

brownrudnick

THOMAS J. REGAN

January 28, 2022

**VIA E-MAIL (SITING.COUNCIL@CT.GOV) &
(MELANIE.BACHMAN@CT.GOV)
& HAND DELIVERY**

Connecticut Siting Council
Attn: Melanie A. Bachman, Esq., Executive Director
Ten Franklin Square
New Britain, CT 06051


RE: Petition No. 1471 - AT&T Interrogatory Responses

Dear Executive Director Bachman:

Please find enclosed for filing an original and fifteen copies of New Cingular Wireless PCS, LLC d/b/a AT&T's ("AT&T") Responses to Siting Council's Interrogatories dated January 14, 2022.

Sincerely,

BROWN RUDNICK LLP



Thomas J. Regan



cc w/ copy via first-class mail:

Erika Wiecenski, First Selectman
Town Office Building
40 Old Farm Road
Willington, CT 06279

Mike D'Amato, Zoning Agent
Town Office Building
40 Old Farm Road
Willington, CT 06279

Robin Campbell, Town Clerk
Town Office Building
40 Old Farm Road
Willington, CT 06279

Peter Andersen, Chair, Conservation Commission
Town Office Building
40 Old Farm Road
Willington, CT 06279

Rosa Chinchilla, Chair, Historic District Commission
Town Office Building
40 Old Farm Road
Willington, CT 06279

Antonia Moran, Mayor
Audrey P. Beck Municipal Building
4 S. Eagleville Road
Storrs Mansfield, CT 06268

Linda Painter, Director of Planning
Audrey P. Beck Municipal Building
4 S. Eagleville Road
Storrs Mansfield, CT 06268

Sara-Ann Chaine, Town Clerk
Audrey P. Beck Municipal Building
4 S. Eagleville Road
Storrs Mansfield, CT 06268

Gail Bruhn, Chair, Historic District Commission
Audrey P. Beck Municipal Building
4 S. Eagleville Road
Storrs Mansfield, CT 06268

**STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL**

IN RE:

**NEW CINGULAR WIRELESS PCS, LLC (AT&T)) PETITION NO. 1471
PETITION FOR A DECLARATORY RULING)
THAT NO CERTIFICATE OF ENVIRONMENTAL)
COMPATIBILITY AND PUBLIC NEED IS)
REQUIRED TO MODIFY AN EXISTING)
WIRELESS TELECOMMUNICATIONS FACILITY)
ON PROPERTY LOCATED AT 343 DALEVILLE)
ROAD, WILLINGTON, CONNECTICUT.) January 28, 2022**

**RESPONSES OF NEW CINGULAR WIRELESS PCS, LLC
d/b/a AT&T TO CONNECTICUT SITING COUNCIL INTERROGATORIES
DATED JANUARY 14, 2022**

Q1. What is the total cost of the proposed project?

A1. The total cost of the proposed project is:

<i>Component</i>	<i>Cost</i>
<i>Equipment/Materials</i>	<i>\$ 114,000</i>
<i>Construction</i>	<i>\$ 179,000</i>
<i>Tower Extension Design and Installation</i>	<i>\$ 78,277</i>
<i>Integration & Optimization</i>	<i>\$ 15,300</i>
<i>Total</i>	<i><u>\$ 386,577</u></i>

Q2. Petition Attachment 3 - Drawing C-1 General Note No. 9 references site development for erosion and sediment control in accordance with Vermont Department of Environmental Conservation. Clarify the information and provide a revised Drawing C-1.

A2. Please see revised drawings removing the notes on Drawing C-1.

Q3. Provide construction work days/hours.

A3. AT&T's proposed construction schedule is Monday through Friday from 8:00 a.m. to 5:00 p.m.

PROJECT INFORMATION

SCOPE OF WORK: TELECOMMUNICATIONS FACILITY (NSB A EXISTING 104'-0" A.G.L. TALL MONOPOLE WITH PROPOSED 56'-0" EXTENSION. PROPOSED WALK-IN CABINET, AND GENERATOR WILL BE INSTALLED AT GRADE INSIDE AN EXISTING FENCED-IN COMPOUND. PROPOSED (3) TPA65-R-BU8DA-K, (3) DMP65R-BU8DA-K, (3) B14 4478, (3) 4449 B5/B12, (3) 8843 B2/B66A, (3) 4415 B30 & (2) SURGE ARRESTORS WILL BE INSTALLED AT A HEIGHT OF 155'-0" A.G.L.):

SITE ADDRESS: 343 DALEVILLE ROAD
WILLINGTON, CT 06279

APPLICANT: AT&T
550 COCHITUATE ROAD
FRAMINGHAM, MA 01701

SITE OWNER: KREUSCHER MURIEL & RICHARD
343 DALEVILLE RD
WILLINGTON, CT 06279

LATITUDE: 41.836606 N, 41° 50' 11.7" N

LONGITUDE: 72.254976 W, 72° 15' 17.9" W

TYPE OF SITE: MONOPOLE/ WALK-IN CABINET

EXISTING TOWER HEIGHT: 104'-0"±

TOWER HEIGHT WITH PROPOSED EXTENSION: 160'-0"±

RAD CENTER: 155'-0"±

APPLICABLE CODES: ALL WORK SHALL CONFORM TO ALL CURRENT APPLICABLE CT STATE BUILDING CODE, NATIONAL ELECTRIC CODE (NEC 2017), ANSI/EIA/TIA-222 H & COMPLY WITH AT&T MOBILITY SPECIFICATIONS



SITE NUMBER: CT1377

SITE NAME: WILLINGTON DALEVILLE ROAD

FA CODE:13935188

PACE ID: MRCTB048935

PROJECT: NSB

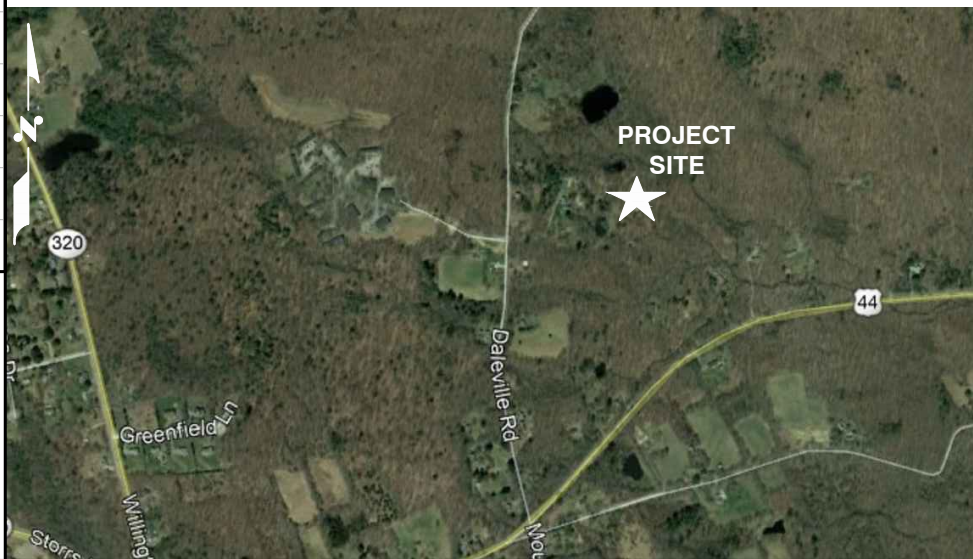
DRAWING INDEX

SHEET NO.	DESCRIPTION	REV.
T-1	TITLE SHEET	2
GN-1	GENERAL NOTES	2
SN-1	SPECIAL INSPECTIONS NOTES	2
C-1	ABUTTERS PLAN	2
A-1	COMPOUND & EQUIPMENT PLANS	2
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A-3	DETAILS	2
A-4	DETAILS	2
A-5	DETAILS	2
E-1	ELECTRICAL NOTES & ONE-LINE DIAGRAM	2
G-1	GROUNDING DETAILS	2
RF-1	RF PLUMBING DIAGRAM	2

ATC SITE NAME: MANSFIELD CT
ATC SITE #: 283563

VICINITY MAP

DIRECTIONS TO SITE:
GET ON I-90 W, HEAD NORTHWEST TOWARD LEGGATT MCCALL CONN, TURN LEFT ONTO LEGGATT MCCALL CONN, CONTINUE ONTO BURR ST, TURN LEFT ONTO COCHITUATE RD, USE THE RIGHT LANE TO MERGE ONTO I-90 W VIA THE RAMP TO SPRINGFIELD, (TOLL ROAD), FOLLOW I-90 W AND I-84 TO CT-320 S IN WILLINGTON. TAKE EXIT 71 FROM I-84, MERGE ONTO I-90 W, (TOLL ROAD), USE THE RIGHT 2 LANES TO TAKE EXIT 9 FOR I-84 TOWARD HARTFORD CT/NEW YORK CITY, (TOLL ROAD), CONTINUE ONTO I-84, (TOLL ROAD), ENTERING CONNECTICUT, TAKE EXIT 71 FOR CT-320 TOWARD RUBY RD, CONTINUE ON CT-320 S. TAKE ELDREDGE RD TO DALEVILLE RD, TURN LEFT ONTO CT-320 S, TURN LEFT TO STAY ON CT-320 S, TURN RIGHT TO STAY ON CT-320 S, TURN LEFT ONTO CT-320 S/CT-74 E, TURN RIGHT ONTO CT-320 S, TURN LEFT ONTO ELDREDGE RD, TURN RIGHT ONTO MARCO RD, CONTINUE ONTO DALEVILLE RD, DESTINATION WILL BE ON THE LEFT



GENERAL NOTES

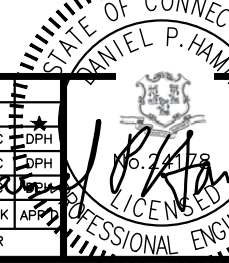
1. THIS DOCUMENT IS THE CREATION, DESIGN, PROPERTY AND COPYRIGHTED WORK OF AT&T. ANY DUPLICATION OR USE WITHOUT EXPRESS WRITTEN CONSENT IS STRICTLY PROHIBITED. DUPLICATION AND USE BY GOVERNMENT AGENCIES FOR THE PURPOSES OF CONDUCTING THEIR LAWFULLY AUTHORIZED REGULATORY AND ADMINISTRATIVE FUNCTIONS IS SPECIFICALLY ALLOWED.
2. THE FACILITY IS AN UNMANNED PRIVATE AND SECURED EQUIPMENT INSTALLATION. IT IS ONLY ACCESSED BY TRAINED TECHNICIANS FOR PERIODIC ROUTINE MAINTENANCE AND THEREFORE DOES NOT REQUIRE ANY WATER OR SANITARY SEWER SERVICE. THE FACILITY IS NOT GOVERNED BY REGULATIONS REQUIRING PUBLIC ACCESS PER ADA REQUIREMENTS.
3. CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE AT&T MOBILITY REPRESENTATIVE IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.
4. CONSTRUCTION DRAWINGS ARE VALID FOR SIX MONTHS AFTER ENGINEER OF RECORD'S STAMPED AND SIGNED SUBMITTAL DATE LISTED HEREIN.

72 HOURS



CALL BEFORE YOU DIG
CALL TOLL FREE 1-800-922-4455
OR CALL 811

UNDERGROUND SERVICE ALERT



H2G HUDSON Design Group LLC
45 BEECHWOOD DRIVE NORTH ANDOVER, MA 01845
TEL: (978) 557-5553 FAX: (978) 336-5586

SAI
12 INDUSTRIAL WAY SALEM, NH 03079

SITE NUMBER: CT1377
SITE NAME: WILLINGTON DALEVILLE ROAD
343 DALEVILLE ROAD WILLINGTON, CT 06279 TOLLAND COUNTY

at&t
550 COCHITUATE ROAD FRAMINGHAM, MA 01701

NO.	DATE	REVISIONS	BY	CHK	APP
1	01/18/22	ISSUED FOR CONSTRUCTION	VA	JC	DPH
1	03/25/21	ISSUED FOR REVIEW	VA	JC	DPH
0	02/12/21	ISSUED FOR REVIEW	AR	CHK	DPH

SCALE: AS SHOWN DESIGNED BY: JC DRAWN BY: AR

AT&T
TITLE SHEET (NSB)
SITE NUMBER: CT1377 DRAWING NUMBER: T-1 REV: 2

GROUNDING NOTES

1. THE SUBCONTRACTOR SHALL REVIEW AND INSPECT THE EXISTING FACILITY GROUNDING SYSTEM AND LIGHTNING PROTECTION SYSTEM (AS DESIGNED AND INSTALLED) FOR STRICT COMPLIANCE WITH THE NEC (AS ADOPTED BY THE AHJ), THE SITE-SPECIFIC (UL, LPI, OR NFPA) LIGHTNING PROTECTION CODE, AND GENERAL COMPLIANCE WITH TELCORDIA AND TIA GROUNDING STANDARDS. THE SUBCONTRACTOR SHALL REPORT ANY VIOLATIONS OR ADVERSE FINDINGS TO THE CONTRACTOR FOR RESOLUTION.
2. 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.
3. THE SUBCONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81 STANDARDS) FOR NEW GROUND ELECTRODE SYSTEMS. THE SUBCONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.
4. 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.
5. 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 AND #2 AWG STRANDED COPPER FOR OUTDOOR BTS.
6. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
7. APPROVED ANTIOXIDANT COATINGS (I.E., CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
8. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO GROUND BAR.
9. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
10. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
11. METAL CONDUIT SHALL BE MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH #6 AWG COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
12. ALL NEW STRUCTURES WITH A FOUNDATION AND/OR FOOTING HAVING 20 FT. OR MORE OF 1/2 IN. OR GREATER ELECTRICALLY CONDUCTIVE REINFORCING STEEL MUST HAVE IT BONDED TO THE GROUND RING USING AN EXOTHERMIC WELD CONNECTION USING #2 AWG SOLID BARE TINNED COPPER GROUND WIRE, PER NEC 250.50

GENERAL NOTES

1. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:
 CONTRACTOR – SAI
 SUBCONTRACTOR – GENERAL CONTRACTOR (CONSTRUCTION)
 OWNER – AT&T MOBILITY
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 BE SCALED 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. "KITTING LIST" SUPPLIED WITH THE BID PACKAGE IDENTIFIES ITEMS THAT WILL BE SUPPLIED BY CONTRACTOR. ITEMS NOT INCLUDED IN THE BILL OF MATERIALS AND KITTING LIST SHALL BE SUPPLIED BY THE SUBCONTRACTOR.
7. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
8. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE CONTRACTOR.
9. SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND T1 CABLES, GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWING. SUBCONTRACTOR SHALL UTILIZE EXISTING TRAYS AND/OR SHALL ADD NEW TRAYS AS NECESSARY. SUBCONTRACTOR SHALL CONFIRM THE ACTUAL ROUTING WITH THE CONTRACTOR.
10. 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.
11. 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 OWNER'S DESIGNATED LOCATION.
12. SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.
13. ALL CONCRETE REPAIR WORK SHALL BE DONE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE (ACI) 301.

14. ANY NEW CONCRETE NEEDED FOR THE CONSTRUCTION SHALL BE AIR-ENTRAINED AND SHALL HAVE 4000 PSI STRENGTH AT 28 DAYS. ALL CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH ACI 318 CODE REQUIREMENTS.
15. ALL STRUCTURAL STEEL WORK SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH AISC SPECIFICATIONS. ALL STRUCTURAL STEEL SHALL BE ASTM A36 (Fy = 36 ksi) UNLESS OTHERWISE NOTED. PIPES SHALL BE ASTM A53 TYPE E (Fy = 36 ksi). ALL STEEL EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED. TOUCH UP ALL SCRATCHES AND OTHER MARKS IN THE FIELD AFTER STEEL IS ERECTED USING A COMPATIBLE ZINC RICH PAINT.
16. CONSTRUCTION SHALL COMPLY WITH SPECIFICATIONS AND "GENERAL CONSTRUCTION SERVICES FOR CONSTRUCTION OF AT&T SITES."
17. SUBCONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS MUST BE VERIFIED. SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
18. THE EXISTING CELL SITE IS IN FULL COMMERCIAL OPERATION. ANY CONSTRUCTION WORK BY SUBCONTRACTOR SHALL NOT DISRUPT THE EXISTING NORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MUST BE COORDINATED WITH CONTRACTOR. ALSO, WORK SHOULD BE SCHEDULED FOR AN APPROPRIATE MAINTENANCE WINDOW USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT.
19. SINCE THE CELL SITE IS ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE ADVISED TO BE WORN TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.
20. **APPLICABLE BUILDING CODES:**
 SUBCONTRACTOR'S 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.

**BUILDING CODE: IBC 2015 WITH 2018 CT STATE BUILDING CODE AMENDMENTS
 ELECTRICAL CODE: 2017 NATIONAL ELECTRICAL CODE (NFPA 70-2017)**

SUBCONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS:

AMERICAN CONCRETE INSTITUTE (ACI) 318; BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE;

AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) MANUAL OF STEEL CONSTRUCTION, ASD, FOURTEENTH EDITION;

TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-H, STRUCTURAL STANDARDS FOR STEEL

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.

ABBREVIATIONS

AGL	ABOVE GRADE LEVEL	EQ	EQUAL	REQ	REQUIRED
AWG	AMERICAN WIRE GAUGE	GC	GENERAL CONTRACTOR	RF	RADIO FREQUENCY
BBU	BATTERY BACKUP UNIT	GRC	GALVANIZED RIGID CONDUIT	TBD	TO BE DETERMINED
BTCW	BARE TINNED SOLID COPPER WIRE	MGB	MASTER GROUND BAR	TBR	TO BE REMOVED
BGR	BURIED GROUND RING	MIN	MINIMUM	TBRR	TO BE REMOVED AND REPLACED
BTS	BASE TRANSCEIVER STATION	P	PROPOSED	TYP	TYPICAL
E	EXISTING	NTS	NOT TO SCALE	UG	UNDER GROUND
EGB	EQUIPMENT GROUND BAR	RAD	RADIATION CENTER LINE	VIF	VERIFY IN FIELD
EGR	EQUIPMENT GROUND RING	REF	REFERENCE		

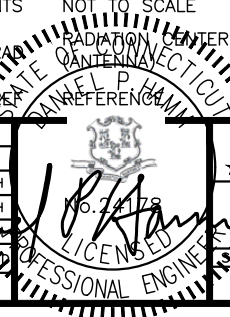
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 45 BEECHWOOD DRIVE NORTH ANDOVER, MA 01845
 TEL: (978) 557-5553 FAX: (978) 336-5586

SAI
 12 INDUSTRIAL WAY SALEM, NH 03079

**SITE NUMBER: CT1377
 SITE NAME: WILLINGTON DALEVILLE ROAD**
 343 DALEVILLE ROAD WILLINGTON, CT 06279 TOLLAND COUNTY

at&t
 550 COCHITUATE ROAD FRAMINGHAM, MA 01701

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AT&T
 GENERAL NOTES (NSB)
 SITE NUMBER: CT1377
 DRAWING NUMBER: GN-1
 REV: 2

STRUCTURAL NOTES:

- DESIGN REQUIREMENTS ARE PER STATE BUILDING CODE AND APPLICABLE SUPPLEMENTS, INTERNATIONAL BUILDING CODE, EIA/TIA-222-H STRUCTURAL STANDARDS FOR STEEL ANTENNA, TOWERS AND ANTENNA SUPPORTING STRUCTURES.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO FABRICATION AND ERECTION OF ANY MATERIAL. ANY UNUSUAL CONDITIONS SHALL BE REPORTED TO THE ATTENTION OF THE CONSTRUCTION MANAGER AND ENGINEER OF RECORD.
- DESIGN AND CONSTRUCTION OF STRUCTURAL STEEL SHALL CONFORM TO THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS".
- STRUCTURAL STEEL SHALL CONFORM TO ASTM A992 (Fy=50 ksi), MISCELLANEOUS STEEL SHALL CONFORM TO ASTM A36 UNLESS OTHERWISE INDICATED.
- STEEL PIPE SHALL CONFORM TO ASTM A500 "COLD-FORMED WELDED & SEAMLESS CARBON STEEL STRUCTURAL TUBING", GRADE B, OR ASTM A53 PIPE STEEL BLACK AND HOT-DIPPED ZINC-COATED WELDED AND SEAMLESS TYPE E OR S, GRADE B. PIPE SIZES INDICATED ARE NOMINAL. ACTUAL OUTSIDE DIAMETER IS LARGER.
- STRUCTURAL CONNECTION BOLTS SHALL BE HIGH STRENGTH BOLTS (BEARING TYPE) AND CONFORM TO ASTM A325 TYPE-X "HIGH STRENGTH BOLTS FOR STRUCTURAL JOINTS, INCLUDING SUITABLE NUTS AND PLAIN HARDENED WASHERS". ALL BOLTS SHALL BE 3/4" DIA UNON.
- ALL STEEL MATERIALS SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123 "ZINC (HOT-DIP GALVANIZED) COATINGS ON IRON AND STEEL PRODUCTS", UNLESS OTHERWISE NOTED.
- ALL BOLTS, ANCHORS AND MISCELLANEOUS HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 "ZINC-COATING (HOT-DIP) ON IRON AND STEEL HARDWARE", UNLESS OTHERWISE NOTED.
- FIELD WELDS, DRILL HOLES, SAW CUTS AND ALL DAMAGED GALVANIZED SURFACES SHALL BE REPAIRED WITH AN ORGANIC ZINC REPAIR PAINT COMPLYING WITH REQUIREMENTS OF ASTM A780. GALVANIZING REPAIR PAINT SHALL HAVE 65 PERCENT ZINC BY WEIGHT, ZIRP BY DUNCAN GALVANIZING, GALVA BRIGHT PREMIUM BY CROWN OR EQUAL. THICKNESS OF APPLIED GALVANIZING REPAIR PAINT SHALL BE NOT LESS THAN 4 COATS (ALLOW TIME TO DRY BETWEEN COATS) WITH A RESULTING COATING THICKNESS REQUIRED BY ASTM A123 OR A153 AS APPLICABLE.
- CONTRACTOR SHALL COMPLY WITH AWS CODE FOR PROCEDURES, APPEARANCE AND QUALITY OF WELDS, AND FOR METHODS USED IN CORRECTING WELDING. ALL WELDERS AND WELDING PROCESSES SHALL BE QUALIFIED IN ACCORDANCE WITH AWS "STANDARD QUALIFICATION PROCEDURES". ALL WELDING SHALL BE DONE USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC AND D.I.I. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "STEEL CONSTRUCTION MANUAL". 14TH EDITION.
- INCORRECTLY FABRICATED, DAMAGED OR OTHERWISE MISFITTING OR NON-CONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE CONSTRUCTION MANAGER PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH ACTION SHALL REQUIRE CONSTRUCTION MANAGER APPROVAL.
- UNISTRUT SHALL BE FORMED STEEL CHANNEL STRUT FRAMING AS MANUFACTURED BY UNISTRUT CORP., WAYNE, MI OR EQUAL. STRUT MEMBERS SHALL BE 1 5/8"x1 5/8"x12GA, UNLESS OTHERWISE NOTED, AND SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION.
- EPOXY ANCHOR ASSEMBLY SHALL CONSIST OF STAINLESS STEEL ANCHOR ROD WITH NUTS & WASHERS. AN INTERNALLY THREADED INSERT, A SCREEN TUBE AND A EPOXY ADHESIVE. THE ANCHORING SYSTEM SHALL BE THE HILTI-HIT HY-270 AND OR HY-200 SYSTEMS (AS SPECIFIED IN DWG.) OR ENGINEERS APPROVED EQUAL.
- EXPANSION BOLTS SHALL CONFORM TO FEDERAL SPECIFICATION FF-S-325, GROUP II, TYPE 4, CLASS I, HILTI KWIK BOLT III OR APPROVED EQUAL. INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- LUMBER SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION AND THE NATIONAL FOREST PRODUCTS ASSOCIATION'S NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION. ALL LUMBER SHALL BE PRESSURE TREATED AND SHALL BE STRUCTURAL GRADE NO. 2 OR BETTER.
- WHERE ROOF PENETRATIONS ARE REQUIRED, THE CONTRACTOR SHALL CONTACT AND COORDINATE RELATED WORK WITH THE BUILDING OWNER AND THE EXISTING ROOF INSTALLER. WORK SHALL BE PERFORMED IN SUCH A MANNER AS TO NOT VOID THE EXISTING ROOF WARRANTY. ROOF SHALL BE WATERTIGHT.
- ALL FIBERGLASS MEMBERS USED ARE AS MANUFACTURED BY STRONGWELL COMPANY OF BRISTOL, VA 24203. ALL DESIGN CRITERIA FOR THESE MEMBERS IS BASED ON INFORMATION PROVIDED IN THE DESIGN MANUAL. ALL REQUIREMENTS PUBLISHED IN SAID MANUAL MUST BE STRICTLY ADHERED TO.
- NO MATERIALS TO BE ORDERED AND NO WORK TO BE COMPLETED UNTIL SHOP DRAWINGS HAVE BEEN REVIEWED AND APPROVED IN WRITING.
- SUBCONTRACTOR SHALL FIREPROOF ALL STEEL TO PRE-EXISTING CONDITIONS.

SPECIAL INSPECTIONS (REFERENCE IBC CHAPTER 17):

GENERAL: WHERE APPLICATION IS MADE FOR CONSTRUCTION, THE OWNER OR THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE ACTING AS THE OWNER'S AGENT SHALL EMPLOY ONE OR MORE APPROVED AGENCIES TO PERFORM INSPECTIONS DURING CONSTRUCTION ON THE TYPES OF WORK LISTED IN THE INSPECTION CHECKLIST ABOVE.

THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE AND ENGINEERS OF RECORD INVOLVED IN THE DESIGN OF THE PROJECT ARE PERMITTED TO ACT AS THE APPROVED AGENCY AND THEIR PERSONNEL ARE PERMITTED TO ACT AS THE SPECIAL INSPECTOR FOR THE WORK DESIGNED BY THEM, PROVIDED THOSE PERSONNEL MEET THE QUALIFICATION REQUIREMENTS.

STATEMENT OF SPECIAL INSPECTIONS: THE APPLICANT SHALL SUBMIT A STATEMENT OF SPECIAL INSPECTIONS PREPARED BY THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE IN ACCORDANCE WITH SECTION 107.1 AS A CONDITION FOR ISSUANCE. THIS STATEMENT SHALL BE IN ACCORDANCE WITH SECTION 1705.

REPORT REQUIREMENT: SPECIAL INSPECTORS SHALL KEEP RECORDS OF INSPECTIONS. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. REPORTS SHALL INDICATE THAT WORK INSPECTED WAS OR WAS NOT COMPLETED IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THEY ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. A FINAL REPORT DOCUMENTING REQUIRED SPECIAL INSPECTIONS SHALL BE SUBMITTED.

NOTES:

- ALL CONNECTIONS TO BE SHOP WELDED & FIELD BOLTED USING 3/4"Ø A325-X BOLTS, UNLESS OTHERWISE NOTIFIED.
- SHOP DRAWING ENGINEER REVIEW & APPROVAL REQUIRED BEFORE ORDERING MATERIAL.
- SHOP DRAWING ENGINEER REVIEW & APPROVAL REQUIRED PRIOR TO STEEL FABRICATION.
- VERIFICATION OF EXISTING ROOF CONSTRUCTION IS REQUIRED PRIOR TO THE INSTALLATION OF THE ROOF PLATFORM. ENGINEER OF RECORD IS TO APPROVE EXISTING CONDITIONS IN ORDER TO MOVE FORWARD.
- CENTERLINE OF PROPOSED STEEL PLATFORM SUPPORT COLUMNS TO BE CENTRALLY LOCATED OVER THE EXISTING BUILDING COLUMNS.
- EXISTING BRICK MASONRY COLUMNS/BEARING TO BE REPAIRED/REPLACED AT ALL PROPOSED PLATFORM SUPPORT POINTS. ENGINEER OF RECORD TO REVIEW AND APPROVE.

NOTES:

- REQUIRED FOR ANY NEW SHOP FABRICATED FRP OR STEEL.
- PROVIDED BY MANUFACTURER, REQUIRED IF HIGH STRENGTH BOLTS OR STEEL.
- PROVIDED BY GENERAL CONTRACTOR; PROOF OF MATERIALS.
- HIGH WIND ZONE INSPECTION CATB 120MPH OR CAT C,D 110MPH INSPECT FRAMING OF WALLS, ANCHORING, FASTENING SCHEDULE.
- ADHESIVE FOR REBAR AND ANCHORS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ACI 355.4 AND ICC-ES AC308 FOR CRACKED CONCRETE AND SEISMIC APPLICATIONS. DESIGN ADHESIVE BOND STRENGTH HAS BEEN BASED ON ACI 355.4 TEMPERATURE CATEGORY B WITH INSTALLATIONS INTO DRY HOLES DRILLED USING A CARBIDE BIT INTO CRACKED CONCRETE THAT HAS CURED FOR AT LEAST 21 DAYS. ADHESIVE ANCHORS REQUIRING CERTIFIED INSTALLATIONS SHALL BE INSTALLED BY A CERTIFIED ADHESIVE ANCHOR INSTALLER PER ACI 318-11 D.9.2.2. INSTALLATIONS REQUIRING CERTIFIED INSTALLERS SHALL BE INSPECTED PER ACI 318-11 D.8.2.4.
- AS REQUIRED; FOR ANY FIELD CHANGES TO THE ITEMS IN THIS TABLE.

SPECIAL INSPECTION CHECKLIST

BEFORE CONSTRUCTION

CONSTRUCTION/INSTALLATION INSPECTIONS AND TESTING REQUIRED (COMPLETED BY ENGINEER OF RECORD)	REPORT ITEM
REQUIRED	ENGINEER OF RECORD APPROVED SHOP DRAWINGS ¹
REQUIRED	MATERIAL SPECIFICATIONS REPORT ²
N/A	FABRICATOR NDE INSPECTION
REQUIRED	PACKING SLIPS ³

ADDITIONAL TESTING AND INSPECTIONS:

DURING CONSTRUCTION

CONSTRUCTION/INSTALLATION INSPECTIONS AND TESTING REQUIRED (COMPLETED BY ENGINEER OF RECORD)	REPORT ITEM
REQUIRED	STEEL INSPECTIONS
N/A	HIGH STRENGTH BOLT INSPECTIONS
N/A	HIGH WIND ZONE INSPECTIONS ⁴
N/A	FOUNDATION INSPECTIONS
N/A	CONCRETE COMP. STRENGTH, SLUMP TESTS AND PLACEMENT
N/A	POST INSTALLED ANCHOR VERIFICATION ⁵
N/A	GROUT VERIFICATION
N/A	CERTIFIED WELD INSPECTION
N/A	EARTHWORK: LIFT AND DENSITY
N/A	ON SITE COLD GALVANIZING VERIFICATION
N/A	GUY WIRE TENSION REPORT

ADDITIONAL TESTING AND INSPECTIONS:

AFTER CONSTRUCTION

CONSTRUCTION/INSTALLATION INSPECTIONS AND TESTING REQUIRED (COMPLETED BY ENGINEER OF RECORD)	REPORT ITEM
REQUIRED	MODIFICATION INSPECTOR REDLINE OR RECORD DRAWINGS ⁶
N/A	POST INSTALLED ANCHOR PULL-OUT TESTING
REQUIRED	PHOTOGRAPHS

ADDITIONAL TESTING AND INSPECTIONS:



45 BEECHWOOD DRIVE
NORTH ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586



12 INDUSTRIAL WAY
SALEM, NH 03079

SITE NUMBER: CT1377
SITE NAME: WILLINGTON DALEVILLE ROAD

343 DALEVILLE ROAD
WILLINGTON, CT 06279
TOLLAND COUNTY



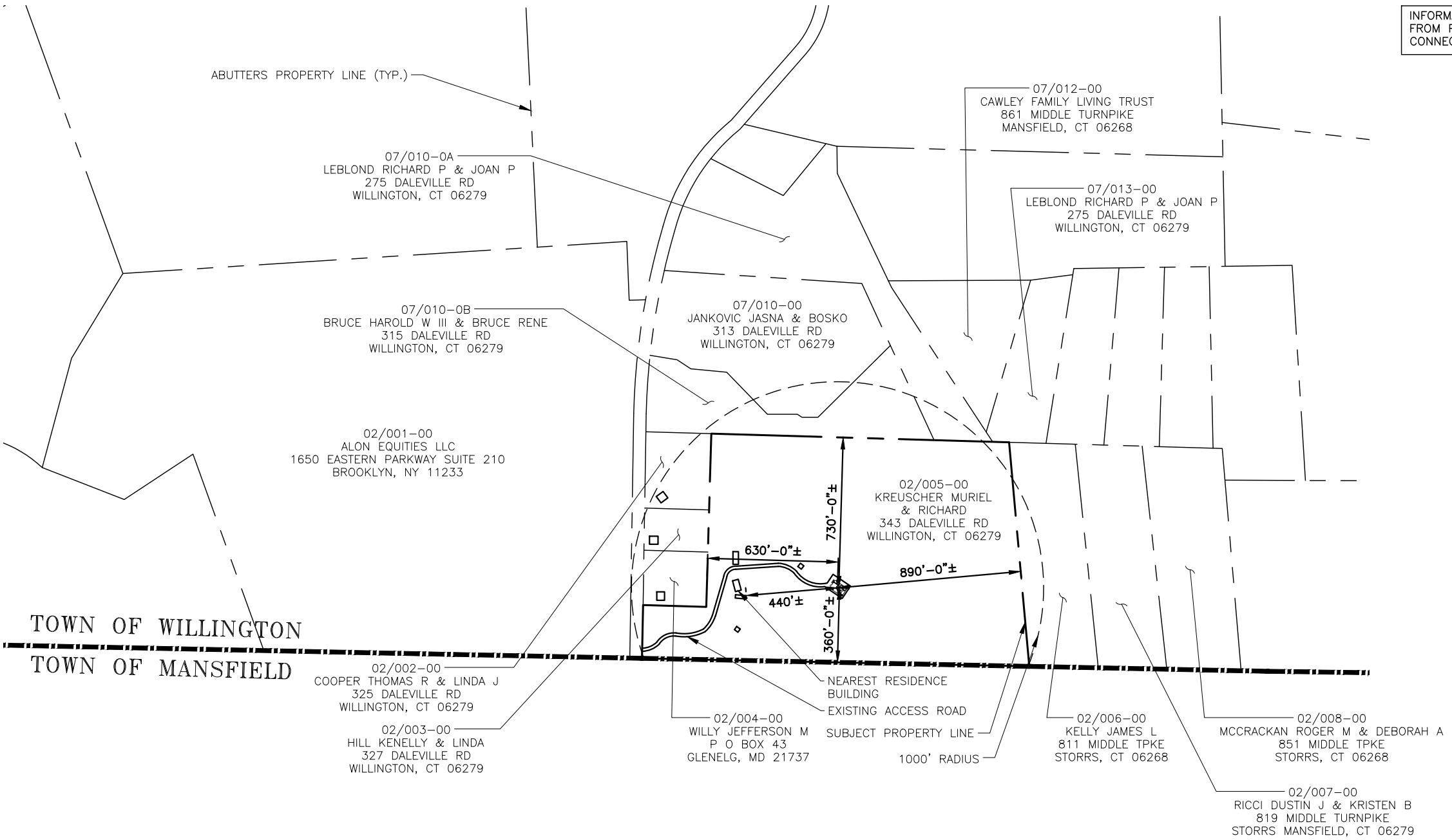
550 COCHITUATE ROAD
FRAMINGHAM, MA 01701

1 01/18/22 ISSUED FOR CONSTRUCTION		VR	JC	DPH		AT&T
1 03/25/21 ISSUED FOR REVIEW		VR	JC	DPH		SPECIAL INSPECTIONS NOTES
0 02/12/21 ISSUED FOR REVIEW		AR	JC	DPH		(NSB)
NO.	DATE	REVISIONS		BY	CHK	APP
SCALE: AS SHOWN		DESIGNED BY: JC		DRAWN BY: AR		
SITE NUMBER		DRAWING NUMBER		REV		
CT1377		SN-1				2

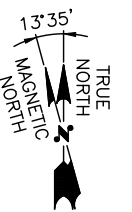
ZONING INFORMATION		
ZONING DISTRICT:	R-80: RESIDENTIAL	
DIMENSIONS REQUIREMENTS:	REQUIRED	PROPOSED
ANTENNA SETBACKS:		
FRONT YARD SETBACK:	200'	630'±
SIDE YARD SETBACK:	200'	360± & 730'±
REAR YARD SETBACK:	200'	890'±
(ALL MEASUREMENTS ARE IN FEET ± UNLESS OTHERWISE NOTED) (SETBACK TO EXISTING EQUIPMENT SHELTER UNLESS OTHERWISE NOTED)		

LIST OF HOMES WITHIN 1,000 FEET RADIUS			
PARCEL ID	QTY	PARCEL ID	QTY
02/002-00	1	02/004-00	1
02/003-00	1	02/005-00	1
TOTAL: 4			

INFORMATION TAKEN FROM PLANS BY CONNECTICUT GIS

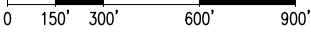


TOWN OF WILLINGTON
TOWN OF MANSFIELD



ABUTTERS PLAN
22x34 SCALE: 1"=300'
11x17 SCALE: 1"=600'

1
C-1



HGD HUDSON Design Group LLC
45 BEECHWOOD DRIVE NORTH ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586

SAI
12 INDUSTRIAL WAY
SALEM, NH 03079

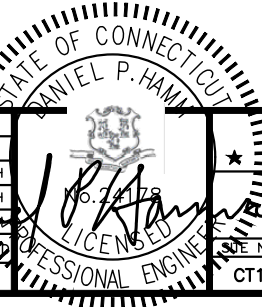
SITE NUMBER: CT1377
SITE NAME: WILLINGTON DALEVILLE ROAD

343 DALEVILLE ROAD
WILLINGTON, CT 06279
TOLLAND COUNTY

at&t
550 COCHITUATE ROAD
FRAMINGHAM, MA 01701

NO.	DATE	REVISIONS	BY	CHK	APP
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1	03/25/21	ISSUED FOR REVIEW	AR	JC	DPH
0	02/12/21	ISSUED FOR REVIEW	AR	JC	DPH

SCALE: AS SHOWN DESIGNED BY: JC DRAWN BY: AR



AT&T

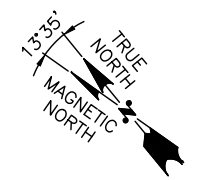
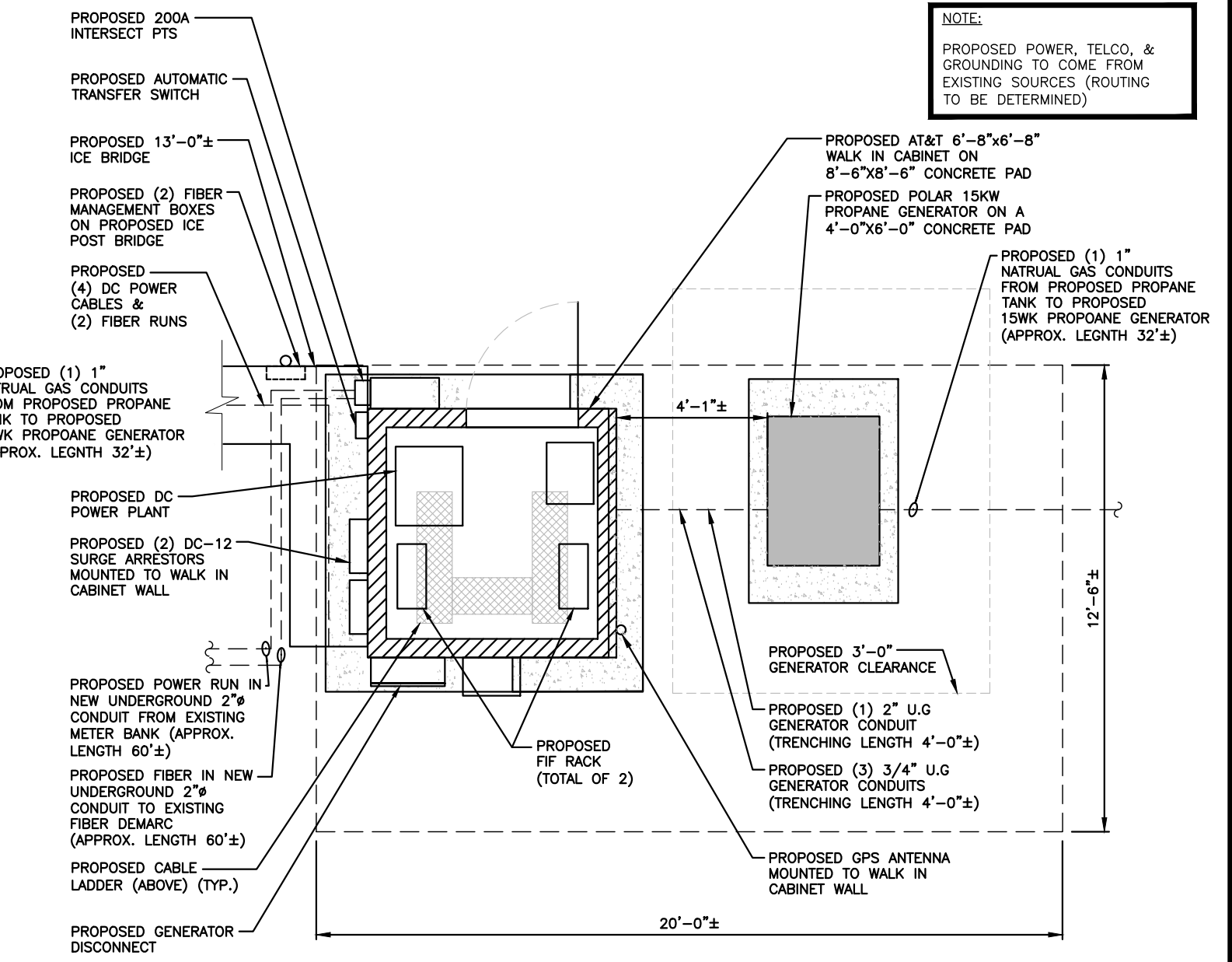
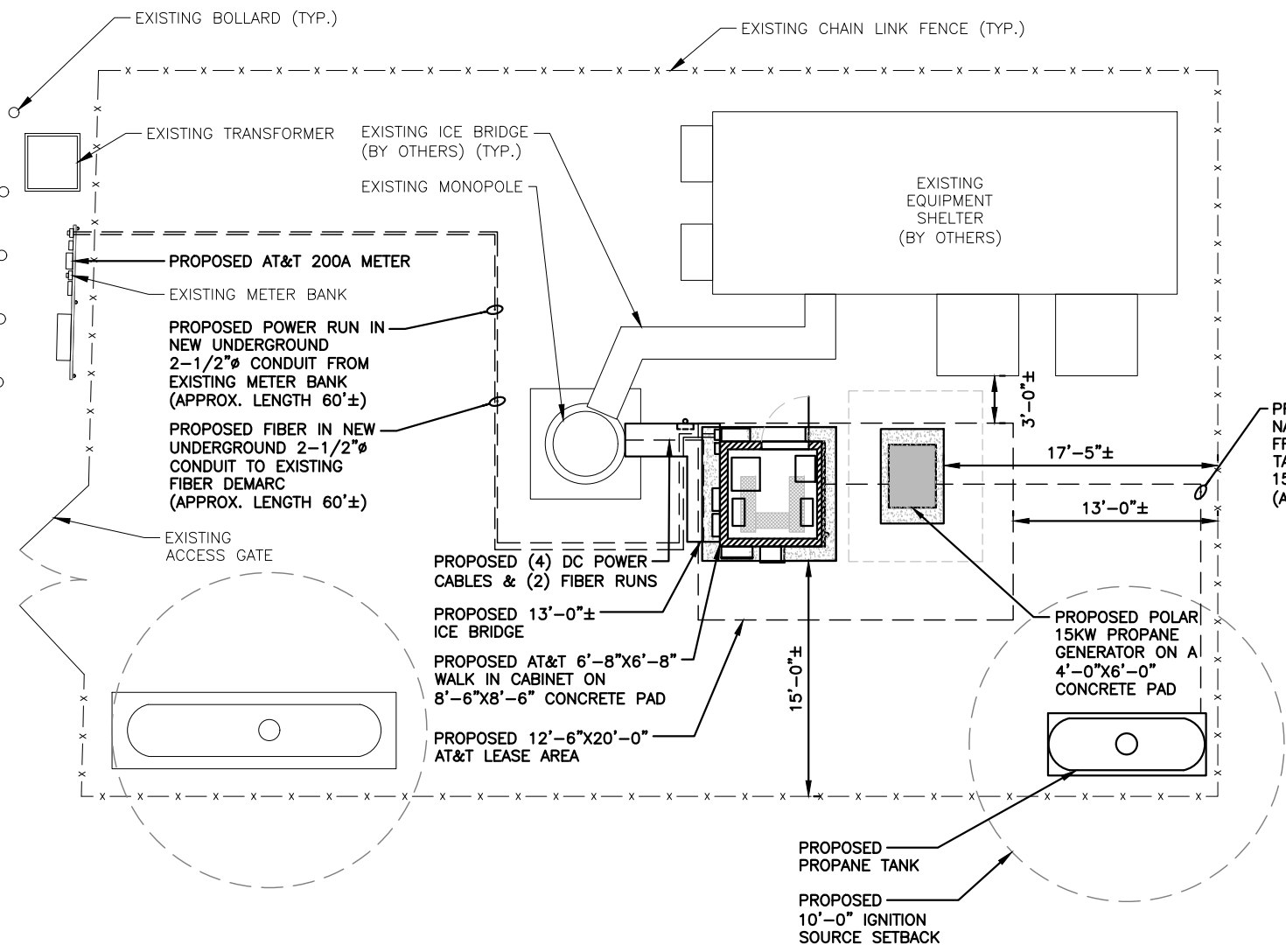
SPECIAL INSPECTIONS NOTES (NSB)

SITE NUMBER	DRAWING NUMBER	REV
CT1377	C-1	2

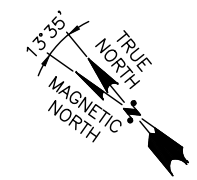
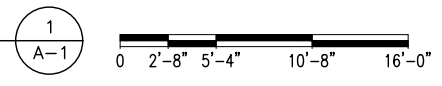
NOTE:
REFER TO THE FINAL RF DATA SHEET FOR FINAL ANTENNA SETTINGS.

NOTE:
REFER TO STRUCTURAL ANALYSIS BY: AMERICAN TOWER CORPORATION DATED: DECEMBER 04, 2020 FOR THE CAPACITY OF THE EXISTING STRUCTURES TO SUPPORT THE PROPOSED EQUIPMENT.

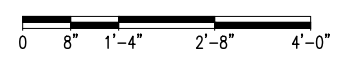
NOTE:
PROPOSED POWER, TELCO, & GROUNDING TO COME FROM EXISTING SOURCES (ROUTING TO BE DETERMINED)



COMPOUND PLAN
22x34 SCALE: 3/16"=1'-0"
11x17 SCALE: 3/32"=1'-0"



EQUIPMENT PLAN
22x34 SCALE: 3/4"=1'-0"
11x17 SCALE: 3/8"=1'-0"



HGD HUDSON Design Group LLC
45 BEECHWOOD DRIVE NORTH ANDOVER, MA 01845
TEL: (978) 557-5553 FAX: (978) 336-5586

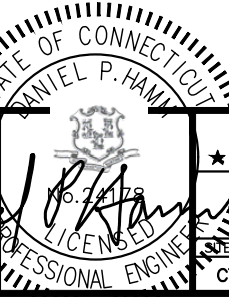
SAI
12 INDUSTRIAL WAY SALEM, NH 03079

SITE NUMBER: CT1377
SITE NAME: WILLINGTON DALEVILLE ROAD
343 DALEVILLE ROAD WILLINGTON, CT 06279 TOLLAND COUNTY

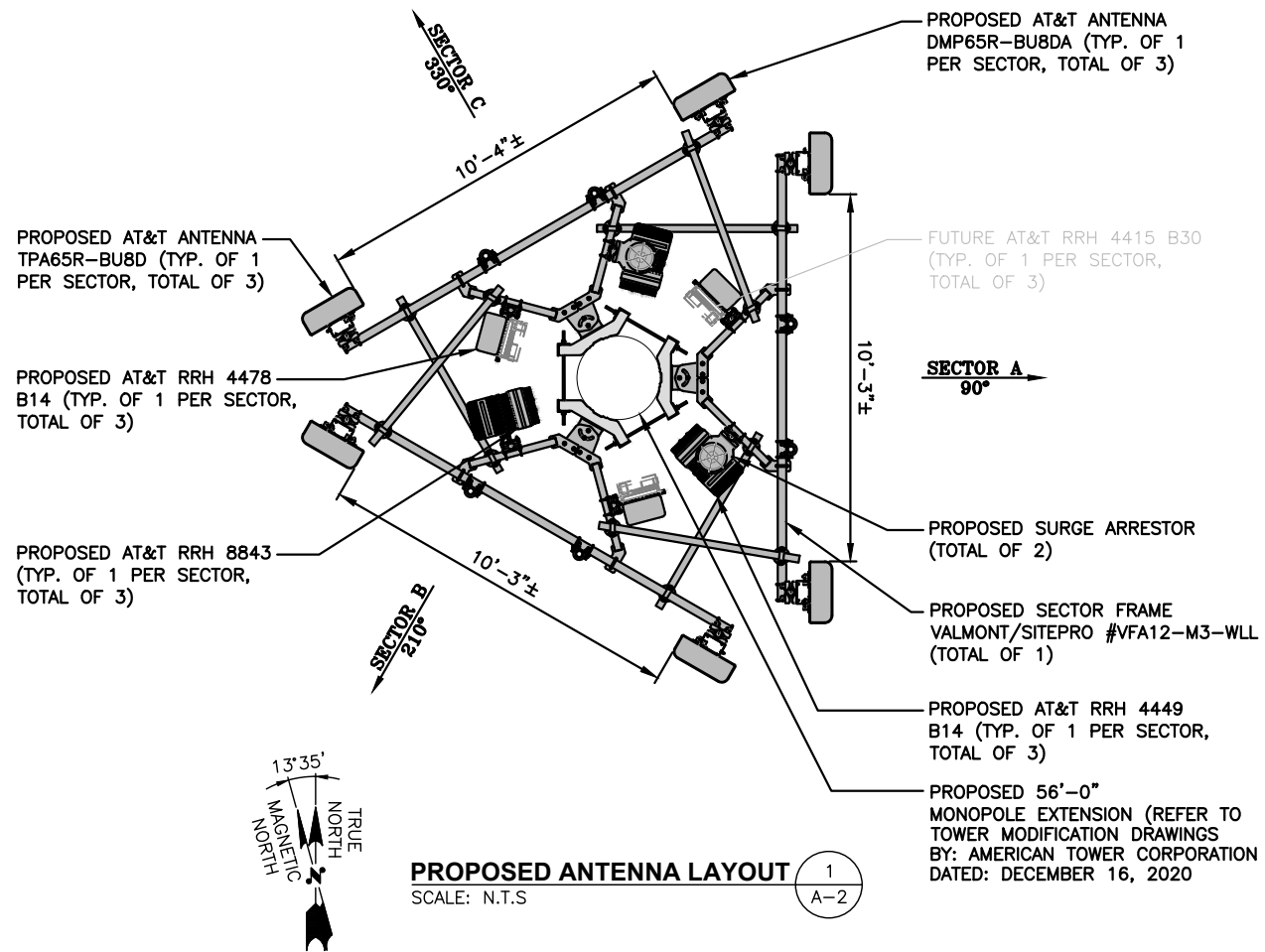
at&t
550 COCHITUATE ROAD FRAMINGHAM, MA 01701

NO.	DATE	REVISIONS	BY	CHK	APP
1	01/18/22	ISSUED FOR CONSTRUCTION	VR	JC	DPH
1	03/25/21	ISSUED FOR REVIEW	VR	JC	DPH
0	02/12/21	ISSUED FOR REVIEW	AR	JC	DPH

SCALE: AS SHOWN DESIGNED BY: JC DRAWN BY: AR



AT&T
COMPOUND & EQUIPMENT PLANS (NSB)
SITE NUMBER: CT1377 DRAWING NUMBER: A-1 REV: 2



PROPOSED AT&T ANTENNA
TPA65R-BU8D (TYP. OF 1
PER SECTOR, TOTAL OF 3)

PROPOSED AT&T RRH 4478
B14 (TYP. OF 1 PER SECTOR,
TOTAL OF 3)

PROPOSED AT&T RRH 8843
(TYP. OF 1 PER SECTOR,
TOTAL OF 3)

PROPOSED AT&T ANTENNA
DMP65R-BU8DA (TYP. OF 1
PER SECTOR, TOTAL OF 3)

FUTURE AT&T RRH 4415 B30
(TYP. OF 1 PER SECTOR,
TOTAL OF 3)

PROPOSED SURGE ARRESTOR
(TOTAL OF 2)

PROPOSED SECTOR FRAME
VALMONT/SITEPRO #VFA12-M3-WLL
(TOTAL OF 1)

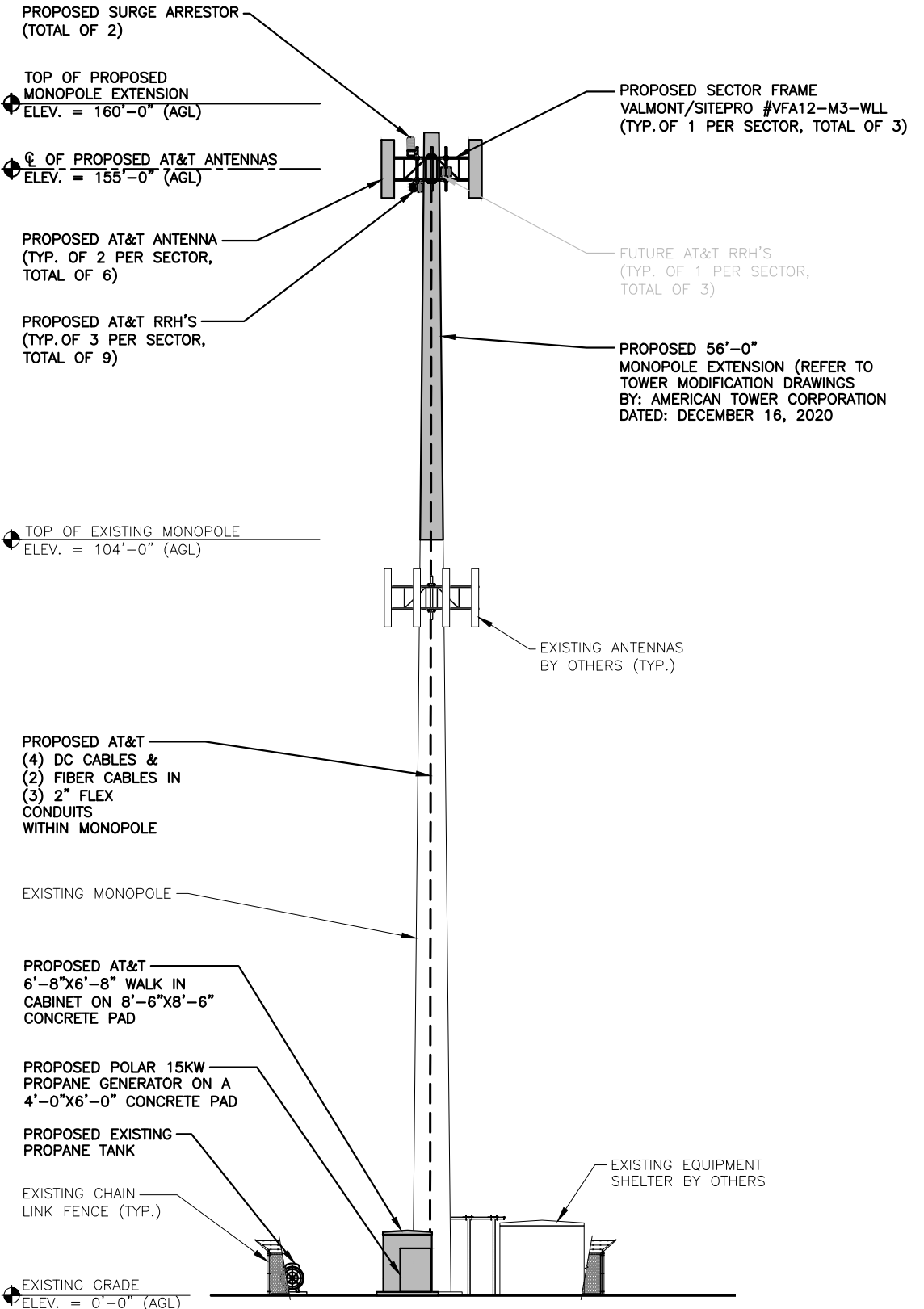
PROPOSED AT&T RRH 4449
B14 (TYP. OF 1 PER SECTOR,
TOTAL OF 3)

PROPOSED 56'-0"
MONOPOLE EXTENSION (REFER TO
TOWER MODIFICATION DRAWINGS
BY: AMERICAN TOWER CORPORATION
DATED: DECEMBER 16, 2020)

NOTE:
AN ANALYSIS FOR THE CAPACITY OF
THE EXISTING ANTENNA MOUNT TO
SUPPORT THE PROPOSED LOADING
HAS BEEN COMPLETED BY:
HUDSON DESIGN GROUP, LLC.
DATED: DECEMBER 14, 2020

NOTE:
REFER TO STRUCTURAL ANALYSIS
BY: AMERICAN TOWER CORPORATION
DATED: DECEMBER 04, 2020
FOR THE CAPACITY OF THE EXISTING
STRUCTURES TO SUPPORT THE
PROPOSED EQUIPMENT.

NOTE:
REFER TO THE FINAL RF DATA
SHEET FOR FINAL ANTENNA
SETTINGS.



ELEVATION
22x34 SCALE: 1/8"=1'-0"
11x17 SCALE: 1/16"=1'-0"

HGD HUDSON
Design Group LLC
45 BEECHWOOD DRIVE
NORTH ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5386

SAI
12 INDUSTRIAL WAY
SALEM, NH 03079

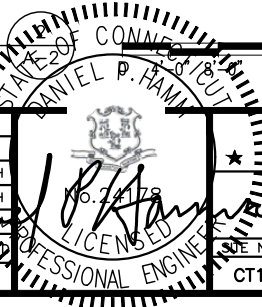
SITE NUMBER: CT1377
SITE NAME: WILLINGTON DALEVILLE ROAD

343 DALEVILLE ROAD
WILLINGTON, CT 06279
TOLLAND COUNTY

at&t
550 COCHITUATE ROAD
FRAMINGHAM, MA 01701

NO.	DATE	REVISIONS	BY	CHK	APP
1	01/18/22	ISSUED FOR CONSTRUCTION	VP	JC	DPH
1	03/25/21	ISSUED FOR REVIEW	AR	JC	DPH
0	02/12/21	ISSUED FOR REVIEW	AR	JC	DPH

SCALE: AS SHOWN DESIGNED BY: JC DRAWN BY: AR



AT&T
ANTENNA LAYOUT & ELEVATIONS
(NSB)
SITE NUMBER: CT1377 DRAWING NUMBER: A-2 REV: 2

NOTE:
AN ANALYSIS FOR THE CAPACITY OF THE EXISTING ANTENNA MOUNT TO SUPPORT THE PROPOSED LOADING HAS BEEN COMPLETED BY: HUDSON DESIGN GROUP, LLC. DATED: DECEMBER 14, 2020

NOTE:
REFER TO THE FINAL RF DATA SHEET FOR FINAL ANTENNA SETTINGS.

NOTE:
REFER TO STRUCTURAL ANALYSIS BY: AMERICAN TOWER CORPORATION DATED: DECEMBER 04, 2020 FOR THE CAPACITY OF THE EXISTING STRUCTURES TO SUPPORT THE PROPOSED EQUIPMENT.

PROPOSED 2.5" STD. (2.88" O.D.) MOUNTING PIPE (10'-0" LONG PIPE) (TYP. OF 3 PER SECTOR, TOTAL OF 9)

PROPOSED SURGE ARRESTOR (TOTAL OF 2)

PROPOSED V-BOOM ANTENNA MOUNT #VFA12-M3-WLL (TYP. OF 1 PER SECTOR, TOTAL OF 3)

PROPOSED 1/2" U-BOLT (TYP.)

PROPOSED 2" STD. (2.38" O.D.) MOUNTING PIPE (6'-0" LONG PIPE) (TYP. OF 2 PER SECTOR, TOTAL OF 6)

PROPOSED RRU BACK TO BACK PIPE MOUNT BRACKET P/N SXX1250461/1 (OR APPROVED EQUAL) (TYP. OF 2 PER SECTOR, TOTAL OF 6)

PROPOSED AT&T RRH'S (TYP. OF 3 PER SECTOR, TOTAL OF 9)

NOTE:
SEE RFDS FOR RRH FREQUENCY AND MODEL NUMBER

PROPOSED SECTOR FRAME, ANTENNA, SURGE SUPPRESSOR & RRH'S MOUNTING DETAIL
SCALE: N.T.S.

2
A-3

PROPOSED AT&T ANTENNAS (TYP. OF 2 PER SECTOR, TOTAL OF 6)

CL OF PROPOSED AT&T ANTENNAS
ELEV. = 155'-0" ± A.G.L.

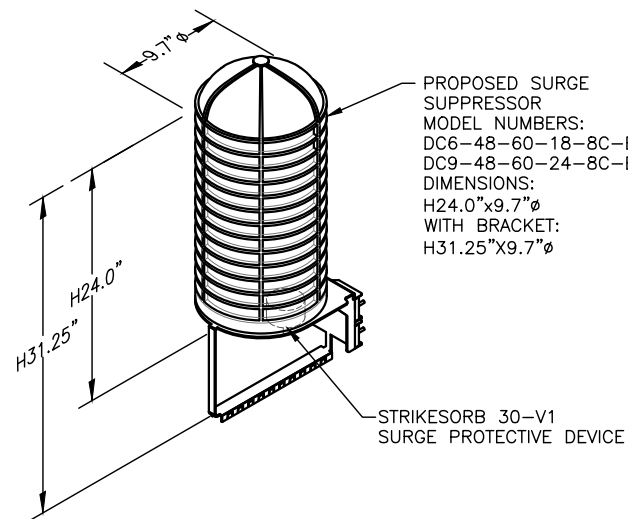
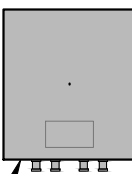
NOTE:
SEE RFDS FOR RRH FREQUENCY AND MODEL NUMBER

PROPOSED RRU REFER TO THE FINAL RFDS AND CHART FOR QUANTITY, MODEL AND DIMENSIONS

NOTE:
MOUNT PER MANUFACTURER'S SPECIFICATIONS.

PROPOSED RRUS DETAIL
SCALE: N.T.S.

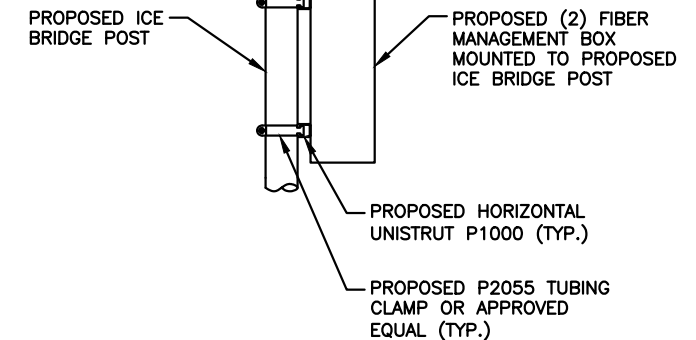
3
A-3



NOTE:
MOUNT PER MANUFACTURER'S SPECIFICATIONS.

DC SURGE SUPPRESSOR DETAIL
SCALE: N.T.S.

4
A-3



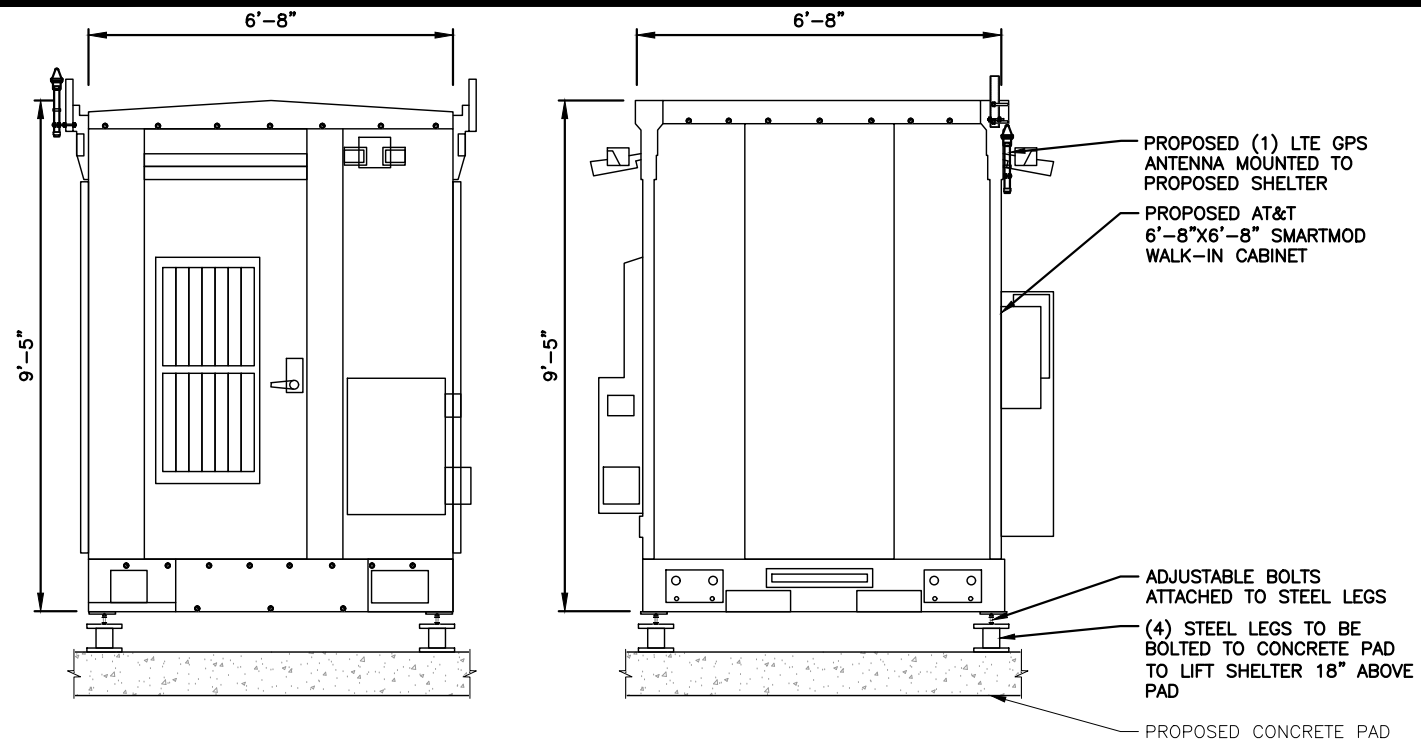
PROPOSED FIBER MANAGEMENT BOX MOUNTING DETAIL

5
A-3

ANTENNA SCHEDULE										
SECTOR	EXISTING/PROPOSED	BAND	ANTENNA	SIZE (INCHES) (L x W x D)	ANTENNA CL HEIGHT	AZIMUTH	RRU	SIZE (INCHES) (L x W x D)	FEEDER	RAYCAP
A1	PROPOSED	LTE B14/AWS/WCS	TPA65R-BU8DA-K	96X21X7.8	155'-0"	90°	(P) (1) B14 4478 (F) (1) 4415 B30	18.1X13.4X8.31 6.5X13.4X5.9	(4) DC POWER (2) FIBER RUNS	(P) (1) RAYCAP DC6-48-60-18-8C-EV (P) (1) RAYCAP DC9-48-60-24-8C-EV
A2	PROPOSED	LTE 700BC/850/PCS	DMP65R-BU8DA-K	96X20.7X7.7	155'-0"	90°	(P) (1) 4449 B5/B12 (P) (1) 8843 B2/B66A	14.9X13.2X10.4 14.9X13.2X10.9		
A3	-	-	-	-	-	-	-	-		
A4	-	-	-	-	-	-	-	-		
B1	PROPOSED	LTE B14/AWS/WCS	TPA65R-BU8DA-K	96X21X7.8	155'-0"	210°	(P) (1) B14 4478 (F) (1) 4415 B30	18.1X13.4X8.31 6.5X13.4X5.9		
B2	PROPOSED	LTE 700BC/850/PCS	DMP65R-BU8DA-K	96X20.7X7.7	155'-0"	210°	(P) (1) 4449 B5/B12 (P) (1) 8843 B2/B66A	14.9X13.2X10.4 14.9X13.2X10.9		
B3	-	-	-	-	-	-	-	-		
B4	-	-	-	-	-	-	-	-		
C1	PROPOSED	LTE B14/AWS/WCS	TPA65R-BU8DA-K	96X21X7.8	155'-0"	330°	(P) (1) B14 4478 (F) (1) 4415 B30	18.1X13.4X8.31 6.5X13.4X5.9		
C2	PROPOSED	LTE 700BC/850/PCS	DMP65R-BU8DA-K	96X20.7X7.7	155'-0"	330°	(P) (1) 4449 B5/B12 (P) (1) 8843 B2/B66A	14.9X13.2X10.4 14.9X13.2X10.9		
C3	-	-	-	-	-	-	-	-		
C4	-	-	-	-	-	-	-	-		

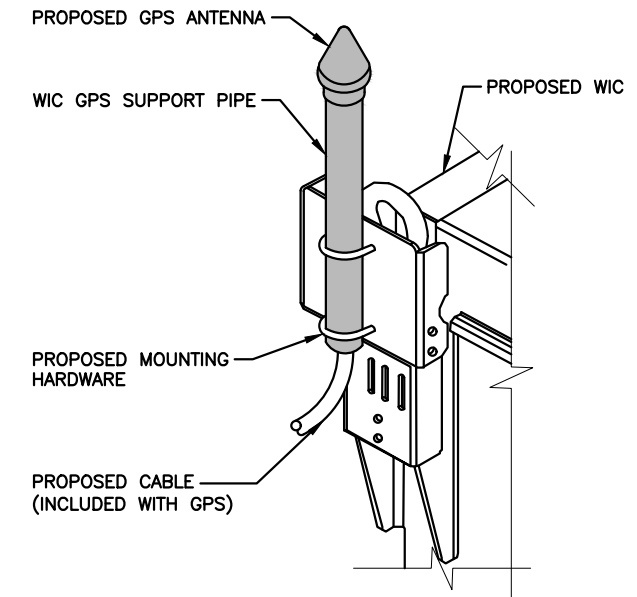
FINAL ANTENNA SCHEDULE
SCALE: N.T.S.

1
A-3

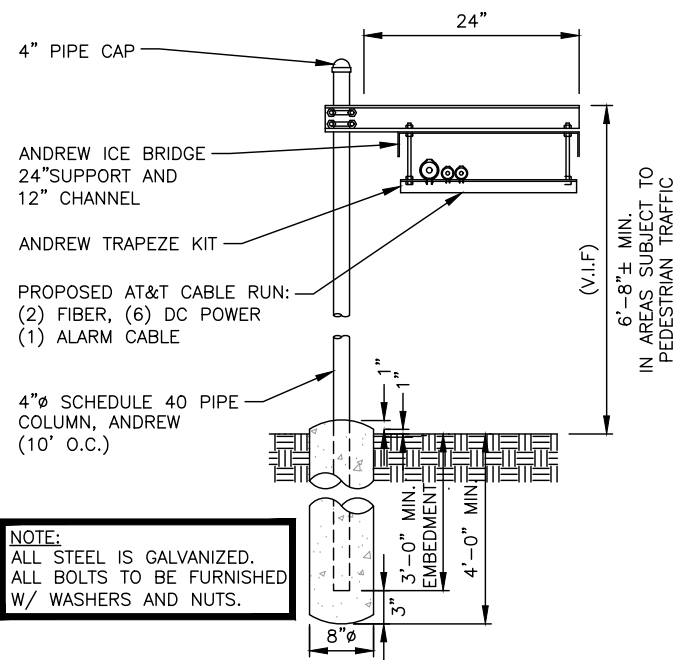


NOTE:
SHELTER SHALL BE MOUNTED PER
MANUFACTURER'S SPECIFICATIONS.

TYPICAL SHELTER DETAIL
SCALE: N.T.S. 1
A-4



GPS MOUNTING DETAIL
N.T.S. 2
A-4

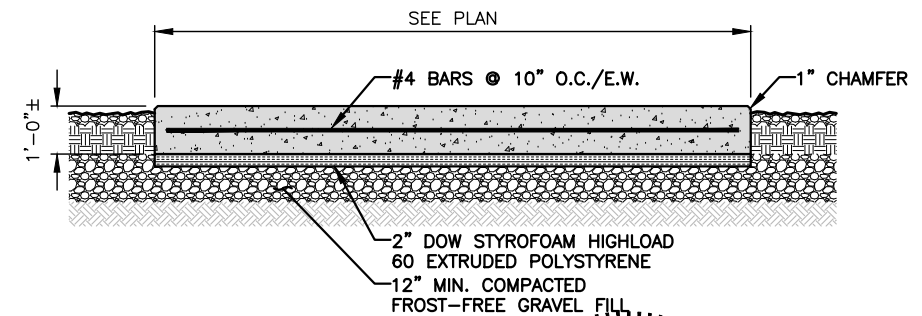


NOTE:
ALL STEEL IS GALVANIZED.
ALL BOLTS TO BE FURNISHED
W/ WASHERS AND NUTS.

ICE BRIDGE DETAIL
SCALE: N.T.S. 3
A-4

FOUNDATION NOTES & CONCRETE SPECIFICATIONS:

- FOUNDATION AREA SHALL BE EXCAVATED TO THE DEPTH AND DIMENSIONS SHOWN ON THE PLANS. EXISTING LEDGE AND ALL OTHER EXISTING UNSUITABLE MATERIAL SHALL BE REMOVED AND LEGALLY DISPOSED OF OFF-SITE. THE SUBGRADE SHALL BE ROLLED WITH A 1-TON, VIBRATORY, WALK-BEHIND ROLLER AT A SPEED OF LESS THAN 2 FPS, 6 PASSES MINIMUM, TO PROVIDE UNYIELDING SURFACE.
- UNDERCUT SOFT OR "WEAVING" AREAS A MINIMUM OF 12 INCHES DEEP. BACKFILL UNDERCUT AREA WITH FILL MEETING THE SPECIFICATIONS OF STRUCTURAL FILL.
- CONCRETE TO HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH (f'c)=4000 psi. CONCRETE TO BE AIR ENTRAINED, DESIRED AIR CONTENT TO BE 6% (PLUS OR MINUS 2%)
- REINFORCING BAR TO BE ASTM A615 GRADE 60.
- WELDED WIRE FABRIC TO CONFORM TO THE REQUIREMENTS OF ASTM A185. WIRES FOR FABRIC TO CONFORM TO THE REQUIREMENTS OF ASTM A82.
- COORDINATE WITH MANUFACTURER OF PREFABRICATED SHELTER FOR LOCATION OF ATTACHMENTS TO BASE SLAB.
- ALL REINFORCING TO HAVE MINIMUM CONCRETE COVER PER ACI SPECIFICATIONS.
- ALL CONCRETE MATERIALS AND WORKMANSHIP SHALL CONFORM TO LATEST EDITION OF ACI 318 AND APPLICABLE STATE BUILDING CODE.



CONCRETE PAD DETAIL
22x34 SCALE: N.T.S.

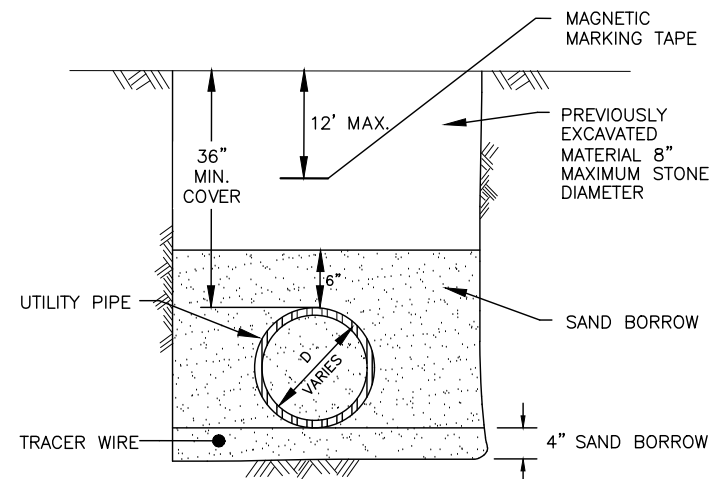


PROPOSED POLAR 15KW PROPANE GENERATOR
MODEL#: 8340-100-LP-15-03

GENERATOR DETAIL

SCALE: N.T.S

1
A-5

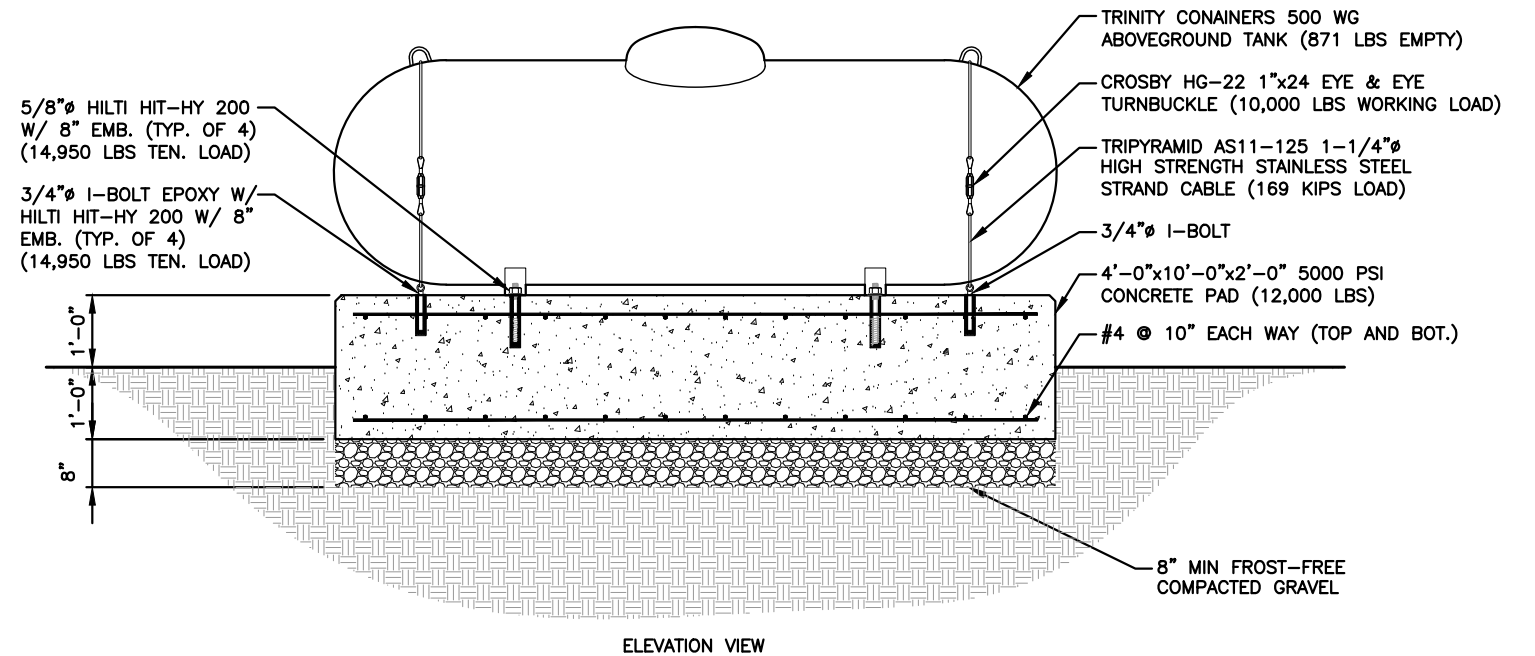
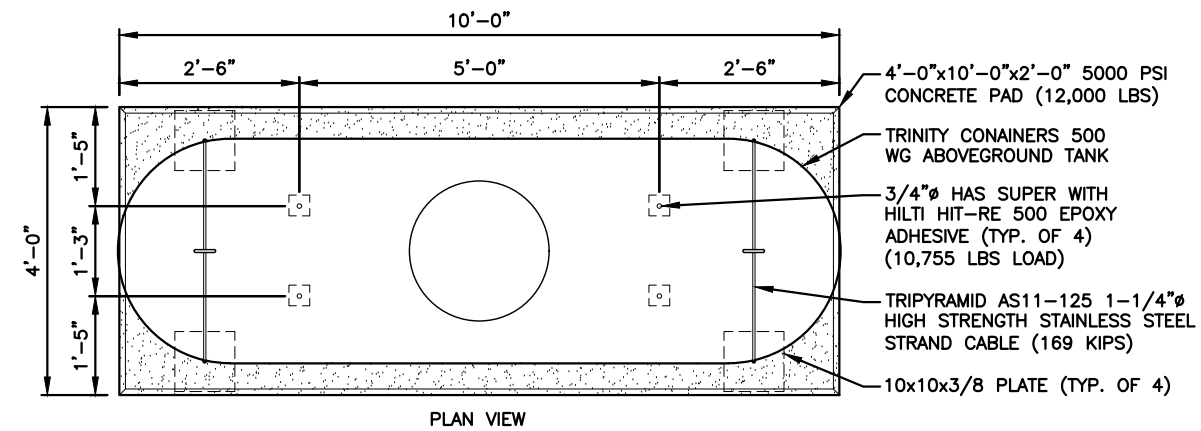


NOTES: 1 COMPACT ALL BACKFILL MATERIAL WITH VIBRATORY PLATE EQUIPMENT (MINIMUM TWO PASSES) TO A MINIMUM DENSITY OF 95 PERCENT OF THE STANDARD PROCTOR DENSITY AS DETERMINED BY ASTM D698. 2 PLACE BACKFILL MATERIALS IN MAXIMUM ONE FOOT LIFTS.

GAS PIPING TRENCH SECTION

SCALE: N.T.S

2
A-5



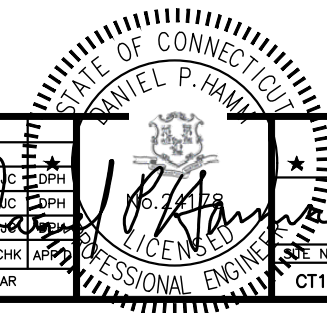
PROPANE TANK MOUNTING

22x34 SCALE: 3/4"=1'-0"
11x17 SCALE: 3/8"=1'-0"

3
A-5



1	01/18/22	ISSUED FOR CONSTRUCTION	VC	JC	DPH				
1	03/25/21	ISSUED FOR REVIEW	AR	JC	DPH				
0	02/12/21	ISSUED FOR REVIEW	AR	JC	DPH				
NO.	DATE	REVISIONS	BY	CHK	APP				
SCALE: AS SHOWN		DESIGNED BY: JC	DRAWN BY: AR						
							SITE NUMBER	DRAWING NUMBER	REV
							CT1377	A-5	2



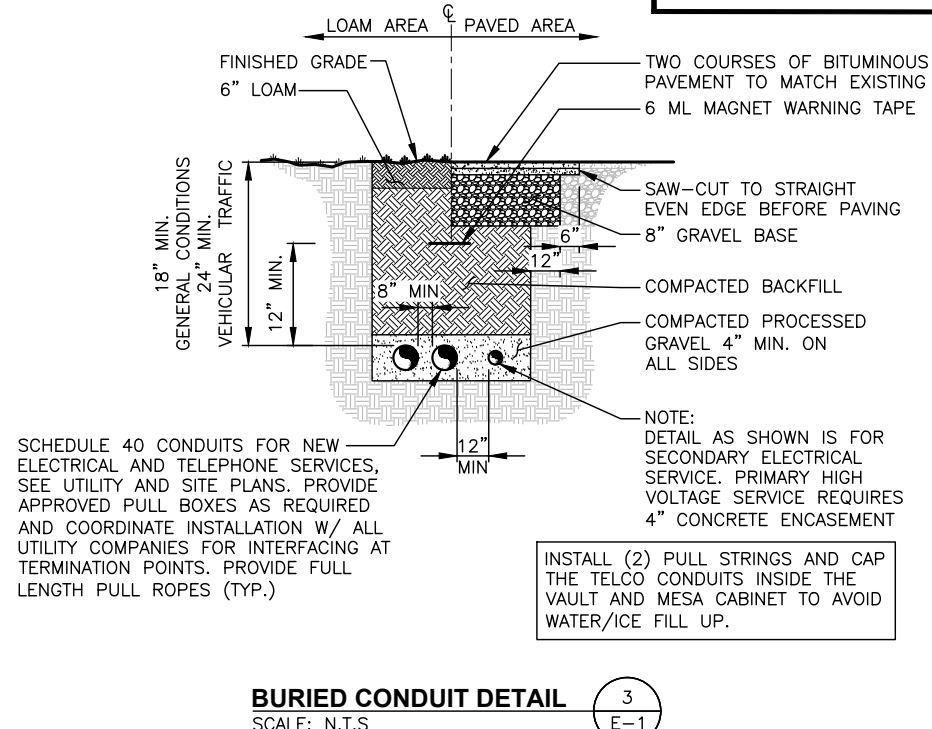
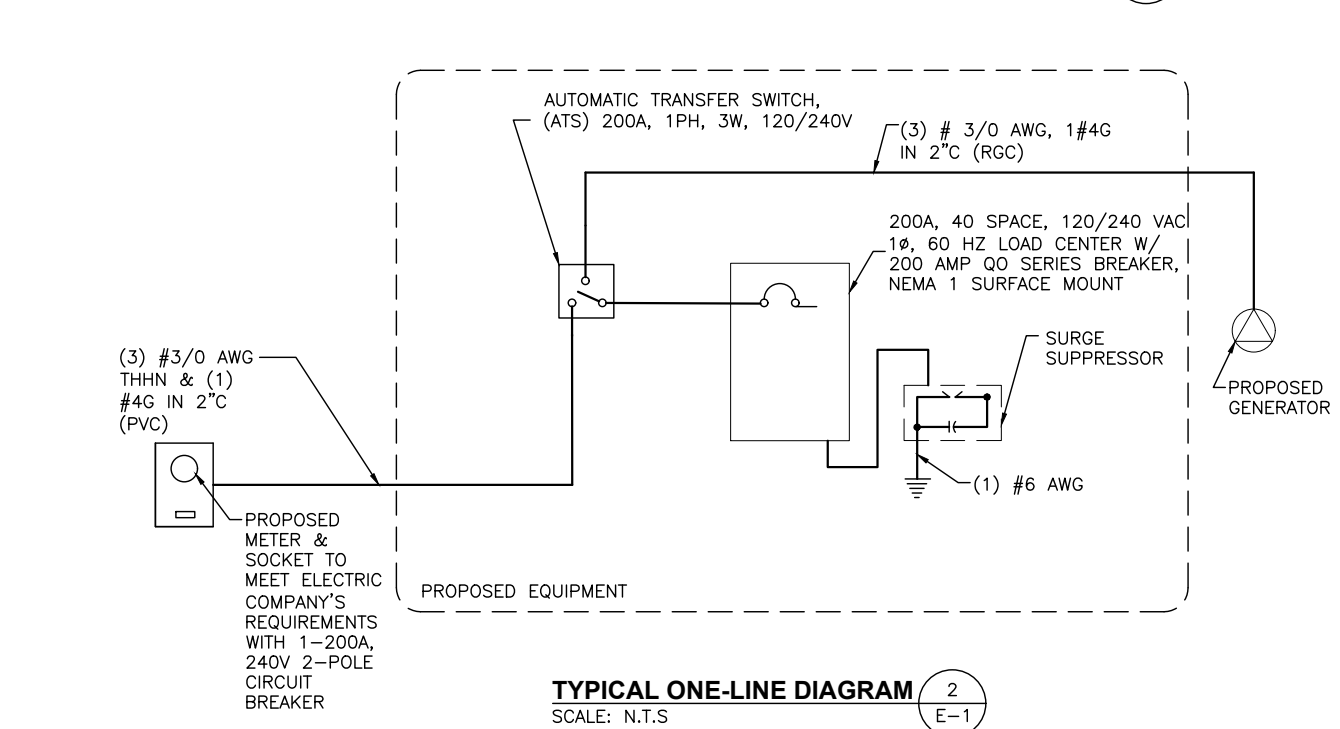
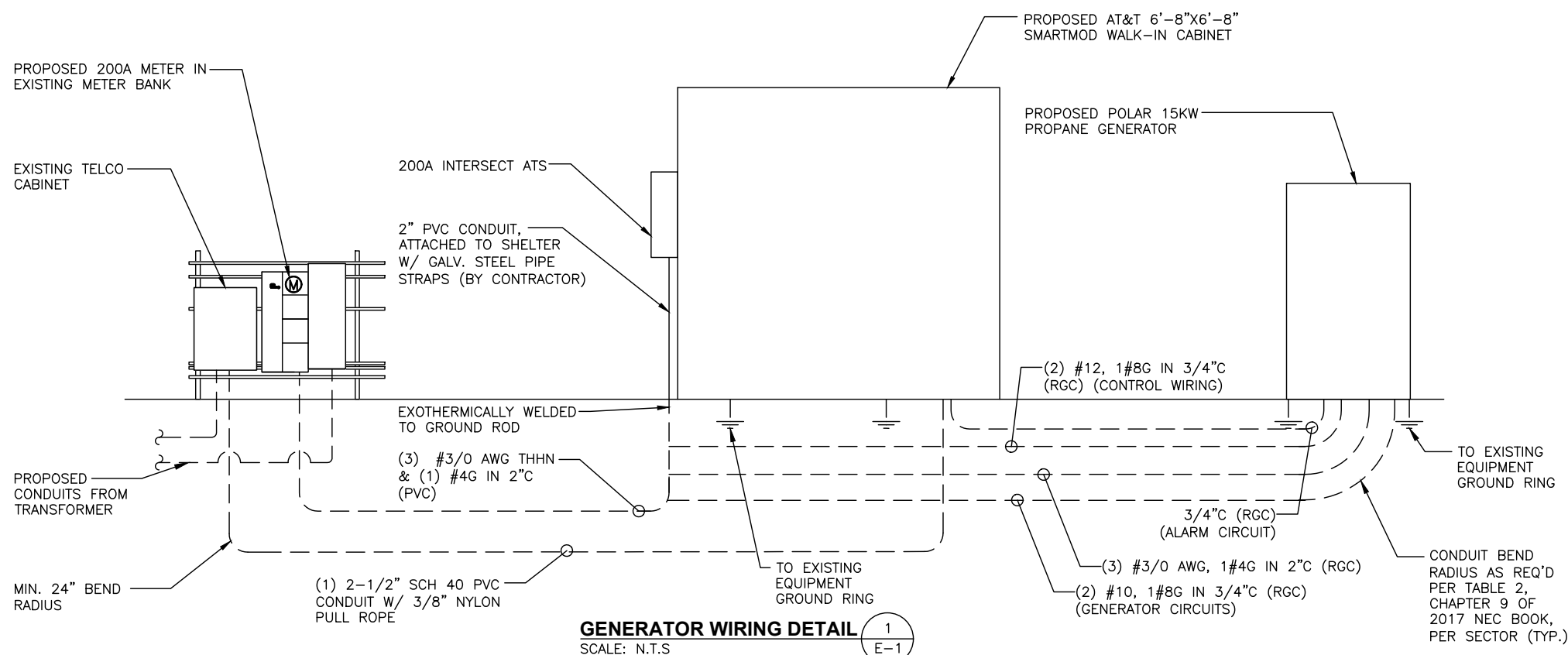
ELECTRICAL LEGEND & ABBREVIATIONS

	NEW PANEL BOARD, SURFACE MOUNTED		EXISTING PANEL BOARD, SURFACE MOUNTED
	DRY TYPE TRANSFORMER		METER
	CIRCUIT BREAKER		NON-FUSIBLE DISCONNECT SWITCH, MOUNTED 54" A.F.F.
	FUSIBLE DISCONNECT SWITCH, MOUNTED 54" A.F.F.		TRANSIENT VOLTAGE SURGE SUPPRESSOR WITH BUILT-IN FUSES, SURFACE MOUNTED
	DUPLEX OUTLET, SURFACE MOUNTED, 20 AMPS, 125 VOLTS, SINGLE PHASE		JUNCTION BOX, SURFACE MOUNTED 18" A.F.F.
	EXPOSED WIRING		HOME RUNS, MINIMUM 2#10 + 1#8G IN 3/4" CONDUIT U.O.N.
	A.F.F. ABOVE FINISHED FLOOR		U.O.N. UNLESS OTHERWISE NOTED
	WP WEATHERPROOF		GFI GROUND FAULT INTERRUPTER
	A AMPERE		V VOLT
	KWH KILOWATT - HOUR		C CONDUIT
	PVC POLYVINYL CHLORIDE		HZ HERTZ
	PH, # PHASE		W WATTS
	NEC NATIONAL ELECTRIC CODE		PPC POWER PROTECTION CABINET
	UL UNDERWRITER LABORATORIES		PTS POWER TRANSFER SWITCH
	QO GALVANIZED RIGID CONDUIT		G GROUND
	GROUND		GROUND
	MECHANICAL CONNECTION		CADWELDED CONNECTION
	MECHANICAL CONNECTION		SIZE AS NOTED
	EXPOSED WIRING		COAXIAL CABLE
	5/8"x8" COPPER GLAD STAINLESS STEEL GROUND ROD		EXOTHERMIC (CAD WELD) OR MECHANICAL (COMPRESSION TYPE) CONNECTION
	POWER FACTOR		

ELECTRICAL AND GROUNDING NOTES

- ALL ELECTRICAL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC) AS WELL AS APPLICABLE STATE AND LOCAL CODES.
- ALL ELECTRICAL ITEMS SHALL BE U.L. APPROVED OR LISTED AND PROCURED PER SPECIFICATION REQUIREMENTS.
- THE ELECTRICAL WORK INCLUDES ALL LABOR AND MATERIAL DESCRIBED BY DRAWINGS AND SPECIFICATION INCLUDING INCIDENTAL WORK TO PROVIDE COMPLETE OPERATING AND APPROVED ELECTRICAL SYSTEM.
- GENERAL CONTRACTOR SHALL PAY FEES FOR PERMITS, AND IS RESPONSIBLE FOR OBTAINING SAID PERMITS AND COORDINATION OF INSPECTIONS.
- ELECTRICAL AND TELCO WIRING OUTSIDE A BUILDING AND EXPOSED TO WEATHER SHALL BE IN WATER TIGHT GALVANIZED RIGID STEEL CONDUITS OR SCHEDULE 80 PVC (AS PERMITTED BY CODE) AND WHERE REQUIRED IN LIQUID TIGHT FLEXIBLE METAL OR NONMETALLIC CONDUITS.
- BURIED CONDUIT SHALL BE SCHEDULE 40 PVC.
- ELECTRICAL WIRING SHALL BE COPPER WITH TYPE XHHW, THWN, OR THININSULATION.
- RUN ELECTRICAL CONDUIT OR CABLE BETWEEN ELECTRICAL UTILITY DEMARCATION POINT AND PROJECT OWNER CELL SITE PPC AS INDICATED ON THIS DRAWING. PROVIDE FULL LENGTH PULL ROPE. COORDINATE INSTALLATION WITH UTILITY COMPANY.
- RUN TELCO CONDUIT OR CABLE BETWEEN TELEPHONE UTILITY DEMARCATION POINT AND PROJECT OWNER CELL SITE TELCO CABINET AND BTS CABINET AS INDICATED ON THIS DRAWING. PROVIDE FULL LENGTH PULL ROPE IN INSTALLED TELCO CONDUIT. PROVIDE GREENLEE CONDUIT MEASURING TAPE AT EACH END.
- WHERE CONDUIT BETWEEN BTS AND PROJECT OWNER CELL SITE PPC AND BETWEEN BTS AND PROJECT OWNER CELL SITE TELCO SERVICE CABINET ARE UNDERGROUND USE PVC, SCHEDULE 40 CONDUIT. ABOVE THE GROUND PORTION OF THESE CONDUITS SHALL BE PVC CONDUIT.
- ALL EQUIPMENT LOCATED OUTSIDE SHALL HAVE NEMA 3R ENCLOSURE.
- PPC SUPPLIED BY PROJECT OWNER.
- GROUNDING SHALL COMPLY WITH NEC ART. 250.
- GROUND COAXIAL CABLE SHIELDS MINIMUM AT BOTH ENDS USING MANUFACTURERS COAX CABLE GROUNDING KITS SUPPLIED BY PROJECT OWNER.
- USE #6 COPPER STRANDED WIRE WITH GREEN COLOR INSULATION FOR ABOVE GRADE GROUNDING (UNLESS OTHERWISE SPECIFIED) AND #2 SOLID TINNED BARE COPPER WIRE FOR BELOW GRADE GROUNDING AS INDICATED ON THE DRAWING.
- ALL GROUND CONNECTIONS TO BE BURNDY HYGROUND COMPRESSION TYPE CONNECTORS OR CADWELD EXOTHERMIC WELD. DO NOT ALLOW BARE COPPER WIRE TO BE IN CONTACT WITH GALVANIZED STEEL.
- ROUTE GROUNDING CONDUCTORS ALONG THE SHORTEST AND STRAIGHTEST PATH POSSIBLE, EXCEPT AS OTHERWISE INDICATED. GROUNDING LEADS SHOULD NEVER BE BENT AT RIGHT ANGLE. ALWAYS MAKE AT LEAST 12" RADIUS BENDS. #6 WIRE CAN BE BENT AT 6" RADIUS WHEN NECESSARY. BOND ANY METAL OBJECTS WITHIN 6 FEET OF PROJECT OWNER EQUIPMENT OR CABINET TO MASTER GROUND BAR OR GROUNDING RING.
- CONNECTIONS TO GROUND BARS SHALL BE MADE WITH TWO HOLE COMPRESSION TYPE COPPER LUGS. APPLY OXIDE INHIBITING COMPOUND TO ALL LOCATIONS.
- APPLY OXIDE INHIBITING COMPOUND TO ALL COMPRESSION TYPE GROUND CONNECTIONS.
- BOND ANTENNA MOUNTING BRACKETS, COAXIAL CABLE GROUND KITS, AND ALNA TO EGB PLACED NEAR THE ANTENNA LOCATION.
- BOND ANTENNA EGB'S AND MGB TO GROUND RING.
- CONTRACTOR SHALL TEST COMPLETED GROUND SYSTEM AND RECORD RESULTS FOR PROJECT CLOSE-OUT DOCUMENTATION. 5 OHMS MINIMUM RESISTANCE REQUIRED.
- CONTRACTOR SHALL CONDUCT ANTENNA, COAX, AND LNA RETURN-LOSS AND DISTANCE-TO-FAULT MEASUREMENTS (SWEEP TESTS) AND RECORD RESULTS FOR PROJECT CLOSE OUT.
- ALL NEW STRUCTURES WITH A FOUNDATION AND/OR FOOTING HAVING 20 FT. OR MORE OF 1/2" OR GREATER ELECTRICALLY CONDUCTIVE REINFORCING STEEL, MUST HAVE IT BONDED TO THE GROUND RING USING AN EXOTHERMIC WELD CONNECTION USING #2 AWG SOLID BARE TINNED COPPER GROUND WIRE, PER NEC 250.50.

NOTES:
 1. GROUND [ATS] TO EXISTING GROUND BAR
 2. GROUND GENERATOR TO EXISTING GROUND RING WITH (2) #2 AWG GROUND WIRES.



HGD HUDSON Design Group LLC
 45 BEECHWOOD DRIVE NORTH ANDOVER, MA 01845
 TEL: (978) 557-5553 FAX: (978) 336-5586

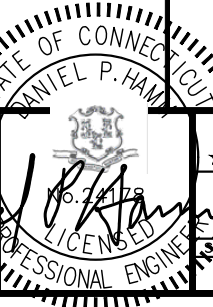
SAI
 12 INDUSTRIAL WAY SALEM, NH 03079

SITE NUMBER: CT1377
SITE NAME: WILLINGTON DALEVILLE ROAD
 343 DALEVILLE ROAD WILLINGTON, CT 06279 TOLLAND COUNTY

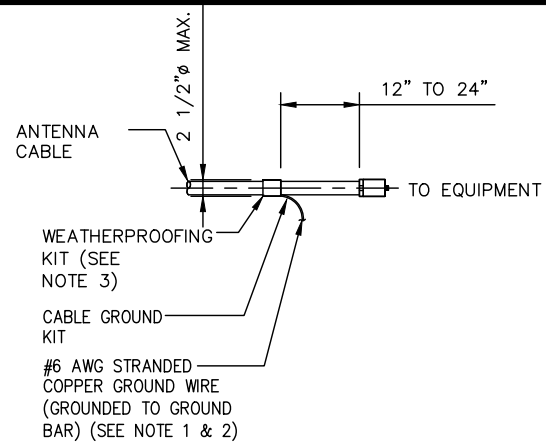
at&t
 550 COCHITUATE ROAD FRAMINGHAM, MA 01701

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SCALE: AS SHOWN DESIGNED BY: JC DRAWN BY: AR

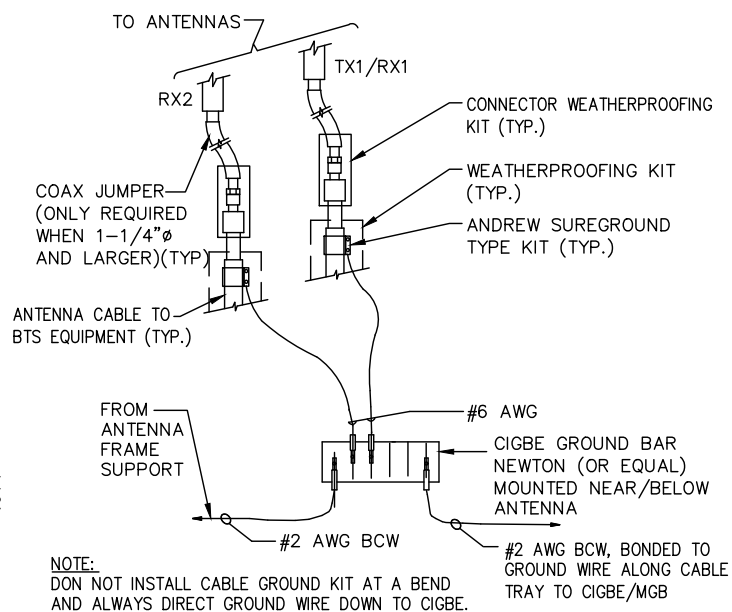
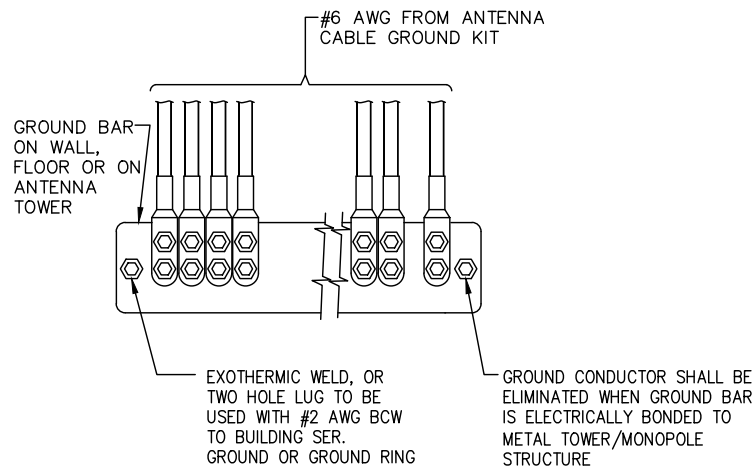


AT&T
ELECTRICAL NOTES & ONE-LINE DIAGRAM (NSB)
 SITE NUMBER: CT1377 DRAWING NUMBER: E-1 REV: 2



NOTES:

- DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
- GROUNDING KIT SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.
- WEATHER PROOFING SHALL BE TWO-PART TAPE SUPPLIED WITH KIT. COLD SHRINK SHALL NOT BE USED.



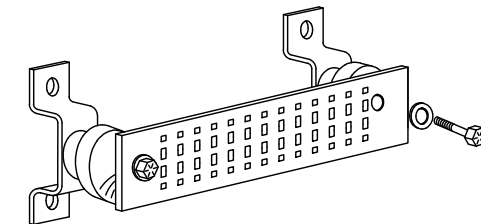
EACH GROUND CONDUCTOR TERMINATING ON ANY GROUND BAR SHALL HAVE AN IDENTIFICATION TAG ATTACHED AT EACH END THAT WILL IDENTIFY ITS ORIGIN AND DESTINATION.

SECTION "P" - SURGE PRODUCERS

- CABLE ENTRY PORTS (HATCH PLATES) (#2 AWG)
- GENERATOR FRAMEWORK (IF AVAILABLE) (#2 AWG)
- TELCO GROUND BAR
- COMMERCIAL POWER COMMON NEUTRAL/GROUND BOND (#2 AWG)
- +24V POWER SUPPLY RETURN BAR (#2 AWG)
- 48V POWER SUPPLY RETURN BAR (#2 AWG)
- RECTIFIER FRAMES.

SECTION "A" - SURGE ABSORBERS

- INTERIOR GROUND RING (#2 AWG)
- EXTERNAL EARTH GROUND FIELD (BURIED GROUND RING) (#2 AWG)
- METALLIC COLD WATER PIPE (IF AVAILABLE) (#2 AWG)
- BUILDING STEEL (IF AVAILABLE) (#2 AWG)



CONNECTION OF CABLE GROUND KIT TO ANTENNA CABLE

SCALE: N.T.S.

INSTALLATION OF GROUND WIRE TO GROUND BAR

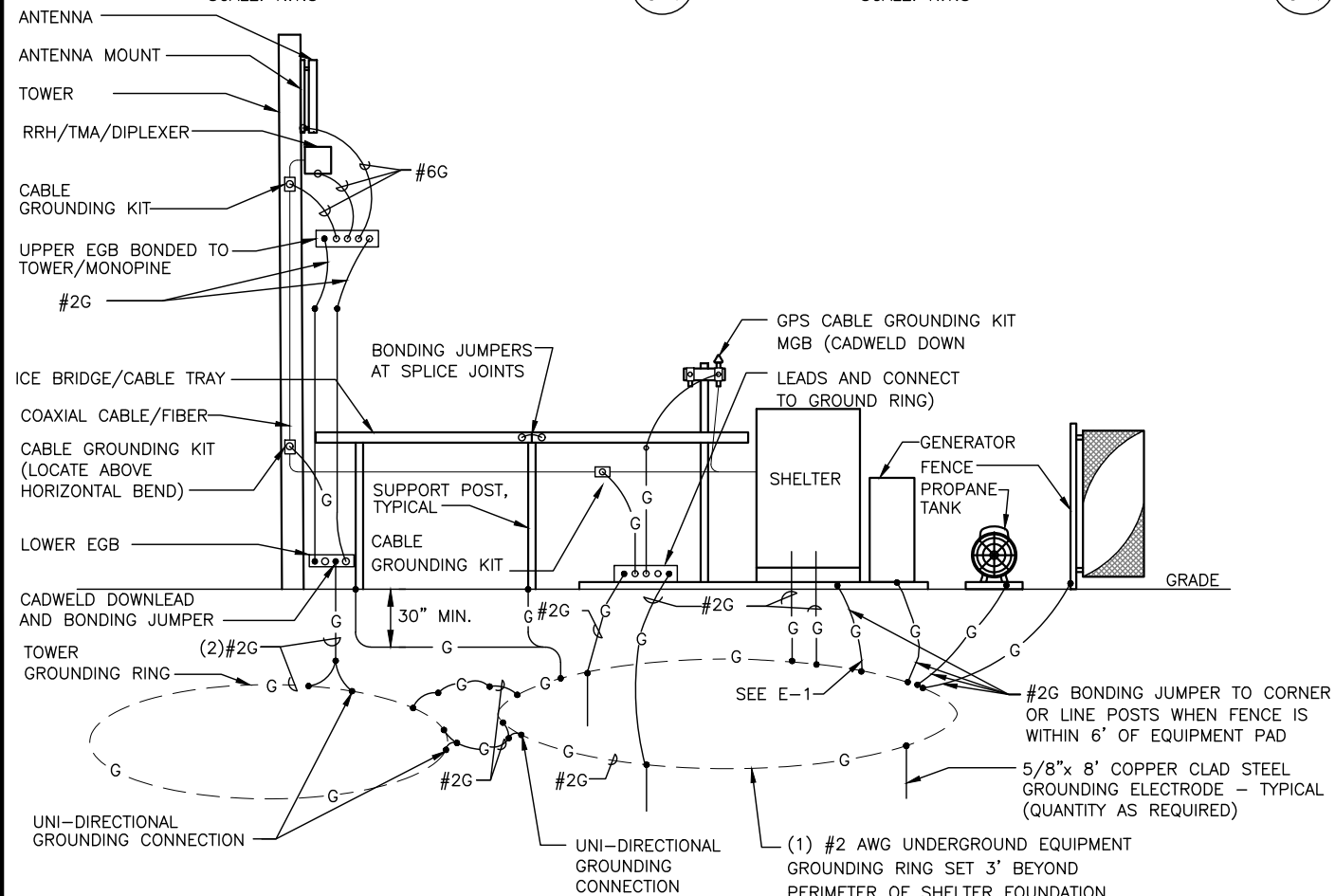
SCALE: N.T.S.

INSTALLATION OF GROUND WIRE TO GROUNDING BAR TOWER

SCALE: N.T.S.

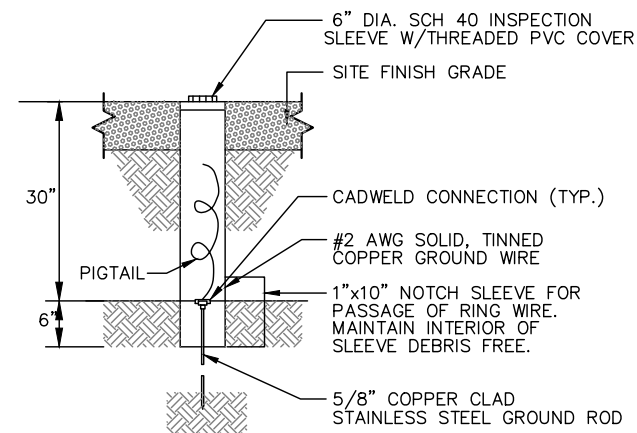
GROUND BAR - DETAIL

SCALE: N.T.S.



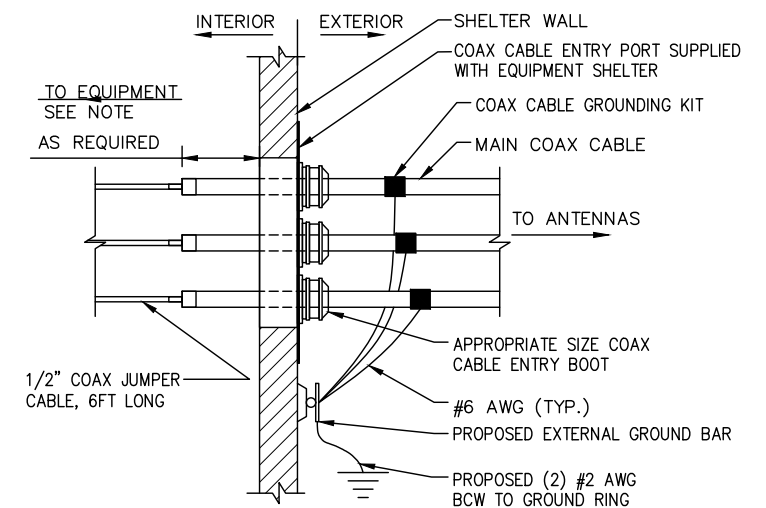
GROUNDING ONE-LINE DIAGRAM

SCALE: N.T.S.



GROUND ROD TEST WELL DETAIL

SCALE: N.T.S.



NOTE: EXTEND MAIN COAXIAL CABLE AS CLOSE AS POSSIBLE TO BTS EQUIPMENT. MAX LENGTH OF BTS JUMPER IS 6 FT.

INSTALLATION OF GROUND WIRE TO GROUND BAR

SCALE: N.T.S.

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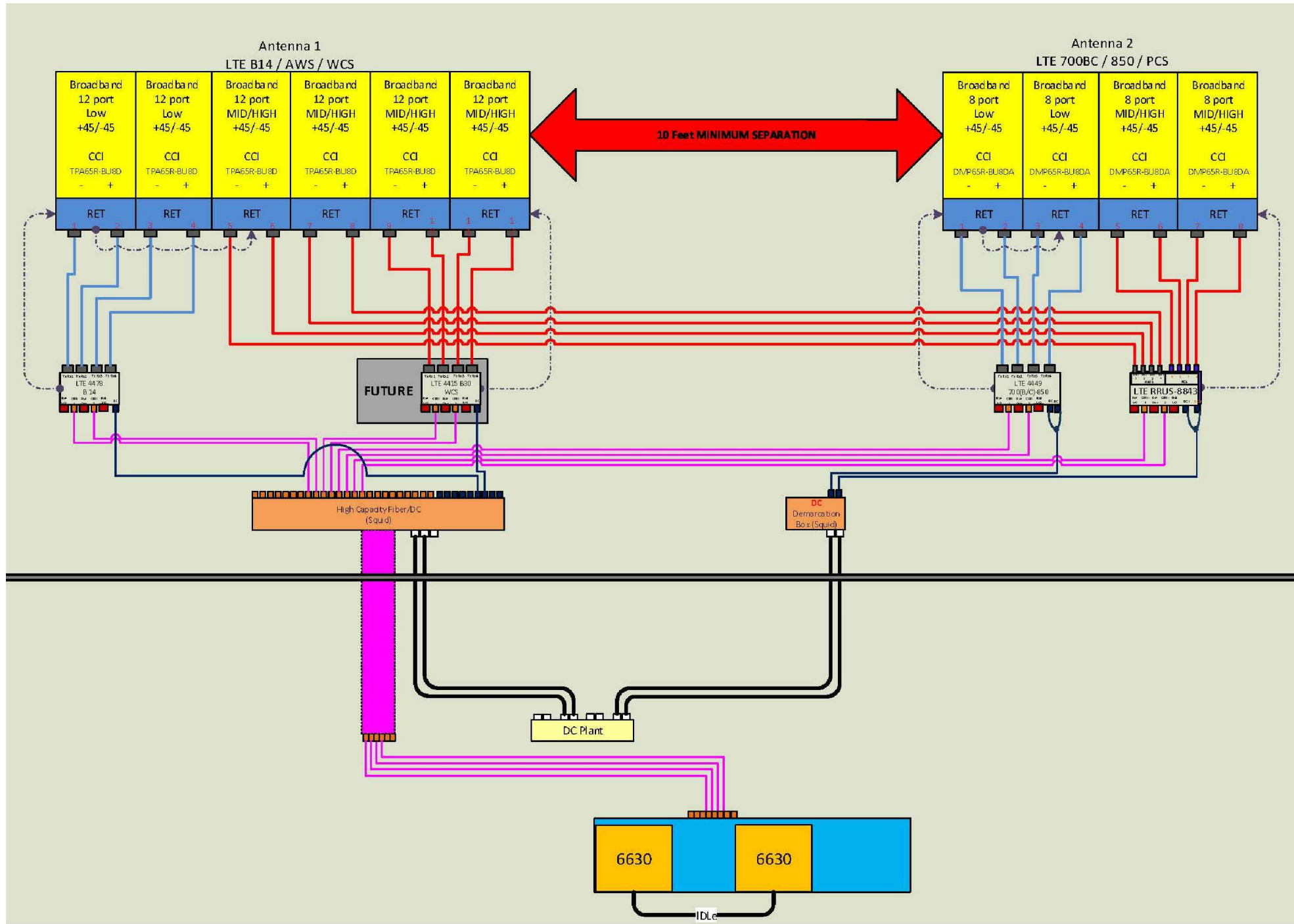
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DANIEL P. HAMM
 REGISTERED PROFESSIONAL ENGINEER
 STATE OF CONNECTICUT
 No. 24428

AT&T
GROUNDING DETAILS (NSB)
 SITE NUMBER: CT1377
 DRAWING NUMBER: G-1
 REV: 2



RF PLUMBING DIAGRAM 1
SCALE: N.T.S. RF-1

NOTE:
1. CONTRACTOR TO CONFIRM ALL PARTS.
2. INSTALL ALL EQUIPMENT TO MANUFACTURER'S RECOMMENDATIONS

NOTE:
REFER TO THE FINAL RF DATA SHEET FOR FINAL ANTENNA SETTINGS.

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SCALE: AS SHOWN DESIGNED BY: JC DRAWN BY: AR

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RF PLUMBING DIAGRAM (NSB)		
SITE NUMBER	DRAWING NUMBER	REV
CT1377	RF-1	2