

From: Jason Blinkhorn <jblinkhorn@qualtekwireless.com>
Sent: Thursday, July 8, 2021 11:48 AM
To: CSC-DL Siting Council <Siting.Council@ct.gov>; hoeym@ci.guilford.ct.us
Cc: Corey Michaud <cmichaud@qualtekwireless.com>; Michael Cypranowski <mcypranowski@qualtekwireless.com>; Adam Trapani <atrapani@qualtekwireless.com>; Karin Turner <ktturner@qualtekwireless.com>; Siyuan Liu <sliu@qualtekwireless.com>; ATT Closeouts <attcloseouts@empiretelecomm.com>; New England Compliance <newenglandcompliance@empiretelecomm.com>
Subject: CSC SITE EM-AT&T-060-210407 / ATT SITE CT2030

CSC team,

We would like to start this project 7-18-2021. Please see attached.

COP team,

Please note this will require additional COP documents for the CSC.

Thank You,

Jason Blinkhorn / Project Manager / 401-787-6007
/ jblinkhorn@qualtekwireless.com
16 Esquire Rd, N Billerica MA 01862
125 Depot St, Bellingham, MA 02019



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AT&T SITE NUMBER: 61163
AT&T SITE NAME: CTV2030
AT&T FA CODE: 10035042
AT&T PACE NUMBER: MRCTB048592, MRCTB048471, MRCTB048634, MRCTB048476, MRCTB048475
AT&T PROJECT: LTE 3C, LTE 4C, 4TX4RX

BUSINESS UNIT #: 806361
SITE ADDRESS: 131 MANOR ROAD
 GUILFORD, CT 06437
COUNTY: NEW HAVEN
SITE TYPE: MONOPOLE
TOWER HEIGHT: 150'-0"



AT&T SITE NUMBER: 61163

BU #: 806361
 NHV 102 943127

131 MANOR ROAD
 GUILFORD, CT 06437

EXISTING 150'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	03/10/2021	AM	CONSTRUCTION	AS
1	04/02/2021	AM	JURISDICTION	AS



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

SHEET NUMBER: **T-1** REVISION: **1**

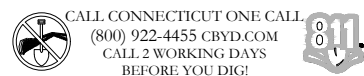
SITE INFORMATION

CROWN CASTLE USA INC. NHV 102 943127
 SITE NAME:
 SITE ADDRESS: 131 MANOR ROAD GUILFORD, CT 06437
 COUNTY: NEW HAVEN
 MAP/PARCEL #: 090017
 AREA OF CONSTRUCTION: EXISTING
 LATITUDE: 41° 19' 48.09"
 LONGITUDE: -72° 43' 18.51"
 LAT/LONG TYPE: NAD83
 GROUND ELEVATION: 287±
 CURRENT ZONING: R-5
 JURISDICTION: TOWN OF GUILFORD
 OCCUPANCY CLASSIFICATION: U-UNMANNED
 TYPE OF CONSTRUCTION: IIB
 A.D.A. COMPLIANCE: FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION
 PROPERTY OWNER: BISHOP B W & SONS INC. 1355 BOSTON POST RD GUILFORD, CT 06437
 TOWER OWNER: CROWN CASTLE 2000 CORPORATE DRIVE CANONSBURG, PA 15317
 CARRIER/APPLICANT: AT&T TOWER ASSET GROUP 575 MOROSGO DRIVE ATLANTA, GA 30324-3300
 ELECTRIC PROVIDER: CONNECTICUT LIGHT & POWER CO 03 397 276
 TELCO PROVIDER: LIGHTOWER

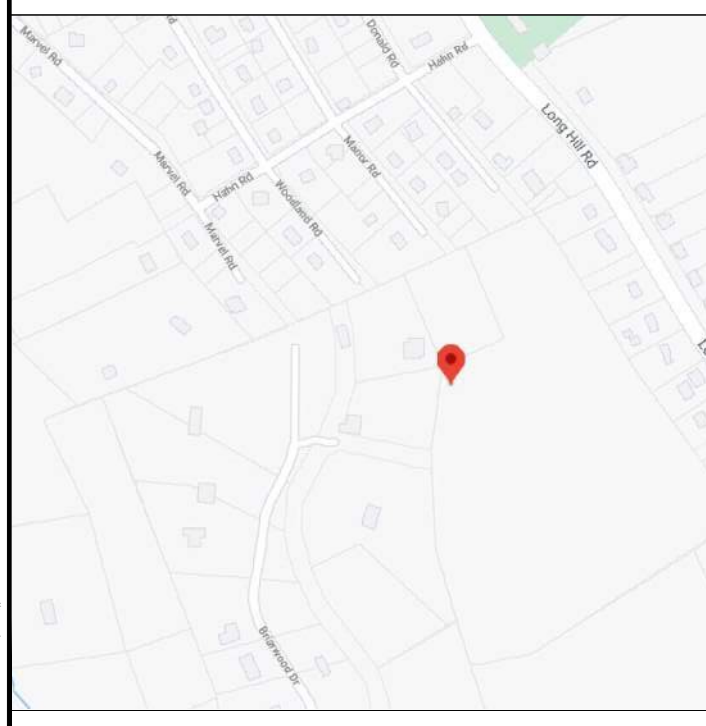
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ALL DRAWINGS CONTAINED HEREIN ARE FORMATTED FOR AT&T. CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.



LOCATION MAP



SITE PHOTO



PROJECT TEAM

A&E FIRM: ENGINEERED TOWER SOLUTIONS, PLLC 3227 WELLINGTON COURT RALEIGH, NC 27615 CROWNAESERVICES@ETS-PLLC.COM
 CROWN CASTLE USA INC. DISTRICT CONTACTS: 370 MALLORY STATION ROAD, SUITE 505 FRANKLIN, TN 37067
 VERONICA DELIA - PROJECT MANAGER
 JASON D'AMICO - CONSTRUCTION MANAGER

NOTE: PRIOR TO ACCESSING/ENTERING THE SITE YOU MUST CONTACT THE CROWN NOC AT (800) 788-7011 & CROWN CONSTRUCTION MANAGER.

PROJECT DESCRIPTION

THE PURPOSE OF THIS PROJECT IS TO ENHANCE BROADBAND CONNECTIVITY AND CAPACITY TO THE EXISTING ELIGIBLE WIRELESS FACILITY.

TOWER SCOPE OF WORK:

- REMOVE (3) POWERWAVE 7770 ANTENNAS
- REMOVE (3) ERICSSON - RRUS 11 B12
- REMOVE (3) ERICSSON - RRUS 12 B2 + RRUS A2 B25
- REMOVE (6) DIPLEXERS
- INSTALL (3) OPA65R-BU6DA ANTENNAS
- INSTALL (3) DMP65R-BU6DA ANTENNAS
- INSTALL (3) ERICSSON - 4449 B5/B12 RRUs
- INSTALL (3) ERICSSON - 8843 B2/B66A RRUs
- INSTALL (3) ERICSSON - 4478 B14 RRUs
- INSTALL (1) RAYCAP - DC6-48-60-18-8F SQUID
- INSTALL (2) DC TRUNKS (7/8")
- INSTALL (1) FIBER TRUNK (3/8")
- INSTALL (2) FLEX CONDUIT

GROUND SCOPE OF WORK:

- REMOVE (1) INDOOR POWER PLANT
- REMOVE BATTERY STRINGS
- REMOVE (2) RACK MOUNTED CONVERTER SHELVES
- REMOVE (6) DIPLEXERS
- INSTALL (1) 6630
- INSTALL (1) RAYCAP - DC12-48-60-0-25E
- INSTALL (1) 7100 VERTIV INDOOR POWER PLANT
- INSTALL (6) VERTIV RECTIFIERS
- INSTALL (4) VERTIV 48V CONVERTERS
- INSTALL (15) UP-CONVERTERS

- INSTALL (12) BATTERIES
- INSTALL (1) IDLE CABLE

APPLICABLE CODES/REFERENCE DOCUMENTS

ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES:

CODE TYPE	CODE
BUILDING	2015 IBC
MECHANICAL	2015 IMC
ELECTRICAL	2017 NEC

REFERENCE DOCUMENTS:

STRUCTURAL ANALYSIS: CROWN CASTLE
 DATED: 02/08/2021

MOUNT ANALYSIS: POD
 DATED: 10/13/2020

RFDS REVISION: 1
 DATED: 08/14/2020

ORDER ID: 527516
 REVISION: 0

CROWN CASTLE USA INC. SITE ACTIVITY REQUIREMENTS:

- NOTICE TO PROCEED- NO WORK SHALL COMMENCE PRIOR TO CROWN CASTLE USA INC. WRITTEN NOTICE TO PROCEED (NTP) AND THE ISSUANCE OF A PURCHASE ORDER. PRIOR TO ACCESSING/ENTERING THE SITE YOU MUST CONTACT THE CROWN CASTLE USA INC. NOC AT 800-788-7011 & THE CROWN CASTLE USA INC. CONSTRUCTION MANAGER.
- "LOOK UP" - CROWN CASTLE USA INC. SAFETY CLIMB REQUIREMENT: THE INTEGRITY OF THE SAFETY CLIMB AND ALL COMPONENTS OF THE CLIMBING FACILITY SHALL BE CONSIDERED DURING ALL STAGES OF DESIGN, INSTALLATION, AND INSPECTION. TOWER MODIFICATION, MOUNT REINFORCEMENTS, AND/OR EQUIPMENT INSTALLATIONS SHALL NOT COMPROMISE THE INTEGRITY OR FUNCTIONAL USE OF THE SAFETY CLIMB OR ANY COMPONENTS OF THE CLIMBING FACILITY ON THE STRUCTURE. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO: PINCHING OF THE WIRE ROPE, BENDING OF THE WIRE ROPE FROM ITS SUPPORTS, DIRECT CONTACT OR CLOSE PROXIMITY TO THE WIRE ROPE WHICH MAY CAUSE FRICTIONAL WEAR, IMPACT TO THE ANCHORAGE POINTS IN ANY WAY, OR TO IMPEDE/BLOCK ITS INTENDED USE. ANY COMPROMISED SAFETY CLIMB, INCLUDING EXISTING CONDITIONS MUST BE TAGGED OUT AND REPORTED TO YOUR CROWN CASTLE USA INC. POC OR CALL THE NOC TO GENERATE A SAFETY CLIMB MAINTENANCE AND CONTRACTOR NOTICE TICKET.
- PRIOR TO THE START OF CONSTRUCTION, ALL REQUIRED JURISDICTIONAL PERMITS SHALL BE OBTAINED. THIS INCLUDES, BUT IS NOT LIMITED TO, BUILDING, ELECTRICAL, MECHANICAL, FIRE, FLOOD ZONE, ENVIRONMENTAL, AND ZONING. AFTER ONSITE ACTIVITIES AND CONSTRUCTION ARE COMPLETED, ALL REQUIRED PERMITS SHALL BE SATISFIED AND CLOSED OUT ACCORDING TO LOCAL JURISDICTIONAL REQUIREMENTS.
- ALL CONSTRUCTION MEANS AND METHODS; INCLUDING BUT NOT LIMITED TO, ERECTION PLANS, RIGGING PLANS, CLIMBING PLANS, AND RESCUE PLANS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR RESPONSIBLE FOR THE EXECUTION OF THE WORK CONTAINED HEREIN, AND SHALL MEET ANSI/ASSE A10.48 (LATEST EDITION); FEDERAL, STATE, AND LOCAL REGULATIONS; AND ANY APPLICABLE INDUSTRY CONSENSUS STANDARDS RELATED TO THE CONSTRUCTION ACTIVITIES BEING PERFORMED. ALL RIGGING PLANS SHALL ADHERE TO ANSI/ASSE A10.48 (LATEST EDITION) AND CROWN CASTLE USA INC. STANDARD CED-STD-10253, INCLUDING THE REQUIRED INVOLVEMENT OF A QUALIFIED ENGINEER FOR CLASS IV CONSTRUCTION, TO CERTIFY THE SUPPORTING STRUCTURE(S) IN ACCORDANCE WITH ANSI/TIA-322 (LATEST EDITION).
- ALL SITE WORK TO COMPLY WITH QAS-STD-10068 "INSTALLATION STANDARDS FOR CONSTRUCTION ACTIVITIES ON CROWN CASTLE USA INC. TOWER SITE," CED-STD-10294 "STANDARD FOR INSTALLATION OF MOUNTS AND APPURTENANCES," AND LATEST VERSION OF ANSI/TIA-1019-A-2012 "STANDARD FOR INSTALLATION, ALTERATION, AND MAINTENANCE OF ANTENNA SUPPORTING STRUCTURES AND ANTENNAS." IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY CROWN CASTLE USA INC. PRIOR TO PROCEEDING WITH ANY SUCH CHANGE OF INSTALLATION.
- 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 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.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
- 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 RELOCATED AS DIRECTED BY CONTRACTOR. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING AND EXCAVATION E) CONSTRUCTION SAFETY PROCEDURES.
- ALL SITE WORK SHALL BE AS INDICATED ON THE STAMPED CONSTRUCTION DRAWINGS AND PROJECT SPECIFICATIONS. LATEST APPROVED REVISION.
- CONTRACTOR SHALL KEEP THE SITE FREE FROM ACCUMULATING WASTE MATERIAL, DEBRIS, AND TRASH AT THE COMPLETION OF THE WORK. 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 CONTRACTOR, TOWER OWNER, CROWN CASTLE USA INC., AND/OR LOCAL UTILITIES.
- THE CONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION FOR SITE SIGNAGE REQUIRED BY LOCAL JURISDICTION AND SIGNAGE REQUIRED ON INDIVIDUAL PIECES OF EQUIPMENT, ROOMS, AND SHELTERS.
- THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE CARRIER'S EQUIPMENT AND TOWER AREAS.
- 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 CONSTRUCTION DRAWINGS AND/OR 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.
- 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 OWNER.
- CONTRACTOR 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.
- CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.
- 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.

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 CONTRACTOR SHALL PERFORM IEEE FALL-OFF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR GROUND ELECTRODE SYSTEMS, THE CONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.
- THE CONTRACTOR 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 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 CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, #6 STRANDED COPPER OR LARGER FOR INDOOR BTS; #2 BARE SOLID TINNED COPPER FOR OUTDOOR BTS.
- CONNECTIONS TO THE GROUND BUS SHALL NOT BE DOUBLED UP OR STACKED BACK TO BACK CONNECTIONS ON OPPOSITE SIDE OF THE GROUND BUS ARE PERMITTED.
- ALL EXTERIOR GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING SHALL BE #2 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 CONNECTIONS 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 ANTI-OXIDANT 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 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 RING WITH (1) #2 BARE SOLID TINNED COPPER GROUND CONDUCTOR.
- GROUND CONDUCTORS USED FOR THE FACILITY GROUNDING 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 WALLS OR FLOORS. WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDITIONS, NON-METALLIC MATERIAL SUCH AS PVC CONDUIT SHALL BE USED. WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (i.e., NONMETALLIC CONDUIT PROHIBITED BY LOCAL CODE) THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT.
- ALL GROUNDS THAT TRANSITION FROM BELOW GRADE TO ABOVE GRADE MUST BE #2 BARE SOLID TINNED COPPER IN 3/4" NON-METALLIC, FLEXIBLE CONDUIT FROM 24" BELOW GRADE TO WITHIN 3" TO 6" OF CAD-WELD TERMINATION POINT. THE EXPOSED END OF THE CONDUIT MUST BE SEALED WITH SILICONE CAULK. (ADD TRANSITIONING GROUND STANDARD DETAIL AS WELL).
- BUILDINGS WHERE THE MAIN GROUNDING CONDUCTORS ARE REQUIRED TO BE ROUTED TO GRADE, THE CONTRACTOR SHALL ROUTE TWO GROUNDING CONDUCTORS FROM THE ROOFTOP, TOWERS, AND WATER TOWERS GROUNDING RING, TO THE EXISTING GROUNDING SYSTEM, THE GROUNDING CONDUCTORS SHALL NOT BE SMALLER THAN 2/O COPPER. ROOFTOP GROUNDING RING SHALL BE BONDED TO THE EXISTING GROUNDING SYSTEM, THE BUILDING STEEL COLUMNS, LIGHTNING PROTECTION SYSTEM, AND BUILDING MAIN WATER LINE (FERROUS OR NONFERROUS METAL PIPING ONLY).

GENERAL NOTES:

- FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:
CONTRACTOR: GENERAL CONTRACTOR RESPONSIBLE FOR CONSTRUCTION
CARRIER: AT&T
TOWER OWNER: CROWN CASTLE USA INC.
- THESE DRAWINGS HAVE BEEN PREPARED USING STANDARDS OF PROFESSIONAL CARE AND COMPLETENESS NORMALLY EXERCISED UNDER SIMILAR CIRCUMSTANCES BY REPUTABLE ENGINEERS IN THIS OR SIMILAR LOCALITIES. IT IS ASSUMED THAT THE WORK DEPICTED WILL BE PERFORMED BY AN EXPERIENCED CONTRACTOR AND/OR WORKPEOPLE WHO HAVE A WORKING KNOWLEDGE OF THE APPLICABLE CODE STANDARDS AND REQUIREMENTS AND OF INDUSTRY ACCEPTED STANDARD GOOD PRACTICE. AS NOT EVERY CONDITION OR ELEMENT IS (OR CAN BE) EXPLICITLY SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL USE INDUSTRY ACCEPTED STANDARD GOOD PRACTICE FOR MISCELLANEOUS WORK NOT EXPLICITLY SHOWN.
- THESE DRAWINGS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE MEANS OR METHODS OF CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY FOR PROTECTION OF LIFE AND PROPERTY DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, FORMWORK, SHORING, ETC. SITE VISITS BY THE ENGINEER OR HIS REPRESENTATIVE WILL NOT INCLUDE INSPECTION OF THESE ITEMS AND IS FOR STRUCTURAL OBSERVATION OF THE FINISHED STRUCTURE ONLY.
- NOTES AND DETAILS IN THE CONSTRUCTION DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT, AND/OR AS PROVIDED FOR IN THE CONTRACT DOCUMENTS. WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL NOTES, AND SPECIFICATIONS, THE GREATER, MORE STRICT REQUIREMENTS, SHALL GOVERN. IF FURTHER CLARIFICATION IS REQUIRED CONTACT THE ENGINEER OF RECORD.
- SUBSTANTIAL EFFORT HAS BEEN MADE TO PROVIDE ACCURATE DIMENSIONS AND MEASUREMENTS ON THE DRAWINGS TO ASSIST IN THE FABRICATION AND/OR PLACEMENT OF CONSTRUCTION ELEMENTS BUT IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY THE DIMENSIONS, MEASUREMENTS, AND/OR CLEARANCES SHOWN IN THE CONSTRUCTION DRAWINGS PRIOR TO FABRICATION OR CUTTING OF ANY NEW OR EXISTING CONSTRUCTION ELEMENTS. IF IT IS DETERMINED THAT THERE ARE DISCREPANCIES AND/OR CONFLICTS WITH THE CONSTRUCTION DRAWINGS THE ENGINEER OF RECORD IS TO BE NOTIFIED AS SOON AS POSSIBLE.
- PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING 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 CROWN CASTLE.
- 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 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.
- 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 CARRIER AND CROWN CASTLE PRIOR TO PROCEEDING WITH ANY SUCH CHANGE OF INSTALLATION.
- CONTRACTOR IS TO PERFORM A SITE INVESTIGATION AND IS TO DETERMINE THE BEST ROUTING OF ALL CONDUITS FOR POWER, AND TELCO AND FOR GROUNDING CABLES AS SHOWN IN THE POWER, TELCO, AND GROUNDING 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 CROWN CASTLE USA INC.
- CONTRACTOR 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.
- CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.

CONCRETE, FOUNDATIONS, AND REINFORCING STEEL:

- 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.
- UNLESS NOTED OTHERWISE, SOIL BEARING PRESSURE USED FOR DESIGN OF SLABS AND FOUNDATIONS IS ASSUMED TO BE 1000 psf.
- ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (f'c) OF 3000 psi AT 28 DAYS, UNLESS NOTED OTHERWISE. NO MORE THAN 90 MINUTES SHALL ELAPSE FROM BATCH TIME TO TIME OF PLACEMENT UNLESS APPROVED BY THE ENGINEER OF RECORD. TEMPERATURE OF CONCRETE SHALL NOT EXCEED 90° AT TIME OF PLACEMENT.
- CONCRETE EXPOSED TO FREEZE-THAW CYCLES SHALL CONTAIN AIR ENTRAINING ADMIXTURES. AMOUNT OF AIR ENTRAINMENT TO BE BASED ON SIZE OF AGGREGATE AND F3 CLASS EXPOSURE (VERY SEVERE). CEMENT USED TO BE TYPE II PORTLAND CEMENT WITH A MAXIMUM WATER-TO-CEMENT RATIO (W/C) OF 0.45.
- ALL STEEL REINFORCING SHALL CONFORM TO ASTM A615. ALL WELDED WIRE FABRIC (WWF) SHALL CONFORM TO ASTM A185. ALL SPLICES SHALL BE CLASS "B" TENSION SPLICES, UNLESS NOTED OTHERWISE. ALL HOOKS SHALL BE STANDARD 90 DEGREE HOOKS, UNLESS NOTED OTHERWISE. YIELD STRENGTH (fy) OF STANDARD DEFORMED BARS ARE AS FOLLOWS:
#4 BARS AND SMALLER.....40 ksi
#5 BARS AND LARGER.....60 ksi
- THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH.....3"
CONCRETE EXPOSED TO EARTH OR WEATHER:
#6 BARS AND LARGER.....2"
#5 BARS AND SMALLER.....1-1/2"
CONCRETE NOT EXPOSED TO EARTH OR WEATHER:
SLAB AND WALLS.....3/4"
BEAMS AND COLUMNS.....1-1/2"
- A TOOLED EDGE OR A 3/4" CHAMFER SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNLESS NOTED OTHERWISE, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.

ELECTRICAL INSTALLATION NOTES:

- ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES/ORDINANCES.
- CONDUIT ROUTINGS ARE SCHEMATIC. CONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED AND TRIP HAZARDS ARE ELIMINATED.
- 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.
4.1. ALL EQUIPMENT SHALL BEAR THE UNDERWRITERS LABORATORIES LABEL OF APPROVAL, AND SHALL CONFORM TO REQUIREMENT OF THE NATIONAL ELECTRICAL CODE.
4.2. ALL OVERCURRENT DEVICES SHALL HAVE AN INTERRUPTING CURRENT RATING THAT SHALL BE GREATER THAN THE SHORT CIRCUIT CURRENT TO WHICH THEY ARE SUBJECTED, 22,000 AIC MINIMUM. VERIFY AVAILABLE SHORT CIRCUIT CURRENT DOES NOT EXCEED THE RATING OF ELECTRICAL EQUIPMENT IN ACCORDANCE WITH ARTICLE 110.24 NEC OR THE MOST CURRENT ADOPTED CODE PRE THE GOVERNING JURISDICTION.
- EACH END OF EVERY POWER PHASE CONDUCTOR, GROUNDING CONDUCTOR, AND TELCO CONDUCTOR OR 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 LAMICOID TAGS SHOWING THEIR RATED VOLTAGE, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING AND BRANCH CIRCUIT ID NUMBERS (i.e. PANEL BOARD AND CIRCUIT ID'S).
- PANEL BOARDS (ID NUMBERS) SHALL BE CLEARLY LABELED WITH PLASTIC LABELS.
- ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.
- ALL POWER AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE COPPER CONDUCTOR (#14 OR LARGER) WITH TYPE THHW, THWN, THWN-2, XHHW, XHHW-2, THW, THW-2, RHW, OR RHW-2 INSULATION UNLESS OTHERWISE SPECIFIED.
- SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE COPPER CONDUCTOR (#6 OR LARGER) WITH TYPE THHW, THWN, THWN-2, XHHW, XHHW-2, THW, THW-2, RHW, OR RHW-2 INSULATION UNLESS OTHERWISE SPECIFIED.
- POWER AND CONTROL WIRING IN FLEXIBLE CORD SHALL BE MULTI-CONDUCTOR, TYPE SOOW CORD (#14 OR LARGER) UNLESS OTHERWISE SPECIFIED.
- POWER AND CONTROL WIRING FOR USE IN CABLE TRAY SHALL BE MULTI-CONDUCTOR, TYPE TC CABLE (#14 OR LARGER), WITH TYPE THHW, THWN, THWN-2, XHHW, XHHW-2, THW, THW-2, RHW, OR RHW-2 INSULATION 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 NOT 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), INTERMEDIATE METAL CONDUIT (IMC), OR RIGID METAL CONDUIT (RMC) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.
- ELECTRICAL METALLIC TUBING (EMT) OR METAL-CLAD CABLE (MC) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
- SCHEDULE 40 PVC UNDERGROUND ON STRAIGHTS AND SCHEDULE 80 PVC FOR ALL ELBOWS/90s AND ALL APPROVED ABOVE GRADE PVC CONDUIT.
- LIQUID-TIGHT 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 NEW FITTINGS TO BE NEW.
- CABINETS, BOXES AND WIRE WAYS SHALL BE LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND THE NEC.
- WIREWAYS SHALL BE METAL WITH AN ENAMEL FINISH AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARDS (WIREFOLD SPECMATE WIREWAY).
- SLOTTED WIRING DUCT SHALL BE PVC AND INCLUDE COVER (PANDUIT TYPE E OR EQUAL).
- CONDUITS SHALL BE FASTENED SECURELY IN PLACE WITH APPROVED NON-PERFORATED STRAPS AND HANGERS. EXPLOSIVE DEVICES (i.e. POWDER-ACTUATED) FOR ATTACHING HANGERS TO STRUCTURE WILL NOT BE PERMITTED. CLOSELY FOLLOW THE LINES OF THE STRUCTURE, MAINTAIN CLOSE PROXIMITY TO THE STRUCTURE AND KEEP CONDUITS IN TIGHT ENVELOPES. CHANGES IN DIRECTION TO ROUTE AROUND OBSTACLES SHALL BE MADE WITH CONDUIT OUTLET BODIES. CONDUIT SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER. PARALLEL AND PERPENDICULAR TO STRUCTURE WALL AND CEILING LINES. ALL CONDUIT SHALL BE FISHED TO CLEAR OBSTRUCTIONS. ENDS OF CONDUITS SHALL BE TEMPORARILY CAPPED FLUSH TO FINISH GRADE TO PREVENT CONCRETE, PLASTER OR DIRT FROM ENTERING. CONDUITS SHALL BE RIGIDLY CLAMPED TO BOXES BY GALVANIZED MALLEABLE IRON BUSHING ON INSIDE AND GALVANIZED MALLEABLE IRON LOCKNUT ON OUTSIDE AND INSIDE.
- EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES AND PULL BOXES SHALL BE GALVANIZED OR EPOXY-COATED SHEET STEEL. SHALL MEET OR EXCEED UL 50 AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND NEMA 3R (OR BETTER) FOR EXTERIOR LOCATIONS.
- 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 BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND WEATHER PROTECTED (WP OR BETTER) FOR EXTERIOR LOCATIONS.
- NONMETALLIC RECEPTACLE, SWITCH AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2 (NEWEST REVISION) AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND WEATHER PROTECTED (WP OR BETTER) FOR EXTERIOR LOCATIONS.
- THE CONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CARRIER AND/OR CROWN CASTLE USA INC. BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.
- THE CONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD LIFE AND PROPERTY.
- INSTALL LAMICOID LABEL ON THE METER CENTER TO SHOW "AT&T".
- ALL EMPTY/SPARE CONDUITS THAT ARE INSTALLED ARE TO HAVE A METERED MULE TAPE PULL CORD INSTALLED.

CONDUCTOR COLOR CODE		
SYSTEM	CONDUCTOR	COLOR
120/240V, 1Ø	A PHASE	BLACK
	B PHASE	RED
	NEUTRAL	WHITE
120/208V, 3Ø	GROUND	GREEN
	A PHASE	BLACK
	B PHASE	RED
277/480V, 3Ø	C PHASE	BLUE
	NEUTRAL	WHITE
	GROUND	GREEN
DC VOLTAGE	A PHASE	BROWN
	B PHASE	ORANGE OR PURPLE
	C PHASE	YELLOW
	NEUTRAL	GREY
	GROUND	GREEN
	POS (+)	RED**
	NEG (-)	BLACK**

* SEE NEC 210.5(C)(1) AND (2)
** POLARITY MARKED AT TERMINATION

ABBREVIATIONS:

ANT	ANTENNA
(E)	EXISTING
FIF	FACILITY INTERFACE FRAME
GEN	GENERATOR
GPS	GLOBAL POSITIONING SYSTEM
GSM	GLOBAL SYSTEM FOR MOBILE
LTE	LONG TERM EVOLUTION
MGB	MASTER GROUND BAR
MW	MICROWAVE
(N)	NEW
NEC	NATIONAL ELECTRIC CODE
(P)	PROPOSED
PP	POWER PLAN
QTY	QUANTITY
RECT	RECTIFIER
RBS	RADIO BASE STATION
RETS	REMOTE ELECTRIC TILT
RFDS	RADIO FREQUENCY DATA SHEET
RRH	REMOTE RADIO HEAD
RRIU	REMOTE RADIO UNIT
SIAD	SMART INTEGRATED DEVICE
TMD	TOWER MOUNTED AMPLIFIER
TYP	TYPICAL
UMTS	UNIVERSAL MOBILE TELECOMMUNICATIONS SYSTEM
W.P.	WORK POINT

APWA UNIFORM COLOR CODE:

WHITE	PROPOSED EXCAVATION
PINK	TEMPORARY SURVEY MARKINGS
RED	ELECTRIC POWER LINES, CABLES, CONDUIT, AND LIGHTING CABLES
YELLOW	GAS, OIL, STEAM, PETROLEUM, OR GASEOUS MATERIALS
ORANGE	COMMUNICATION, ALARM OR SIGNAL LINES, CABLES, OR CONDUIT AND TRAFFIC LOOPS
BLUE	POTABLE WATER
PURPLE	RECLAIMED WATER, IRRIGATION, AND SLURRY LINES
GREEN	SEWERS AND DRAIN LINES



AT&T SITE NUMBER: 61163

BU #: 806361
NHV 102 943127

131 MANOR ROAD
GUILFORD, CT 06437

EXISTING 150'-0" MONOPOLE

ISSUED FOR:				
REV	DATE	DRWN	DESCRIPTION	DES/QA
0	03/10/2021	AM	CONSTRUCTION	AS

STATE OF CONNECTICUT
FREDERIC BOST
PEN 0029529
3/11/2021

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SHEET NUMBER: T-2	REVISION: 0
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AT&T SITE NUMBER: 61163

BU #: 806361
 NHV 102 943127

131 MANOR ROAD
 GUILFORD, CT 06437

EXISTING 150'-0" MONOPOLE

ISSUED FOR:

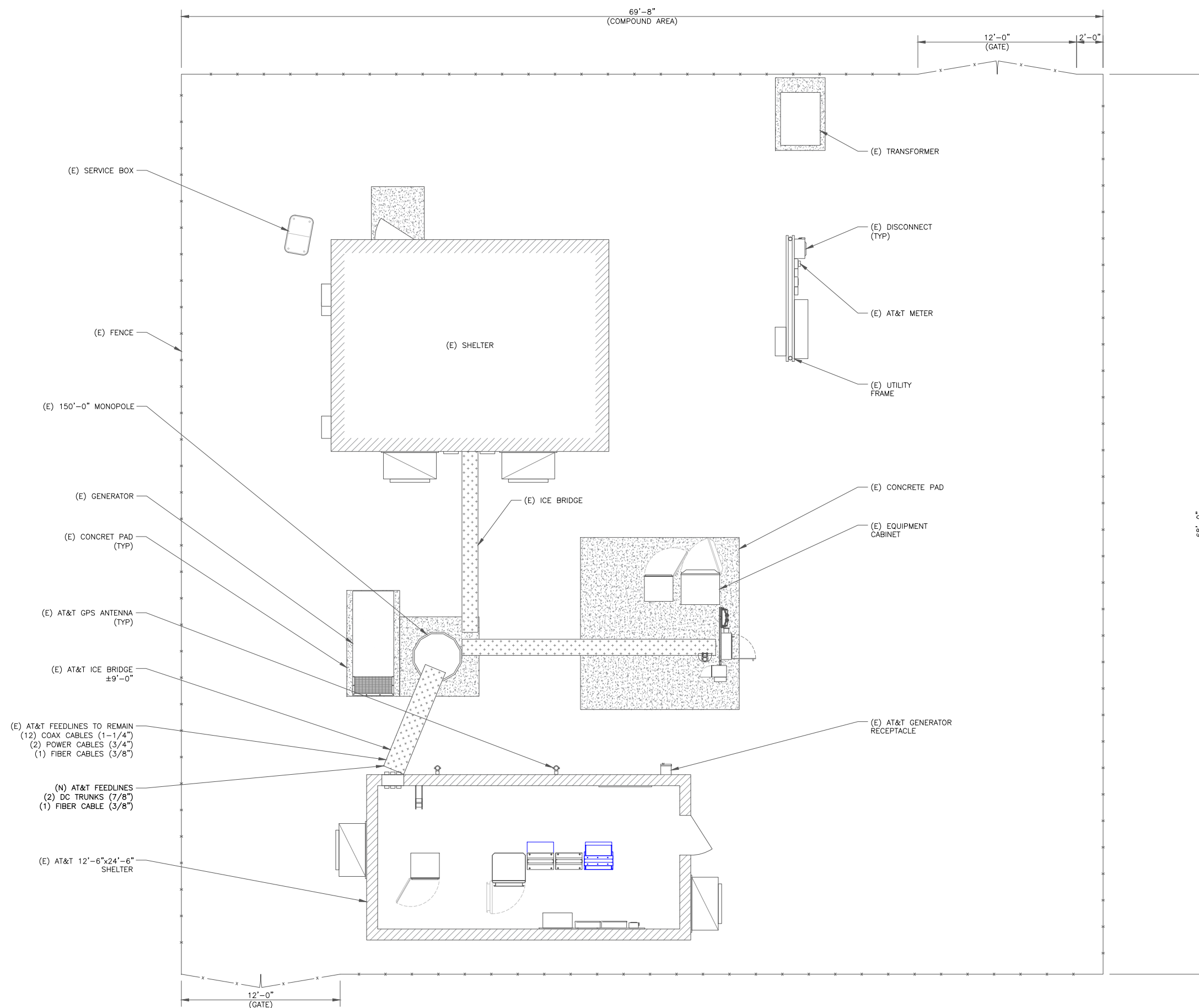
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0	03/10/2021	AM	CONSTRUCTION	AS
1	04/02/2021	AM	JURISDICTION	AS



04/02/2021

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SHEET NUMBER: **C-1.1** REVISION: **1**



1 SITE PLAN
 SCALE: 1/4"=1'-0" (FULL SIZE)
 1/8"=1'-0" (11x17)



AT&T SITE NUMBER: 61163

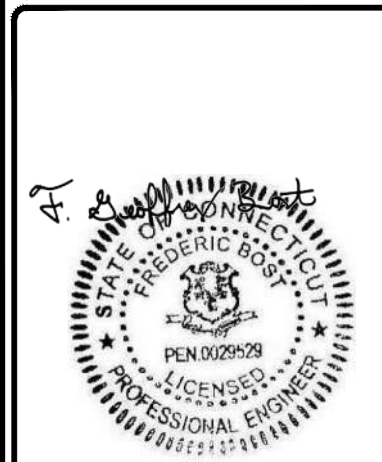
BU #: 806361
NHV 102 943127

131 MANOR ROAD
GUILFORD, CT 06437

EXISTING 150'-0" MONOPOLE

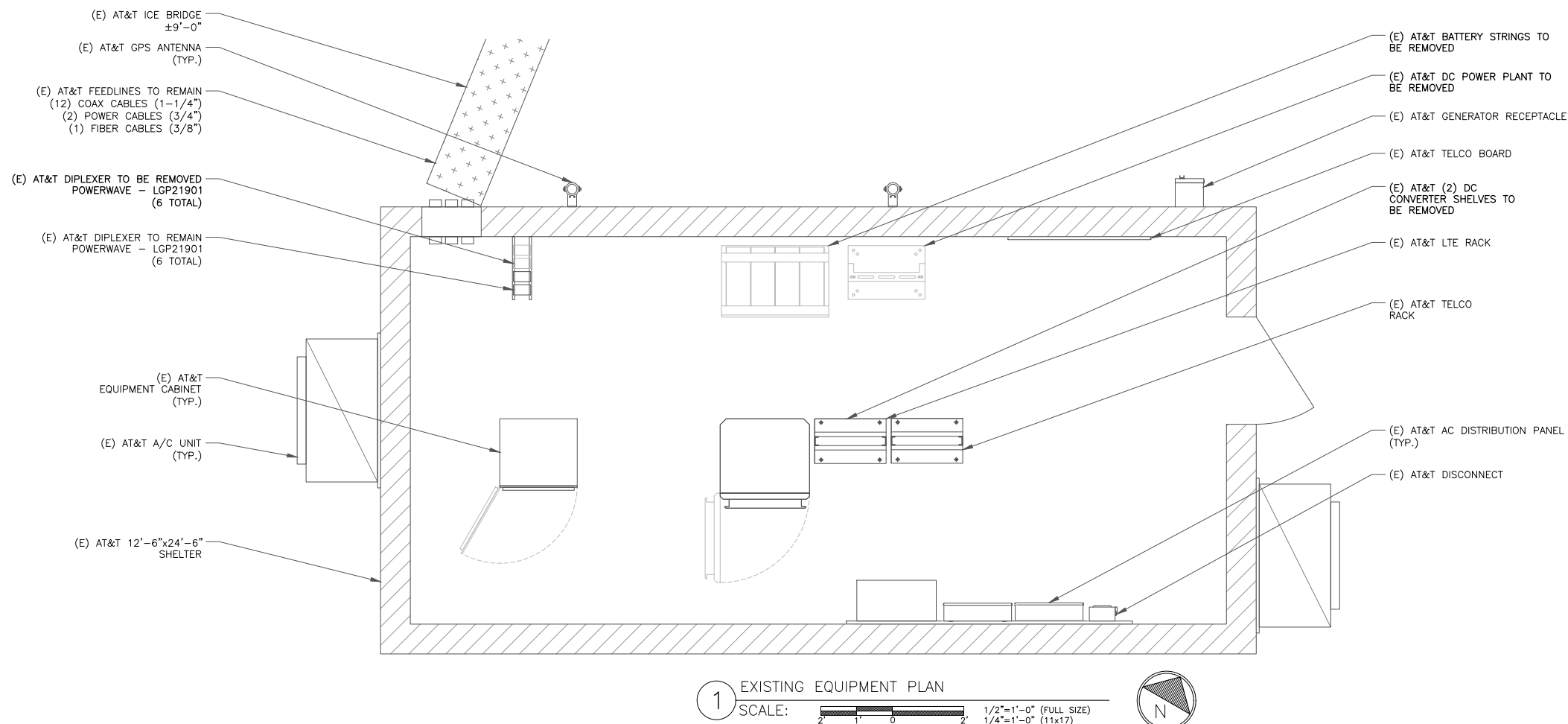
ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES/QA
0	03/10/2021	AM	CONSTRUCTION	AS
1	04/02/2021	AM	JURISDICTION	AS



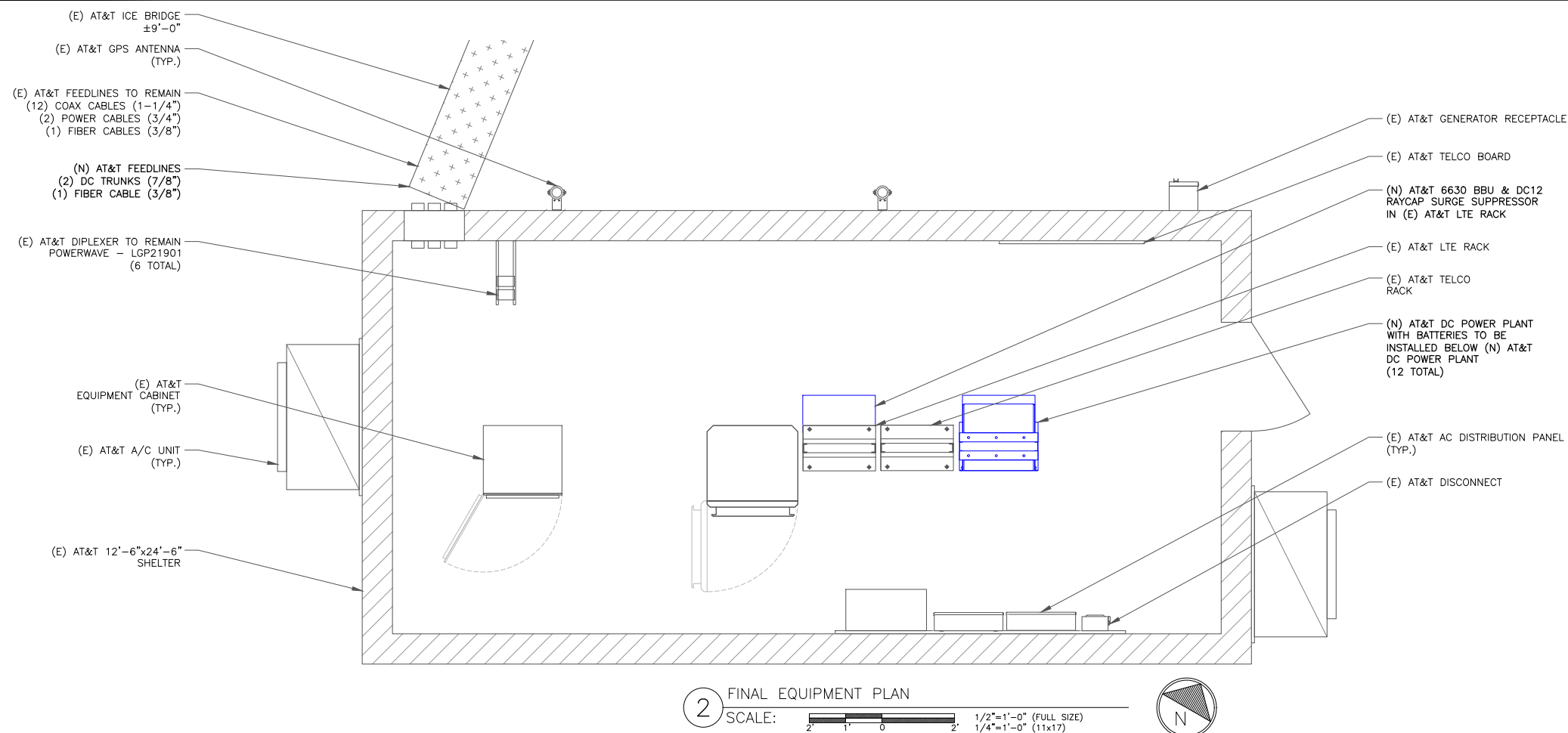
04/02/2021
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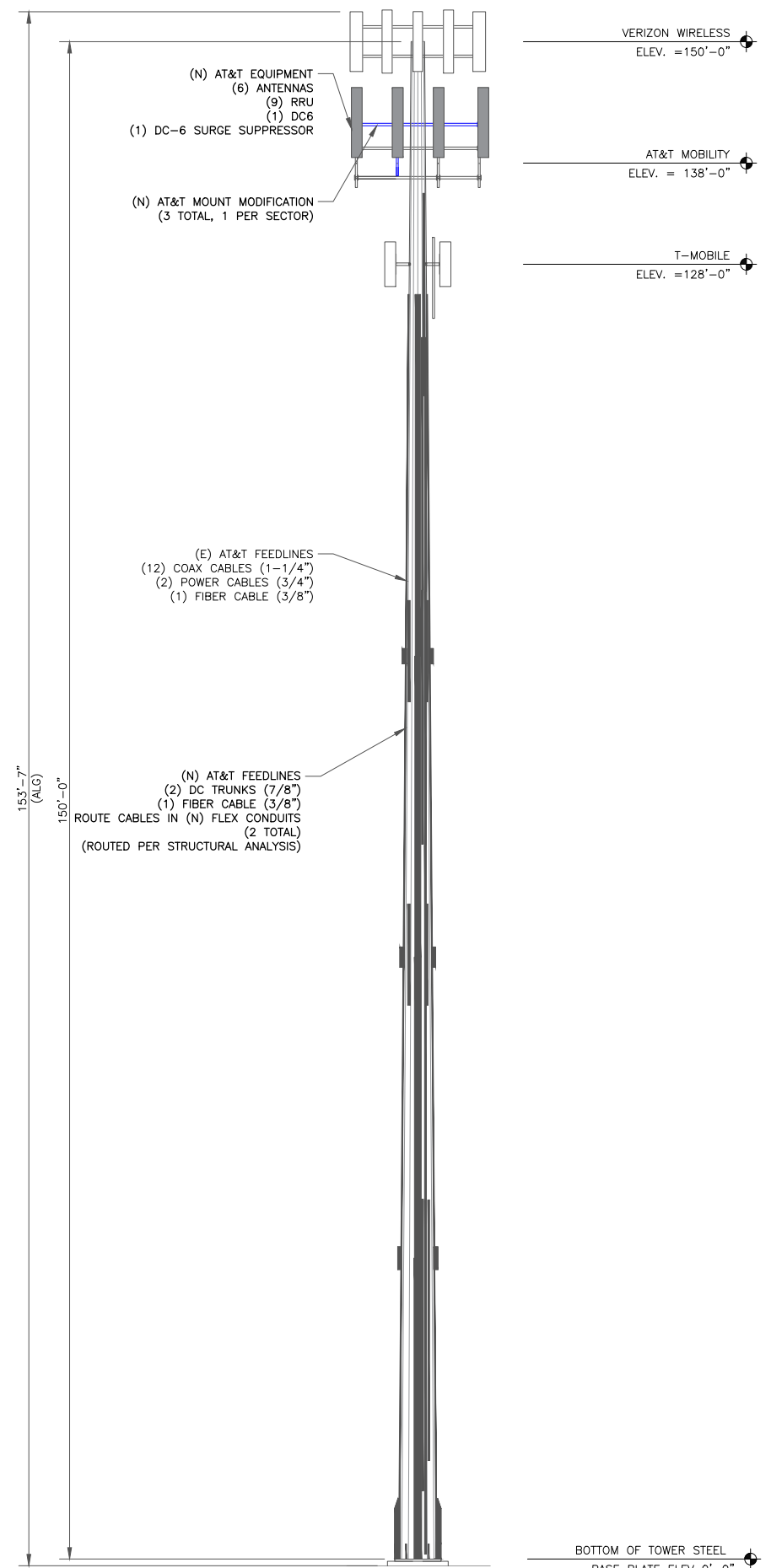
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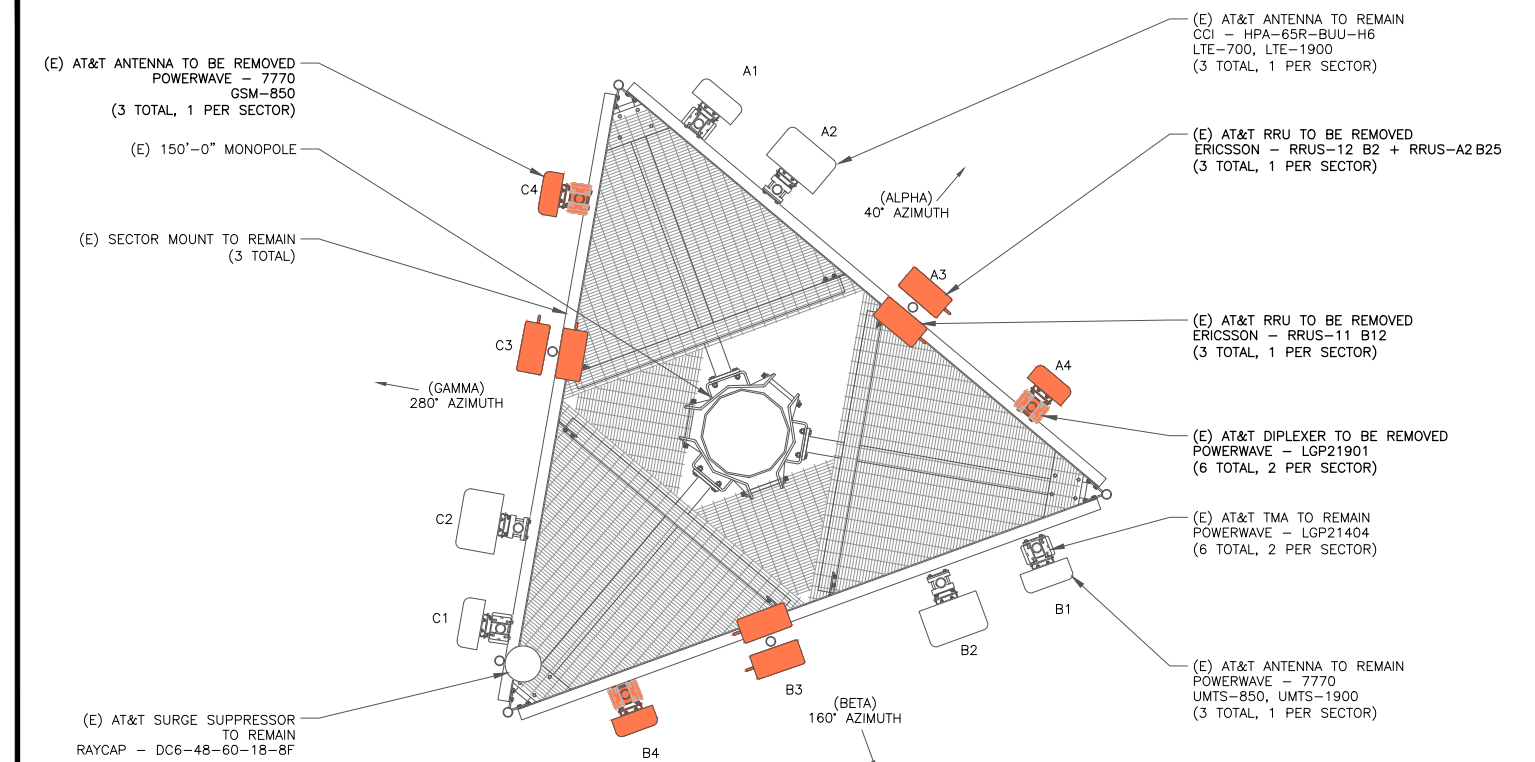
- GROUND SCOPE OF WORK:
- REMOVE (E) AT&T DC POWER PLANT
 - REMOVE (E) AT&T BATTERY STRINGS
 - REMOVE (2) (E) LTE RACK DC CONVERTER SHELVES
 - REMOVED (12) (E) DIPLEXERS
 - INSTALL (N) AT&T DC POWER PLANT
 - INSTALL (15) UP-CONVERTERS IN NEW PP
 - INSTALL (4) 48VDC CONVERTERS IN NEW PP
 - INSTALL (6) VERTIC RECTIFIERS IN NEW PP
 - INSTALL (N) AT&T BATTERY RACK WITH (12) BATTERIES IN NEW PP
 - INSTALL (1) AT&T SURGE SUPPRESSION UNIT IN LTE RACK
 - INSTALL (1) 6630 BBU IN LTE RACK
 - INSTALL (1) IDLE CABLE

NOTE:
THE POWER DESIGN FOR ANY AC ELECTRICAL POWER CHANGES IS TO BE PERFORMED BY OTHERS AND IS SHOWN HERE FOR REFERENCE PURPOSES ONLY. AT&T IS SOLELY RESPONSIBLE FOR THE ELECTRICAL POWER DESIGN.

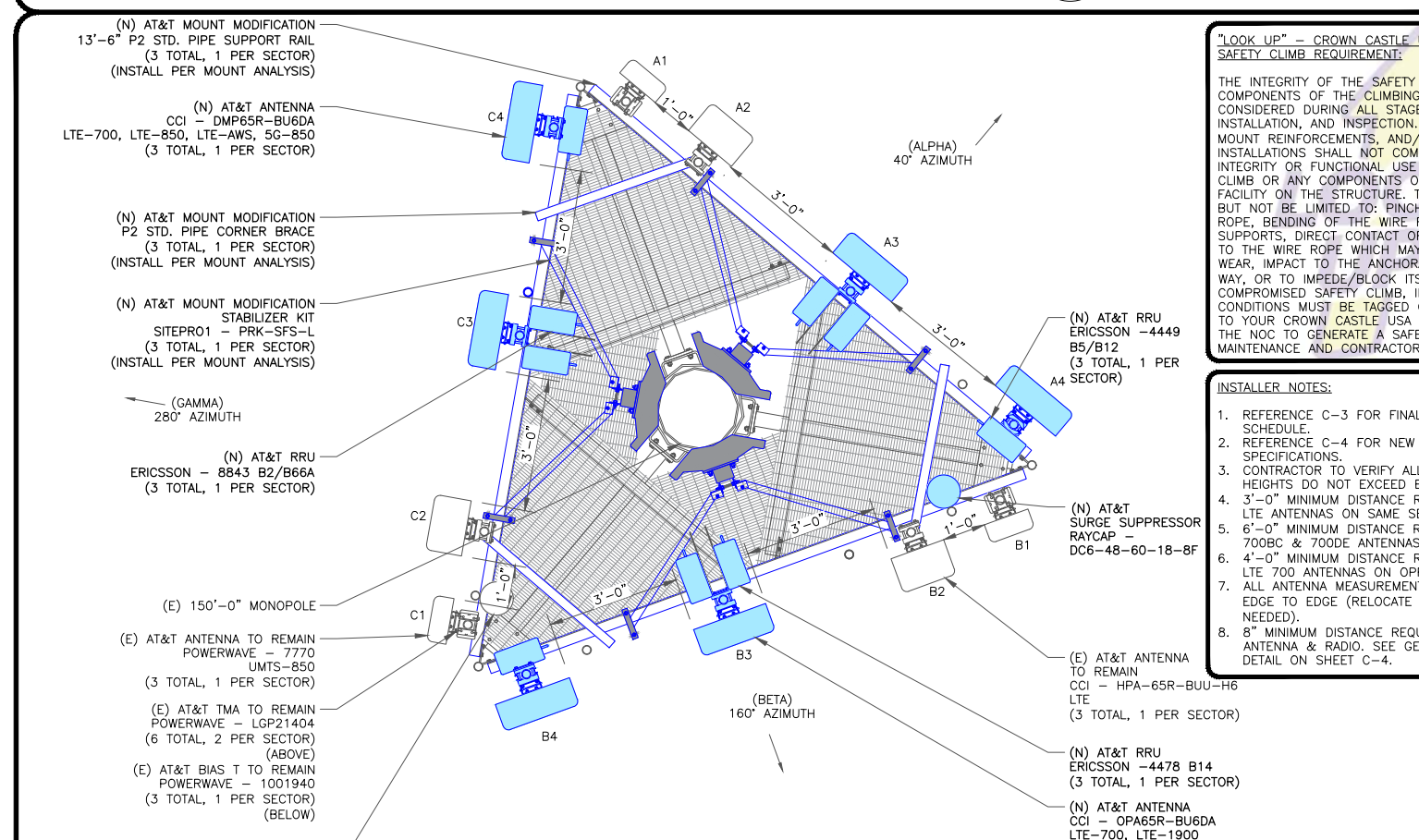




1 FINAL ELEVATION
SCALE: NOT TO SCALE



2 EXISTING ANTENNA PLAN
SCALE: 1/2"=1'-0" (FULL SIZE)
1/4"=1'-0" (11x17)



3 FINAL ANTENNA PLAN
SCALE: 1/2"=1'-0" (FULL SIZE)
1/4"=1'-0" (11x17)

"LOOK UP" - CROWN CASTLE USA INC. SAFETY CLIMB REQUIREMENT:

THE INTEGRITY OF THE SAFETY CLIMB AND ALL COMPONENTS OF THE CLIMBING FACILITY SHALL BE CONSIDERED DURING ALL STAGES OF DESIGN, INSTALLATION, AND INSPECTION. TOWER MODIFICATION, MOUNT REINFORCEMENTS, AND/OR EQUIPMENT INSTALLATIONS SHALL NOT COMPROMISE THE INTEGRITY OR FUNCTIONAL USE OF THE SAFETY CLIMB OR ANY COMPONENTS OF THE CLIMBING FACILITY ON THE STRUCTURE. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO: PINCHING OF THE WIRE ROPE, BENDING OF THE WIRE ROPE FROM ITS SUPPORTS, DIRECT CONTACT OR CLOSE PROXIMITY TO THE WIRE ROPE WHICH MAY CAUSE FRICTIONAL WEAR, IMPACT TO THE ANCHORAGE POINTS IN ANY WAY, OR TO IMPEDE/BLOCK ITS INTENDED USE. ANY COMPROMISED SAFETY CLIMB, INCLUDING EXISTING CONDITIONS MUST BE TAGGED OUT AND REPORTED TO YOUR CROWN CASTLE USA INC. POC OR CALL THE NOC TO GENERATE A SAFETY CLIMB MAINTENANCE AND CONTRACTOR NOTICE TICKET.

- INSTALLER NOTES:**
1. REFERENCE C-3 FOR FINAL EQUIPMENT SCHEDULE.
 2. REFERENCE C-4 FOR NEW EQUIPMENT SPECIFICATIONS.
 3. CONTRACTOR TO VERIFY ALL ANTENNA TIP HEIGHTS DO NOT EXCEED BEACON BASE HEIGHT.
 4. 3'-0" MINIMUM DISTANCE REQUIRED BETWEEN LTE ANTENNAS ON SAME SECTOR.
 5. 6'-0" MINIMUM DISTANCE REQUIRED BETWEEN 700BC & 700DE ANTENNAS ON SAME SECTOR.
 6. 4'-0" MINIMUM DISTANCE REQUIRED BETWEEN LTE 700 ANTENNAS ON OPPOSING SECTORS.
 7. ALL ANTENNA MEASUREMENT DISTANCES MUST BE EDGE TO EDGE (RELOCATE ANTENNAS AS NEEDED).
 8. 8" MINIMUM DISTANCE REQUIRED BETWEEN ANTENNA & RADIO. SEE GENERIC EXAMPLE DETAIL ON SHEET C-4.

1025 LENOX PARK BOULEVARD NE
ATLANTA, GA 30319

370 MALLORY STATION ROAD, SUITE 505
FRANKLIN, TN 37067

ENGINEERED TOWER SOLUTIONS, PLLC
3227 WELLINGTON COURT
RALEIGH, NC 27615

AT&T SITE NUMBER: 61163

BU #: 806361
NHV 102 943127

131 MANOR ROAD
GUILFORD, CT 06437

EXISTING 150'-0" MONOPOLE

ISSUED FOR:

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1	04/02/2021	AM	JURISDICTION	AS

STATE OF CONNECTICUT
FREDERIC BOST
PEN 0029529
LICENSED PROFESSIONAL ENGINEER

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SHEET NUMBER: **C-2** REVISION: **1**

FINAL EQUIPMENT SCHEDULE
(VERIFY WITH CURRENT RFDS)

ALPHA																			
POSITION	ANTENNA				RADIO			DIPLEXER			TMA			SURGE PROTECTION		CABLES			
	TECH.	STATUS/MANUFACTURER MODEL	AZIMUTH	RAD CENTER	QTY.	STATUS/MODEL	LOCATION	QTY.	STATUS	LOCATION	QTY.	STATUS/MANUFACTURER MODEL	QTY.	STATUS/MODEL	QTY.	STATUS/TYPE	SIZE	LENGTH	
A1	UMTS-850	(E) POWERWAVE 7770	40°	142'	-	-	-	2	(E)	TOWER	2	(E) POWERWAVE - LGP21404	-	-	4	(E) COAX	1-1/4"	189'-0"	
											1	(E) POWERWAVE - 1001940							
A2	LTE	(E) CCI HPA-65R-BUU-H6	40°	142'	-	-	-	-	-	-	-	-	1	(E) DC6-48-60-18-8F SHARED	2	(E) POWER SHARED	3/4"	189'-0"	
															1	(E) FIBER SHARED	3/8"	189'-0"	
A3	LTE-700 LTE-1900	(N) CCI OPA65R-BU6DA	40°	142'	1	-	-	-	-	-	-	-	-	1	(N) DC6-48-60-18-8F SHARED	2	(N) POWER SHARED	7/8"	189'-0"
																1	(N) 8843 B2/B66A		
A4	LTE-700 LTE-850 LTE-AWS 5G-850	(N) CCI DMP65R-BU6DA	40°	142'	1	(N) 4449 B5/B12	TOWER	-	-	-	-	-	-	-	1	(N) FIBER SHARED	3/8"	189'-0"	

BETA																			
POSITION	ANTENNA				RADIO			DIPLEXER			TMA			SURGE PROTECTION		CABLES			
	TECH.	STATUS/MANUFACTURER MODEL	AZIMUTH	RAD CENTER	QTY.	STATUS/MODEL	LOCATION	QTY.	STATUS	LOCATION	QTY.	STATUS/MANUFACTURER MODEL	QTY.	STATUS/MODEL	QTY.	STATUS/TYPE	SIZE	LENGTH	
B1	UMTS-850	(E) POWERWAVE 7770	40°	142'	-	-	-	2	(E)	TOWER	2	(E) POWERWAVE - LGP21404	-	-	4	(E) COAX	1-1/4"	189'-0"	
											1	(E) POWERWAVE - 1001940							
B2	LTE	(E) CCI HPA-65R-BUU-H6	40°	142'	-	-	-	-	-	-	-	-	-	-	-	SHARED	SHARED	-	
																SHARED	SHARED	-	
B3	-	(N) CCI OPA65R-BU6DA	40°	142'	1	-	-	-	-	-	-	-	-	-	-	-	SHARED	SHARED	-
																	1	(N) 8843 B2/B66A	
B4	LTE-700 LTE-850 LTE-AWS 5G-850	(N) CCI DMP65R-BU6DA	40°	142'	1	(N) 4449 B5/B12	TOWER	-	-	-	-	-	-	-	-	SHARED	SHARED	-	

GAMMA																			
POSITION	ANTENNA				RADIO			DIPLEXER			TMA			SURGE PROTECTION		CABLES			
	TECH.	STATUS/MANUFACTURER MODEL	AZIMUTH	RAD CENTER	QTY.	STATUS/MODEL	LOCATION	QTY.	STATUS	LOCATION	QTY.	STATUS/MANUFACTURER MODEL	QTY.	STATUS/MODEL	QTY.	STATUS/TYPE	SIZE	LENGTH	
C1	UMTS-850	(E) POWERWAVE 7770	40°	142'	-	-	-	2	(E)	TOWER	2	(E) POWERWAVE - LGP21404	-	-	4	(E) COAX	1-1/4"	189'-0"	
											1	(E) POWERWAVE - 1001940							
C2	LTE	(E) CCI HPA-65R-BUU-H6	40°	142'	-	-	-	-	-	-	-	-	-	-	-	SHARED	SHARED	-	
																SHARED	SHARED	-	
C3	LTE-700 LTE-1900	(N) CCI OPA65R-BU6DA	40°	142'	1	-	-	-	-	-	-	-	-	-	-	-	SHARED	SHARED	-
																	1	(N) 8843 B2/B66A	
C4	LTE-700 LTE-850 LTE-AWS 5G-850	(N) CCI DMP65R-BU6DA	40°	142'	1	(N) 4449 B5/B12	TOWER	-	-	-	-	-	-	-	-	SHARED	SHARED	-	

NOTE:
(E) - EXISTING
(N) - NEW



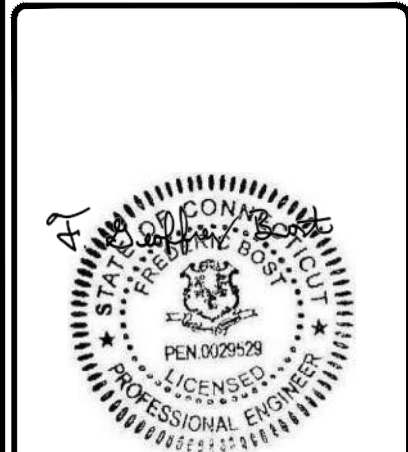
AT&T SITE NUMBER: 61163

BU #: 806361
NHV 102 943127

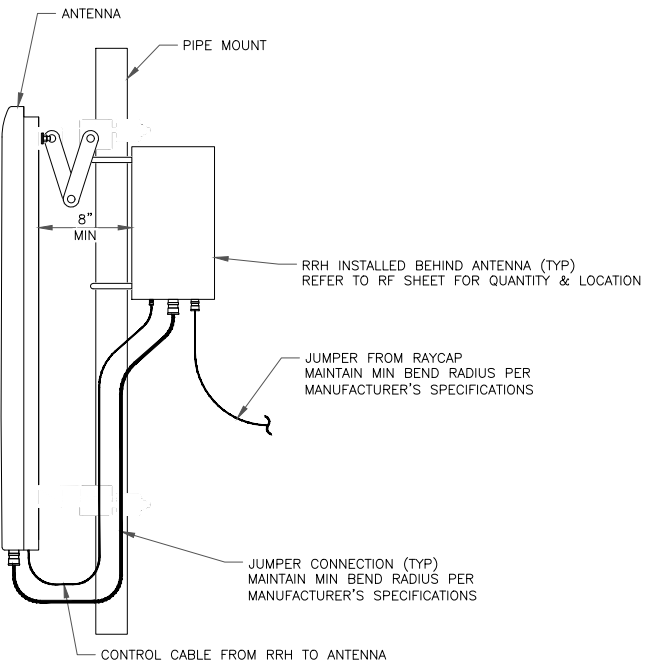
131 MANOR ROAD
GUILFORD, CT 06437

EXISTING 150'-0" MONOPOLE

ISSUED FOR:				
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1	04/02/2021	AM	JURISDICTION	AS

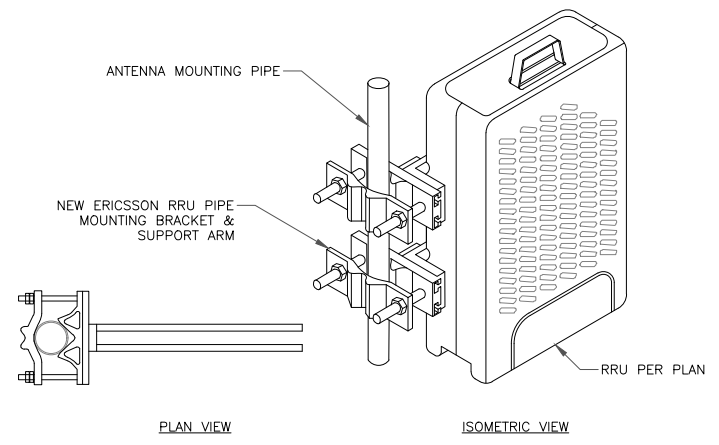


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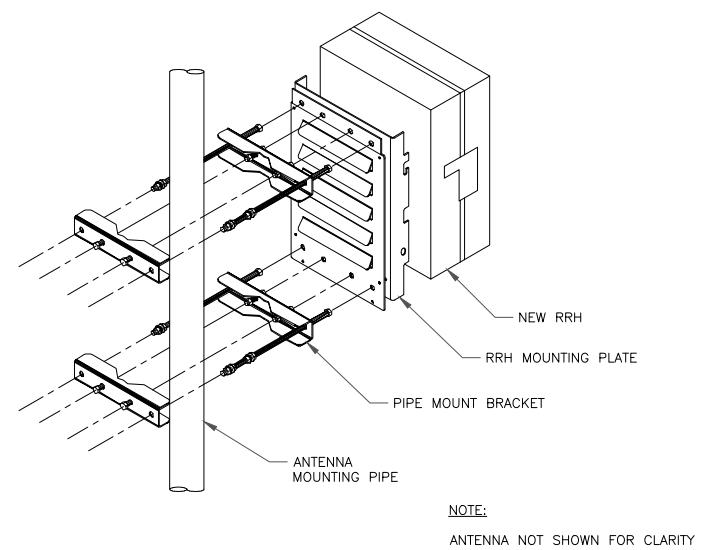


1 GENERIC ANTENNA MOUNTING ELEVATION
SCALE: NOT TO SCALE

ERICSSON RRU MOUNTING KIT:
 SXX 107 2839/1: SINGLE RRU SUPPORT KIT (PART # 5335) (OR ENGINEER APPROVED EQUIVALENT)
 SXX 107 2839/2: EXPANSION KIT (PART # 5336) (OR ENGINEER APPROVED EQUIVALENT)
MOUNTING NOTES:
 REFER TO PRODUCT SPECS FOR BOLT SIZE & PIPE DIAMETER TOLERANCES. THE PART NO. SXX107-2839/2 IS REQUIRED FOR (2) RRUS.



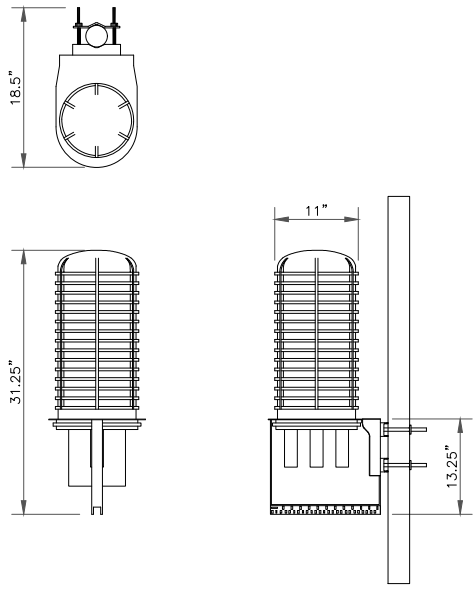
2 ERICSSON - SXX 107 2839
SCALE: NOT TO SCALE



3 SINGLE RRH MOUNTING DETAIL
SCALE: NOT TO SCALE

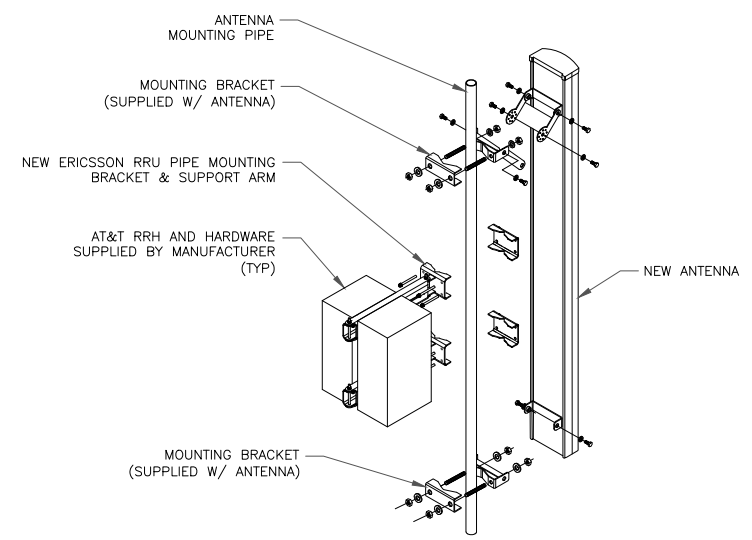
RAYCAP
 DC6-48-60-18-8F

RAYCAP - DC6-48-60-18-8F
 SIZE: 11x31.25 IN.
 WEIGHT: 32.8 LBS
 NOMINAL OPERATING VOLTAGE: 48 VDC
 VOLTAGE PROTECTION RATING: 400 V
 WIND LOADING: 150 MPH SUSTAINED (105.7 LBS)
 WIND LOADING: 195 MPH GUST (213.6 LBS)



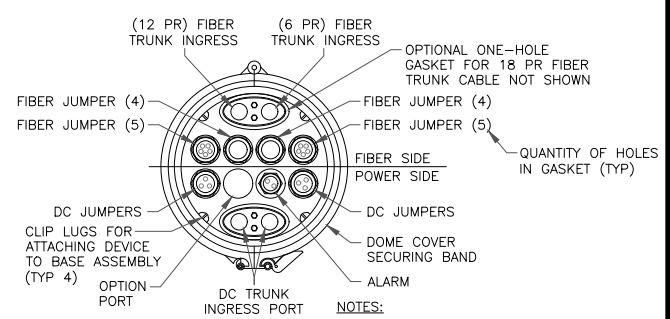
4 ANTENNA WITH RRH MOUNTING DETAIL
SCALE: NOT TO SCALE

INSTALLER NOTES:
 1. COMPLY WITH MANUFACTURERS INSTRUCTIONS TO ENSURE THAT ALL RRHS RECEIVE ELECTRICAL POWER WITHIN 24 HOURS OF BEING REMOVED FROM THE MANUFACTURER'S PACKAGING.
 2. DO NOT OPEN RRH PACKAGES IN THE RAIN.
 3. ALL PIPES, BRACKETS, AND MISCELLANEOUS HARDWARE TO BE GALVANIZED UNLESS NOTED OTHERWISE.



5 ANTENNA WITH DUAL RRH MOUNTING DETAIL
SCALE: NOT TO SCALE

CONTRACTOR TO USE "THREAD LUBRICANT" ON MOUNTING BOLTS DURING INSTALLATION



NOTES:
 1. REMOVE CABLE SEALING GLAND AND INSTALL M32x1.5 METRIC-TO-1\"/>

6 SQUID MOUNTING DETAIL
SCALE: NOT TO SCALE

1025 LENOX PARK BOULEVARD NE
ATLANTA, GA 30319

370 MALLORY STATION ROAD, SUITE 505
FRANKLIN, TN 37067

ENGINEERED TOWER SOLUTIONS, PLLC
3227 WELLINGTON COURT
RALEIGH, NC 27615

AT&T SITE NUMBER: 61163
 BU #: 806361
 NHV 102 943127
 131 MANOR ROAD
 GUILFORD, CT 06437
 EXISTING 150'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES/QA
0	03/10/2021	AM	CONSTRUCTION	AS

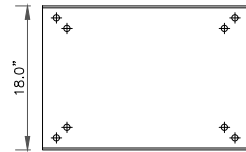
STATE OF CONNECTICUT
 FREDERIC BOST
 PEN 0029529
 LICENSED PROFESSIONAL ENGINEER
 3/11/2021

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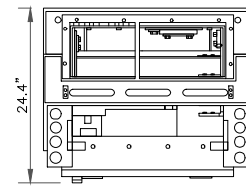
03/10/2021

SHEET NUMBER: **C-4** REVISION: **0**

EMERSON NETSURE 721 DC POWER PLANT				
ITEM	WEIGHT/UNIT (LBS)	QTY	TOTAL WEIGHT (LBS)	
EMPTY RACK	500	1	500	
Rack+Rectifiers & Converters only	605.6	1	605.6	
Marathon M12V155FT Battery	119	0	0	
Marathon M12V180FT Battery	133	8	1064	
		TOTAL=	1669.6	LBS



BOTTOM



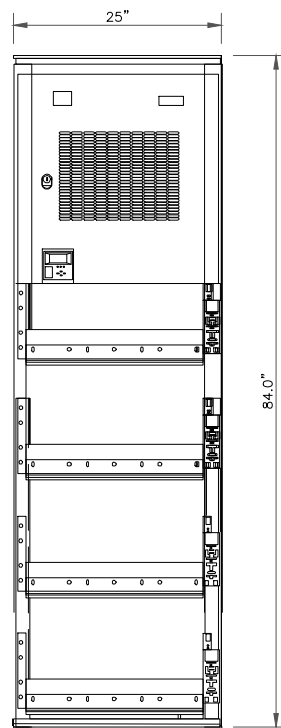
PLAN VIEW

EQUIPMENT SPECIFICATIONS
 MANUFACTURER: EMERSON/VERTIV
 ATTM NUMBER: NEQ.17139
 EMERSON NUMBER: 582127000Z011

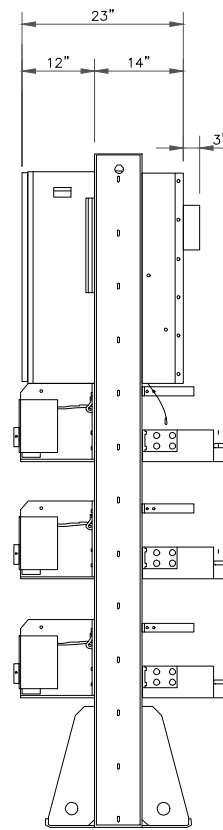
HEIGHT: 84.0 IN
 WIDTH: 25 IN
 DEPTH: 23 IN

WEIGHT: SEE TABLE ABOVE

SAFETY COMPLIANCE: UL LISTED AND SEISMIC ZONE 4 COMPLIANT



FRONT



SIDE

7 EMERSON POWER PLANT
 SCALE: NOT TO SCALE

8 NOT USED
 SCALE: NOT TO SCALE

10 NOT USED
 SCALE: NOT TO SCALE

9 NOT USED
 SCALE: NOT TO SCALE

11 NOT USED
 SCALE: NOT TO SCALE



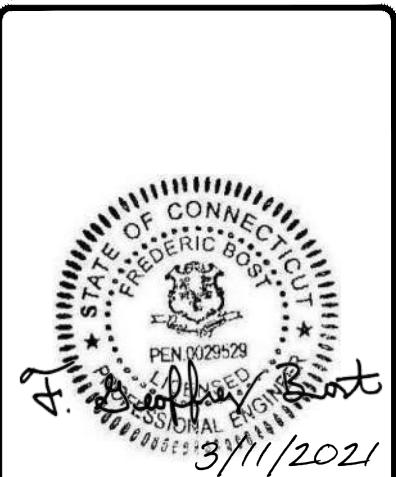
AT&T SITE NUMBER: 61163

BU #: 806361
 NHV 102 943127

131 MANOR ROAD
 GUILFORD, CT 06437

EXISTING 150'-0" MONOPOLE

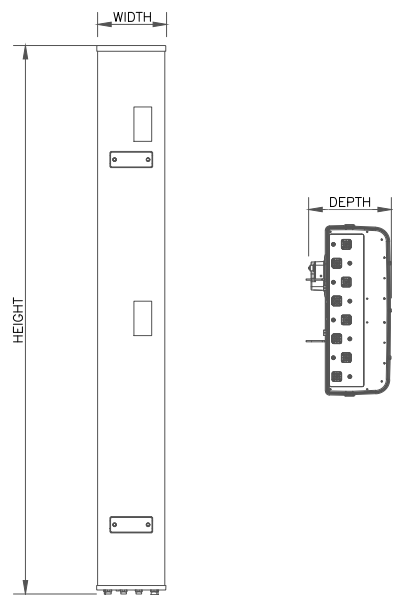
ISSUED FOR:				
REV	DATE	DRWN	DESCRIPTION	DES/QA
0	03/10/2021	AM	CONSTRUCTION	AS



03/10/2021
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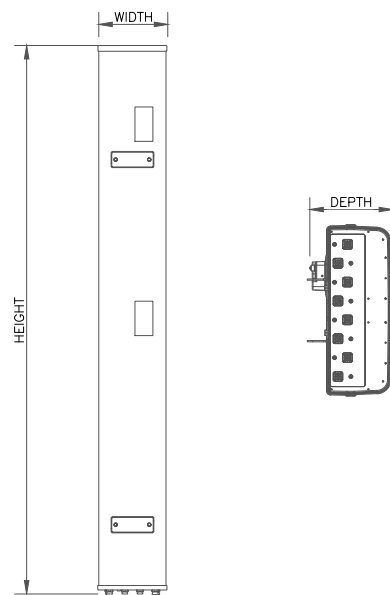
SHEET NUMBER: **C-5** REVISION: **0**

HEIGHT	WIDTH	DEPTH	WEIGHT
71.20"	21.00"	7.80"	63.50 LBS



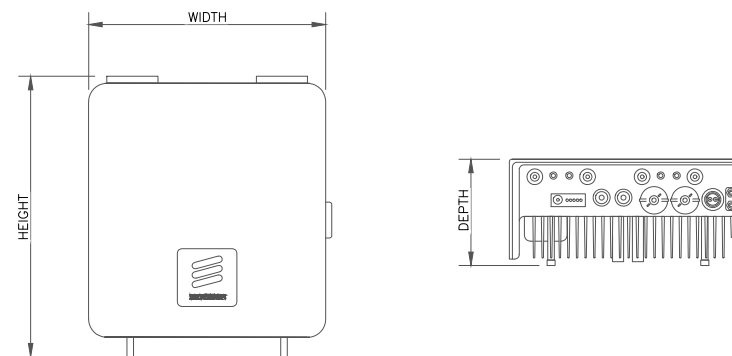
1 CCI - OPA65-BU6DA
SCALE: NOT TO SCALE

HEIGHT	WIDTH	DEPTH	WEIGHT
71.20"	20.70"	7.70"	89.30 LBS



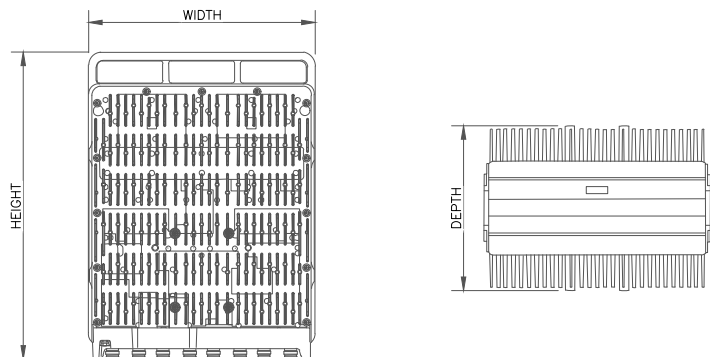
2 CCI - DMP65R-BU6D
SCALE: NOT TO SCALE

HEIGHT	WIDTH	DEPTH	WEIGHT
16.50"	13.20"	7.70"	59.90 LBS



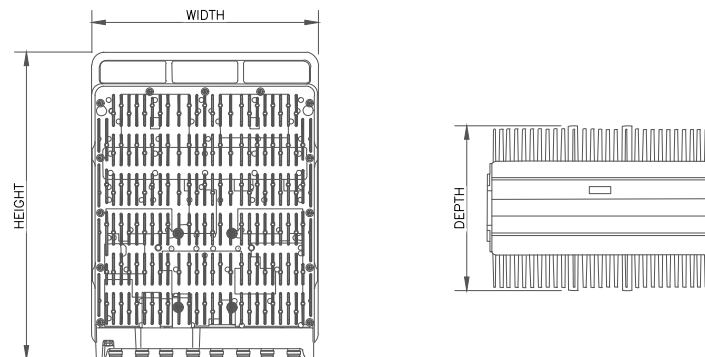
3 RADIO DETAIL: ERICSSON - 4478 B14
SCALE: NOT TO SCALE

HEIGHT	WIDTH	DEPTH	WEIGHT
14.90"	13.20"	10.90"	72.00 LBS



4 RADIO DETAIL: ERICSSON - 8843 B2/B66A
SCALE: NOT TO SCALE

HEIGHT	WIDTH	DEPTH	WEIGHT
17.90"	13.19"	9.44"	71.00 LBS



5 RADIO DETAIL: ERICSSON - 4449 B5/B12
SCALE: NOT TO SCALE

6 NOT USED
SCALE: NOT TO SCALE

 **AT&T**
1025 LENOX PARK BOULEVARD NE
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 **CROWN CASTLE**
370 MALLORY STATION ROAD, SUITE 505
FRANKLIN, TN 37067

 **ETS**
ENGINEERED TOWER SOLUTIONS, PLLC
3227 WELLINGTON COURT
RALEIGH, NC 27615

AT&T SITE NUMBER: 61163


BU #: 806361
NHV 102 943127

131 MANOR ROAD
GUILFORD, CT 06437

EXISTING 150'-0" MONOPOLE

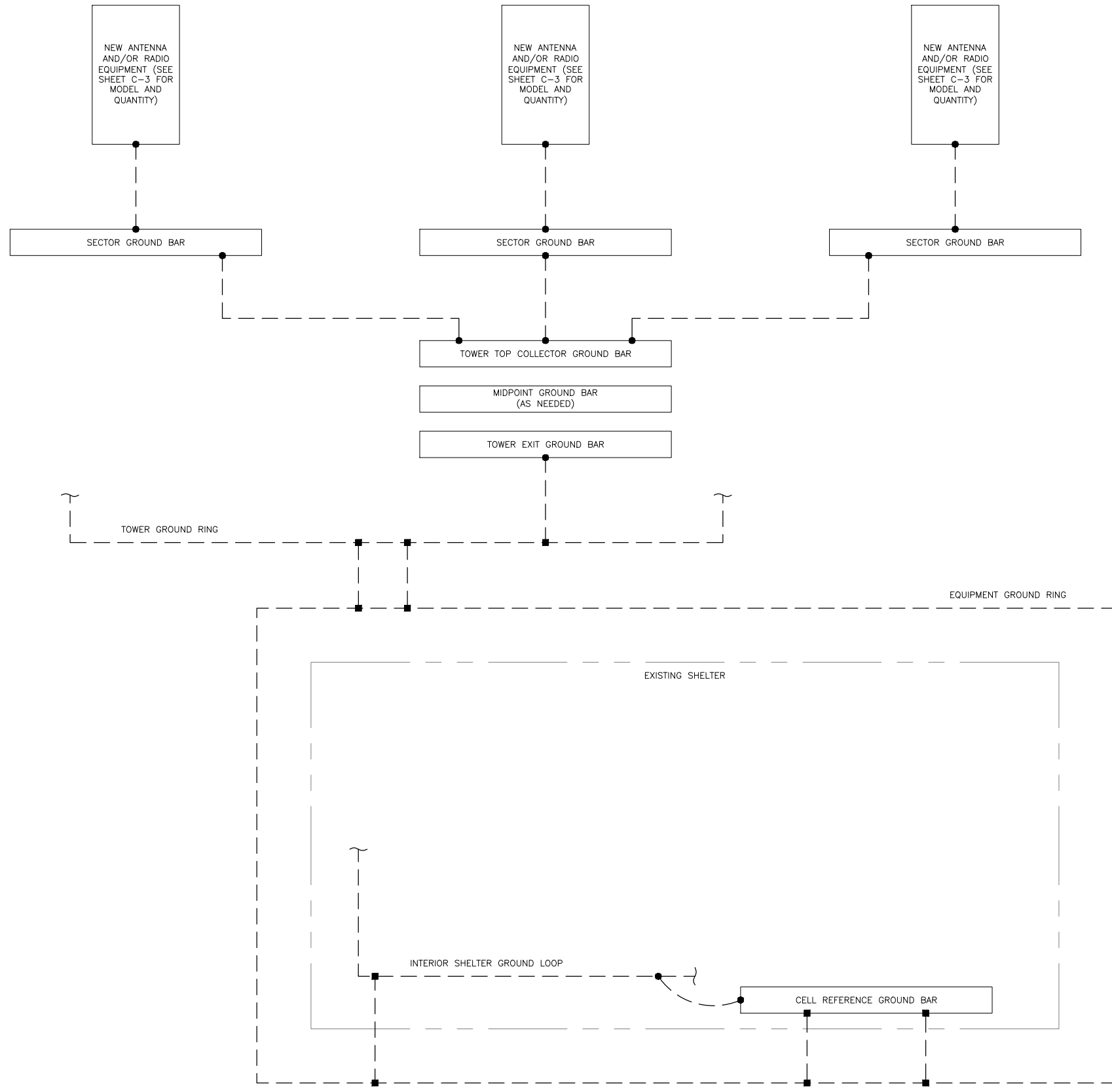
ISSUED FOR:

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0	05/10/2021	AM	CONSTRUCTION	AS


3/11/2021

03/10/2021
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SHEET NUMBER: **C-6** REVISION: **0**



GROUNDING PLAN LEGEND:

- GROUND WIRE
- EXOTHERMIC WELD
- MECHANICAL CONNECTION
- COPPER GROUND ROD
- ⊗ GROUND ROD W/ TEST WELL

CELL REFERENCE GROUND BAR: POINT OF GROUND REFERENCE FOR ALL COMMUNICATIONS EQUIPMENT FRAMES. ALL BONDS ARE MADE WITH #2 STRANDED GREEN INSULATED COPPER CONDUCTORS. BOND TO GROUND RING WITH (2) #2 SOLID TINNED COPPER CONDUITS (ATT-TP-76416 7.6.7).

HATCH PLATE GROUND BAR: BOND TO THE INTERIOR GROUND RING WITH (2) #2 STRANDED GREEN INSULATED COPPER CONDUCTORS. WHEN A HATCH-PLATE AND A CELL REFERENCE GROUND BAR ARE BOTH PRESENT, THE CELL SITE REFERENCE GROUND BAR MUST BE CONNECTED TO THE HATCH-PLATE AND TO THE INTERIOR GROUND RING USING (2) #2 STRANDED GREEN INSULATED COPPER CONDUCTORS.

EXTERIOR CABLE ENTRY PORT GROUND BARS: LOCATED AT THE ENTRANCE TO THE CELL SITE BUILDING. BOND TO GROUND RING WITH A #2 SOLID TINNED COPPER CONDUCTORS WITH AN EXOTHERMIC WELD AND INSPECTION SLEEVE (ATT-TP-76416 7.6.7.2).

DURING ALL DC POWER SYSTEM CHANGES INCLUDING DC SYSTEM CHANGE OUTS, RECTIFIER REPLACEMENTS OR ADDITIONS, BREAKER DISTRIBUTION CHANGES, BATTERY ADDITIONS, BATTERY REPLACEMENTS AND INSTALLATIONS OR CHANGES TO DC CONVERTER SYSTEMS IT SHALL BE REQUIRED THAT SERVICES CONTRACTORS VERIFY ALL DC POWER SYSTEMS ARE EQUIPPED WITH MASTER DC SYSTEM RETURN GROUND CONDUCTOR FROM THE DC POWER SYSTEM COMMON RETURN BUS DIRECTLY CONNECTED TO THE CELL SITE REFERENCE GROUND BAR PER TP76300 SECTION H 6 AND TP76416 FIGURE 7-11 REQUIREMENTS.

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131 MANOR ROAD
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EXISTING 150'-0" MONOPOLE

ISSUED FOR:

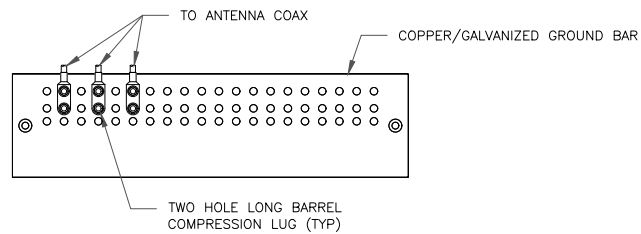
REV	DATE	DRWN	DESCRIPTION	DES/QA
0	05/10/2021	AM	CONSTRUCTION	AS

03/10/2021

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1 GROUNDING SCHEMATIC
SCALE: NOT TO SCALE

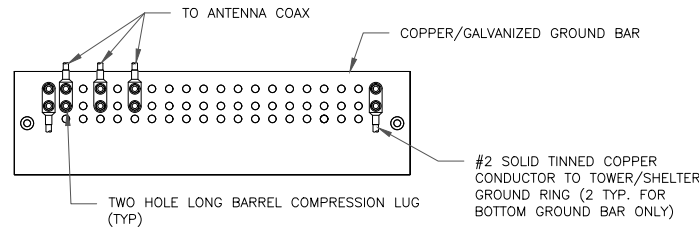
SHEET NUMBER: **G-1** REVISION: **0**



NOTES:

- DOUBLING UP "OR STACKING" OF CONNECTIONS IS NOT PERMITTED.
- EXTERIOR ANTIOXIDANT JOINT COMPOUND TO BE USED ON ALL EXTERIOR CONNECTIONS.
- GROUND BAR SHALL NOT BE ISOLATED FROM TOWER. MOUNT DIRECTLY TO ANTENNA MOUNT STEEL.

1 ANTENNA SECTOR GROUND BAR DETAIL
SCALE: NOT TO SCALE

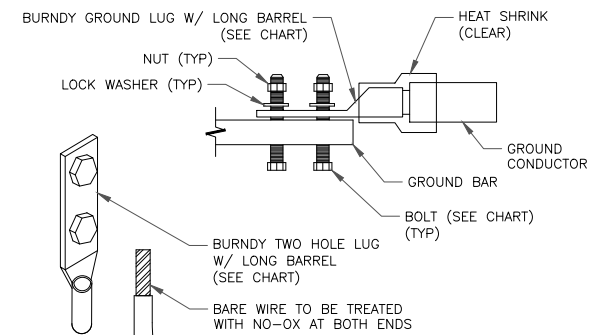


NOTES:

- EXTERIOR ANTIOXIDANT JOINT COMPOUND TO BE USED ON ALL EXTERIOR CONNECTIONS.
- GROUND BAR SHALL NOT BE ISOLATED FROM TOWER. MOUNT DIRECTLY TO TOWER STEEL (TOWER ONLY).
- GROUND BAR SHALL BE ISOLATED FROM BUILDING OR SHELTER.

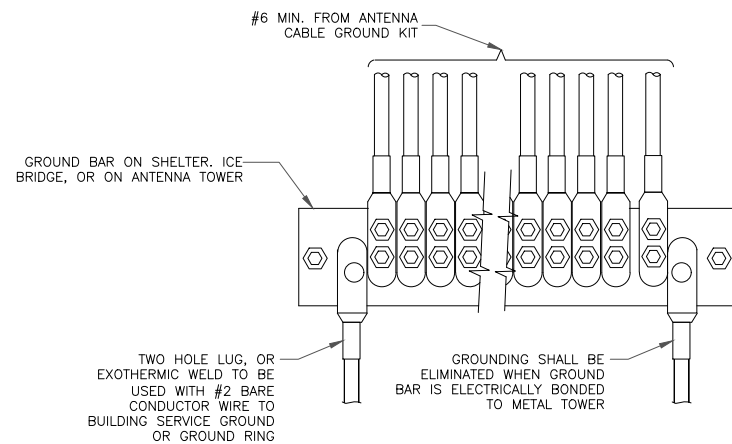
2 TOWER/SHELTER GROUND BAR DETAIL
SCALE: NOT TO SCALE

WIRE SIZE	BURNDY LUG	BOLT SIZE
#6 GREEN INSULATED	YA6C-2TC38	3/8" - 16 NC SS 2 BOLT
#2 SOLID TINNED	YA3C-2TC38	3/8" - 16 NC SS 2 BOLT
#2 STRANDED	YA2C-2TC38	3/8" - 16 NC SS 2 BOLT
#2/0 STRANDED	YA26-2TC38	3/8" - 16 NC SS 2 BOLT
#4/0 STRANDED	YA28-2N	1/2" - 16 NC SS 2 BOLT

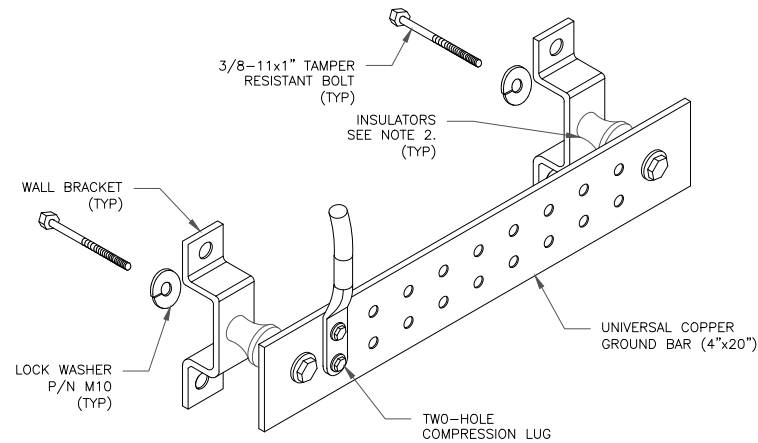


NOTE:
ALL GROUNDING LUGS ARE TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. ALL HARDWARE BOLTS, NUTS, LOCK WASHERS SHALL BE STAINLESS STEEL. ALL HARDWARE ARE TO BE AS FOLLOWS: BOLT, FLAT WASHER, GROUND BAR, GROUND LUG, FLAT WASHER AND NUT.

3 MECHANICAL LUG CONNECTION
SCALE: NOT TO SCALE



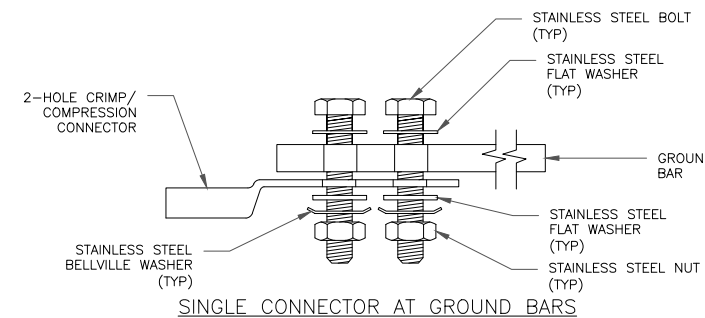
4 GROUNDWIRE INSTALLATION
SCALE: NOT TO SCALE



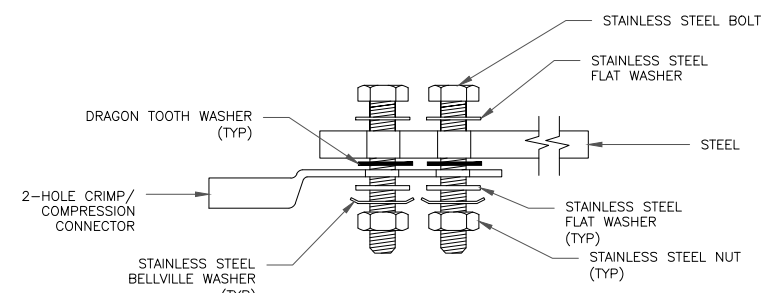
NOTES:

- DOWN LEAD (HOME RUN) CONDUCTORS ARE NOT TO BE INSTALLED ON CROWN CASTLE USA INC. TOWER, PER THE GROUNDING DOWN CONDUCTOR POLICY GAS-STD-10091. NO MODIFICATION OR DRILLING TO TOWER STEEL IS ALLOWED IN ANY FORM OR FASHION, CAD-WELDING ON THE TOWER AND/OR IN THE AIR ARE NOT PERMITTED.
- OMIT INSULATOR WHEN MOUNTING TO TOWER STEEL OR PLATFORM STEEL USE INSULATORS WHEN ATTACHING TO BUILDING OR SHELTERS.

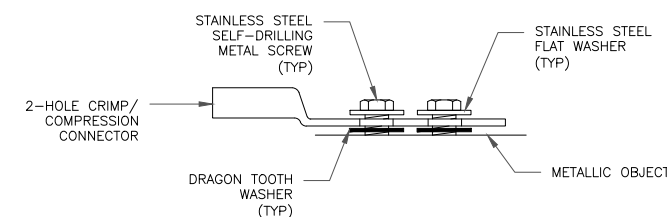
5 GROUND BAR DETAIL
SCALE: NOT TO SCALE



SINGLE CONNECTOR AT GROUND BARS

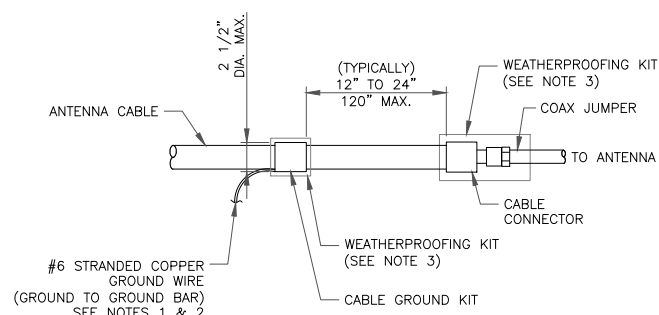


SINGLE CONNECTOR AT STEEL OBJECTS



SINGLE CONNECTOR AT METALLIC/STEEL OBJECTS

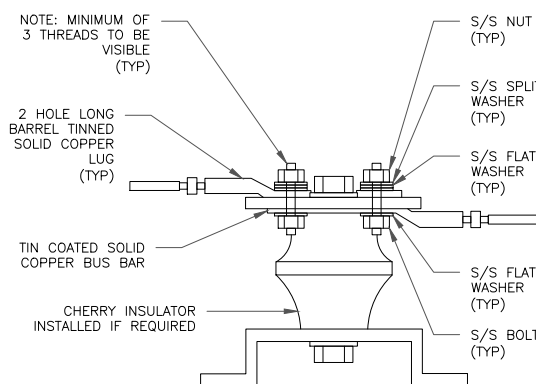
8 HARDWARE DETAIL FOR EXTERIOR CONNECTIONS
SCALE: NOT TO SCALE



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 KIT, COLD SHRINK SHALL NOT BE USED.

6 CABLE GROUND KIT CONNECTION
SCALE: NOT TO SCALE



7 LUG DETAIL
SCALE: NOT TO SCALE



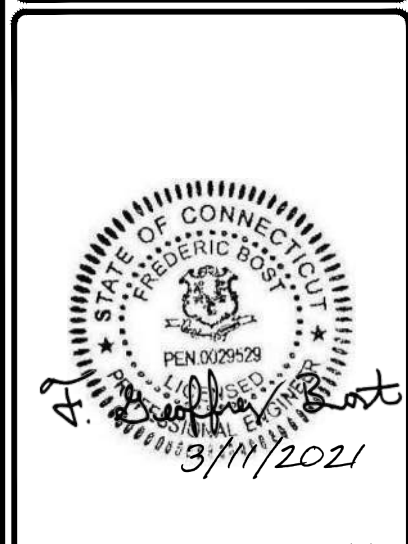
AT&T SITE NUMBER: 61163

BU #: 806361
NHV 102 943127

131 MANOR ROAD
GUILFORD, CT 06437

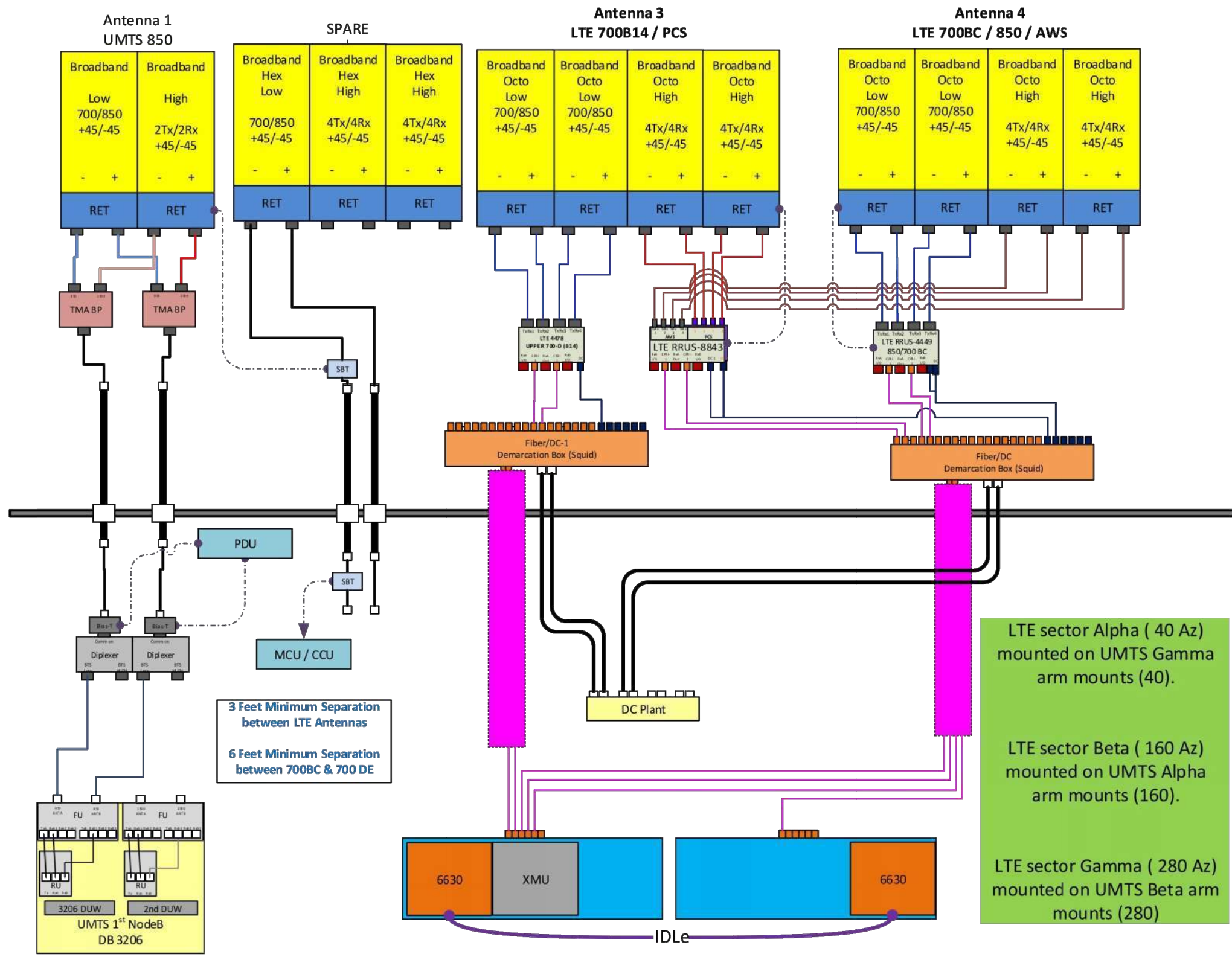
EXISTING 150'-0" MONOPOLE

ISSUED FOR:				
REV	DATE	DRWN	DESCRIPTION	DES./QA
0	03/10/2021	AM	CONSTRUCTION	AS



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SHEET NUMBER: **G-2** REVISION: **0**





SITE:
806361 NHV 102 943127 (10035042)

MODIFICATION DRAWING FOR AN EXISTING 13.5' PLATFORM W/ SUPPORT RAILS AT 138' ON A 150' MONOPOLE TOWER

PLANS PREPARED FOR:
CROWN CASTLE

PLANS PREPARED BY:
POD
 POWER OF DESIGN
 1033 E. TURKEYFOOT LAKE RD.
 SUITE 206 AKRON, OHIO 44312
 330-961-7432

CARRIER:
AT&T

DRAWING NOTICE:
 THESE DOCUMENTS ARE CONFIDENTIAL AND ARE THE SOLE PROPERTY OF CROWN CASTLE AND MAY NOT BE REPRODUCED, DISSEMINATED OR REDISTRIBUTED WITHOUT THE EXPRESS WRITTEN CONSENT OF CROWN CASTLE.

MODIFICATION DRAWING

10/13/2020

 Signature: *Jason Cheronis*

REV.	DATE	DESCRIPTION

SITE INFORMATION:
NHV 102 943127 (10035042)

131 MANOR RD.
 GUILFORD, CT 06437

SITE NUMBER:
806361

POD NUMBER: 20-70444
 DRAWN BY: TAJ
 CHECKED BY: JGC
 DATE: 10/13/2020

SHEET TITLE:
TITLE SHEET

T-01

SHEET INDEX	
T-01	TITLE SHEET
N-01	NOTES
S-01	PLAN VIEW
S-02	ELEVATION VIEW
MI-01	MODIFICATION CHECKLIST

PROJECT INFORMATION	
COUNTY:	NEW HAVEN
SITE ADDRESS:	131 MANOR RD. GUILFORD, CT 06437
LATITUDE:	41° 19' 48.09"
LONGITUDE:	-72° 43' 18.51"

SCOPE OF WORK:
MOUNT MODIFICATION DRAWINGS INCLUDES: INSTALL PROPOSED SUPPORT RAILS, CORNER BRACES, STABILIZER KITS, & MOUNT PIPES.

GENERAL NOTES

- THE MODIFICATIONS REPRESENTED IN THESE DRAWINGS ARE BASED ON THE STRUCTURAL DOCUMENTS PROVIDED IN THE STRUCTURAL DOCUMENTS TABLE. THE CONTRACTOR SHALL OBTAIN AND BECOME FAMILIAR WITH ALL REFERENCED DOCUMENTS.
- ALL MODIFICATIONS MUST BE INSTALLED TO BRING THE TOWER INTO CONFORMANCE WITH ALL APPLICABLE CODES.

GOVERNING CODES	TIA-222-H
ULTIMATE WIND SPEED	122 MPH 3 SECOND GUST
RADIAL ICE THICKNESS	1"
WIND SPEED W/ ICE	50 MPH 3 SECOND GUST
STRUCTURE CLASS	II
EXPOSURE CATEGORY	C
TOPOGRAPHIC CATEGORY	1
SPECTRAL RESPONSE ACCELERATIONS	SS= 0.206 & S1= 0.054
- ALL WORK PRESENTED ON THESE DRAWINGS MUST BE COMPLETED BY THE CONTRACTOR UNLESS NOTED OTHERWISE OR APPROVED BY THE EOR. THE CONTRACTOR MUST HAVE CONSIDERABLE EXPERIENCE PERFORMING WORK SIMILAR TO THAT DESCRIBED WITHIN THESE DRAWINGS. BY ACCEPTANCE OF THIS PROJECT, THE CONTRACTOR IS ATTESTING THAT HE HAS SUFFICIENT EXPERIENCE AND ABILITY, THAT HE IS KNOWLEDGEABLE OF THE WORK TO BE PERFORMED AND THAT HE IS PROPERLY LICENSED AND REGISTERED TO PERFORM THE WORK IN THE PROJECT JURISDICTION.
- WORK SHALL ONLY BE PERFORMED DURING CALM, DRY DAYS (WINDS LESS THAN 10XMPH). IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE INSTALLATION PROCEDURE AND SEQUENCE TO INSURE THE SAFETY OF THE STRUCTURE AND ITS COMPONENT PARTS DURING ERECTION AND/OR MODIFICATIONS. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF TEMPORARY BRACING, GUYS OR TIE-DOWNS THAT MAY BE NECESSARY. SUCH MATERIAL SHALL BE REMOVED AND SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER THE COMPLETION OF THE PROJECT.
- ALL DIMENSIONS, ELEVATIONS AND EXISTING CONDITIONS SHOWN ON THE DRAWINGS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING ANY MATERIALS ORDERING, FABRICATION OR CONSTRUCTION WORK ON THIS PROJECT. CONTRACTOR SHALL NOT SCALE CONTRACT DRAWINGS IN LIEU OF FIELD VERIFICATIONS. ANY DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND EOR. THE DISCREPANCIES MUST BE RESOLVED BEFORE THE CONTRACTOR IS TO PROCEED WITH THE WORK. THE CONTRACT DOCUMENTS DO NOT INDICATE THE METHODS OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND IS SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES. OBSERVATION VISITS TO THE SITE BY THE OWNER AND/OR THE EOR SHALL NOT INCLUDE INSPECTION OF THE PROTECTIVE MEASURES AND PROCEDURES.
- THE DESIGN WITHIN THESE DRAWINGS ASSUMES THE TOWER AND ITS FOUNDATIONS HAVE BEEN WELL MAINTAINED, IN GOOD CONDITION AND ARE WITHOUT DEFECT. BENT MEMBERS, CORRODED MEMBER, LOOSE BOLTS, CRACKED WELDS, AND OTHER STRUCTURAL DEFECTS HAVE NOT BEEN CONSIDERED UNLESS SPECIFICALLY NOTED. THE TOWER IS ASSUMED TO BE PLUMB AND THE SITE IS ASSUMED LEVEL. THE OWNER AND/OR EOR SHALL BE NOTIFIED IMMEDIATELY IF ANY VARIANCES ARE FOUND.
- THE CONTRACTOR SHALL ONLY WORK WITHIN THE LIMITS OF THE TOWER OWNER'S PROPERTY, LEASE AREA OR APPROVED EASEMENTS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY WORK IS PERFORMED WITHIN THESE BOUNDARIES. CONSTRUCTION STAKING AND BOUNDARY MARKING IS THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL EMPLOY A SURVEYOR AS REQUIRED. ANY WORK OUTSIDE THESE BOUNDARIES SHALL BE APPROVED IN WRITING BY THE OWNER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAIN AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR INSURING THAT ALL WORK PERFORMED COMPLIES WITH ALL APPLICATION SAFETY CODES AND GOVERNING REGULATIONS.
- ACCESS TO THE PROPOSED WORK SITE MAY BE RESTRICTED. THE CONTRACTOR SHALL COORDINATE INTENDED CONSTRUCTION ACTIVITY, INCLUDING WORK SCHEDULES AND MATERIAL DELIVERIES, WITH THE OWNER/RESIDENT LEASING AGENT FOR APPROVAL.
- THE CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS FOR THIS PROJECT FROM ALL APPLICABLE GOVERNING AGENCIES. THE CONTRACTOR WILL BE RESPONSIBLE FOR ABIDING BY ALL CONDITIONS AND REQUIREMENTS OF THE PERMITS.
- ALL MATERIAL UTILIZED FOR THIS PROJECT MUST BE NEW AND FREE OF ANY DEFECTS. ANY MATERIAL SUBSTITUTIONS, INCLUDED BUT NOT LIMITED TO ALTERED SIZED AND/OR STRENGTHS, MUST BE APPROVED BY THE EOR.
- UNLESS NOTED OTHERWISE, ALL NEW MEMBERS SHALL MAINTAIN THE EXISTING MEMBER WORKING LINES AND NOT INTRODUCE ECCENTRICITIES INTO THE STRUCTURE.
- ALL DIMENSIONS AND QUANTITIES LISTED WITHIN THESE DRAWINGS ARE INTENDED TO AID THE CONTRACTOR. THE CONTRACTOR SHALL VERIFY ALL DIMENSION AND QUANTITIES PRIOR TO BIDDING AND/OR ORDERING MATERIALS.
- ALL MANUFACTURERS' INSTRUCTIONS SHALL BE FOLLOWED EXACTLY. ANY DEVIATION REQUIRES WRITTEN APPROVAL FROM THE EOR.
- THE CONTRACTOR IS RESPONSIBLE FOR TEMPORARILY REMOVING COAX, BRACKETS, ANTENNAS MOUNTS AND ANY OTHER TOWER APPURTENANCE THAT MAY INTERFERE WITH THE INSTALLATION OF THE TOWER MODIFICATIONS. ALL TOWER APPURTENANCES MUST BE REPLACE AND/OR RESTORED TO ITS ORIGINAL LOCATION. SOME MOUNTS OR ATTACHMENTS MAY REQUIRE CUSTOM MODIFICATION TO PROPERLY FIT THE MODIFIED REGION OF THE STRUCTURE. THESE CUSTOM MOUNTS OR ATTACHMENTS ARE DESIGNED BY OTHERS AND MUST BE APPROVED BY THE OWNER/EOR PRIOR TO REMOVAL. ANY CARRIER DOWNTIME MUST BE COORDINATED WITH THE OWNER IN WRITING.
- DO NOT SCALE DRAWINGS.

REFERENCE DOCUMENTS

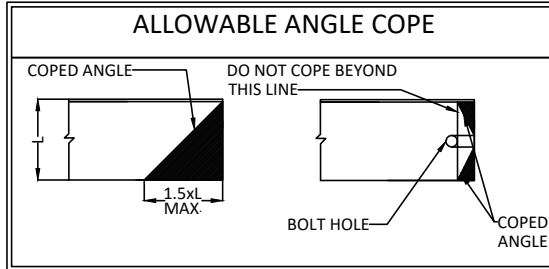
DOCUMENT TYPE	DESIGNATION
MOUNT ANALYSIS	POD PROJECT NUMBER: 20-70234 DATED: 10/02/2020

STRUCTURAL STEEL NOTES

- ALL DETAILING, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE AISC SPECIFICATIONS, LATEST EDITION.
- ALL STRUCTURAL STEEL ELEMENTS SHALL CONFORM TO THE FOLLOWING REQUIREMENTS.

MATERIAL SPECIFICATIONS	
ANGLES	ASTM A36 (36 KSI YIELD STRENGTH)
PIPES	ASTM A53 GR.B (35 KSI YIELD STRENGTH)
BOLTS	ASTM A325N
NUTS	ASTM A563
WASHER	ASTM F436
PLATE	ASTM A36 (36 KSI YIELD STRENGTH)
U-BOLTS	ASTM A307

- ALL CONNECTIONS NOT FULLY DETAILED ON THESE PLANS SHALL BE DETAILED BY THE FABRICATOR IN ACCORDANCE WITH AISC SPECIFICATIONS, LATEST EDITION.
- CAULKING SHALL BE PROVIDED AROUND PERIMETER OF ANY AND ALL MODIFICATION MEMBERS TO ENSURE COMPLETE SEAL BETWEEN EXISTING STRUCTURE AND REINFORCING MEMBERS IN FULL CONTACT WITH EXISTING STEEL. SEALANT IS TO BE EXTERIOR GRADE, PAINTABLE SILICONE CAULKING AS MANUFACTURED BY DOW AND ACCEPTABLE TO EOR.
- Holes SHALL NOT BE FLAME CUT THROUGH STEEL UNLESS APPROVED BY THE EOR.
- ALL EXPOSED STEEL SHALL BE HOTXDIPPED GALVANIZED PER ASTM A123, ASTM A153/A153M, OR ASTM A653 G90, AS APPLICABLE FOR FULL WEATHER PROTECTION. FOR HIGH STRENGTH STEEL FASTENERS WHERE HOTXDIPPED GALVANIZING IS NOT PERMITTED DACROMET F1136 GRADE 3 COATING SHALL BE USED. IN ADDITION ALL NEW STEEL SHALL BE PAINTED TO MATCH EXISTING TOWER STEEL. CONTRACTOR SHALL OBTAIN EOR APPROVAL FOR STEEL PROTECTION BY ANY OTHER MEANS.
- REPAIR DAMAGED PAINTED/GALVANIZED SURFACES WITH TWO COATS OF BRUSH OR ROLL ON ZRC COLD GALVANIZING COMPOUND OR EOR APPROVED COATING. SURFACES MUST BE WIRE BRUSHED AND SOLVENT CLEANED PRIOR TO APPLICATION OF GALVANIZING COMPOUND.
- ALL BOLT ASSEMBLIES FOR STRUCTURAL MEMBERS REPRESENTED IN THIS DRAWING REQUIRE LOCKING DEVICES (LOCKING NUT/PAL NUT) TO BE INSTALLED IN ACCORDANCE WITH TIA/EIAX222 REQUIREMENTS.
- ALL PROPOSED AND/OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH SUCH THAT THE END OF THE BOLT BE AT LEAST FLUSH WITH THE FACE OF THE NUT. IT IS NOT PERMITTED FOR THE BOLT END TO BE BELOW THE FACE OF THE NUT AFTER TIGHTENING IS COMPLETED.



- ALL DIMENSIONS REPRESENTED IN THE ABOVE TABLES ARE AISC MINIMUM REQUIREMENTS. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS IN FIELD AND NOTIFY ENGINEER IF DISTANCES ARE LESS THAN THOSE PROVIDED.
- THE DIMENSIONS PROVIDED ARE MINIMUM REQUIREMENTS. ACTUAL DIMENSIONS OF PROPOSED MEMBERS WITHIN THESE DRAWINGS MAY VARY FROM THE AISC MINIMUM REQUIREMENT.

BOLT SCHEDULE				
BOLT DIAMETER	STANDARD HOLE	SHORT SLOT	MIN. EDGE DISTANCE	SPACING
1/2	9/16	9/16x11/16	7/8	1-1/2
5/8	11/16	11/16x7/8	1-1/8	1-7/8
3/4	13/16	13/16x1	1-1/4	2-1/4
7/8	15/16	15/16x1-1/8	1-1/2	2-5/8
1	1-1/16	1-1/16x1-5/16	1-3/4	3

WORKABLE GAGES			
LEG	2-1/2	----	----
G	1-3/8	----	----
<ul style="list-style-type: none"> - DIMENSIONS GIVEN IN INCHES. - MATCH EXISTING WHEN APPLICABLE. 			



DRAWING NOTICE:
THESE DOCUMENTS ARE CONFIDENTIAL AND ARE THE SOLE PROPERTY OF CROWN CASTLE AND MAY NOT BE REPRODUCED, DISSEMINATED OR REDISTRIBUTED WITHOUT THE EXPRESS WRITTEN CONSENT OF CROWN CASTLE.

MODIFICATION DRAWING

10/13/2020

REV. DATE DESCRIPTION

SITE INFORMATION:
NHV 102 943127
(10035042)

131 MANOR RD.
GUILFORD, CT 06437

SITE NUMBER:
806361

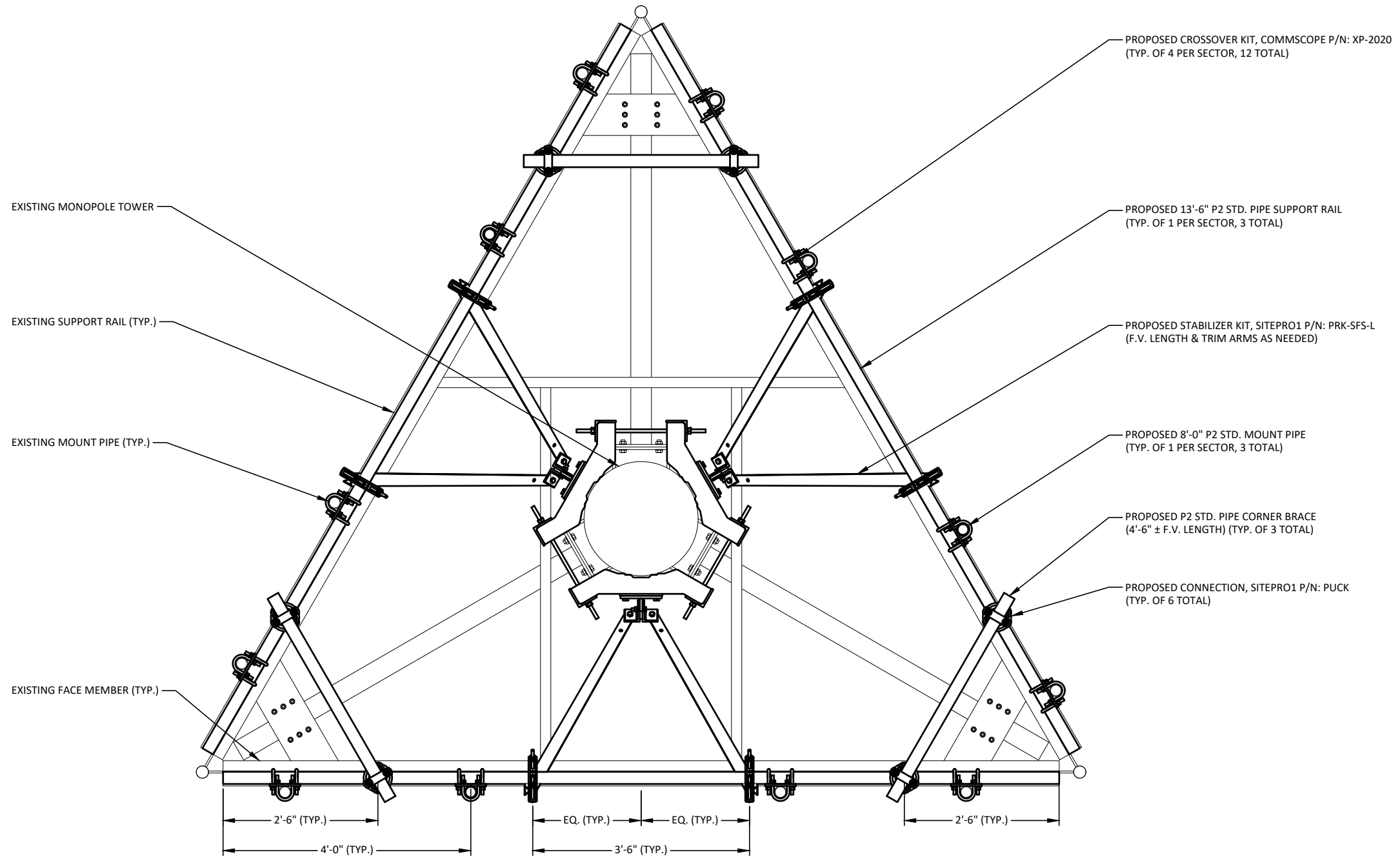
POD NUMBER: 20-70444
DRAWN BY: TAJ
CHECKED BY: JGC
DATE: 10/13/2020

SHEET TITLE:
NOTES

N-01

NOTES:

- ANTENNAE & GRATING NOT SHOWN FOR CLARITY
- ALL FIELD DRILLED HOLES SHALL BE SOLVENT CLEANED AND TOUCHED UP WITH TWO COATS OF ZRC RICH PAINT
- EXCESS MATERIALS SHALL BE REMOVED AND DISPOSED OFF SITE BY THE CONTRACTOR



PLAN VIEW
1/2" = 1'-0"

PLANS PREPARED FOR:
CROWN CASTLE

PLANS PREPARED BY:
POD
POWER OF DESIGN
1033 E. TURKEYFOOT LAKE RD.
SUITE 206 AKRON, OHIO 44312
330-961-7432

CARRIER:
AT&T

DRAWING NOTICE:
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MODIFICATION DRAWING

10/13/2020

STATE OF CONNECTICUT
JASON CHERONIS
PEN.0032793
LICENSED PROFESSIONAL ENGINEER

REV.	DATE	DESCRIPTION

SITE INFORMATION:
NHV 102 943127
(10035042)

131 MANOR RD.
GUILFORD, CT 06437

SITE NUMBER:
806361

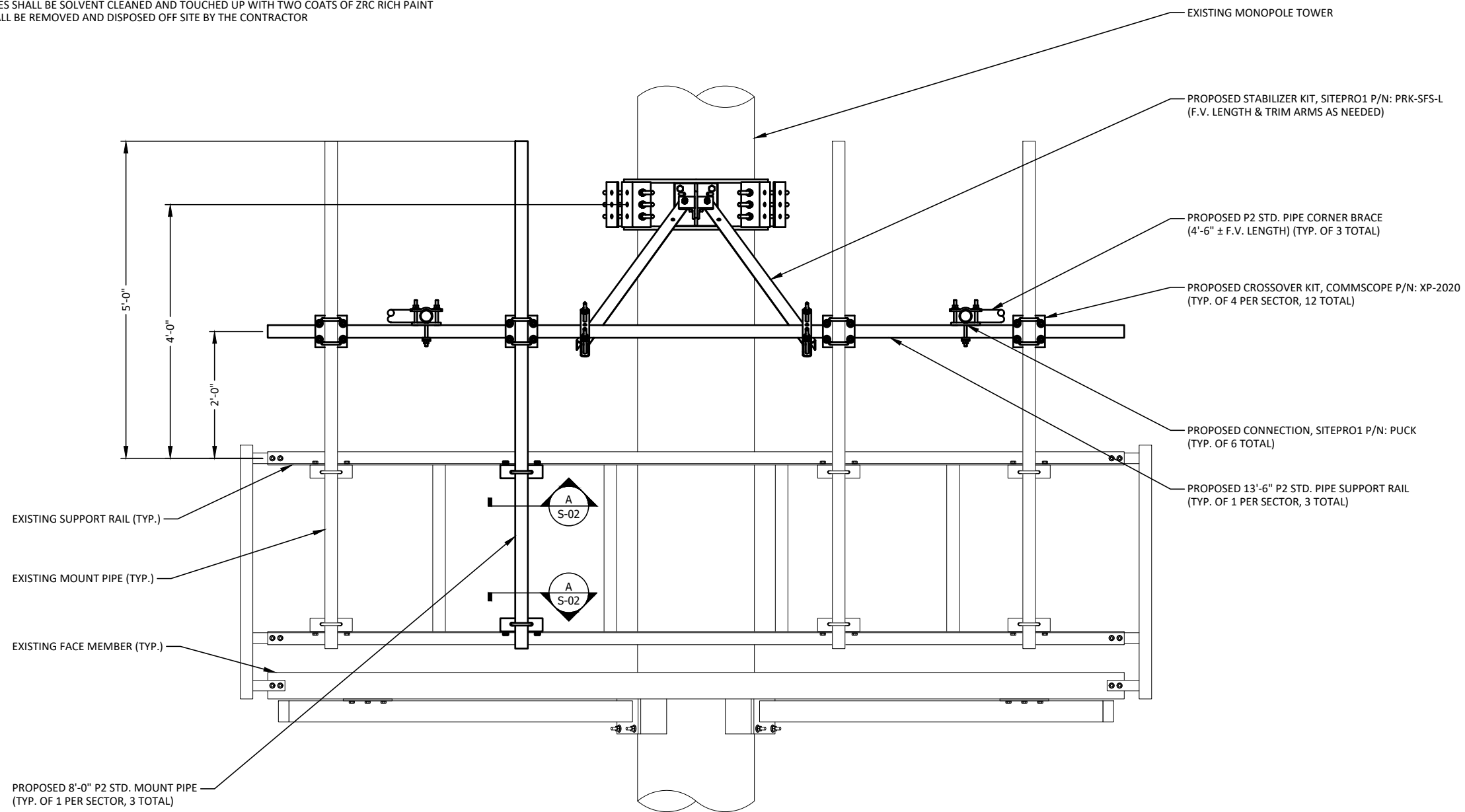
POD NUMBER: 20-70444
DRAWN BY: TAJ
CHECKED BY: JGC
DATE: 10/13/2020

SHEET TITLE:
PLAN VIEW

S-01

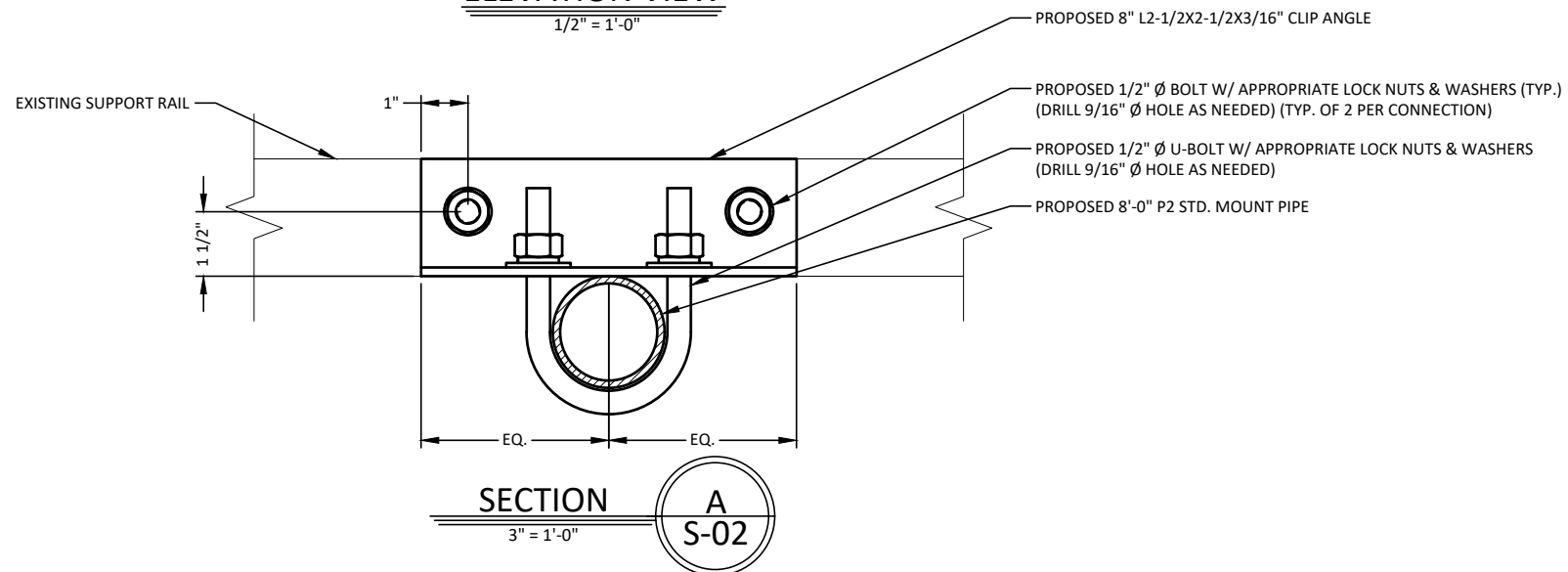
NOTES:

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- ALL FIELD DRILLED HOLES SHALL BE SOLVENT CLEANED AND TOUCHED UP WITH TWO COATS OF ZRC RICH PAINT
- EXCESS MATERIALS SHALL BE REMOVED AND DISPOSED OFF SITE BY THE CONTRACTOR



ELEVATION VIEW

1/2" = 1'-0"



SECTION

3" = 1'-0"

A
S-02

PLANS PREPARED FOR:



PLANS PREPARED BY:



1033 E. TURKEYFOOT LAKE RD.
SUITE 206 AKRON, OHIO 44312
330-961-7432

CARRIER:



DRAWING NOTICE:

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MODIFICATION DRAWING

10/13/2020



REV.	DATE	DESCRIPTION

SITE INFORMATION:

NHV 102 943127 (10035042)

131 MANOR RD.
GUILFORD, CT 06437

SITE NUMBER:

806361

POD NUMBER: 20-70444

DRAWN BY: TAJ
CHECKED BY: JGC
DATE: 10/13/2020

SHEET TITLE:

ELEVATION VIEW

S-02

MODIFICATION INSPECTION CHECKLIST					
BEFORE CONSTRUCTION		DURING CONSTRUCTION		AFTER CONSTRUCTION	
CONSTRUCTION/INSTALLATION INSPECTION AND TESTING REQUIRED (COMPLETED BY ENGINEER OF RECORD)	REPORT ITEM	CONSTRUCTION/INSTALLATION INSPECTION AND TESTING REQUIRED (COMPLETED BY ENGINEER OF RECORD)	REPORT ITEM	CONSTRUCTION/INSTALLATION INSPECTION AND TESTING REQUIRED (COMPLETED BY ENGINEER OF RECORD)	REPORT ITEM
X	MODIFICATION INSPECTION CHECKLIST DWG	X	CONSTRUCTION INSPECTION	X	MODIFICATION INSPECTOR REDLINE OR RECORD DRAWING(S)
-	ENGINEER OF RECORD APPROVED SHOP DRAWINGS	-	FOUNDATION INSPECTION	-	POST INSTALLED ANCHOR ROD PULL-OUT TESTING
-	FABRICATION INSPECTION	-	CONCRETE COMP. STRENGTH AND SLUMP TEST	X	PHOTOGRAPHS
X	MATERIAL TEST REPORT	-	POST INSTALLED ANCHOR ROD VERIFICATION	ADDITIONAL TESTING AND INSPECTION	
-	FABRICATOR NDE INSPECTION	-	BASE PLATE GROUT VERIFICATION		
-	NDE REPORT OF MONOPOLE BASEPLATE (AS REQUIRED)	-	THIRD PARTY CERTIFIED WELD INSPECTION		
X	PACKING SLIP	-	EARTHWORK LIFT AND DENSITY (REPORT REQUIRED)		
ADDITIONAL TESTING AND INSPECTION		X	ON SITE COLD GALVANIZING VERIFICATION		
		-	GUY WIRE TENSION REPORT		
		X	GC AS-BUILT DOCUMENTS		
		ADDITIONAL TESTING AND INSPECTION			

MODIFICATION INSPECTION NOTES:

GENERAL:

1. THE MODIFICATION INSPECTION IS A VISUAL INSPECTION OF TOWER MODIFICATION AND A REVIEW OF CONSTRUCTION INSPECTION AND OTHER REPORTS TO ENSURE THE INSTALLATION WAS CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. NAMELY THE MODIFICATION DRAWINGS, AS DESIGNED BY THE ENGINEER OF RECORD.
2. THE MODIFICATION INSPECTION IS TO CONFIRM INSTALLATION CONFIGURATION AND WORKMANSHIP ONLY AN IS NOT A REVIEW OF THE MODIFICATION DESIGN ITSELF. NOR DOES THE MODIFICATION INSPECTOR TAKE OWNERSHIP OF THE MODIFICATION DESIGN. OWNERSHIP OF THE STRUCTURAL MODIFICATION DESIGN EFFECTIVENESS AND INTENT RESIDES WITH THE ENGINEER OF RECORD AT ALL TIMES.
3. TO ENSURE THAT THE REQUIREMENT OF THE MODIFICATION INSPECTION ARE MET, IT IS VITAL THAT THE GENERAL CONTRACTOR (GC) AND THE MODIFICATION INSPECTOR BEGIN COMMUNICATION AND COORDINATING AS SOON AS A PO OR PAYMENT IS RECEIVED. IT IS EXPECTED THAT EACH PARTY WILL BE PROACTIVE IN REACHING OUT TO THE OTHER PARTY.

MODIFICATION INSPECTOR:

1. THE MODIFICATION INSPECTOR IS REQUIRED TO CONTACT THE GC AS SOON AS RECEIVING A PO OR PAYMENT FOR THE MODIFICATION INSPECTION TO:
 - REVIEW THE REQUIREMENT OF THE MODIFICATION INSPECTION CHECKLIST
 - WORK WITH THE GC TO DEVELOP A SCHEDULE TO CONDUCT ON-SITE INSPECTIONS
 - DISCUSS ANY SITE SPECIFIC INSPECTIONS OR CONCERNS
2. THE MODIFICATION INSPECTOR IS RESPONSIBLE FOR COLLECTING ALL GENERAL CONTRACTOR (GC) INSPECTION AND TEST REPORTS. REVIEWING THE DOCUMENTS FOR ADHERENCE TO THE CONTRACT DOCUMENTS, CONDUCTING THE INXFIELD INSPECTIONS, AND SUBMITTING THE MODIFICATION INSPECTION REPORT.

GENERAL CONTRACTOR:

1. THE GC IS REQUIRED TO CONTACT THE MODIFICATION INSPECTOR AS SOON AS RECEIVING A PO OR PAYMENT FOR THE MODIFICATION INSTALLATION OR TURNKEY PROJECT TO:

- REVIEW THE REQUIREMENT OF THE MODIFICATION INSPECTION CHECKLIST
 - WORK WITH THE MI INSPECTOR TO DEVELOP A SCHEDULE TO CONDUCT ON-SITE MODIFICATION INSPECTIONS, INCLUDING FOUNDATION INSPECTIONS
 - BETTER UNDERSTAND ALL INSPECTION AND TESTING REQUIREMENTS
2. THE GC SHALL PERFORM AND RECORD THE TEST AND INSPECTION RESULTS IN ACCORDANCE WITH THE REQUIREMENTS OF THE MODIFICATION INSPECTION CHECKLIST.

RECOMMENDATIONS:

1. IT IS SUGGESTED THAT THE GC PROVIDE A MINIMUM OF 5 BUSINESS DAYS NOTICE, TO THE MODIFICATION INSPECTOR AS TO WHEN THE SITE WILL BE READY FOR HE MODIFICATION INSPECTION TO BE CONDUCTED.
- THE GC AND MODIFICATION INSPECTION COORDINATE CLOSELY THROUGHOUT THE ENTIRE PROJECT.
 - WHEN POSSIBLE IT IS PREFERRED TO HAVE THE MODIFICATION INSPECTOR AND GC ON-SITE SIMULTANEOUSLY FOR ANY GUY WIRE TENSIONING OR REXTENSIONING OPERATIONS.
 - IT MAY BE BENEFICIAL TO INSTALL ALL TOWER MODIFICATIONS PRIOR TO CONDUCTING THE FOUNDATION INSPECTION TO ALLOW FOUNDATION AND MODIFICATION INSPECTION(S) DONE IN ONE SITE VISIT.
 - WHEN POSSIBLE, IT IS PREFERRED TO HAVE THE GC AND MODIFICATION INSPECTOR ON-SITE DURING THE MODIFICATION INSPECTION. THEREFORE, THE GC MAY CHOOSE TO COORDINATE THE MODIFICATION INSPECTION CAREFULLY TO ENSURE ALL CONSTRUCTION FACILITIES AT THEIR DISPOSAL WHEN THE MI INSPECTOR IS ON SITE.

CANCELLATION OR DELAYS IN SCHEDULED MODIFICATION INSPECTION:

1. IF THE GC AND MODIFICATION INSPECTOR AGREE TO A DATE ON WHICH THE MODIFICATION INSPECTION WILL BE CONDUCTED, AND EITHER ARTY CANCELS OR DELAYS, THE TOWER OWNER SHALL NOT BE RESPONSIBLE FOR ANY COSTS, FEES, LOSS OR DEPOSITS AND/OR OTHER PENALTIES RELATE TO THE CANCELLATION OR DELAY INCURRED BY EITHER PARTY FOR ANY TIME. EXCEPTIONS MAY BE MADE IN THE DELAY/ CANCELLATION IS CAUSED BY WEATHER OR OTHER CONDITIONS THAT MAY COMPROMISE THE SAFETY OF THE PARTIES INVOLVED.

CORRECTION OF FAILING MODIFICATION INSPECTION:

1. IF THE MODIFICATION INSTALLATION WOULD FAIL THE MODIFICATION

INSPECTION ("FAILED MODIFICATION INSPECTION"), THE GC SHALL WORK WITH MODIFICATION INSPECTOR TO COORDINATE A REMEDIATION PLAN IN ONE OF TWO WAYS:

- CORRECT FAILING ISSUES TO COMPLY WITH THE SPECIFICATIONS CONTAINED IN THE ORIGINAL CONTRACT DOCUMENTS AND COORDINATE A SUPPLEMENT MODIFICATION INSPECTION. OR, WITH TOWER OWNER'S APPROVAL, THE GC MAY WORK WITH THE ENGINEER OF RECORD TO REXANALYZE THE MODIFICATION/REINFORCEMENT USING AS-BUILT CONDITION.

VERIFICATION INSPECTIONS:

1. TOWER OWNER RESERVES THE RIGHT TO CONDUCT A VERIFICATION INSPECTION TO VERIFY THE ACCURACY AND COMPLETENESS OF PREVIOUSLY COMPLETED MODIFICATION AND INSPECTION(S) ON TOWER MODIFICATION PRODUCTS.
2. VERIFICATION INSPECTION MAY BE CONDUCTED BY AN INDEPENDENT FIRM AFTER A MODIFICATION PROJECT IS COMPLETED, AS MARKED BY THE DATE OF AN ACCEPTED "PASSING MODIFICATION INSPECTION MODIFICATION INSPECTION" REPORT FOR THE ORIGINAL PROJECT.

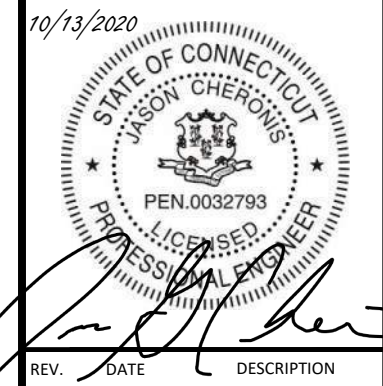
REQUIRED PHOTOS:

1. BETWEEN THE GC AND THE MI INSPECTOR THE FOLLOWING PHOTOGRAPHS ARE TO BE TAKEN AND INCLUDED IN THE MODIFICATION INSPECTION REPORT:
 - PREXCONSTRUCTION GENERAL SITE CONDITION
 - PHOTOGRAPHS DURING THE REINFORCEMENT MODIFICATION CONSTRUCTION/ERECTION AND INSPECTION
 - RAW MATERIALS
 - PHOTOS OF ALL CRITICAL DETAILS
 - WELD PREPARATION
 - FOUNDATION MODIFICATION
 - BOLT INSTALLATION AND TORQUE
 - FINAL INSTALLED CONDITION
 - SURFACE COATING REPAIR
- POST CONDITION PHOTOGRAPHS
- FINAL INFIELD CONDITION ANY OTHER PHOTOS DEEMED RELEVANT TO SHOW COMPLETE DENTALS OF MODIFICATIONS
2. PHOTOS OF ELEVATED MODIFICATIONS TAKEN FROM THE GROUND SHALL BE CONSIDERED INADEQUATE.



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MODIFICATION DRAWING



REV.	DATE	DESCRIPTION

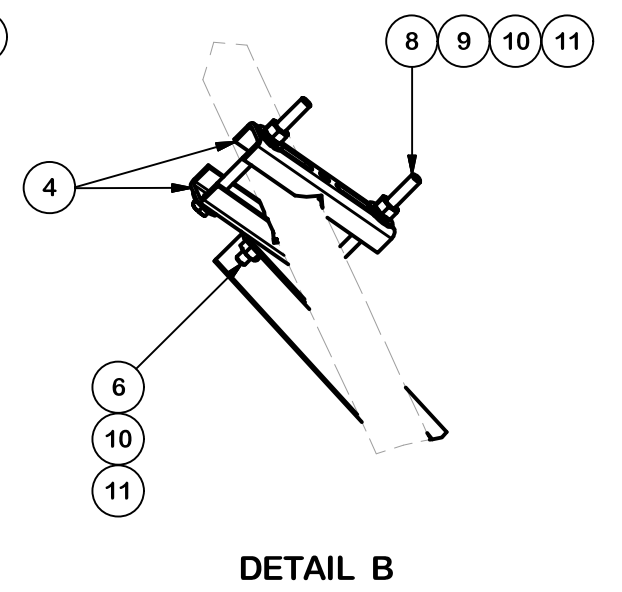
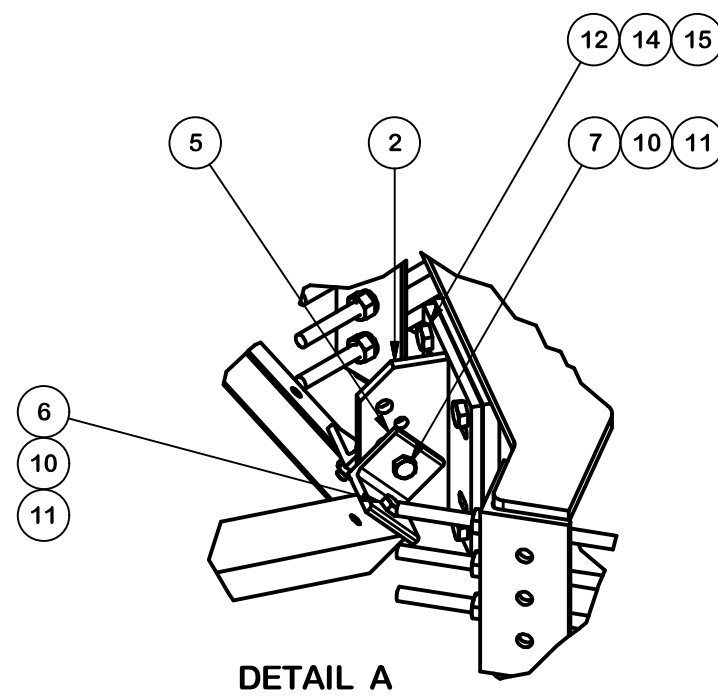
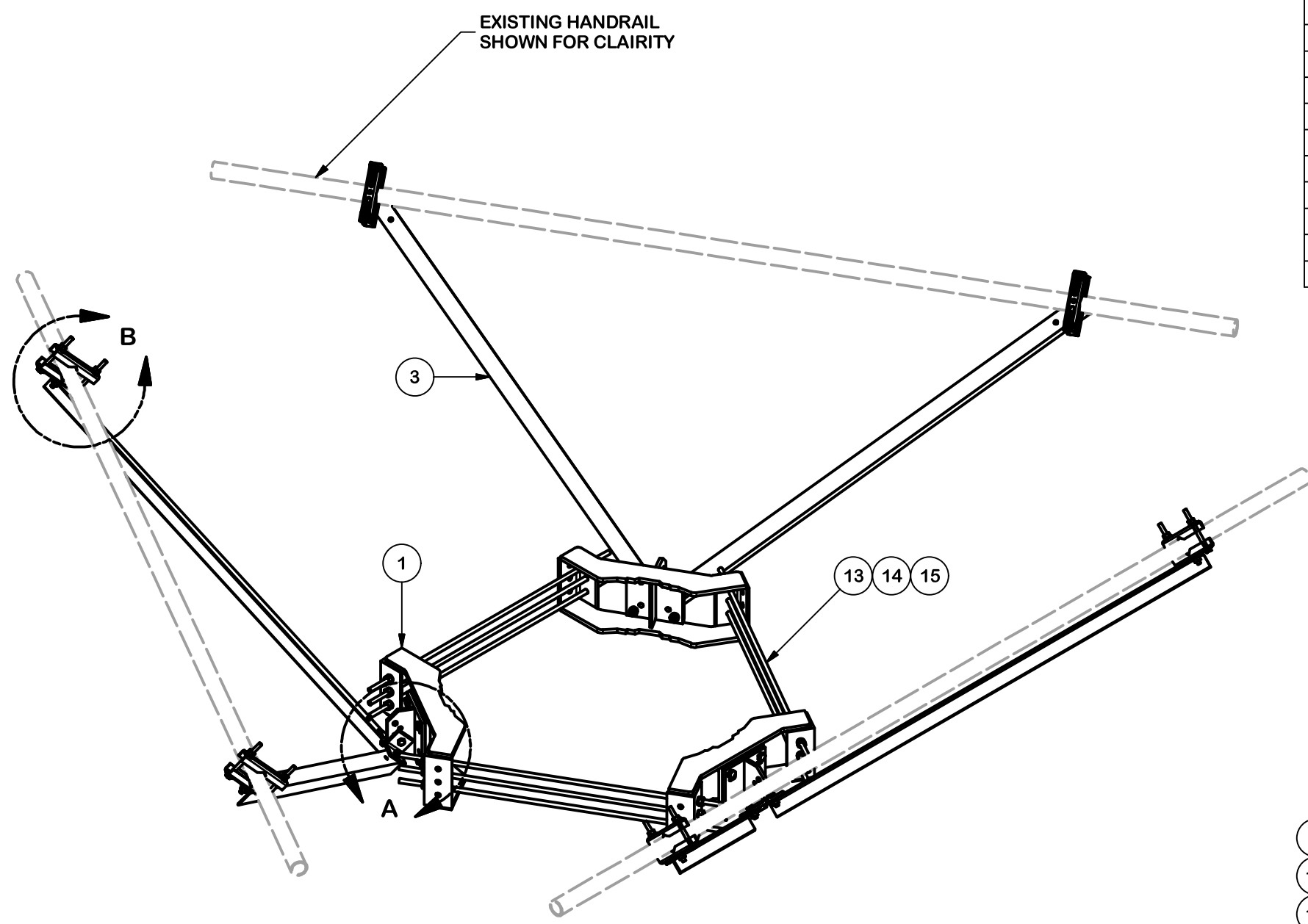
SITE INFORMATION:
NHV 102 943127 (10035042)
131 MANOR RD.
GUILFORD, CT 06437

SITE NUMBER:
806361

POD NUMBER: 20-70444
DRAWN BY: TAJ
CHECKED BY: JGC
DATE: 10/13/2020

SHEET TITLE:
MODIFICATION CHECKLIST
MI-01

PARTS LIST						
ITEM	QTY	PART NO.	PART DESCRIPTION	LENGTH	UNIT WT.	NET WT.
1	3	X-LWRM	RING MOUNT WELDMENT		68.81	206.42
2	3	X-TBW	T-BRACKET WELDMENT		13.60	40.80
3	6	X-254924	DIAGONAL ANGLE - SITE PRO 1	72 in	19.71	118.24
4	12	X-STU	STIFF ARM CHANNEL BRACKET	8 1/2 in	1.37	16.46
5	6	SHCM-T	CHAIN MOUNT TIGHTENER BRACKET	3 in	1.86	11.15
6	12	G12112	1/2" x 1-1/2" HDG HEX BOLT GR5	1/2 in	0.15	1.77
7	3	G12212	1/2" x 2-1/2" HDG HEX BOLT GR5	2 1/2 in	0.20	0.61
8	12	G12065	1/2" x 6-1/2" HDG HEX BOLT GR5 FULL THREAD	6 1/2 in	0.41	4.91
9	24	G12FW	1/2" HDG USS FLATWASHER	3/32 in	0.03	0.82
10	27	G12LW	1/2" HDG LOCKWASHER	1/8 in	0.01	0.38
11	27	G12NUT	1/2" HDG HEAVY 2H HEX NUT		0.07	1.93
12	12	A582114	5/8" x 2-1/4" HDG A325 HEX BOLT	2 1/4 in	0.31	3.75
13	9	G58R-24	5/8" x 24" THREADED ROD (HDG.)	24 in	0.40	3.59
13	9	G58R-48	5/8" x 48" THREADED ROD (HDG.)	48 in	0.40	3.59
14	30	G58LW	5/8" HDG LOCKWASHER		0.03	0.78
15	30	G58NUT	5/8" HDG HEAVY 2H HEX NUT		0.13	3.90
					TOTAL WT. #	642.04



REV	DESCRIPTION OF REVISIONS	CPD	BY	DATE
A	CHANGED MAX. DIA. FOR HANDRAIL CONNECTION	SP1	BC	10/25/2017


REVISION HISTORY

TOLERANCE NOTES

TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE:
 SAWED, SHEARED AND GAS CUT EDGES ($\pm 0.030''$)
 DRILLED AND GAS CUT HOLES ($\pm 0.030''$) - NO CONING OF HOLES
 LASER CUT EDGES AND HOLES ($\pm 0.010''$) - NO CONING OF HOLES
 BENDS ARE $\pm 1/2$ DEGREE
 ALL OTHER MACHINING ($\pm 0.030''$)
 ALL OTHER ASSEMBLY ($\pm 0.060''$)

PROPRIETARY NOTE:
 THE DATA AND TECHNIQUES CONTAINED IN THIS DRAWING ARE PROPRIETARY INFORMATION OF VALMONT INDUSTRIES AND CONSIDERED A TRADE SECRET. ANY USE OR DISCLOSURE WITHOUT THE CONSENT OF VALMONT INDUSTRIES IS STRICTLY PROHIBITED.

DESCRIPTION			
HANDRAIL REINFORCEMENT KIT (LONG)			
CPD NO.	DRAWN BY	ENG. APPROVAL	
SP1	CSL3 2/23/2017	3RD PARTY	
CLASS	SUB	DRAWING USAGE	CHECKED BY
81	02	SHOP	BMC 9/8/2017

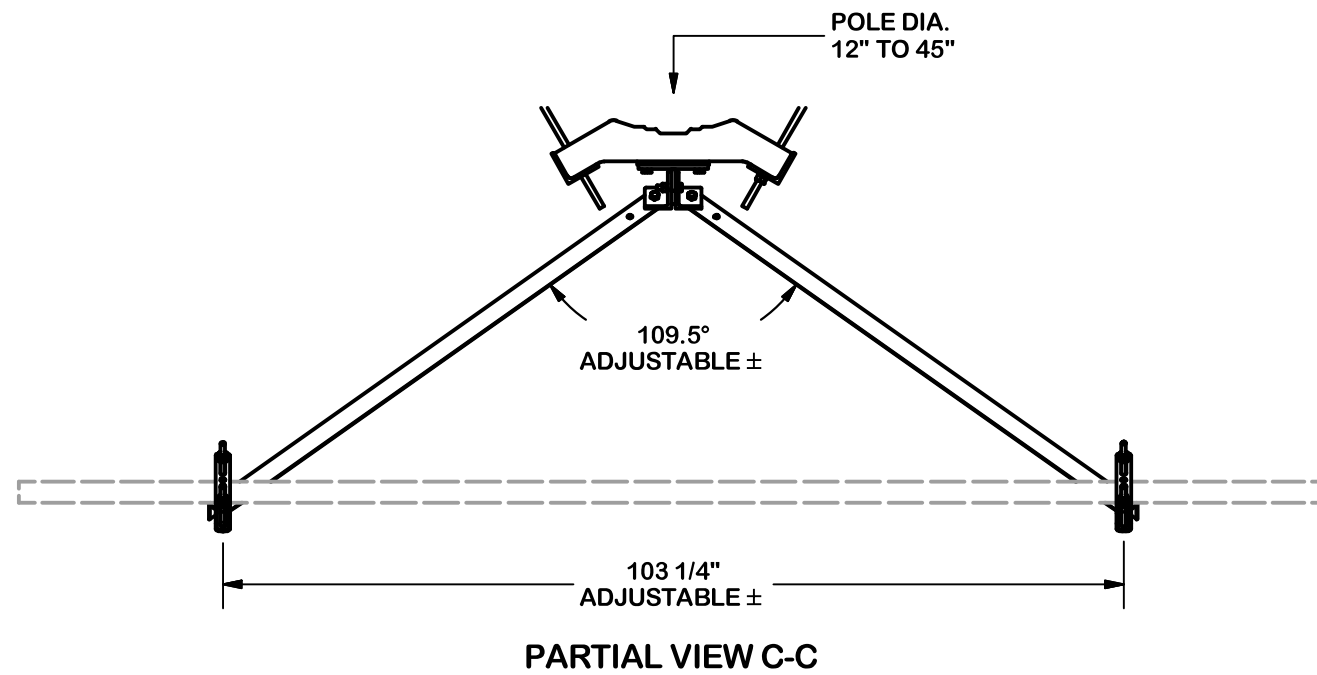


A valmont COMPANY

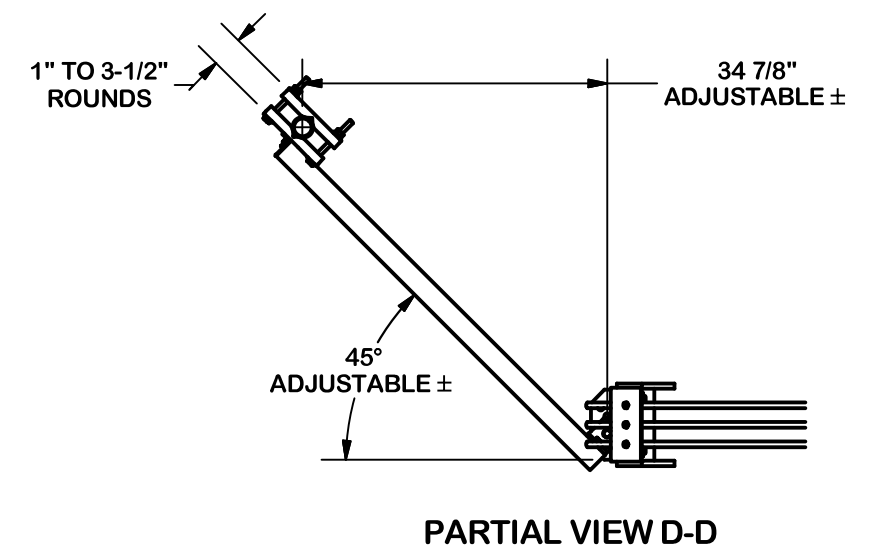
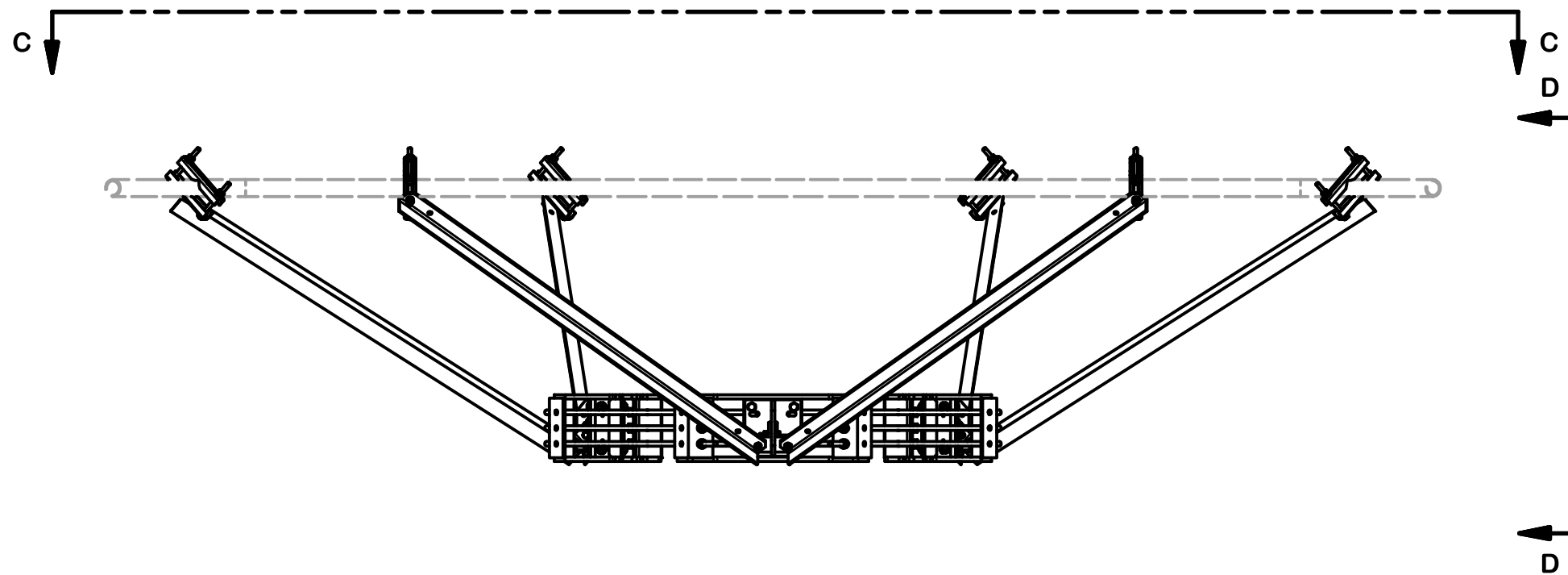
Locations:
 New York, NY
 Atlanta, GA
 Los Angeles, CA
 Plymouth, IN
 Salem, OR
 Dallas, TX

Engineering Support Team:
 1-888-753-7446

PART NO.	PRK-SFS-L
DWG. NO.	PRK-SFS-L



VERTICAL POSITION



TOLERANCE NOTES

TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE:
 SAWED, SHEARED AND GAS CUT EDGES (± 0.030")
 DRILLED AND GAS CUT HOLES (± 0.030") - NO CONING OF HOLES
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 ALL OTHER MACHINING (± 0.030")
 ALL OTHER ASSEMBLY (± 0.060")

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DESCRIPTION
HANDRAIL REINFORCEMENT KIT (LONG)

CPD NO. SP1	DRAWN BY CSL3 2/23/2017	ENG. APPROVAL 3RD PARTY
CLASS 81	SUB 02	DRAWING USAGE SHOP
CHECKED BY BMC 9/8/2017		

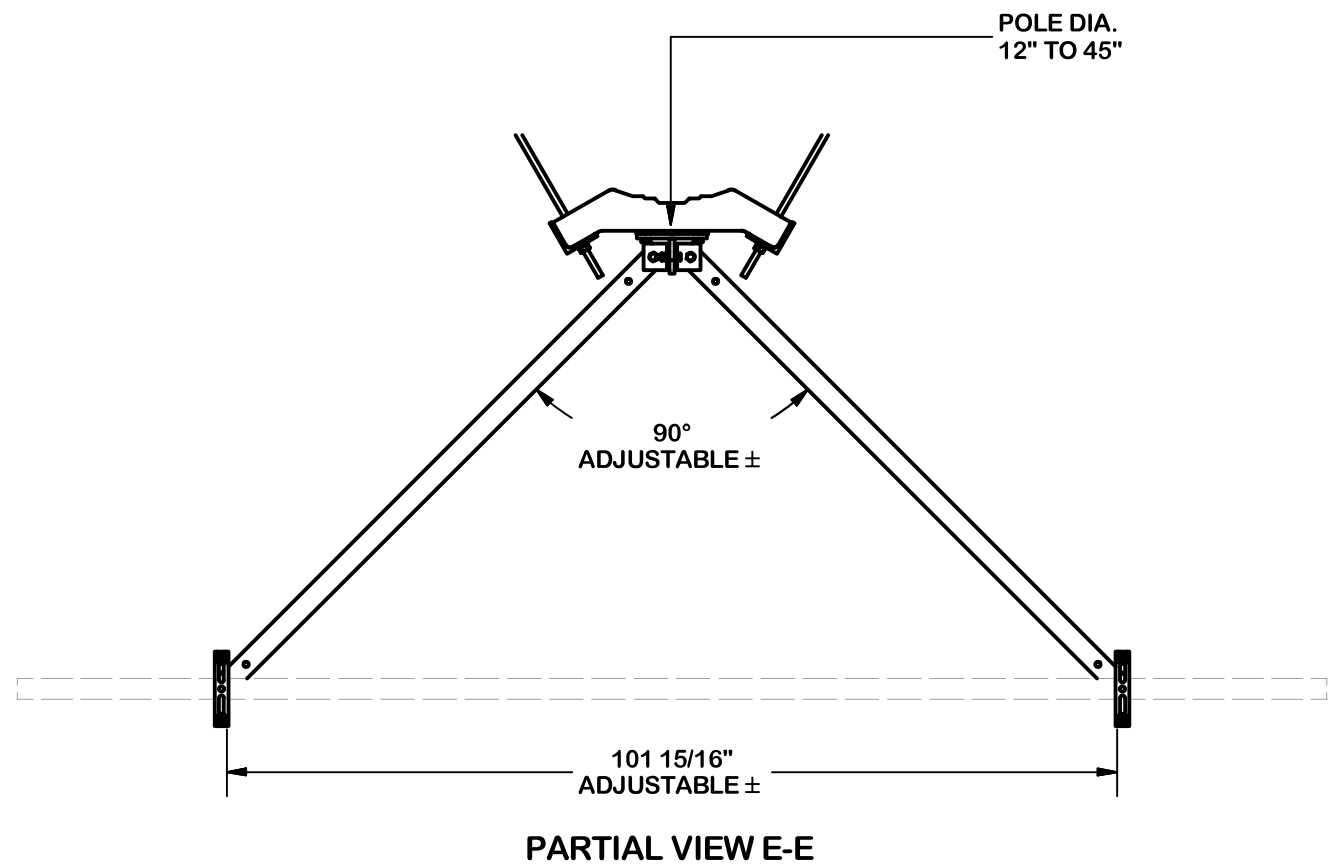
SITE PRO 1
 A valmont COMPANY

Engineering Support Team:
 1-888-753-7446

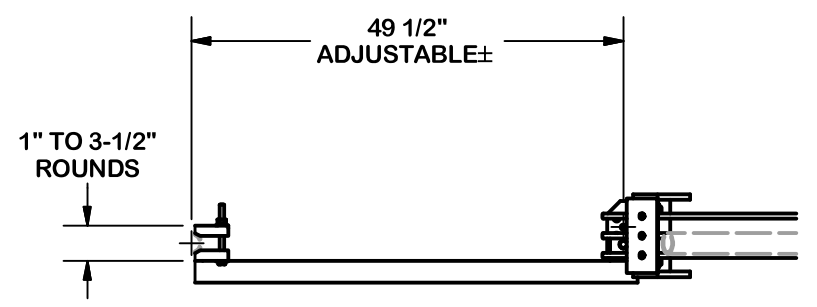
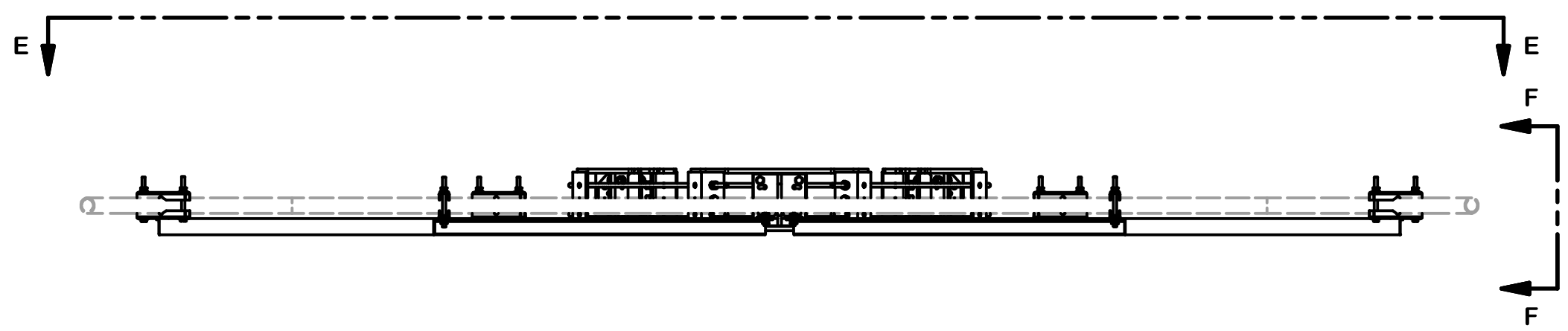
Locations:
 New York, NY
 Atlanta, GA
 Los Angeles, CA
 Plymouth, IN
 Salem, OR
 Dallas, TX

PART NO. PRK-SFS-L	PAGE 2 OF 3
DWG. NO. PRK-SFS-L	

REV	DESCRIPTION OF REVISIONS	CPD	BY	DATE
A	CHANGED MAX. DIA. FOR HANDRAIL CONNECTION	SP1	BC	10/25/2017
REVISION HISTORY				



HORIZONTAL POSITION



PARTIAL VIEW F-F

TOLERANCE NOTES
 TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE:
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DESCRIPTION
HANDRAIL REINFORCEMENT KIT (LONG)

SITE PRO 1
 A valmont COMPANY

Engineering Support Team:
 1-888-753-7446

Locations:
 New York, NY
 Atlanta, GA
 Los Angeles, CA
 Plymouth, IN
 Salem, OR
 Dallas, TX

REV	DESCRIPTION OF REVISIONS	CPD	BY	DATE
A	CHANGED MAX. DIA. FOR HANDRAIL CONNECTION	SP1	BC	10/25/2017
REVISION HISTORY				

CPD NO. SP1	DRAWN BY CSL3 2/23/2017	ENG. APPROVAL 3RD PARTY
CLASS 81	SUB 02	DRAWING USAGE SHOP
CHECKED BY BMC 9/8/2017		

PART NO. PRK-SFS-L	3 OF 3 PAGE
DWG. NO. PRK-SFS-L	

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STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@ct.gov

Web Site: portal.ct.gov/csc

VIA ELECTRONIC MAIL

May 3, 2021

Denise Sabo
Northeast Site Solutions
54 Main Street, Unit 3
Sturbridge, MA 01566

RE: **EM-AT&T-060-210407** – AT&T notice of intent to modify an existing telecommunications facility located at Long Hill Road (a/k/a 131 Manor Road), Guilford, Connecticut.

Dear Ms. Sabo:

The Connecticut Siting Council (Council) hereby acknowledges your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies with the following conditions:

1. Construction activities shall take place during daylight working hours consistent with the Condition No. 14 of the Council's Decision and Order in Docket No. 56;
2. Prior to AT&T's antenna installation, antenna mount modifications shall be installed in accordance with the Mount Analysis prepared by Power of Design Group, dated October 13, 2020 and stamped and signed by Jason Cheronis;
3. Within 45 days following completion of equipment installation, AT&T shall provide documentation certified by a Professional Engineer that its installation complied with the recommendations of the Mount Analysis;
4. Any deviation from the proposed modification as specified in this notice and supporting materials with the Council shall render this acknowledgement invalid;
5. Any material changes to this modification as proposed shall require the filing of a new notice with the Council;
6. The Council shall be notified in writing at least two weeks prior to the commencement of site construction activities;
7. Within 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;
8. Any nonfunctioning antenna and associated antenna mounting equipment on this facility owned and operated by AT&T shall be removed within 60 days of the date the antenna ceased to function;
9. The validity of this action shall expire one year from the date of this letter; and

10. The applicant may file a request for an extension of time beyond the one year deadline provided that such request is submitted to the Council not less than 60 days prior to the expiration.

The proposed modifications including the placement of all necessary equipment and shelters within the tower compound are to be implemented as specified here and in your notice dated April 5, 2021. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site by any dimension, increase noise levels at the tower site boundary by six decibels or more, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standards adopted by the Federal Communications Commission pursuant to Section 704 of the Telecommunications Act of 1996 and by the state Department of Energy and Environmental Protection pursuant to Connecticut General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below state and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Please be advised that the validity of this action shall expire one year from the date of this letter. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Thank you for your attention and cooperation.

Sincerely,

s/ Melanie A. Bachman

Melanie A. Bachman
Executive Director

MAB/IN/emr

c: The Honorable Matthew T. Hoey III, First Selectman, Town of Guilford
(hoeym@ci.guilford.ct.us)



Town of Guilford Building Department

50 Boston Street
Guilford, CT 06437
Phone 203-453-8029 Fax 203-453-8034

APPLICATION NO.

19639

PERMIT NO.

212911

Issue Date: 07/01/2021

Parcel ID	Location
6	131 MANOR RD
Subdivision Name	Subdivision Lot No.
R-3	GUILFORD

Owner Information

Name: BISHOP B W & SONS
Address: 1355 BOSTON POST RD
GUILFORD, CT 06437

Owner ID: 517689
Phone Number:
Email:

Contractor Information

Name: CROWN CASTLE USA
Address: 12 GILL ST, SUITE 5800
WOBURN, MA 01801

Phone Number: (781) 970-0053
Contractor ID: 1773
Email:

Estimated Cost of Construction: \$ 30,000

Total Fees Paid: \$ 490.80

Project Description: CELL TOWERS

Scope of Work:

ANTENNA UPGRADES

Permit Conditions:

KIMBERLY NORMAN-ROSEDAM - PERMIT CONDITIONS WHERE APPLICABLE:
ANTENNAS AND CELL TOWERS
PERMIT CONDITIONS:

Permit valid one year. Permit will expire if work is not started within six months from date of issuance. Upon written request and payment of \$20.00 fee, permit may be renewed for six months at the discretion of the Building Officials. Required building inspections are (1) Temporary Electric Service (2) Footing (3) Footing Drains (4) Damp Proofing (5) Rough Electrical, HVAC, Plumbing and Framing (6) Insulation (7) Permanent Electrical (8) Final. Engineering Department Inspections (Required for New Construction and Substantial Improvement) are (1) Driveway Sight Lines (2) Driveway Grading (3) Paved Driveway Aprons (4) Drainage Systems.

CALL (203) 453-8029 Monday - Friday 8:30AM - 4:30 PM to SCHEDULE INSPECTIONS. 24 HOUR ADVANCE NOTICE IS REQUIRED. There is a charge for Certificate of Occupancy.

PROPERTY OWNER IS RESPONSIBLE TO SCHEDULE A FINAL INSPECTION.

1. THIS PROJECT REQUIRES SPECIAL INSPECTIONS IN ACCORDANCE WITH SECTION 1704, CSBC, WHICH SHALL BE CONDUCTED BY AN ACCREDITED INSPECTION AGENCY OR APPROVED INDIVIDUAL (CT REGISTERED PROFESSIONAL ENGINEER) AS NOTED ON THE SUBMITTED AND APPROVED "STATEMENT OF SPECIAL INSPECTIONS"
 - a. SPECIAL INSPECTION REPORTS SHALL BE SUBMITTED DIRECTLY TO THIS OFFICE FROM THE AGENCY OR APPROVED INDIVIDUAL AS AVAILABLE.
 - b. SUBMISSION OF A FINAL REPORT DOCUMENTING REQUIRED INSPECTIONS AND CORRECTIONS OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS PRIOR TO CERTIFICATE OF OCCUPANCY

2. FIRE PROTECTION CONTRACTOR SHALL SUBMIT PRIOR TO COMMENCEMENT OF WORK DRAWINGS, UNDER SEAL FROM CT LICENSED LAYOUT TECHNICIAN, OF PROPOSED FM-200 WORK FOR REVIEW TO THE FIRE MARSHAL AND BUILDING DEPARTMENT FOR WORK IN NEWLY CONSTRUCTED AREAS.
 - a. SUBMIT "AS-BUILT" DRAWINGS OF FIRE PROTECTION WORK PRIOR TO FINAL INSPECTION.

3. PRIOR TO ISSUANCE OF A CERTIFICATE OF APPROVAL SUBMIT A LETTER BY THE ENGINEER OF RECORD, A NOTARIZED "STATEMENT OF COMPLIANCE" BEARING A SEAL OF A CONNECTICUT REGISTERED PROFESSIONAL, VERIFYING THAT ALL CONSTRUCTION AND REPAIRS PERFORMED UNDER THIS PERMIT HAS BEEN COMPLETED, INSPECTED AND APPROVED AS CONFORMING TO THE APPROVED CONSTRUCTION DOCUMENTS.