

CROWN CASTLE USA INC. SITE ACTIVITY REQUIREMENTS:

1. 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.
2. "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.
3. 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.
4. 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).
5. 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.
7. 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.
8. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
9. THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
10. 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.
11. ALL SITE WORK SHALL BE AS INDICATED ON THE STAMPED CONSTRUCTION DRAWINGS AND PROJECT SPECIFICATIONS. LATEST APPROVED REVISION.
12. 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.
13. 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.
14. 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.
15. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE CARRIER'S EQUIPMENT AND TOWER AREAS.
16. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
17. 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.
18. 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.
19. 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.
20. 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.
21. CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.
22. 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:

1. 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.
2. THE CONTRACTOR SHALL PERFORM IEEE FALL–OF–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.
3. 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.
4. 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.
5. 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.
6. 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.
7. 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.
8. ALL EXTERIOR GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING SHALL BE #2 SOLID TINNED COPPER UNLESS OTHERWISE INDICATED.
9. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
10. USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED.
11. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
12. ALL GROUND CONNECTIONS ABOVE GRADE (INTERIOR AND EXTERIOR) SHALL BE FORMED USING HIGH PRESS CRIMPS.
13. COMPRESSION GROUND CONNECTIONS MAY BE REPLACED BY EXOTHERMIC WELD CONNECTIONS.
14. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE TOWER GROUND BAR.
15. APPROVED ANTIOXIDANT COATINGS (I.E. CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
16. ALL EXTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.
17. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
18. BOND ALL METALLIC OBJECTS WITHIN 6 ft. OF MAIN GROUND RING WITH (1) #2 BARE SOLID TINNED COPPER GROUND CONDUCTOR.
19. 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.
20. 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).
21. 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 2/0 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:

1. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:
CONTRACTOR: GENERAL CONTRACTOR RESPONSIBLE FOR CONSTRUCTION
CARRIER: VERIZON
TOWER OWNER: CROWN CASTLE USA INC.
2. 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.
3. 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.
4. 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.
5. 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.
6. 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.
7. 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.
8. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
9. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
10. 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.
11. 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.
12. 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.
13. 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.
14. CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.

CONCRETE, FOUNDATIONS, AND REINFORCING STEEL:

1. 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.
2. UNLESS NOTED OTHERWISE, SOIL BEARING PRESSURE USED FOR DESIGN OF SLABS AND FOUNDATIONS IS ASSUMED TO BE 1000 psf.
3. 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°f AT TIME OF PLACEMENT.
4. 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.
5. 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
6. 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"
7. 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:

1. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES/ORDINANCES.
2. CONDUIT ROUTINGS ARE SCHEMATIC. CONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED AND TRIP HAZARDS ARE ELIMINATED.
3. WIRING, RACEWAY AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC.
4. 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.
5. 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.
6. 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).
7. PANEL BOARDS (ID NUMBERS) SHALL BE CLEARLY LABELED WITH PLASTIC LABELS.
8. ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.
9. 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.
10. 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.
11. POWER AND CONTROL WIRING IN FLEXIBLE CORD SHALL BE MULTI–CONDUCTOR, TYPE SOOW CORD (#14 OR LARGER) UNLESS OTHERWISE SPECIFIED.
12. POWER AND CONTROL WIRING FOR USE IN CABLE TRAY SHALL BE MULTI–CONDUCTOR, TYPE TO CABLE (#14 OR LARGER), WITH TYPE THHW, THWN, THWN–2, XHHW, XHHW–2, THW, THW–2, RHW, OR RHW–2 INSULATION UNLESS OTHERWISE SPECIFIED.
13. 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).
14. RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEC AND NEC.
15. ELECTRICAL METALLIC TUBING (EMT), INTERMEDIATE METAL CONDUIT (IMC), OR RIGID METAL CONDUIT (RMC) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.
16. ELECTRICAL METALLIC TUBING (EMT) OR METAL–CLAD CABLE (MC) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
17. SCHEDULE 40 PVC UNDERGROUND ON STRAIGHTS AND SCHEDULE 80 PVC FOR ALL ELBOWS/90s AND ALL APPROVED ABOVE GRADE PVC CONDUIT.
18. LIQUID–TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID–TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
19. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION–TYPE AND APPROVED FOR THE LOCATION USED. SET NEW FITTINGS ARE NOT ACCEPTABLE.
20. CABINETS, BOXES AND WIRE WAYS SHALL BE LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEC AND THE NEC.
21. WIREWAYS SHALL BE METAL WITH AN ENAMEL FINISH AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARDS (WIREMOLD SPECMATE WIREWAY).
22. SLOTTED WIRING DUCT SHALL BE PVC AND INCLUDE COVER (PANDUIT TYPE E OR EQUAL).
23. 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.
24. 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.
25. 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.
26. 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.
27. 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.
28. 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.
29. INSTALL LAMICOID LABEL ON THE METER CENTER TO SHOW "VERIZON".
30. 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
	GROUND	GREEN
120/208V, 3Ø	A PHASE	BLACK
	B PHASE	RED
	C PHASE	BLUE
	NEUTRAL	WHITE
277/480V, 3Ø	GROUND	GREEN
	A PHASE	BROWN
	B PHASE	ORANGE OR PURPLE
	C PHASE	YELLOW
DC VOLTAGE	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 PLANT
QTY	QUANTITY
RECT	RECTIFIER
RBS	RADIO BASE STATION
RET	REMOTE ELECTRIC TILT
RFDS	RADIO FREQUENCY DATA SHEET
RRH	REMOTE RADIO HEAD
RRU	REMOTE RADIO UNIT
SIAD	SMART INTEGRATED DEVICE
TMA	TOWER MOUNTED AMPLIFIER
TYP	TYPICAL
UMTS	UNIVERSAL MOBILE TELECOMMUNICATIONS SYSTEM
W.P.	WORK POINT

JURISDICTIONAL APPROVAL:



1825 W. WALNUT HILL LANE, SUITE 120
IRVING, TEXAS 75038

VERIZON SITE NUMBER: 16968208

BU #: 877803
KCYC LEES SUMMIT DT
207 SE DOUGLAS
LEE'S SUMMIT, MO 64063
EXISTING 180'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
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11	08/14/2024	RC	FINAL	AMT
12	09/19/2024	RC	FINAL	AMT



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SHEET NUMBER:

T-2

REVISION:

12



JOB SUMMARY

Customer: GEOLINE SURVEYING INC
Billing Address 13430 NW 104TH TERRACE
City ALACHUA
State FL
Zip 32615
Job Details
Jobsite Location City Lee's Summit
State Missouri
Zip
Work Order Number 588762-92726
Customer Service Phone Num
Job Num PO Num 877803
Project Manager: Jordan Liberty
Email: Jordan.Liberty@gprsinc.com

Thank you for using GPRS on your project. We appreciate the opportunity to work with you. If you have questions regarding the results of this scanning, please contact the lead GPRS technician on this project.

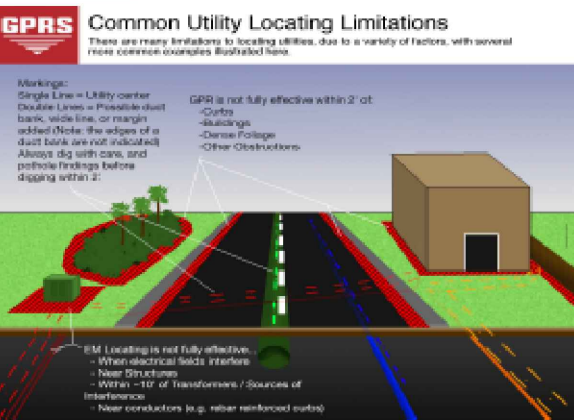
EQUIPMENT USED

The following equipment was used on this project:

- Underground GPR Antenna:** This GPR Antenna uses frequencies ranging from 250 MHz to 450 MHz and is mounted in a stroller frame that rolls over the surface. Data is displayed on a screen and marked in the field in real-time. The surface needs to be reasonably smooth and unobstructed to obtain readable scans. Obstructions such as curbs, landscaping, and vegetation will limit the efficacy of GPR. The total effective scan depth can be as much as 8' or more with this antenna but can vary widely depending on the soil conditions and composition. Some soil types, such as clay, may limit maximum depths to 3' or less. As depth increases, targets must be larger to be detected, and non-metallic targets can be challenging to locate. The depths provided should always be treated as estimates as their accuracy can be affected by multiple factors. For more information, please visit: [Link](#).
- EM Pipe Locator:** Electromagnetic Pipe and Cable Locator. Detects electromagnetic fields. Used to actively trace conductive pipes and tracer wires, or passively detect power and radio signals traveling along conductive pipes and utilities. For more information, please visit: [Link](#).
- GPS:** This handheld unit offers accuracy down to 4 inches; however, the accuracy achieved will depend on the satellite environment at the time of collection and is not considered survey-grade. Features can be collected as points, lines, or areas and then exported as a KML/KMZ or overlaid on a CAD drawing. For more information, please visit: [Link](#).



JOB SUMMARY



CONTACT / SIGNATURE INFORMATION

TERMS & CONDITIONS

<http://www.gprsinc.com/termsandconditions.html>

SIGNATURE

CONTACT NAME

ZACK WALL

386-418-0500



JOB SUMMARY

WORK PERFORMED

GPRS performed the following work on this project:

UNDERGROUND UTILITY

- The total area scanned was approximately 15000 square feet.
- The effective depth of GPR will vary throughout a site depending on a variety of factors such as surface type, surface conditions, soil type, and moisture content. At this site, the maximum effective GPR depth was approximately 2 feet.

RESULTS AND NOTES

Details on Unlocatable Utilities	On the north side of the generator there is a t in the gas line where the gas goes under ground and that line is unlocatable. There are 2 comm lines that come off the east pole and enter the complex and then stop locating. There was a sprint box in there and a man came out and talked to me said that soeing had come and out out a bunch of their wires.		
Client's Scope of Work	Locate utilities from cell tower to end point in right of ways.		
Additional Notes	Located gas, communication and electric. Please stay 2 feet off of marks.		
Located Utilities:	Electric, Communication, Natural Gas	Unlocatable Utility Types:	Communication, Natural Gas
Marking Medium:	Spray Paint, Flags	Client performed 811 Location Request:	No
Client Provided Drawings:	No	Findings Walkthrough done with client:	No : Client not on site

3D LASER SCANNING

BUILD AT THE SPEED OF INSIGHT

GPRS DELIVERS SINGULAR SOLUTIONS IN 3D TECHNOLOGY

GPRS intelligently Visualizes The built World™ above and below ground as the leading provider of accurate and creative 3D laser scanning solutions for the construction, architecture, and engineering industries.

3D laser scan technology is a cost-effective solution to your facility visualization needs. It can reduce and even eliminate costly errors to speed up your design, engineering, and construction process.

ABOVE AND BELOW GROUND DATA CAPTURE

The combination of laser scanning and ground penetrating radar allows you to visualize your facility effectively and accurately.

Our fully integrated service gives you accurate data to expedite design planning, accurate 3D measurements and accurate distances, along with the ability to markup and share the with project teams. Recolving critical site information will lower project risks and increase project efficiency.

What can GPRS help you visualize?

TRAINING
EQUIPMENT
METHODOLOGY

The use of proper training, multiple technologies and a field-proven methodology are the key to a successful utility locate. GPRS is a master of all three components through the utilization of the SIMSPEC.

SIMSPEC.ORG

SERVICES

UTILITY LOCATING

VIDEO PIPE INSPECTION

LEAK DETECTION

MAPPING & MODELING

CONCRETE IMAGING

1.866.914.4718

GPRSINC.COM

JURISDICTIONAL APPROVAL:



180 WASHINGTON VALLEY ROAD
BEDMINSTER, NJ 07921



1200 MACARTHUR BLVD, SUITE 200
MAHWAH, NJ 07430



1825 W. WALNUT HILL LANE, SUITE 120
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VERIZON SITE NUMBER: 16968208

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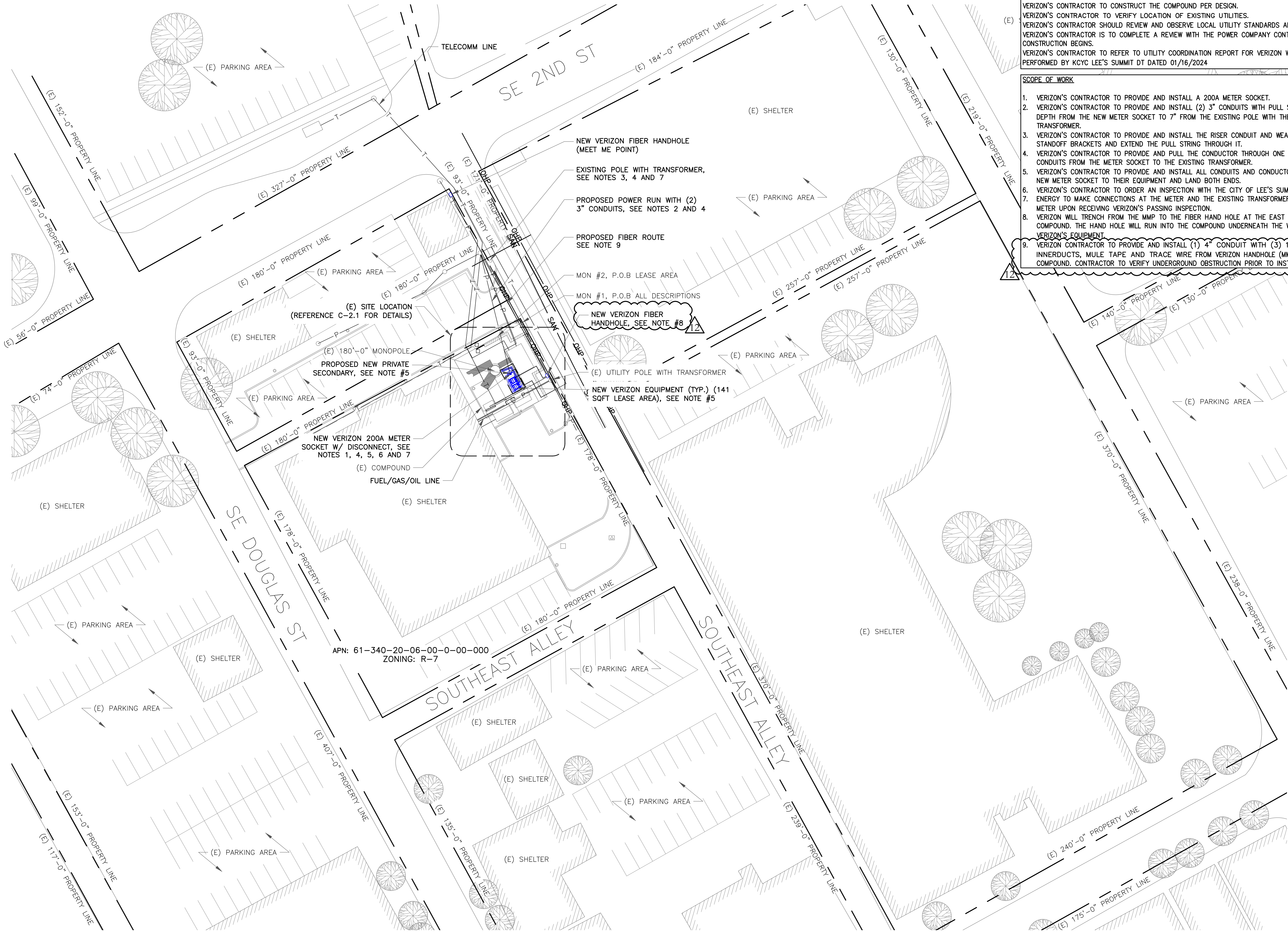
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SHEET NUMBER:

C-1

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12



GENERAL NOTES:

VERIZON'S CONTRACTOR TO CONSTRUCT THE COMPOUND PER DESIGN.

VERIZON'S CONTRACTOR TO VERIFY LOCATION OF EXISTING UTILITIES.

VERIZON'S CONTRACTOR SHOULD REVIEW AND OBSERVE LOCAL UTILITY STANDARDS AND GUIDELINES.

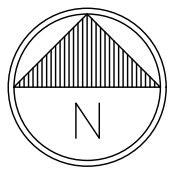
VERIZON'S CONTRACTOR IS TO COMPLETE A REVIEW WITH THE POWER COMPANY CONTACT BEFORE CONSTRUCTION BEGINS.

VERIZON'S CONTRACTOR TO REFER TO UTILITY COORDINATION REPORT FOR VERIZON WIRELESS PERFORMED BY KCYC LEE'S SUMMIT DT DATED 01/16/2024

- SCOPE OF WORK**
1. VERIZON'S CONTRACTOR TO PROVIDE AND INSTALL A 200A METER SOCKET.
 2. VERIZON'S CONTRACTOR TO PROVIDE AND INSTALL (2) 3" CONDUITS WITH PULL STRING AT 30" DEPTH FROM THE NEW METER SOCKET TO 7" FROM THE EXISTING POLE WITH THE TRANSFORMER.
 3. VERIZON'S CONTRACTOR TO PROVIDE AND INSTALL THE RISER CONDUIT AND WEATHER-HEAD ON STANDOFF BRACKETS AND EXTEND THE PULL STRING THROUGH IT.
 4. VERIZON'S CONTRACTOR TO PROVIDE AND PULL THE CONDUCTOR THROUGH ONE OF THE NEW 3" CONDUITS FROM THE METER SOCKET TO THE EXISTING TRANSFORMER.
 5. VERIZON'S CONTRACTOR TO PROVIDE AND INSTALL ALL CONDUITS AND CONDUCTORS FROM THE NEW METER SOCKET TO THEIR EQUIPMENT AND LAND BOTH ENDS.
 6. VERIZON'S CONTRACTOR TO ORDER AN INSPECTION WITH THE CITY OF LEE'S SUMMIT.
 7. ENERGY TO MAKE CONNECTIONS AT THE METER AND THE EXISTING TRANSFORMER AND SET THE METER UPON RECEIVING VERIZON'S PASSING INSPECTION.
 8. VERIZON WILL TRENCH FROM THE MMP TO THE FIBER HAND HOLE AT THE EAST OF THE COMPOUND. THE HAND HOLE WILL RUN INTO THE COMPOUND UNDERNEATH THE WALL TO VERIZON'S EQUIPMENT.
 9. VERIZON CONTRACTOR TO PROVIDE AND INSTALL (1) 4" CONDUIT WITH (3) 1" INNERDUCTS, MULE TAPE AND TRACE WIRE FROM VERIZON HANDHOLE (MMP) TO COMPOUND. CONTRACTOR TO VERIFY UNDERGROUND OBSTRUCTION PRIOR TO INSTALLATION.

1 OVERALL SITE PLAN

SCALE: 1"=30'-0" (FULL SIZE)
1"=60'-0" (11x17)



LEGEND	
— P —	ELECTRICAL
— G —	FUEL/GAS/OIL
— T —	TELECOMM
- - -	SCAN LIMIT

UTILITY GUIDANCE

BU: 877803
ORDER: 547366
RES: ROBERT ROSS

UTILITY GUIDANCE (NON DOCUMENTED): GROUND LEASE DOES NOT SPECIFY OUR UTILITY RIGHTS. WHEN INSTALLING THE UTILITIES PLEASE LOCATE AND FOLLOW EXISTING PATH. IF EXISTING PATH IS NOT AN OPTION, PLEASE NOTIFY CORE AS FURTHER COORDINATION MAY BE NEEDED.

JURISDICTIONAL APPROVAL:

verizon

180 WASHINGTON VALLEY ROAD
BEDMINSTER, NJ 07921

CROWN CASTLE

1200 MACARTHUR BLVD, SUITE 200
MAHWAH, NJ 07430



1825 W. WALNUT HILL LANE, SUITE 120
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VERIZON SITE NUMBER: 16968208

BU #: 877803
KCYC LEES SUMMIT DT
207 SE DOUGLAS
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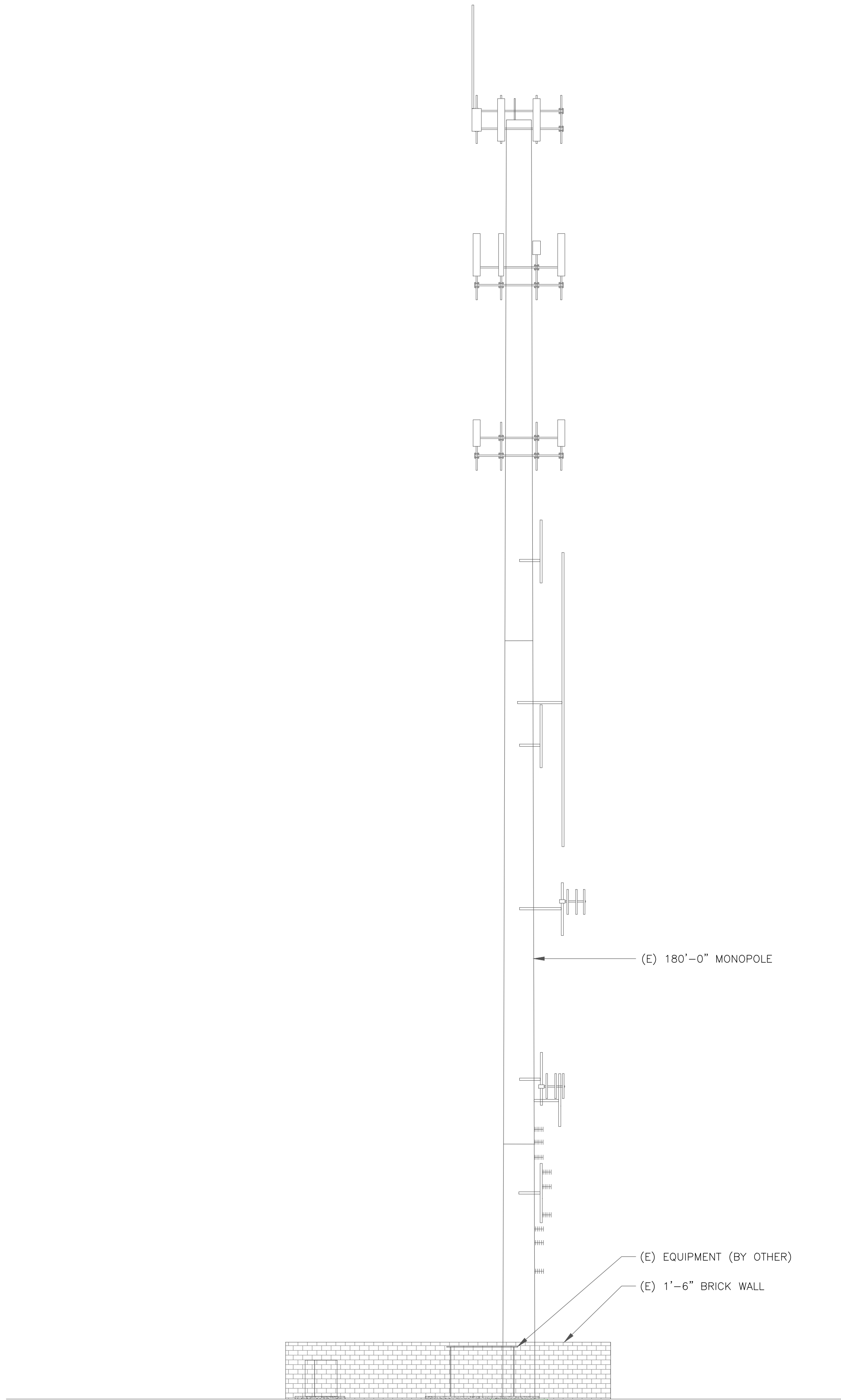
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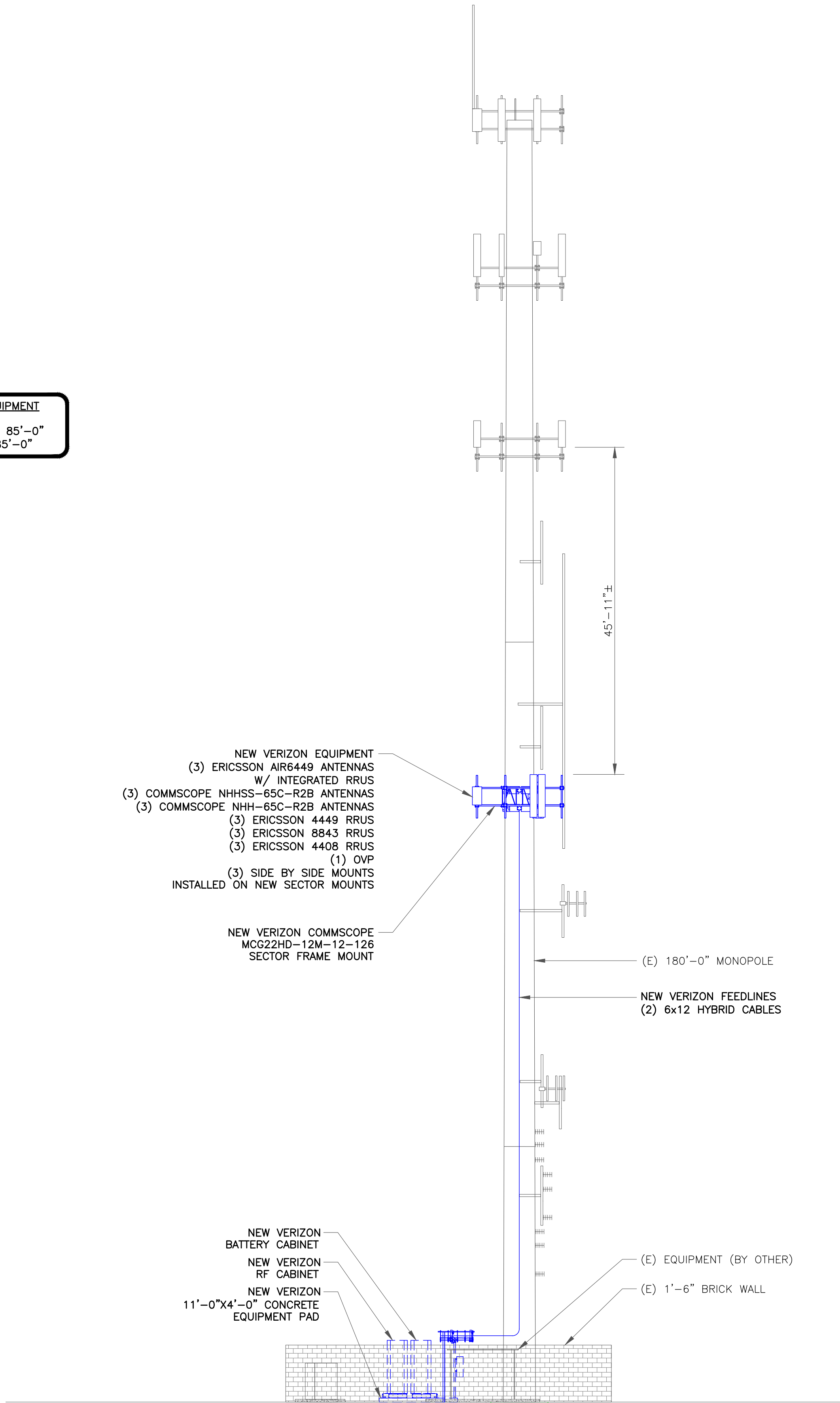
12



1 EXISTING SOUTHEAST ELEVATION
SCALE: NOT TO SCALE

VERIZON EQUIPMENT

ANTENNA CL: 85'-0"
MOUNT CL: 85'-0"



2 FINAL SOUTHEAST ELEVATION
SCALE: NOT TO SCALE

JURISDICTIONAL APPROVAL:

verizon

180 WASHINGTON VALLEY ROAD
BEDMINSTER, NJ 07921

**CROWN
CASTLE**

1200 MACARTHUR BLVD, SUITE 200
MAHWAH, NJ 07430

Trylon

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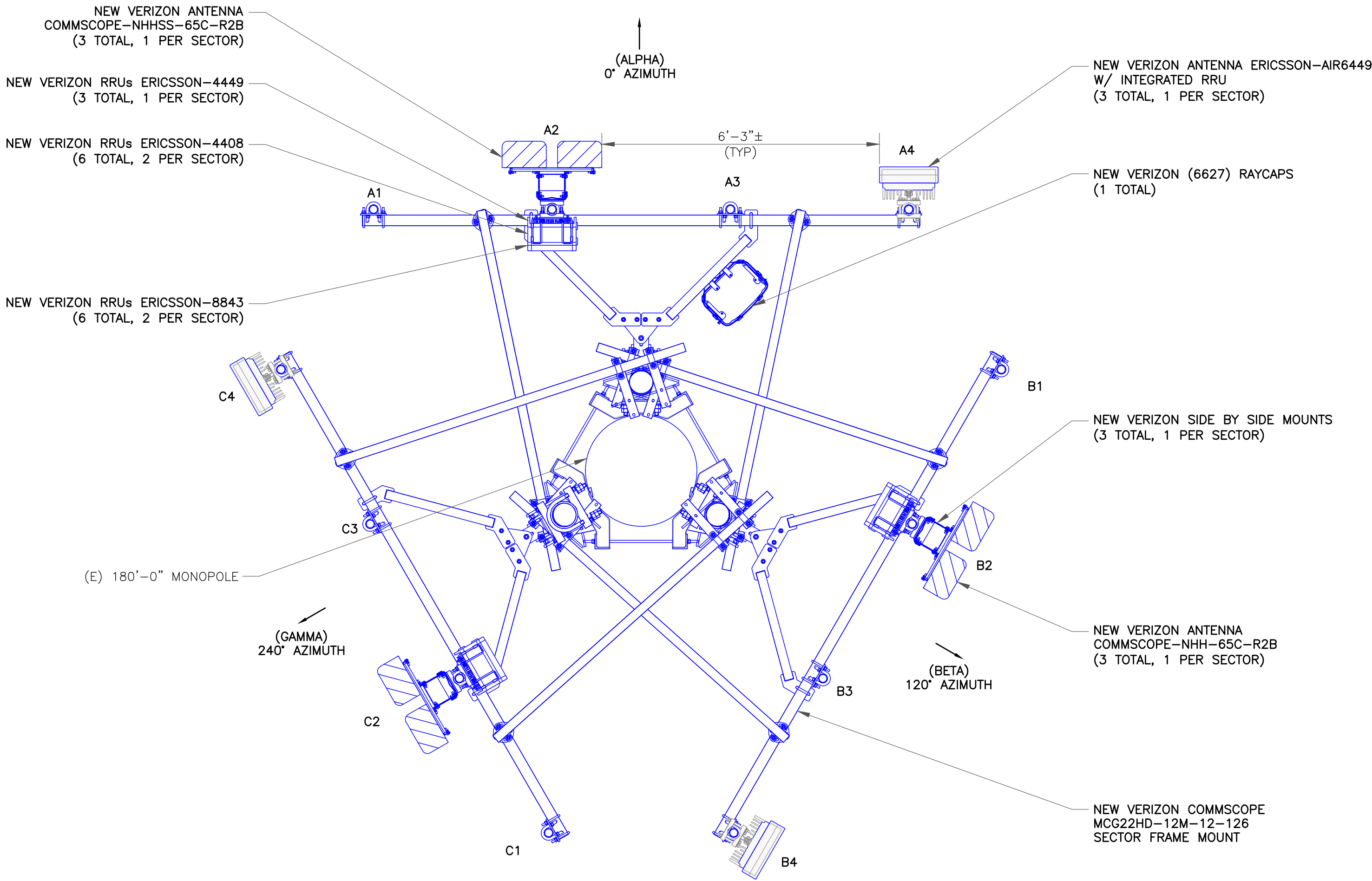
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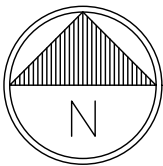
ANTENNA SCHEDULE										
SECTOR	POS.	TECHNOLOGY	RAD. CENTER	AZIMUTH	ANTENNA MANUFACTURER	ANTENNA MODEL	MECH. TILT	ELECT. TILT	TOWER MOUNTED EQUIPMENT	FEEDLINE TYPE
ALPHA	A1	—	—	—	—	—	—	—	—	—
ALPHA	A2	—	85'–0"	0°	JMA WIRELESS	NHHSS–65C–R2B NHH–65C–R2B	—	—	(1) ERICSSON – RADIO 4449 (1) ERICSSON – RADIO 4408 (1) ERICSSON – RRUS 8843	HYBRID
ALPHA	A3	—	—	—	—	—	—	—	—	—
ALPHA	A4	—	85'–0"	0°	ERICSSON	AIR6449	—	—	(1) INTEGRATED RRU	—
BETA	B1	—	—	—	—	—	—	—	—	—
BETA	B2	—	85'–0"	120°	JMA WIRELESS	NHHSS–65C–R2B NHH–65C–R2B	—	—	(1) ERICSSON – RADIO 4449 (1) ERICSSON – RADIO 4408 (1) ERICSSON – RRUS 8843 (1) OVP	HYBRID
BETA	B3	—	—	—	—	—	—	—	—	—
BETA	B4	—	85'–0"	120°	ERICSSON	AIR6449	—	—	(1) INTEGRATED RRU	—
GAMMA	C1	—	—	—	—	—	—	—	—	—
GAMMA	C2	—	85'–0"	240°	JMA WIRELESS	NHHSS–65C–R2B NHH–65C–R2B	—	—	(1) ERICSSON – RADIO 4449 (1) ERICSSON – RADIO 4408 (1) ERICSSON – RRUS 8843	HYBRID (SHARED)
GAMMA	C3	—	—	—	—	—	—	—	—	—
GAMMA	C4	—	85'–0"	240°	ERICSSON	AIR6449	—	—	(1) INTEGRATED RRU	—

CABLE SCHEDULE			
STATUS	CABLE TYPE	SIZE	QUANTITY
NEW	HYBRID	6x12	2
FINAL CABLE QUANTITY			2

1 ANTENNA AND CABLE SCHEDULE
SCALE: NOT TO SCALE



2 FINAL ANTENNA PLAN
SCALE: NOT TO SCALE



JURISDICTIONAL APPROVAL:



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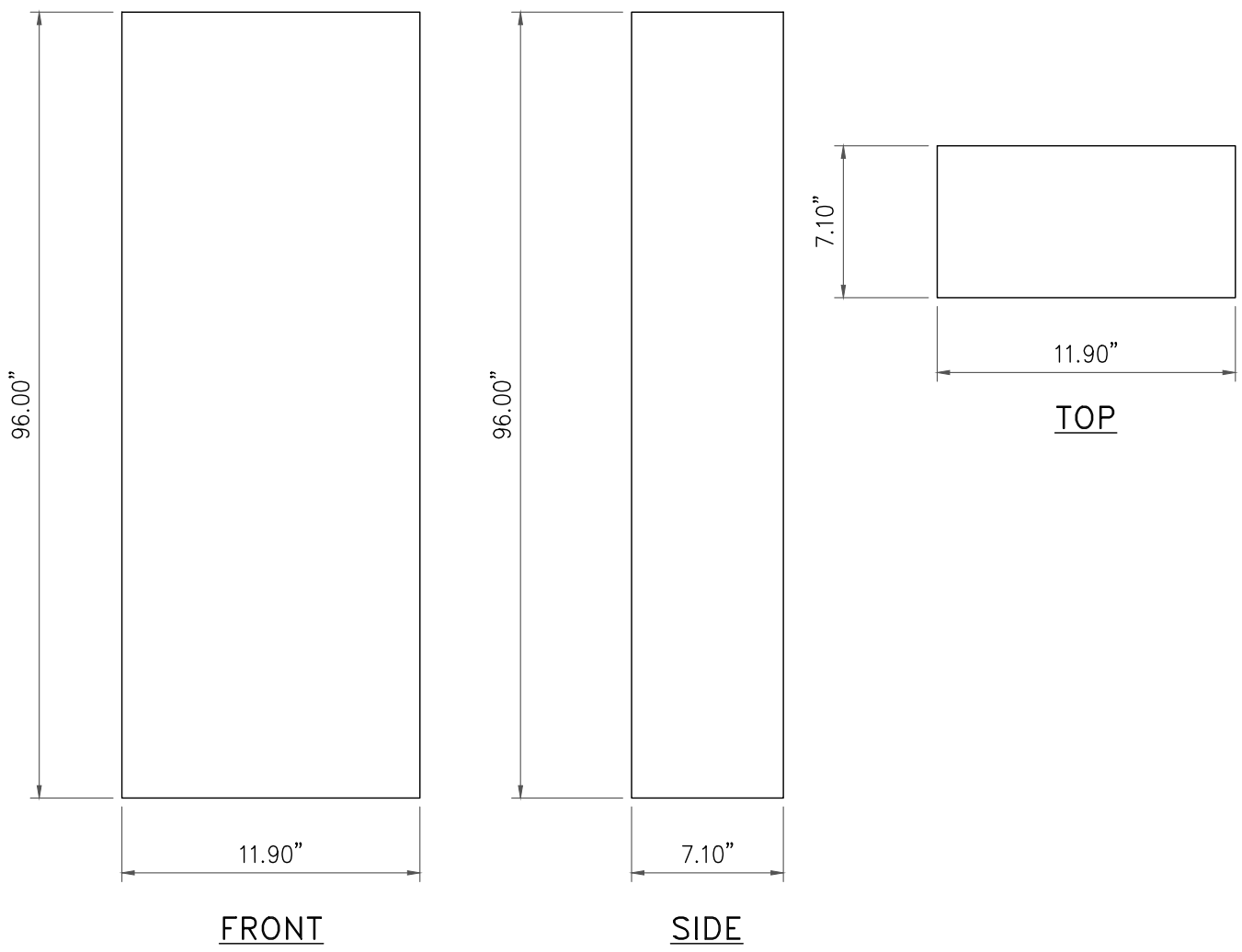
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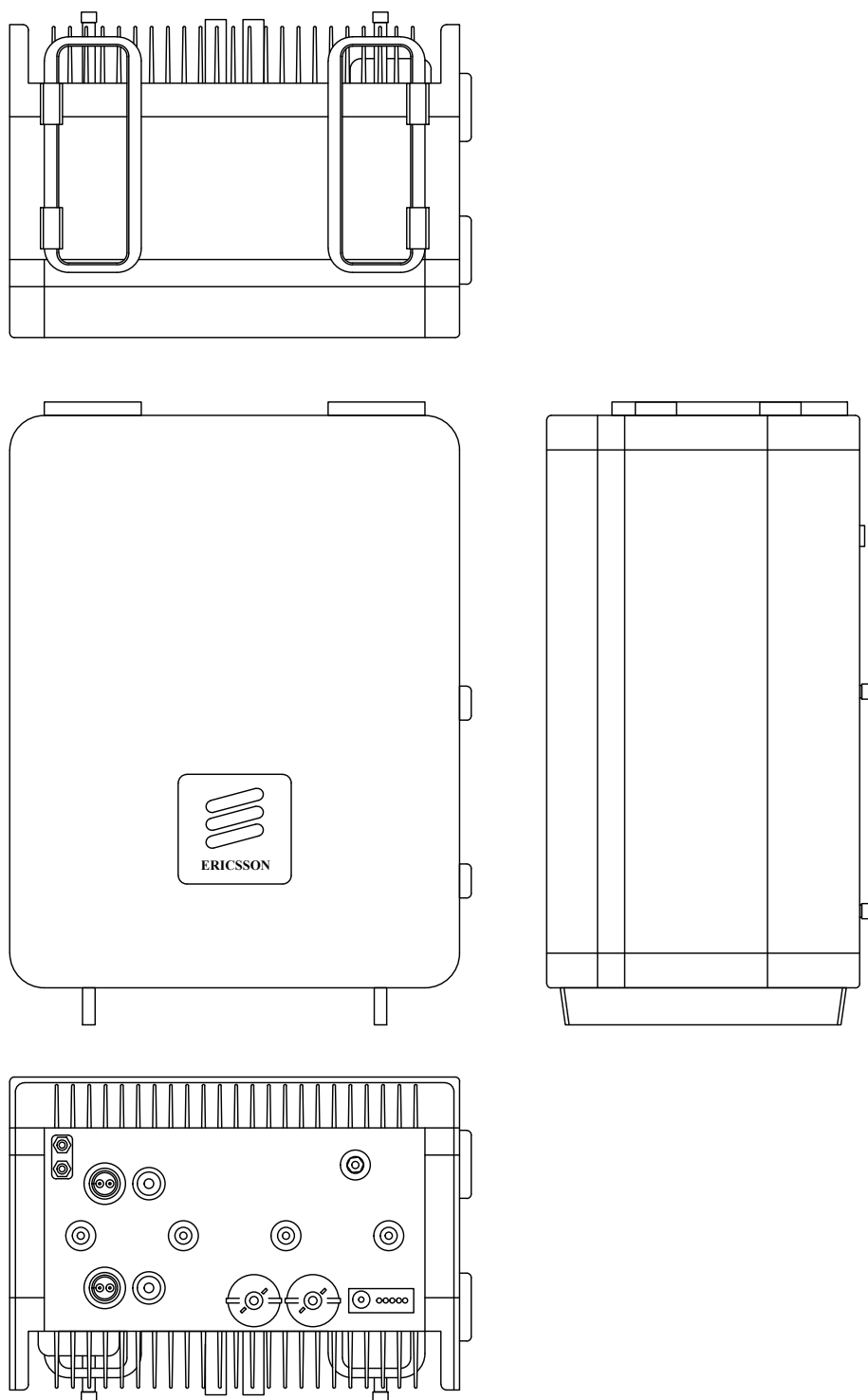
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PANEL ANTENNA (NHH-65C-R2B)

DIMENSIONS, HxWxD: 96.00"x11.90"x7.10"
WEIGHT, W/O BRACKETS: 51.60 lbs

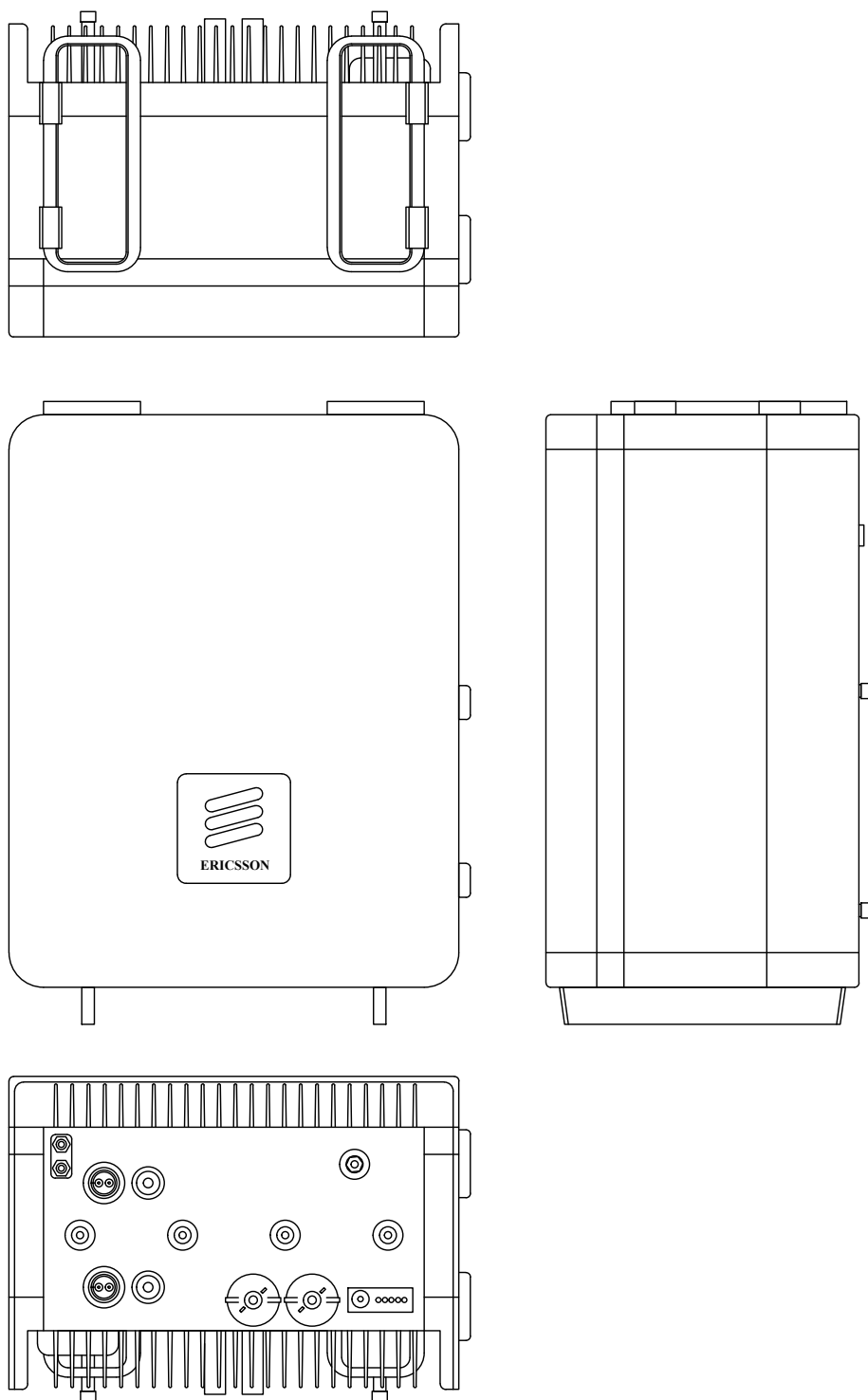


1 NHH-65C-R2B ANTENNA DETAIL
SCALE: NOT TO SCALE



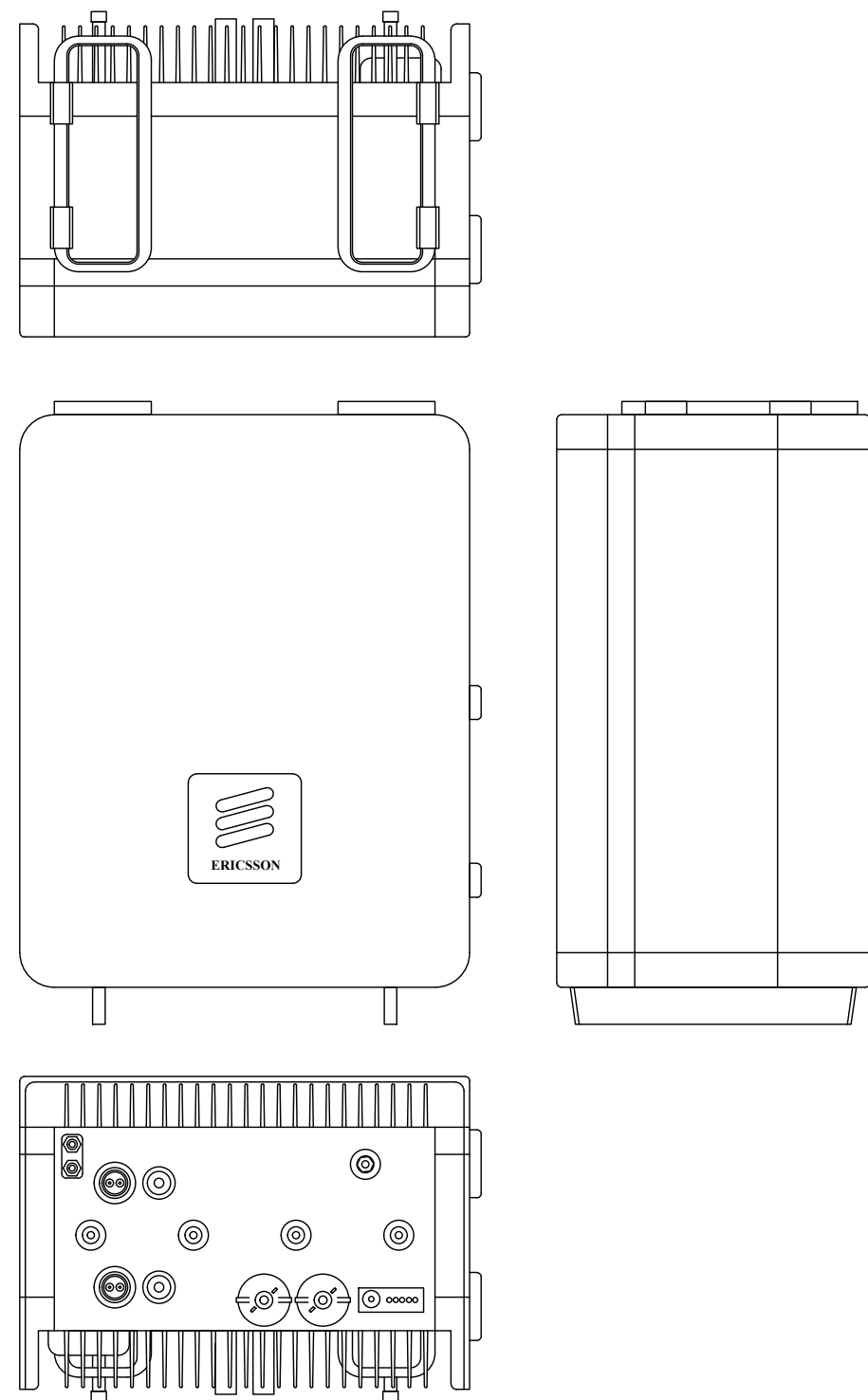
ERICSSON - RADIO 4449
WEIGHT: 70.0 LBS
SIZE (HxWxD): 18.0x13.2x9.4 IN.

2 ERICSSON - RADIO 4449 DETAIL
SCALE: NOT TO SCALE



ERICSSON - RADIO 8843
WEIGHT: 70.0 LBS
SIZE (HxWxD): 18.0x13.2x9.4 IN.

3 ERICSSON - RADIO 8843 DETAIL
SCALE: NOT TO SCALE

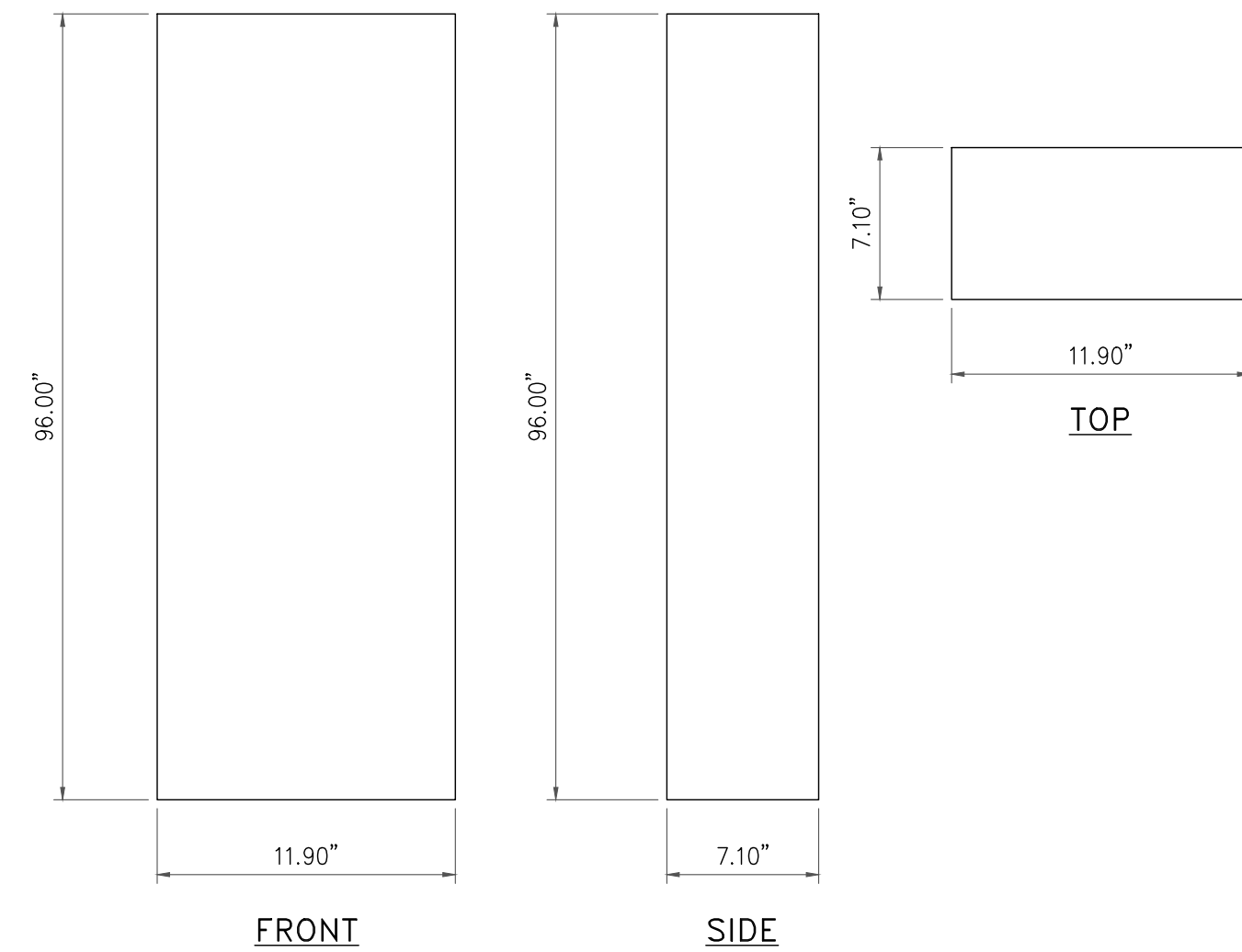


ERICSSON - RADIO 4408
WEIGHT: 10.14 LBS
SIZE (HxWxD): 8.41x7.88x4.13 IN.

4 ERICSSON - RADIO 4408 DETAIL
SCALE: NOT TO SCALE

PANEL ANTENNA (NHHSS-65C-R2B)

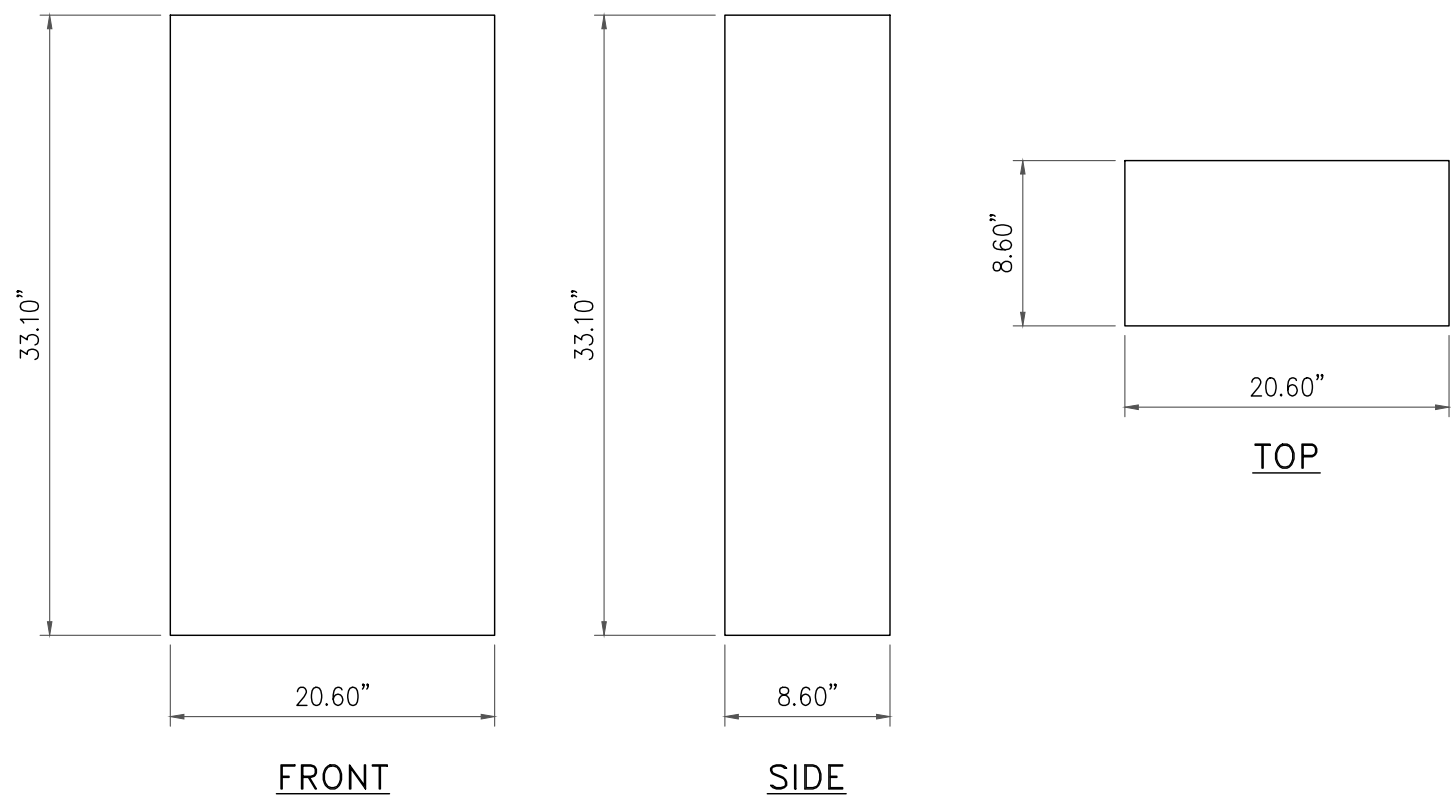
DIMENSIONS, HxWxD: 96.00"x11.90"x7.10"
WEIGHT, W/O BRACKETS: 69.70 lbs



5 NHHSS-65C-R2B ANTENNA DETAIL
SCALE: NOT TO SCALE

PANEL ANTENNA (AIR 6449)

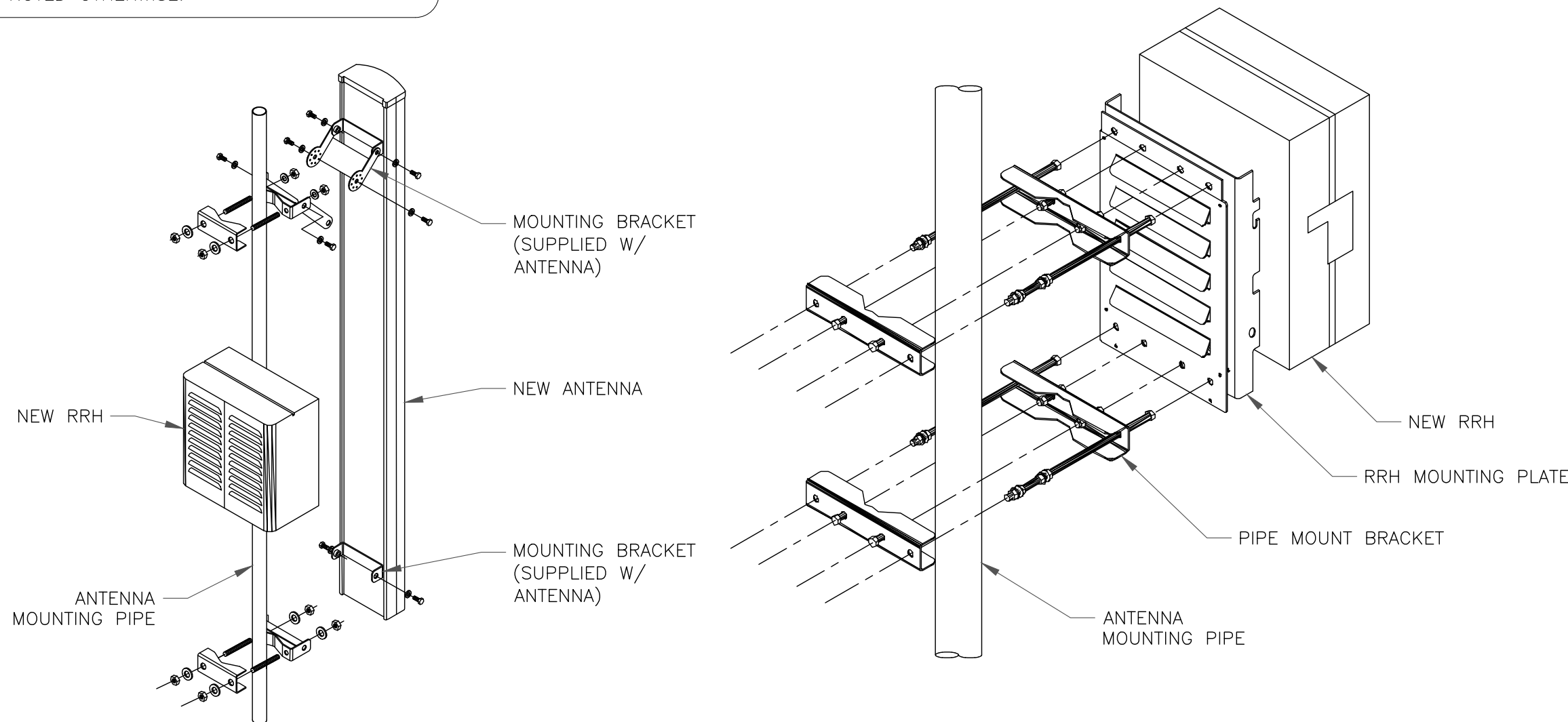
DIMENSIONS, HxWxD: 33.10"x20.60"x8.60"
WEIGHT, W/O BRACKETS: 104.0 lbs



6 AIR 6449 ANTENNA 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.



7 ANTENNA WITH RRH MOUNTING DETAIL
SCALE: NOT TO SCALE

JURISDICTIONAL APPROVAL:

verizon

180 WASHINGTON VALLEY ROAD
BEDMINSTER, NJ 07921

CROWN CASTLE

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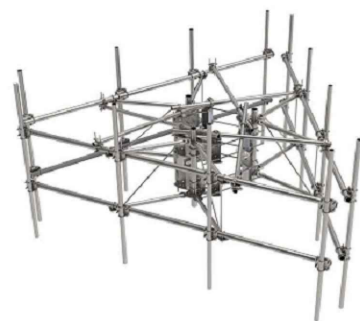
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MCG22HD-12M-12-126



G22HD High Capacity 3-Sector Monopole Frame with 2 7/8in OD x 12.5ft face. Includes twelve 2 3/8in OD x 126in antenna pipes

Product Classification

Product Type	High capacity monopole sector frame
Product Series	G2

General Specifications

Mounting	Monopole, 381–1270 mm (15–50 in) OD
Pipe, quantity	12
Sectors, quantity	3

Dimensions

Height	3,200.4 mm 126 in
Face Width	3.81 m 12.5 ft
Width	3,810 mm 150 in
Pipe Length	3,200.4 mm 126 in
Face Support Pipe Diameter	73.025 mm 2.875 in
Mounting Diameter, maximum	1270 mm 50 in
Mounting Diameter, minimum	381 mm 15 in
Pipe Outer Diameter	60.325 mm 2.375 in
Stand-off Distance	1,041.4 mm 41 in

Material Specifications

Material Type	Hot dip galvanized steel
---------------	--------------------------

Mechanical Specifications

Wind Rating	For Specifications, please contact steelproducts@commscope.com or call 800-255-1479
Wind Rating Test Method	TIA/EIA-222

MCG22HD-12M-12-126

Environmental Specifications

Man Rating	500 lb vertical man load at 15 mph (BWS)
------------	--

Packaging and Weights

Included	Pipe mounts Plain end pipes (12) Ring mounts (2) Sector frames (3) Stiff arm
Packaging quantity	1

* Footnotes

Wind Rating	BWS—Base Wind Speed; FBC—Florida Building Code
Man Rating	BWS—Base Wind Speed

JURISDICTIONAL APPROVAL:



180 WASHINGTON VALLEY ROAD
BEDMINSTER, NJ 07921



1200 MACARTHUR BLVD, SUITE 200
MAHWAH, NJ 07430



1825 W. WALNUT HILL LANE, SUITE 120
IRVING, TEXAS 75038

VERIZON SITE NUMBER: 16968208

BU #: 877803
KCYC LEES SUMMIT DT
207 SE DOUGLAS
LEE'S SUMMIT, MO 64063
EXISTING 180'-0" MONOPOLE

ISSUED FOR:				
REV	DATE	DRWN	DESCRIPTION	DES./QA
1	06/21/2023	RC	FINAL	EAN
2	07/27/2023	RC	FINAL	AMT
3	09/18/2023	TFL	FINAL	AMT
4	10/17/2023	RC	FINAL	AMT
5	01/09/2024	TFL	FINAL	AMT
6	01/23/2024	RC	FINAL	AMT
7	03/29/2024	RC	FINAL	AMT
8	04/05/2024	RC	FINAL	AMT
9	04/19/2024	RC	FINAL	AMT
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11	08/14/2024	RC	FINAL	AMT
12	09/19/2024	RC	FINAL	AMT



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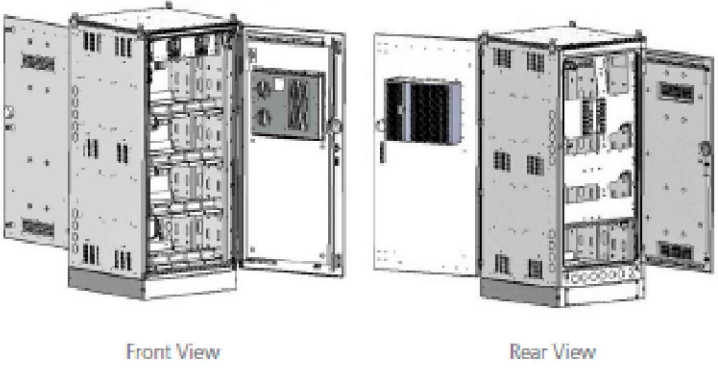
SHEET NUMBER:

C-6

REVISION:

12

Model 760250540



- Cabinet Features**
- Dimensions**
- Overall 74" H x 43.7" D x 36" W (standard height, depth with air conditioner)
- With Optional 6" Plinth – 80" H x 43.7" D x 36" W (depth with air conditioner)
 - Footprint – 37" D x 36" W (depth without air conditioner)
- Weight:** 1060 lbs. (481 kg) –for 6-String Cabinet
- Weight: as Shipped:** 1237 lbs. (561 kg)
- Note: Cabinet Weights are without Plinth (112.4 lbs. [51 kg])
- Battery Compartment**
- 1 kW HVAC with 500 W Heater, DC*
 - 4 Battery Shelves, 6-String Capacity of 24 HT200 Ah VRLA Batteries
 - Master Circuit Breaker String Panel with 6 each 250-amp String Circuit Breaker Switches
 - Battery Cabling and the 250A Circuit Breakers Included
 - CommScope Battery Bus Bar Assembly
 - Connection Point for Battery Cabling to the Power Cabinet
 - Maximum Cable Size of 4.0 AWG from Battery to Power Cabinet
 - Cabinet Light
 - Hinged Rear Access Door with Upper and Lower Vents
 - Knockouts on Left and Right Sides, Rear
 - Top and Side Solar Shields
 - Side Shield Fits Left and Right Sides, Pending Cabinet Site Orientation (one cabinet side shield only)
 - Integrated Puck Lock System Intrusion Prevention, Front and Rear Doors
 - Cabinet can use both Electronic and Standard Keyed Puck Locks

CMC Cabinet Ordering Information

PeopleSoft Part #	Description
760250540	CMC74-36B, VRLA Battery Cabinet, 6-String, 1 kW HVAC with 500 W Heater, DC

Field Replacement Units and Aftermarket Kits

PeopleSoft Part #	Description
Field Replacement Units (FRUs)	
760250922	Handle, Front Door
760250925	1 kW HVAC with 500 W Heater, DC
760250928	Circuit Breaker, Battery String, 250 A
760250958	Front Door Assembly, with 1 kW HVAC with 500 W Heater, DC
760253587	Rear Door Assembly, CMC74-36B
760250961	Solar Shield, Side
760250927	Solar Shield, Top
Aftermarket Kits (AMKs)	
760246443	Interconnect, 3PR, 4/0, 2", CMC74-36B
760250933	6" High Plinth, Cabinet Mounting

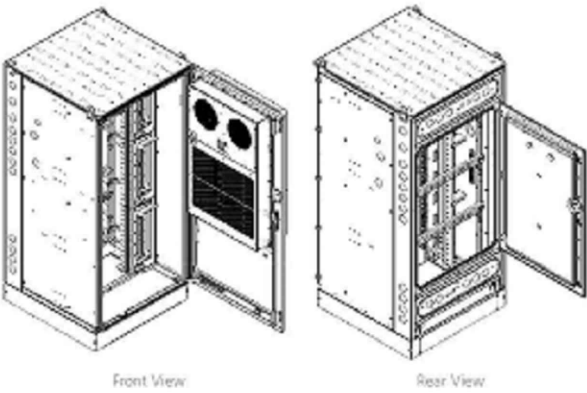
NOTE: The CommScope Part # and Verizon Wireless PeopleSoft #s are the same.

Telcordia GR-487 Compliant
Safety Agency Listed

* Hardened Equipment to -40° C to +65° C

1 BATTERY CABINET DETAIL
SCALE: NOT TO SCALE

Model 760250058



- Cabinet Features**
- Dimensions**
- Overall 74" H x 43.7" D x 36" W (standard height, depth with air conditioner)
- With Optional 6" Plinth – 80" H x 43.7" D x 36" W (depth with air conditioner)
 - Footprint – 37" D x 36" W (depth without air conditioner)
- Weight:** 525 lbs. (238 kg)
- Weight: as Shipped:** 701 lbs. (318 kg)
- Note: Cabinet Weights are without Plinth (112.4 lbs. [51 kg])
- Equipment Compartment**
- 4 kW Air Conditioner, DC*
 - Adjustable Equipment Rack System, Up to 48 RU
 - Up to 40 RU of 23" EIA Horizontal Rack Space
 - Up to 9 RU of 19" EIA Vertical Rack Space
 - OVP Vertical Side Mounting Options
 - Allows more Horizontal Rack Space for Equipment
 - Cabinet Light
 - 4-Position GFCI Outlet
 - Hinged Rear Access Door
 - Two Interchangeable Rear Port Panels
 - Cabinet Ships with One Conduit Knockout Panel and One Blank Panel
 - Knockouts on Left and Right Sides, Rear
 - Solar Shield, Top
 - Integrated Puck Lock System Intrusion Prevention, Front and Rear Doors
 - Cabinet can use both Electronic and Standard Keyed Puck Locks

CMC Cabinet Ordering Information

PeopleSoft Part #	Description
760250058	CMC74-36E, Equipment Cabinet, 4 kW Air Conditioner, DC

Field Replacement Units and Aftermarket Kits

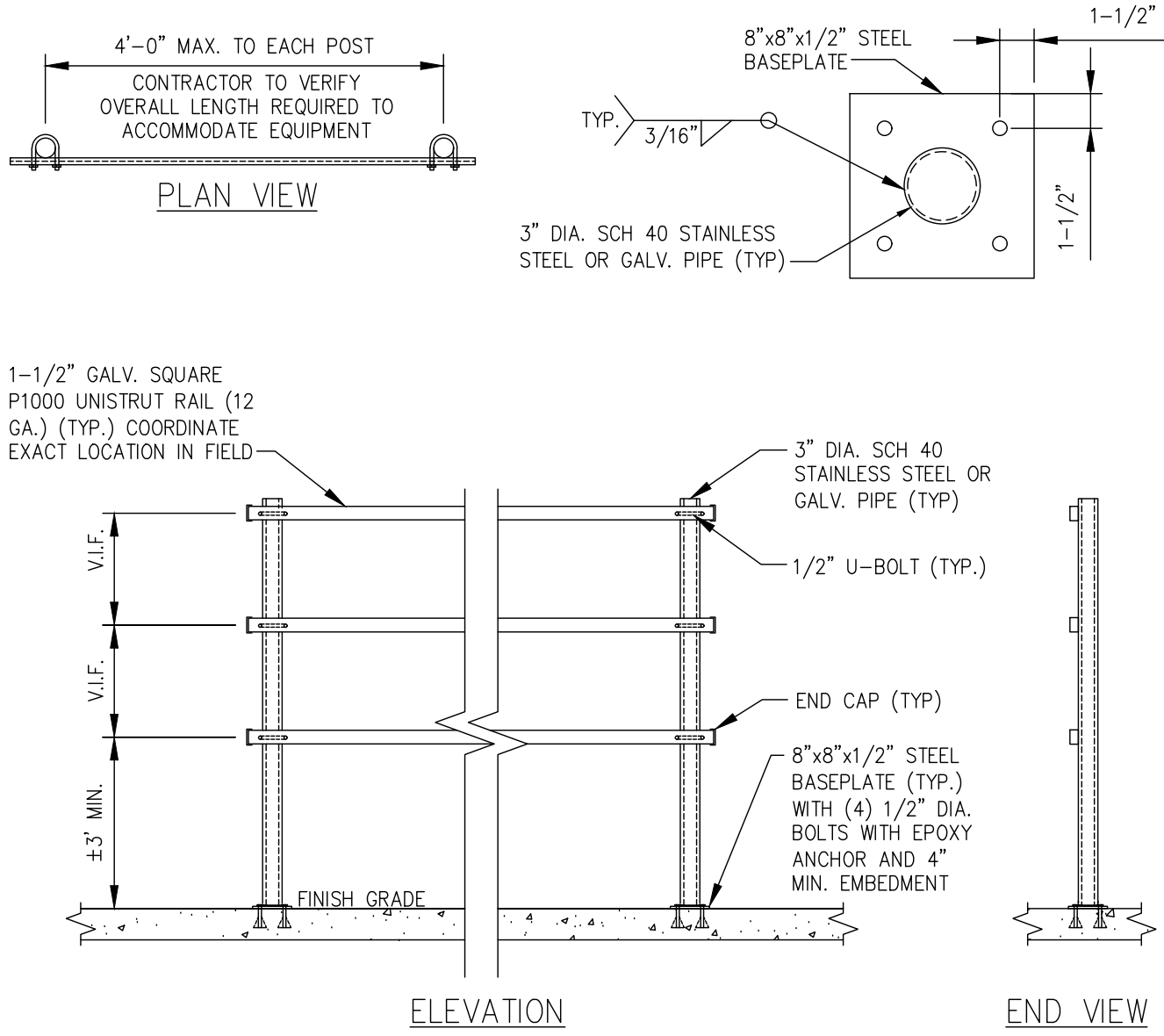
PeopleSoft Part #	Description
Field Replacement Units (FRUs)	
760250972	Front Door Assembly, 4kW Air Conditioner, CMC74-36E
760250922	Handle, Front Door
760250980	Rear Door Assembly
760250935	4 kW Air Conditioner, DC
760250926	Interchangeable Conduit Panel, Rear
760250927	Solar Shield, Top
Aftermarket Kits (AMKs)	
760246443	Interconnect, 3PR, 4/0, 2", CMC74-E
760250933	6" High Plinth, Cabinet Mounting

NOTE: The CommScope Part # and Verizon Wireless PeopleSoft #s are the same.

Telcordia GR-487 Compliant
Safety Agency Listed

* Hardened Equipment to -40° C to +65° C

2 RF CABINET DETAIL
SCALE: NOT TO SCALE



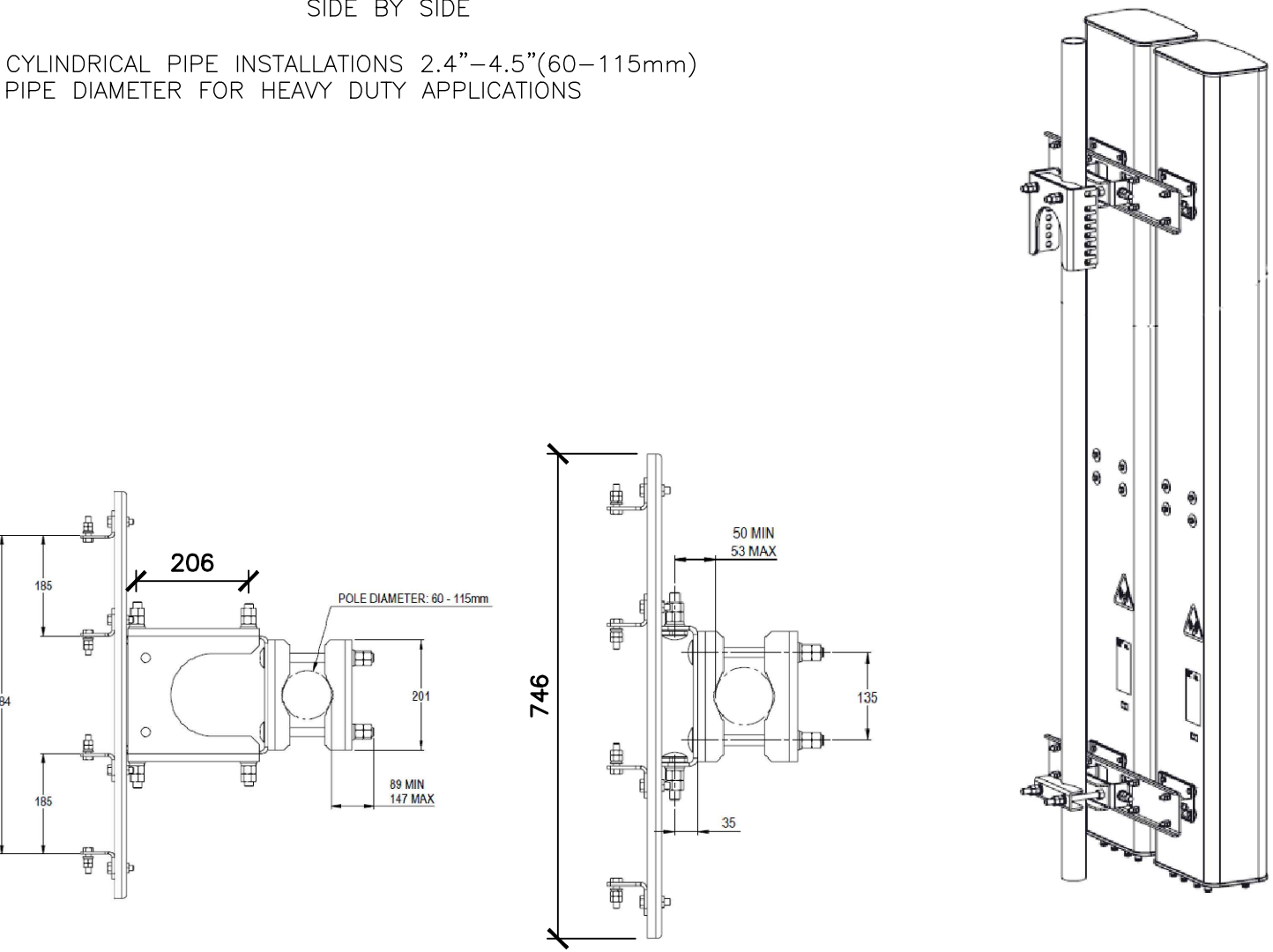
3 VERIZON H-FRAME DETAIL
SCALE: NOT TO SCALE

COMMScope SIDE BY SIDE MOUNTING KIT
(OR APPROVED, EQUAL):
639845-1 BSAMNT-SBS-2-2

DIMENSIONS HxW (mm): 5.20"(132) x 29.37"(746)

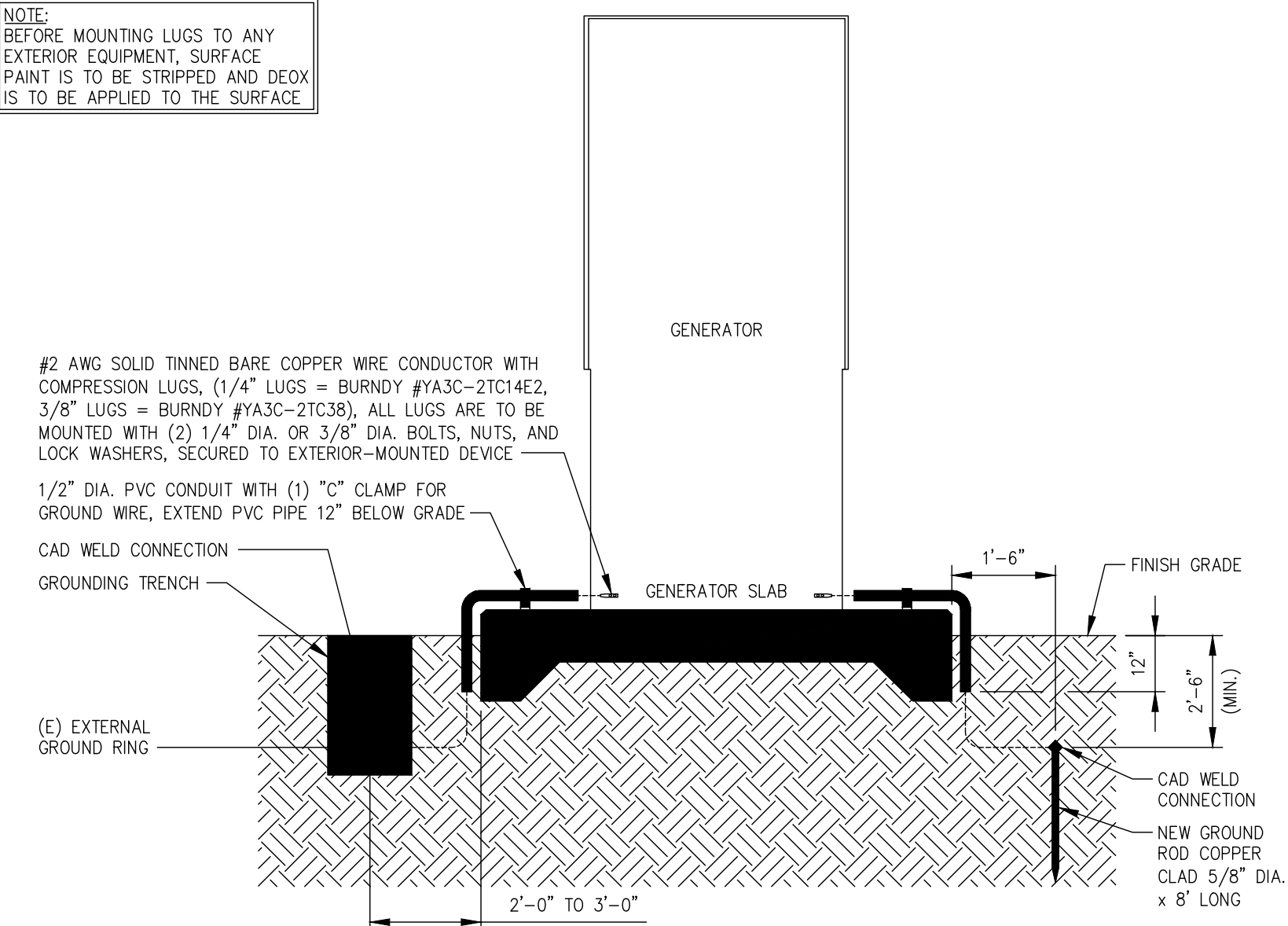
MOUNTING: ALLOWS MOUNTING EITHER (2) 350mm OR (2) 457mm WIDE ANTENNAS WITH 2 MOUNT POINTS SIDE BY SIDE

CYLINDRICAL PIPE INSTALLATIONS 2.4"-4.5"(60-115mm)
PIPE DIAMETER FOR HEAVY DUTY APPLICATIONS

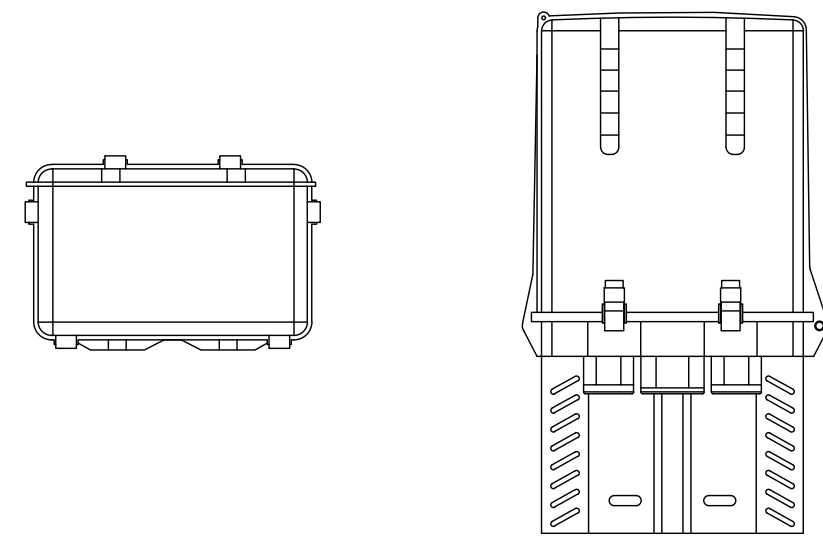


4 NOT USED
SCALE: NOT TO SCALE

NOTE:
BEFORE MOUNTING LUGS TO ANY
EXTERIOR EQUIPMENT, SURFACE
PAINT IS TO BE STRIPPED AND DEOX
IS TO BE APPLIED TO THE SURFACE



5 GENERATOR GROUNDING DETAIL (TYPICAL)
SCALE: NOT TO SCALE



RAYCAP – RCMDC-3315-PF-48
WEIGHT (WITHOUT MOUNTING HARDWARE): 32.0 LBS
SIZE (HxWxD): 25.66x15.73x10.26 IN.
RATED WIND VELOCITY: 150 MPH (SUSTAINED)
OPERATING TEMPERATURE: -40° C TO +80° C
NOMINAL OPERATING DC VOLTAGE: 48 VDC

6 RAYCAP – RCMDC-3315-PF-48
SCALE: NOT TO SCALE

JURISDICTIONAL APPROVAL:



VERIZON SITE NUMBER: 16968208

BU #: 877803
KCYC LEES SUMMIT DT
207 SE DOUGLAS
LEE'S SUMMIT, MO 64063
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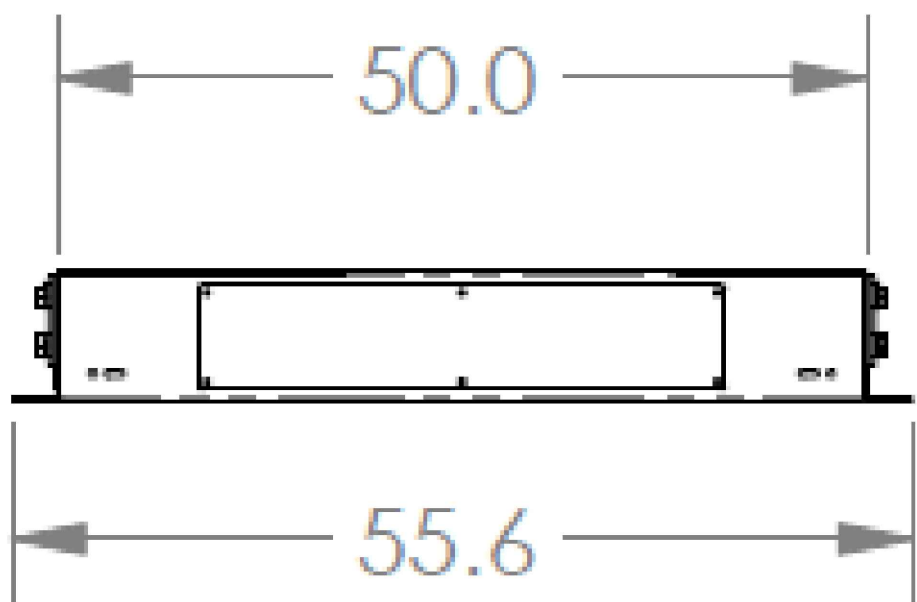
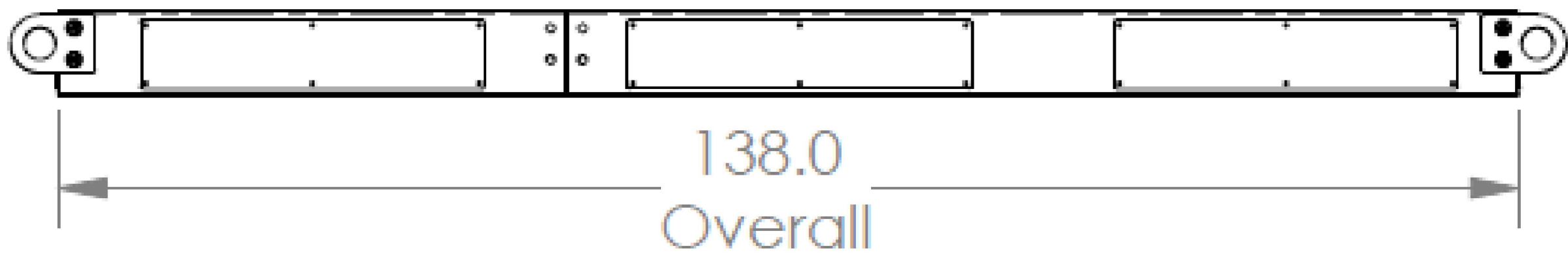
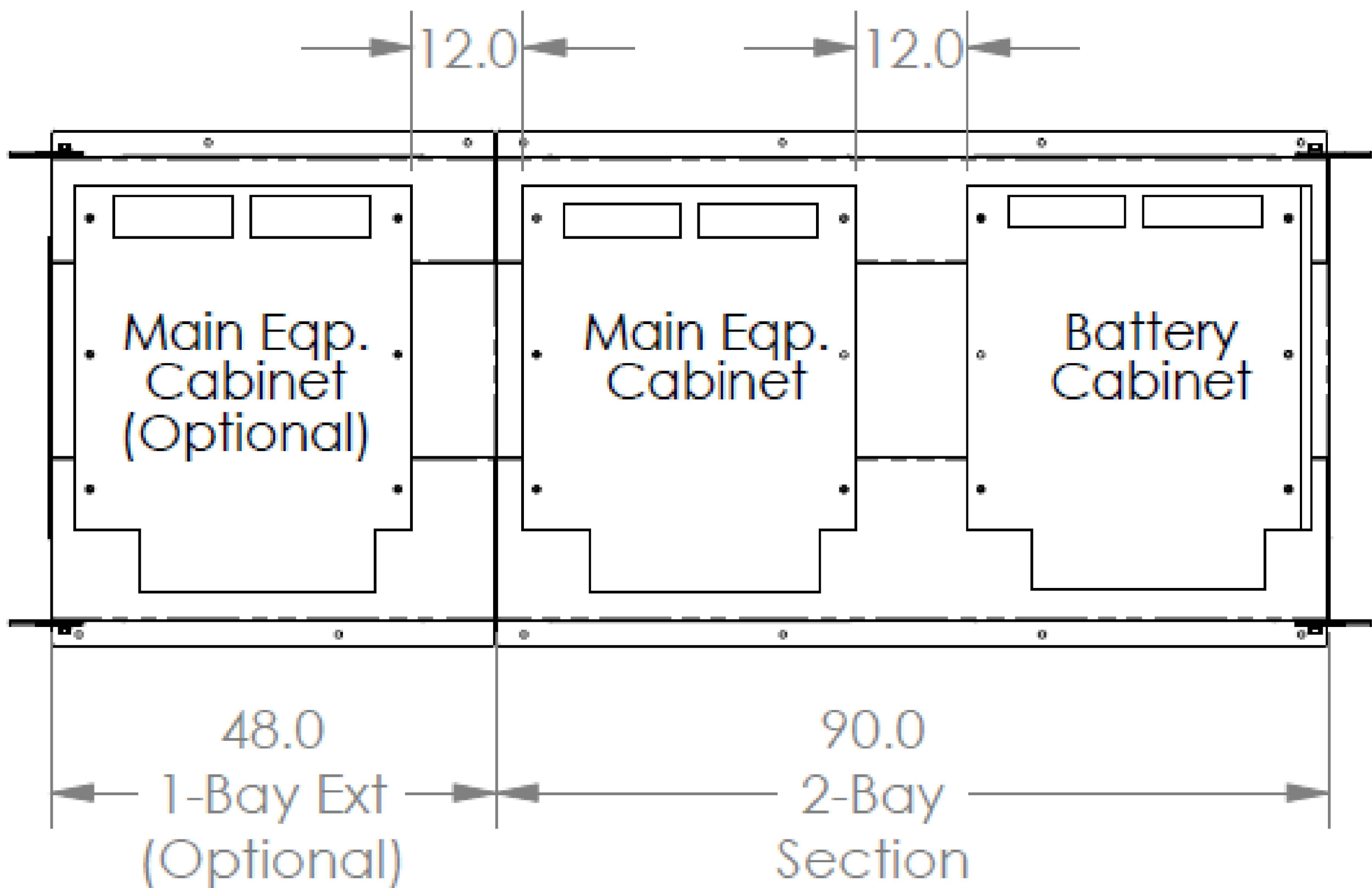
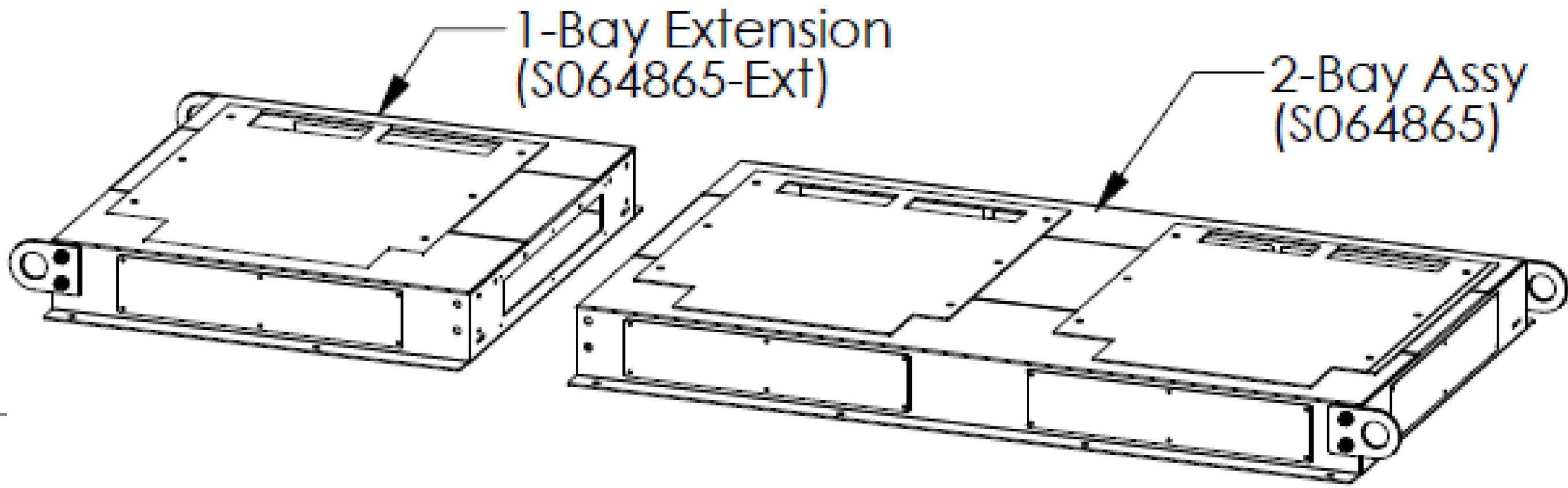


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REVISION: 12

NOTE:
-Part Number **S064865** contains the 2 Bay Assy
-Part Number **S064865-EXT** contains the 2 Bay Assy
PLUS the 1-Bay Extension

NAME: Commscope Plinth w/ Extension Assy
DWG: S064865-Ext
MDT 2/23/2021



JURISDICTIONAL APPROVAL:

verizon
180 WASHINGTON VALLEY ROAD
BEDMINSTER, NJ 07921

CROWN CASTLE
1200 MACARTHUR BLVD, SUITE 200
MAHWAH, NJ 07430

Trylon

1825 W. WALNUT HILL LANE, SUITE 120
IRVING, TEXAS 75038

VERIZON SITE NUMBER: 16968208

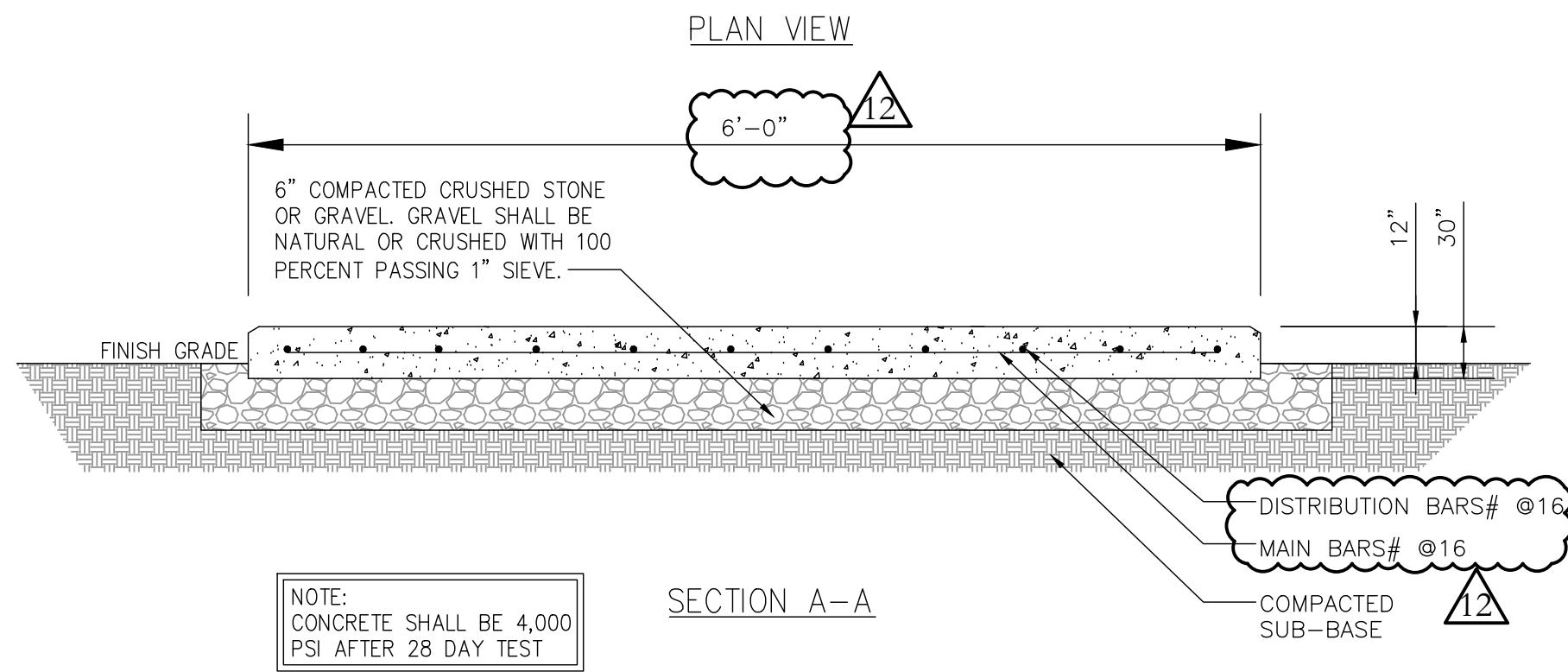
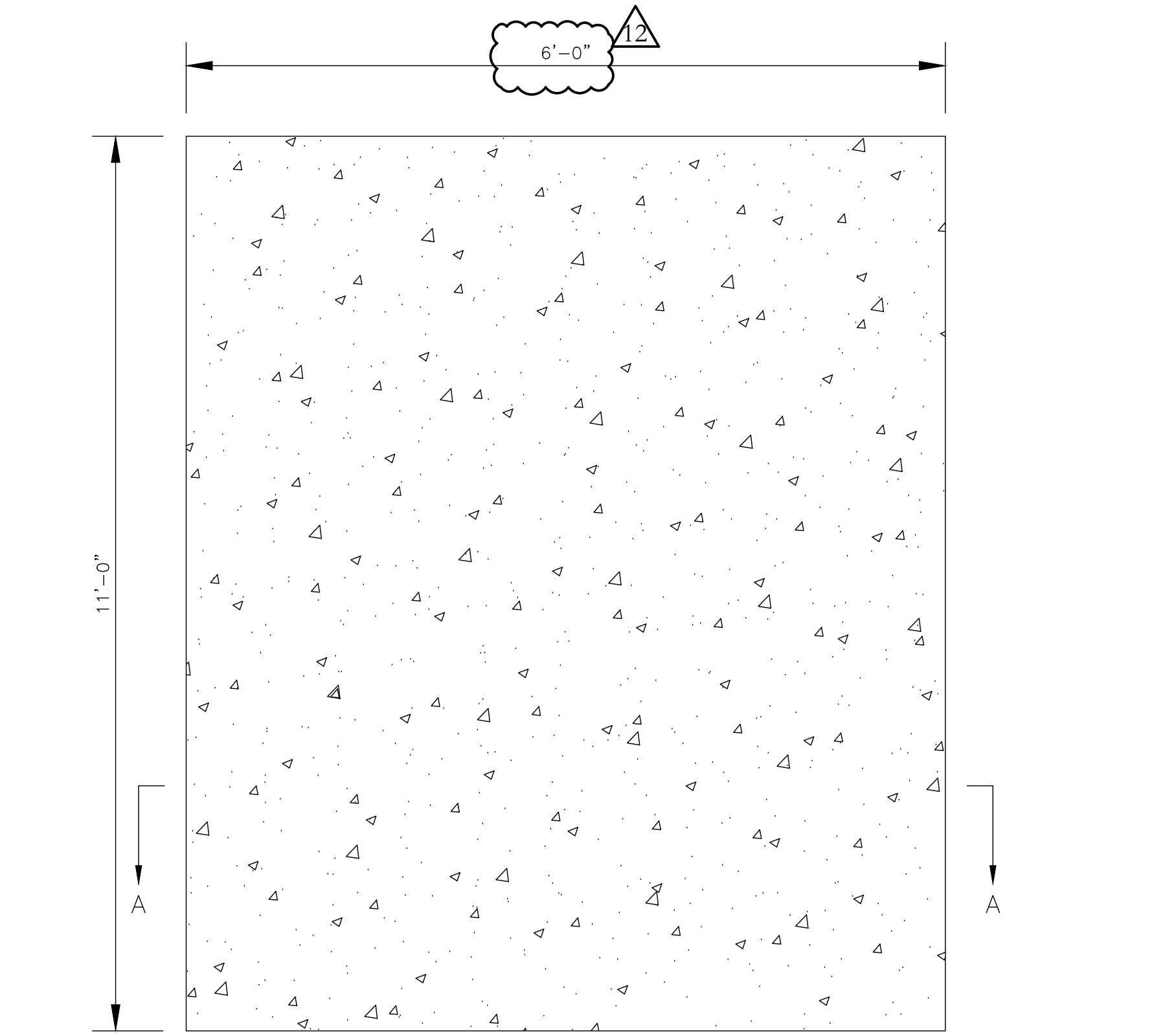
BU #: 877803
KCYC LEES SUMMIT DT
207 SE DOUGLAS
LEE'S SUMMIT, MO 64063
EXISTING 180'-0" MONOPOLE

ISSUED FOR:

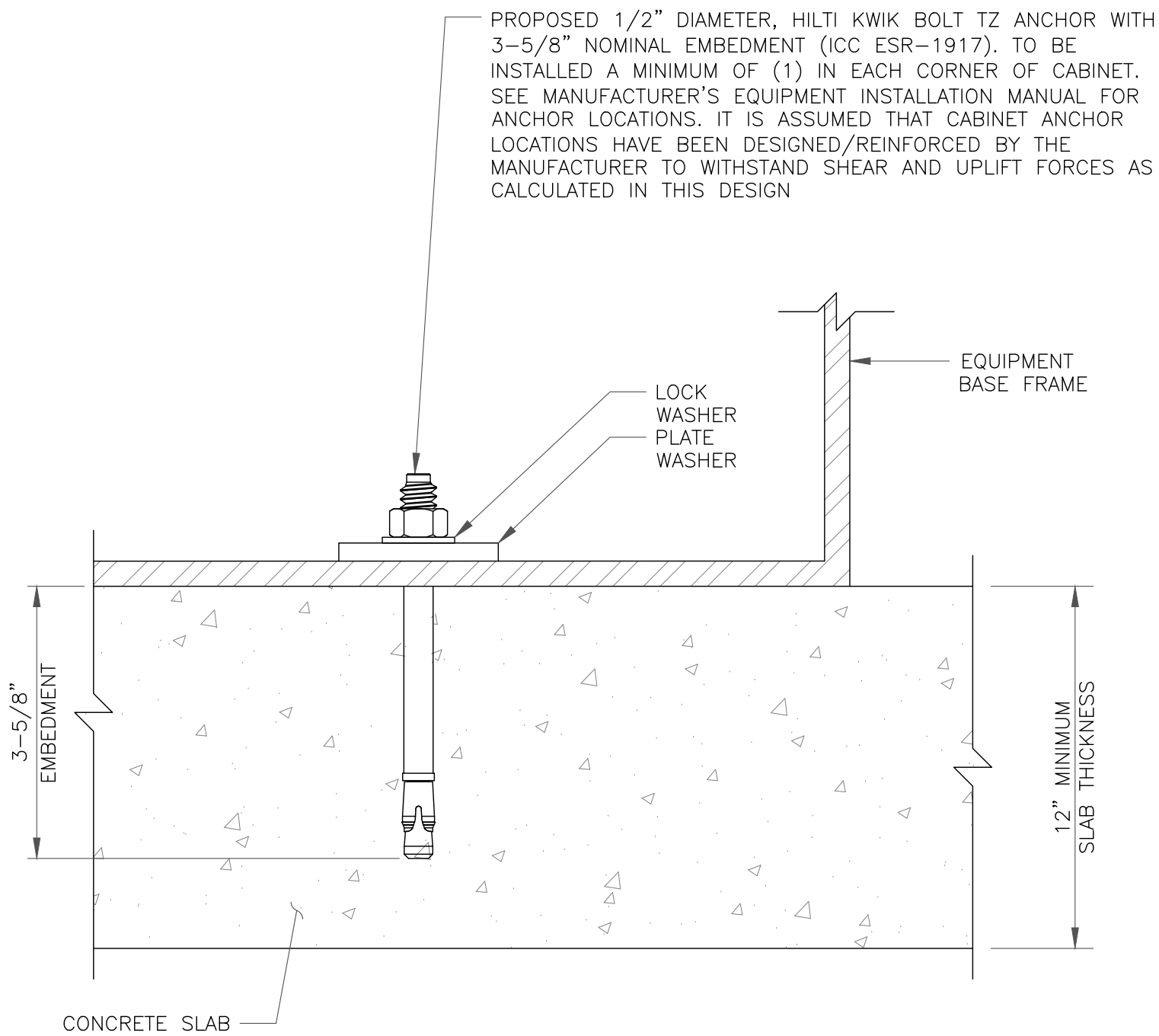
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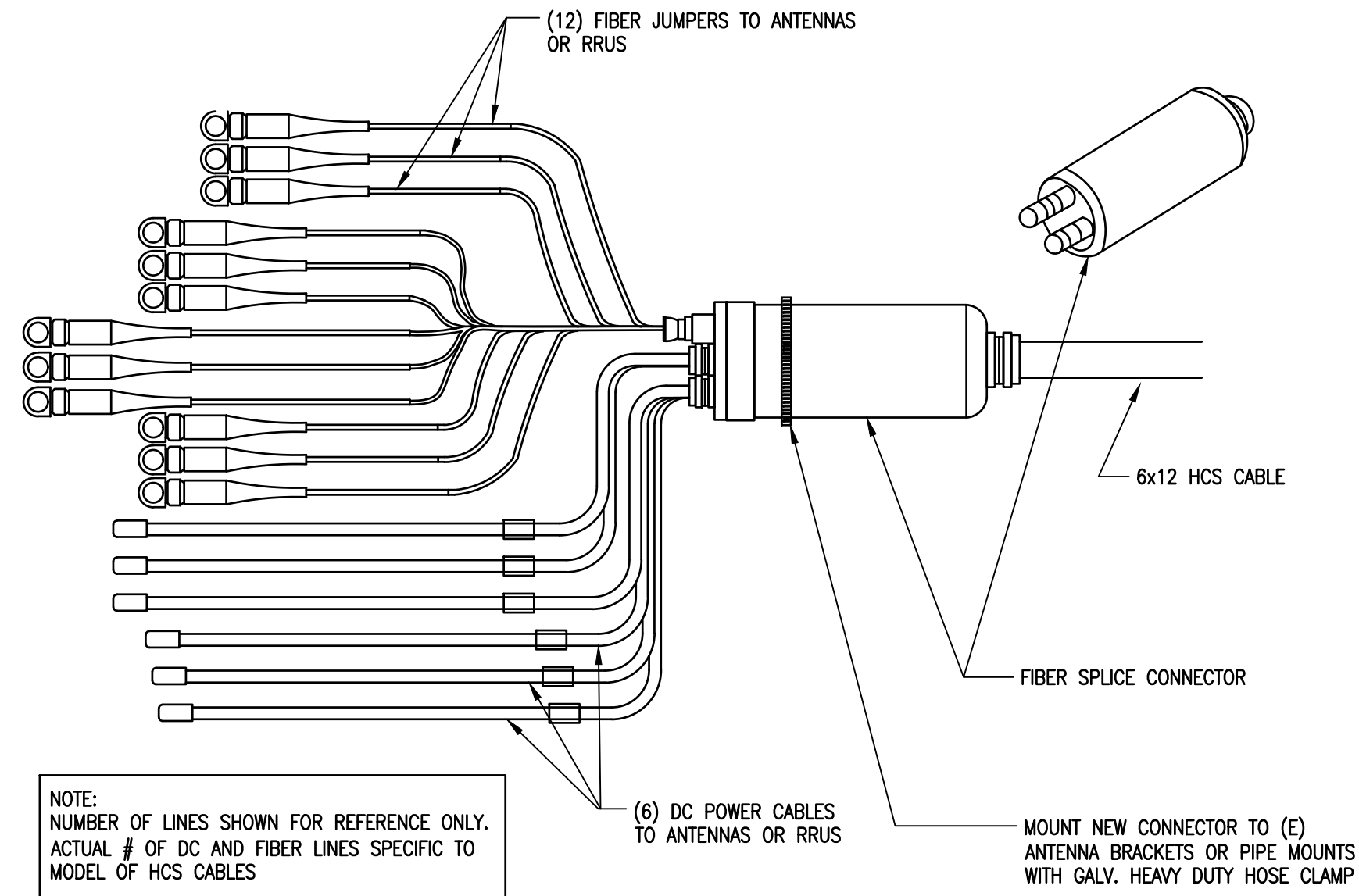
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1 CONCRETE PAD DETAIL
SCALE: NOT TO SCALE



3 CABINET ANCHOR DETAIL
SCALE: NOT TO SCALE



4 HYBRID CABLE
SCALE: NOT TO SCALE

2 NOT USED
SCALE: NOT TO SCALE

JURISDICTIONAL APPROVAL:

verizon
180 WASHINGTON VALLEY ROAD
BEDMINSTER, NJ 07921

CROWN CASTLE
1200 MACARTHUR BLVD, SUITE 200
MAHWAH, NJ 07430

Trylon

1825 W. WALNUT HILL LANE, SUITE 120
IRVING, TEXAS 75038

VERIZON SITE NUMBER: 16968208

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KCYC LEES SUMMIT DT
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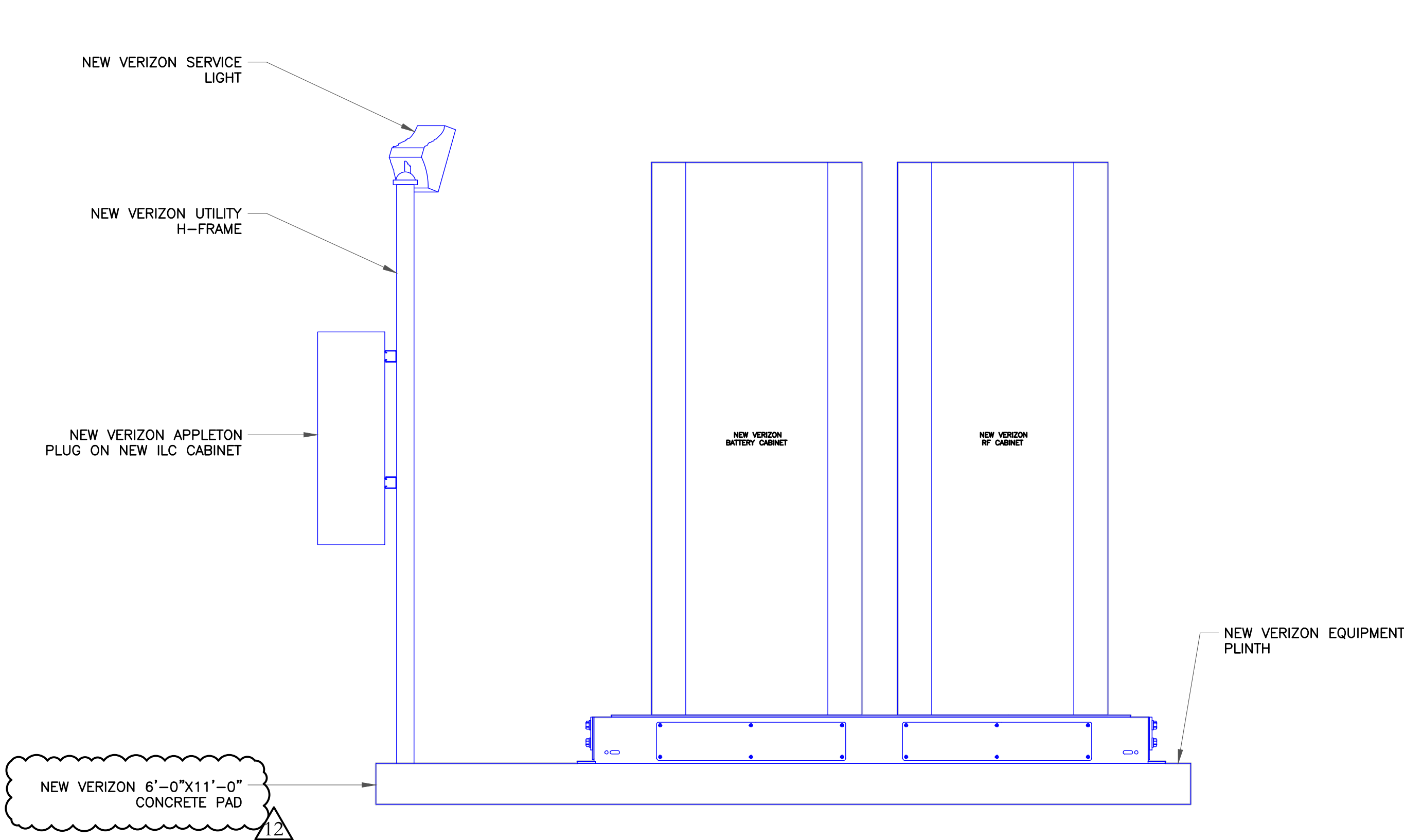
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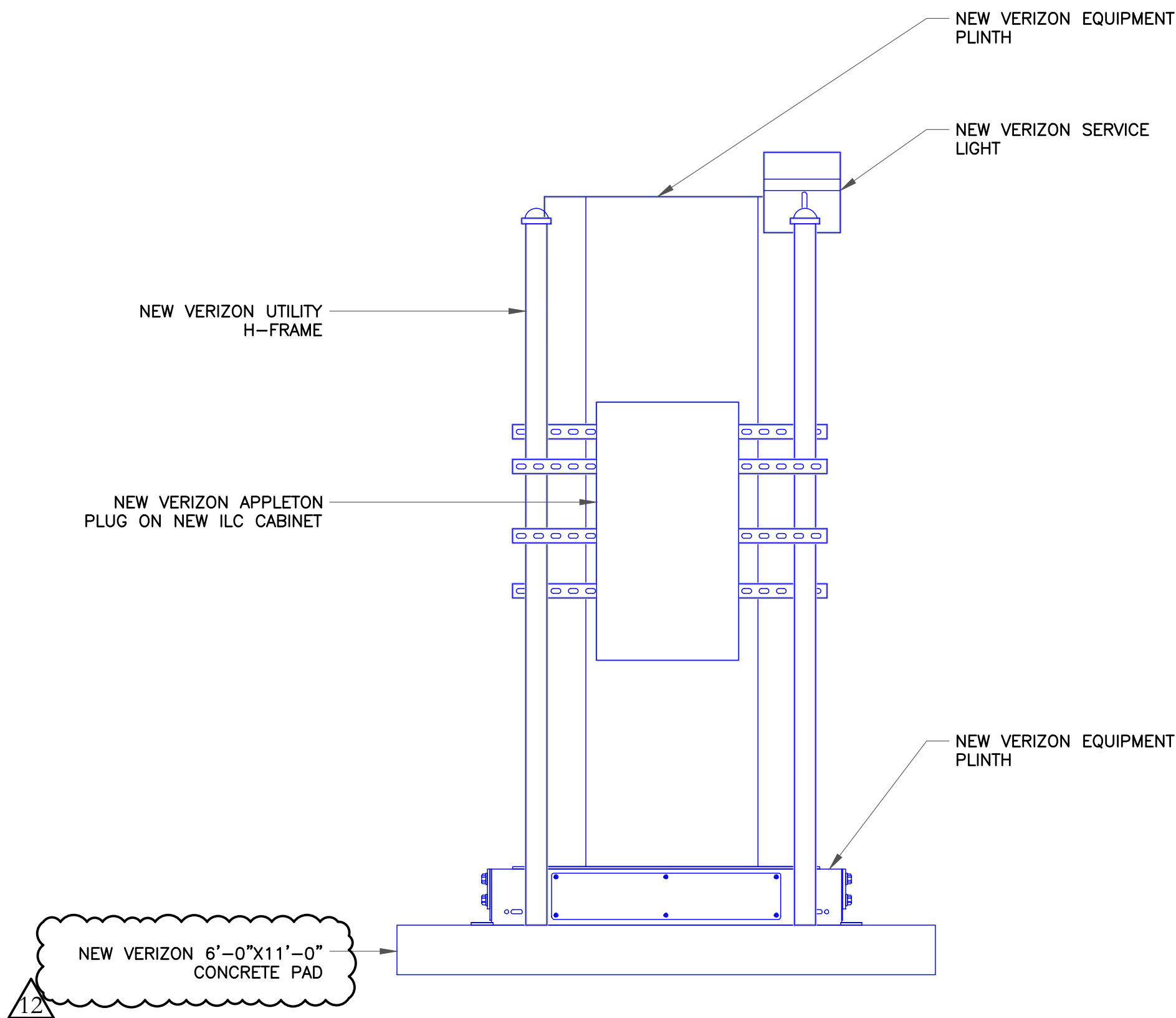
C-9

REVISION:

12



1 FRONT EQUIPMENT ELEVATION
SCALE: NOT TO SCALE



2 SIDE EQUIPMENT ELEVATION
SCALE: NOT TO SCALE

JURISDICTIONAL APPROVAL:

verizon
180 WASHINGTON VALLEY ROAD
BEDMINSTER, NJ 07921

CROWN CASTLE
1200 MACARTHUR BLVD, SUITE 200
MAHWAH, NJ 07430

Trylon
1825 W. WALNUT HILL LANE, SUITE 120
IRVING, TEXAS 75038

VERIZON SITE NUMBER: 16968208

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CODED DRAWING NOTES

- 1

NEW VERIZON 11'–0"x6'–0" EQUIPMENT PAD
- 2

NEW VERIZON EQUIPMENT PLINTH
- 3

NEW VERIZON RF CABINET
- 4

NEW VERIZON BATTERY CABINET
- 5

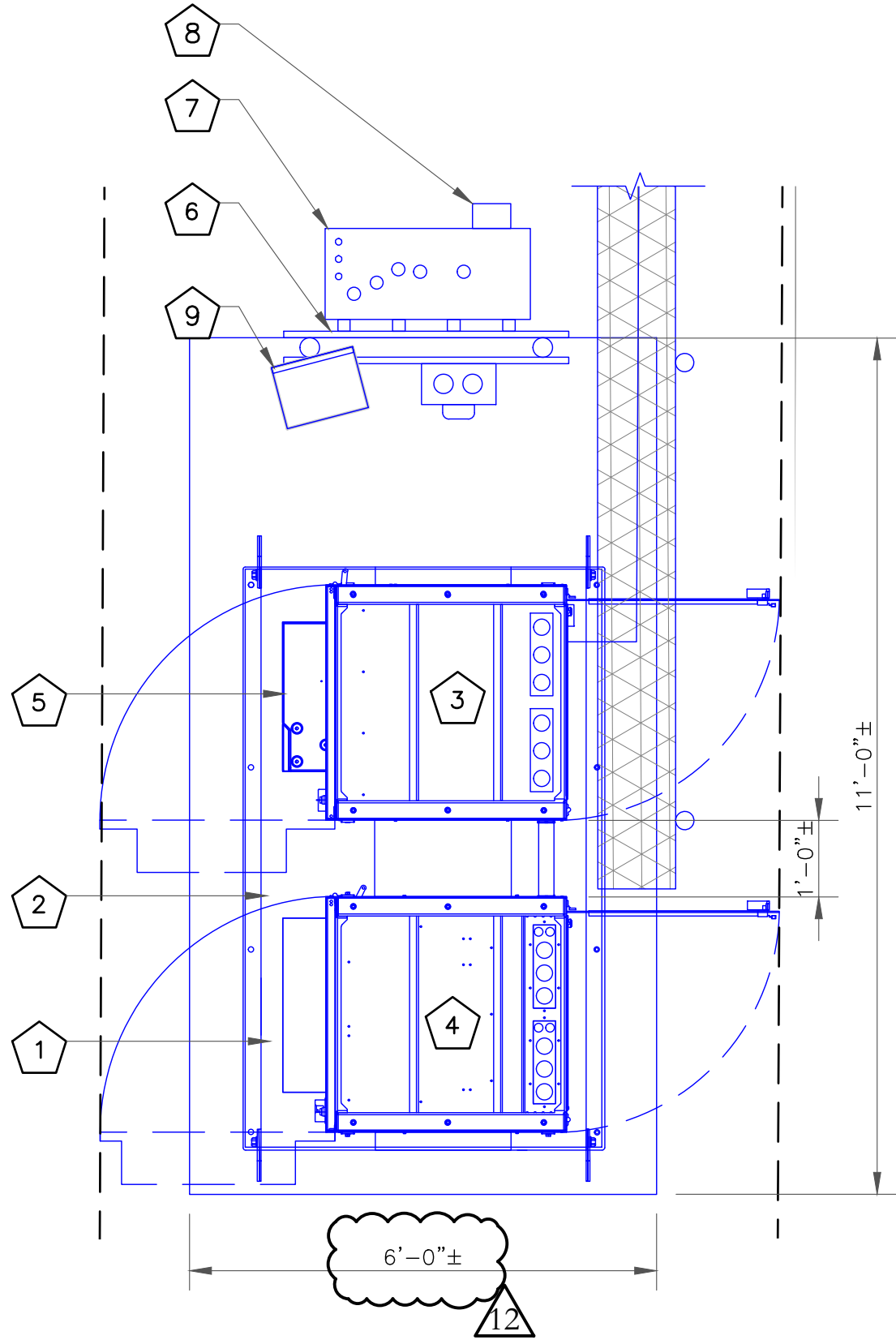
NEW VERIZON RACK MOUNTED OVP
- 6

NEW VERIZON EQUIPMENT H–FRAME
- 7

NEW VERIZON ILC CABINET
- 8

NEW VERIZON APPLETON PLUG ON NEW ILC CABINET
- 9

NEW VERIZON SERVICE LIGHTS



1 EQUIPMENT LAYOUT
SCALE: NOT TO SCALE

2 NOT USED
SCALE: NOT TO SCALE

3 NOT USED
SCALE: NOT TO SCALE

4 NOT USED
SCALE: NOT TO SCALE

JURISDICTIONAL APPROVAL:

180 WASHINGTON VALLEY ROAD
BEDMINSTER, NJ 07921

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REVISION:
12

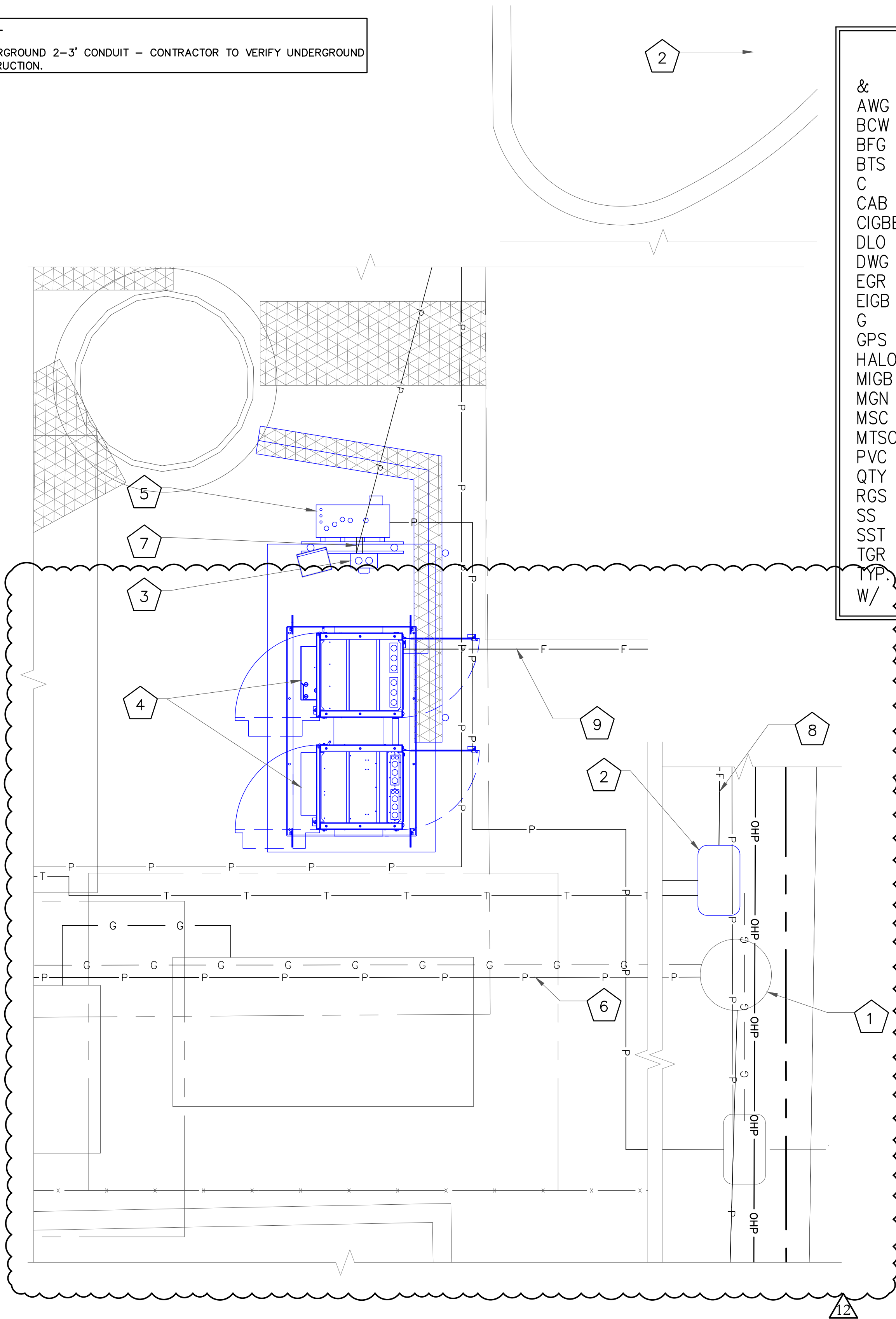
GENERAL ELECTRICAL NOTES:

- ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE LATEST VERSION OF THE NATIONAL ELECTRICAL CODE AND ALL LOCAL AND STATE CODES, LAWS, AND ORDINANCES.
- ALL UNDERGROUND CONDUIT SHALL BE PVC SCHEDULE 40 UNLESS OTHERWISE INDICATED. SUPPLY UTILITY MARKING TAPE BURIED 12" BELOW GRADE ALONG ENTIRE LENGTH OF UNDERGROUND CONDUITS.
- ALL CONDUCTORS SHALL BE COPPER WITH THHN/THWN INSULATION. CONTROL CONDUCTORS SHALL BE STRANDED, POWER & LIGHTING CONDUCTORS SHALL BE SOLID FOR #10 & #12 CONDUCTORS AND STRANDED FOR ALL OTHER SIZES.
- ELECTRICAL DRAWINGS ARE IN PART DIAGRAMMATIC. COORDINATE ELECTRICAL WORK WITH SITE CONDITIONS.
- LOCATE ALL UNDERGROUND UTILITIES BEFORE TRENCHING. IF CONFLICTS ARISE, CONTACT UTILITY COMPANY AND ENGINEER IMMEDIATELY.
- ALL EXPOSED CONDUITS SHALL HAVE WEATHERPROOF CAPS, NOT DUCT TAPE.
- PROVIDE 200 LB TEST PULL WIRES IN EACH TELEPHONE AND POWER CONDUIT.
- PULL BOXES SHALL BE INSTALLED AS NEEDED PER NEC UTILITY REQUIREMENTS.

CODED DRAWING NOTES:

- 1 EXISTING UTILITY POLE
- 2 NEW VERIZON FIBER HANDHOLE COVER SHALL BE STAMPED VERIZON
- 3 NEW VERIZON 200A METER SOCKET W/ DISCONNECT
- 4 NEW VERIZON CABINETS ON A NEW 11'-0"x4'-0" EQUIPMENT PAD
- 5 NEW VERIZON ILC CABINET ON NEW EQUIPMENT H-FRAME
- 6 FOR POWER - (1) 2" SCH. 40 PVC CONDUIT FOR POWER FROM EXISTING UTILITY POLE TO NEW VERIZON 200A METER SOCKET W/ DISCONNECT
- 7 (1) 2" SCH. 40 PVC CONDUIT FROM NEW VERIZON 200A METER SOCKET W/ DISCONNECT TO NEW ILC CABINET
- 8 FOR TELCO - (1) 4" SCH 40 PVC CONDUIT WITH (3) 1" INNERDUCTS, MULE TAPE AND TRACE WIRE FOR FIBER BETWEEN THE (2) NEW FIBER HANDHOLES (PENDING COORDINATION WITH LOCAL UTILITY COMPANY)
- 9 FOR TELCO - (1) 2" SCH 40 PVC CONDUIT WITH MULE TAPE FOR FIBER FROM THE NEW FIBER HANDHOLE TO THE EQUIPMENT CABINET

NOTES:
UNDERGROUND 2-3' CONDUIT - CONTRACTOR TO VERIFY UNDERGROUND OBSTRUCTION.



ABBREVIATIONS:	
&	AND
AWG	AMERICAN WIRE GAUGE
BCW	BARE COPPER WIRE
BFG	BELOW FINISH GRADE
BTS	BARE TINNED STRANDED
C	CONDUIT
CAB	CABINET
CIGBE	COAX ISOLATED GROUND BAR EXTERNAL
DLO	DIESEL LOCOMOTIVE CABLE
DWG	DRAWING
EGR	EXTERIOR GROUND RING
EIGB	EXTERIOR ISOLATED GROUND BAR
G	GROUND
GPS	GLOBAL POSITIONING SYSTEM
HALO	INTERIOR GROUND RING
MIGB	MAIN ISOLATED GROUND BAR
MCN	MULTI-GROUNDED NEUTRAL
MSC	MOBILE SWITCHING CENTER
MTSO	MOBILE TELEPHONE SWITCHING OFFICE
PVC	POLYVINYL CHLORIDE
QTY	QUANTITY
RGS	RIGID GALVANIZED STEEL
SS	STAINLESS STEEL
SST	SELF SUPPORT TOWER
TGR	TOWER GROUND RING
TYP.	TYPICAL
W/	WITH

ELECTRICAL SYMBOLS:

ϕ	RECEPTACLE
— P — P —	BURIED POWER CONDUIT
— T — T —	BURIED TELCO CONDUIT
(M)	ELECTRICAL METER
#	INDICATES CODED NUMBER
[SWITCH]	SAFETY SWITCH
\emptyset	UTILITY POLE

LEGEND

— P —	ELECTRICAL
— G —	FUEL/GAS/OIL
— T —	TELECOMM
----	SCAN LIMIT

UTILITY GUIDANCE

BU: 877803
ORDER: 547366
RES: ROBERT ROSS

UTILITY GUIDANCE (NON DOCUMENTED): GROUND LEASE DOES NOT SPECIFY OUR UTILITY RIGHTS. WHEN INSTALLING THE UTILITIES PLEASE LOCATE AND FOLLOW EXISTING PATH. IF EXISTING PATH IS NOT AN OPTION, PLEASE NOTIFY CCRE AS FURTHER COORDINATION MAY BE NEEDED.

JURISDICTIONAL APPROVAL:

verizon
180 WASHINGTON VALLEY ROAD
BEDMINSTER, NJ 07921

CROWN CASTLE
1200 MACARTHUR BLVD, SUITE 200
MAHWAH, NJ 07430

Trylon

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11	08/14/2024	RC	FINAL	AMT
12	09/19/2024	RC	FINAL	AMT



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SHEET NUMBER:

E-1

REVISION:

12

NOTE:
ICE BRIDGE NOT SHOWN FOR CLARITY.

NOTE:
CONTRACTOR TO LOCATE ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. COORDINATE LOCATION OF ALL PROPOSED DIGGING & UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.

1 OVERALL CONDUIT LAYOUT
SCALE: NOT TO SCALE

CODED DRAWING NOTES:

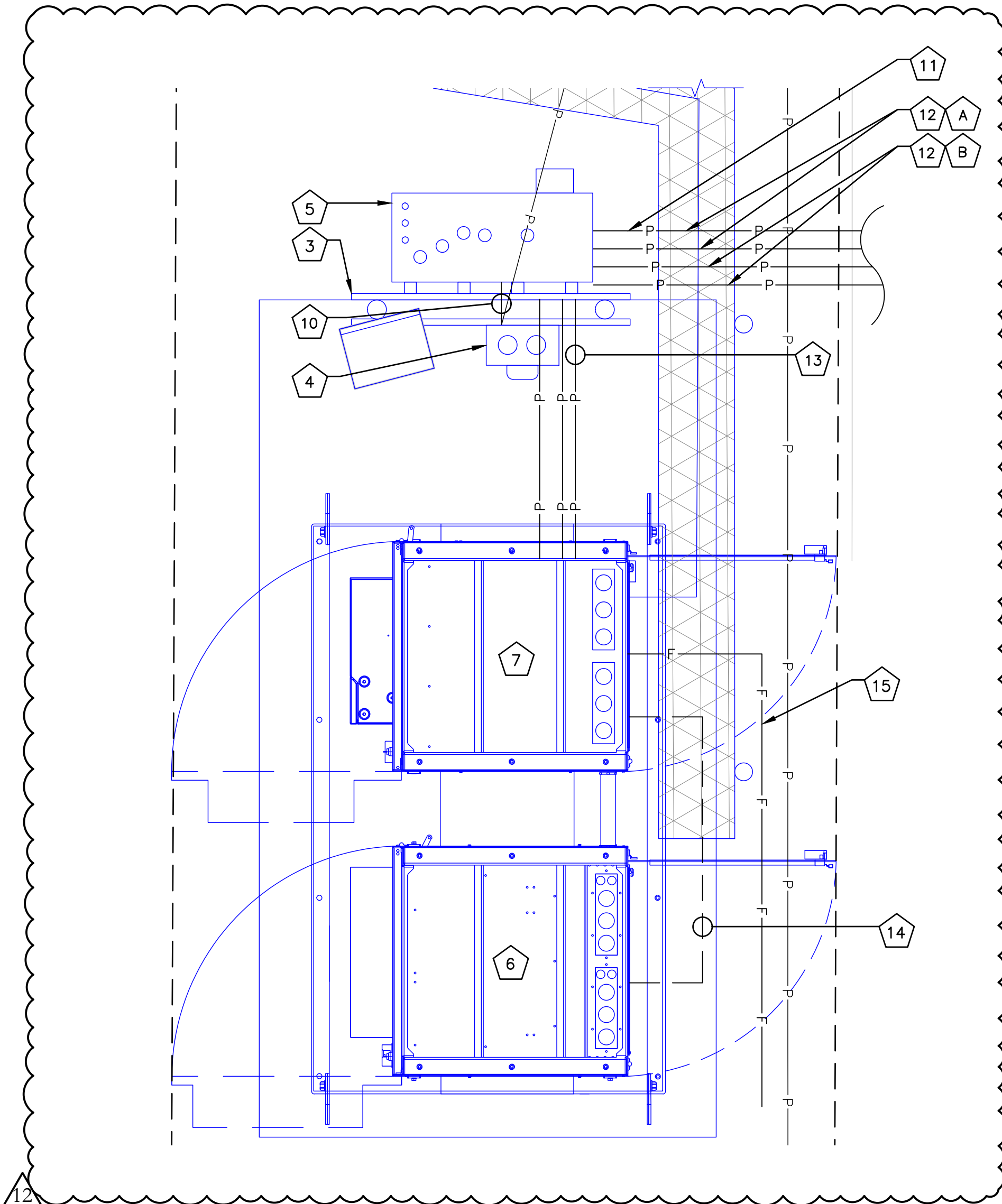
- 1 EXISTING UTILITY POLE W/ POLE MOUNTED TRANSFORMER (NOT SHOWN)
- 2 NEW VERIZON FIBER HANDHOLE (MEET ME POINT) (LOCATION TBD) (NOT SHOWN)
- 3 NEW UTILITY H-FRAME
- 4 NEW VERIZON 200A METER SOCKET W/ DISCONNECT IN EMPTY METER SLOT C ON EXISTING METERBANK
- 5 NEW VERIZON ILC CABINET W/ INTEGRATED ATS
- 6 NEW VERIZON BATTERY CABINET
- 7 NEW VERIZON RF CABINET
- 8 NEW VERIZON BACKUP GENERATOR (PENDING COORDINATION WITH LOCAL UTILITY COMPANY)
- 9 FOR POWER – (1) 2" SCH. 40 PVC CONDUIT FROM EXISTING UTILITY POLE (NOT SHOWN) TO NEW VERIZON METER/DISCONNECT SWITCH (NOT SHOWN) (PENDING COORDINATION WITH LOCAL UTILITY COMPANY)
- 10 (1) 2" SCH. 40 PVC CONDUIT FROM NEW ELECTRIC METER/DISCONNECT SWITCH TO NEW ILC CABINET W/ INTEGRATED ATS
- 11 (1) 3/4" SCH. 40 PVC CONDUIT FOR ALARMS FROM NEW ILC CABINET W/ INTEGRATED ATS TO NEW VERIZON BACKUP GENERATOR (CONTRACTOR TO SUPPLY SIZE/QTY CONDUCTORS PER MANUFACTURER SPECIFICATIONS)
- 12 (1) 2" SCH. 40 PVC CONDUIT FOR POWER FROM NEW ILC CABINET W/ INTEGRATED ATS TO NEW TO PROPOSED VERIZON BACKUP GENERATOR (CONTRACTOR TO SUPPLY SIZE/ITY CONDUCTORS PER MANUFACTURER SPECIFICATIONS)
- 13 (1) 2" GRC OR LIQUIDTIGHT CONDUIT FROM NEW VERIZON ILC CABINET W/ INTEGRATED ATS TO NEW VERIZON POWER RF CABINET (CONTRACTOR TO SUPPLY SIZE/QTY CONDUCTORS PER MANUFACTURER SPECIFICATIONS)
- 14 (1) 2" GRC OR LIQUIDTIGHT CONDUIT FROM NEW VERIZON RF CABINET TO NEW VERIZON BATTERY CABINET
- 15 FOR TELCO – (1) 2" PVC CONDUIT FROM NEW FIBER HANDHOLE TO NEW VERIZON RF CABINET (PENDING COORDINATION WITH LOCAL UTILITY COMPANY)

NOTE:
ICE BRIDGE NOT
SHOWN FOR CLARITY.

NOTE:
CONTRACTOR TO LOCATE ALL UNDERGROUND UTILITIES PRIOR
TO CONSTRUCTION. COORDINATE LOCATION OF ALL PROPOSED
DIGGING & UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.

GENERAL ELECTRICAL NOTES:

- ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE LATEST VERSION OF THE NATIONAL ELECTRICAL CODE AND ALL LOCAL AND STATE CODES, LAWS, AND ORDINANCES.
- ALL UNDERGROUND CONDUIT SHALL BE PVC SCHEDULE 40 UNLESS OTHERWISE INDICATED. SUPPLY UTILITY MARKING TAPE BURIED 12" BELOW GRADE ALONG ENTIRE LENGTH OF UNDERGROUND CONDUITS.
- ALL CONDUCTORS SHALL BE COPPER WITH THHN/THWN INSULATION. CONTROL CONDUCTORS SHALL BE STRANDED, POWER & LIGHTING CONDUCTORS SHALL BE SOLID FOR #10 & #12 CONDUCTORS AND STRANDED FOR ALL OTHER SIZES.
- ELECTRICAL DRAWINGS ARE IN PART DIAGRAMMATIC. COORDINATE ELECTRICAL WORK WITH SITE CONDITIONS.
- LOCATE ALL UNDERGROUND UTILITIES BEFORE TRENCHING. IF CONFLICTS ARISE, CONTACT UTILITY COMPANY AND ENGINEER IMMEDIATELY.
- ALL EXPOSED CONDUITS SHALL HAVE WEATHERPROOF CAPS, NOT DUCT TAPE.
- PROVIDE 200 LB TEST PULL WIRES IN EACH TELEPHONE AND POWER CONDUIT.
- PULL BOXES SHALL BE INSTALLED AS NEEDED PER NEC UTILITY REQUIREMENTS.



1 EQUIPMENT CONDUIT LAYOUT
SCALE: NOT TO SCALE

ABBREVIATIONS:

&	AND
AWG	AMERICAN WIRE GAUGE
BCW	BARE COPPER WIRE
BFG	BELOW FINISH GRADE
BTS	BARE TINNED STRANDED
C	CONDUIT
CAB	CABINET
CIGBE	COAX ISOLATED GROUND BAR EXTERNAL
DLO	DIESEL LOCOMOTIVE CABLE
DWG	DRAWING
EGR	EXTERIOR GROUND RING
EIGB	EXTERIOR ISOLATED GROUND BAR
G	GROUND
GPS	GLOBAL POSITIONING SYSTEM
HALO	INTERIOR GROUND RING
MGB	MAIN ISOLATED GROUND BAR
MGN	MULTI-GROUNDED NEUTRAL
MSC	MOBILE SWITCHING CENTER
MTSO	MOBILE TELEPHONE SWITCHING OFFICE
PVC	POLYVINYL CHLORIDE
QTY	QUANTITY
RGS	RIGID GALVANIZED STEEL
SS	STAINLESS STEEL
SST	SELF SUPPORT TOWER
TGR	TOWER GROUND RING
TYP.	TYPICAL
W/	WITH

ELECTRICAL SYMBOLS:

⌀	RECEPTACLE
—P—P—	BURIED POWER CONDUIT
—T—T—	BURIED TELCO CONDUIT
(M)	ELECTRICAL METER
#	INDICATES CODED NUMBER
□	SAFETY SWITCH
⊘	UTILITY POLE

GENERATOR CONDUITS:

- A. (1) 2" CONDUIT (AC POWER) ILC TO GENERATOR
- B. (1) 1" CONDUIT WITH 2 #12 AC CIRCUITS (CHARGER AND HEATER) ILC TO GENERATOR
- C. (1) 1" CONDUIT WITH 1 #14 DC CIRCUIT (START/STOP) ILC TO GENERATOR
- D. (1) 1" CONDUIT WITH 2 CAT5'S (1 TO THE TRANSFER SWITCH AND 1 TO THE GENERATOR) ILC TO GENERATOR

EQUIPMENT CABINET:

- E. (1) 2" CONDUIT (AC POWER) ILC TO EQUIPMENT CABINET/PLINTH
- F. (1) 2" CONDUIT (ALARMS) ILC TO EQUIPMENT CABINET/PLINTH
- G. (1) 2" CONDUIT (FUTURE) ILC TO EQUIPMENT CABINET/PLINTH
- H. (1) 3" CONDUIT (OR PER JURISDICTION) (MAIN POWER) METER TO ILC

JURISDICTIONAL APPROVAL:



VERIZON SITE NUMBER: 16968208

BU #: 877803
KCYC LEES SUMMIT DT
207 SE DOUGLAS
LEE'S SUMMIT, MO 64063
EXISTING 180'-0" MONOPOLE

ISSUED FOR:

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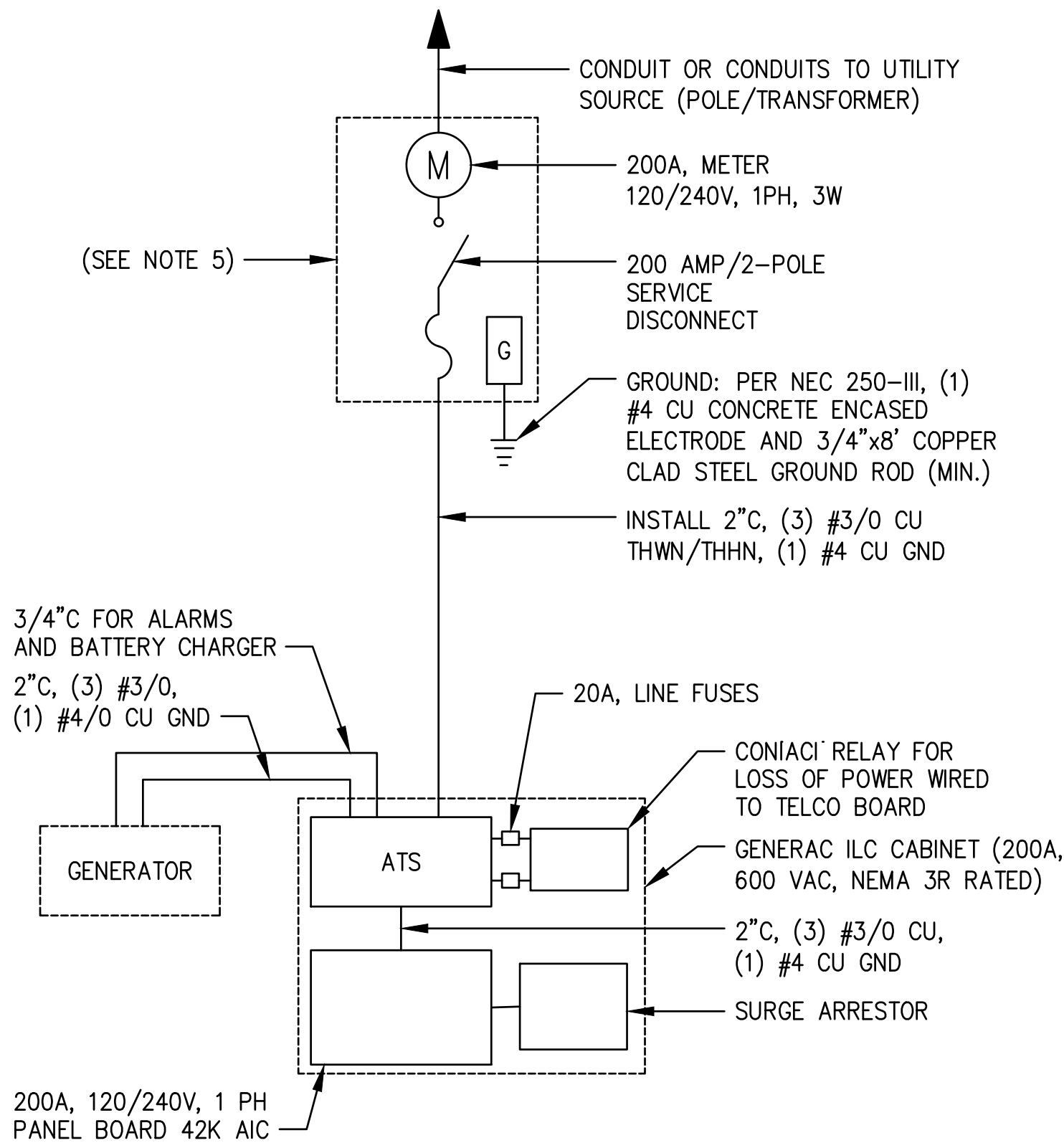
E-2

REVISION:

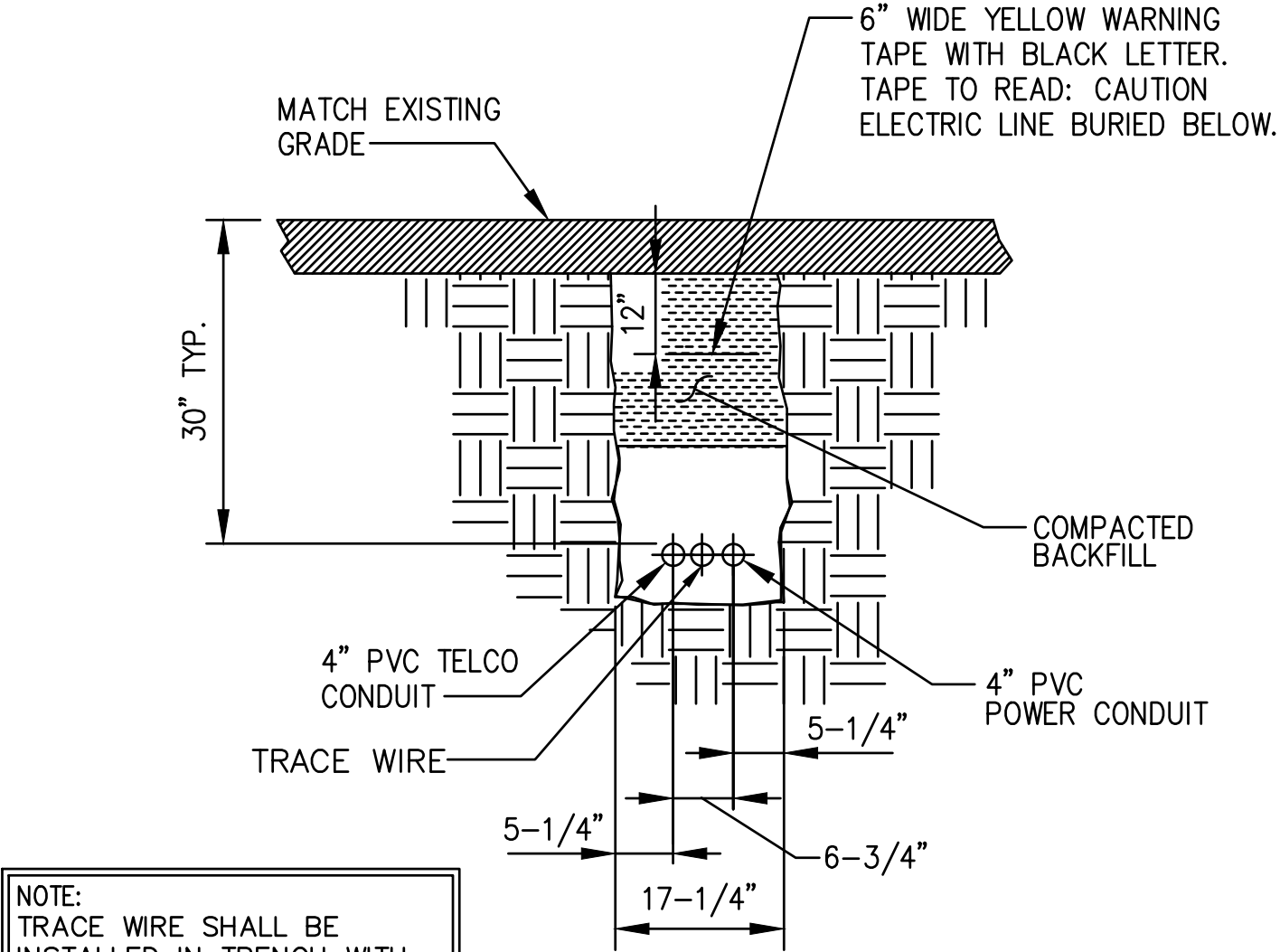
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POWER NOTES:

- (1) ALL SERVICE EQUIPMENT SHALL USE EUSERC/POWER COMPANY REQUIREMENTS AND BE REVIEWED & APPROVED BY POWER COMPANY PRIOR TO CONSTRUCTION.
- (2) ALL CONDUITS MUST BE COPPER UNLESS OTHERWISE SPECIFIED.
- (3) CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY FOR FINAL AND EXACT WORK/MATERIALS REQUIREMENTS & CONSTRUCT TO UTILITY ENGINEERING PLANS & SPECIFICATIONS ONLY.
- (4) CONTRACTOR SHALL FURNISH AND INSTALL CONDUITS, PULL WIRES, CABLE PULL BOXES, CONCRETE ENCASEMENT OF CONDUITS, TRANSFORMER PAD, BARRIERS, POLE RISER TRENCHING, BACK FILL, PAY ALL UTILITY FEES, & INCLUDE REQUIREMENTS IN SCOPE
- (5) COMMERCIAL ELECTRICAL SERVICE COMBINATION METER AND MAIN DISCONNECT, 200A 120/240V, 1-PHASE, 3-WIRE, RING-TYPE, WITH TEST-PASS FACILITIES, 10K AIC, NEMA 3R ENCLOSURE
- (6) THE DESIGN CRITERIA USED FOR THIS PROJECT WAS THE 2014 NEC

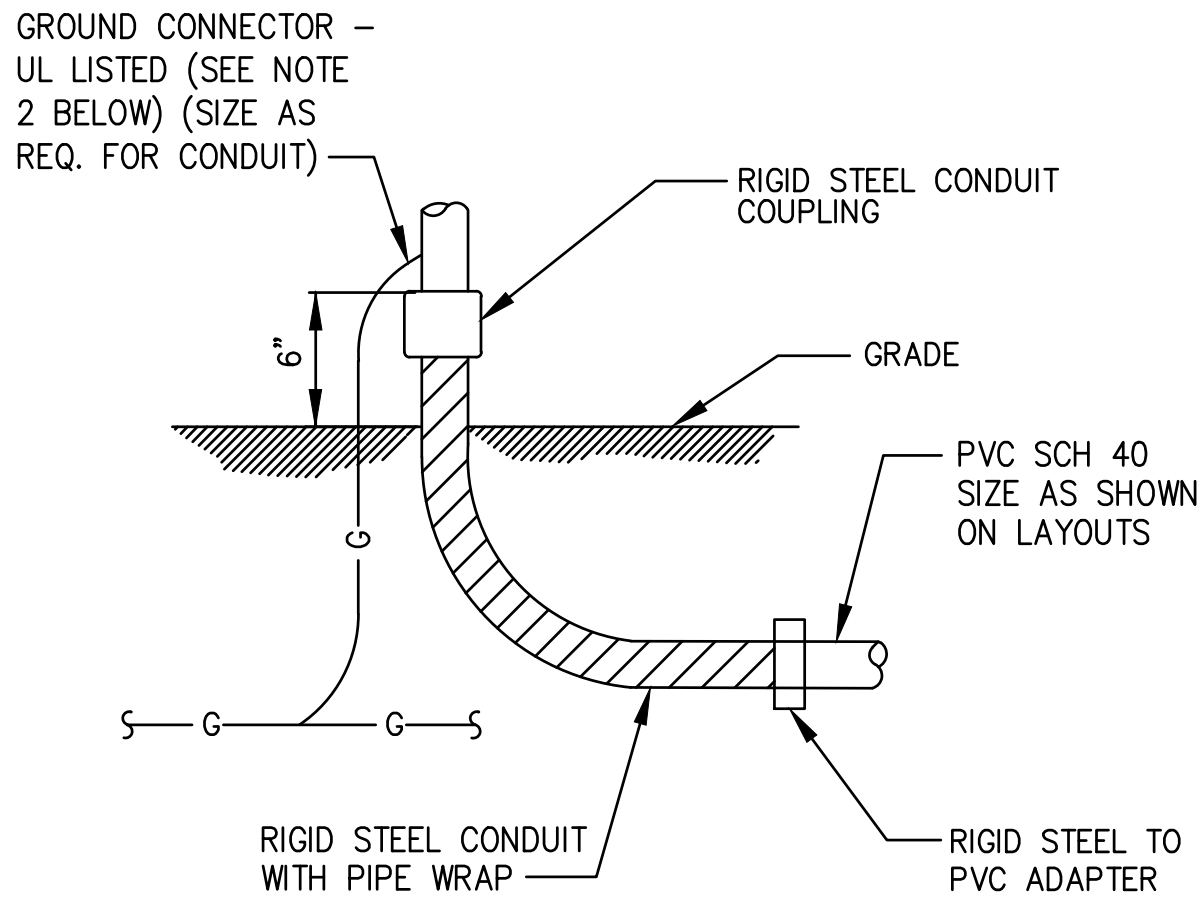


1 ELECTRICAL ONE LINE DIAGRAM (TYPICAL)
SCALE: NOT TO SCALE



- NOTE:
TRACE WIRE SHALL BE
INSTALLED IN TRENCH WITH
THE FIBER / TELCO CONDUIT.
- NOTE:
NUMBER AND SIZE OF CONDUITS MAY
VARY. SEE DWG E-1 FOR CONDUIT SIZE
AND LOCATION. CONFIRM DIMENSIONS
SHOWN WITH UTILITY COMPANY.

3 CONDUIT TRENCH DETAILS
SCALE: NOT TO SCALE



- NOTES:
1. ALL CONDUIT ABOVE GRADE MUST BE RIGID STEEL OR LIQUDTIGHT
 2. ALL NEW STRUCTURAL STEEL SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A123 G90 AFTER FABRICATION.
 3. FIELD ABRASIONS SHALL BE TOUCH UP PAINTED WITH ZINC RICH GALVANIZING REPAIR PAINT IN ACCORDANCE WITH ASTM A780.
 4. ALL EXPOSED ENDS OF CONDUITS SHALL HAVE WEATHER PROOF CAPS. DO NOT USE DUCT TAPE.
 5. PROVIDE 200LB. TEST PULL WIRES IN EACH TELEPHONE AND POWER CONDUIT. STUB CONDUITS INTO ENCLOSURE AND LABEL.

4 UNDERGROUND CONDUIT STUB-UP
SCALE: NOT TO SCALE

JURISDICTIONAL APPROVAL:

verizon
180 WASHINGTON VALLEY ROAD
BEDMINSTER, NJ 07921

CROWN CASTLE
1200 MACARTHUR BLVD, SUITE 200
MAHWAH, NJ 07430

Trylon
1825 W. WALNUT HILL LANE, SUITE 120
IRVING, TEXAS 75038

VERIZON SITE NUMBER: 16968208

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11	08/14/2024	RC	FINAL	AMT
12	09/19/2024	RC	FINAL	AMT

STATE OF MISSOURI
MICHAEL S. MOORE
PE-2022020690
9/20/2024
PROFESSIONAL ENGINEER

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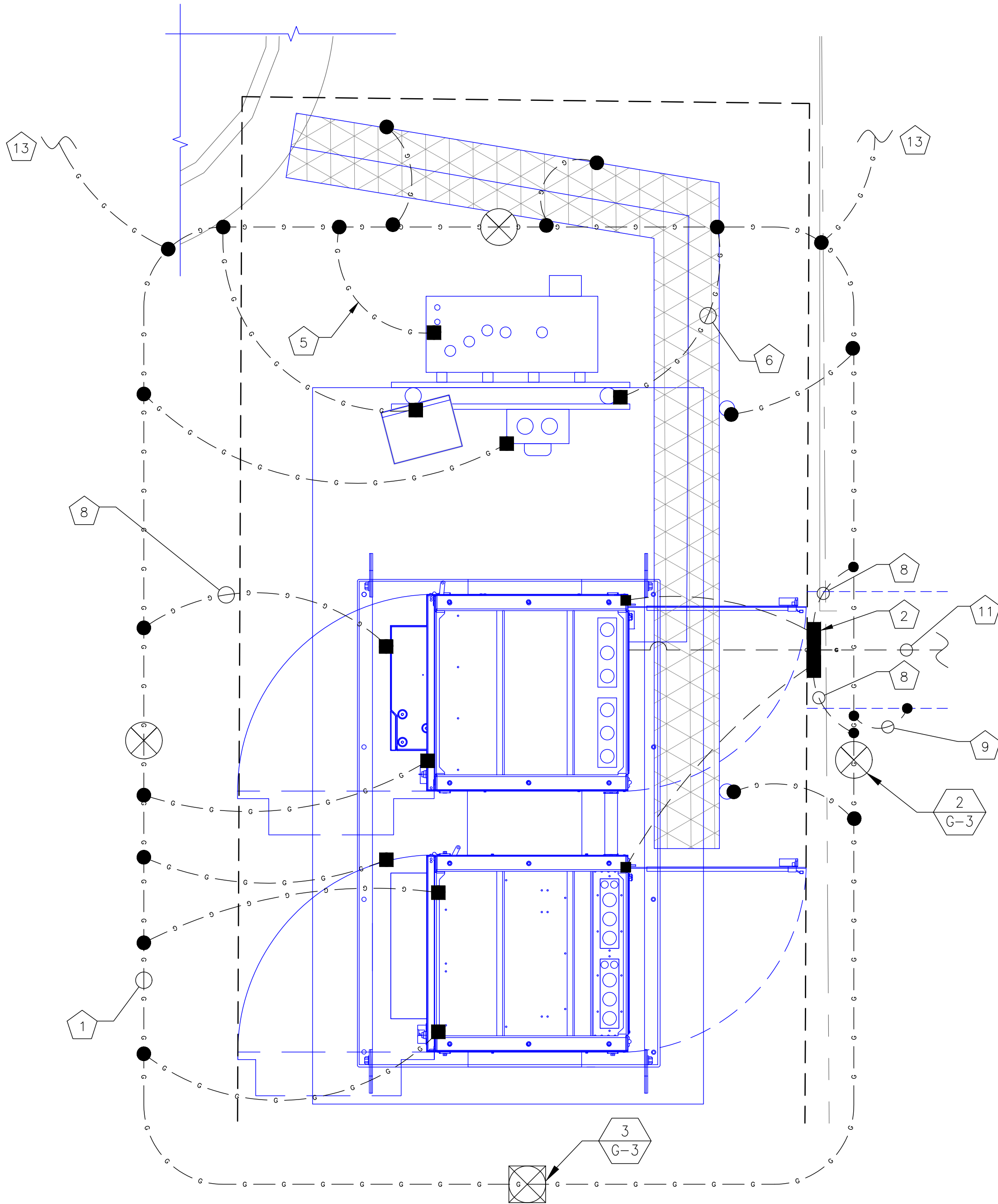
SHEET NUMBER: **E-3** REVISION: **12**

CODED DRAWING NOTES:

- 1 PROPOSED VERIZON BURIED EQUIPMENT GROUND RING (#2 SOLID TINNED BCW)
- 2 PROPOSED EQUIPMENT GROUND BAR NEAR PROPOSED VERIZON EQUIPMENT (TYP. OF (2))
- 3 PROPOSED VERIZON POWER DISTRIBUTION CABINET TO BE GROUNDED PER MANUFACTURER'S SPECIFICATIONS
- 4 PROPOSED VERIZON BBU CABINET TO BE GROUNDED PER MANUFACTURER'S SPECIFICATIONS
- 5 PROPOSED VERIZON ILC CABINET W/ INTEGRATED ATS TO BE GROUNDED PER MANUFACTURER'S SPECIFICATIONS
- 6 PROPOSED EQUIPMENT H-FRAME TO BE GROUNDED PER MANUFACTURER'S SPECIFICATIONS
- 7 EXISTING TOWER GROUND RING (NOT SHOWN)
- 8 BOND PROPOSED EQUIPMENT GROUND BAR TO NEW VERIZON BURIED EQUIPMENT GROUND RING WITH #2 SOLID TINNED BCW. (TYP. OF (2) PLACES PER GROUND BAR)
- 9 BOND PROPOSED ICE BRIDGE TO NEW VERIZON BURIED EQUIPMENT GROUND RING WITH #2 SOLID TINNED BCW. (TYP.)
- 10 PROPOSED VERIZON TOWER BASE CIGBE (TYP. OF (1)) (NOT SHOWN)
- 11 BOND PROPOSED VERIZON TOWER BASE CIGBE (NOT SHOWN) TO PROPOSED EQUIPMENT GROUND BAR WITH #2 SOLID TINNED BCW. (CONTRACTOR TO VERIFY)
- 12 BOND PROPOSED VERIZON TOWER TOP CIGBE (NOT SHOWN) TO PROPOSED TOWER BASE CIGBE (NOT SHOWN) WITH #2 SOLID TINNED BCW. (CONTRACTOR TO VERIFY)
- 13 BOND PROPOSED VERIZON BURIED EQUIPMENT GROUND RING TO EXISTING COMPOUND GROUNDING SYSTEM WITH #2 SOLID TINNED BCW. (TYP. OF (2) PLACES) (CONTRACTOR TO VERIFY)
- 14 BOND TOWER BASE CIGBE (NOT SHOWN) TO EXISTING TOWER GROUND RING (NOT SHOWN) WITH #2 SOLID TINNED BCW. (CONTRACTOR TO VERIFY)
- 15 PROPOSED BACKUP GENERATOR TO BE GROUNDED PER MANUFACTURER'S SPECIFICATIONS

GROUNDING SYMBOLS:

- ⊗ GROUND ROD
- ACCESS WELL
- ⊗ GROUND ROD WITH ACCESS
- COMPRESSION TYPE CONNECTION
- EXOTHERMIC WELD TYPE CONNECTION
- - G - - #2/0 BTS COPPER CONDUCTOR
- # INDICATES CODED NOTE

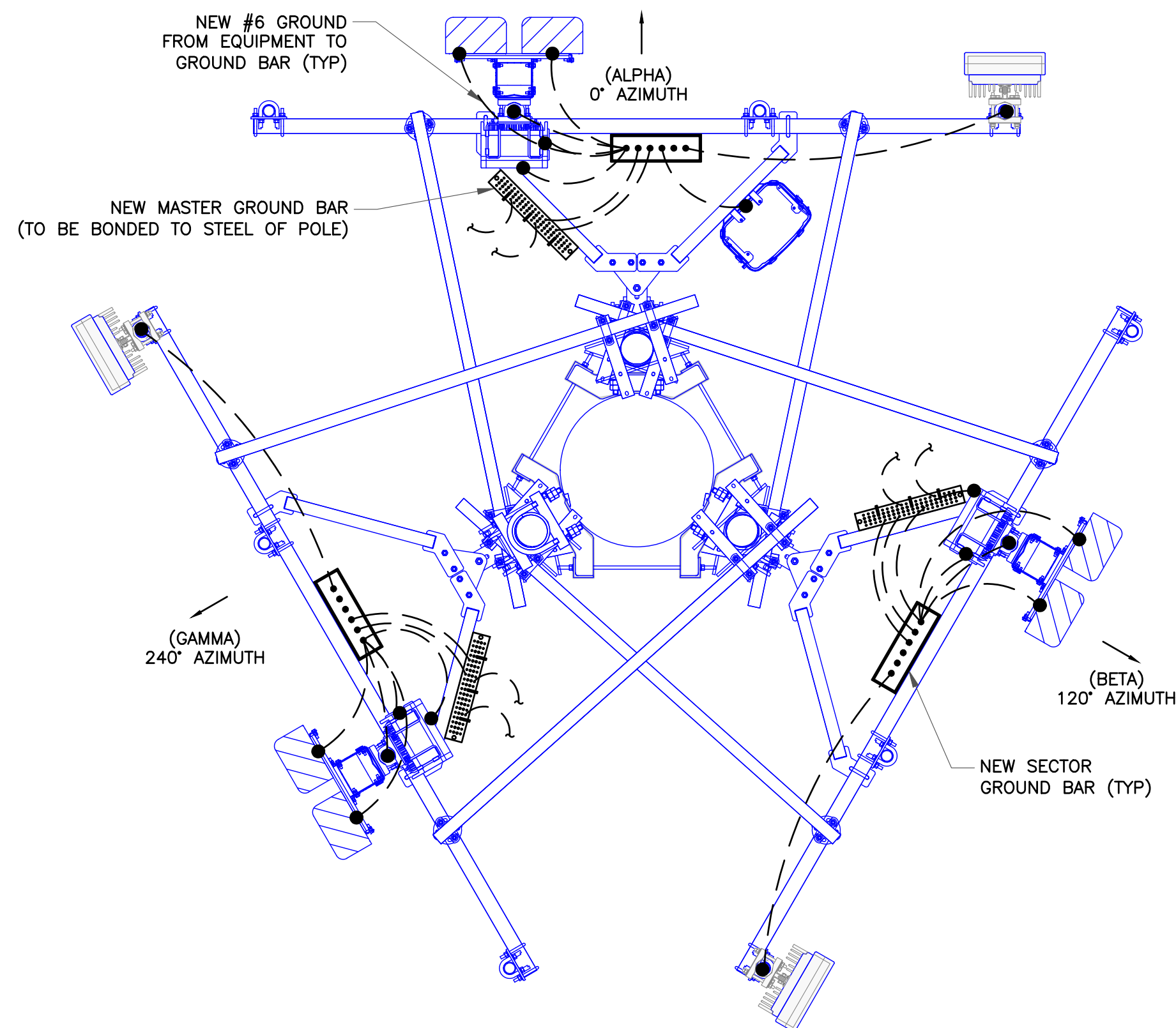


2 TYPICAL GROUNDING PLAN
SCALE: NOT TO SCALE

GENERAL GROUNDING NOTES:

- TO ENSURE PROPER BONDING, ALL CONNECTIONS SHALL BE AS FOLLOWS:
 - #2 BARE TINNED SOLID COPPER CONDUCTOR: EXOTHERMIC WELD TO RODS OR GROUND RING
 - LUGS AND BUS BAR (UNLESS NOTED OTHERWISE): SANDED CLEAN, COATED WITH OXIDE INHIBITOR AND BOLTED FOR MAXIMUM SURFACE CONTACT. ALL LUGS SHALL BE COPPER (NO ALUMINUM SHALL BE PERMITTED). PROVIDE LOCK WASHERS FOR ALL MECHANICAL CONNECTIONS FOR GROUND CONDUCTORS. USE STAINLESS STEEL HARDWARE THROUGHOUT.
- ALL GROUNDING CABLE IN CONCRETE OR THROUGH WALLS SHALL BE IN 3/4" PVC CONDUIT. SEAL AROUND CONDUIT THROUGH WALLS. NO METALLIC CONDUIT SHALL BE USED FOR GROUNDING CONDUCTORS.
- OWNER'S REPRESENTATIVE WILL INSPECT EXOTHERMIC WELD AND CONDUCT MEGGER TEST PRIOR TO BURIAL. MAXIMUM 5 OHMS RESISTANCE IS REQUIRED.
- CONTRACTOR TO INSTALL GROUNDING IN CLOSE PROXIMITY TO EQUIPMENT PLATFORM OR PAD.
- MAKE ALL GROUND CONNECTIONS AS SHORT AND DIRECT AS POSSIBLE. AVOID SHARP BENDS. ALL BENDS SHALL BE A MINIMUM 8" RADIUS AND NO GREATER THAN 90 DEGREES.
- ALL CADWELDS TO BURIED GROUND RING SHALL BE THE PARALLEL TYPE, EXCEPT FOR THE GROUND RODS WHICH SHALL BE THE TEE TYPE.
- BOND SERVICE CONDUITS TO GROUND RING AS THEY CROSS. DO NOT EXOTHERMICALLY WELD TO CONDUITS.
- THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER WHEN THE GROUNDING SYSTEM IS COMPLETE. THE CONSTRUCTION MANAGER SHALL INSPECT THE GROUNDING SYSTEM PRIOR TO BACKFILLING.
- THE MINIMUM SPACING BETWEEN GROUND RODS SHALL BE 10'-0" (MAX. 15'-0").
- BOND CIGBE TO EXTERNAL GROUND RING WITH 2 RUNS OF #2 BARE, TINNED, SOLID COPPER CONDUCTOR IN PVC. CONNECT BAR END WITH 2 HOLE LUG, AND "CADWELD" THE OTHER END TO THE EXTERNAL GROUND ROD.
- THE PREFERRED LOCATION FOR COAX GROUNDING IS AT THE BASE OF THE TOWER PRIOR TO THE COAX BEND.
- BONDING OF THE GROUNDED CONDUCTOR (NEUTRAL) AND THE GROUNDING CONDUCTOR SHALL BE AT THE SERVICE DISCONNECTING MEANS. BONDING JUMPER SHALL BE INSTALLED PER N.E.C. ARTICLE 250-30.

NOTE:
CONTRACTOR TO GROUND
PROPOSED ICE BRIDGE TO
CROWN CASTLE SPECIFICATIONS



1 ANTENNA GROUNDING PLAN
SCALE: NOT TO SCALE

JURISDICTIONAL APPROVAL:

verizon
180 WASHINGTON VALLEY ROAD
BEDMINSTER, NJ 07921

CROWN CASTLE
1200 MACARTHUR BLVD, SUITE 200
MAHWAH, NJ 07430

Trylon
1825 W. WALNUT HILL LANE, SUITE 120
IRVING, TEXAS 75038

VERIZON SITE NUMBER: 16968208

BU #: 877803
KCYC LEES SUMMIT DT
207 SE DOUGLAS
LEE'S SUMMIT, MO 64063
EXISTING 180'-0" MONOPOLE

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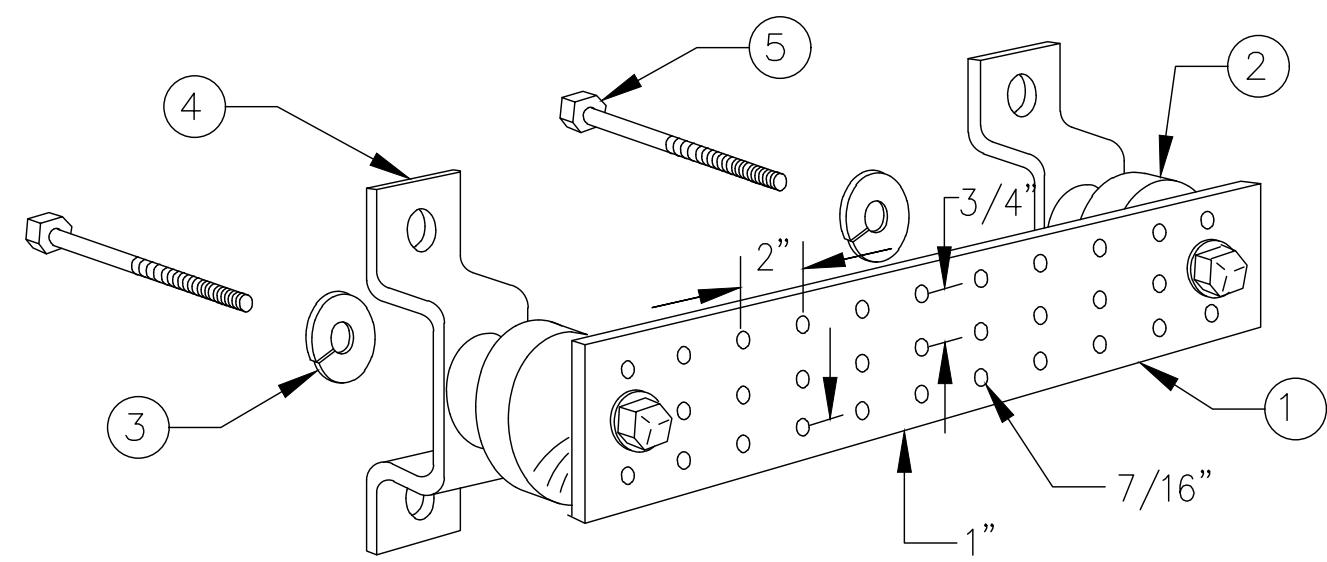
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SHEET NUMBER:

G-1

REVISION:

12



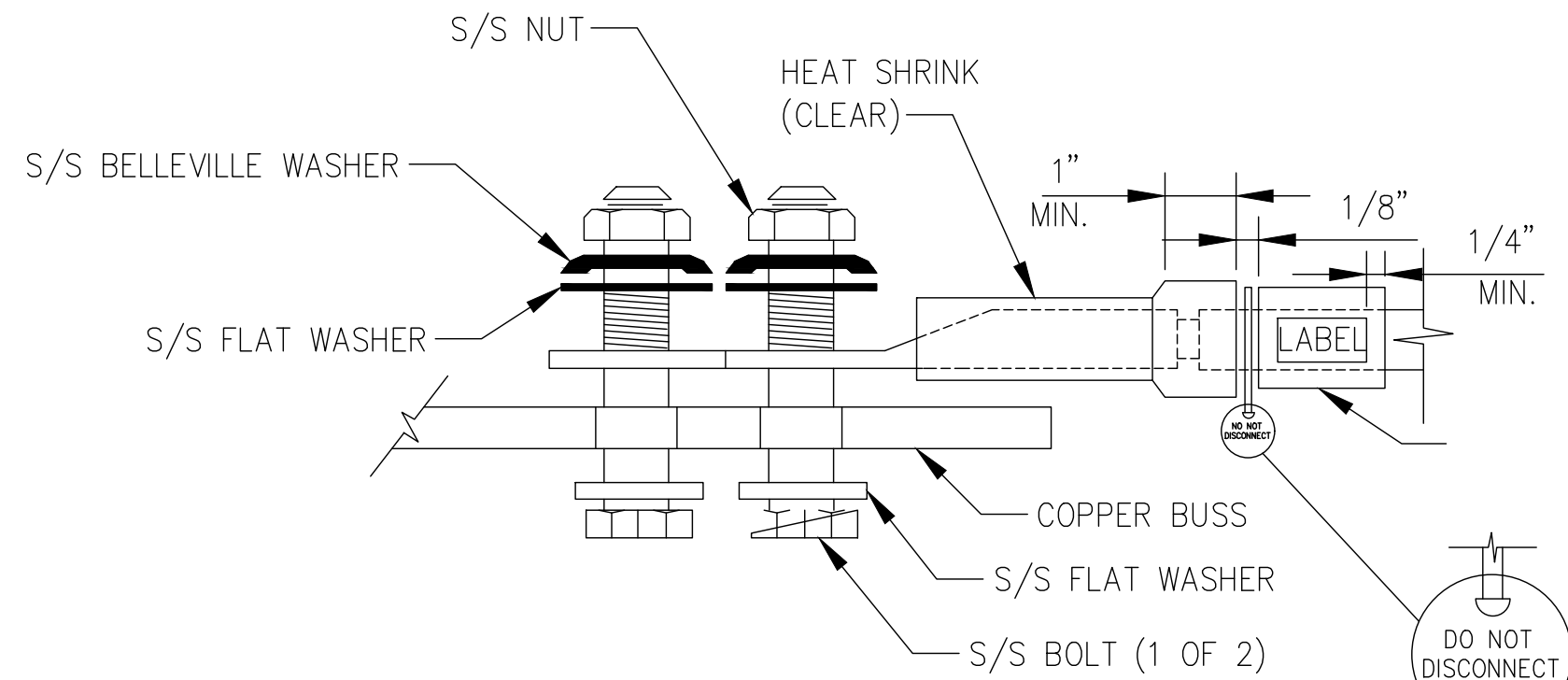
LEGEND

1. TINNED COPPER GROUND BAR, 1/4"x4"x20", NEWTON INSTRUMENT CO., HARGER TGB14420M, OR EQUIVALENT. HOLE CENTERS TO MATCH
2. NEMA DOUBLE LUG CONFIGURATION.
3. INSULATORS, NEWTON INSTRUMENT CO. CAT. NO. 3061-4 OR HARGER EQUIVALENT.
4. 5/8" LOCKWASHERS, NEWTON INSTRUMENT CO. CAT. NO. 3015-8 OR EQUIVALENT.
5. WALL MOUNTING BRACKET, NEWTON INSTRUMENT CO. CAT. NO. A-6056 OR HARGER EQUIVALENT.
6. 5/8-11"x1" H.H.C.S. BOLTS, NEWTON INSTRUMENT CO. CAT. NO. 3012-1 OR HARGER EQUIVALENT.

NOTES:

1. ALL MOUNTING HARDWARE CAN ALSO BE USED ON 6", 12", 18", ETC. GROUND BARS.
2. ENTIRE ESSEMBLY AVAILABLE FROM NEWTON INSTRUMENT CO. CAT. NO. 2106060010 OR AS HARGER TGB14420M.

1 TYPICAL GROUND BAR
SCALE: NOT TO SCALE

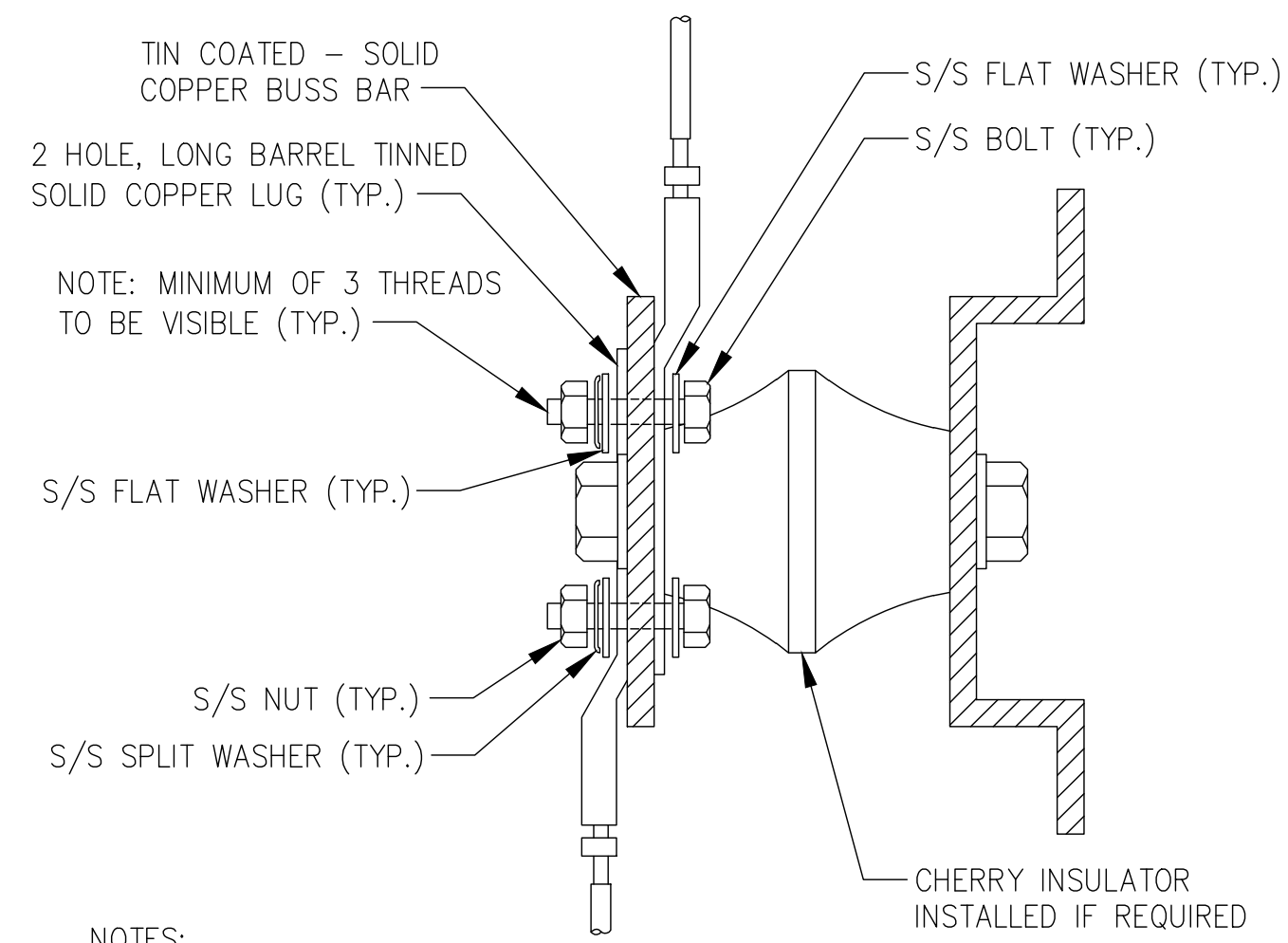


NOTE:

ALL MECHANICAL EXTERNAL TERMINATION SURFACES SHALL BE TREATED WITH T&B KOPR-SHIELD CP8 ANTI-OXIDATION COMPOUND.

"DO NOT DISCONNECT"
TAG ON ALL GROUND
BAR INTERCONNECTS

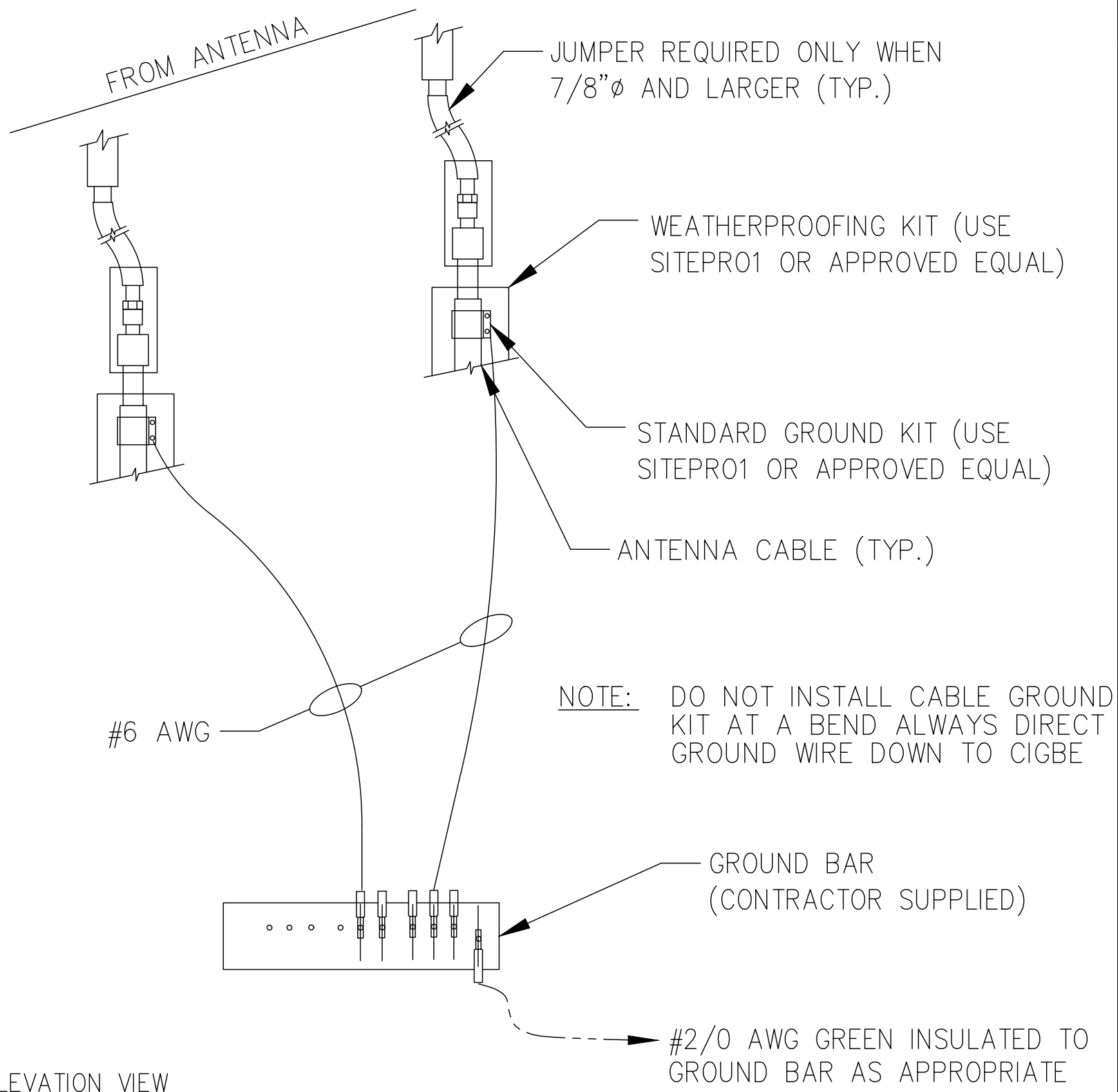
2 TYPICAL EQUIPMENT GROUND CONNECTION
SCALE: NOT TO SCALE



NOTES:

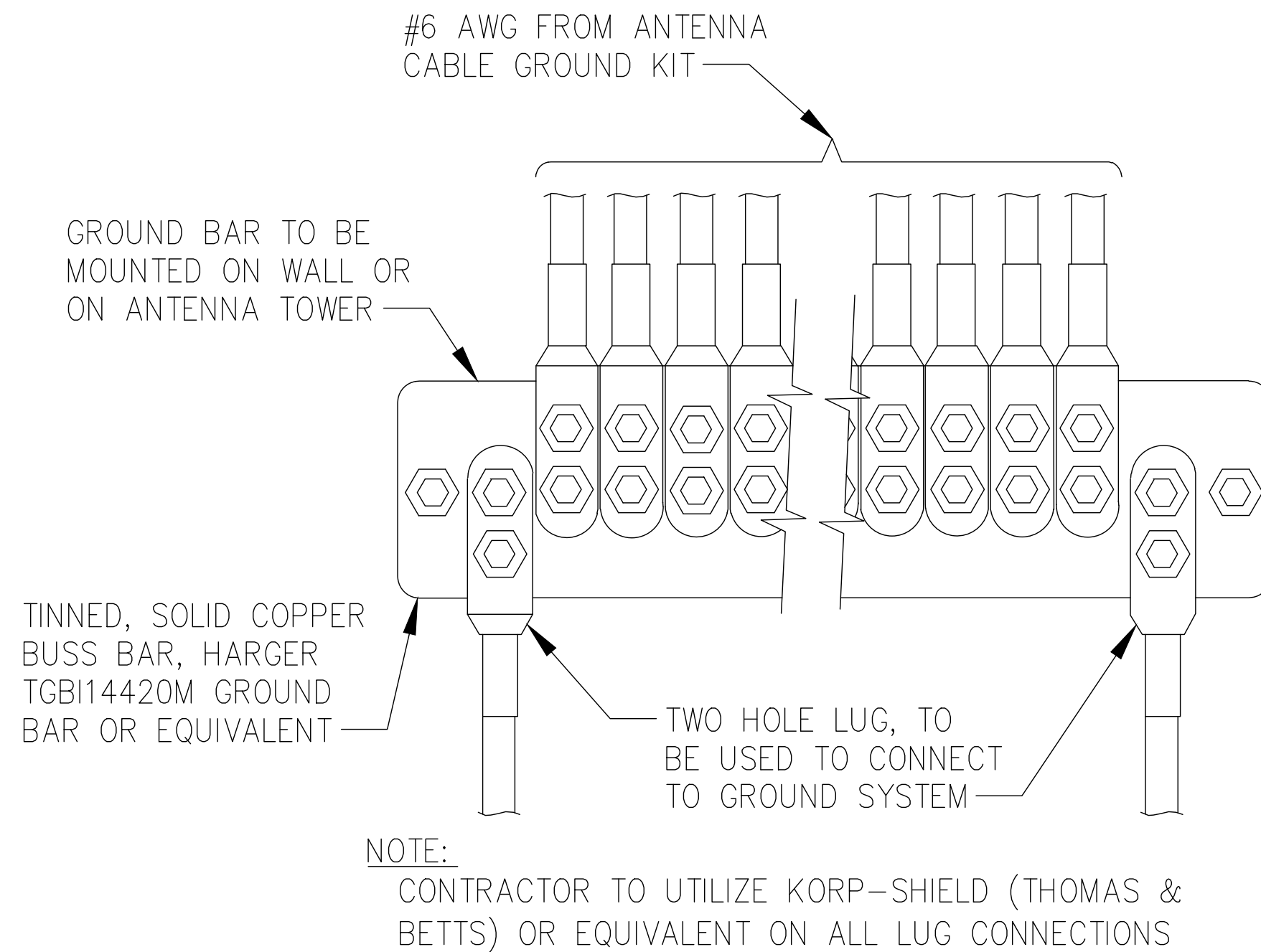
1. ALL HARDWARE 18-8 STAINLESS STEEL INCLUDING SPLIT WASHERS.
2. COAT WIRE END WITH ANTI-OXIDATION COMPOUND PRIOR TO INSERTION INTO LUG BARREL AND CRIMPING.
3. APPLY ANTI-OXIDATION COMPOUND BETWEEN ALL LUGS AND BUSS BARS PRIOR TO MATING AND BOLTING.

3 TYPICAL GROUND LUG
SCALE: NOT TO SCALE

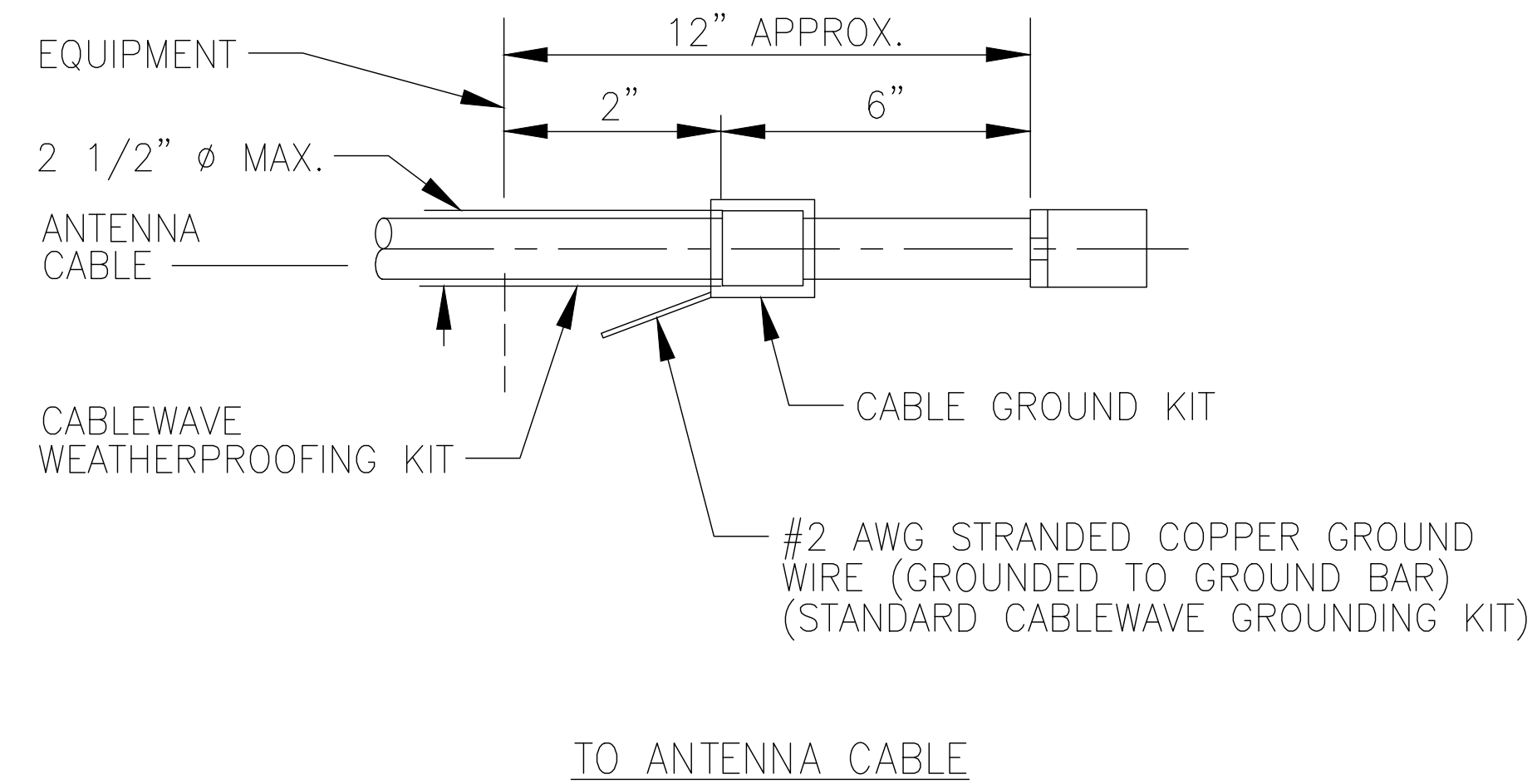


ELEVATION VIEW

4 TYPICAL CONNECTION OF GROUND WIRES TO GROUNDING BARS@ANTENNA
SCALE: NOT TO SCALE



5 TYPICAL ANTENNA GROUND BAR
SCALE: NOT TO SCALE



NOTE:

DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.

6 TYPICAL CABLE GROUND KIT CONNECTION
SCALE: NOT TO SCALE

JURISDICTIONAL APPROVAL:

verizon

180 WASHINGTON VALLEY ROAD
BEDMINSTER, NJ 07921

CROWN CASTLE

1200 MACARTHUR BLVD, SUITE 200
MAHWAH, NJ 07430

Trylon

1825 W. WALNUT HILL LANE, SUITE 120
IRVING, TEXAS 75038

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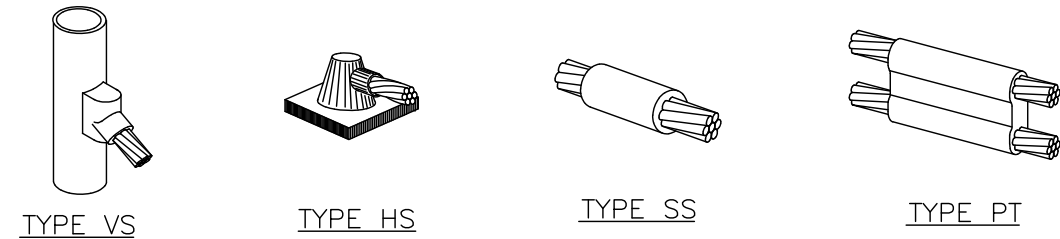
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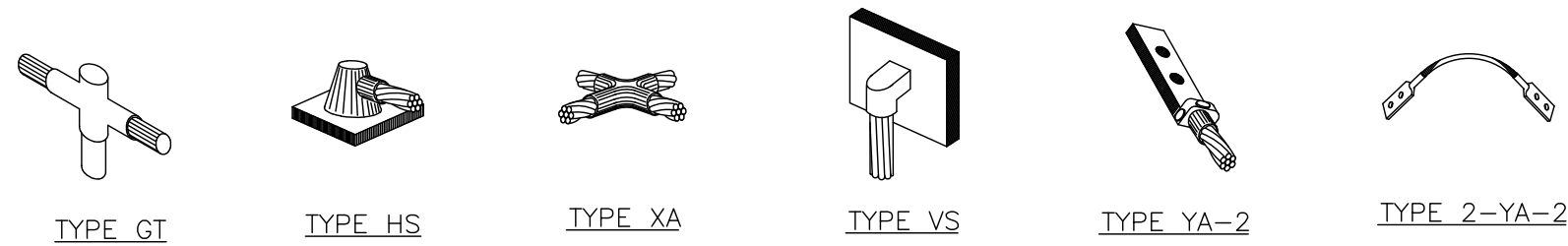
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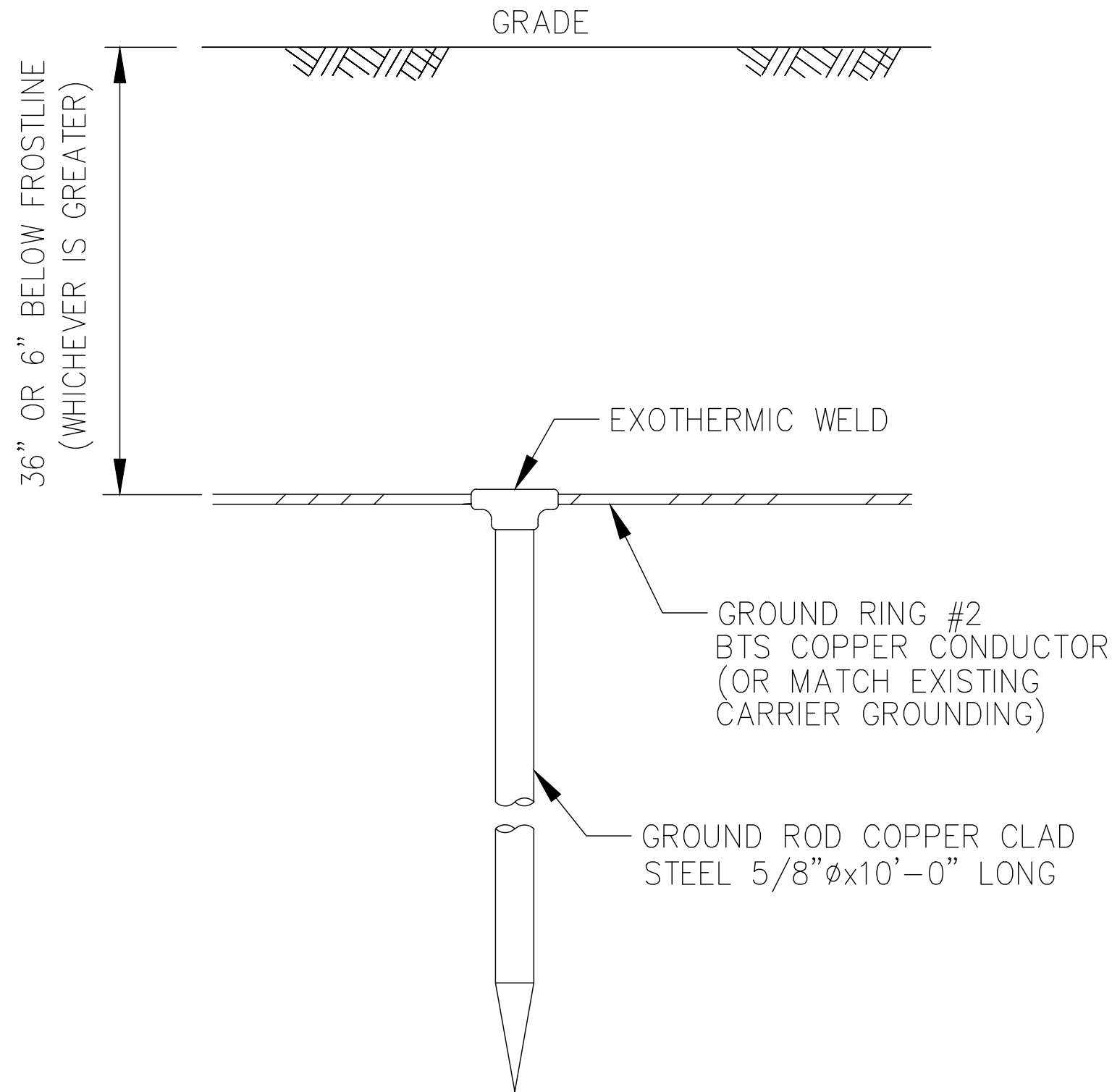
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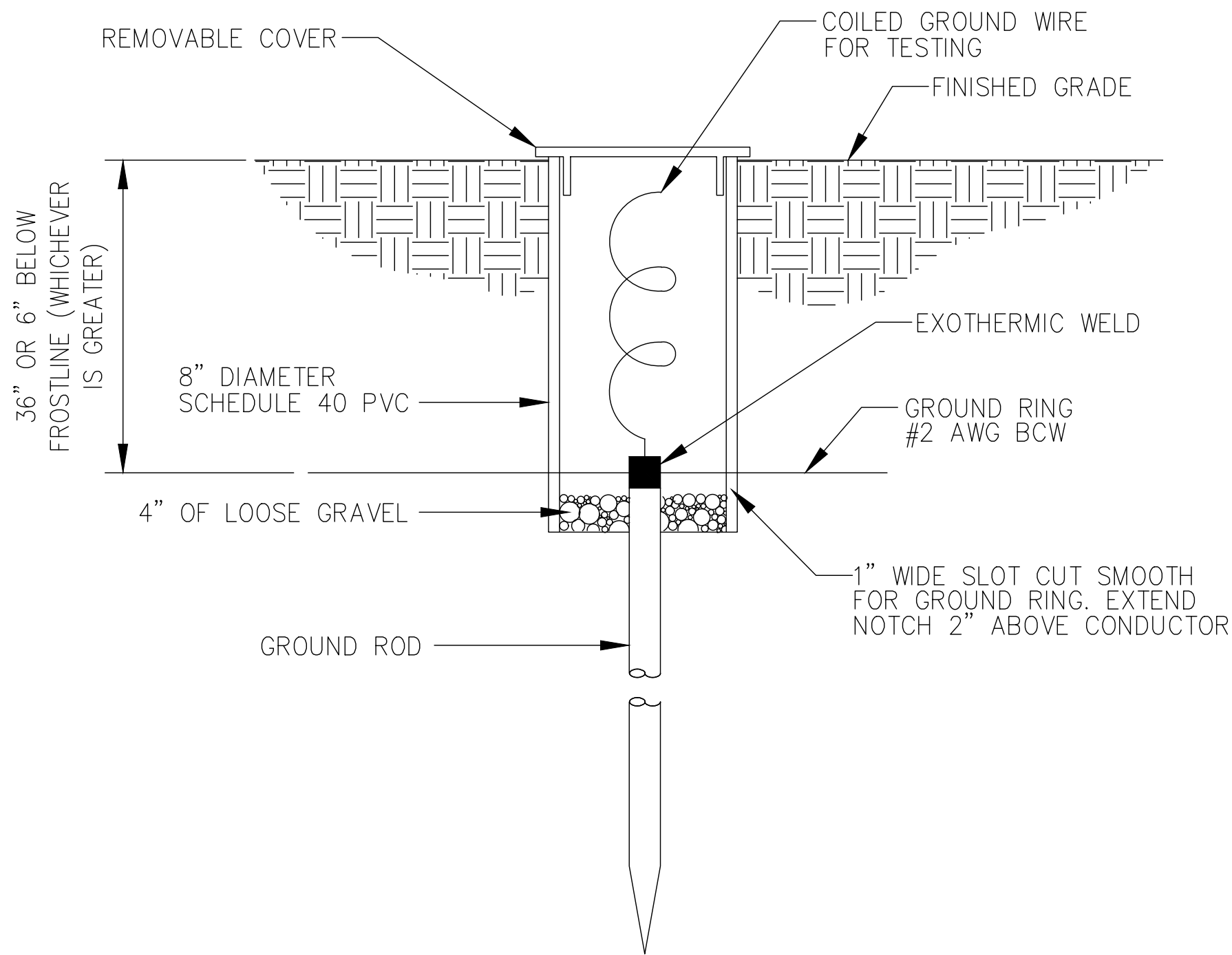
NOTE: ERICO CADWELD "MOLD TYPES" SHOWN HERE ARE EXAMPLES. CONSULT WITH PROJECT MANAGER FOR SPECIFIC MOLDS TO BE USED FOR THIS PROJECT



1 TYPICAL EQUIPMENT GROUND CONNECTIONS
SCALE: NOT TO SCALE



2 TYPICAL GROUND ROD
SCALE: NOT TO SCALE



3 TYPICAL INSPECTION SLEEVE
SCALE: NOT TO SCALE

4 NOT USED
SCALE: NOT TO SCALE

JURISDICTIONAL APPROVAL:



1825 W. WALNUT HILL LANE, SUITE 120
IRVING, TEXAS 75038

VERIZON SITE NUMBER: 16968208

BU #: 877803
KCYC LEES SUMMIT DT
207 SE DOUGLAS
LEE'S SUMMIT, MO 64063
EXISTING 180'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
1	06/21/2023	RC	FINAL	EAN
2	07/27/2023	RC	FINAL	AMT
3	09/18/2023	TFL	FINAL	AMT
4	10/17/2023	RC	FINAL	AMT
5	01/09/2024	TFL	FINAL	AMT
6	01/23/2024	RC	FINAL	AMT
7	03/29/2024	RC	FINAL	AMT
8	04/05/2024	RC	FINAL	AMT
9	04/19/2024	RC	FINAL	AMT
10	07/25/2024	RC	FINAL	AMT
11	08/14/2024	RC	FINAL	AMT
12	09/19/2024	RC	FINAL	AMT



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:

G-3

REVISION:

12

NOTE: LEE’S SUMMIT FIRE STATION
BUN: 877803

PROPERTY DESCRIPTION: LEASE AREA (AS PROVIDED)

All that part of Lot 8, Block 17, W.B. Howards Addition, a subdivision in the city of Lee’s Summit, Jackson County, Missouri described as follows: Commencing at the most Northerly corner of said Lot 8, thence South 45° East along the most Northeasterly line of said Lot 8, a distance of 4.59 feet, thence South 44° 41’ 08” West parallel to the most Northwesterly line of said Lot 8, a distance of 30.00 feet to the point of beginning, thence continuing South 44° 41’ 08” West, a distance of 30.00 feet, thence South 45° East a distance of 40.00 feet, thence North 44°41’ 08” East, a distance of 30.00 feet, thence North 45° West, a distance of 40.00 feet to the point of beginning.

City of Lee’s Summit
APN: 61–340–20–06–00–0–00–000
Deed: N/A

Given under my hand and seal _____

JEFFREY B. LOVELACE
MO–LS2580

DATE: _____

LEE’S SUMMIT FIRE STATION
BUN: 877803

PROPERTY DESCRIPTION: NON–EXCLUSIVE ACCESS & UTILITY EASEMENT (AS SURVEYED)

A 20 foot wide Access and Utility Easement being situated in Lots 7 and 8, Block 17, WILLIAM B. HOWARD’S FIRST ADDITION TO THE CITY OF LEE’S SUMMIT, Jackson County, Missouri, lying 10.00 feet on each side of following described centerline:

COMMENCING at the most Northerly corner of said Lot 8; thence along the Northeasterly line of said Lot 8, South 28°44’45” East, a distance of 4.59 feet; thence departing said Northeasterly line, South 60°48’47” West, a distance of 47.24 feet; thence North 29°11’13” West, a distance of 10.00 feet to the POINT OF BEGINNING; thence North 60°48’47” East, a distance of 20.00 feet; thence North 29°11’13” West, a distance of 4.59 feet; thence North 60°48’47” East, a distance of 27.35 feet to the Southwesterly line of an existing Public Alley in said Block 17 and the POINT OF TERMINATION. Containing 1,039 square feet or 0.02 acres more or less.

City of Lee’s Summit
APN: 61–340–20–06–00–0–00–000
Deed: N/A

Given under my hand and seal _____

JEFFREY B. LOVELACE
MO–LS2580

DATE: _____