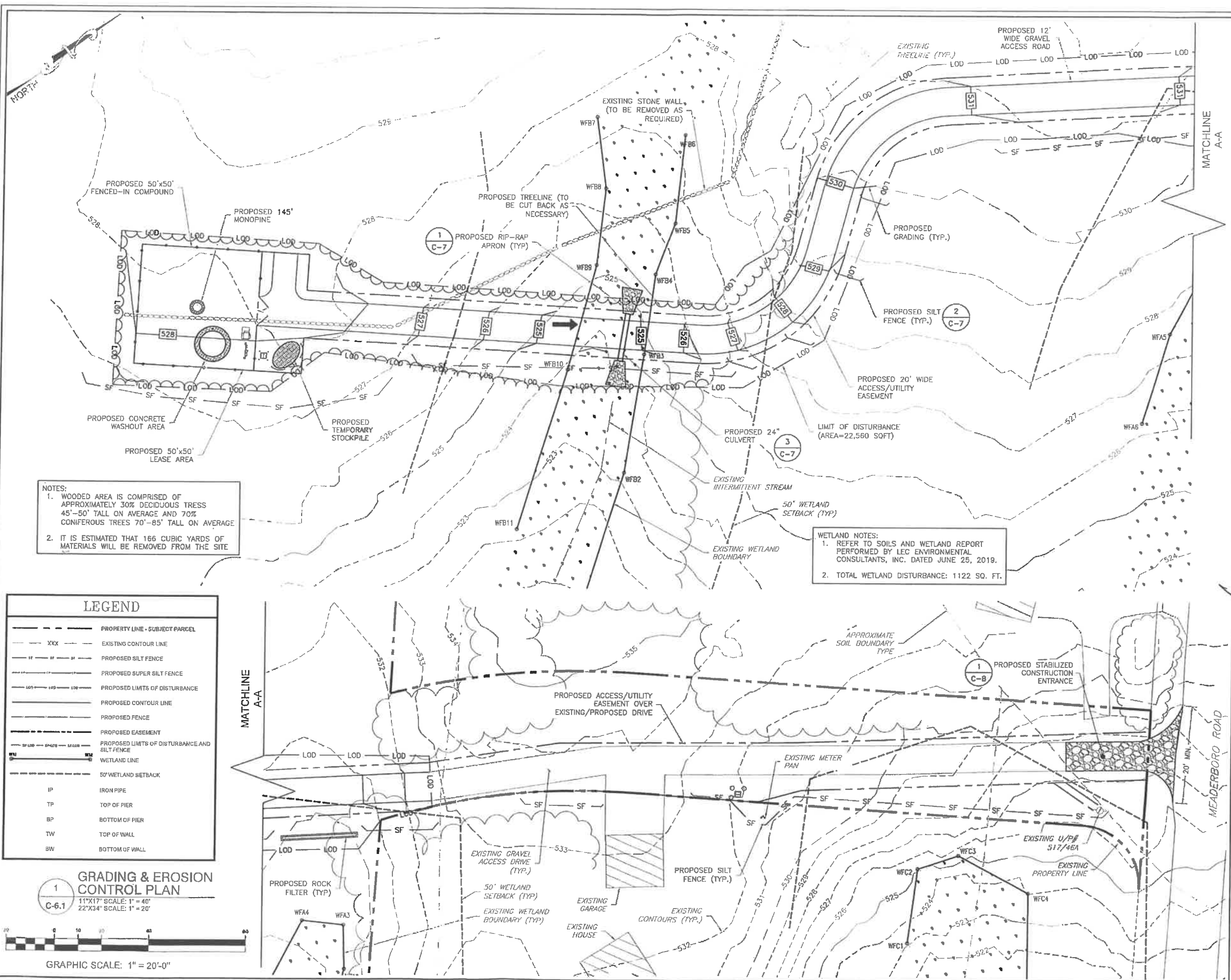


SHEET TITLE:

GRADING &  
EROSION  
CONTROL PLAN

SHEET NUMBER: REVISION:

**C6.1** 4  
018893000



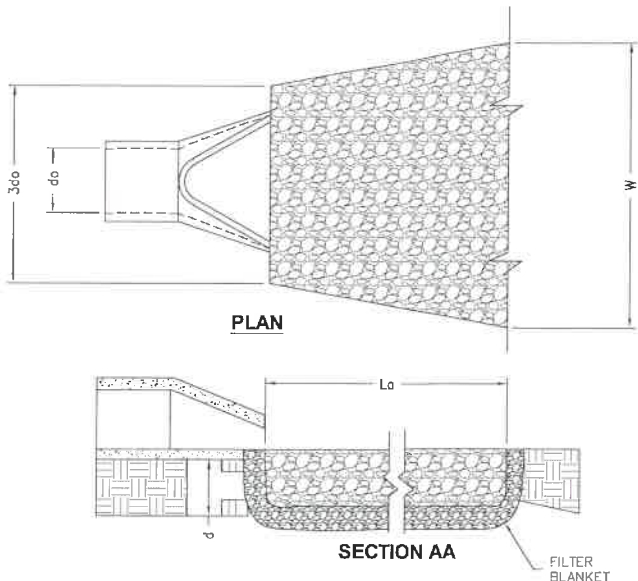


EROSION CONTROL NOTES:

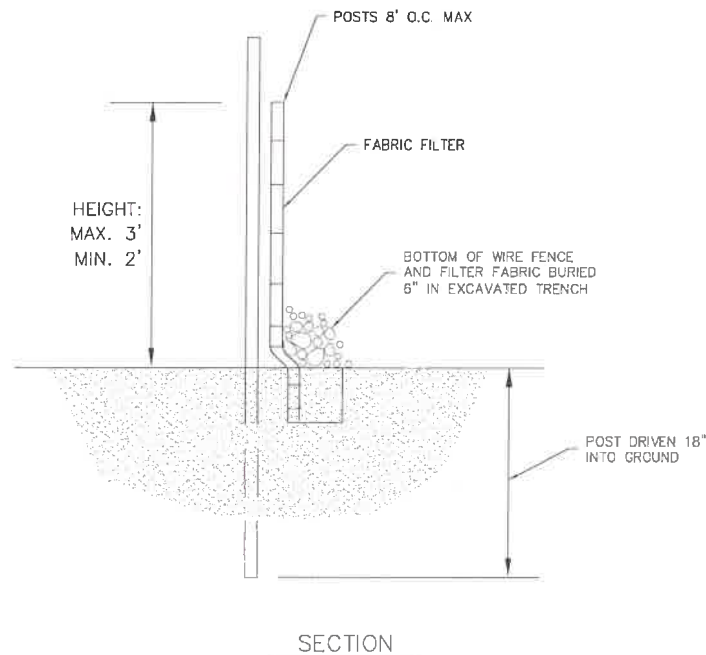
1. EROSION CONTROLS SHALL BE INSTALLED PRIOR TO CONSTRUCTION AND SHALL BE ADEQUATE TO MAINTAIN SEDIMENT ON SITE.
2. ALL EXCAVATED SOILS NOT NEEDED ON SITE FOR BACKFILL OPERATIONS SHALL BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE TAKEN OFF SITE AND LEGALLY DISPOSED OF.
3. SOIL REMAINING ON SITE SHALL HAVE SILT FENCE TIGHTLY PLACED AROUND THE ENTIRE CIRCUMFERENCE OF THE PILE.
4. PROVIDE EROSION CONTROLS AS NECESSARY TO PREVENT EXISTING SOILS FROM DRAINING OFF SITE OR INTO EXISTING DRAINAGE STRUCTURES.
5. ERECTION OF EROSION CONTROLS SHALL BE IN ACCORDANCE WITH STATE AND LOCAL EROSION CONTROL REGULATIONS.

NOTES:

1.  $L_a$  IS THE LENGTH OF THE RIPRAP APRON.
2.  $d = 1.5$  TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6".
3. IN A WELL-DEFINED CHANNEL EXTEND THE APRON UP THE CHANNEL BANKS TO AN ELEVATION OF 6" ABOVE THE MAXIMUM TAILWATER DEPTH OR TO THE TOP OF THE BANK, WHICHEVER IS LESS.
4. A FILTER BLANKET OR FILTER FABRIC SHOULD BE INSTALLED BETWEEN THE RIPRAP AND SOIL FOUNDATION.



1 RIP-RAP VELOCITY DISSIPATOR PAD  
C-7 NOT TO SCALE



2 SEDIMENT FENCE (SILT FENCE)  
C-7 NOT TO SCALE

CONSTRUCTION SEQUENCE

AT LEAST 7 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE O/RP SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES, THE LANDOWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS, THE EROSION AND SEDIMENT CONTROL PLAN PREPARER, AND THE CONSERVATION DISTRICT TO AN ON-SITE MEETING. ALSO, AT LEAST 3 WORKING DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE NEW HAMPSHIRE ONE CALL SYSTEM INCORPORATED AT 811 FOR BURIED UTILITIES LOCATIONS.

EROSION AND SEDIMENT BMPs MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE BEGINS WITHIN THE TRIBUTARY AREAS OF THOSE BMPs.

ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE.

1. MOBILIZATION
2. INSTALL SILT FENCE AROUND COMPOUND AREA.
3. COMMENCE CLEARING AND GRUBBING. SOIL STOCKPILE AREA AND ROUGH GRADE SITE.
4. EXCAVATE AND POUR TOWER FOUNDATION. BACKFILL AND COMPACT FOUNDATION AREA.
5. CONSTRUCT AND MAINTAIN TEMPORARY COVER TO STABILIZE DISTURBED AREAS.
6. INSTALL UTILITIES.
7. COLLECT SILT AND SEDIMENT AND PLACE BACK ON SITE
8. ESTABLISH PERMANENT COVER
9. REMOVE EROSION AND CONTROL MEASURES

IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE, THE O/RP SHALL STABILIZE ANY AREAS DISTURBED BY THE ACTIVITIES. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE SPECIFIED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY VEGETATIVE STABILIZATION SPECIFICATIONS. DISTURBED AREAS WHICH ARE AT FINISHED GRADE OR WHICH WILL NOT BE REDISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE PERMANENT VEGETATIVE STABILIZATION SPECIFICATIONS.

AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.

AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPs MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE BMPs MUST BE STABILIZED IMMEDIATELY.

SEEDING SCHEDULE FOR WINTER / SPRING CONSTRUCTION ACTIVITIES

SEEDING MIXTURE	RATE (LB/ACRE)
SPECIES	
RYE (GRAIN)	120
ANNUAL LESPEDEZA (KOBÉ IN PIEDMONT AND COASTAL PLAIN, KOREAN IN MOUNTAINS)	50

OMIT ANNUAL LESPEDEZA WHEN DURATION OF TEMPORARY COVER IS NOT TO EXTEND BEYOND JUNE.

SEEDING DATES	
MOUNTAINS - ABOVE 2500 FT.:	FEB 15 - MAY 15
BELOW 2500 FT.:	FEB. 1 - MAY 1
PIEDMONT -	JAN. 1 - MAY 1
COASTAL PLAIN -	DEC. 1 - APR. 15

**SOIL AMENDMENTS**  
FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER.

**MULCH**  
APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

**MAINTENANCE**  
REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

SEEDING SCHEDULE FOR SUMMER CONSTRUCTION ACTIVITIES

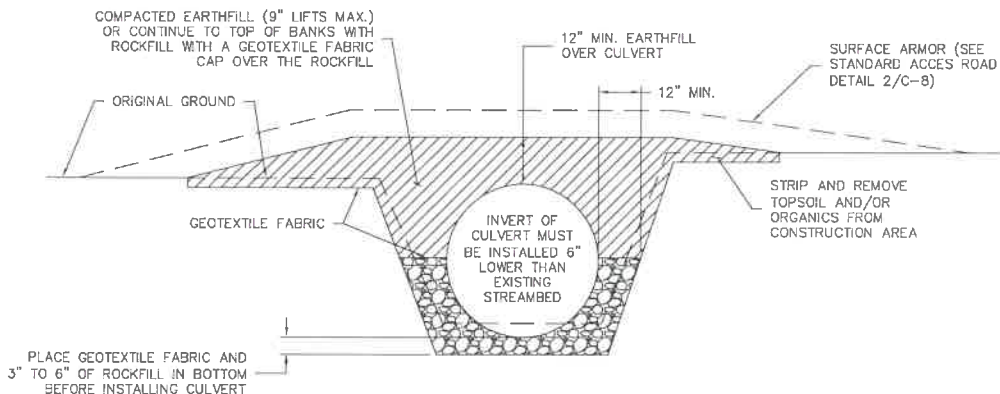
SEEDING MIXTURE	RATE (LB/ACRE)
SPECIES	
COMMON BERMUDAGRASS	40-50 (1-2 LB/1,000 SQ. FT.)

SEEDING DATES	
COASTAL PLAIN -	APR. 1 - JULY
PIEDMONT -	APR. 15 - JUNE 30

**SOIL AMENDMENTS**  
APPLY LIME AND FERTILIZER ACCORDING TO SOIL TESTS, OR APPLY 3,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 500 LB/ACRE 10-10-10 FERTILIZER.

**MULCH**  
USE JUTE, EXCELSIOR MATTING, OR OTHER EFFECTIVE CHANNEL LINING MATERIAL TO COVER THE BOTTOM OF CHANNELS AND DITCHES. THE LINING SHOULD EXTEND ABOVE THE HIGHEST CALCULATED DEPTH OF FLOW. ON CHANNEL SIDE SLOPES ABOVE THIS HEIGHT, AND IN DRAINAGES NOT REQUIRING TEMPORARY LINING, APPLY 4,000 LB/ACRE GRAIN STRAW AND ANCHOR STRAW BY STAPLING NETTING OVER THE TOP.

**MAINTENANCE**  
A MINIMUM OF 3 WEEKS IS REQUIRED FOR ESTABLISHMENT. INSPECT AND REPAIR MULCH FREQUENTLY. REFERTILIZE THE FOLLOWING APR. WITH 50 LB/ACRE NITROGEN.



3 SINGLE CULVERT CROSSING SECTION DETAIL  
C-7 NOT TO SCALE

Eco-Site

PROJECT INFORMATION:

ECO SITE ID# NH-0002  
T-MOBILE SITE #: 4NB0203A  
144 WEAVER ROAD  
ROCHESTER, NH 03867  
STRAFFORD COUNTY  
LATITUDE: 43.310533°  
LONGITUDE: -71.053875°

CURRENT ISSUE DATE:

10/10/19

ISSUED FOR:

FINAL

REV.: DATE: ISSUED FOR: BY:

0	02/18/19	CONSTRUCTION	PRC
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2	04/04/19	REVISED	MJS
3	07/22/19	REVISED	MJS
4	10/10/19	REVISED	MJS

CONSULTANT:

**NB+C**  
TOTALLY COMMITTED.  
NB+C ENGINEERING SERVICES, LLC.  
100 APOLLO DRIVE, SUITE 303  
CHELMSFORD, MA 01924  
(978) 855-8308

CONSULTANT:

DRAWN BY: CHK.: APV.:

DFR PRC PRC

LICENSER:



SHEET TITLE:

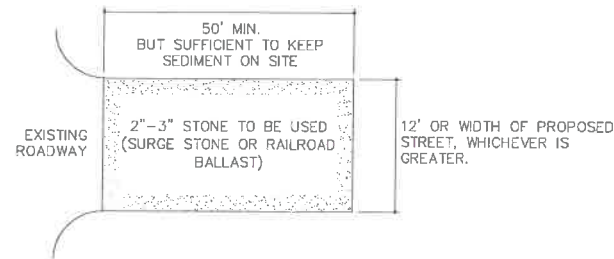
GRADING &  
EROSION  
CONTROL DETAILS

SHEET NUMBER: REVISION:

C7

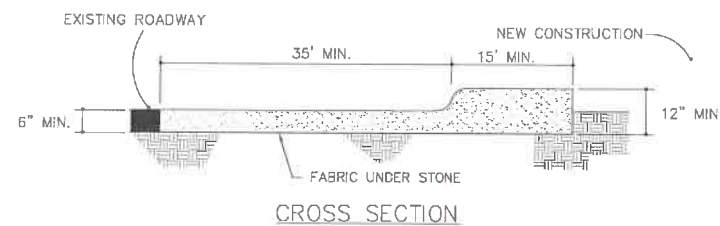
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018893000

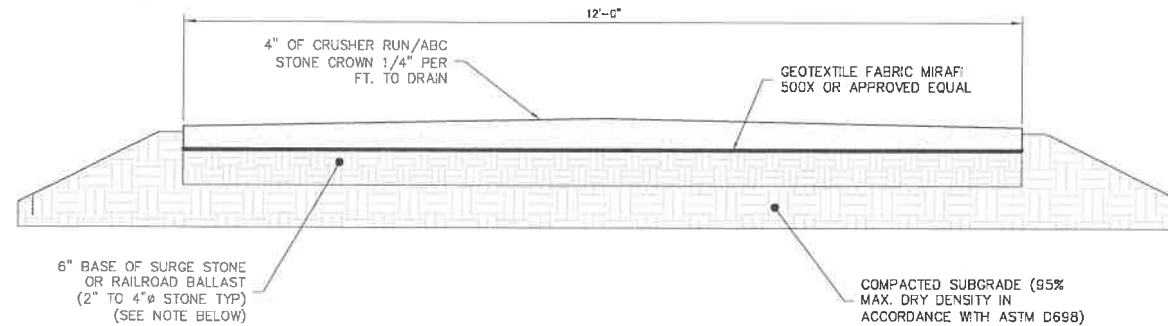


PLAN

- NOTES:
1. PUT SILT FENCE OR TREE PROTECTION FENCE UP TO ENSURE CONSTRUCTION ENTRANCE IS USED.
  2. IF CONSTRUCTION ON THE SITES ARE SUCH THAT THE MUD IS NOT REMOVED BY THE VEHICLE TRAVELING OVER THE STONE, THEN THE TIRES OF THE VEHICLES MUST BE WASHED BEFORE ENTERING THE PUBLIC ROAD.
  3. IF A PROJECT CONTINUES TO PULL MUD AND DEBRIS ON TO THE PUBLIC ROAD, THE GOVERNING AUTHORITY WILL CLEAN THE AREA AND INVOICE THE FINANCIALLY RESPONSIBLE PERSON AS INDICATED ON THE FINANCIAL RESPONSIBILITY FORM.



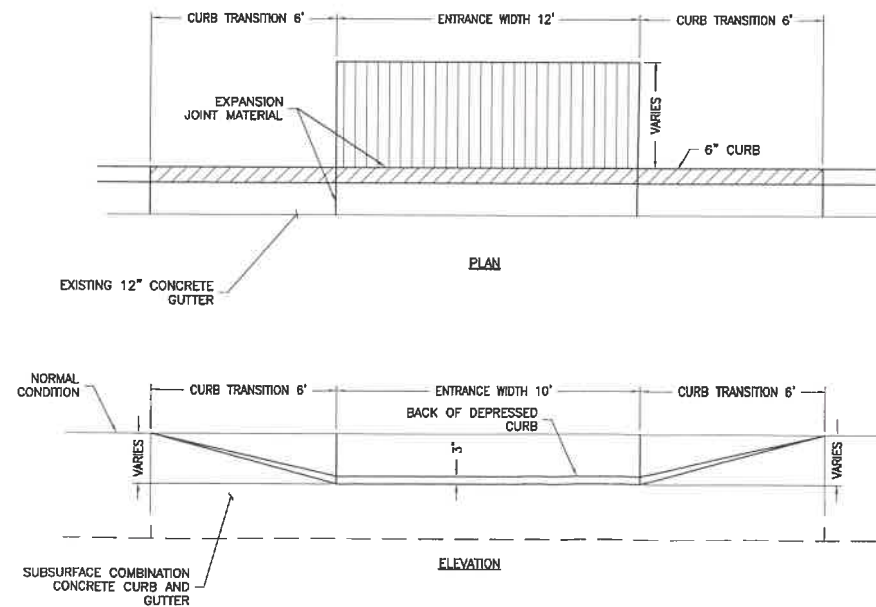
1 CONSTRUCTION ENTRANCE  
C-8 NOT TO SCALE



NOTE:

IF DETERMINED NECESSARY DURING GRADING AND CONSTRUCTION OF THE ACCESS ROAD BY THE ECO-SITE PROJECT MANAGER, THE CONTRACTOR SHALL INSTALL 6" BASE OF SURGE STONE OR RAILROAD BALLAST (2" TO 4" STONE TYP.)

2 STANDARD ACCESS ROAD DETAIL  
C-8 NOT TO SCALE



3 STANDARD CURB & SIDEWALK CUT DETAIL  
C-8 NOT TO SCALE

Eco-Site

PROJECT INFORMATION:

ECO SITE ID# NH-0002  
T-MOBILE SITE #: 4NB0203A  
144 MEADOWBROOK ROAD  
POC-ENTER, N- 113457  
STRATTON RD NH  
LATITUDE: 43.310333°  
LONGITUDE: -71.053875°

CURRENT ISSUE DATE:

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4	10/10/19	REVISED	MJS

CONSULTANT:

**NB+C**  
TOTALLY COMMITTED.

NB+C ENGINEERING SERVICES, LLC.  
100 APOLLO DRIVE, SUITE 303  
CHELMSFORD, MA 01824  
(978) 858-8388

CONSULTANT:

DRAWN BY: CHK.: APV.:  
DFR PRC PRC

LICENSER:

STATE OF NEW HAMPSHIRE  
KALPAKARAN KOLANDAYE  
No. 13868  
LICENSED PROFESSIONAL ENGINEER  
NH PROFESSIONAL ENGINEER NO. #13868  
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EXPlicitLY AGREED TO BY THE ENGINEER IN WRITING. THE ENGINEER DISCLAIMS ALL LIABILITY  
ASSOCIATED WITH THE REUSE, ALTERATION OR MODIFICATION OF THE CONTENTS HEREIN.

SHEET TITLE:

ACCESS ROAD  
DETAILS

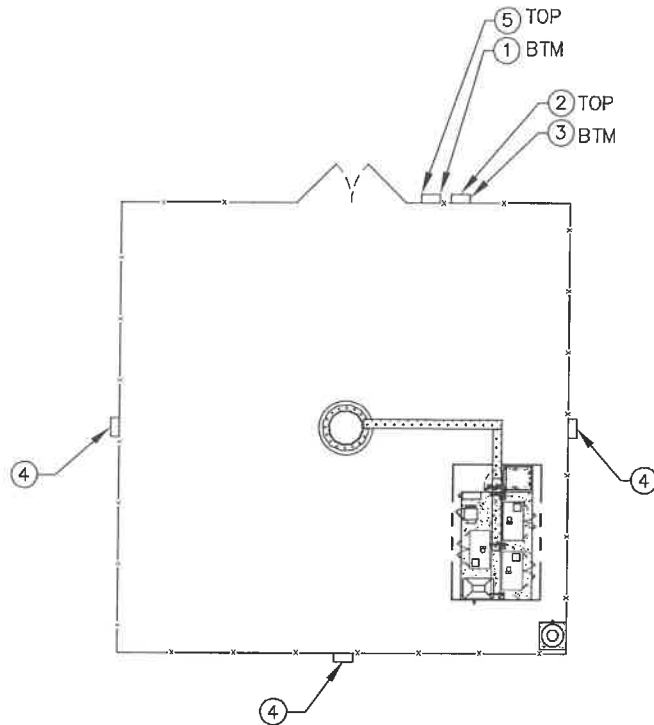
SHEET NUMBER: REVISION:

C8

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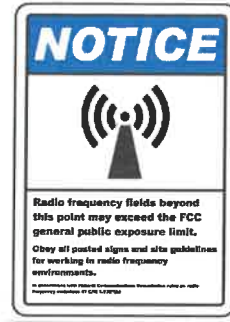
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NOTE: SEE TYPICAL SIGNS AND SPECIFICATIONS DETAIL ON THIS SHEET FOR SIGN DESIGNATIONS.

1 OVERALL SIGN PLACEMENT PLAN VIEW  
C-9 NOT TO SCALE



- ① NOTICE - RF SIGN (BLUE) 12" x 18" DIGITAL PRINT MOUNTED TO 0.40 THICK ALUMINUM (OPERATIONS PROVIDED)
- ② WARNING - RF SIGN 12" x 18" DIGITAL PRINT MOUNTED TO 0.40 THICK ALUMINUM (OPERATIONS PROVIDED)
- ③ CAUTION - RF SIGN (YELLOW) 12" x 18" DIGITAL PRINT MOUNTED TO 0.40 THICK ALUMINUM (OPERATIONS PROVIDED)
- ④ NO-TRESSPASSING SIGN 12" x 18" DIGITAL PRINT MOUNTED TO 0.40 THICK ALUMINUM (OPERATIONS PROVIDED)

TOWER ID:  
SITE NAME:  
E911 ADDRESS:  
FCC#:

FOR TOWER LEASING INFORMATION &  
**EMERGENCY CONTACT**  
**1-866-899-6191**

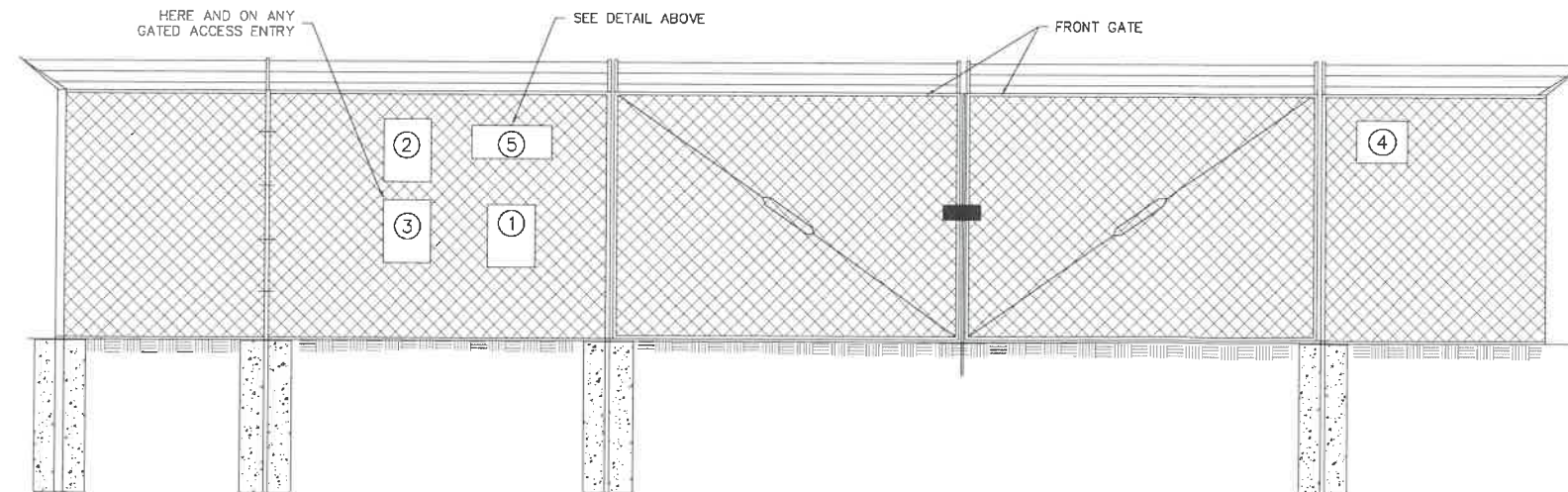
Eco-Site

**NOTE:**

SIGN REQUIREMENTS SHOWN ARE MINIMUM REQUIREMENTS SET BY ECO-SITE. CONFIRM ADDITIONAL SIGNAGE REQUIREMENTS WITH LOCAL BUILDING AUTHORITY.

- ⑤ ECO-SITE ID SIGN  
18" HIGH X 24" WIDE  
(OPERATIONS PROVIDED)

2 TYPICAL SIGNS AND SPECIFICATIONS  
C-9 NOT TO SCALE



**SIGNAGE NOTES:**

1. SIGNS SHALL BE FABRICATED FROM CORROSION RESISTANT PRESSED METAL, AND PAINTED WITH LONG LASTING UV RESISTANT COATINGS.
2. SIGNS (EXCEPT WHERE NOTED OTHERWISE) SHALL BE MOUNTED TO THE TOWER, GATE, AND FENCE USING A MINIMUM OF 9 GAUGE ALUMINUM WIRE, HOG RINGS (AS UTILIZED IN FENCE INSTALLATIONS) OR BRACKETS WHERE NECESSARY. BRACKETS SHALL BE OF SIMILAR METAL AS THE STRUCTURE TO AVOID GALVANIC CORROSION.

3 SITE SIGNAGE FRONT GATE VIEW  
C-9 NOT TO SCALE

Eco-Site

**PROJECT INFORMATION:**

ECO SITE ID# NH-0002  
T-MOBILE SITE #: 4NB0203A  
144 WADSWORTH ROAD  
ROCHESTER, NH 03857  
STAFFORD COUNTY  
LATITUDE: 43.310633°  
LONGITUDE: -71.053875°

**CURRENT ISSUE DATE:**

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FINAL

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3	07/22/19	REVISED	MJS
4	10/10/19	REVISED	MJS

**CONSULTANT:**

**NB+C**  
**TOTALLY COMMITTED.**  
NB+C ENGINEERING SERVICES, LLC.  
100 APOLLO DRIVE, SUITE 300  
CHELMSFORD, MA 01824  
(978) 655-4308

**CONSULTANT:**

**DRAWN BY: CHK: APV:**  
DFR PRC PRC

**LICENSER:**

STATE OF NEW HAMPSHIRE  
Krupakaran  
No. 13868  
LICENSED  
NH PROFESSIONAL ENGINEER LIC. #13868  
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**SHEET TITLE:**

**SITE SIGNAGE  
DETAILS**

**SHEET NUMBER: REVISION:**

**C9**

**4**

018893000

PROJECT INFORMATION:

ECO SITE ID# NH-0002  
T-MOBILE SITE #: 4NB0203A

144 WATERBURY ROAD  
ROSELAND, NH 03068  
LATITUDE: 43.310333  
LONGITUDE: -71.053875

CURRENT ISSUE DATE:

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4	10/10/19	REVISED	MJS

CONSULTANT:

**NB+C**  
TOTALLY COMMITTED.

NB+C ENGINEERING SERVICES, LLC.  
100 APOLLO DRIVE, SUITE 303  
CHELMSFORD, MA 01824  
(978) 858-8308

CONSULTANT:

DRAWN BY: CHK.: APV.:

DFR PRC PRC

LICENSER:

STATE OF NEW HAMPSHIRE  
Krupakaran  
No. 13868  
LICENSED PROFESSIONAL ENGINEER  
Krupakaran Holandaimed J.  
NH PROFESSIONAL ENGINEER LIC. #13868

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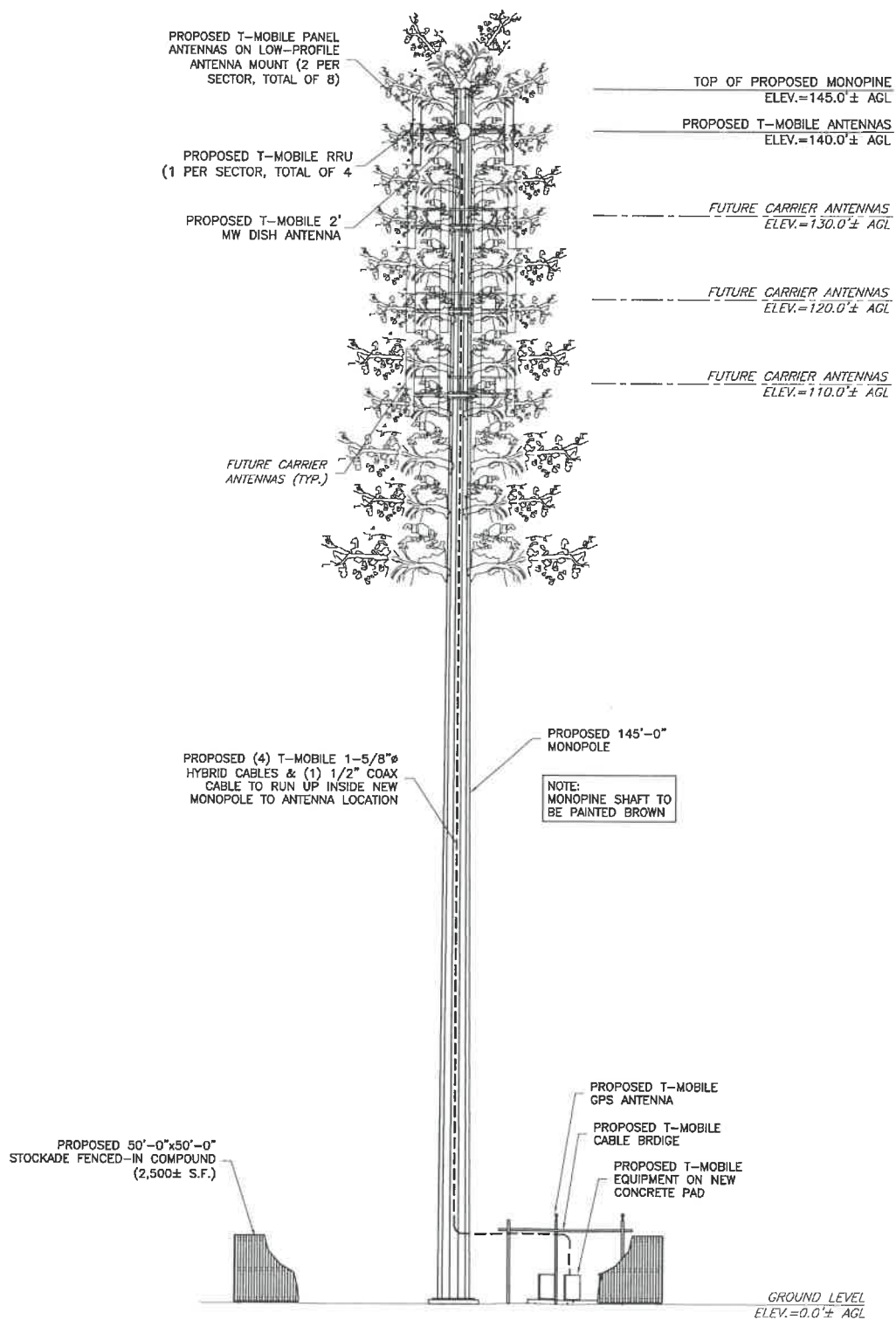
ANTENNA AND  
TOWER ELEVATION  
DETAILS

SHEET NUMBER: REVISION:

C10

4

018893000



1 MONOPOLE TOWER ELEVATION - NORTHWEST VIEW  
C-10 11"X17" SCALE: 1" = 20'  
22"X34" SCALE: 1" = 10'



GRAPHIC SCALE: 1" = 10'-0"

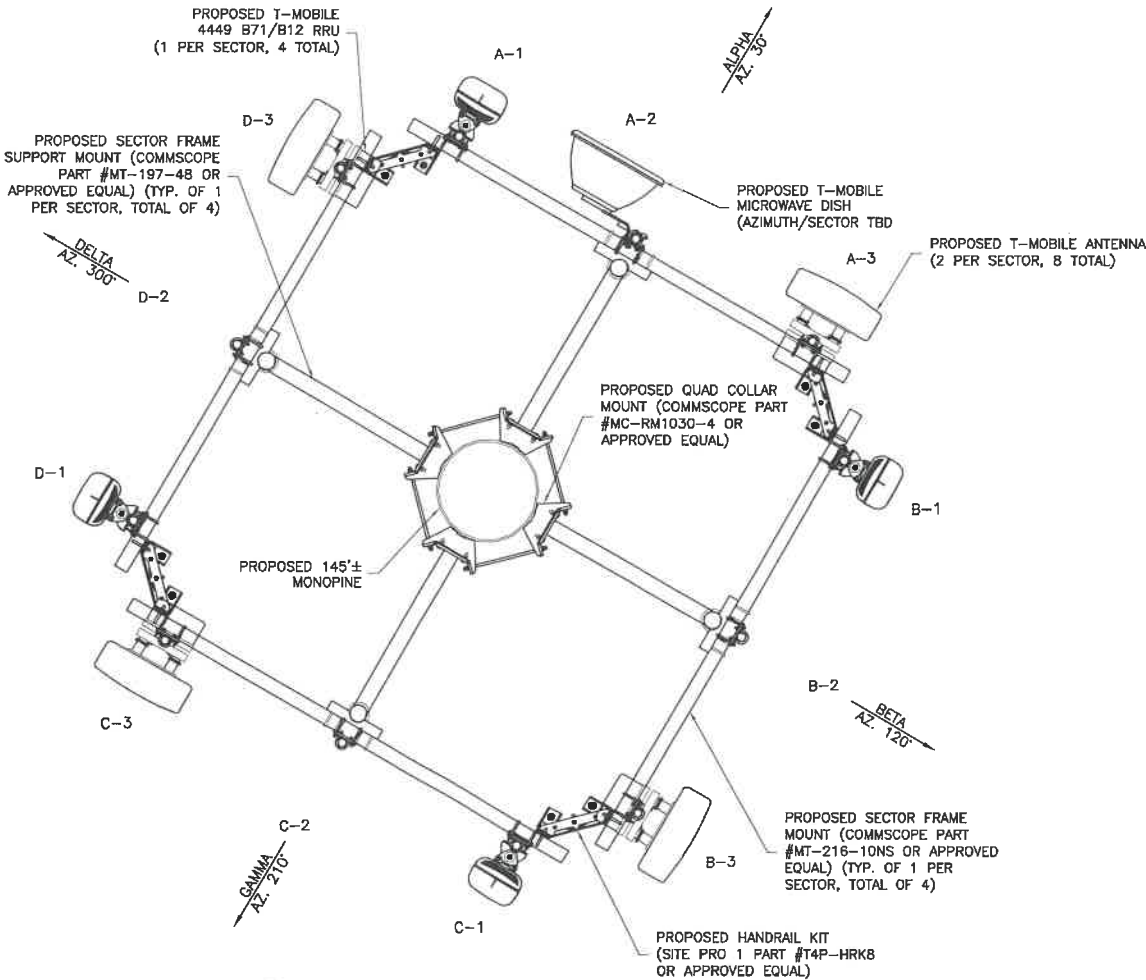


ANTENNA INFORMATION											
SECTOR	STATUS	ANTENNA MANUFACTURER	ANTENNA MODEL	ANTENNA DIMENSIONS (HxWxD)	MECHANICAL DOWN TILT	ELECTRICAL DOWN TILT	RAD CENTER	AZIMUTH	TMA/RRU QUANTITY & MODEL	CABLE QUANTITY & TYPE	CABLE LENGTH
A1	PROPOSED	ERICSSON	AIR 32 DB	56.6"x12.9"x8.7"	0' / 0'	2' / 2' / 2' / 2'	140'	30'	-	(1) 6X12 HYBRID CABLE	180'±
A2	PROPOSED	RFS	SC2-W100AC	26.4"Ø	-	-	140'	TBD	-	(1) 1/2" COAX CABLE	180'±
A3	PROPOSED	RFS	APXVAARR24_43-U-NA20	95.9"x24.0"x8.5"	0'	4' / 4'	140'	30'	(1) ERICSSON 4449 B71/B12	SHARED WITH A-1	-
B1	PROPOSED	ERICSSON	AIR 32 DB	56.6"x12.9"x8.7"	0' / 0'	2' / 2' / 2' / 2'	140'	120'	-	(1) 6X12 HYBRID CABLE	180'±
B2	FUTURE	-	-	-	-	-	-	-	-	-	-
B3	PROPOSED	RFS	APXVAARR24_43-U-NA20	95.9"x24.0"x8.5"	0'	4' / 4'	140'	120'	(1) ERICSSON 4449 B71/B12	SHARED WITH B-1	-
C1	PROPOSED	ERICSSON	AIR 32 DB	56.6"x12.9"x8.7"	0' / 0'	2' / 2' / 2' / 2'	140'	210'	-	(1) 6X12 HYBRID CABLE	180'±
C2	FUTURE	-	-	-	-	-	140'	-	-	-	-
C3	PROPOSED	RFS	APXVAARR24_43-U-NA20	95.9"x24.0"x8.5"	0'	4' / 4'	140'	210'	(1) ERICSSON 4449 B71/B12	SHARED WITH C-1	-
D1	PROPOSED	ERICSSON	AIR 32 DB	56.6"x12.9"x8.7"	0' / 0'	2' / 2' / 2' / 2'	140'	300'	-	(1) 6X12 HYBRID CABLE	180'±
D2	FUTURE	-	-	-	-	-	-	-	-	-	-
D3	PROPOSED	RFS	APXVAARR24_43-U-NA20	95.9"x24.0"x8.5"	0'	4' / 4'	140'	300'	(1) ERICSSON 4449 B71/B12	SHARED WITH D-1	-

NOTES:  
1. CONTRACTOR TO VERIFY PROPOSED ANTENNA INFORMATION IS THE MOST CURRENT DATA AT TIME OF CONSTRUCTION.  
2. CONTRACTOR TO CONFIRM CABLE LENGTHS PRIOR TO CONSTRUCTION.

MAGNETIC NORTH DEVIATION FOR TRUE NORTH +14.89 DEGREES

(-) → (+)



1 ANTENNA LAYOUT PLAN  
C-11 NOT TO SCALE



PROJECT INFORMATION:

ECO SITE ID# NH-0002  
T-MOBILE SITE #: 4NB0203A  
144 MEADOWBROOK ROAD  
ROCKFORD, VT 05857  
STAFFORD COUNTY  
LATITUDE: 43.310533°  
LONGITUDE: -71.053275°

CURRENT ISSUE DATE:

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4	10/10/19	REVISED	MJS

CONSULTANT:

**NB+C**  
TOTALLY COMMITTED.  
NB+C ENGINEERING SERVICES, LLC.  
100 APOLLO DRIVE, SUITE 303  
CHELMSFORD, MA 01824  
(978) 856-8338

CONSULTANT:

DRAWN BY: CHK.: APV.:

DFR PRC PRC

LICENSER:

STATE OF NEW HAMPSHIRE  
Krupakarman, Indrajit  
No. 13868  
LICENSED PROFESSIONAL ENGINEER  
NH PROFESSIONAL ENGINEER LICENSE #13868  
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SHEET TITLE:

ANTENNA PLAN  
& SCHEDULE

SHEET NUMBER: REVISION:

C11

4

018893000

PROJECT INFORMATION:

ECO SITE ID# NH-0002  
T-MOBILE SITE #: 4NB0203A  
144 WEAVER ROAD  
ROCKFORD, NH 03857  
STRAFFORD COUNTY  
LATITUDE: 43.310333°  
LONGITUDE: -71.053275°

CURRENT ISSUE DATE:

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4	10/10/19	REVISED	MJS

CONSULTANT:

**NB+C**  
TOTALLY COMMITTED.  
NB+C ENGINEERING SERVICES, LLC.  
100 APOLLO DRIVE, SUITE 303  
CHELMSFORD, MA 01824  
(978) 856-9308

CONSULTANT:

DRAWN BY: CHK.: APV.:

DFR PRC PRC

LICENSER:

STATE OF NEW HAMPSHIRE  
Krupakaran  
KOLANDAYE  
No. 13868  
LICENSED PROFESSIONAL ENGINEER  
Krupakaran Kolandaye  
NH PROFESSIONAL ENGINEER LICENSE #13868  
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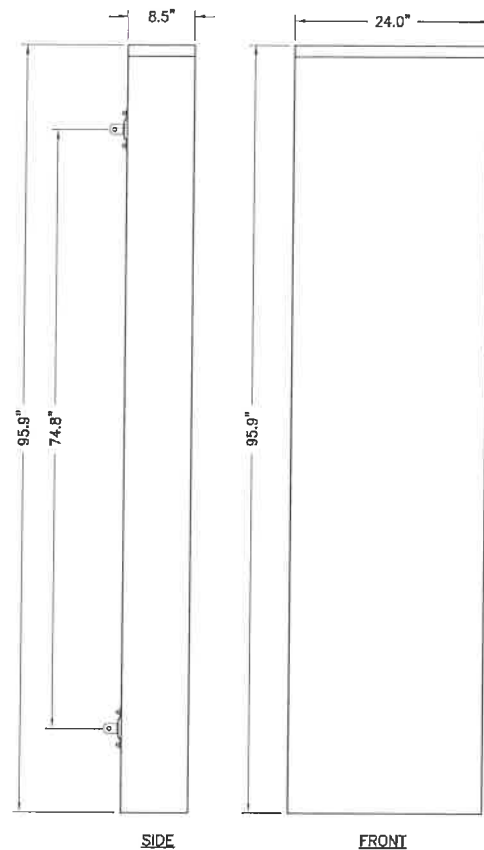
ANTENNA DETAILS  
& SPECIFICATIONS

SHEET NUMBER: REVISION:

C12

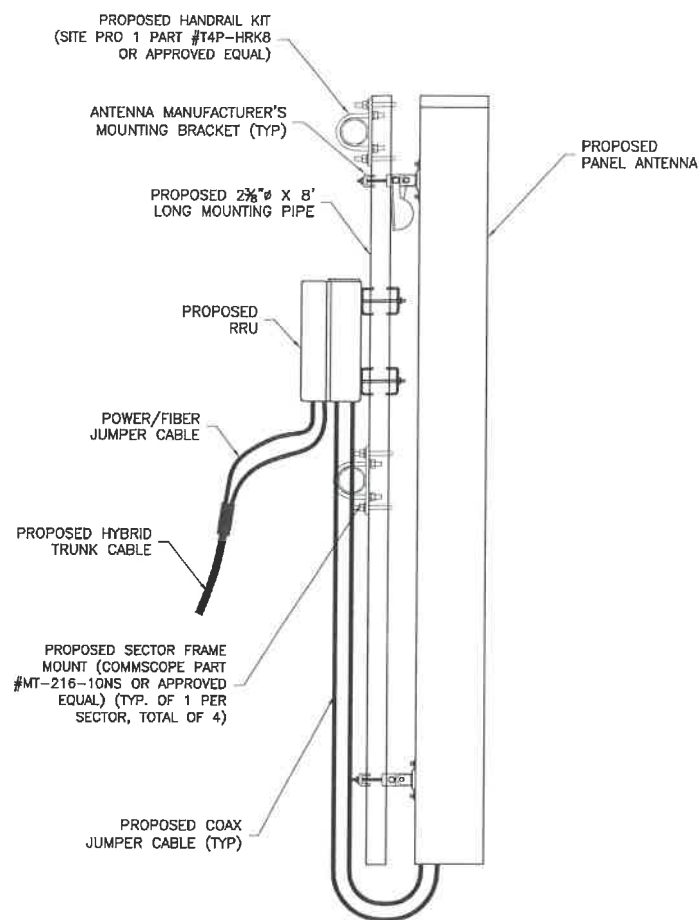
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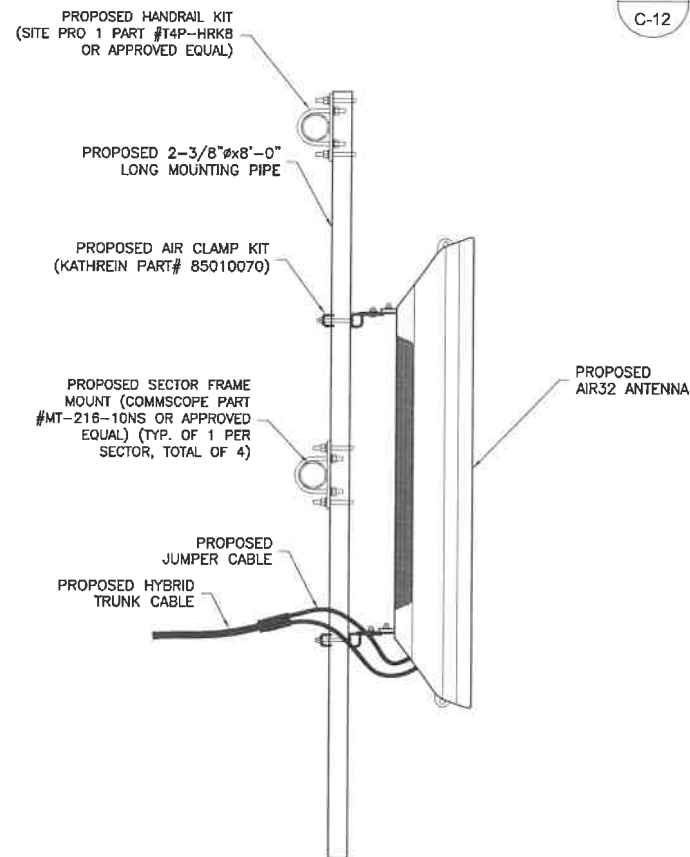


MECHANICAL SPECIFICATIONS  
RFS PART# - APXVAARR24-43-U-NA20  
HEIGHT: 95.9 IN  
WIDTH: 24.0 IN  
DEPTH: 8.5 IN  
WEIGHT: 99.0 LBS

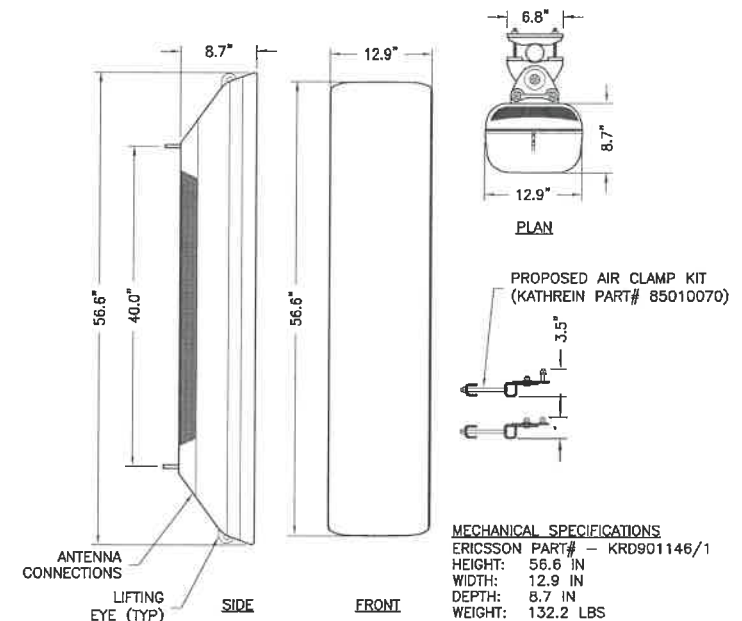
1 RFS PANEL ANTENNA  
C-12 NOT TO SCALE



2 ANTENNA MOUNTING DETAIL  
C-12 NOT TO SCALE

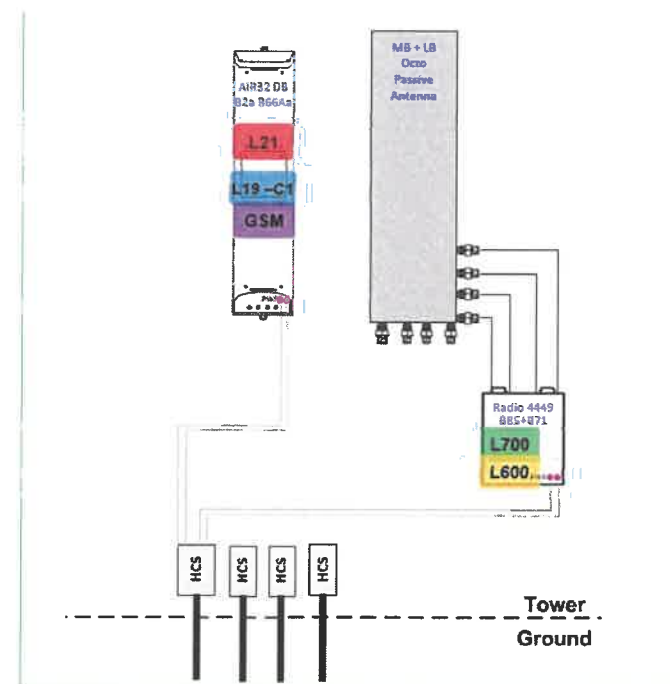


4 ANTENNA MOUNTING DETAIL  
C-12 NOT TO SCALE



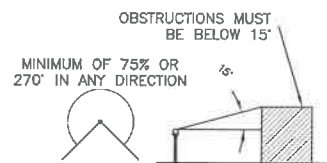
MECHANICAL SPECIFICATIONS  
ERICSSON PART# - KRD901146/1  
HEIGHT: 56.6 IN  
WIDTH: 12.9 IN  
DEPTH: 8.7 IN  
WEIGHT: 132.2 LBS

3 ERICSSON AIR-32DB PANEL ANTENNA  
C-12 NOT TO SCALE



5 PLUMBING DIAGRAM  
C-12 NOT TO SCALE





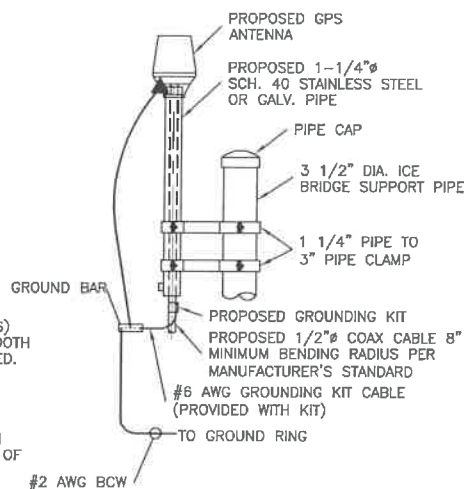
NOTES:

1. THE ELEVATION AND LOCATION OF THE GPS ANTENNA SHALL BE IN ACCORDANCE WITH THE FINAL RF REPORT.

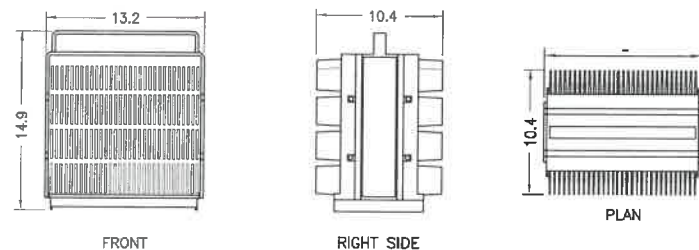
2. THE GPS ANTENNA MOUNT IS DESIGNED TO FASTEN TO A STANDARD 1-1/4" DIAMETER, SCHEDULE 40, GALVANIZED STEEL OR STAINLESS STEEL PIPE. THE PIPE MUST NOT BE THREADED AT THE ANTENNA MOUNT END. THE PIPE SHALL BE CUT TO THE REQUIRED LENGTH (MINIMUM OF 18 INCHES) USING A HAND OR ROTARY PIPE CUTTER TO ASSURE A SMOOTH AND PERPENDICULAR CUT. A HACK SAW SHALL NOT BE USED. THE CUT PIPE END SHALL BE DEBURRED AND SMOOTH IN ORDER TO SEAL AGAINST THE NEOPRENE GASKET ATTACHED TO THE ANTENNA MOUNT.

3. IT IS CRITICAL THAT THE GPS ANTENNA IS MOUNTED SUCH THAT IT IS WITHIN 2 DEGREES OF VERTICAL AND THE BASE OF THE ANTENNA IS WITHIN 2 DEGREES OF LEVEL.

4. DO NOT SWEEP TEST GPS ANTENNA.



1 GPS MOUNTING DETAIL  
C-13 NOT TO SCALE



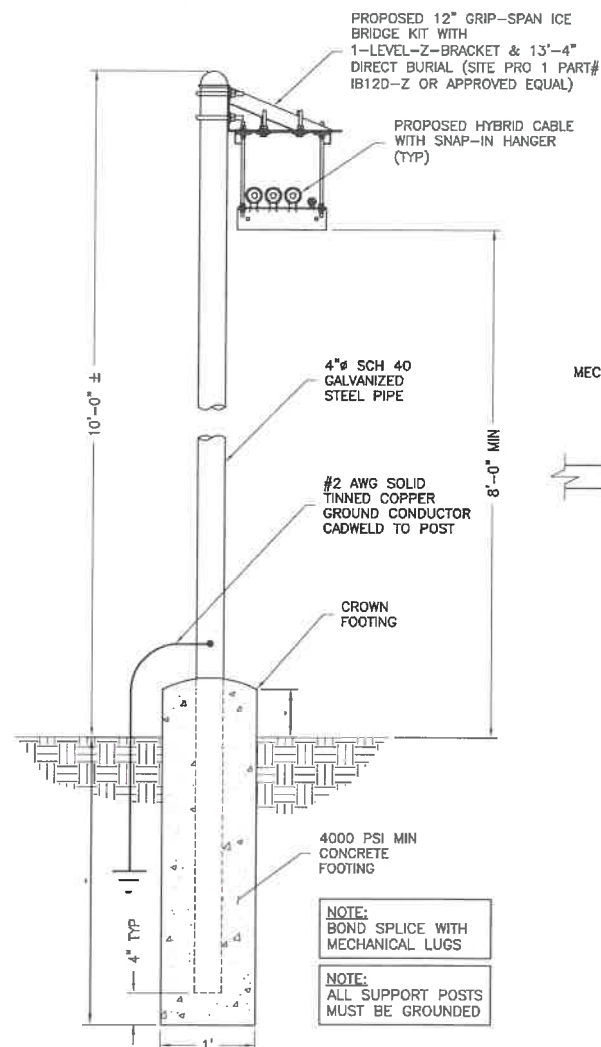
SIZE AND WEIGHT TABLE

RRU	WIDTH	DEPTH	HEIGHT	WEIGHT W/O BRACKET
RADIO 4449 B71/B12	13.2"	10.4"	14.9"	74.0 LBS.

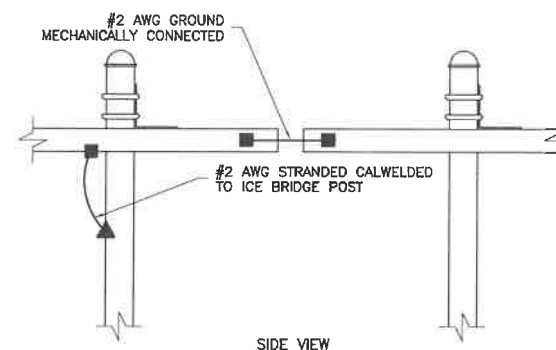
NOTES:

1. DO NOT PAINT THE RRU. RRU SOLAR SHIELD CAN BE PAINTED PER MANUFACTURER'S METHOD OF PROCEDURE.

4 ERICSSON REMOTE RADIO UNIT (RRU)  
C-13 NOT TO SCALE



2 CABLE BRIDGE DETAIL  
C-13 NOT TO SCALE



3 CABLE GROUND SECTION  
C-13 NOT TO SCALE

Eco-Site

PROJECT INFORMATION:

ECO SITE ID# NH-0002  
T-MOBILE SITE #: 4NB0203A

1441 WEATHERFORD ROAD  
907-7577777  
WEATHERFORD, AL 36087  
LATITUDE: 43.310633°  
LONGITUDE: -71.053275°

CURRENT ISSUE DATE:

10/10/19

ISSUED FOR:

FINAL

REV.: DATE: ISSUED FOR: BY:

0	02/18/19	CONSTRUCTION	PRC
1	03/01/19	REVISED	PRC
2	04/04/19	REVISED	MJS
3	07/22/19	REVISED	MJS
4	10/10/19	REVISED	MJS

CONSULTANT:

**NB+C**  
TOTALLY COMMITTED.  
NB+C ENGINEERING SERVICES, LLC.  
100 APOLLO DRIVE, SUITE 303  
CHELMSFORD, MA 01824  
(978) 655-6300

CONSULTANT:

DRAWN BY: CHK.: APV.:

DFR PRC PRC

LICENSER:

STATE OF NEW HAMPSHIRE  
Krupakaran, Kolan, Jeyaraj  
No. 13868  
LICENSED PROFESSIONAL ENGINEER  
NH PROFESSIONAL ENGINEER NO. #13868  
IT IS A VIOLATION OF THE ENGINEER'S ETHICS TO ACT UNDER THE  
DIRECTION OF A LICENSED PROFESSIONAL ENGINEER WITHOUT THE  
EXPLICIT AGREEMENT TO DO SO BY THE ENGINEER. THE ENGINEER  
ASSUMES ALL LIABILITY ASSOCIATED WITH THE REUSE, ALTERATION OR MODIFICATION OF THE CONTENTS HEREIN.

SHEET TITLE:

ANTENNA PLAN  
DETAILS

SHEET NUMBER: REVISION:

C13 4  
018893000

PROJECT INFORMATION:  
**ECO SITE ID# NH-0002**  
**T-MOBILE SITE #: 4NB0203A**  
 144 WEATHERS ROAD  
 307 - 5575, N. STATE  
 STRAFFORD, NH  
 LATITUDE: 43.310333°  
 LONGITUDE: -71.053275°

CURRENT ISSUE DATE:  
**10/10/19**

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**FINAL**

REV.	DATE	ISSUED FOR	BY
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4	10/10/19	REVISED	MJS

CONSULTANT:  
**NB+C**  
**TOTALLY COMMITTED.**  
 NB+C ENGINEERING SERVICES, LLC.  
 100 APOLLO DRIVE, SUITE 303  
 CHELMSFORD, MA 01824  
 (978) 855-4300

CONSULTANT:  
 (Blank)

DRAWN BY: DFR  
 CHK.: PRC  
 APV.: PRC

LICENSER:

STATE OF NEW HAMPSHIRE  
 KRUPAKARAN KOLANDAYE  
 No. 13868  
 LICENSED PROFESSIONAL ENGINEER  
 NH PROFESSIONAL ENGINEER LICENSE #13868  
 IT IS A VIOLATION OF THE ENGINEERING ACTS UNDER THE  
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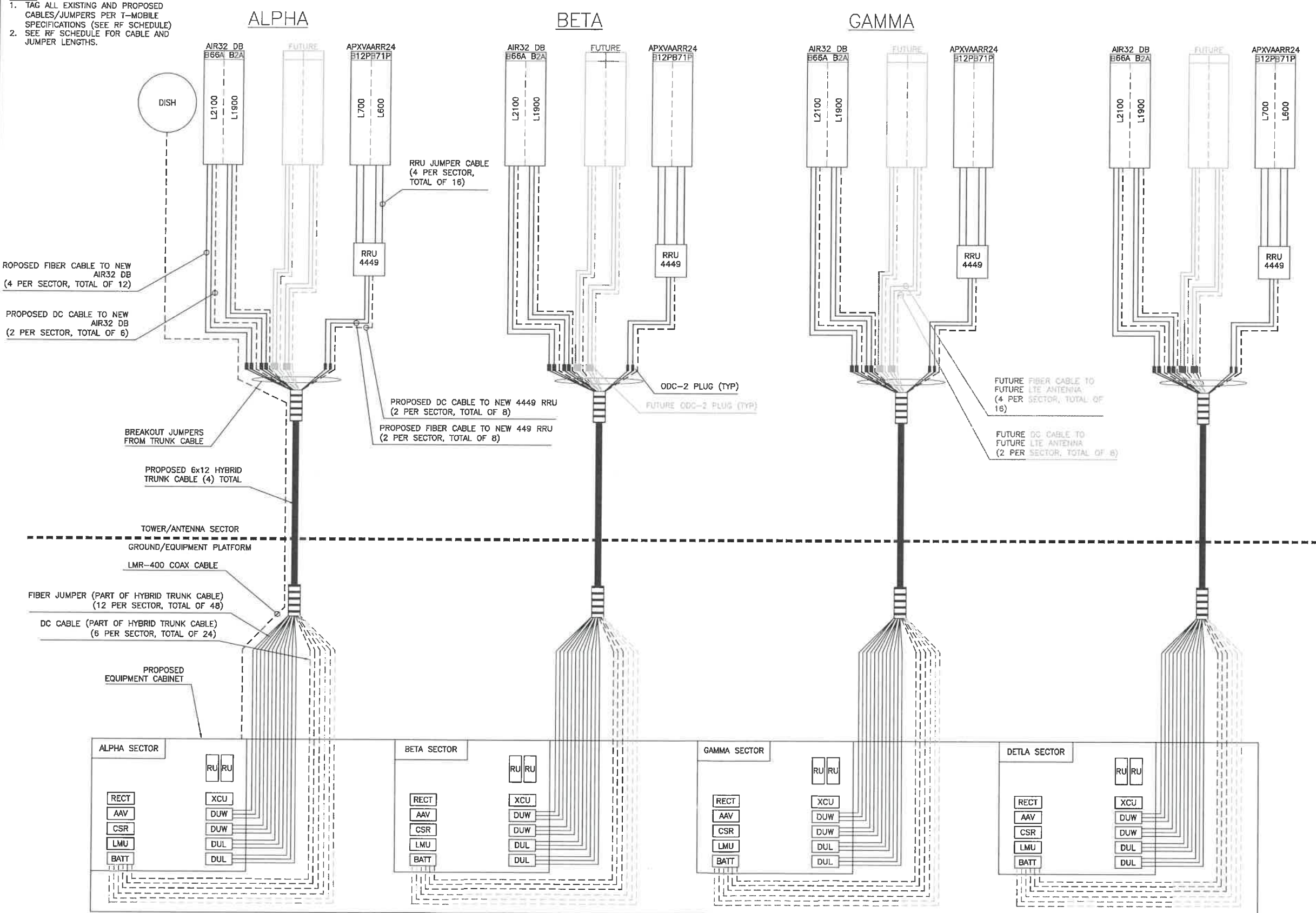
SHEET TITLE:

**ANTENNA  
 & CABLING  
 SCHEMATIC**

SHEET NUMBER: C14 REVISION: 4

**C14** **4**  
 018893000

NOTES:  
 1. TAG ALL EXISTING AND PROPOSED CABLES/JUMPERS PER T-MOBILE SPECIFICATIONS (SEE RF SCHEDULE)  
 2. SEE RF SCHEDULE FOR CABLE AND JUMPER LENGTHS.





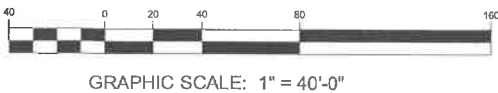
ELECTRICAL NOTES AND SPECIFICATIONS:

- ALL ELECTRICAL WORK SHALL COMPLY WITH NEC, STATE, AND LOCAL CODES.
- CONTRACTOR SHALL OBTAIN OWNER/TENANT SPECIFICATIONS AND REVIEW FOR ADDITIONAL DETAILS AND REQUIREMENTS THAT MAY NOT BE SHOWN IN THESE DRAWINGS. CONTRACTOR SHALL COMPLY WITH ANY ADDITIONAL OWNER/TENANT SPECIFICATIONS AND REQUIREMENTS.
- CONTRACTOR SHALL COORDINATE WITH THE ELECTRICAL UTILITY FOR THE EXACT TRANSFORMER LOCATION, METERING REQUIREMENTS, AND SERVICE ROUTING. CONTRACTOR SHALL COORDINATE WITH THE TELEPHONE UTILITY FOR THE EXACT TELEPHONE REQUIREMENTS AND SERVICE ROUTING.
- PRIOR TO PURCHASING EQUIPMENT, THE CONTRACTORS SHALL CONTACT THE ELECTRIC UTILITY AND LOCATION IN WRITING THE MAXIMUM AVAILABLE FAULT CURRENT AT THE UTILITY SERVICE POINT. PROVIDE MAX AFC SIGNAGE AS REQUIRED PER NEC 110.24. THE CONTRACTOR SHALL ENSURE ALL ELECTRICAL EQUIPMENT, CIRCUIT BREAKERS, DISCONNECTS, FUSES, AND PANEL BOARDS HAVE A FAULT CURRENT INTERRUPTING RATING GREATER THAN THE AVAILABLE FAULT CURRENT. IN NO CASE SHALL THE FAULT CURRENT INTERRUPTING RATING BE LESS THAN 10,000 AMPS.
- CONTRACTOR TO PROVIDE 2-200 LB TEST POLYETHYLENE PULL CORDS SECURELY FASTENED AT EACH END OF POWER AND TELCO CONDUIT. PROVIDE CAPS ON ENDS OF UNUSED CONDUIT.
- CONTRACTOR TO PROVIDE A REBAR MARKER WITH AT LEAST 2 FEET EXPOSED ABOVE GRADE AND PAINTED BRIGHT ORANGE TO INDICATE LOCATION OF CONDUIT CAPPED BELOW GRADE.
- PRIOR TO TRENCHING, CONTRACTOR SHALL LOCATE ALL EXISTING UNDERGROUND UTILITIES. CONTRACTOR SHALL REPAIR AT CONTRACTOR'S EXPENSE ANY DAMAGE TO EXISTING UTILITIES.
- CONTRACTOR TO VERIFY EXACT ROUTING OF POWER AND TELCO CONDUIT WITH LOCAL UTILITIES AND OWNER/TENANT. ENSURE ALL CONDUIT STUB-UPS ACCOMMODATE EQUIPMENT REQUIREMENTS.
- UNDERGROUND CONDUITS SHALL BE SCHEDULE 40 PVC UNLESS NOTED OTHERWISE. USE SCHEDULE 80 PVC UNDER ROADS. USE LONG-SWEEP RIGID GALVANIZED STEEL (RGS) FOR ELBOWS. USE RGS FOR RISERS TO EQUIPMENT. MANUFACTURED BENDS SHALL HAVE A MINIMUM RADIUS OF 36" FOR CONDUIT.
- CONDUIT RUNS SHALL HAVE A CONTINUOUS SLOPE DOWNWARD AND AWAY FROM THE EQUIPMENT TO ALLOW WATER TO FLOW AWAY FROM THE EQUIPMENT AND SHELTER. EXCAVATE TRENCHES ALONG STRAIGHT LINES PRIOR TO INSTALLING CONDUIT TO ACCOMMODATE ADJUSTING THE ELEVATION, AS NEEDED.
- CONDUIT ENTERING EQUIPMENT SHALL BE SEALED WITH A SEALANT THAT IS IDENTIFIED FOR USE WITH THE CABLE. CONDUCTOR INSULATION, SHIELDING, ETC.
- THE OWNER SHALL FURNISH AND THE CONTRACTOR SHALL INSTALL ADDITIONAL SIGNAGE TO BE LOCATED AT THE COMPOUND FENCE. CONTRACTOR SHALL COORDINATE WITH OWNER/TENANT ECO-SITE CONSTRUCTION MANAGER FOR PLACEMENT OF SIGNAGE.
- UPON COMPLETION OF CONSTRUCTION, CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE CAUSED BY CONSTRUCTION ACTIVITIES TO THE LANDSCAPING AREA.
- IF GENERATOR/FUEL CELL IS INSTALLED, CONTRACTOR SHALL PROVIDE A LABEL TO READ: "OPENING THE DISCONNECT WILL CAUSE THE GENERATOR TO START. TO REMOVE POWER ENTIRELY FROM THE EQUIPMENT, THE GENERATOR MUST BE TURNED OFF AND THE GENERATOR BREAKER MUST BE OPENED."
- CONTRACTORS SHALL ENSURE A MINIMUM 3' CLEARANCE IN FRONT OF ELECTRICAL PANELS PER NEC.
- ALL ELECTRICAL MATERIALS, DEVICES, APPLIANCES AND EQUIPMENT SHALL BE LABEL LISTED BY AN APPROVED THIRD PARTY TESTING AGENCY.
- FLEX CONDUIT RUNS NOT TO EXCEED 36" WITHOUT PRIOR TMO APPROVAL.

CONDUIT ROUTING NOTE:

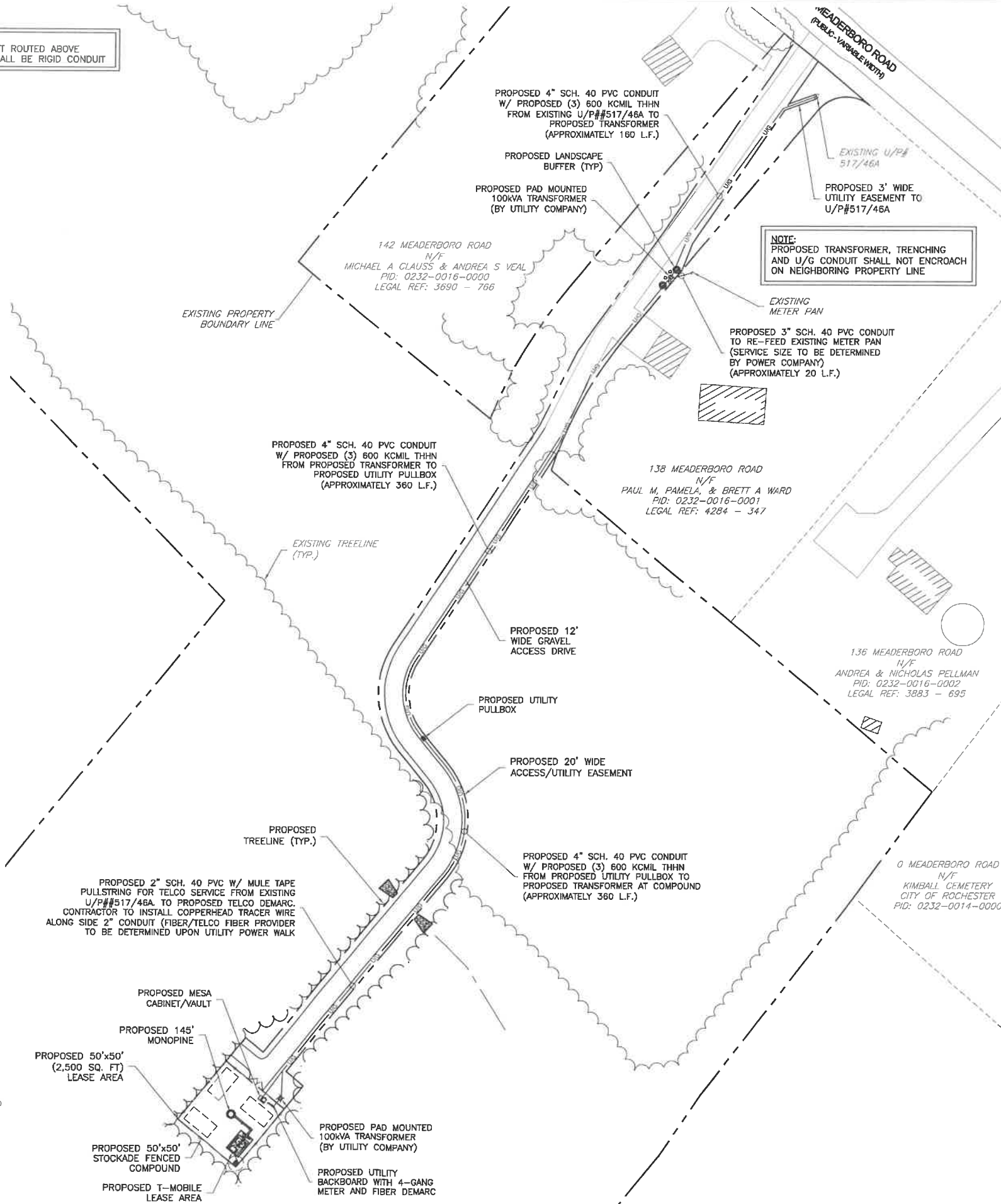
- CONTRACTOR TO PROVIDE PULL BOXES AS NEEDED TO ENSURE NO GREATER THAN 360 DEGREES OF BENDS BETWEEN PULL POINTS IN CONDUIT RUNS.
- CONTRACTOR COORDINATE WITH LOCAL UTILITY COMPANY FOR SERVICE TO THIS POINT.
- ALL CONDUIT TO BE RUN WITHIN 2' UTILITY BUFFER AS SHOWN ON CIVIL PLANS. CONDUIT SHOWN OUTSIDE OF 2' UTILITY BUFFER FOR CLARITY PURPOSES ONLY.

1 ELECTRICAL & UTILITY PLAN  
E-1 11"x17" SCALE: 1" = 80'  
22"x34" SCALE: 1" = 40'



NOTE:  
ALL CONDUIT ROUTED ABOVE  
GROUND SHALL BE RIGID CONDUIT

NORTH



Eco-Site

PROJECT INFORMATION:

ECO SITE ID# NH-0002  
T-MOBILE SITE #: 4NB0203A  
144 MEADERBORO ROAD  
ROCHESTER, NH 03857  
STAFFORD COUNTY  
LATITUDE: 43.310333°  
LONGITUDE: -71.053875°

CURRENT ISSUE DATE:

10/10/19

ISSUED FOR:

FINAL

REV.: DATE: ISSUED FOR: BY:

0	02/18/19	CONSTRUCTION	PRC
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2	04/04/19	REVISED	MJS
3	07/22/19	REVISED	MJS
4	10/10/19	REVISED	MJS

CONSULTANT:

**NB+C**  
TOTALLY COMMITTED.  
NB+C ENGINEERING SERVICES, LLC.  
100 APOLLO DRIVE, SUITE 303  
CHELMSFORD, MA 01824  
(978) 856-0008

CONSULTANT:

DRAWN BY: CHK.: APV.:

DFR PRC PRC

LICENSER:

STATE OF NEW HAMPSHIRE  
Krupakaran, K. L. & A. M. S. P.  
No. 13888  
LICENSED PROFESSIONAL ENGINEER  
NH PROFESSIONAL ENGINEER LIC. #13888  
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SHEET TITLE:

ELECTRICAL &  
UTILITY PLAN

SHEET NUMBER: REVISION:

E1

4

018893000

PROJECT INFORMATION:

ECO SITE ID# NH-0002  
T-MOBILE SITE #: 4NB0203A  
144 HEATHROAD ROAD  
SACRAMENTO, CA 95827  
UTAH COUNTY  
LATITUDE: 43.310533°  
LONGITUDE: -71.053875°

CURRENT ISSUE DATE:

10/10/19

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FINAL

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CONSULTANT:

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NB+C ENGINEERING SERVICES, LLC.  
100 APOLLO DRIVE, SUITE 303  
CHELMSFORD, MA 01824  
(978) 858-8038

CONSULTANT:

DRAWN BY: CHK.: APV.:

DFR PRC PRC

LICENSER:

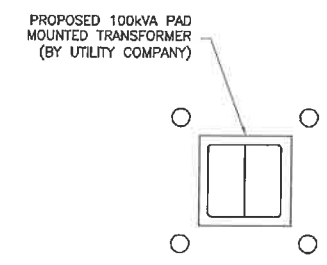
STATE OF NEW HAMPSHIRE  
KRUPAKARAN KOLANDAYE  
No. 13868  
LICENSED PROFESSIONAL ENGINEER  
KRUPAKARAN KOLANDAYE, P.E.  
NH PROFESSIONAL ENGINEER LIC. #13868  
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SHEET TITLE:

CARRIER  
UTILITY  
PLAN

SHEET NUMBER: REVISION:

E2 4  
018893000



PROPOSED 50'x50' FENCED COMPOUND

PROPOSED 12' WIDE ACCESS GATE

PROPOSED TRENCH & INSTALL PROPOSED 3" SCH. 40 PVC CONDUIT W/ (3) 3/0 AWG THHN & 6 AWG GND FROM PROPOSED DISC. TO PROPOSED PPC CABINET (APPROXIMATELY 40'± L.F.)

PROPOSED 50'x50' (2,500 SQ. FT) LEASE AREA/FENCED COMPOUND

PROPOSED TRENCH & INSTALL PROPOSED 4" SCH. 40 PVC CONDUIT FOR FIBER FROM PROPOSED FIBER DEMARC TO PROPOSED SITE SUPPORT CABINET (APPROXIMATELY 50'± L.F.)

PROPOSED UTILITY BACKBOARD WITH 4-GANG METER AND FIBER DEMARC

PROPOSED MESA CABINET/VAULT

PROPOSED 145'± MONOPINE

PROPOSED T-MOBILE RBS 6102 CABINET

PROPOSED T-MOBILE PPC CABINET

PROPOSED PURCELL RAC24 SITE SUPPORT CABINET

PROPOSED T-MOBILE 10'x15' LEASE AREA

PROPOSED T-MOBILE GENERATOR ON CONCRETE PAD

5' MIN. BUFFER

PROPOSED T-MOBILE 120 GALLON PROPANE TANK ON 3'-0"x3'-0" CONCRETE PAD

PROPOSED T-MOBILE U/G GAS RUN IN NEW PE FLEX LPG PIPING FROM PROPOSED PROPANE TANK TO PROPOSED GENERATOR

PROPOSED T-MOBILE CABLE BRIDGE (TYP.)

ELECTRICAL LEGEND

	SAFETY DISCONNECT SWITCH	A	AMPERE
	PANEL BOARD	C	CONDUIT
	KILOWATT HOUR METER	EMT	ELECTRICAL METALLIC TUBING
	TRANSFORMER	G	GROUND
	CIRCUIT BREAKER	GFI	GROUND FAULT INTERRUPTING
	MANUAL TRANSFER SWITCH	KWH	KILOWATT HOUR
	AC GENERATOR CONNECTOR	MCB	MAIN CIRCUIT BREAKER
	WEATHERPROOF GFI DUPLEX RECEPTACLE	P	POLE
	ELECTRICAL WIRING	SW	SWITCH
	TELCO WIRING	V	VOLT
		W	WIRE

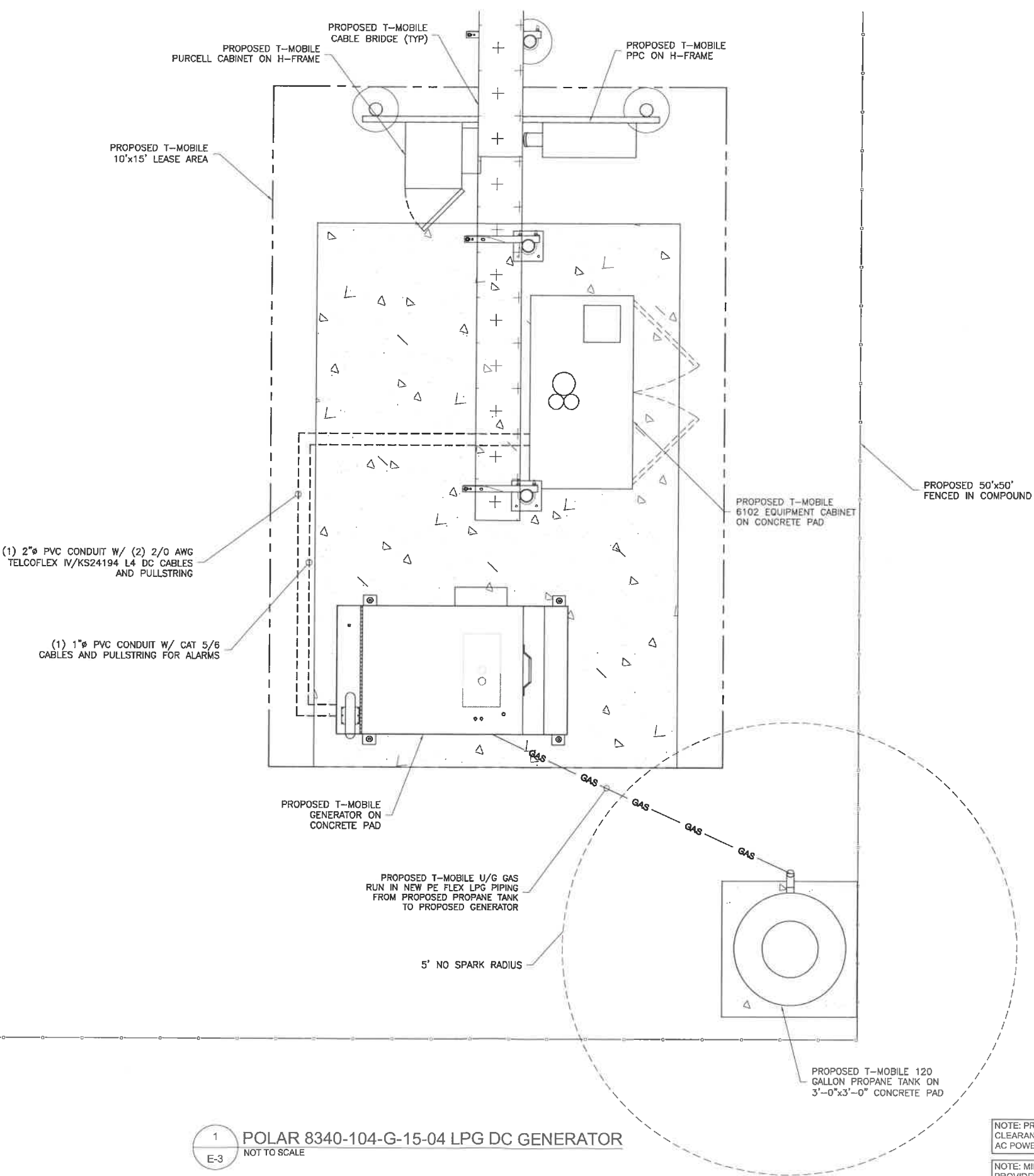
1 PARTIAL ELECTRICAL & UTILITY PLAN  
E-2 NOT TO SCALE

NOTE:  
ALL CONDUIT ROUTED ABOVE  
GROUND SHALL BE RIGID CONDUIT



GENERATOR INSTALLATION NOTES:

1. CONTRACTOR TO INSTALL GENERATOR, FUEL TANK AND ELECTRICAL EQUIPMENT IN ACCORDANCE WITH ADOPTED NEC, NFPA, AND NFPA STANDARDS. CONTRACTOR TO VERIFY REQUIREMENTS WITH LOCAL GOVERNING AUTHORITY.
2. ALL EQUIPMENT TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. CONTRACTOR TO REFERENCE MANUFACTURER'S INSTALLATION MANUAL AND SPECIFICATIONS PRIOR TO INSTALLATION AND BIDDING OF CONTRACT SCOPE.
3. CONTRACTOR TO INSTALL GENERATORS, FUEL TANKS, AND ELECTRICAL EQUIPMENT IN A MANNER THAT ACHIEVES ALL REQUIRED CLEARANCES FOR ACCESS, MAINTENANCE, AND REFUELING.
4. CONTRACTOR TO COORDINATE CONDUIT ENTRY INSTALLATION WITH GENERATOR STUB-UP AREAS PER MANUFACTURER'S SPECIFICATIONS PRIOR TO CONCRETE PAD INSTALLATION.
5. POWER, ALARM AND CONTROL CONDUCTORS AND CONDUITS SHALL BE SIZED ACCORDING TO NEC AND MANUFACTURER'S SPECIFICATIONS.
6. INSTALLATION AND LOCATION OF EXTERNAL AUTOMATIC TRANSFER SWITCH (IF REQUIRED) SHALL BE COORDINATED WITH FINAL LOCATION OF UTILITY SERVICE FEEDERS AND LOAD CENTER.
7. ALL GENERATORS, FUEL TANKS AND ELECTRICAL EQUIPMENT TO BE BONDED TO GROUNDING SYSTEM IN ACCORDANCE WITH NEC AND MANUFACTURER'S SPECIFICATIONS.
8. PROVIDE CLEARANCE TO LPG FUEL TANKS IN ACCORDANCE WITH NFPA 58.
9. ANY PROPOSED NATURAL GAS SERVICES TO BE COORDINATED WITH LOCAL GAS UTILITY. CONTRACTOR TO COORDINATE METER LOCATION, LINE SIZE AND INSTALLATION WITH NFPA, UTILITY AND MANUFACTURER REQUIREMENTS.



Eco-Site

PROJECT INFORMATION:

ECO SITE ID# NH-0002  
T-MOBILE SITE #: 4NB0203A

LATITUDE: 43.310533°  
LONGITUDE: -71.053875°

CURRENT ISSUE DATE:

10/10/19

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FINAL

REV.: DATE: ISSUED FOR: BY:

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4	10/10/19	REVISED	MJS

CONSULTANT:

**NB+C**  
TOTALLY COMMITTED.

NB+C ENGINEERING SERVICES, LLC.  
100 APOLLO DRIVE, SUITE 303  
CHELMSFORD, MA 01824  
(978) 856-6300

CONSULTANT:

DRAWN BY: CHK.: APV.:

DFR PRC PRC

LICENSER:

STATE OF NEW HAMPSHIRE  
KRUPARANTAN  
LICENSED PROFESSIONAL ENGINEER  
No. 13868  
NH PROFESSIONAL ENGINEER LIC. #13868  
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ASSOCIATED WITH THE DESIGN, ALTERATION, OR MODIFICATION OF THE DOCUMENTS HEREIN.

SHEET TITLE:

GENERATOR  
INSTALLATION  
DETAILS

SHEET NUMBER: REVISION:

E3 4  
018893000

# SPECIFICATIONS PN 8340-104-G-15-04

## Engine

Engine Model	Toyota 1KS
Cylinders	3 In-line
Displacement (L)	0.952
Bore (in./mm)	2.834/72
Stroke (in./mm)	3.070/78
Intake Air System	Naturally Aspirated
Engine HP	23
Emissions	U.S. EPA Tier 4 Interim
Emissions Compliance	EPA Certified
Variable RPM	2900 to 3300

## Engine lubrication system

Oil Filter Type	Full flow spin-on canister
Oil Capacity (L)	3.3
Oil Pressure Switch	Yes
Oil Pressure Transducer	Optional

## Fuel consumption LPG

Output (kW)	gal/hr	L/hr
4	0.97	3.67
5	1.1	4.16
6	1.26	4.77
7	1.475	5.58
8	1.69	6.4
9	1.945	7.36
10	2.2	8.33
12	2.52	9.54
14.5	3.55	13.44

## Fuel pressure

Minimum	Recommended	Maximum
0.14 psi	0.39 psi	0.5 psi
4 in H2O	11 in H2O	13.9 in H2O
10 mbar	27.4 mbar	34.5 mbar

## Engine cooling system

Type	Pressurized Aluminum Radiator
Water Pump	Belt-driven, Pre-lubed, self-sealing
Fan Type	Belt-driven
Airflow CFM	1300
Fan Mode	Pusher
Temperature Sensor	Yes

## Environmental

Operating Temperature (°C/°F)	-23 to 50 / -10 to 122
Operating Humidity %	100
Cold Start Aids	Spark Plugs

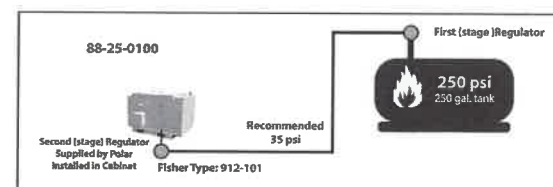
Optional: manifold heater available for temperatures < -10 °F

## Power adjustment for conditions

Temperature Deration	1% derate for every 5.6 °C (10 °F) above 25 °C (77 °F)
Altitude Deration	3% derate for every 300 m (1000 ft) above 91 m (300 ft)

## Fuel system

Type	Natural gas or propane
Fuel Pump Type	Electrical
Injector Type	Float Feed Carburetor
Fuel Filtering	Paper Element
Fuel Tank/Line	Supplied by customer
Max fuel flow rate (BTU/hr)	325,000

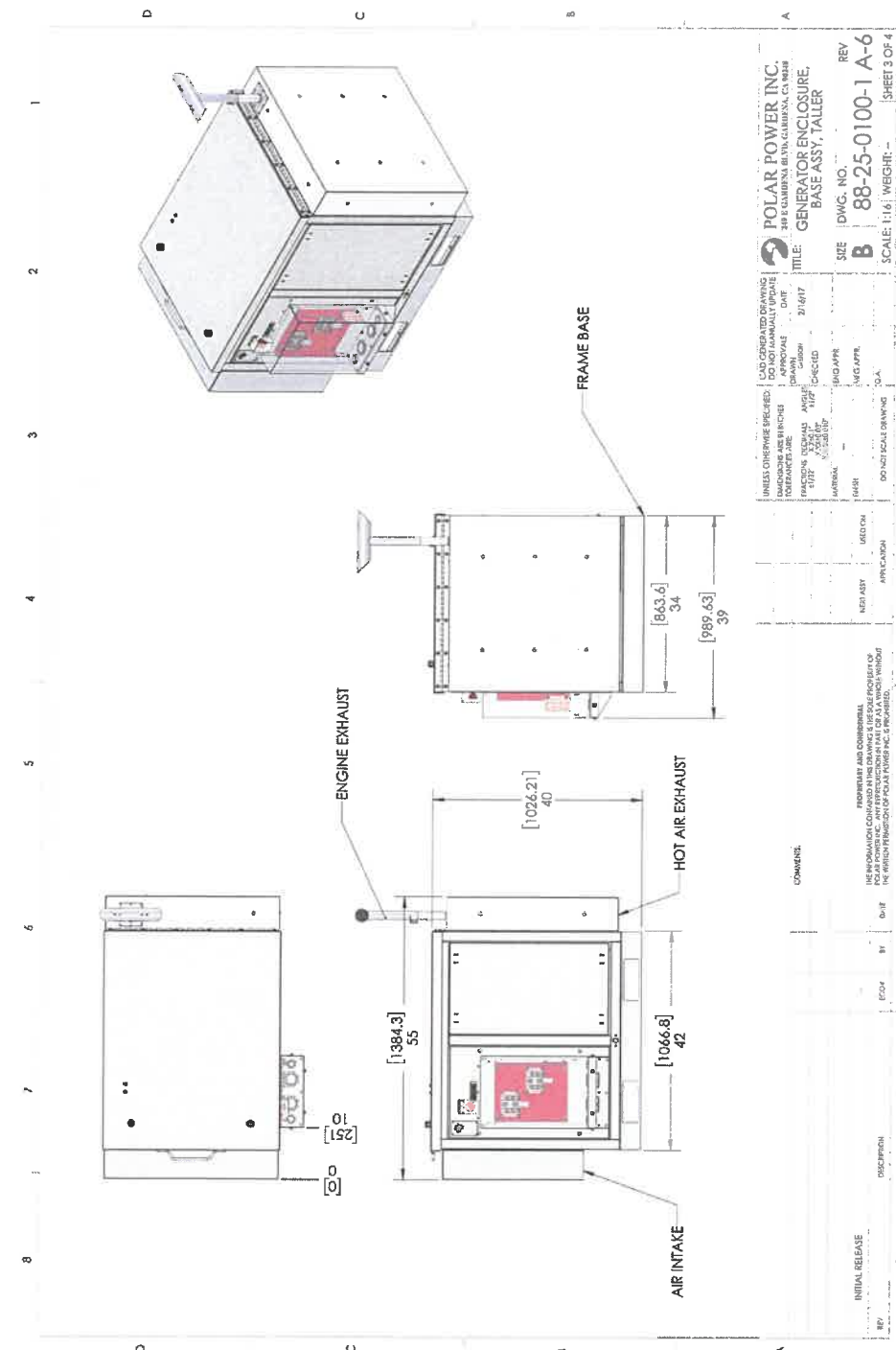


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3

6

# DRAWING FOR PN 8340-104-G-15-04



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Eco-Site

PROJECT INFORMATION:

ECO SITE ID# NH-0002  
T-MOBILE SITE #: 4NB0203A

LATITUDE: 43.310533°  
LONGITUDE: -71.053875°

CURRENT ISSUE DATE:

10/10/19

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FINAL

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CONSULTANT:

**NB+C**  
TOTALLY COMMITTED.  
NB+C ENGINEERING SERVICES, LLC.  
100 APOLLO DRIVE, SUITE 303  
CHELMSFORD, MA 01824  
(978) 855-5303

CONSULTANT:

DRAWN BY: CHK.: APV.:

DFR PRC PRC

LICENSER:

STATE OF NEW HAMPSHIRE  
Krupakaran, K. J.  
No. 13868  
LICENSED PROFESSIONAL ENGINEER  
NH PROFESSIONAL ENGINEER NO. 13868  
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ASSOCIATED WITH THE DESIGN, ALTERATION, OR MODIFICATION OF THE CONTENTS HEREIN.

SHEET TITLE:

GENERATOR  
SPECS

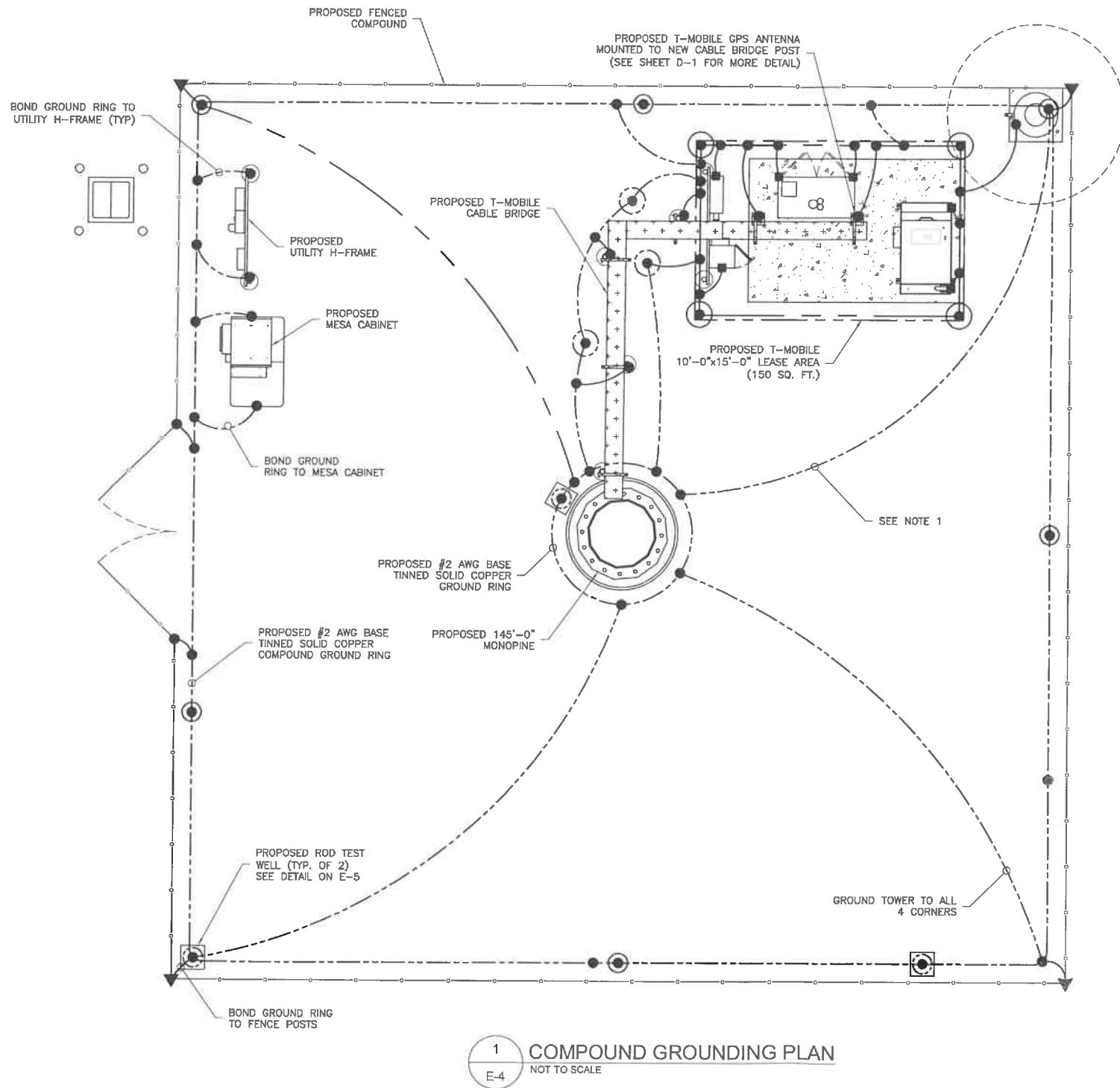
SHEET NUMBER: REVISION:

E3A

4

018893000





1  
E-4  
COMPOUND GROUNDING PLAN  
NOT TO SCALE

GROUNDING NOTES AND SPECIFICATIONS:

1. THE COPPER GROUND RING SHALL CONSIST OF 2 AWG TINNED SOLID BARE COPPER CONDUCTOR, UNLESS NOTED OTHERWISE, BURIED AT 24" BELOW FINISHED GRADE (OR 6" BELOW FROSTLINE). ALL CONNECTIONS SHALL BE MADE USING AN EXOTHERMIC WELD, UNLESS NOTED OTHERWISE.
2. GROUND CONDUCTOR BEND RADIUS SHALL NOT BE LESS THAN 12".
3. GROUND RODS SHOULD BE SPACED 2X HEIGHT APART AROUND COMPOUND GROUND RING. (EX. 10' ROD SHOULD BE SPACED 20' APART). MINIMUM SPACING BETWEEN GROUND RODS IS 10' UNLESS NOTED OTHERWISE.
4. GATES SHALL BE BONDED TO GATE POSTS USING FLEXIBLE JUMPER STRAP (BELDEN 8662 FLAT BRAID TINNED COPPER OR EQUAL) WITH EXOTHERMIC WELDS.
5. ALL GROUNDING/BONDING CONDUCTORS LOCATED ABOVE FINISHED GRADE SHALL BE RUN IN 1/2" FLEX CONDUIT.
6. CONTRACTOR SHALL NOTIFY THE OWNER/TENANT ECO-SITE CONSTRUCTION MANAGER TO INSPECT THE GROUNDING SYSTEM PRIOR TO BACKFILLING.

LEGEND:

- GROUND ROD EXOTHERMICALLY WELDED TO GROUND RING
- GROUND RING
- EXOTHERMIC WELD
- GROUND ROD TEST WELL



PROJECT INFORMATION:

ECO SITE ID# NH-0002  
T-MOBILE SITE #: 4NB0203A  
144 WEAVERBORO ROAD  
ROCHESTER, NH 03867  
STAFFORD COUNTY  
LATITUDE: 43.310633°  
LONGITUDE: -71.053875°

CURRENT ISSUE DATE:

10/10/19

ISSUED FOR:

FINAL

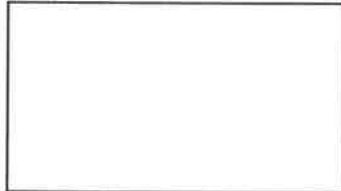
REV.: DATE: ISSUED FOR: BY:

0	02/18/19	CONSTRUCTION	PRC
1	03/01/19	REVISED	PRC
2	04/04/19	REVISED	MJS
3	07/22/19	REVISED	MJS
4	10/10/19	REVISED	MJS

CONSULTANT:

**NB+C**  
TOTALLY COMMITTED.  
NB+C ENGINEERING SERVICES, LLC.  
100 APOLLO DRIVE, SUITE 303  
CHELMSFORD, MA 01824  
(978) 856-8358

CONSULTANT:



DRAWN BY: CHK.: APV.:

DFR	PRC	PRC
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LICENSER:

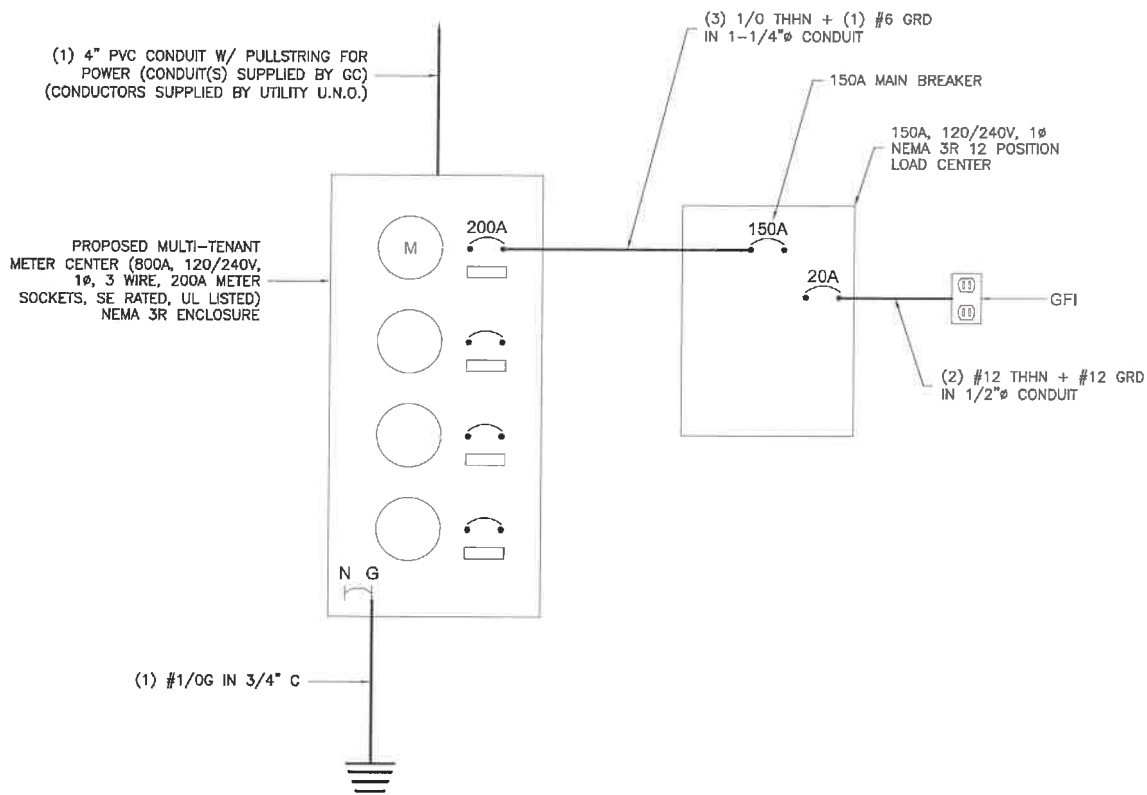
STATE OF NEW HAMPSHIRE  
Krupakaran  
KOLANDAYE  
No. 13868  
LICENSED PROFESSIONAL ENGINEER  
NH PROFESSIONAL ENGINEER LICENSE #13868  
IT IS A VIOLATION OF THE ENGINEER'S LICENSE TO SIGN OR ACT AS UNDER THE  
DIRECTION OF A LICENSED PROFESSIONAL ENGINEER WITHOUT THE SIGNATURE LINE  
EXPLICITLY ASSESS TO BY THE ENGINEER IN WRITING. THE ENGINEER ASSUMES ALL LIABILITY  
ASSOCIATED WITH THE DESIGN, ALTERATION OR MODIFICATION OF THE CONTENTS HEREIN.

SHEET TITLE:

GROUNDING  
PLAN

SHEET NUMBER: REVISION:

E4	4
018893000	



#### NOTES AND SPECIFICATIONS

1. ELECTRIC UTILITY WILL PROVIDE METER AND INCOMING SERVICE LATERAL CONDUCTORS.
2. ALL ELECTRICAL WORK SHALL COMPLY WITH NEC, STATE AND LOCAL CODES.
3. CONTRACTOR SHALL OBTAIN OWNER/TENANT EQUIPMENT DRAWINGS AND REVIEW FOR ADDITIONAL DETAILS AND REQUIREMENTS THAT MAY NOT BE SHOWN IN THESE DRAWINGS. CONTRACTOR SHALL COMPLY WITH ANY ADDITIONAL OWNER/TENANT SPECIFICATIONS AND REQUIREMENTS THAT MAY BE ADDRESSED IN THE EQUIPMENT DRAWINGS.
4. PRIOR TO PURCHASING EQUIPMENT, THE CONTRACTOR SHALL CONTACT THE ELECTRIC UTILITY AND OBTAIN IN WRITING THE MAXIMUM AVAILABLE FAULT CURRENT AT THE UTILITY SERVICE POINT. PROVIDE MAX AFC SIGNAGE AS REQUIRED PER NEC 110.24. THE CONTRACTOR SHALL ENSURE ALL ELECTRICAL EQUIPMENT, CIRCUIT BREAKERS, DISCONNECTS, FUSES, AND PANELBOARDS HAVE A FAULT CURRENT INTERRUPTING RATING GREATER THAN THE AVAILABLE FAULT CURRENT. IN NO CASE SHALL THE FAULT CURRENT INTERRUPTING RATING BE LESS THAN 10,000 AMPS.
5. THE GROUNDED SERVICE CONDUCTOR (NEUTRAL CONDUCTOR) SHALL BE GROUNDED AT THE SERVICE DISCONNECT ONLY.
6. ALL POWER CIRCUITS SHALL USE COPPER CONDUCTORS WITH THHN/THWN INSULATION. ALL TERMINATIONS SHALL BE RATED FOR AT LEAST 75°C.
7. CONTRACTOR SHALL PROVIDE GROUND FAULT CIRCUIT INTERRUPTER (GFCI) TYPE RECEPTACLES FOR ALL UTILITY RECEPTACLES.
8. CONTRACTOR SHALL ENSURE ALL NEUTRAL CONDUCTORS HAVE WHITE INSULATION AND EQUIPMENT GROUND CONDUCTORS HAVE GREEN INSULATION. COLOR TAPE IDENTIFICATION OF THESE CONDUCTORS IS NOT ALLOWED.
9. PER NEC ARTICLE 702 PROVIDE SIGNAGE AS FOLLOWS:

AT SERVICE DISCONNECT:

**WARNING - SHOCK HAZARD EXISTS IF GROUNDING ELECTRODE CONDUCTOR OR BONDING JUMPER CONNECTION IN THIS EQUIPMENT IS REMOVED WHILE ALTERNATE SOURCE(S) IS ENERGIZED**

Eco-Site

PROJECT INFORMATION:

ECO SITE ID# NH-0002  
T-MOBILE SITE #: 4NB0203A

LATITUDE: 43.316333°  
LONGITUDE: -71.053875°

CURRENT ISSUE DATE:

10/10/19

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FINAL

REV.: DATE: ISSUED FOR: BY:

0	02/18/19	CONSTRUCTION	PRC
1	03/01/19	REVISED	PRC
2	04/04/19	REVISED	MJS
3	07/22/19	REVISED	MJS
4	10/10/19	REVISED	MJS

CONSULTANT:

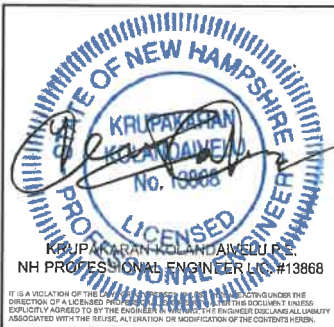


CONSULTANT:

DRAWN BY: CHK.: APV.:

DFR PRC PRC

LICENSER:



SHEET TITLE:

SINGLE  
LINE  
DIAGRAM

SHEET NUMBER: REVISION:

E5

4

018893000



PROJECT INFORMATION:

ECO SITE ID# NH-0002  
T-MOBILE SITE #: 4NB0203A  
144 E. STAFFORD ST.  
STAFFORD, NH 03857  
LATITUDE: 43.310333  
LONGITUDE: -71.053875

CURRENT ISSUE DATE:

10/10/19

ISSUED FOR:

FINAL

REV.: DATE: ISSUED FOR: BY:

0	02/18/19	CONSTRUCTION	PRC
1	03/01/19	REVISED	PRC
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CONSULTANT:

**NB+C**  
TOTALLY COMMITTED.  
NB+C ENGINEERING SERVICES, LLC.  
100 APOLLO DRIVE, SUITE 303  
CHELSEA, MA 01824  
(978) 856-9300

CONSULTANT:

DRAWN BY: CHK.: APV.:

DFR PRC PRC

LICENSER:

STATE OF NEW HAMPSHIRE  
KRIJANJAN  
KRIJANJAN  
No. 13868  
LICENSED  
KRIJANJAN KRIJANJAN  
NH PROFESSIONAL ENGINEER LIC. #13868  
IT IS A VIOLATION OF THE PROFESSIONAL ENGINEER ACT TO ENGAGE IN THE PRACTICE OF ENGINEERING WITHOUT THE NECESSARY QUALIFICATIONS, UNLESS EXPLICITLY PERMITTED TO BY THE ENGINEER'S BOARD. THE ENGINEER'S BOARD HAS ALL LIABILITY ASSOCIATED WITH THE REUSE, ALTERATION, OR MODIFICATION OF THE CONTENTS HEREIN.

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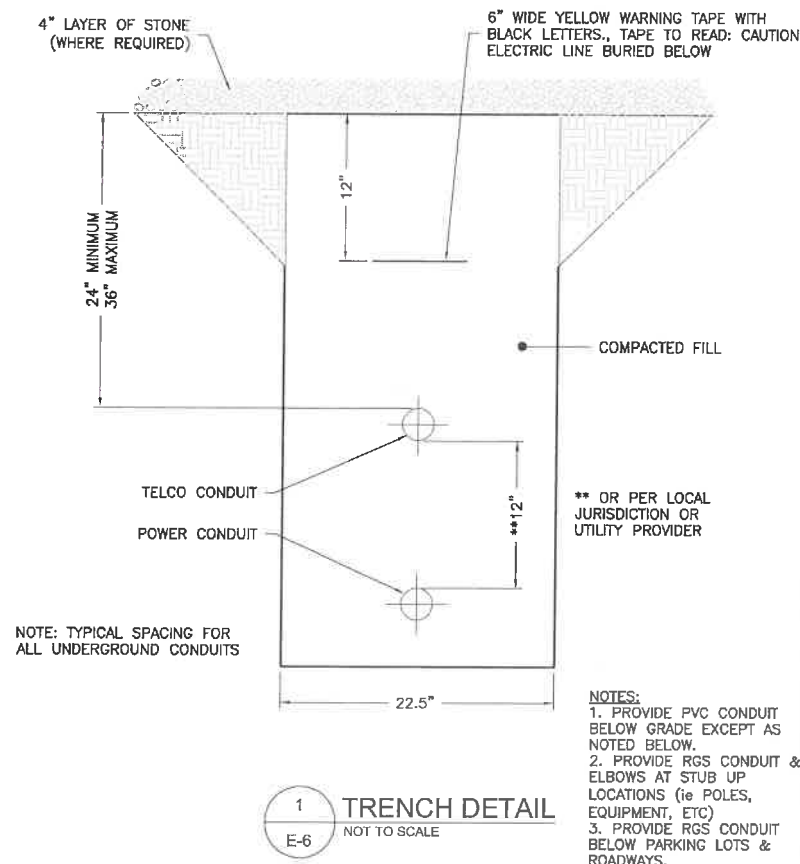
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DETAILS

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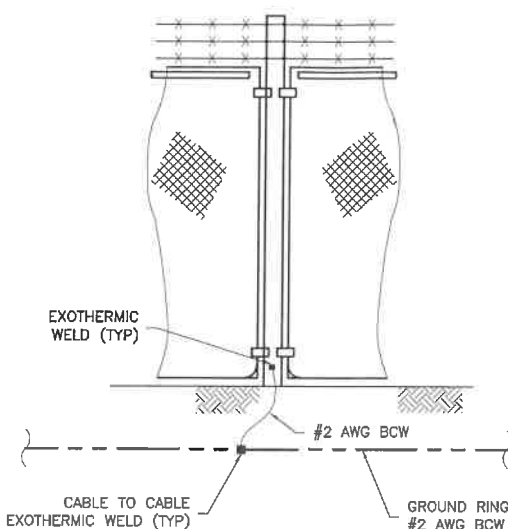
E6

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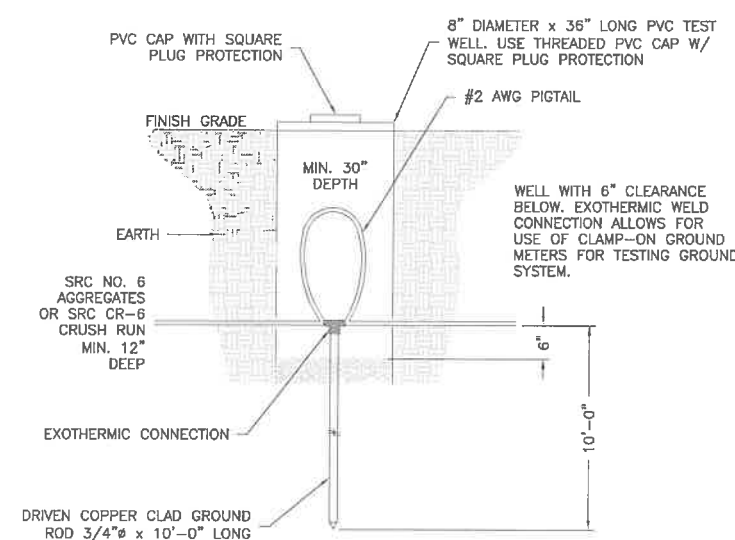
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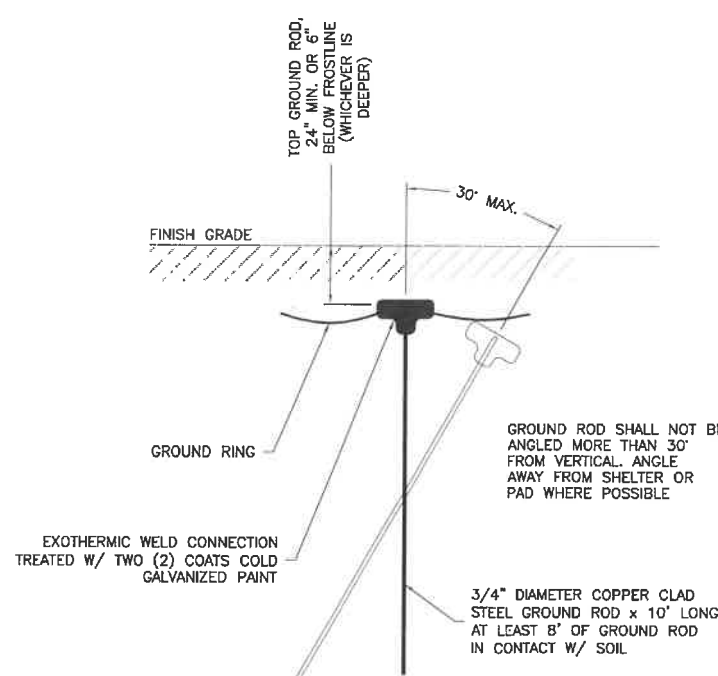
1 TRENCH DETAIL  
E-6 NOT TO SCALE



2 FENCE GROUNDING  
E-6 NOT TO SCALE



3 INSPECTION SLEEVE DETAIL  
E-6 NOT TO SCALE



5 GROUND ROD DETAIL  
E-6 NOT TO SCALE



018893000