



PHOTO SIMULATIONS

**SITE NAME: 4BN0106A
BN106/1662 COMM. AVE. RT**

PROJECT TYPE: ANCHOR UPGRADE – 67D5A998C INDOOR (EVOLVED FROM 3B)

Address:

**1662 COMMONWEALTH AVENUE
BRIGHTON, MA 02135**

Date:

**JULY 22, 2021
(REVISION #0)**

Prepared by:





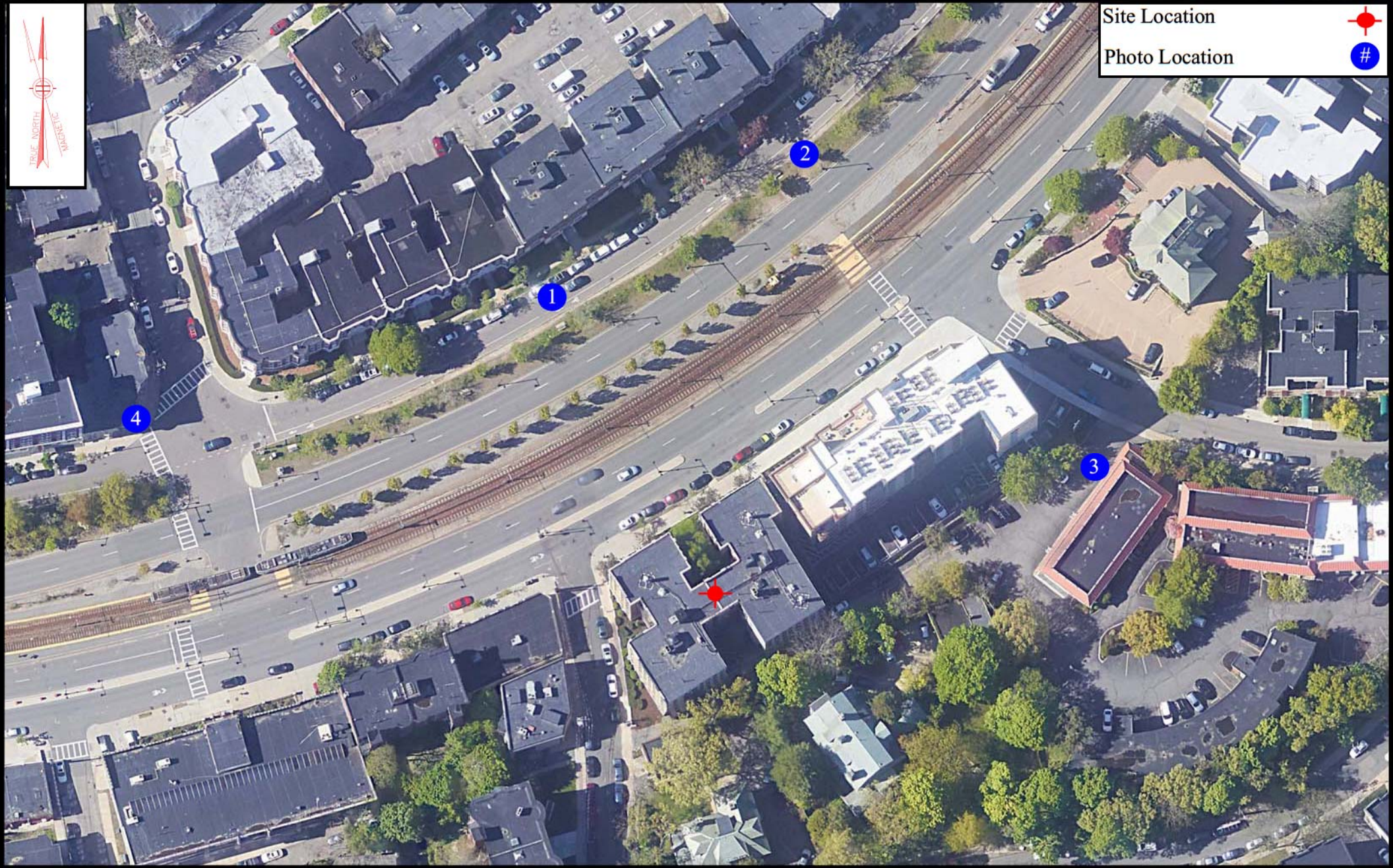
R.K. Executive Centre ■ 201 Boston Post Road West ■ Suite 101 ■ Marlborough, MA 01752

t. 508.481.7400 ■ www.chappellengineering.com ■ f. 508.481.7406

PHOTO LOCATION MAP



Site Location 
Photo Location 



4BN0106A
BN106/1662 Comm. Ave. RT
1662 Commonwealth Avenue
Brighton, MA 02135

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PROPOSED CONDITIONS - PHOTO LOCATION 1



T · Mobile ·

4BN0106A
BN106/1662 Comm. Ave. RT
1662 Commonwealth Avenue, Boston, MA 02135
Photo Simulation from 180' +/- North-Northwest of Building

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PROPOSED CONDITIONS - PHOTO LOCATION 2



T · Mobile ·

4BN0106A
BN106/1662 Comm. Ave. RT
1662 Commonwealth Avenue, Boston, MA 02135
Photo Simulation from 220' +/- North-Northeast of Building

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PROPOSED CONDITIONS - PHOTO LOCATION 3



 T-Mobile

4BN0106A
BN106/1662 Comm. Ave. RT
1662 Commonwealth Avenue, Boston, MA 02135
Photo Simulation from 200' +/- Northeast of Building

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PROPOSED CONDITIONS - PHOTO LOCATION 4



T · Mobile ·

4BN0106A
BN106/1662 Comm. Ave. RT
1662 Commonwealth Avenue, Boston, MA 02135
Photo Simulation from 330' +/- Northwest of Building

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BN106/1662 COMM. AVE. RT

1662 COMMONWEALTH AVENUE
BRIGHTON, MA 02135

SITE NO.: 4BN0106A

RF DESIGN GUIDELINE: 67D5A998C INDOOR (EVOLVED FROM 3B)

T-MOBILE TECHNICIAN SITE SAFETY NOTES

LOCATION	SPECIAL RESTRICTIONS
SECTOR A:	ACCESS BY CERTIFIED CLIMBER
SECTOR B:	ACCESS BY CERTIFIED CLIMBER
SECTOR C:	ACCESS BY CERTIFIED CLIMBER
GPS/LMU:	UNRESTRICTED
RADIO CABINETS:	UNRESTRICTED
PPC DISCONNECT:	UNRESTRICTED
MAIN CIRCUIT D/C:	UNRESTRICTED
NIU/T DEMARC:	UNRESTRICTED
OTHER/SPECIAL:	NONE

GENERAL NOTES

- THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK. THE WORK PERFORMED ON THE PROJECT AND THE MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES.
- THE ARCHITECT/ENGINEER HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. THE CONTRACTOR BIDDING THE JOB IS NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS.
- THE CONTRACTOR OR BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) THE OMNIPONT REPRESENTATIVE OF ANY CONFLICTS, ERRORS, OR OMISSIONS PRIOR TO THE SUBMISSION OF CONTRACTOR'S PROPOSAL OR PERFORMANCE OF WORK. IN THE EVENT OF DISCREPANCIES THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED IN WRITING OTHERWISE.
- THE SCOPE OF WORK SHALL INCLUDE FURNISHING ALL MATERIALS, EQUIPMENT, LABOR AND ALL OTHER MATERIALS AND LABOR DEEMED NECESSARY TO COMPLETE THE WORK/PROJECT AS DESCRIBED HEREIN.
- THE CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO THE SUBMISSION OF BIDS OR PERFORMING WORK TO FAMILIARIZE HIMSELF WITH THE FIELD CONDITIONS AND TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL OBTAIN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS/CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO THE MANUFACTURER'S/VENDOR'S SPECIFICATIONS UNLESS NOTED OTHERWISE OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
- THE CONTRACTOR SHALL PROVIDE A FULL SET OF CONSTRUCTION DOCUMENTS AT THE SITE UPDATED WITH THE LATEST REVISIONS AND ADDENDUMS OR CLARIFICATIONS AVAILABLE FOR THE USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT.
- THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY CONSTRUCTION CONTROL SURVEYS, ESTABLISHING AND MAINTAINING ALL LINES AND GRADES REQUIRED TO CONSTRUCT ALL IMPROVEMENTS AS SHOWN HEREIN.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS WHICH MAY BE REQUIRED FOR THE WORK BY THE ARCHITECT/ENGINEER, THE STATE, COUNTY OR LOCAL GOVERNMENT AUTHORITY.
- THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, ETC. DURING CONSTRUCTION. UPON COMPLETION OF WORK, THE CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.
- THE CONTRACTOR SHALL KEEP THE GENERAL WORK AREA CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DIRT, DEBRIS, RUBBISH AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY. PREMISES SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.
- THE CONTRACTOR SHALL COMPLY WITH ALL OSHA REQUIREMENTS AS THEY APPLY TO THIS PROJECT.
- THE CONTRACTOR SHALL NOTIFY THE PROJECT OWNER'S REPRESENTATIVE WHERE A CONFLICT OCCURS ON ANY OF THE CONTRACT DOCUMENTS. THE CONTRACTOR IS NOT TO ORDER MATERIAL OR CONSTRUCT ANY PORTION OF THE WORK THAT IS IN CONFLICT UNTIL CONFLICT IS RESOLVED BY THE LESSEE/LICENSEE REPRESENTATIVE.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, PROPERTY LINES, ETC. ON THE JOB.
- ALL UNDERGROUND UTILITY INFORMATION WAS DETERMINED FROM SURFACE INVESTIGATIONS AND EXISTING PLANS OF RECORD. THE CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES IN THE FIELD PRIOR TO ANY SITE WORK.

AT LEAST 72 HOURS PRIOR TO DIGGING, THE CONTRACTOR IS REQUIRED TO CALL DIG SAFE AT 811



VICINITY MAP: 1"=1000'



DIRECTIONS

HEAD NORTHEAST TOWARD COMMERCE WAY. TURN RIGHT TOWARD COMMERCE WAY. TURN LEFT ONTO COMMERCE WAY. TURN LEFT ONTO SOUTH WASHINGTON STREET. TURN RIGHT ONTO MA-123 EAST. TURN LEFT TO MERGE ONTO I-495 NORTH TOWARD MANSFIELD/MARLBORO. TAKE EXIT 13A TO MERGE ONTO I-95 NORTH. TAKE THE EXIT ON THE LEFT TO STAY ON I-95 NORTH TOWARD PORTSMOUTH NH. TAKE EXIT 20A FOR ROUTE 9 TOWARD BROOKLINE EAST. MERGE ONTO MA-9 EAST/BOYLSTON STREET. KEEP LEFT TO STAY ON MA-9 EAST. SHARP LEFT ONTO CHESTNUT HILL AVENUE. TURN RIGHT ONTO DEAN ROAD. CONTINUE ONTO COREY ROAD. TURN LEFT ONTO CUMMINGS ROAD. SITE IS LOCATED ON RIGHT HAND SIDE.

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DO NOT SCALE DRAWINGS

CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE PROJECT OWNER'S REPRESENTATIVE IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

SITE NOTES

- THIS IS AN UNMANNED AND RESTRICTED ACCESS TELECOMMUNICATION FACILITY, AND IS NOT FOR HUMAN HABITATION. IT WILL BE USED FOR THE TRANSMISSION OF RADIO SIGNAL FOR THE PURPOSE OF PROVIDING PUBLIC CELLULAR SERVICE.
 - ADA COMPLIANCE NOT REQUIRED.
 - POTABLE WATER OR SANITARY SERVICE IS NOT REQUIRED.
 - NO OUTDOOR STORAGE OR ANY SOLID WASTE RECEPTACLES REQUIRED.
- CONTRACTOR SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS, AND CONDITIONS ON JOB SITE. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK. FAILURE TO NOTIFY THE ARCHITECT/ENGINEER PLACE THE RESPONSIBILITY ON THE CONTRACTOR TO CORRECT THE DISCREPANCIES AT THE CONTRACTOR'S EXPENSE.
- NEW CONSTRUCTION WILL CONFORM TO ALL APPLICABLE CODES AND ORDINANCES.
 - BUILDING CODE: MASSACHUSETTS STATE BUILDING CODE 780 CMR (9TH EDITION)
 - ELECTRICAL CODE: 2017 NATIONAL ELECTRICAL CODE
 - STRUCTURAL CODE: TIA/EIA-222-H STRUCTURAL STANDARDS FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS.

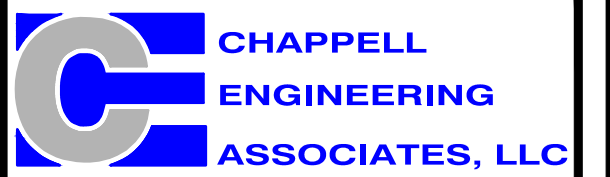
PROJECT SUMMARY

SITE NUMBER: 4BN0106A
 SITE NAME: BN106/1662 COMM. AVE. RT
 SITE ADDRESS: 1662 COMMONWEALTH AVENUE BRIGHTON, MA 02135
 ASSESSOR'S PARCEL NO.: 2102013070
 ZONING DISTRICT: MFR-1 MULTIFAMILY RESIDENTIAL SUBDISTRICT
 CONSTRUCTION TYPE: ANCHOR UPGRADE
 LAND OWNER: 1662-1666 CONDOMINIUM TRUST 15 COMMERCE WAY, SUITE B NORTON, MA 02766
 APPLICANT: T-MOBILE NORTHEAST LLC 15 COMMERCE WAY, SUITE B NORTON, MA 02766
 ARCHITECT: CHAPPELL ENGINEERING ASSOCIATES, LLC 201 BOSTON POST ROAD WEST, SUITE 101 MARLBOROUGH, MA 01752
 STRUCTURAL ENGINEER: CHAPPELL ENGINEERING ASSOCIATES, LLC 201 BOSTON POST ROAD WEST, SUITE 101 MARLBOROUGH, MA 01752
 SITE CONTROL POINT: LATITUDE: 42.341730° N42°20'30.23" LONGITUDE: -71.144732° W71°08'41.04"

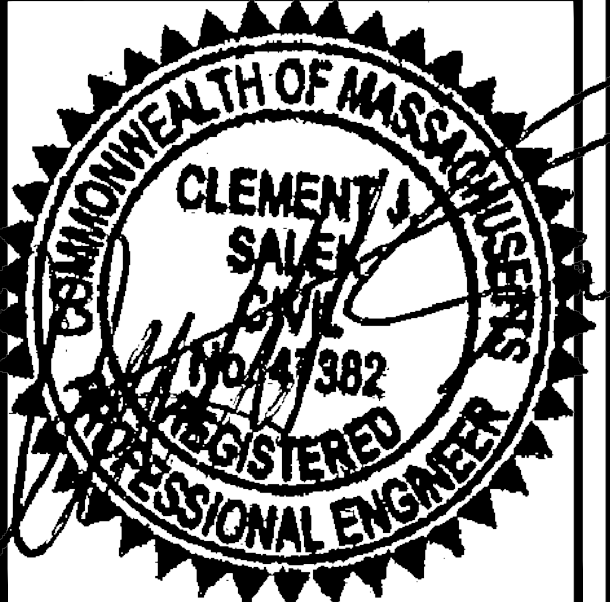
SPECIAL ZONING NOTE:
 BASED ON INFORMATION PROVIDED BY T-MOBILE REGULATORY COMPLIANCE PROFESSIONALS AND LEGAL COUNSEL, THIS TELECOMMUNICATIONS EQUIPMENT DEPLOYMENT IS CONSIDERED AN ELIGIBLE FACILITY UNDER THE MIDDLE CLASS TAX RELIEF AND JOB CREATION ACT OF 2012, 47 USC 1455(A), SECTION 6409(A), AND IS SUBJECT TO AN ELIGIBLE FACILITY REQUEST, EXPEDITED REVIEW, AND LIMITED/PARTIAL ZONING PRE-EMPTION FOR LOCAL DISCRETIONARY PERMITS (VARIANCE, SPECIAL PERMIT, SITE PLAN REVIEW, OR ADMINISTRATIVE REVIEW).



T-MOBILE NORTHEAST LLC
15 COMMERCE WAY, SUITE B
NORTON, MA 02766
OFFICE: (508) 286-2700



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 R.K. EXECUTIVE CENTRE
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SUITE 101
MARLBOROUGH, MA 01752
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APPROVALS

STRUCTURE OWNER _____

LEASING _____

R.F. _____

ZONING _____

CONSTRUCTION _____

A/E _____

PROJECT NO: 4BN0106A

DRAWN BY: JRV

CHECKED BY: JMT

VERSION		
2	07/22/21	CONSTRUCTION REVISED
1	05/28/21	CONSTRUCTION
0	12/03/20	CONSTRUCTION REVIEW

THIS DOCUMENT IS THE CREATION, DESIGN, PROPERTY AND COPYRIGHTED WORK OF T-MOBILE NORTHEAST LLC. ANY DUPLICATION OR USE WITHOUT EXPRESS WRITTEN CONSENT IS STRICTLY PROHIBITED. DUPLICATION AND USE BY GOVERNMENT AGENCIES FOR THE PURPOSES OF CONDUCTING THEIR LAWFULLY AUTHORIZED REGULATORY AND ADMINISTRATIVE FUNCTIONS IS SPECIFICALLY ALLOWED.

4BN0106A
BN106/1662 COMM
AVE RT
1662 COMMONWEALTH AVENUE
BRIGHTON, MA 02135

SHEET TITLE

TITLE SHEET

SHEET NUMBER

T-1

GENERAL NOTES:

- FOR THE PURPOSE OF CONSTRUCTION DRAWINGS, THE FOLLOWING DEFINITIONS SHALL APPLY:
CONTRACTOR – T-MOBILE
SUBCONTRACTOR – GENERAL CONTRACTOR (CONSTRUCTION)
OWNER – T-MOBILE
OEM – ORIGINAL EQUIPMENT MANUFACTURER
- PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR.
- ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK.
- ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL, STATE AND FEDERAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
- DRAWINGS PROVIDED HERE ARE NOT TO BE SCALED AND ARE INTENDED TO SHOW OUTLINE ONLY.
- UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
- THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CONTRACTOR.
- SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER, T1 CABLES AND GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWING. SUBCONTRACTOR SHALL UTILIZE EXISTING TRAYS AND/OR SHALL ADD NEW TRAYS AS NECESSARY. SUBCONTRACTOR SHALL CONFIRM THE ACTUAL ROUTING WITH THE CONTRACTOR AND/OR LANDLORD PRIOR TO CONSTRUCTION.
- THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
- SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY.
- SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION AND RETURN DISTURBED AREAS TO ORIGINAL CONDITIONS.
- THE SUBCONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE SUBCONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
- SUBCONTRACTOR SHALL NOTIFY CHAPPELL ENGINEERING ASSOCIATES, LLC 48 HOURS IN ADVANCE OF POURING CONCRETE OR BACKFILLING TRENCHES, SEALING ROOF AND WALL PENETRATIONS AND POST DOWNS, FINISHING NEW WALLS OR FINAL ELECTRICAL CONNECTIONS FOR ENGINEERING REVIEW.
- CONSTRUCTION SHALL COMPLY WITH ALL T-MOBILE STANDARDS AND SPECIFICATIONS.
- SUBCONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS MUST BE VERIFIED. SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
- THE EXISTING CELL SITES ARE IN FULL COMMERCIAL OPERATION. ANY CONSTRUCTION WORK BY SUBCONTRACTOR SHALL NOT DISRUPT THE EXISTING NORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MUST BE COORDINATED WITH CONTRACTOR. ALSO, WORK SHOULD BE SCHEDULED FOR AN APPROPRIATE MAINTENANCE WINDOW USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT.
- IF THE EXISTING CELL SITE IS ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE TO BE WORN TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.

SITE WORK GENERAL NOTES:

- THE SUBCONTRACTOR 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 ENGINEERS. EXTREME CAUTION SHOULD BE USED BY THE SUBCONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. SUBCONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING AND EXCAVATION.
- ALL SITE WORK SHALL BE AS INDICATED ON THE DRAWINGS AND PROJECT SPECIFICATIONS.
- IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
- THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE BTS EQUIPMENT AND TOWER AREAS.
- NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.
- THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
- 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 ENGINEERING, OWNER AND/OR LOCAL UTILITIES.
- 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 IN THE PROJECT SPECIFICATIONS.
- SUBCONTRACTOR 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 SUBCONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE T-MOBILE SPECIFICATION FOR SITE SIGNAGE.

CONCRETE AND REINFORCING STEEL NOTES:

- ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST-IN-PLACE CONCRETE.
 - ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE. A HIGHER STRENGTH (400PSI) MAY BE USED. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 381 CODE REQUIREMENTS
 - REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE. SPLICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, UNO.
 - THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:
CONCRETE CAST AGAINST EARTH.....3 IN.
CONCRETE EXPOSED TO EARTH OR WEATHER:
#6 AND LARGER2 IN.
#5 AND SMALLER & WWF1½ IN.
CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR NOT CAST AGAINST THE GROUND:
SLAB AND WALL¾ IN.
BEAMS AND COLUMNS½ IN.
 - A CHAMFER ¾" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNO, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.
 - INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHORS SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO THE MANUFACTURERS RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR CONTRACTOR APPROVAL WHEN DRILLING HOLES IN CONCRETE. SPECIAL INSPECTIONS, REQUIRED BY GOVERNING CODES, SHALL BE PERFORMED IN ORDER TO MAINTAIN MANUFACTURER'S MAXIMUM ALLOWABLE LOADS. ALL EXPANSION/WEDGE ANCHORS SHALL BE STAINLESS STEEL OR HOT DIPPED GALVANIZED. EXPANSION BOLTS SHALL BE PROVIDED BY SIMPSON OR APPROVED EQUAL.
 - CONCRETE CYLINDER TIES ARE NOT REQUIRED FOR SLAB ON GRADE WHEN CONCRETE IS LESS THAN 50 CUBIC YARDS (IBC1905.6.2.3) IN THAT EVENT THE FOLLOWING RECORDS SHALL BE PROVIDED BY THE CONCRETE SUPPLIER;
(A) RESULTS OF CONCRETE CYLINDER TEST PERFORMED AT THE SUPPLIERS PLANT.
(B) CERTIFICATION OF MINIMUM COMPRESSIVE STRENGTH FOR THE CONCRETE GRADE SUPPLIED.
FOR GREATER THAN 50 CUBIC YARDS THE GC SHALL PERFORM THE CONCRETE CYLINDER TEST.
 - AS AN ALTERNATIVE TO ITEM 7. TEST CYLINDERS SHALL BE TAKEN INITIALLY AND THEREAFTER FOR EVERY 50 YARDS OF CONCRETE FROM EACH DIFFERENT BATCH PLANT.
 - EQUIPMENT SHALL NOT BE PLACED ON NEW PADS FOR SEVEN DAYS AFTER PAD IS POURED, UNLESS IT IS VERIFIED BY CYLINDER TESTS THAT COMPRESSIVE STRENGTH HAS BEEN ATTAINED.
- STRUCTURAL STEEL NOTES:**
- ALL STEEL WORK SHALL BE PAINTED OR GALVANIZED IN ACCORDANCE WITH THE DRAWINGS AND T-MOBILE SPECIFICATIONS UNLESS OTHERWISE NOTED. STRUCTURAL STEEL SHALL BE ASTM-A-36 UNLESS OTHERWISE NOTED ON THE SITE SPECIFIC DRAWINGS. STEEL DESIGN, INSTALLATION AND BOLTING SHALL BE IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) "MANUAL OF STEEL CONSTRUCTION".
 - ALL WELDING SHALL BE PERFORMED USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC AND AWS D1.1. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL OF STEEL CONSTRUCTION", 9TH EDITION. PAINTED SURFACES SHALL BE TOUCHED UP.
 - BOLTED CONNECTIONS SHALL USE BEARING TYPE ASTM A325 BOLTS (¾") AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE. ALL BOLTS SHALL BE GALVANIZED OR STAINLESS STEEL.
 - NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE ¾" DIA. ASTM A 307 BOLTS (GALV) UNLESS NOTED OTHERWISE.
 - CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ENGINEER REVIEW & APPROVAL ON PROJECTS REQUIRING STRUCTURAL STEEL.
 - ALL STRUCTURAL STEEL WORK SHALL BE DONE IN ACCORDANCE WITH AISC SPECIFICATIONS.

SOIL COMPACTION NOTES FOR SLAB ON GRADE:

- EXCAVATE AS REQUIRED TO REMOVE VEGETATION AND TOPSOIL TO EXPOSE NATURAL SUBGRADE AND PLACE CRUSHED STONE AS REQUIRED.
- COMPACTION CERTIFICATION: AN INSPECTION AND WRITTEN CERTIFICATION BY A QUALIFIED GEOTECHNICAL TECHNICIAN OR ENGINEER IS ACCEPTABLE.
- AS AN ALTERNATE TO INSPECTION AND WRITTEN CERTIFICATION, THE "UNDISTURBED SOIL" BASE SHALL BE COMPACTED WITH "COMPACTION EQUIPMENT", LISTED BELOW, TO AT LEAST 90% MODIFIED PROCTOR MAXIMUM DENSITY PER ASTM D 1557 METHOD C.
- COMPACTED SUBBASE SHALL BE UNIFORM AND LEVELED. PROVIDE 6" MINIMUM CRUSHED STONE OR GRAVEL COMPACTED IN 3" LIFTS ABOVE COMPACTED SOIL. GRAVEL SHALL BE NATURAL OR CRUSHED WITH 100% PASSING #1 SIEVE.
- AS AN ALTERNATE TO ITEMS 2 AND 3, THE SUBGRADE SOILS WITH 5 PASSES OR A MEDIUM SIZED VIBRATORY PLATE COMPACTOR (SUCH AS BOMAG BPR 30/38) OR HAND-OPERATED SINGLE DRUM VIBRATORY ROLLER (SUCH AS BOMAG BW 55E). AND SOFT AREAS THAT ARE ENCOUNTERED SHOULD BE REMOVED AND REPLACED WITH A WELL-GRADED GRANULAR FILL AND COMPACTED AS STATED ABOVE.

COMPACTION EQUIPMENT:

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

CONSTRUCTION NOTES:

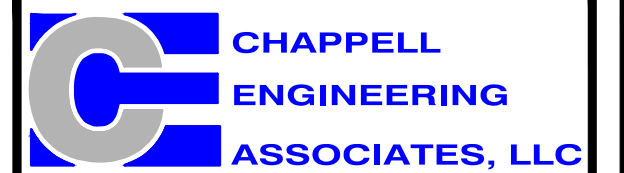
- FIELD VERIFICATION:
SUBCONTRACTOR SHALL FIELD VERIFY SCOPE OF WORK, T-MOBILE ANTENNA PLATFORM LOCATION AND UTILITY TRENCHWORK.
- COORDINATION OF WORK:
SUBCONTRACTOR SHALL COORDINATE RF WORK AND PROCEDURES WITH CONTRACTOR.
- CABLE LADDER RACK:
SUBCONTRACTOR SHALL FURNISH AND INSTALL CABLE LADDER RACK, CABLE TRAY AND/OR ICE BRIDGE, AND CONDUIT AS REQUIRED TO SUPPORT CABLES TO THE NEW BTS LOCATION.

ELECTRICAL INSTALLATION NOTES:

- WIRING, RACEWAY, AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC AND TELCORDIA.
- SUBCONTRACTOR SHALL MODIFY OR INSTALL CABLE TRAY SYSTEM AS REQUIRED TO SUPPORT RF AND TRANSPORT CABLEING TO THE NEW BTS EQUIPMENT. SUBCONTRACTOR SHALL SUBMIT MODIFICATIONS TO CONTRACTOR FOR APPROVAL.
- ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC AND TELCORDIA.
- CABLES SHALL NOT BE ROUTED THROUGH LADDER-STYLE CABLE TRAY RUNGS.
- EACH END OF EVERY POWER, GROUNDING, AND T1 CONDUCTOR AND CABLE SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2 INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC AND OSHA, AND MATCH INSTALLATION REQUIREMENTS.
- POWER PHASE CONDUCTORS (I.E., HOTS) SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, ½ INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). PHASE CONDUCTOR COLOR CODES SHALL CONFORM WITH THE NEC AND OSHA.
- ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS. ALL EQUIPMENT SHALL BE LABELED WITH THEIR VOLTAGE RATING, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING, AND BRANCH CIRCUIT ID NUMBERS (I.E., PANELBOARD AND CIRCUIT ID'S).
- PANELBOARDS (ID NUMBERS) AND INTERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS.
- ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.
- POWER, CONTROL, AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE CONDUCTOR (#34 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
- SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE CONDUCTOR (#6 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2 GREEN INSULATION, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
- SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED OUTDOORS, OR BELOW GRADE, SHALL BE SINGLE CONDUCTOR #2 AWG SOLID TINNED COPPER CABLE, UNLESS OTHERWISE SPECIFIED.
- POWER AND CONTROL WIRING, NOT IN TUBING OR CONDUIT, SHALL BE MULTI-CONDUCTOR, TYPE TC CABLE (#34 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; WITH OUTER JACKET; LISTED OR LABELED FOR THE LOCATION USE, UNLESS OTHERWISE SPECIFIED.
- NEW RACEWAY OR CABLE TRAY WILL MATCH THE EXISTING INSTALLATION WHERE POSSIBLE.
- ELECTRICAL METALLIC TUBING (EMT) OR RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80 FOR LOCATIONS SUBJECT TO PHYSICAL DAMAGE) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.
- ELECTRICAL METALLIC TUBING (EMT), ELECTRICAL NONMETALLIC TUBING (ENT), OR RIGID NONMETALLIC CONDUIT (RIGID PVC, SCHEDULE 40) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
- GALVANIZED STEEL INTERMEDIATE METALLIC CONDUIT (IMC) SHALL BE USED FOR OUTDOOR LOCATIONS ABOVE GRADE.
- RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80) SHALL BE USED UNDERGROUND; DIRECT BURIED, IN AREAS OF OCCASIONAL LIGHT VEHICLE TRAFFIC OR ENCASED IN REINFORCED CONCRETE IN AREAS OF HEAVY VEHICLE TRAFFIC.
- LIQUID-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. SETSCREW FITTINGS ARE NOT ACCEPTABLE.
- CABINETS, BOXES AND WIREWAYS SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEC AND NEC.
- CABINETS, BOXES AND WIREWAYS TO MATCH THE EXISTING INSTALLATION WHERE POSSIBLE.
- WIREWAYS SHALL BE EPOXY-COATED (GRAY) AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARD; SHALL BE PAINDUIT TYPE E (OR EQUAL); AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.
- EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES, AND PULL BOXES SHALL BE GALVANIZED OR EPOXY-COATED SHEET STEEL, SHALL MEET OR EXCEED UL 50, AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.
- METAL RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY-COATED, OR NON-CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
- NONMETALLIC RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
- THE SUBCONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CONTRACTOR BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.
- THE SUBCONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD AGAINST LIFE AND PROPERTY.
- ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE LOCAL CODES.
- CONDUIT ROUTINGS ARE SCHEMATIC. SUBCONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED.

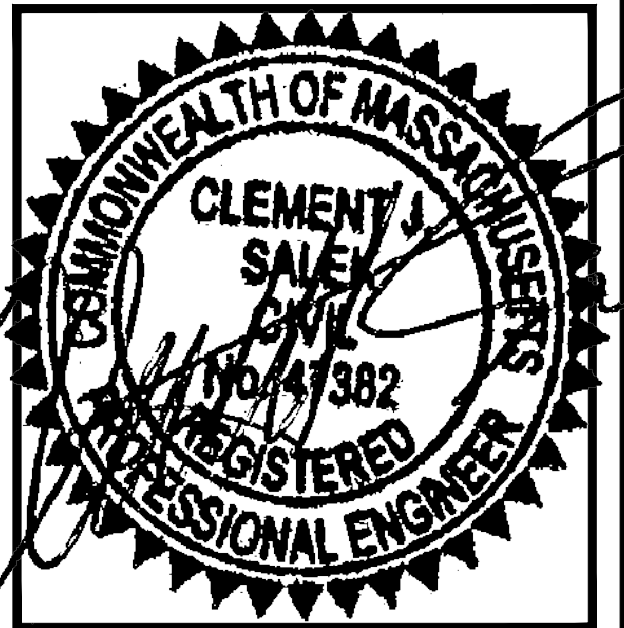


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APPROVALS

STRUCTURE OWNER _____

LEASING _____

R.F. _____

ZONING _____

CONSTRUCTION _____

A/E _____

PROJECT NO: 4BN0106A

DRAWN BY: JRV

CHECKED BY: JMT

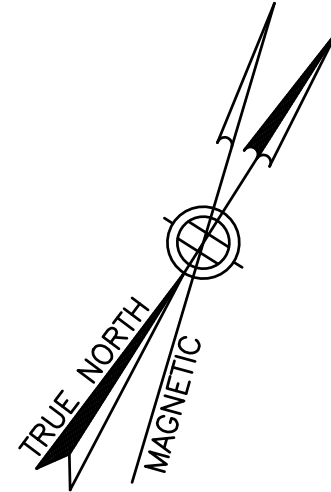
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0	12/03/20	CONSTRUCTION REVIEW

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4BN0106A
BN106/1662 COMM
AVE RT
1662 COMMONWEALTH AVENUE
BRIGHTON, MA 02135

SHEET TITLE
GENERAL NOTES

SHEET NUMBER
GN-1



NOTES:
 EXISTING BEARING WALLS ARE SHOWN IN APPROXIMATE LOCATIONS FROM 1929 CONSTRUCTION PLANS REFERENCED IN 12-14-2012 STRUCTURAL DESIGN CALCULATIONS BY PROTERRA DESIGN GROUP. EXISTING ROOF CONSISTS OF MEMBRANE OVER TAR AND GRAVEL WITH LATH AND PLASTER CEILING BELOW. CONTRACTOR TO VERIFY LOCATION OF BEARING WALLS AND JOIST LOCATIONS BY CUTTING OPEN ROOF SHEATHING TO VISUALLY LOCATE BEARING WALLS IN AREAS OF PROPOSED RF CHIMNEY LOCATIONS SHOWN

EQUIPMENT SCHEDULE

- CURRENT EQUIPMENT**
- THREE (3) ANDREW SBNHH-1D65A-SR PANEL ANTENNAS
 - THREE (3) RFS APX16DWW-16DWW-S-E-A20 PANEL ANTENNAS
 - THREE (3) GENERIC TWIN STYLE 1B AWS TMAS
 - TWELVE (12) 1-3/8" COAX CABLES
 - THREE (3) 3/8" (3x6) HCS FIBER CABLE
 - ONE (1) GPS ANTENNA & ASSOCIATED 1/2" COAX CABLE
 - THREE (3) ERICSSON RRUS01 B2
 - THREE (3) ERICSSON RRUS11 B4
 - THREE (3) ERICSSON RRUS11 B12
 - ONE (1) ERICSSON RBS 3206 EQUIPMENT CABINET
 - ONE (1) POWER BATTERY CABINET 6200 (PBC 6200)
 - THREE (3) SURGE PROTECTOR DEVICES (SPD-1, SPD-2, & SPD-3)
 - ONE (1) 19" EQUIPMENT RACK (LTE)
 - ONE (1) WALL MOUNTED 19" EQUIPMENT RACK (AAV)
 - ONE (1) 200A ELECTRIC PANEL
 - ONE (1) 100A ELECTRIC SUBPANEL

- EQUIPMENT TO BE REMOVED**
- THREE (3) ANDREW SBNHH-1D65A-SR PANEL ANTENNAS
 - SIX (6) 1-3/8" COAX CABLES
 - THREE (3) ERICSSON RRUS01 B2
 - THREE (3) ERICSSON RRUS11 B2
 - THREE (3) ERICSSON RRUS11 B4
 - THREE (3) ERICSSON RRUS11 B12

- EQUIPMENT TO BE ADDED**
- THREE (3) COMMSCOPE FFVW-65A-R2-V1 PANEL ANTENNAS
 - THREE (3) ERICSSON M-MIMO AIR6449 B41 ANTENNAS
 - THREE (3) MICRODATA MI-54131 AWS/PCS DIPLEXERS
 - THREE (3) ERICSSON RADIO 4415 B66A
 - THREE (3) ERICSSON RADIO 4424 B25
 - THREE (3) ERICSSON RADIO 4449 B71+B85
 - THREE (3) 1-3/8" (6x12) HCS FIBER CABLES
 - ONE (1) ERICSSON 6230 DC POWER SYSTEM
 - ONE (1) SURGE PROTECTOR DEVICES (SPD-4)

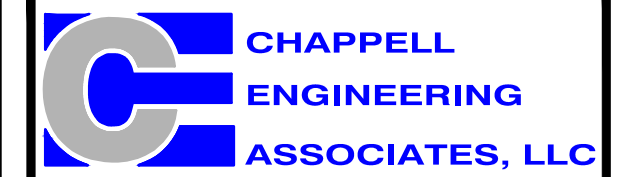
- FINAL EQUIPMENT CONFIGURATION**
- THREE (3) RFS APX16DWW-16DWW-S-E-A20 PANEL ANTENNAS
 - THREE (3) COMMSCOPE FFVW-65A-R2-V1 PANEL ANTENNAS
 - THREE (3) ERICSSON M-MIMO AIR6449 B41 ANTENNAS
 - THREE (3) MICRODATA MI-54131 AWS/PCS DIPLEXERS
 - THREE (3) GENERIC TWIN STYLE 1B AWS TMAS
 - SIX (6) 1-3/8" COAX CABLES
 - THREE (3) 3/8" (3x6) HCS FIBER CABLE
 - THREE (3) 1-3/8" (6x12) HCS FIBER CABLES
 - ONE (1) GPS ANTENNA & ASSOCIATED 1/2" COAX CABLE
 - THREE (3) ERICSSON RADIO 4415 B66A
 - THREE (3) ERICSSON RADIO 4424 B25
 - THREE (3) ERICSSON RADIO 4449 B71+B85
 - ONE (1) ERICSSON 6230 DC POWER SYSTEM
 - ONE (1) ERICSSON RBS 3206 EQUIPMENT CABINET
 - ONE (1) POWER BATTERY CABINET 6200 (PBC 6200)
 - FOUR (4) SURGE PROTECTOR DEVICES (SPD-1, SPD-2, SPD-3, & SPD-4)
 - ONE (1) 19" EQUIPMENT RACK (LTE)
 - ONE (1) WALL MOUNTED 19" EQUIPMENT RACK (AAV)
 - ONE (1) 200A ELECTRIC PANEL
 - ONE (1) 100A ELECTRIC SUBPANEL

EXISTING EQUIPMENT SPACE REQUIREMENTS WILL NOT CHANGE

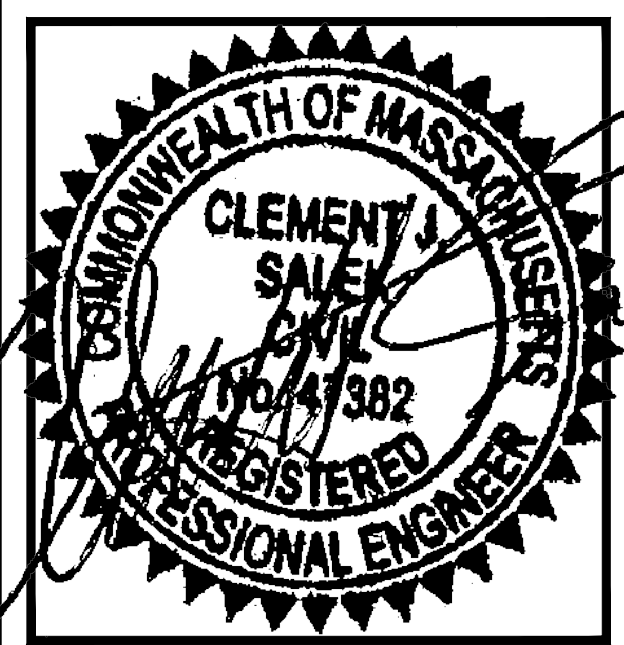
RF CONFIGURATION
 67D5A998C INDOOR (EVOLVED FROM 3B)



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APPROVALS

STRUCTURE OWNER _____

LEASING _____

R.F. _____

ZONING _____

CONSTRUCTION _____

A/E _____

PROJECT NO: 4BN0106A

DRAWN BY: JRV

CHECKED BY: JMT

VERSION

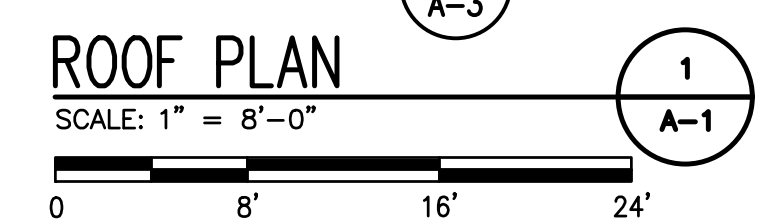
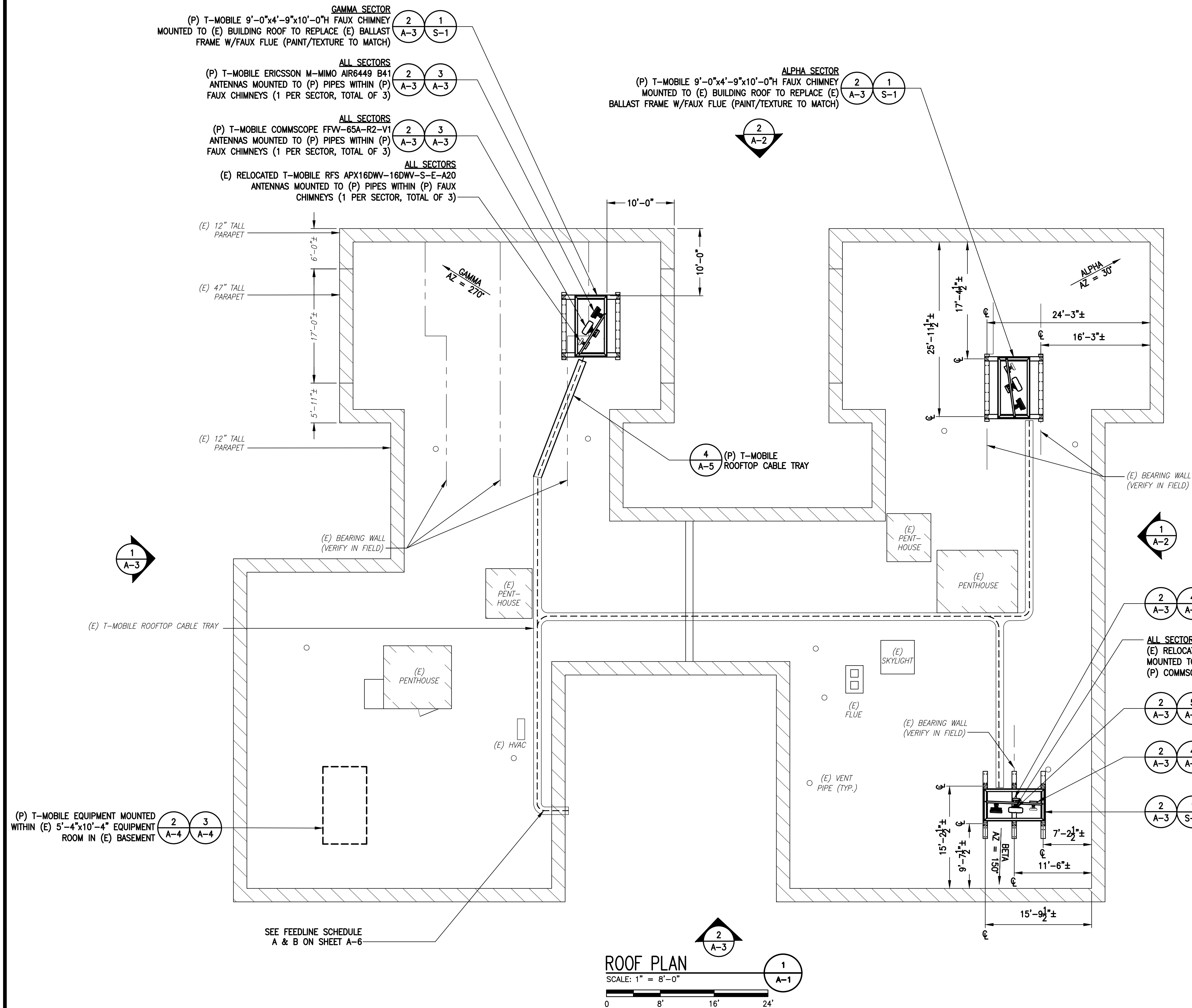
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4BN0106A
 BN106/1662 COMM
 AVE RT
 1662 COMMONWEALTH AVENUE
 BRIGHTON, MA 02135

SHEET TITLE
 ROOF PLAN

SHEET NUMBER
 A-1



- CONSTRUCTION NOTES:**
- (E) RFS APX16DWW-16DWW-S-E-A20 PANEL ANTENNAS (1 PER SECTOR) TO BE RELOCATED WITHIN (P) CHIMNEYS (SEE PLAN).
 - (E) GENERIC TWIN STYLE 1B AWS TMA (1 PER SECTOR) TO BE RELOCATED WITHIN (P) CHIMNEYS (SEE PLAN).
 - (E) BALLAST MOUNTED FLUES (1 PER SECTOR) TO BE REPLACED BY NEW FAUX CHIMNEYS
 - (P) FAUX CHIMNEYS FINAL LOCATION AND SIZE MAY VARY SLIGHTLY BASED ON ROOF FRAMING & STRUCTURAL ANALYSIS.
 - (P) FAUX CHIMNEYS SHALL BE PAINTED TO MATCH (E) BUILDING/PENTHOUSE FACADE.

- CONSTRUCTION NOTES:**
- (E) RFS APX16DW-16DW-S-E-A20 PANEL ANTENNAS (1 PER SECTOR) TO BE RELOCATED WITHIN (P) CHIMNEYS (SEE PLAN).
 - (E) GENERIC TWIN STYLE 1B AWS TMA (1 PER SECTOR) TO BE RELOCATED WITHIN (P) CHIMNEYS (SEE PLAN).
 - (E) BALLAST MOUNTED FLUES (1 PER SECTOR) TO BE REPLACED BY NEW FAUX CHIMNEYS
 - (P) FAUX CHIMNEYS FINAL LOCATION AND SIZE MAY VARY SLIGHTLY BASED ON ROOF FRAMING & STRUCTURAL ANALYSIS.
 - (P) FAUX CHIMNEYS SHALL BE PAINTED TO MATCH (E) BUILDING/PENTHOUSE FACADE.

ALL SECTORS
 (E) RELOCATED T-MOBILE RFS APX16DW-16DW-S-E-A20 ANTENNAS MOUNTED TO (P) PIPES WITHIN (P) FAUX CHIMNEYS (1 PER SECTOR, TOTAL OF 3)

ALL SECTORS
 (P) T-MOBILE COMMSCOPE FFV-65A-R2-V1 ANTENNAS MOUNTED TO (P) PIPES WITHIN (P) FAUX CHIMNEYS (1 PER SECTOR, TOTAL OF 3)

ALL SECTORS
 (P) T-MOBILE ERICSSON M-MIMO AIR6449 B41 ANTENNAS MOUNTED TO (P) PIPES WITHIN (P) FAUX CHIMNEYS (1 PER SECTOR, TOTAL OF 3)

TOP OF PROP. FAUX CHIMNEY
 EL= 64'-3"± AGL

EXIST. T-MOBILE (3) PANEL ANTENNAS
 EL= 61'-0"± AGL

PROP. T-MOBILE (6) PANEL ANTENNAS
 EL= 61'-0"± AGL

TOP OF ROOF
 EL= 54'-3"± AGL

ALL SECTORS
 (P) T-MOBILE ERICSSON RADIO 4424 B25 & RADIO 4449 B71+B85 MOUNTED TO (P) PIPES WITHIN (P) FAUX CHIMNEYS BEHIND (P) COMMSCOPE ANTENNAS (1 EACH PER SECTOR, TOTAL OF 6)

ALL SECTORS
 (E) RELOCATED T-MOBILE GENERIC TWIN STYLE 1B AWS TMAS MOUNTED TO (P) PIPES WITHIN (P) FAUX CHIMNEYS BEHIND (P) COMMSCOPE ANTENNAS (1 PER SECTOR, TOTAL OF 3)

ALL SECTORS
 (P) T-MOBILE MICRODATA MI-54131 AWS/PCS DIPLEXERS MOUNTED TO (P) PIPES WITHIN (P) FAUX CHIMNEYS BEHIND (P) COMMSCOPE ANTENNAS (1 PER SECTOR, TOTAL OF 3)

ALL SECTORS
 (P) T-MOBILE ERICSSON RADIO 4415 B66A MOUNTED TO (P) PIPES WITHIN (P) FAUX CHIMNEYS BEHIND (E) RFS ANTENNAS (1 PER SECTOR, TOTAL OF 3)

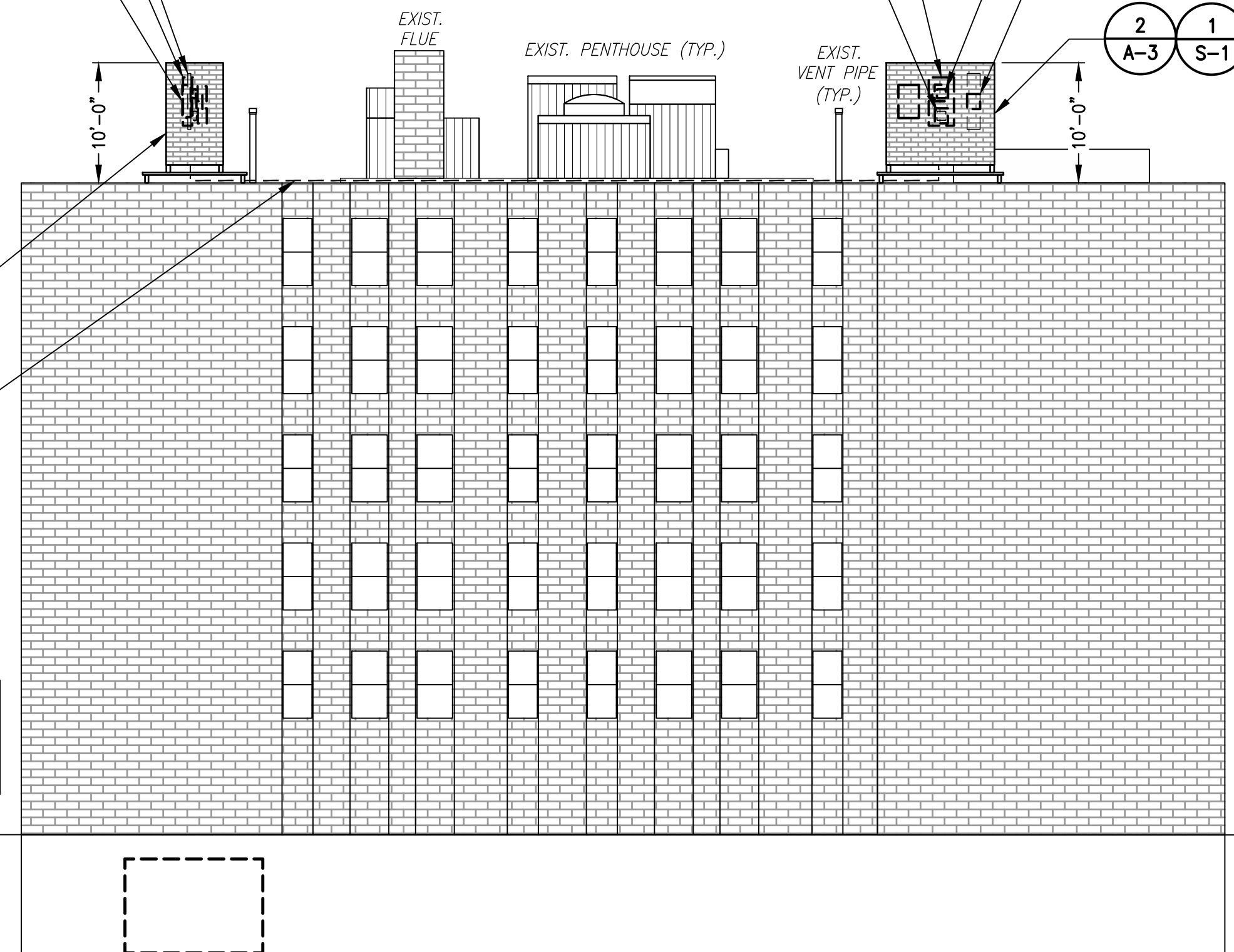
ALPHA SECTOR
 (P) T-MOBILE 9'-0"x4'-9"x10'-0"H FAUX CHIMNEY MOUNTED TO (E) BUILDING ROOF TO REPLACE (E) BALLAST FRAME W/FAUX FLUE (PAINT/TEXTURE TO MATCH)

BETA SECTOR
 (P) T-MOBILE 9'-0"x4'-9"x10'-0"H FAUX CHIMNEY MOUNTED TO (E) BUILDING ROOF TO REPLACE (E) BALLAST FRAME W/FAUX FLUE (PAINT/TEXTURE TO MATCH)

SEE FEEDLINE SCHEDULE A & B ON SHEET A-6

NOTE:
 GAMMA SECTOR ANTENNA & RRU ARE NOT VISIBLE ON THIS ELEVATION VIEW.

GROUND LEVEL AT MAIN ENTRY
 EL= 0'-0"± AGL



EAST ELEVATION
 SCALE: 1" = 10'-0"

ALL SECTORS
 (P) T-MOBILE ERICSSON RADIO 4424 B25 & RADIO 4449 B71+B85 MOUNTED TO (P) PIPES WITHIN (P) FAUX CHIMNEYS BEHIND (P) COMMSCOPE ANTENNAS (1 EACH PER SECTOR, TOTAL OF 6)

ALL SECTORS
 (P) T-MOBILE MICRODATA MI-54131 AWS/PCS DIPLEXERS MOUNTED TO (P) PIPES WITHIN (P) FAUX CHIMNEYS BEHIND (P) COMMSCOPE ANTENNAS (1 PER SECTOR, TOTAL OF 3)

ALL SECTORS
 (E) RELOCATED T-MOBILE GENERIC TWIN STYLE 1B AWS TMAS MOUNTED TO (P) PIPES WITHIN (P) FAUX CHIMNEYS BEHIND (P) COMMSCOPE ANTENNAS (1 PER SECTOR, TOTAL OF 3)

TOP OF PROP. FAUX CHIMNEY
 EL= 64'-3"± AGL

EXIST. T-MOBILE (3) PANEL ANTENNAS
 EL= 61'-0"± AGL

PROP. T-MOBILE (6) PANEL ANTENNAS
 EL= 61'-0"± AGL

TOP OF ROOF
 EL= 54'-3"± AGL

ALL SECTORS
 (P) T-MOBILE ERICSSON RADIO 4415 B66A MOUNTED TO (P) PIPES WITHIN (P) FAUX CHIMNEYS BEHIND (E) RFS ANTENNAS (1 PER SECTOR, TOTAL OF 3)

ALL SECTORS
 (E) RELOCATED T-MOBILE RFS APX16DW-16DW-S-E-A20 ANTENNAS MOUNTED TO (P) PIPES WITHIN (P) FAUX CHIMNEYS (1 PER SECTOR, TOTAL OF 3)

ALL SECTORS
 (P) T-MOBILE COMMSCOPE FFV-65A-R2-V1 ANTENNAS MOUNTED TO (P) PIPES WITHIN (P) FAUX CHIMNEYS (1 PER SECTOR, TOTAL OF 3)

ALL SECTORS
 (P) T-MOBILE ERICSSON M-MIMO AIR6449 B41 ANTENNAS MOUNTED TO (P) PIPES WITHIN (P) FAUX CHIMNEYS (1 PER SECTOR, TOTAL OF 3)

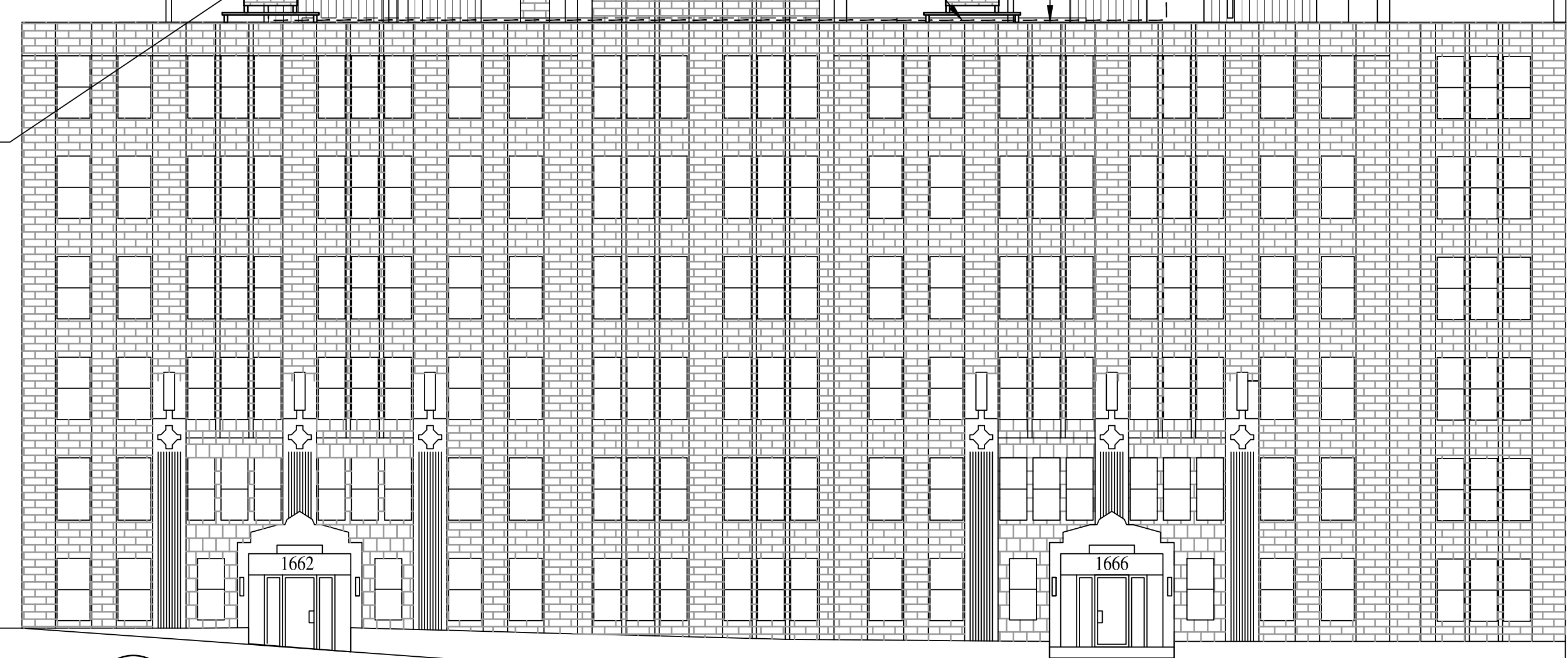
GAMMA SECTOR
 (P) T-MOBILE 9'-0"x4'-9"x10'-0"H FAUX CHIMNEY MOUNTED TO (E) BUILDING ROOF TO REPLACE (E) BALLAST FRAME W/FAUX FLUE (PAINT/TEXTURE TO MATCH)

SEE FEEDLINE SCHEDULE A & B ON SHEET A-6

ALPHA SECTOR
 (P) T-MOBILE 9'-0"x4'-9"x10'-0"H FAUX CHIMNEY MOUNTED TO (E) BUILDING ROOF TO REPLACE (E) BALLAST FRAME W/FAUX FLUE (PAINT/TEXTURE TO MATCH)

NOTE:
 BETA SECTOR ANTENNA & RRU ARE NOT VISIBLE ON THIS ELEVATION VIEW.

GROUND LEVEL AT MAIN ENTRY
 EL= 0'-0"± AGL



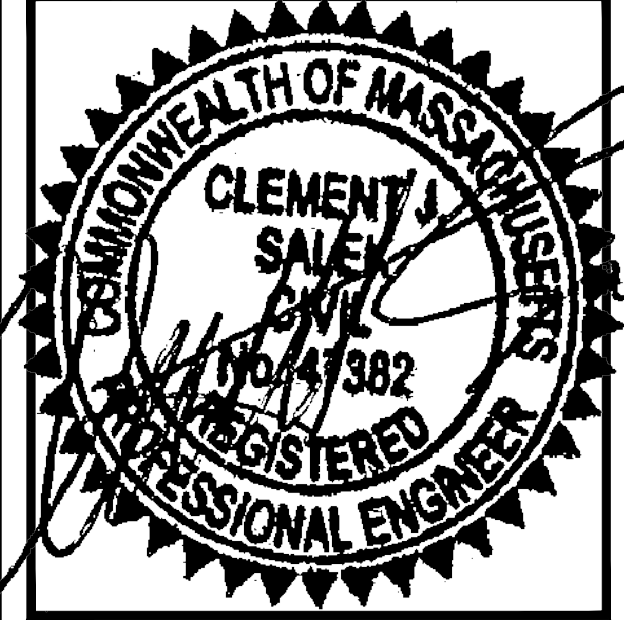
NORTH ELEVATION
 SCALE: 1" = 10'-0"

T-Mobile

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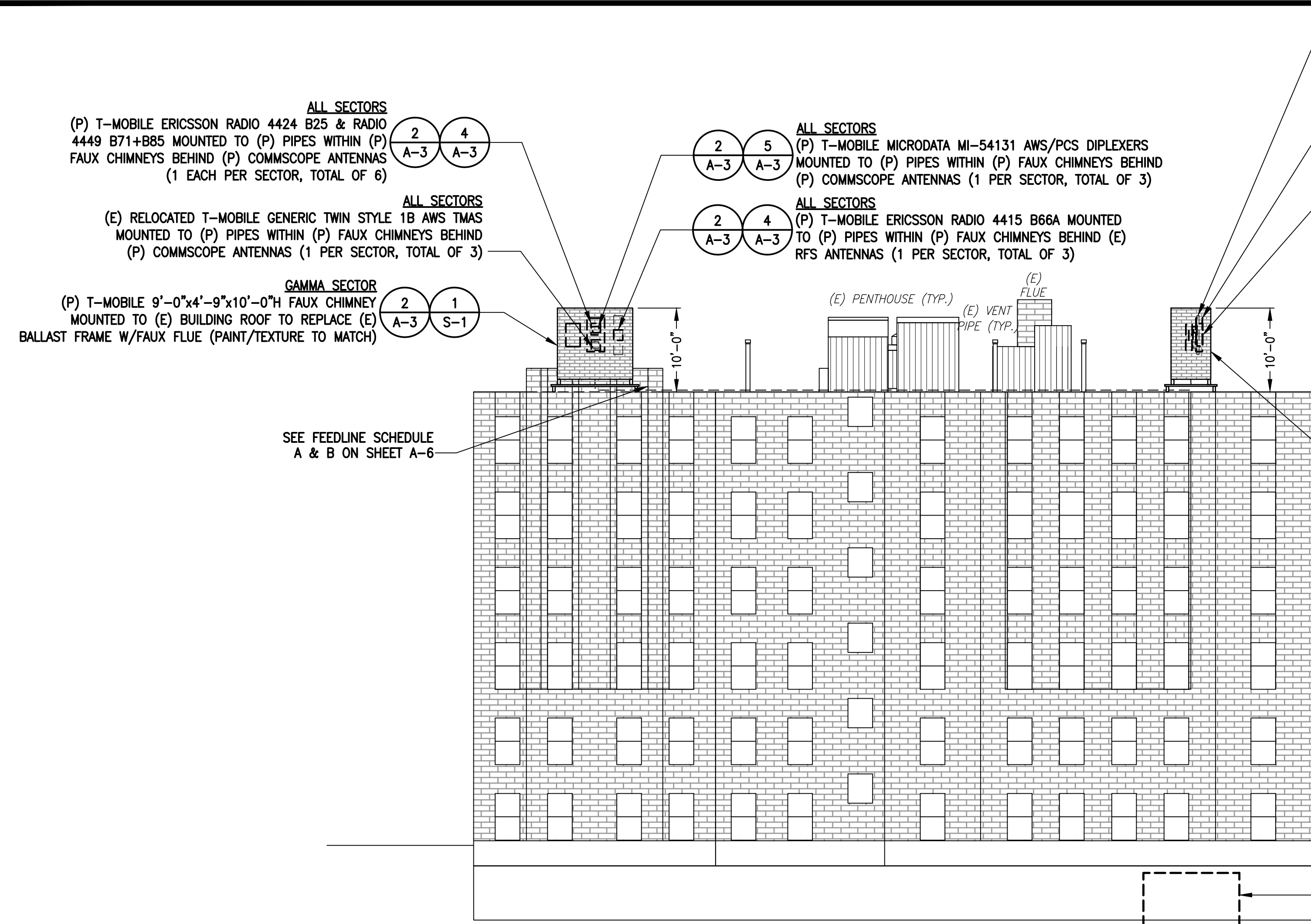
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 1662 COMMONWEALTH AVENUE
 BRIGHTON, MA 02135

SHEET TITLE
 EAST & NORTH
 BUILDING ELEVATIONS

SHEET NUMBER
A-2



WEST ELEVATION
SCALE: 1" = 10'-0"
0 5' 10' 20' 30'

ALL SECTORS
(P) T-MOBILE ERICSSON RADIO 4424 B25 & RADIO 4449 B71+B85 MOUNTED TO (P) PIPES WITHIN (P) FAUX CHIMNEYS BEHIND (P) COMMSCOPE ANTENNAS (1 EACH PER SECTOR, TOTAL OF 6)

ALL SECTORS
(E) RELOCATED T-MOBILE GENERIC TWIN STYLE 1B AWS TMA MOUNTED TO (P) PIPES WITHIN (P) FAUX CHIMNEYS BEHIND (P) COMMSCOPE ANTENNAS (1 PER SECTOR, TOTAL OF 3)

GAMMA SECTOR
(P) T-MOBILE 9'-0"x4'-9"x10'-0"H FAUX CHIMNEY MOUNTED TO (E) BUILDING ROOF TO REPLACE (E) BALLAST FRAME W/FAUX FLUE (PAINT/TEXTURE TO MATCH)

ALL SECTORS
(P) T-MOBILE MICRODATA MI-54131 AWS/PCS DIPLEXERS MOUNTED TO (P) PIPES WITHIN (P) FAUX CHIMNEYS BEHIND (P) COMMSCOPE ANTENNAS (1 PER SECTOR, TOTAL OF 3)

ALL SECTORS
(P) T-MOBILE ERICSSON RADIO 4415 B66A MOUNTED TO (P) PIPES WITHIN (P) FAUX CHIMNEYS BEHIND (E) RFS ANTENNAS (1 PER SECTOR, TOTAL OF 3)

ALL SECTORS
(E) RELOCATED T-MOBILE RFS APX16DWV-16DWV-S-E-A20 ANTENNAS MOUNTED TO (P) PIPES WITHIN (P) FAUX CHIMNEYS (1 PER SECTOR, TOTAL OF 3)

ALL SECTORS
(P) T-MOBILE COMMSCOPE FFV-65A-R2-V1 ANTENNAS MOUNTED TO (P) PIPES WITHIN (P) FAUX CHIMNEYS (1 PER SECTOR, TOTAL OF 3)

ALL SECTORS
(P) T-MOBILE ERICSSON M-MIMO AIR6449 B41 ANTENNAS MOUNTED TO (P) PIPES WITHIN (P) FAUX CHIMNEYS (1 PER SECTOR, TOTAL OF 3)

BETA SECTOR
(P) T-MOBILE 9'-0"x4'-9"x10'-0"H FAUX CHIMNEY MOUNTED TO (E) BUILDING ROOF TO REPLACE (E) BALLAST FRAME W/FAUX FLUE (PAINT/TEXTURE TO MATCH)

NOTE:
ALPHA SECTOR ANTENNA & RRU ARE NOT VISIBLE ON THIS ELEVATION VIEW.

GROUND LEVEL AT MAIN ENTRY
EL. = 0'-0" AGL

(E) T-MOBILE EQUIPMENT WITHIN (E) LEASE AREA IN BASEMENT

ALL SECTORS
(E) RELOCATED T-MOBILE RFS APX16DWV-16DWV-S-E-A20 ANTENNAS MOUNTED TO (P) PIPES WITHIN (P) FAUX CHIMNEYS (1 PER SECTOR, TOTAL OF 3)

ALL SECTORS
(P) T-MOBILE COMMSCOPE FFV-65A-R2-V1 ANTENNAS MOUNTED TO (P) PIPES WITHIN (P) FAUX CHIMNEYS (1 PER SECTOR, TOTAL OF 3)

ALL SECTORS
(P) T-MOBILE ERICSSON M-MIMO AIR6449 B41 ANTENNAS MOUNTED TO (P) PIPES WITHIN (P) FAUX CHIMNEYS (1 PER SECTOR, TOTAL OF 3)

TOP OF (E) FAUX CHIMNEY
EL. = 64'-3"± AGL

⊕ (E) T-MOBILE (3) PANEL ANTENNAS
EL. = 61'-0"± AGL

⊕ (P) T-MOBILE (6) PANEL ANTENNAS
EL. = 61'-0"± AGL

TOP OF ROOF
EL. = 54'-3"± AGL

ALL SECTORS
(E) RELOCATED T-MOBILE RFS APX16DWV-16DWV-S-E-A20 ANTENNAS MOUNTED TO (P) PIPES WITHIN (P) FAUX CHIMNEYS (1 PER SECTOR, TOTAL OF 3)

ALL SECTORS
(P) T-MOBILE COMMSCOPE FFV-65A-R2-V1 ANTENNAS MOUNTED TO (P) PIPES WITHIN (P) FAUX CHIMNEYS (1 PER SECTOR, TOTAL OF 3)

ALL SECTORS
(P) T-MOBILE ERICSSON M-MIMO AIR6449 B41 ANTENNAS MOUNTED TO (P) PIPES WITHIN (P) FAUX CHIMNEYS (1 PER SECTOR, TOTAL OF 3)

GAMMA SECTOR
(P) T-MOBILE 9'-0"x4'-9"x10'-0"H FAUX CHIMNEY MOUNTED TO (E) BUILDING ROOF TO REPLACE (E) BALLAST FRAME W/FAUX FLUE (PAINT/TEXTURE TO MATCH)

ALL SECTORS
(P) T-MOBILE ERICSSON RADIO 4424 B25 & RADIO 4449 B71+B85 MOUNTED TO (P) PIPES WITHIN (P) FAUX CHIMNEYS BEHIND (P) COMMSCOPE ANTENNAS (1 EACH PER SECTOR, TOTAL OF 6)

ALL SECTORS
(E) RELOCATED T-MOBILE GENERIC TWIN STYLE 1B AWS TMA MOUNTED TO (P) PIPES WITHIN (P) FAUX CHIMNEYS BEHIND (P) COMMSCOPE ANTENNAS (1 PER SECTOR, TOTAL OF 3)

ALL SECTORS
(P) T-MOBILE MICRODATA MI-54131 AWS/PCS DIPLEXERS MOUNTED TO (P) PIPES WITHIN (P) FAUX CHIMNEYS BEHIND (P) COMMSCOPE ANTENNAS (1 PER SECTOR, TOTAL OF 3)

ALL SECTORS
(P) T-MOBILE ERICSSON RADIO 4415 B66A MOUNTED TO (P) PIPES WITHIN (P) FAUX CHIMNEYS BEHIND (E) RFS ANTENNAS (1 PER SECTOR, TOTAL OF 3)

TOP OF (P) FAUX CHIMNEY
EL. = 64'-3"± AGL

⊕ (E) T-MOBILE (3) PANEL ANTENNAS
EL. = 61'-0"± AGL

⊕ (P) T-MOBILE (6) PANEL ANTENNAS
EL. = 61'-0"± AGL

TOP OF ROOF
EL. = 54'-3"± AGL

BETA SECTOR
(P) T-MOBILE 9'-0"x4'-9"x10'-0"H FAUX CHIMNEY MOUNTED TO (E) BUILDING ROOF TO REPLACE (E) BALLAST FRAME W/FAUX FLUE (PAINT/TEXTURE TO MATCH)

NOTE:
ALPHA SECTOR ANTENNA & RRU ARE NOT VISIBLE ON THIS ELEVATION VIEW.

GROUND LEVEL AT MAIN ENTRY
EL. = 0'-0" AGL

(E) T-MOBILE EQUIPMENT WITHIN (E) LEASE AREA IN BASEMENT

SOUTH ELEVATION
SCALE: 1" = 10'-0"
0 5' 10' 20' 30'

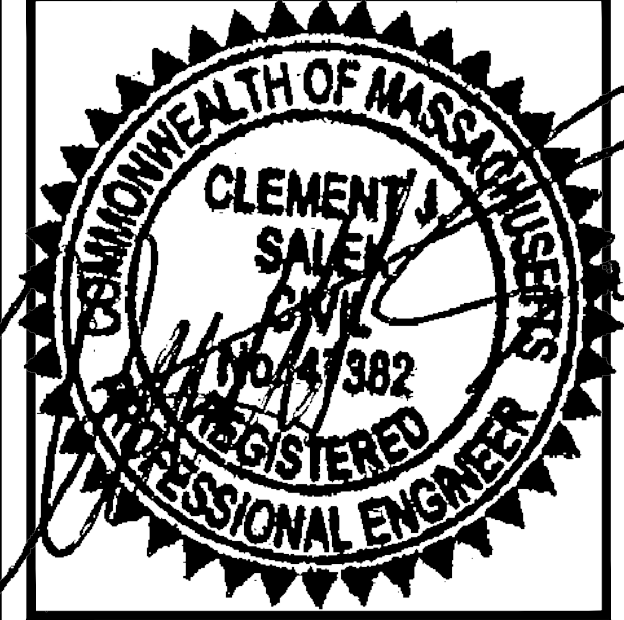
- CONSTRUCTION NOTES:**
- (E) RFS APX16DWV-16DWV-S-E-A20 PANEL ANTENNAS (1 PER SECTOR) TO BE RELOCATED WITHIN (P) CHIMNEYS (SEE PLAN).
 - (E) GENERIC TWIN STYLE 1B AWS TMA (1 PER SECTOR) TO BE RELOCATED WITHIN (P) CHIMNEYS (SEE PLAN).
 - (E) BALLAST MOUNTED FLUES (1 PER SECTOR) TO BE REPLACED BY NEW FAUX CHIMNEYS
 - (P) FAUX CHIMNEYS FINAL LOCATION AND SIZE MAY VARY SLIGHTLY BASED ON ROOF FRAMING & STRUCTURAL ANALYSIS.
 - (P) FAUX CHIMNEYS SHALL BE PAINTED TO MATCH (E) BUILDING/PENTHOUSE FACADE.

T-Mobile

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APPROVALS

STRUCTURE OWNER _____

LEASING _____

R.F. _____

ZONING _____

CONSTRUCTION _____

A/E _____

PROJECT NO: 4BN0106A

DRAWN BY: JRV

CHECKED BY: JMT

VERSION

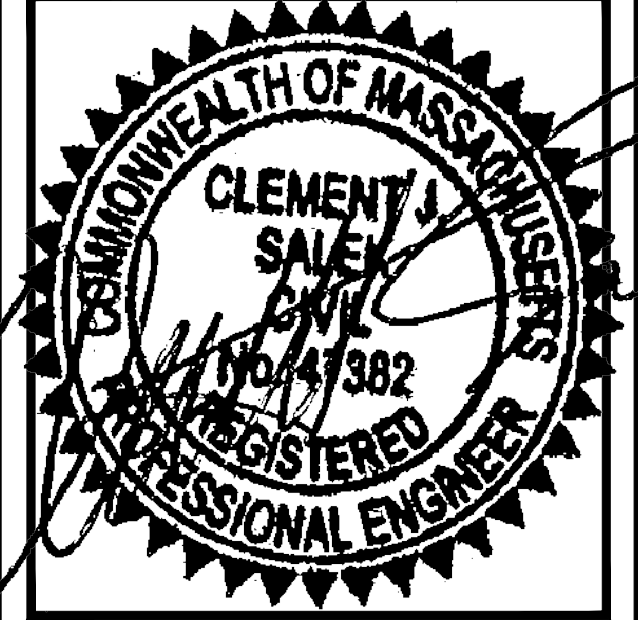
NO.	DATE	DESCRIPTION
2	07/22/21	CONSTRUCTION REVISED
1	05/28/21	CONSTRUCTION
0	12/03/20	CONSTRUCTION REVIEW

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4BN0106A
BN106/1662 COMM
AVE RT
1662 COMMONWEALTH AVENUE
BRIGHTON, MA 02135

SHEET TITLE
WEST & SOUTH
BUILDING ELEVATIONS

SHEET NUMBER
A-3



APPROVALS

STRUCTURE OWNER _____

LEASING _____

R.F. _____

ZONING _____

CONSTRUCTION _____

A/E _____

PROJECT NO: 4BN0106A

DRAWN BY: JRV

CHECKED BY: JMT

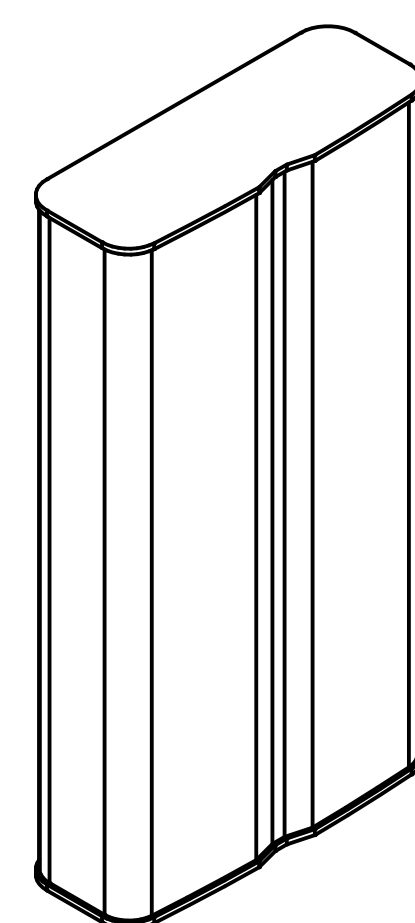
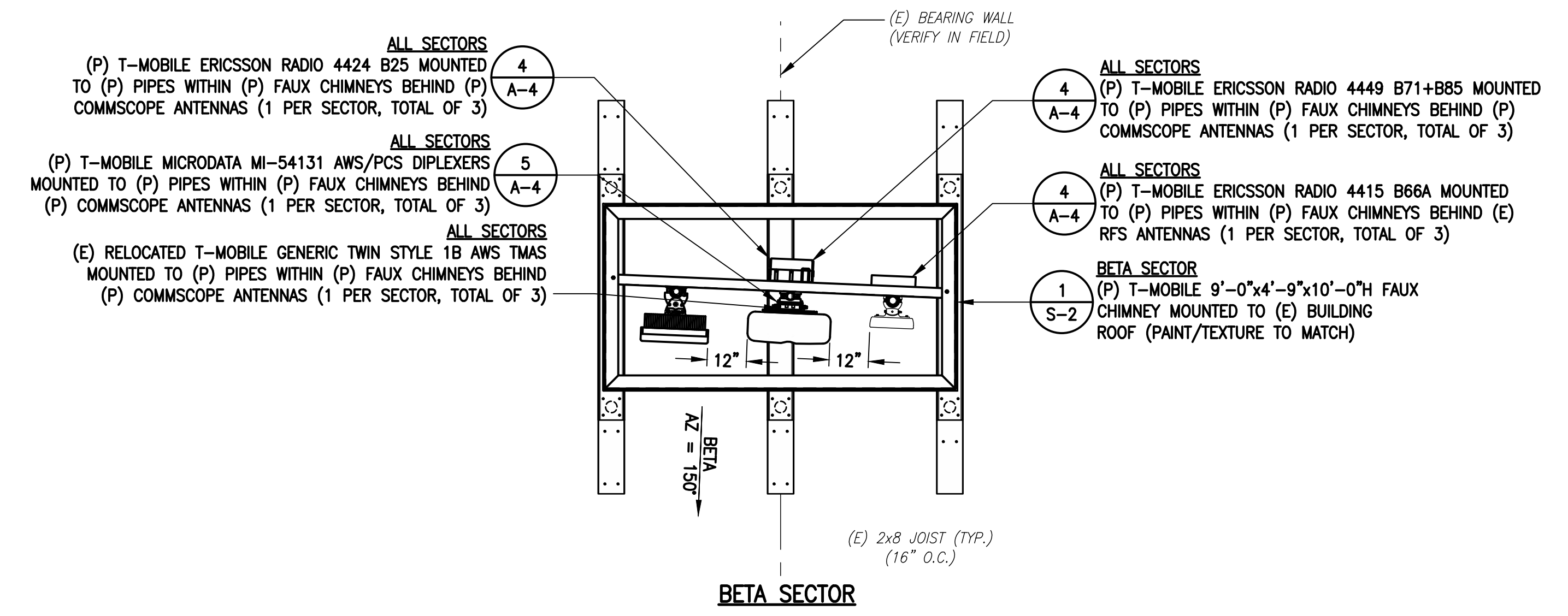
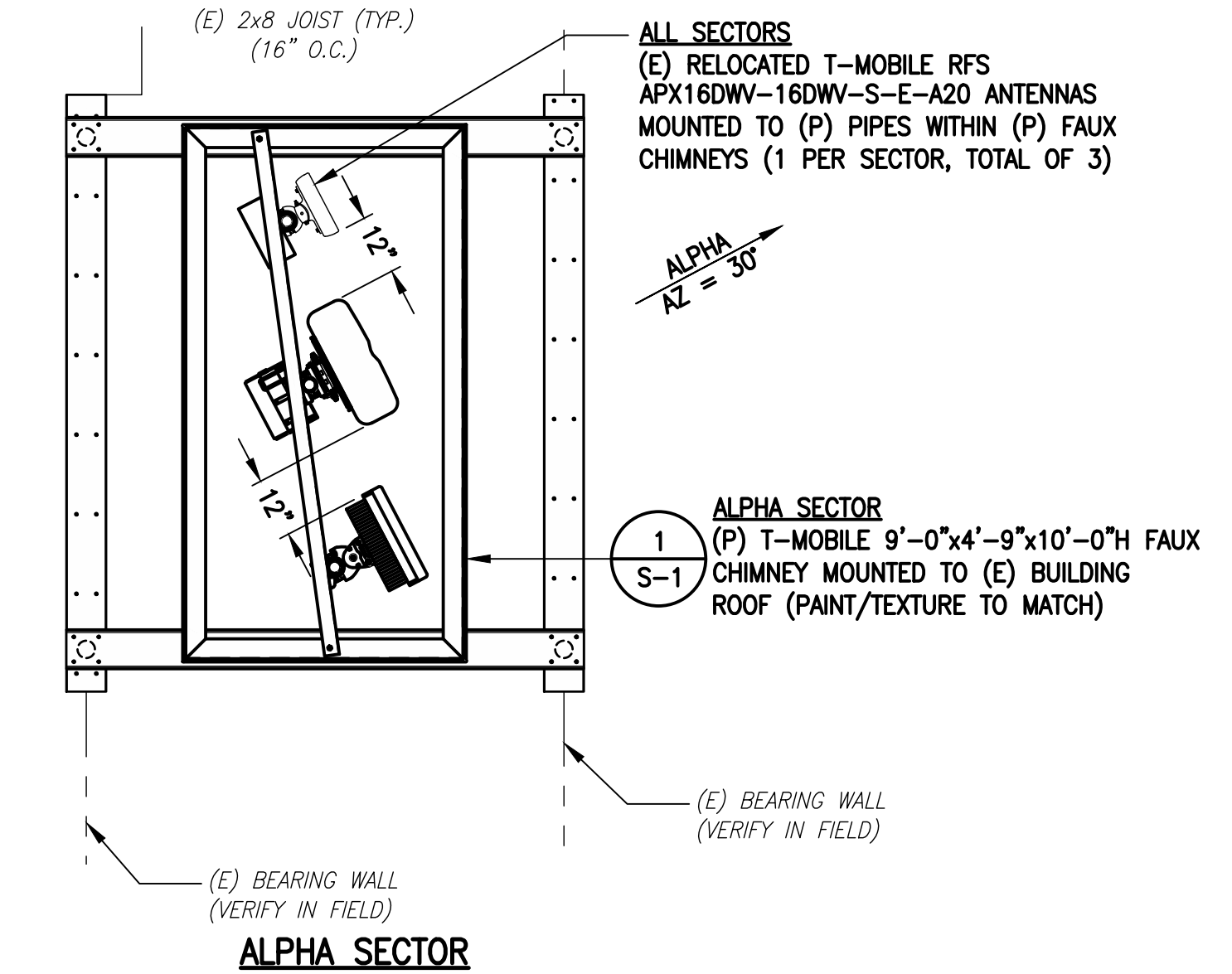
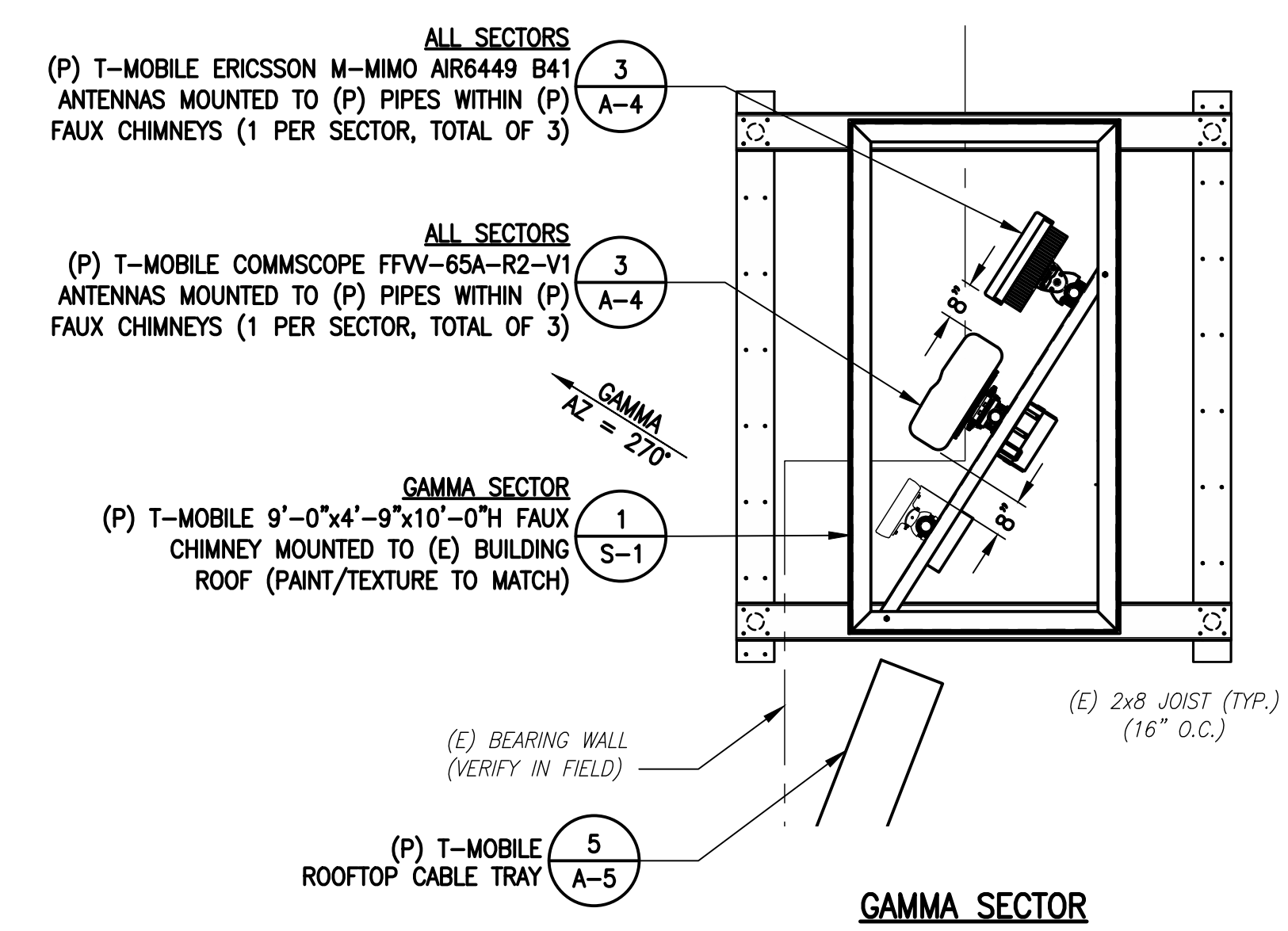
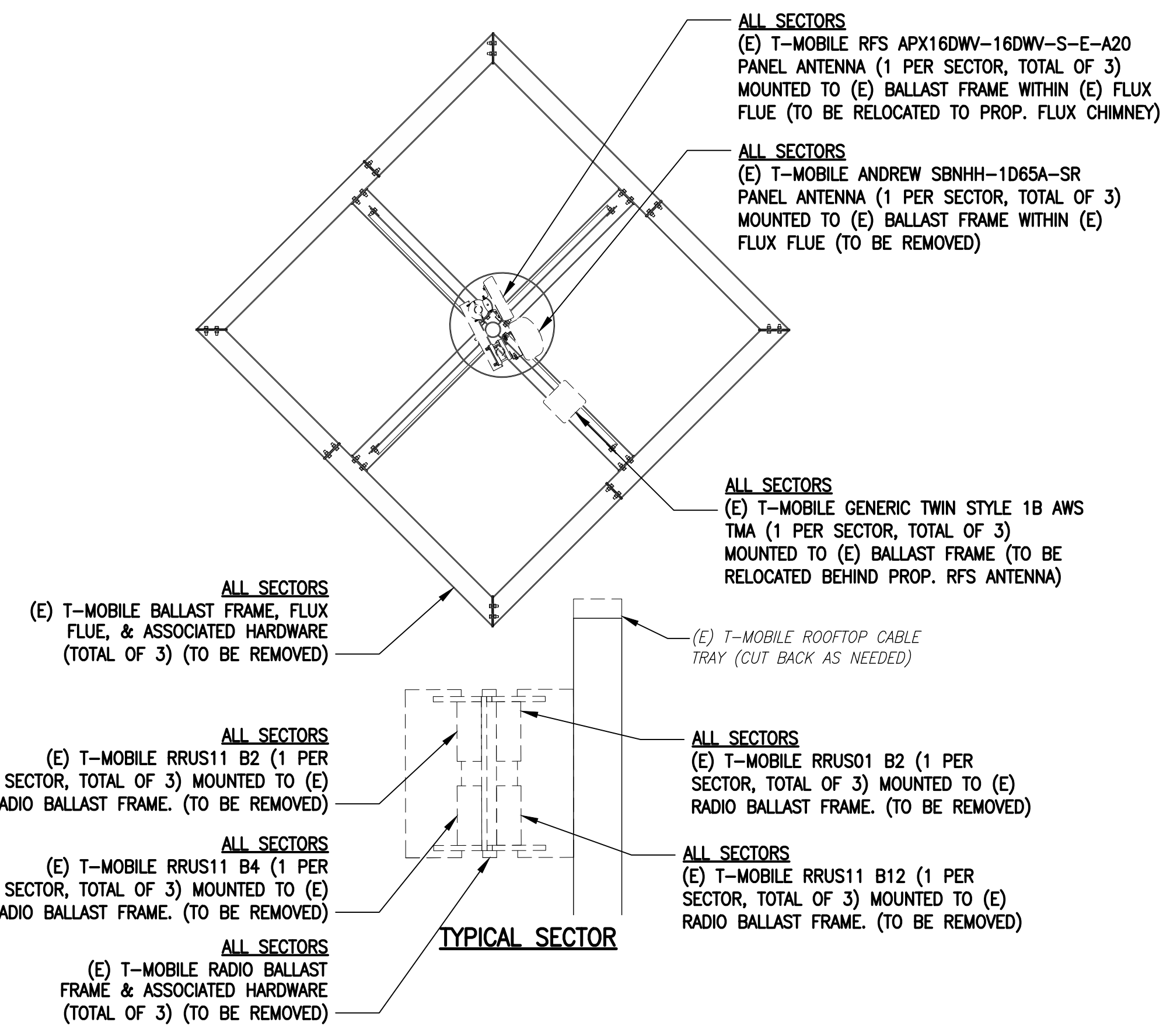
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BN106/1662 COMM
AVE RT
1662 COMMONWEALTH AVENUE
BRIGHTON, MA 02135

SHEET TITLE
ANTENNA PLANS
& DETAILS

SHEET NUMBER
A-4



COMMSCOPE FFW-65A-R2-V1 ANTENNA
DIMENSIONS: 48.2"H x 25.2"W x 9.3"D
WEIGHT: 73.2 lbs
QUANTITY: 1 PER SECTOR, TOTAL OF 3



ERICSSON M-MIMO AIR6449 B41 ANTENNA
DIMENSIONS: 33.1"H x 20.5"W x 8.3"D
WEIGHT: 103.0 lbs
QUANTITY: 1 PER SECTOR, TOTAL OF 3



ERICSSON RADIO 4449 B71+B85
DIMENSIONS: 14.9"H x 13.2"W x 9.3"D
WEIGHT: 74.0 lbs
QUANTITY: 1 PER SECTOR, TOTAL OF 3



ERICSSON RADIO 4415 B66A
DIMENSIONS: 16.5"H x 13.4"W x 5.9"D
WEIGHT: 46.0 lbs
QUANTITY: 1 PER SECTOR, TOTAL OF 3



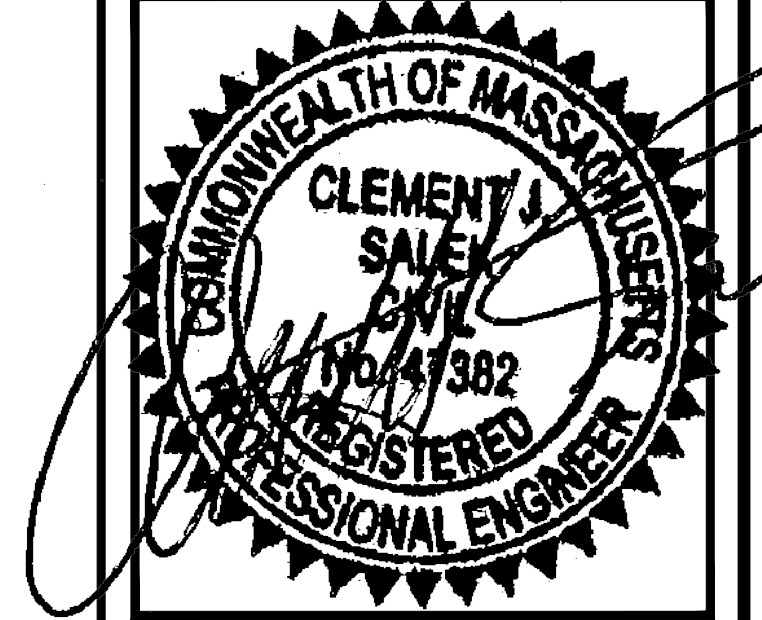
ERICSSON RADIO 4424 B25
DIMENSIONS: 16.5"H x 13.5"W x 9.6"D
WEIGHT: 88.0 lbs
QUANTITY: 1 PER SECTOR, TOTAL OF 3



MICRODATA MI-54131 AWS/PCS (8:4) DIPLEXER
DIMENSIONS: 4.2"H x 8.3"W x 3.0"D
WEIGHT: 6.61 lbs
QUANTITY: 1 PER SECTOR, TOTAL OF 3



- CONSTRUCTION NOTES:**
- (E) RFS APX16DW-16DW-S-E-A20 PANEL ANTENNAS (1 PER SECTOR) TO BE RELOCATED WITHIN (P) CHIMNEYS (SEE PLAN).
 - (E) GENERIC TWIN STYLE 1B AWS TMA (1 PER SECTOR) TO BE RELOCATED WITHIN (P) CHIMNEYS (SEE PLAN).
 - (E) BALLAST MOUNTED FLUES (1 PER SECTOR) TO BE REPLACED BY NEW FAUX CHIMNEYS
 - (P) FAUX CHIMNEYS FINAL LOCATION AND SIZE MAY VARY SLIGHTLY BASED ON ROOF FRAMING & STRUCTURAL ANALYSIS.
 - (P) FAUX CHIMNEYS SHALL BE PAINTED TO MATCH (E) BUILDING/PENTHOUSE FACADE.



APPROVALS

STRUCTURE OWNER _____

LEASING _____

R.F. _____

ZONING _____

CONSTRUCTION _____

A/E _____

PROJECT NO: 4BN0106A

DRAWN BY: JRV

CHECKED BY: JMT

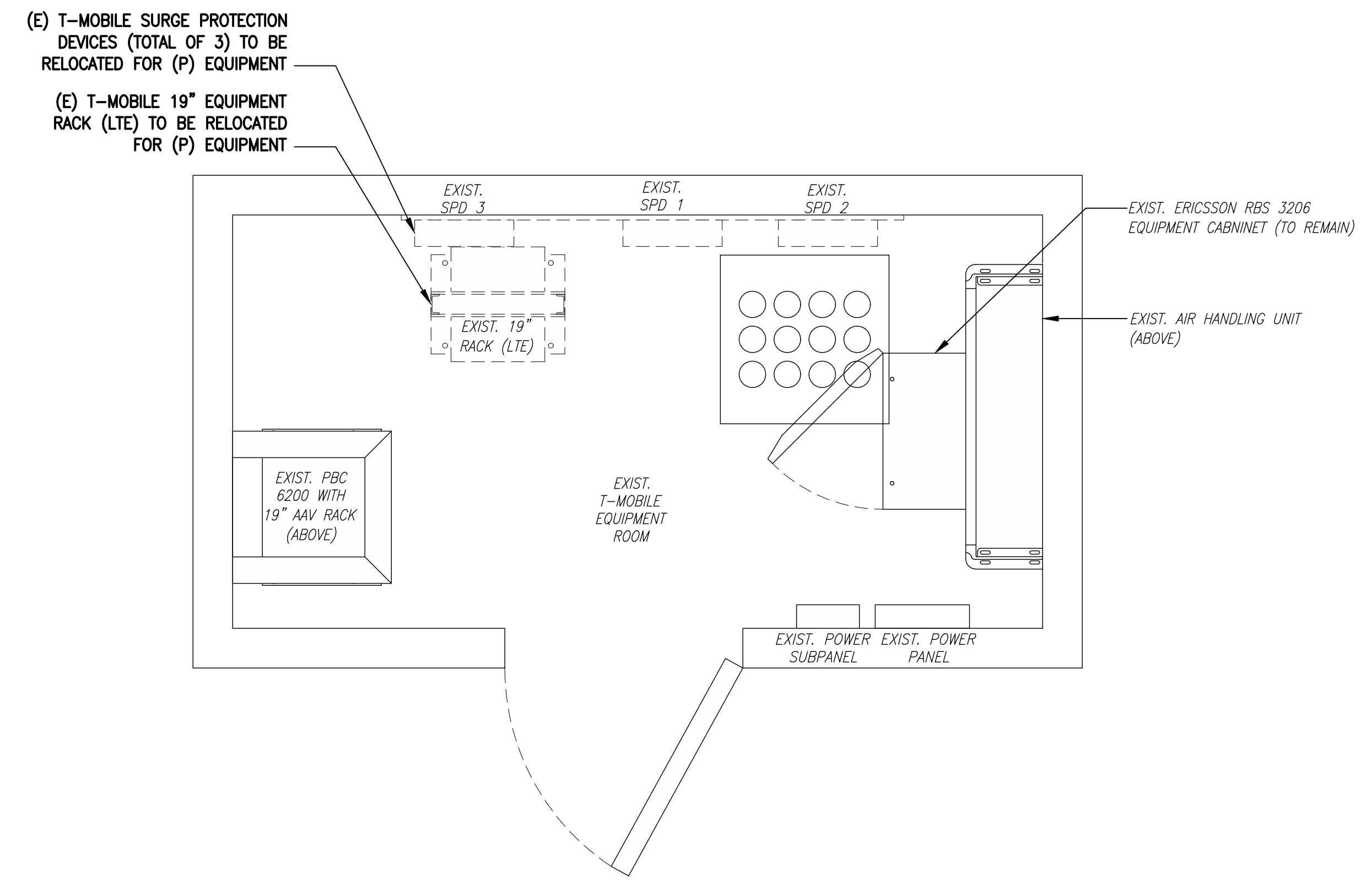
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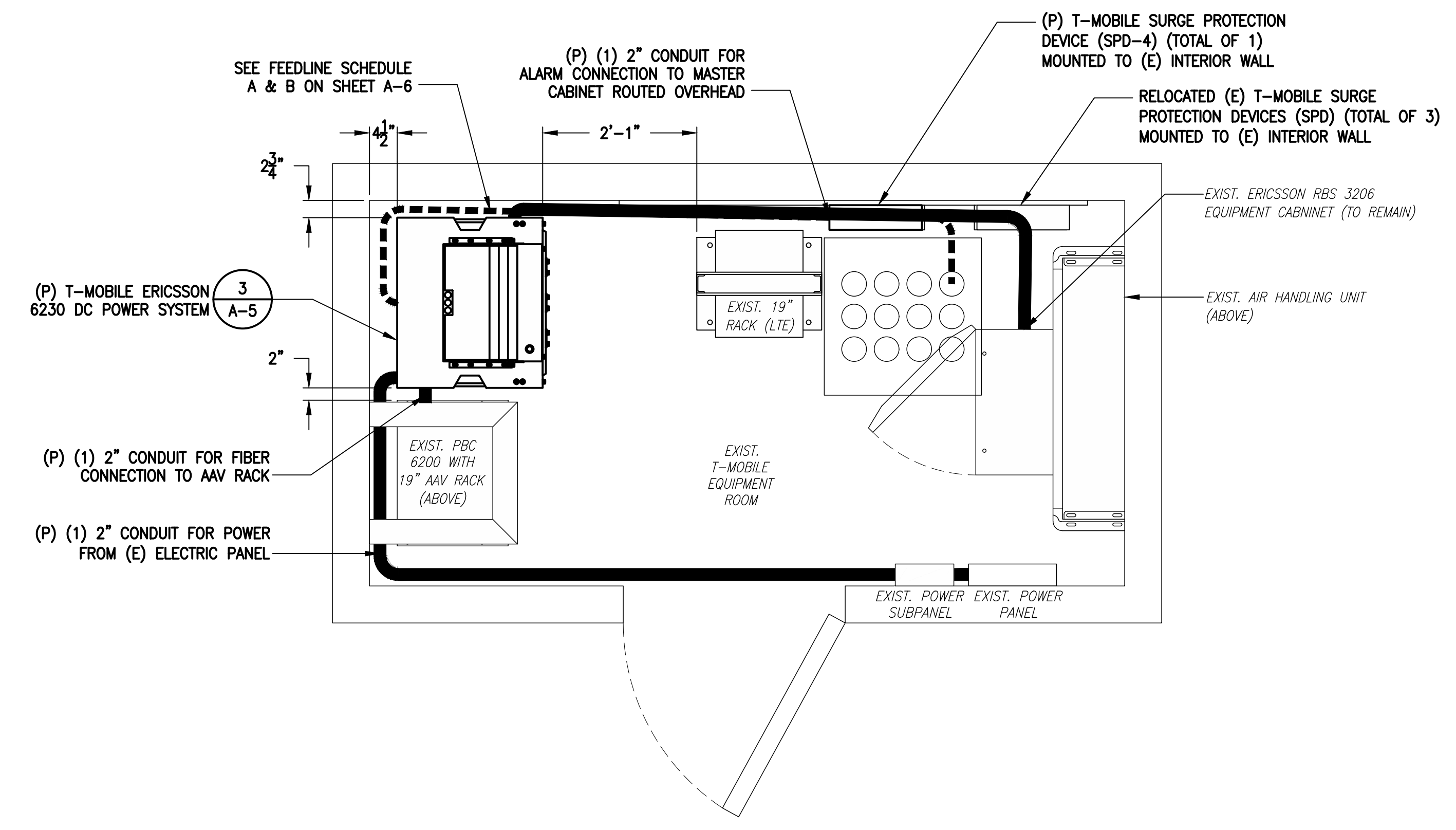
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AVE RT
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BRIGHTON, MA 02135

SHEET TITLE
EQUIPMENT PLANS
& DETAILS

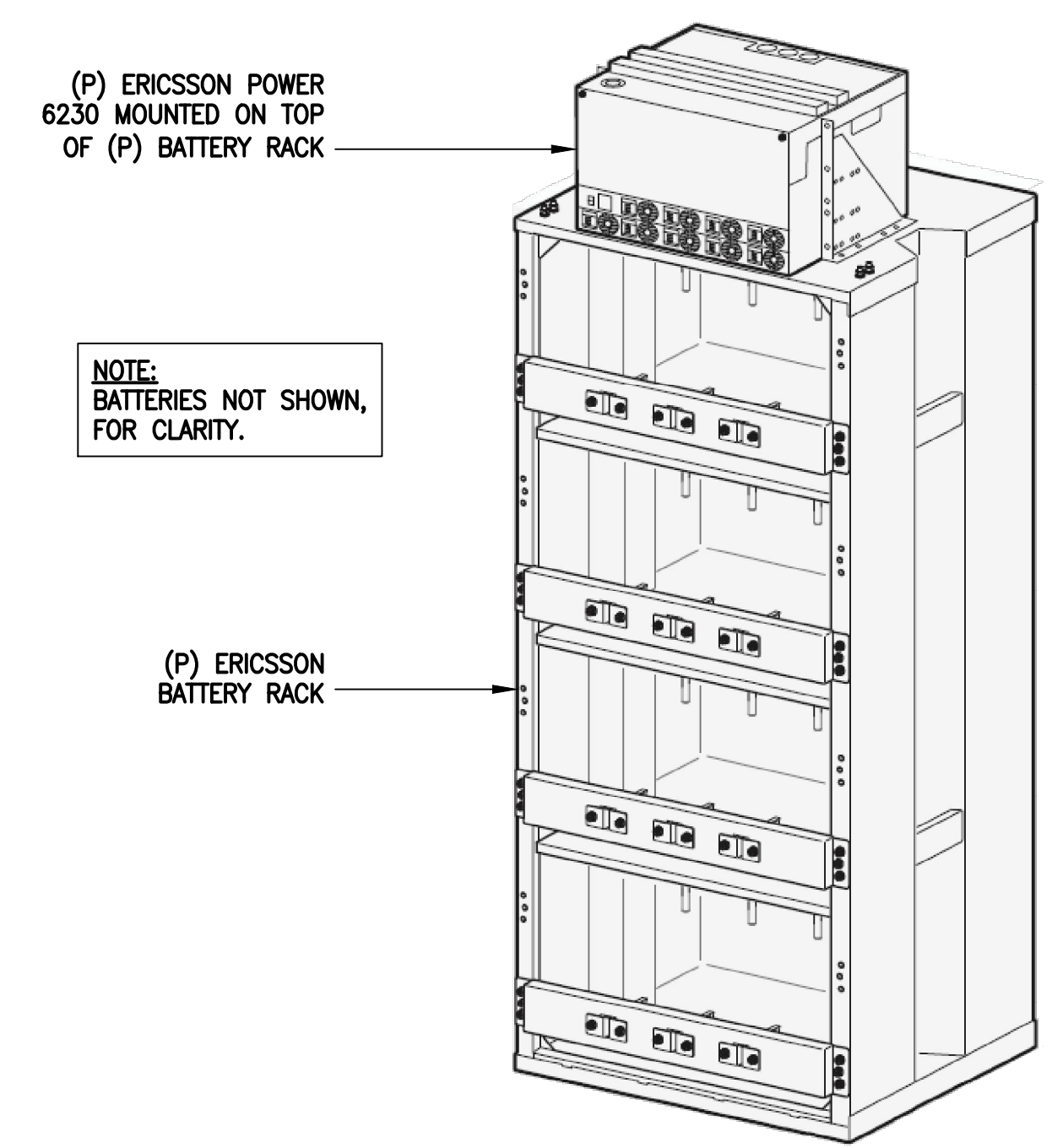
SHEET NUMBER
A-5



(E) EQUIPMENT PLAN 1
SCALE: N.T.S. A-5

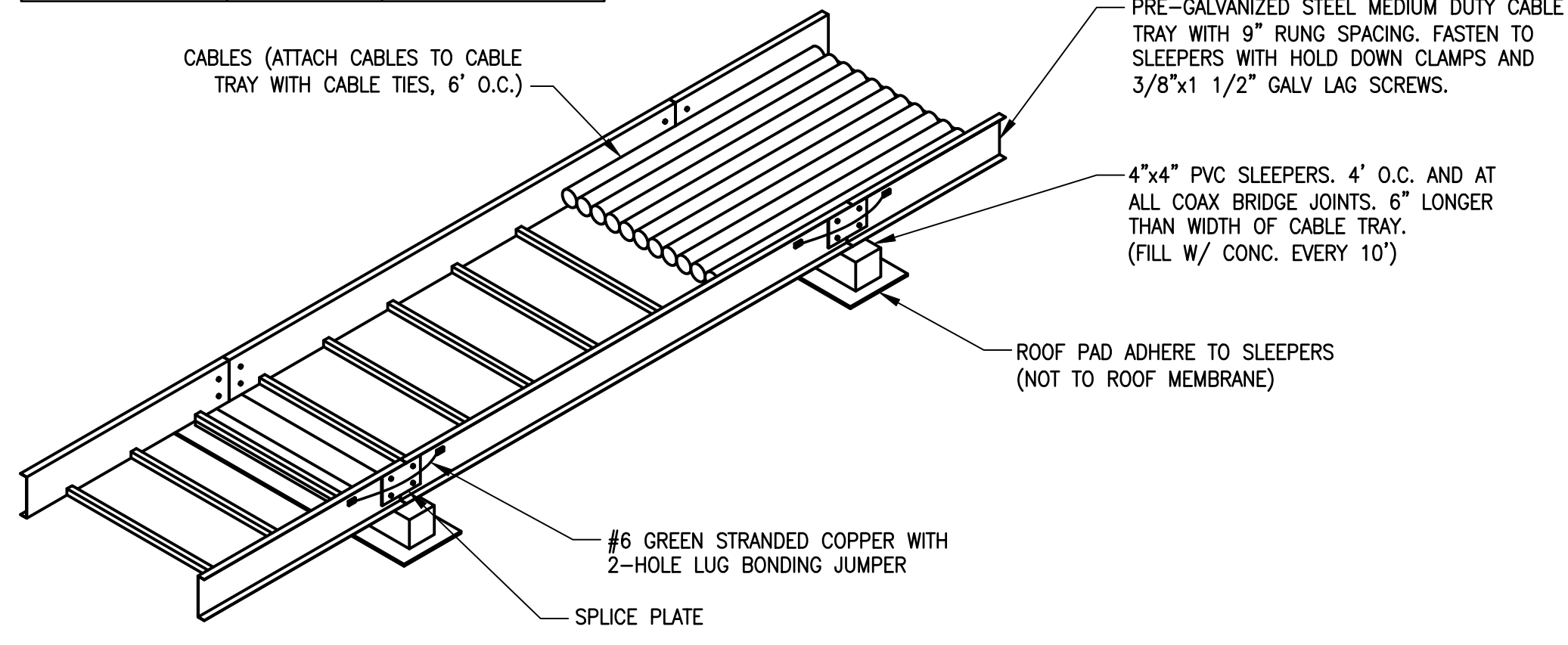


(P) EQUIPMENT PLAN 2
SCALE: N.T.S. A-5

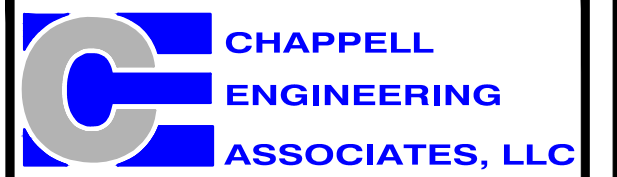


ERICSSON 6230 DC POWER SYSTEM
DIMENSIONS: 63.0"H x 27.6"W x 23.6"D
QUANTITY: TOTAL OF 1
EQUIPMENT DETAIL 3
SCALE: N.T.S. A-5

NUMBER OF COAXIAL CABLES	WIDTH OF CABLE TRAY	LOADING DEPTH OF CABLE TRAY
12	24"	4"
8	18"	4"
4	12"	4"
1-3	6"	4"

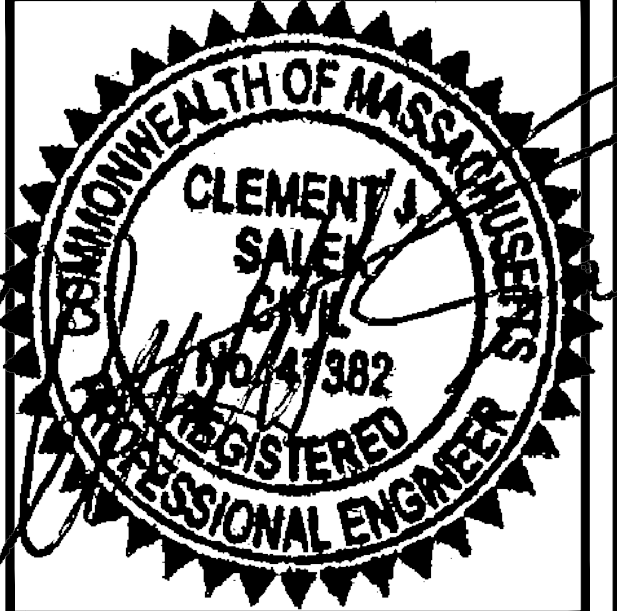


CABLE TRAY DETAIL 4
SCALE: NOT TO SCALE A-5



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PROJECT NO: 4BN0106A

DRAWN BY: JRV

CHECKED BY: JMT

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BN106/1662 COMM
AVE RT
1662 COMMONWEALTH AVENUE
BRIGHTON, MA 02135

SHEET TITLE
ANTENNA &
FEEDLINE CHARTS

SHEET NUMBER
A-6

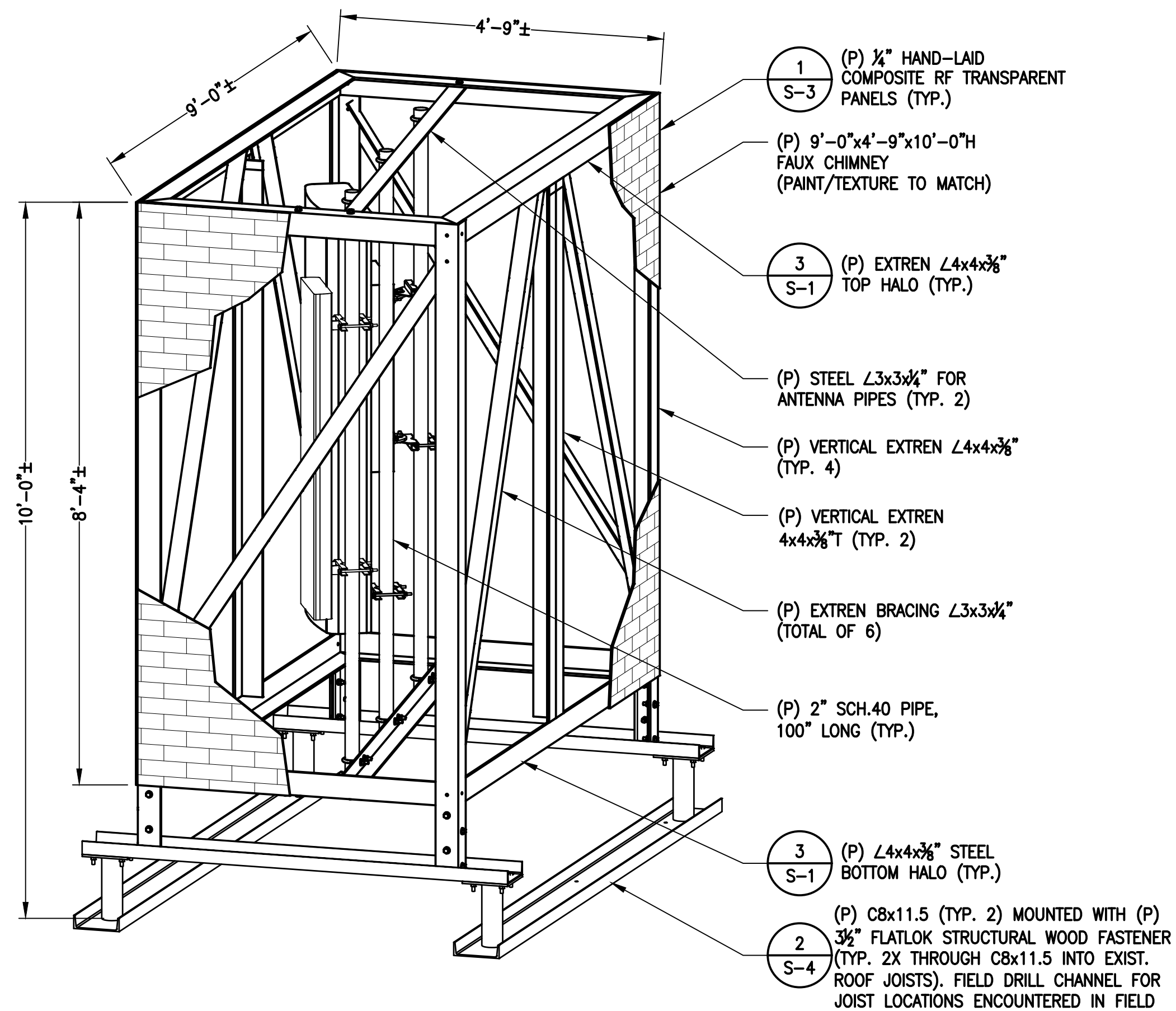
FINAL ANTENNA CONFIGURATION								
SECTOR	ANTENNA	RAD CENTER	AZIMUTH (TRUE NORTH)	MECHANICAL DOWNTILT	ELECTRICAL DOWNTILT	BAND	TMA/RADIOS	SIGNAL CABLES
ALPHA	A1 <small>RFS APX16DWW-16DWW-S-E-A20</small>	65'± AGL	30°	0°	-	L2100	RADIO 4415 B66A	(E) (6) 1-5/8" COAX CABLES (E) (3) 7/8" (3x6) HCS FIBER CABLE (P) (3) 1-5/8" (6x12) HCS FIBER CABLES
	A2 <small>COMMSCOPE FFW-65A-R2-V1</small>	65'± AGL	30°	0°	-	L700/L600/N600 L1900/G1900/U2100	RADIO 4449 B71+B85 RADIO 4424 B25 MI-54131 DIPLEXER <small>GENERIC TWIN STYLE 1B AWS TMA</small>	
	A3 <small>ERICSSON M-MIMO AIR6449 B41</small>	65'± AGL	30°	0°	-	L2500/N2500	-	
	B1 <small>RFS APX16DWW-16DWW-S-E-A20</small>	65'± AGL	150°	0°	-	L2100	RADIO 4415 B66A	
BETA	B2 <small>COMMSCOPE FFW-65A-R2-V1</small>	65'± AGL	150°	0°	-	L700/L600/N600 L1900/G1900/U2100	RADIO 4449 B71+B85 RADIO 4424 B25 MI-54131 DIPLEXER <small>GENERIC TWIN STYLE 1B AWS TMA</small>	
	B3 <small>ERICSSON M-MIMO AIR6449 B41</small>	65'± AGL	150°	0°	-	L2500/N2500	-	
	C1 <small>RFS APX16DWW-16DWW-S-E-A20</small>	65'± AGL	270°	0°	-	L2100	RADIO 4415 B66A	
	C2 <small>COMMSCOPE FFW-65A-R2-V1</small>	65'± AGL	270°	0°	-	L700/L600/N600 L1900/G1900/U2100	RADIO 4449 B71+B85 RADIO 4424 B25 MI-54131 DIPLEXER <small>GENERIC TWIN STYLE 1B AWS TMA</small>	
GAMMA	C3 <small>ERICSSON M-MIMO AIR6449 B41</small>	65'± AGL	270°	0°	-	L2500/N2500	-	

CABLE NOTE: (E)(6) 1-5/8" COAX CABLES TO BE REMOVED. SEE FEEDLINE SCHEDULE A & B BELOW.

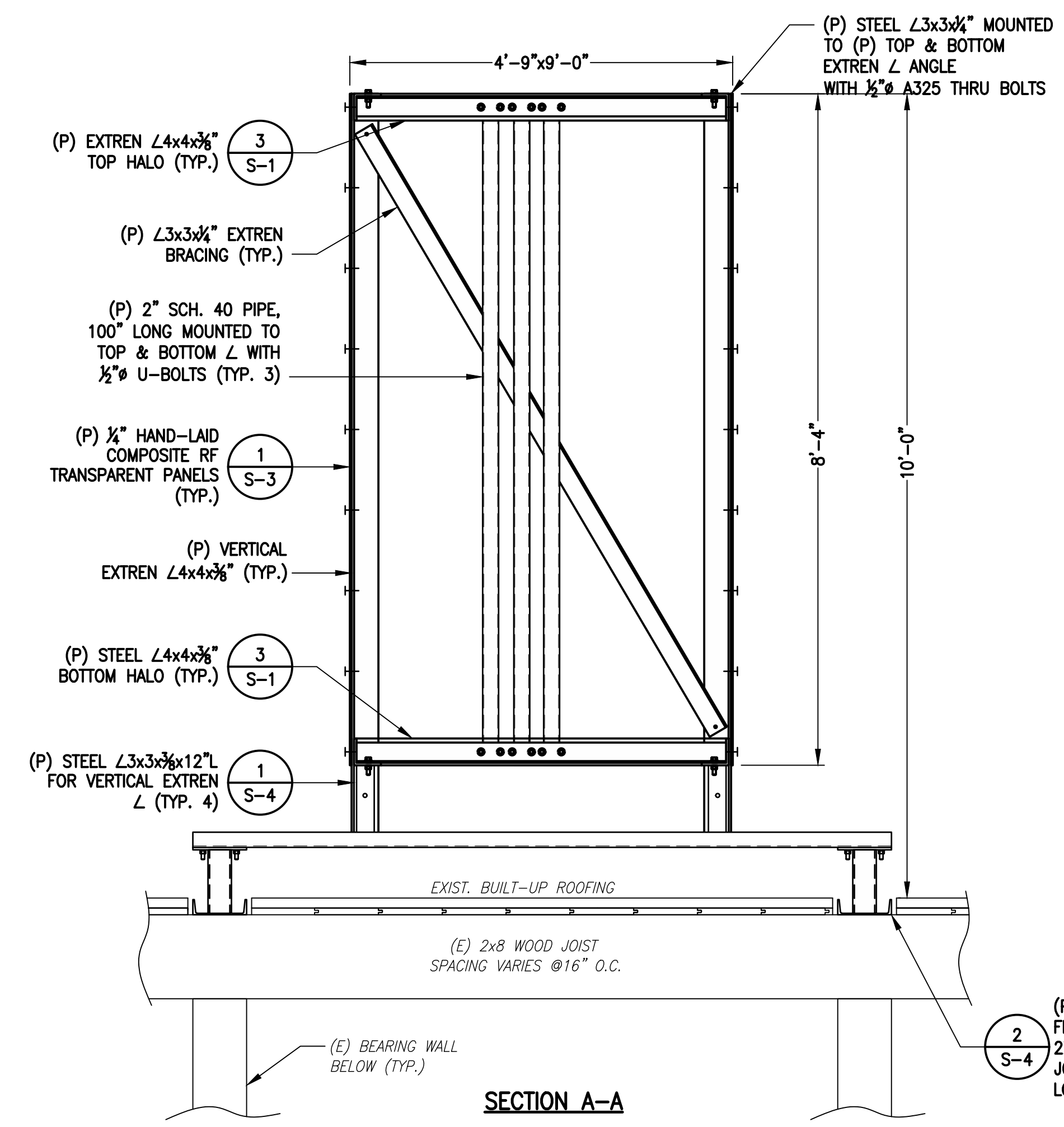
NOTE: RFDS REV9 - 09/13/20

FEEDLINE SCHEDULE		
SCHEDULE	FEEDLINES	LOCATION
A	EXISTING TO REMAIN: (6) 1-5/8" COAX CABLES (3) 7/8" (3x6) HCS FIBER CABLE (1) 1/2" COAX CABLE FOR GPS ANTENNA EXISTING TO BE REMOVED: (6) 1-5/8" COAX CABLES	ROUTED PER STRUCTURAL ANALYSIS
B	PROPOSED: (3) 1-5/8" (6x12) HCS FIBER CABLES	

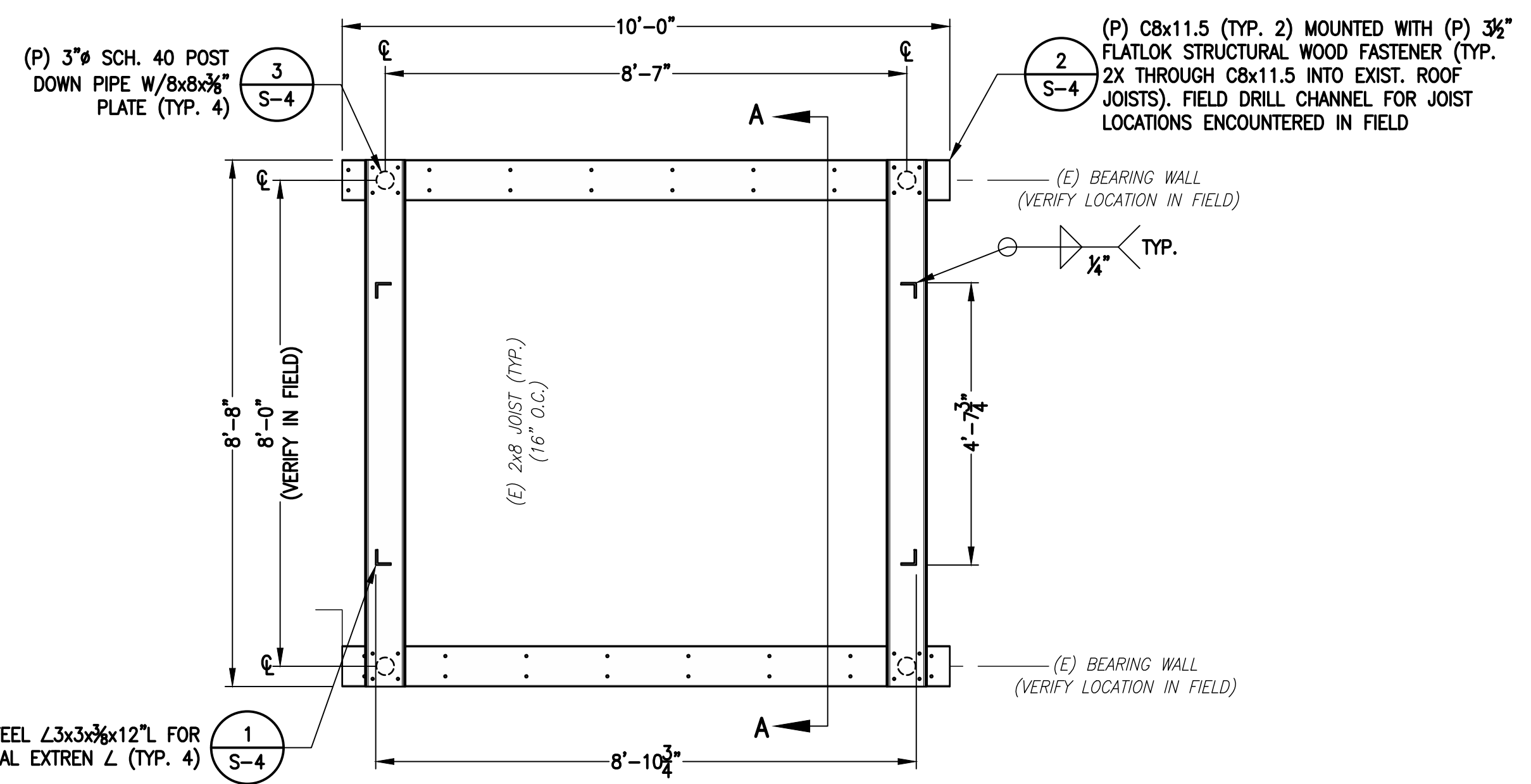
NOTE:
EXISTING T-MOBILE EQUIPMENT FEEDLINE INVENTORY BASED ON OBSERVED FIELD CONDITIONS. RFDS AND FEEDLINE LEASING ENTITLEMENTS MAY DIFFER.



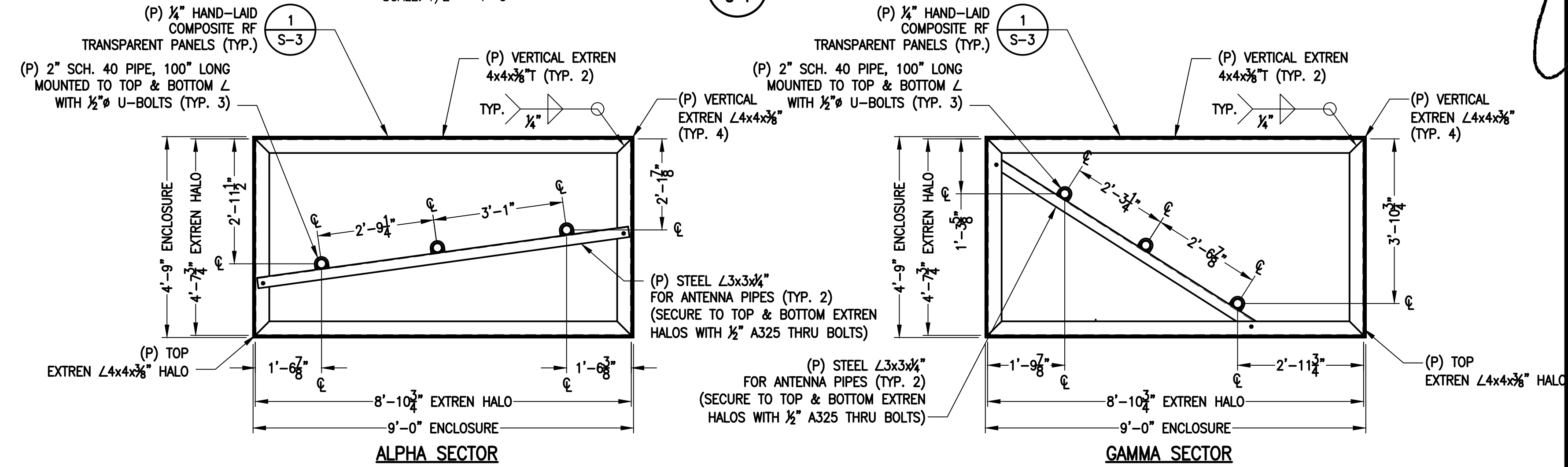
FAUX CHIMNEY ISOMETRIC
SCALE: N.T.S.



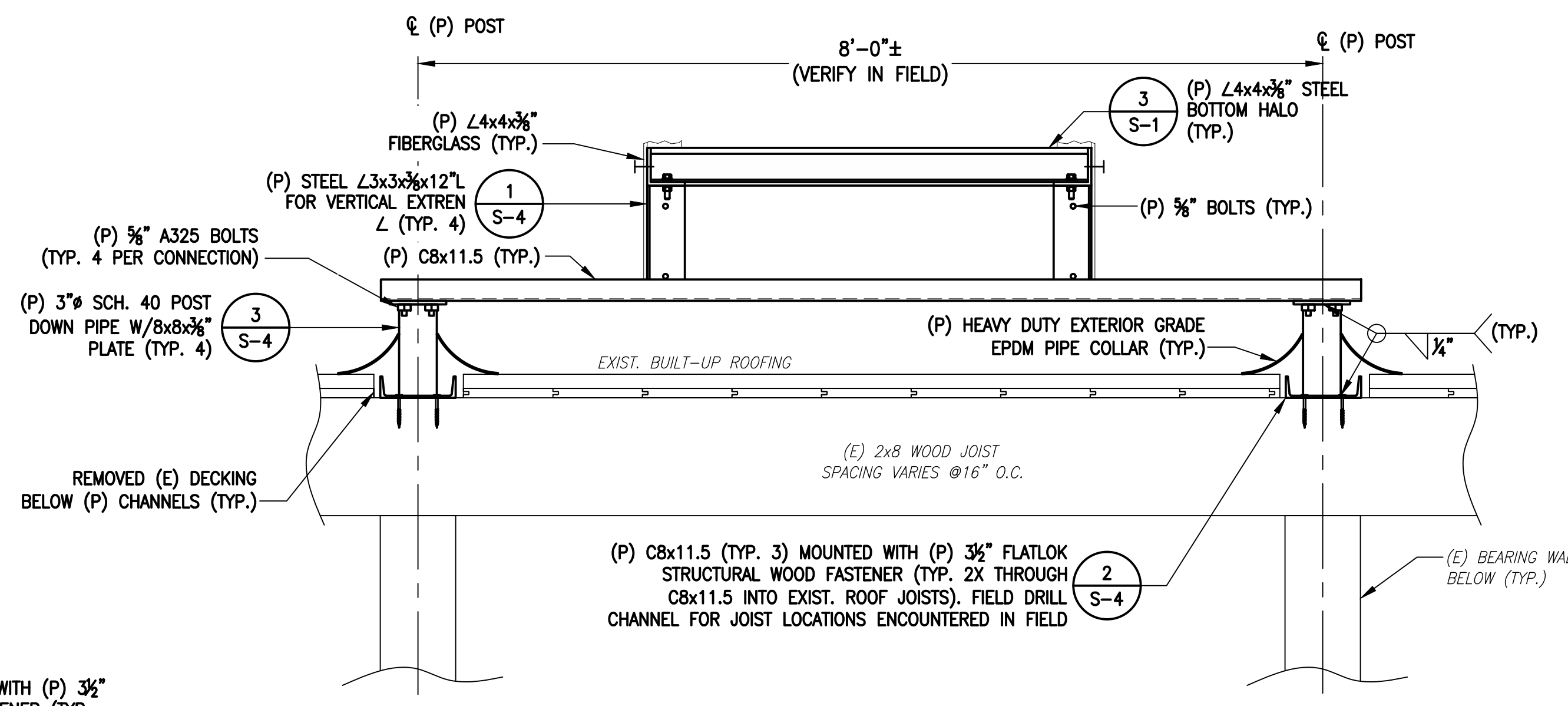
SECTION A-A FAUX CHIMNEY ELEVATION
SCALE: 3/4" = 1'-0"



CHIMNEY FRAME BASE
SCALE: 1/2" = 1'-0"



CHIMNEY FRAMING
SCALE: 1/2" = 1'-0"



CHANNEL FRAME ELEVATION
SCALE: 1/2" = 1'-0"

FRP NOTES

1. ALL STRUCTURAL FIBERGLASS (FRP) SHAPES, PLATE & SHEET ARE TO BE EXTREN BY STRONGWELL, SERIES 525 (OR APPROVED EQUAL).
2. HAND LAID COMPOSITE RF TRANSPARENT PANELS ARE TO BE MIN. 1/4" THICK, NOT INCLUDING DECORATIVE TEXTURE ON EXTERIOR.
3. FRP PANELS SHALL BE PAINTED/TEXTURED WITH BRICK PATTERN AND COLORS TO MATCH EXISTING BUILDING/CHIMNEYS.

NOTES:

- 1.) PROPOSED STEEL C8x11.5 CHANNELS TO BE DRILLED IN THE FIELD.
- 2.) DO NOT PRE-DRILL PILOT (LEAD) HOLES FOR FLATLOK FASTENERS.

T-Mobile

T-MOBILE NORTHEAST LLC
15 COMMERCE WAY, SUITE B
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COMMONWEALTH OF MASSACHUSETTS

CLEMENT J. SALES
REGISTERED PROFESSIONAL ENGINEER
No. 47382

APPROVALS

STRUCTURE OWNER _____

LEASING _____

R.F. _____

ZONING _____

CONSTRUCTION _____

A/E _____

PROJECT NO: 4BN0106A

DRAWN BY: JRV

CHECKED BY: JMT

VERSION

NO.	DATE	DESCRIPTION
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1	05/28/21	CONSTRUCTION
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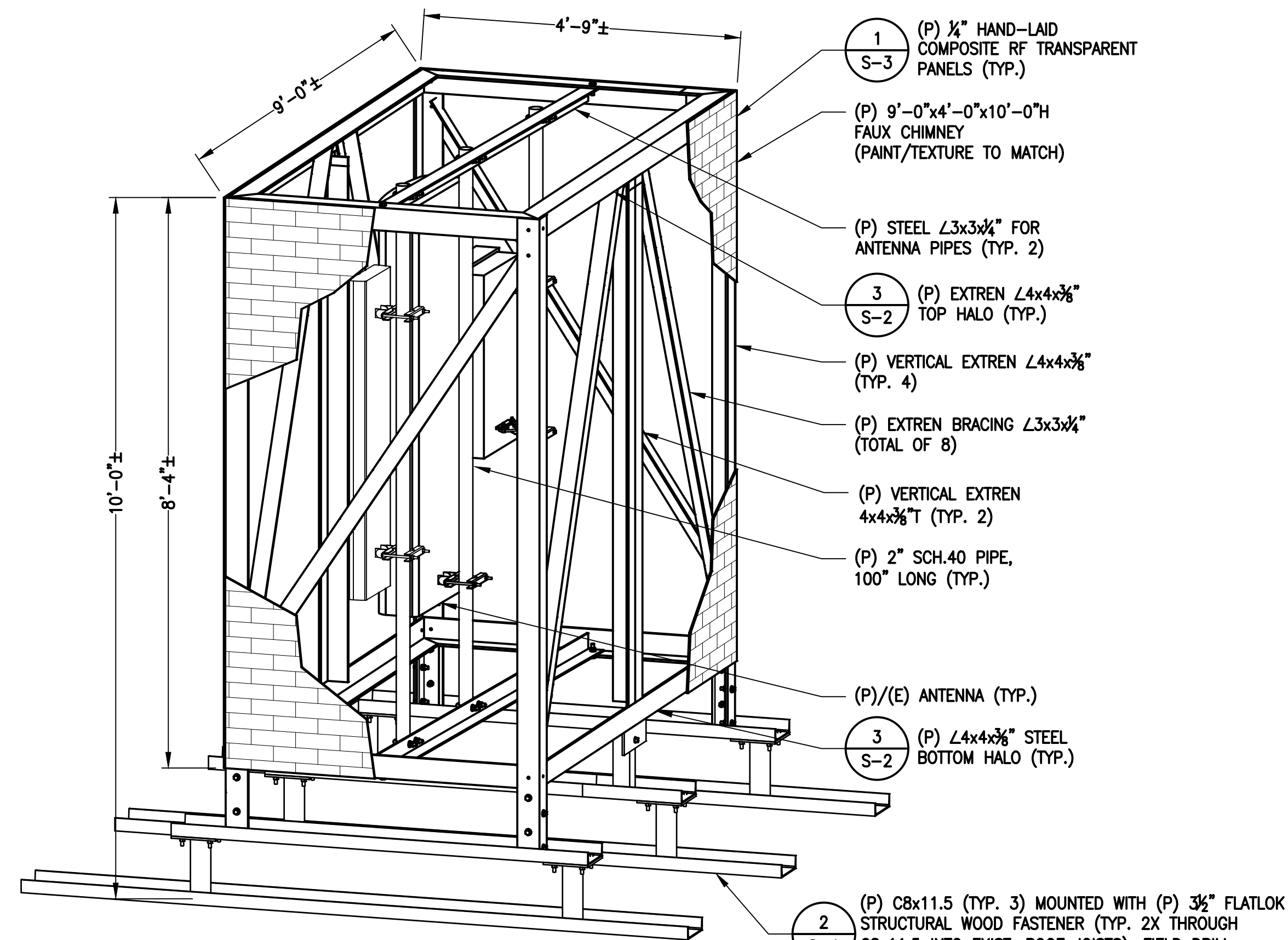
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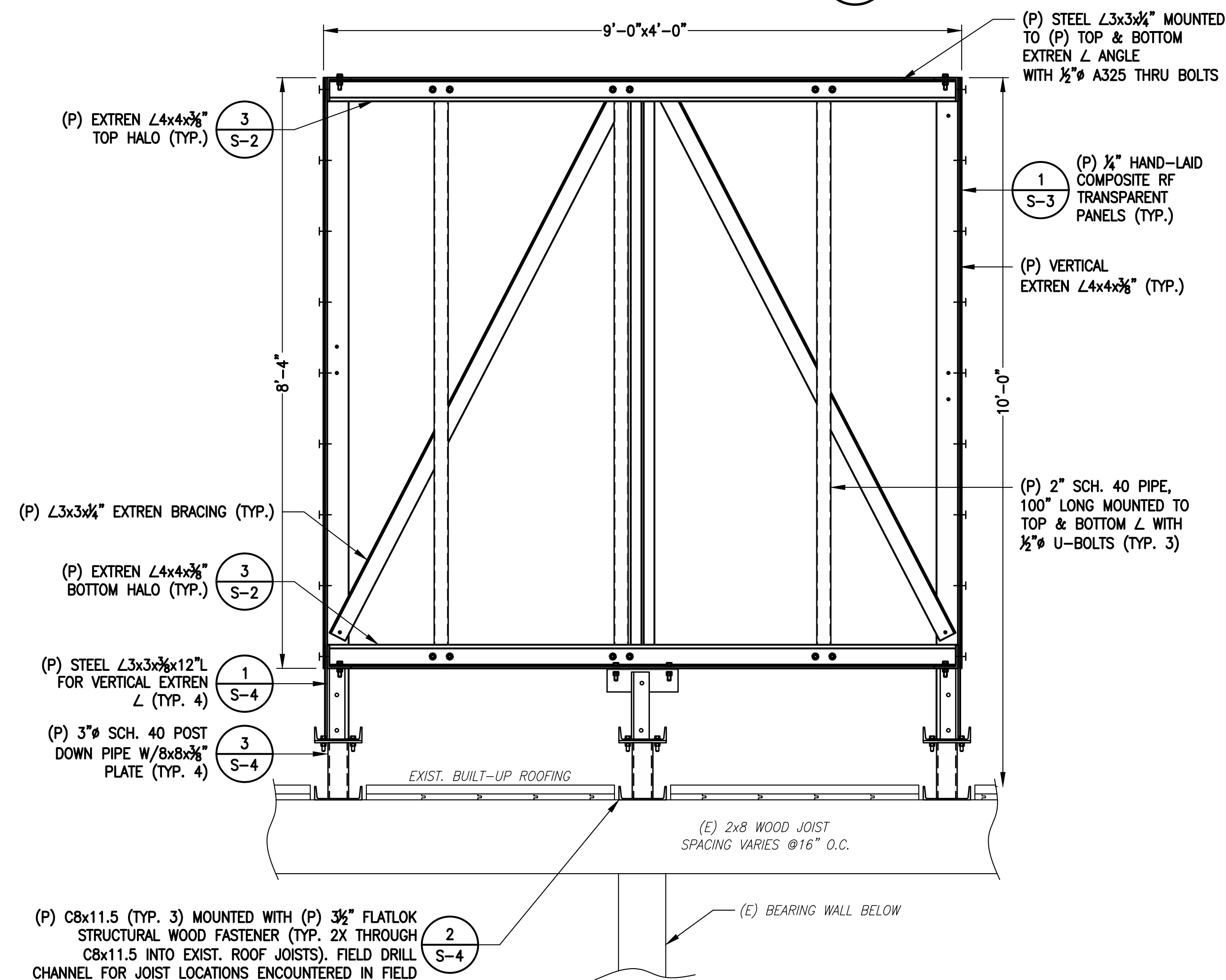
STRUCTURAL DETAILS - ALPHA & GAMMA CHIMNEY FRAMING

SHEET NUMBER

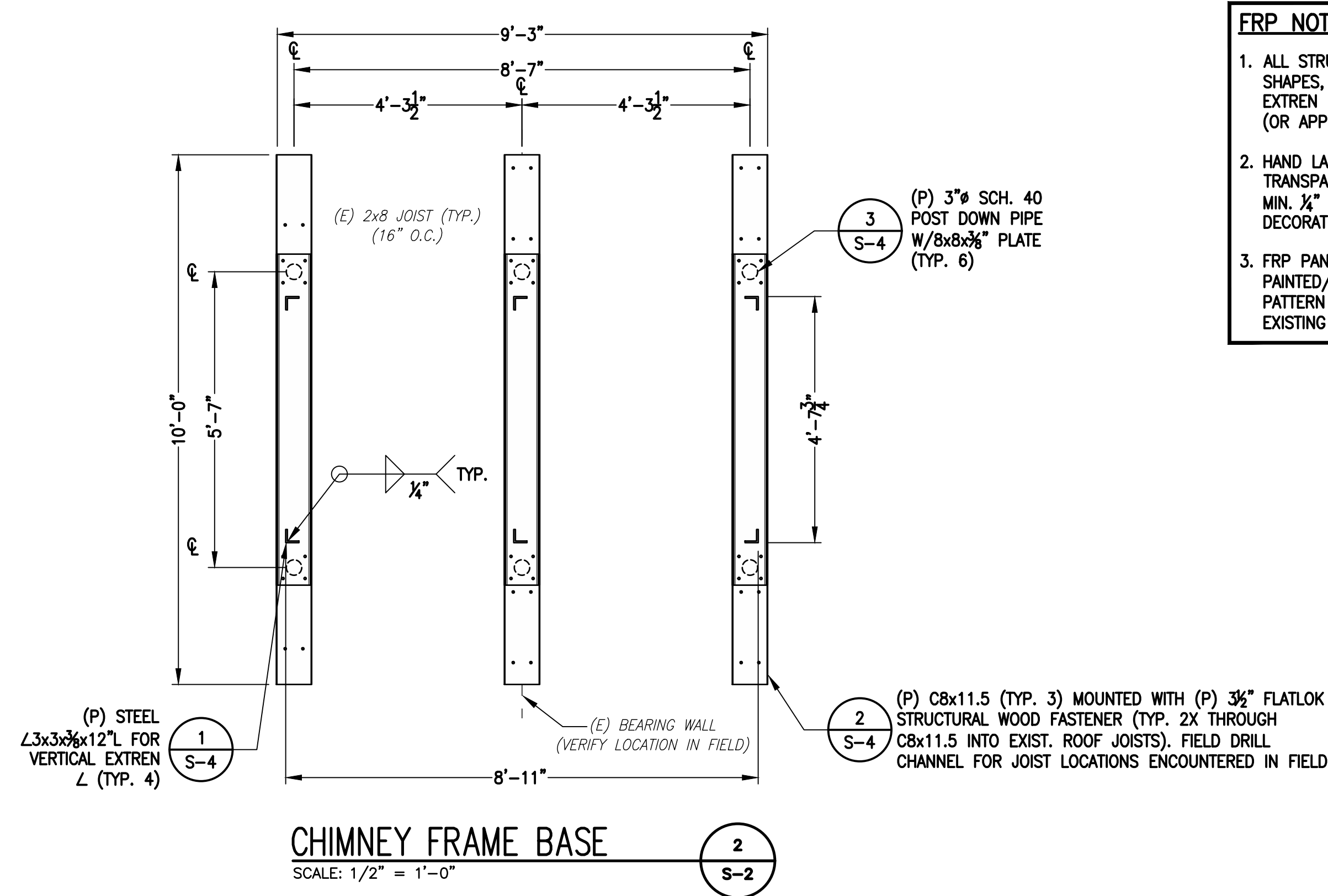
S-1



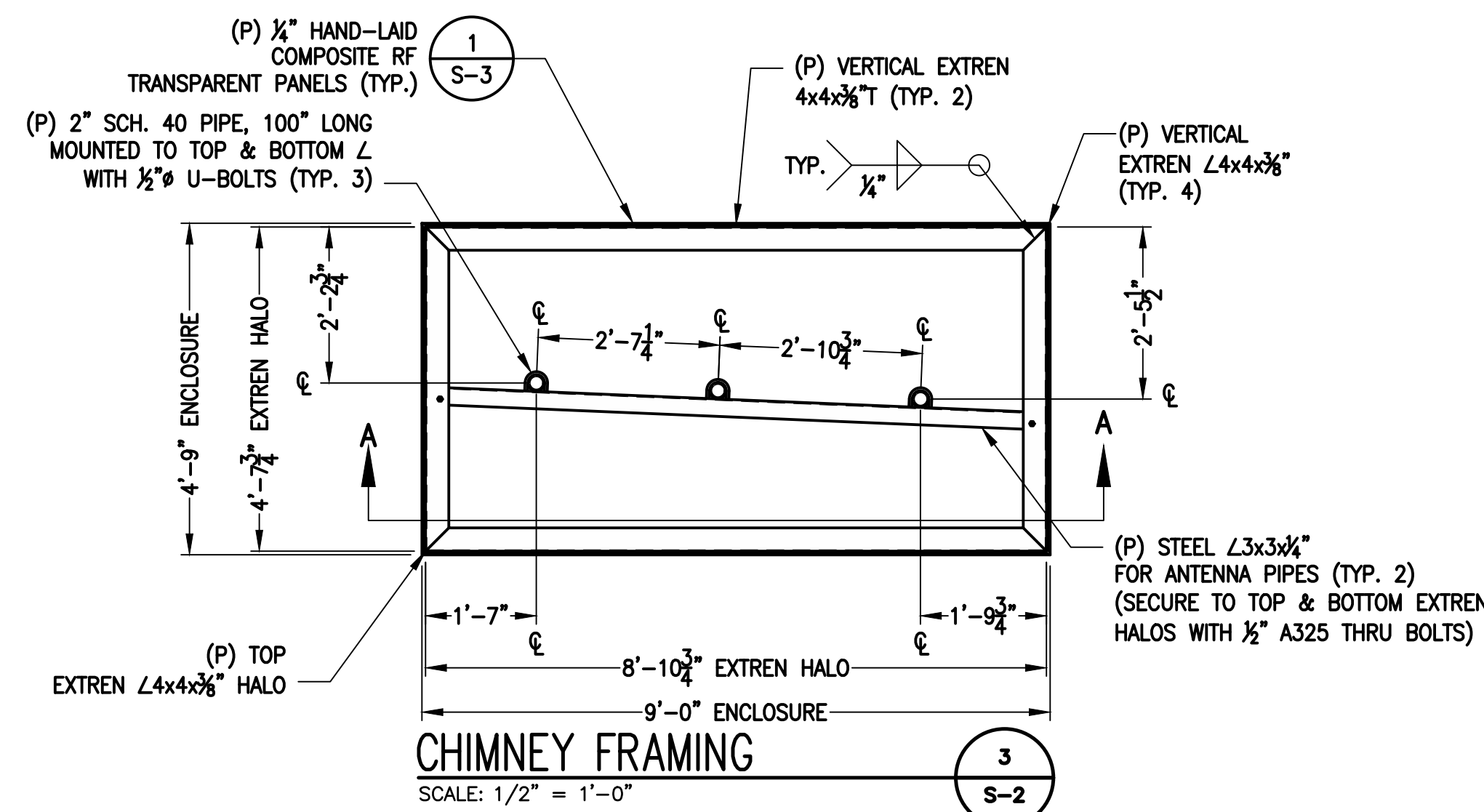
FAUX CHIMNEY ISOMETRIC
SCALE: N.T.S.



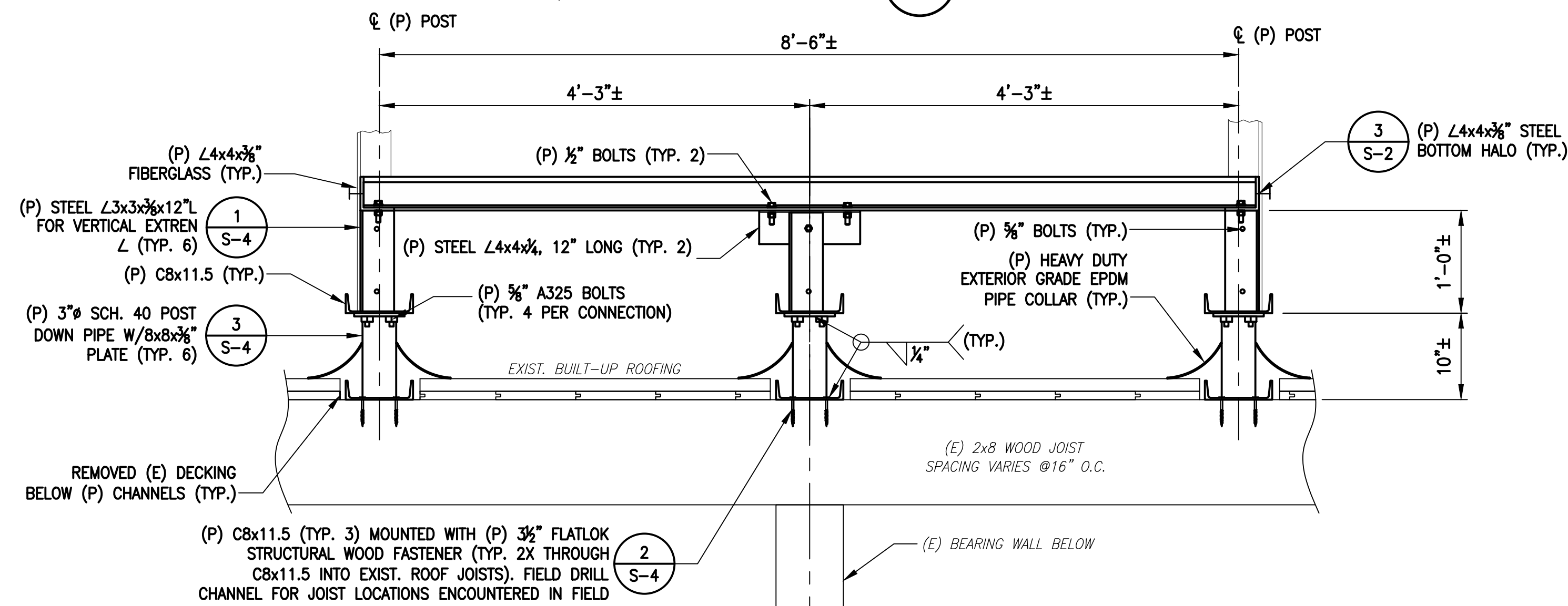
SECTION A-A
FAUX CHIMNEY ELEVATION
SCALE: 3/4" = 1'-0"



CHIMNEY FRAME BASE
SCALE: 1/2" = 1'-0"



CHIMNEY FRAMING
SCALE: 1/2" = 1'-0"



CHANNEL FRAME ELEVATION
SCALE: 1/2" = 1'-0"

FRP NOTES

1. ALL STRUCTURAL FIBERGLASS (FRP) SHAPES, PLATE & SHEET ARE TO BE EXTREN BY STRONGWELL, SERIES 525 (OR APPROVED EQUAL).
2. HAND LAID COMPOSITE RF TRANSPARENT PANELS ARE TO BE MIN. 1/2" THICK, NOT INCLUDING DECORATIVE TEXTURE ON EXTERIOR.
3. FRP PANELS SHALL BE PAINTED/TEXTURED WITH BRICK PATTERN AND COLORS TO MATCH EXISTING BUILDING/CHIMNEYS.

T-Mobile

T-MOBILE NORTHEAST LLC
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NORTON, MA 02766
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(508)481-7400
www.chappellengineering.com

COMMONWEALTH OF MASSACHUSETTS

CLEMENT J. SALES
REGISTERED PROFESSIONAL ENGINEER
No. 41382

APPROVALS

STRUCTURE OWNER _____

LEASING _____

R.F. _____

ZONING _____

CONSTRUCTION _____

A/E _____

PROJECT NO: 4BN0106A

DRAWN BY: JRV

CHECKED BY: JMT

VERSION

2	07/22/21	CONSTRUCTION REVISED
1	05/28/21	CONSTRUCTION
0	12/03/20	CONSTRUCTION REVIEW

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4BN0106A
BN106/1662 COMM
AVE RT
1662 COMMONWEALTH AVENUE
BRIGHTON, MA 02135

SHEET TITLE
STRUCTURAL DETAILS -
BETA CHIMNEY FRAMING

SHEET NUMBER
S-2

- NOTES:
- 1.) PROPOSED STEEL C8x11.5 CHANNELS TO BE DRILLED IN THE FIELD.
 - 2.) DO NOT PRE-DRILL PILOT (LEAD) HOLES FOR FLATLOK FASTENERS.

HARDWARE INSTALLATION NOTES

- ALL HARDWARE IN DIRECT PATH OF ANTENNAS SHALL BE 3/8"Ø-16 40% GLASS FILLED ISOPLAST GRAY FLANGE HEX HEAD CAP SCREWS AND 40% GLASS FILLED ISOPLAST FLANGE NUTS, EXCEPT AT REMOVABLE PANEL LOCATIONS. NO SUBSTITUTIONS PERMITTED WITHOUT PRIOR APPROVAL.

SUPPLIER INFORMATION:
 E&T FASTENERS
 41 ODELL SCHOOL ROAD, UNIT A
 CONCORD, NC 28027
 TEL: 704-933-5774
 WWW.FASTENERCOMPONENTS.COM

- ALL HARDWARE ON REMOVABLE PANELS SHALL BE 3/8"Ø FIBREBOLT ASSEMBLY AS SHOWN IN DETAIL 3/S-3. SEE FIBREBOLT INSTALLATION NOTES.
- ALL REMAINING HARDWARE SECURING SCREENING MATERIAL ON UPPER AND LOWER STEEL HALO FRAMES AND NOT IN DIRECT PATH OF ANTENNAS SHALL BE 3/8"Ø GALVANIZED OR STAINLESS STEEL HARDWARE. UTILIZE FLAT AND LOCK WASHERS TO PREVENT CRUSHING OF EXTREN L'S WHEN TIGHTENING BOLTS. LOCATE FLAT WASHERS AGAINST EACH FACE OF EXTREN L'S AS REQUIRED TO PREVENT CRUSHING AND FRACTURING OF EXTREN MEMBER WHEN TIGHTENING FASTENERS.
- POLYURETHANE ADHESIVE SHALL BE USED ON ALL NON-METALLIC HARDWARE, EXCEPT ON REMOVABLE PANEL LOCATIONS.

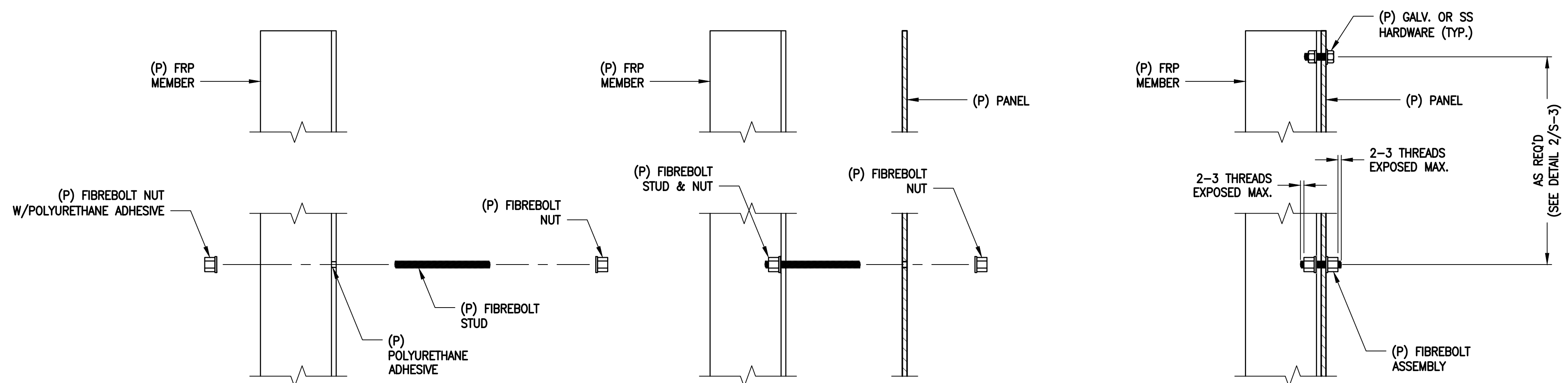
FIBREBOLT INSTALLATION PROCEDURE

FIBREBOLT STUDS AND NUTS HAVE PROPERTIES AND CHARACTERISTICS DIFFERENT FROM STEEL FAILURE TO FOLLOW THE PROCEDURE BELOW CAN RESULT IN DAMAGE AND/OR PREMATURE FAILURE OF FIBREBOLT.

- BEARING SURFACES OF NUTS MUST BE PARALLEL TO THE SURFACES BEING FASTENED.
- A TORQUE WRENCH MUST BE USED. SEE THE TABLE BELOW:

SIZE	ULTIMATE TORQUE STRENGTH	RECOMMENDED MAXIMUM INSTALLATION TORQUE
3/8" - 16 UNC	8 FT. - LBS.	4 FT. - LBS.
1/2" - 13 UNC	18 FT. - LBS.	8 FT. - LBS.
3/4" - 11 UNC	35 FT. - LBS.	16 FT. - LBS.
1" - 10 UNC	50 FT. - LBS.	24 FT. - LBS.
1 1/4" - 8 UNC	110 FT. - LBS.	50 FT. - LBS.

- WRENCHES MUST MAKE FULL CONTACT WITH ALL NUT EDGES. PARTIAL CONTACT WILL CAUSE THE CORNERS TO FRACTURE, AFFECTING THE PERFORMANCE OF THE STUD/NUT ASSEMBLY. A STANDARD SIX POINT SOCKET IS RECOMMENDED FOR THE HEX NUTS.
- THE REMOVABLE PANEL IS BEING INSTALLED FOR ACCESS TO THE EQUIPMENT WITHIN THE FAUX CHIMNEY. ADHESIVE SHALL NOT BE INSTALLED ON THE FIBREBOLTS TO ALLOW FOR THE PANEL TO BE REMOVED. INSTALL FIBREBOLT NUTS USING THE RECOMMENDED MAXIMUM INSTALLATION TORQUE.

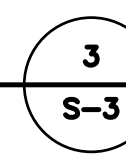


FIBREBOLT INSTALLATION NOTES (FOR REMOVABLE PANEL LOCATIONS)

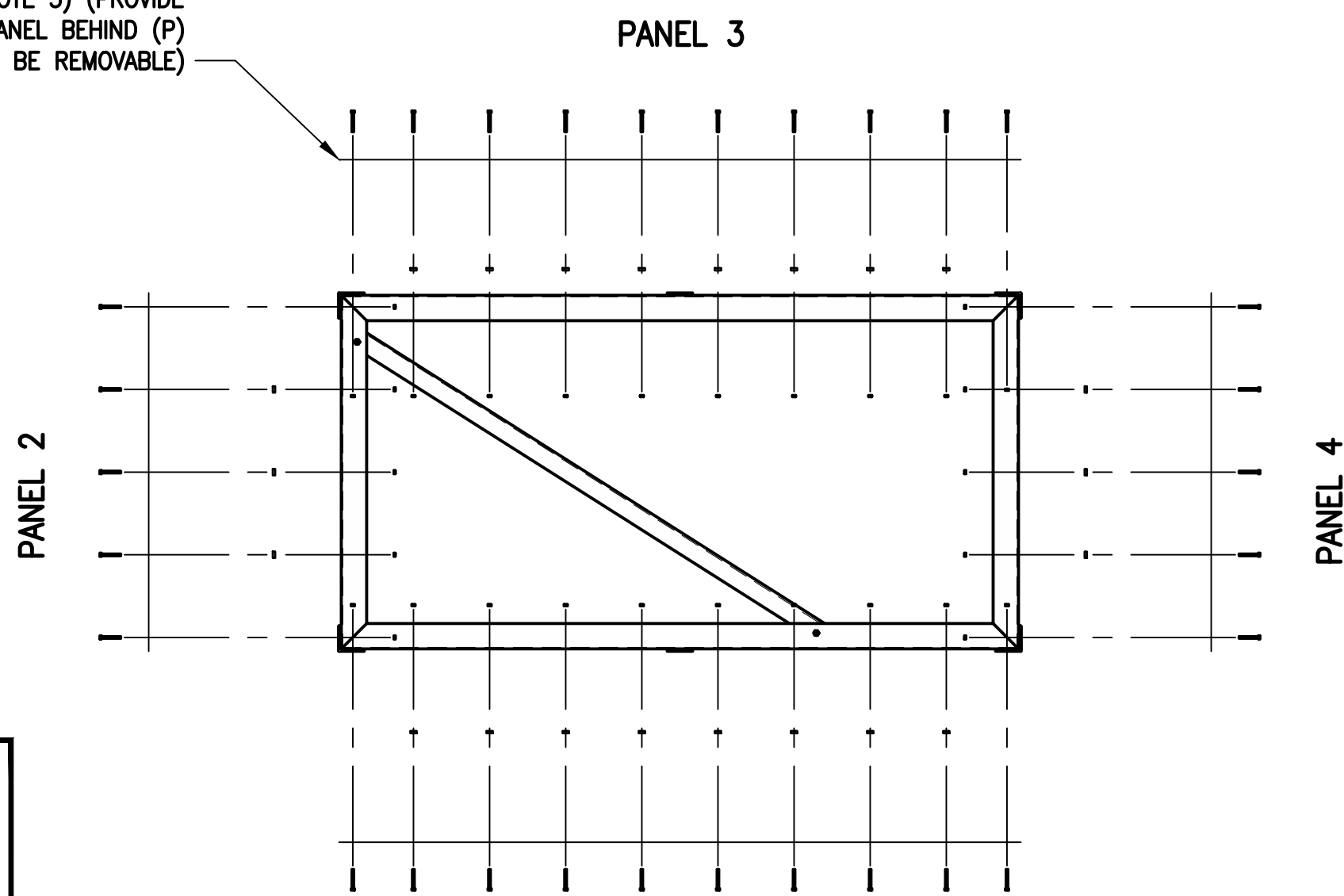
- DRILL UNDERSIZED HOLE IN FRP MEMBER.
- TAP FRP MEMBER FOR 3/8"Ø-16 THREAD.
- INSTALL FIBREBOLT 3/8"Ø-16 (6" LONG) STUD INTO TAPPED FRP WITH POLYURETHANE ADHESIVE.
- INSTALL FIBREBOLT NUT WITH POLYURETHANE ADHESIVE ON REAR SIDE OF FRP.
- INSTALL PANEL AND EXTERIOR FIBREBOLT NUT. EXCESS THREADED STUD SHALL BE TRIMMED TO 2-3 THREADS UPON COMPLETION.

FIBREBOLT INSTALLATION DETAILS

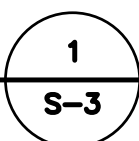
SCALE: N.T.S.



(P) 1/4" HAND-LAID COMPOSITE RF TRANSPARENT PANELS FASTENED TO FRAMING WITH GLASS FILLED ISOPLAST HARDWARE ON SIDE OF PANELS IN DIRECT PATH OF ANTENNAS AND FIBREBOLTS ON SIDES OF REMOVABLE PANEL (PAINT TO MATCH - SEE NOTE 3) (PROVIDE SPACERS, AS REQUIRED) (PANEL BEHIND (P) ANTENNAS SHALL BE REMOVABLE)

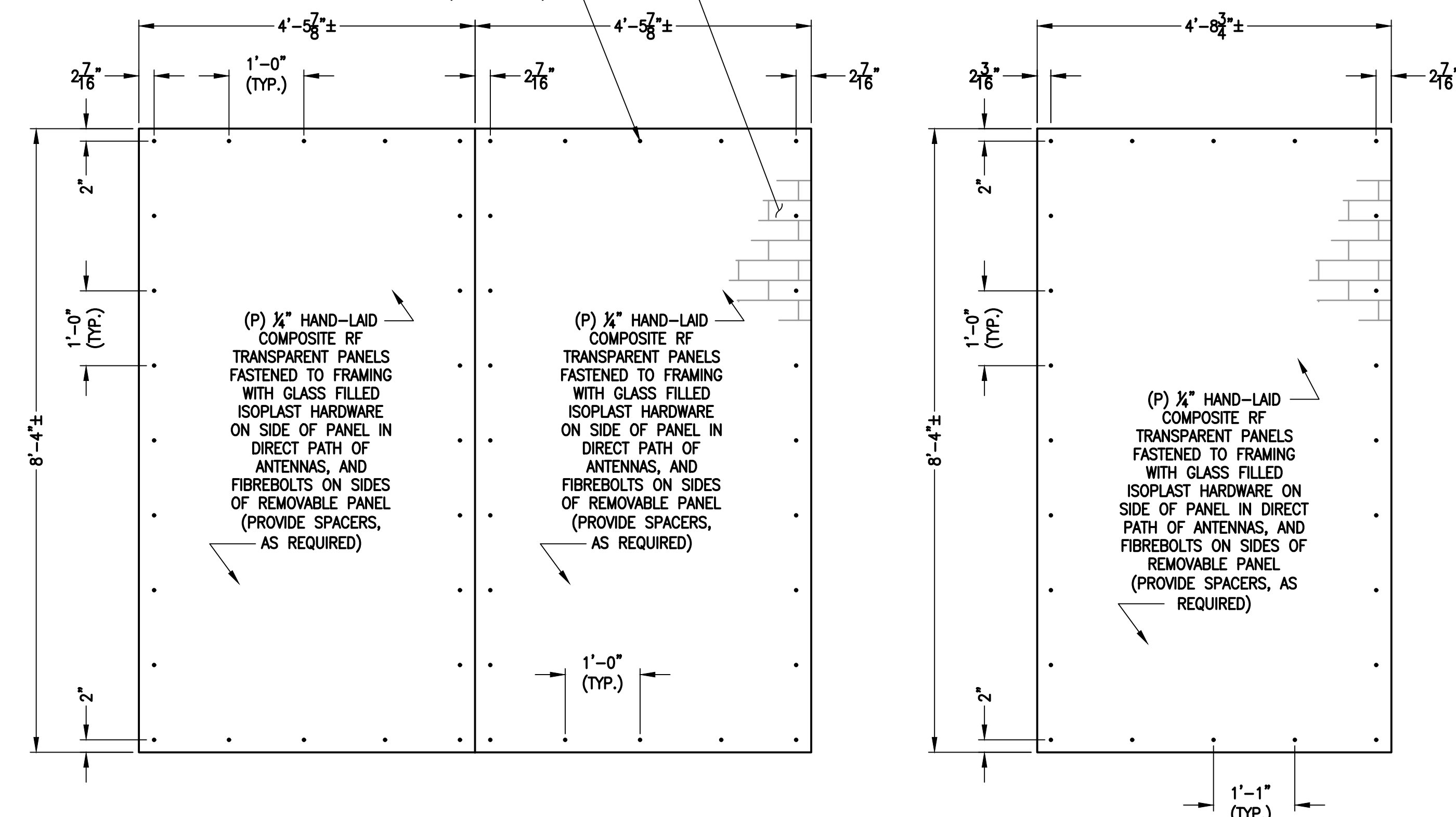


CHIMNEY PLAN
 SCALE: 1/2" = 1'-0"

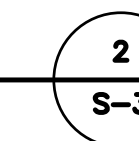


PANELS SHALL BE MIN. 1/4" THICK, NOT INCLUDING DECORATE TEXTURE ON EXTERIOR. PANELS SHALL BE PAINTED/TEXTURED WITH BRICK PATTERN AND COLORS TO MATCH (E) BUILDING/CHIMNEYS

(P) 3/8"Ø-16 40% GLASS FILLED ISOPLAST GRAY FLANGE HEX HEAD CAP SCREWS & FLANGE NUTS @ 12" O.C. (SEE NOTE 1)



CHIMNEY PANELS
 SCALE: 3/4" = 1'-0"

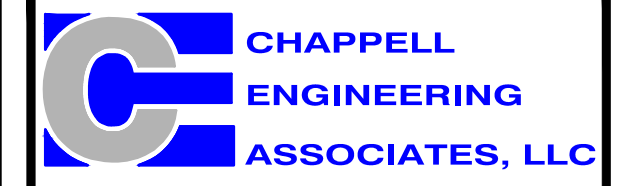


FRP NOTES

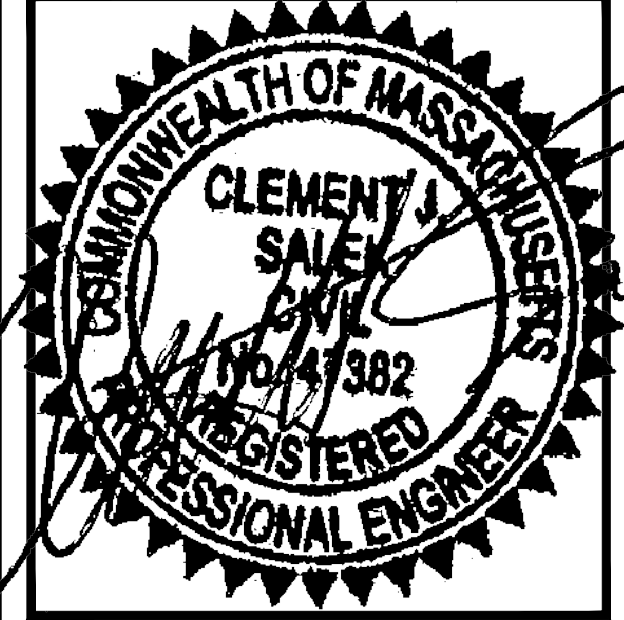
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APPROVALS

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LEASING _____

R.F. _____

ZONING _____

CONSTRUCTION _____

A/E _____

PROJECT NO: 4BN0106A

DRAWN BY: JRV

CHECKED BY: JMT

VERSION

NO.	DATE	DESCRIPTION
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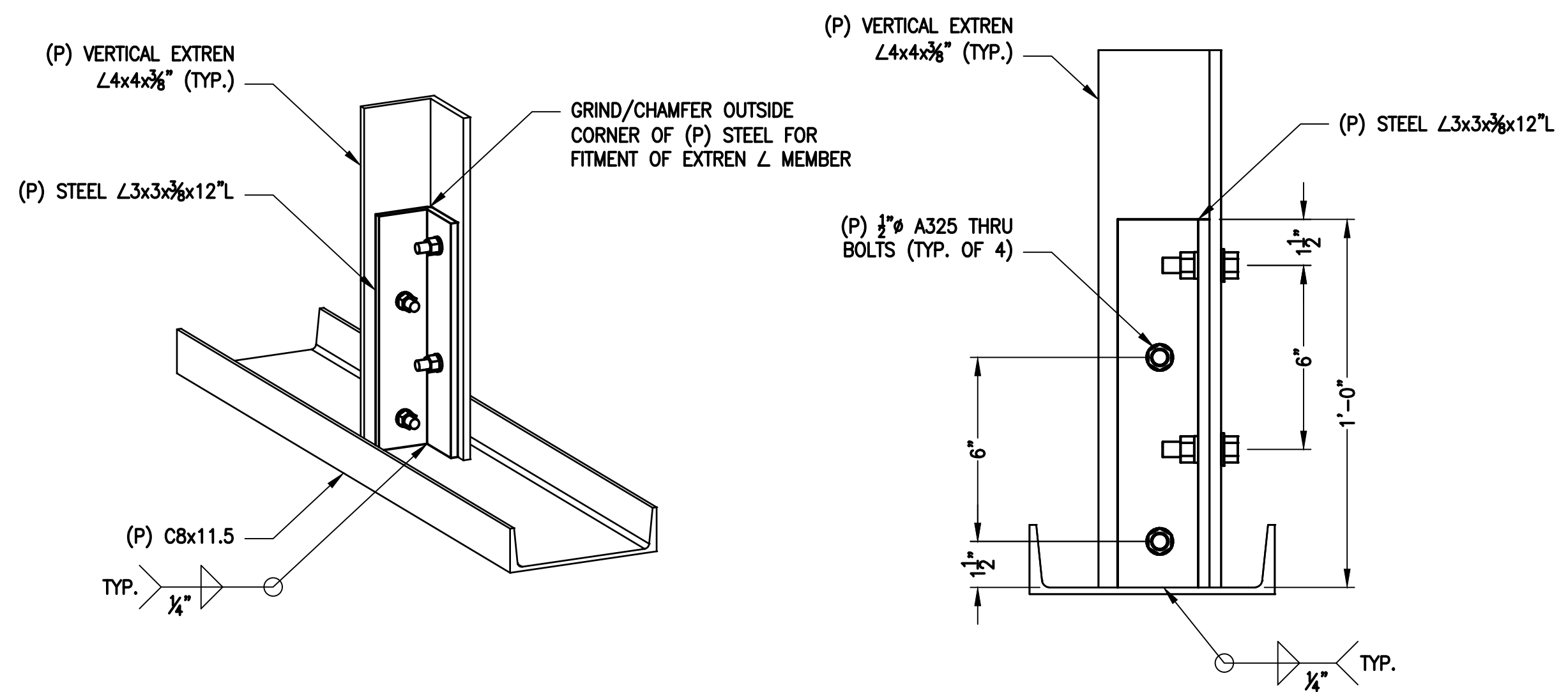
4BN0106A
 BN106/1662 COMM
 AVE RT
 1662 COMMONWEALTH AVENUE
 BRIGHTON, MA 02135

SHEET TITLE
 STRUCTURAL DETAILS - TYPICAL CHIMNEY PANELS

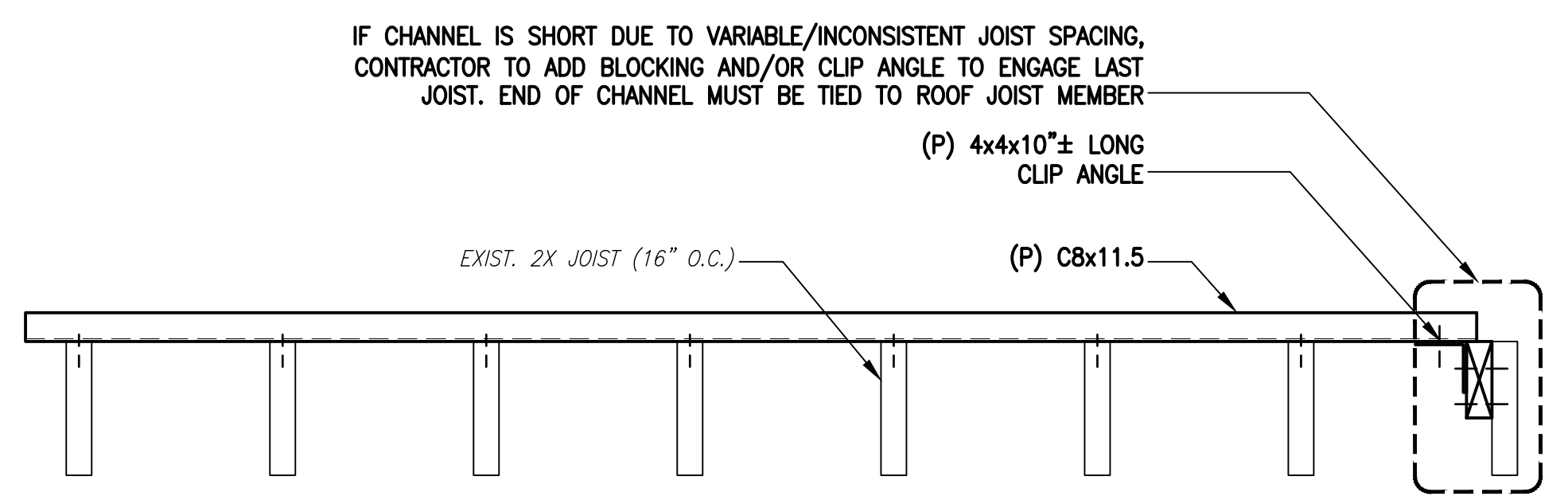
SHEET NUMBER
S-3

FRP NOTES

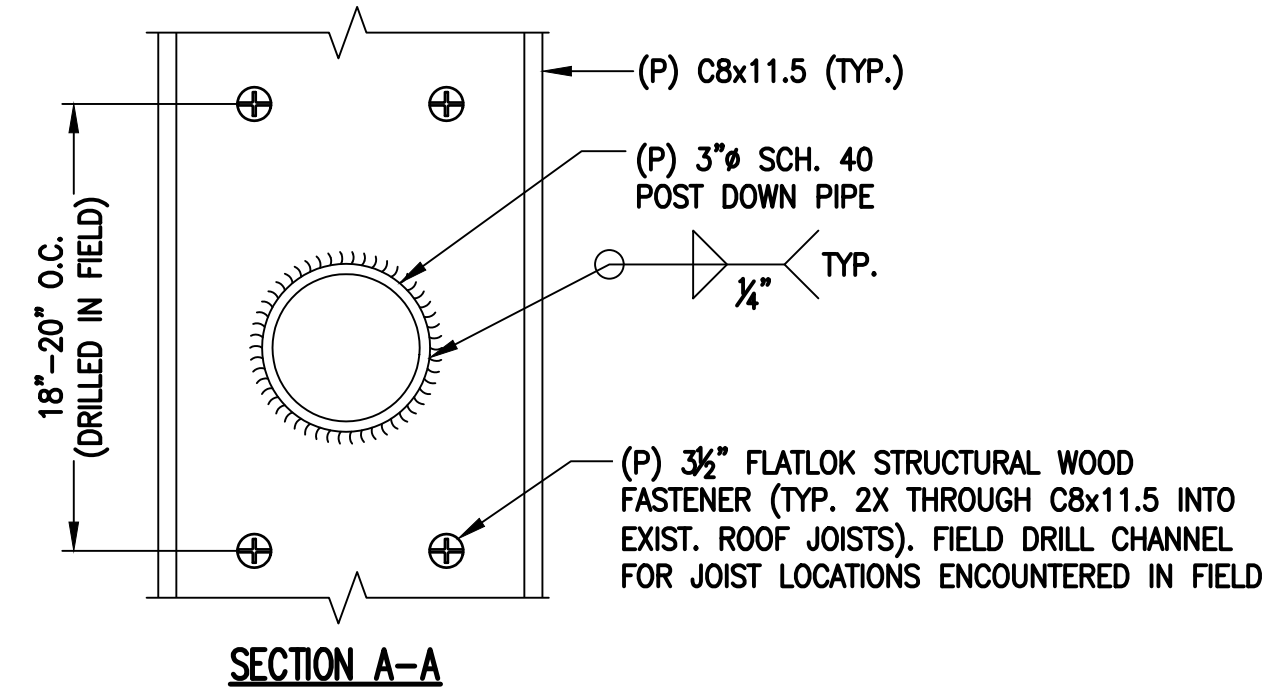
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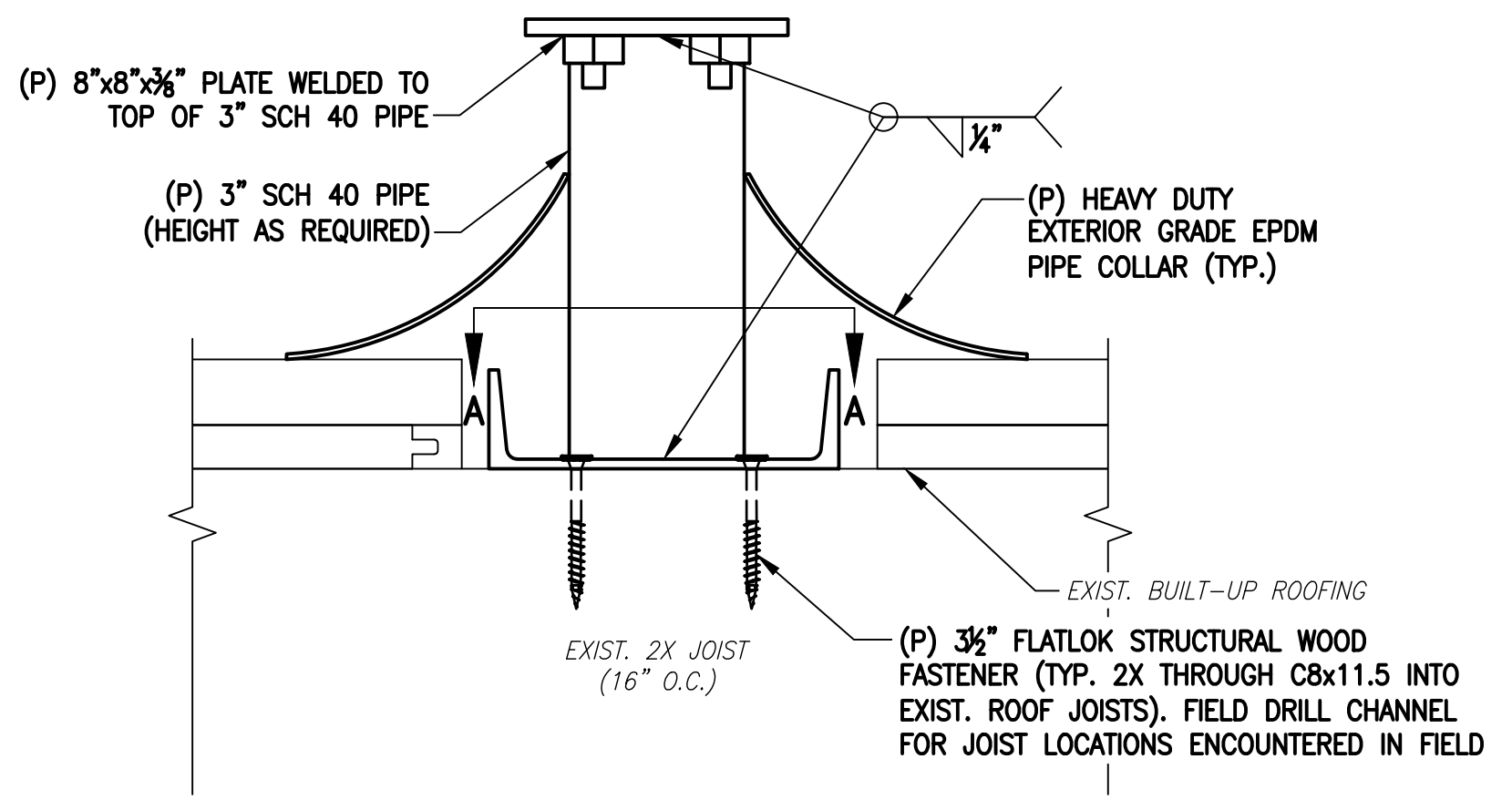
LEG CONNECTION DETAIL
SCALE: NOT TO SCALE



CHANNEL TO JOIST CONNECTION
SCALE: NOT TO SCALE



SECTION A-A



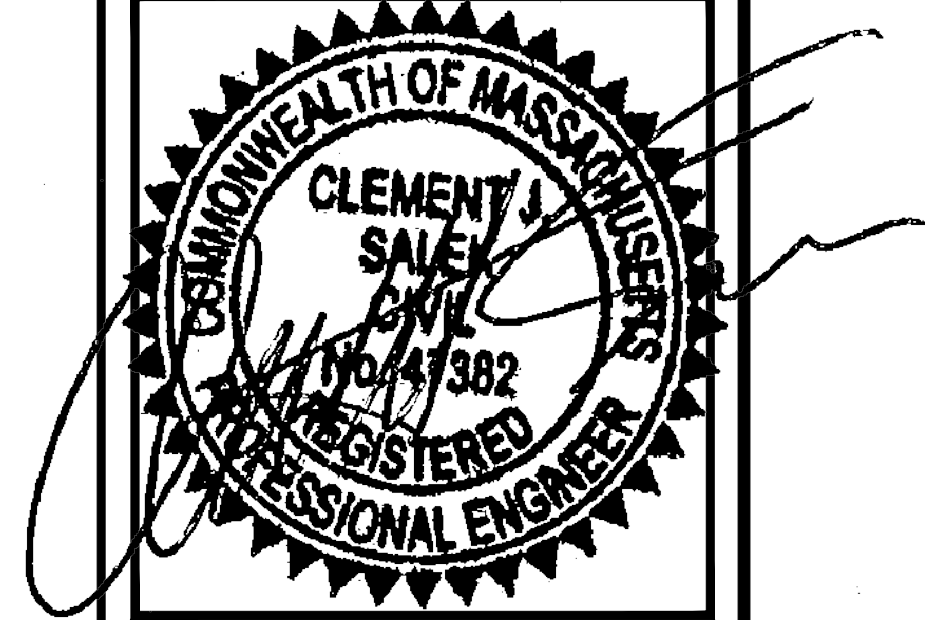
PIPE STUB DETAIL
SCALE: NOT TO SCALE

T-Mobile

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APPROVALS

STRUCTURE OWNER _____

LEASING _____

R.F. _____

ZONING _____

CONSTRUCTION _____

A/E _____

PROJECT NO: 4BN0106A

DRAWN BY: JRV

CHECKED BY: JMT

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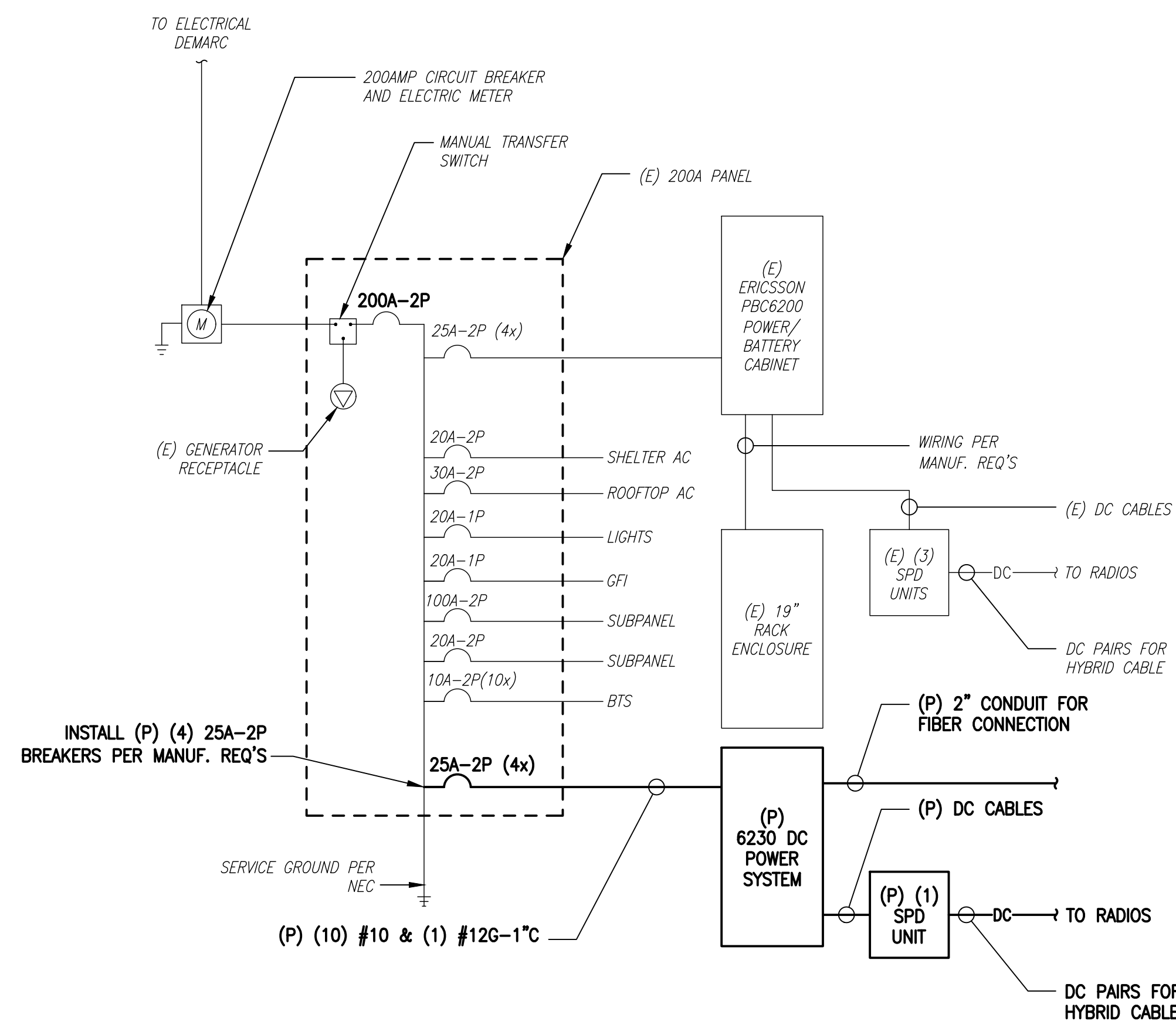
4BN0106A
BN106/1662 COMM
AVE RT
1662 COMMONWEALTH AVENUE
BRIGHTON, MA 02135

SHEET TITLE
STRUCTURAL DETAILS - TYPICAL CHIMNEY DETAILS

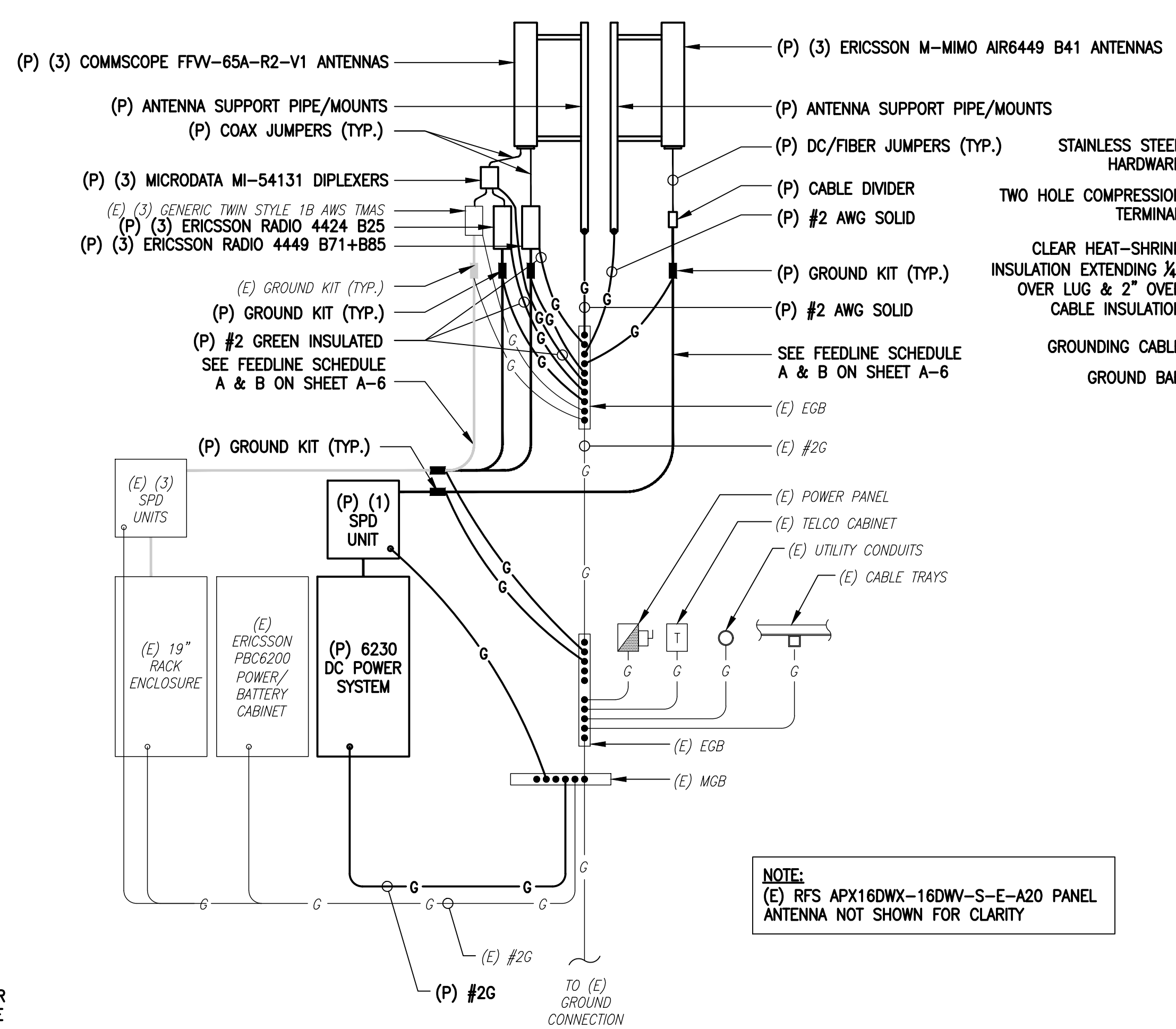
SHEET NUMBER
S-4

NOTES:

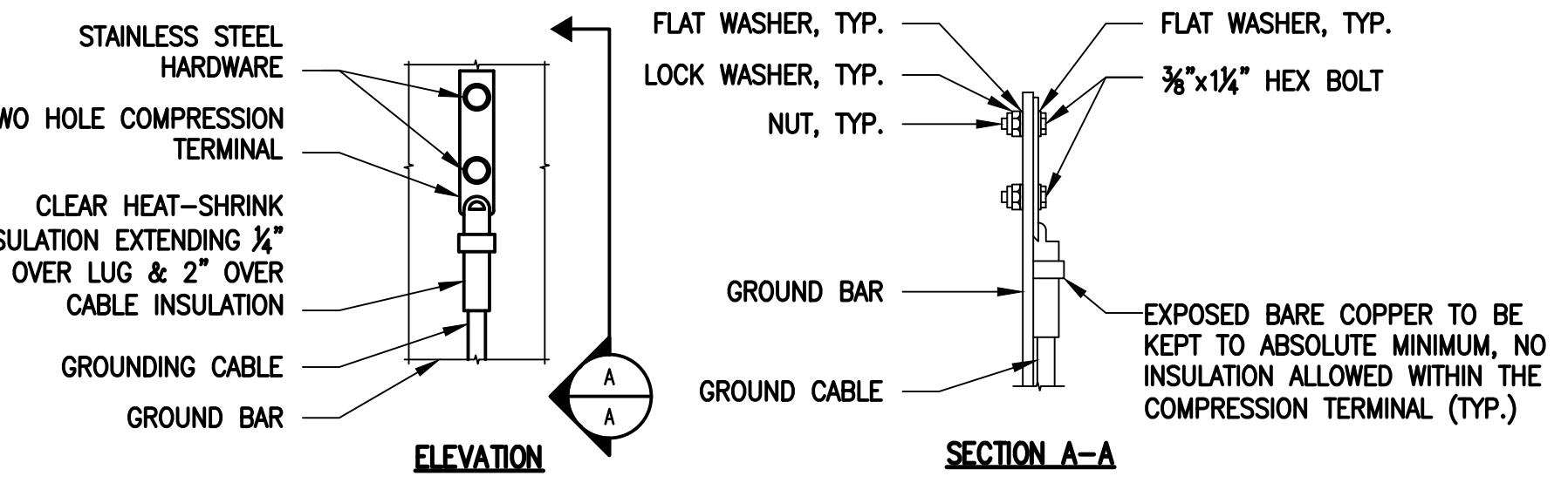
- 1.) PROPOSED STEEL C8x11.5 CHANNELS TO BE DRILLED IN THE FIELD.
- 2.) DO NOT PRE-DRILL PILOT (LEAD) HOLES FOR FLATLOK FASTENERS.



ONE LINE DIAGRAM
SCALE: NOT TO SCALE
1
E-1

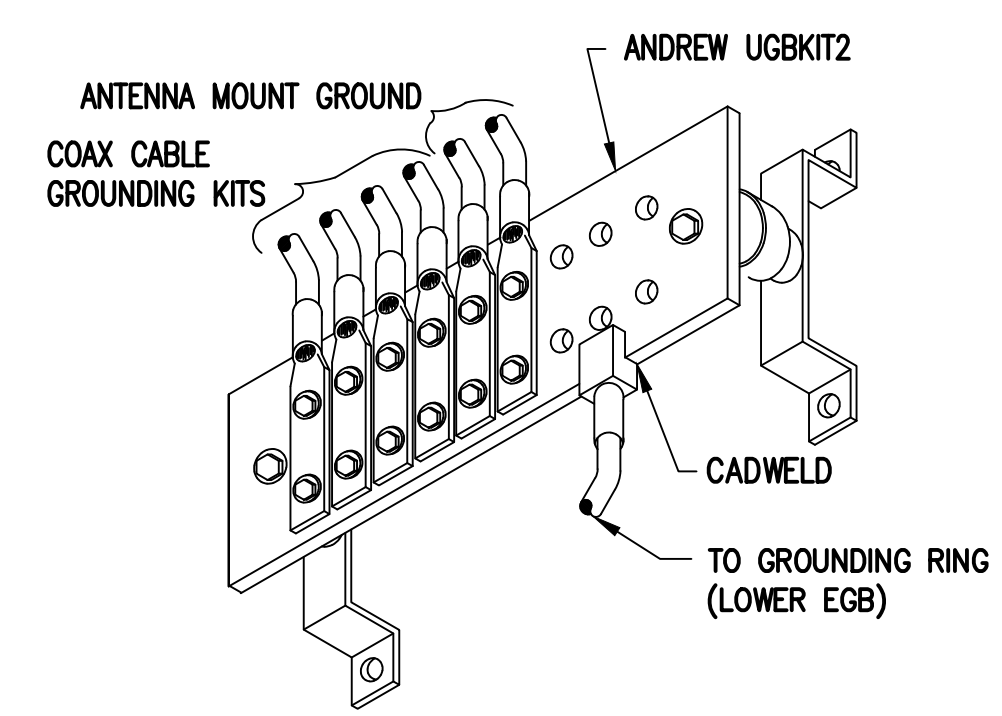


GROUNDING RISER DIAGRAM
SCALE: NOT TO SCALE
2
E-1

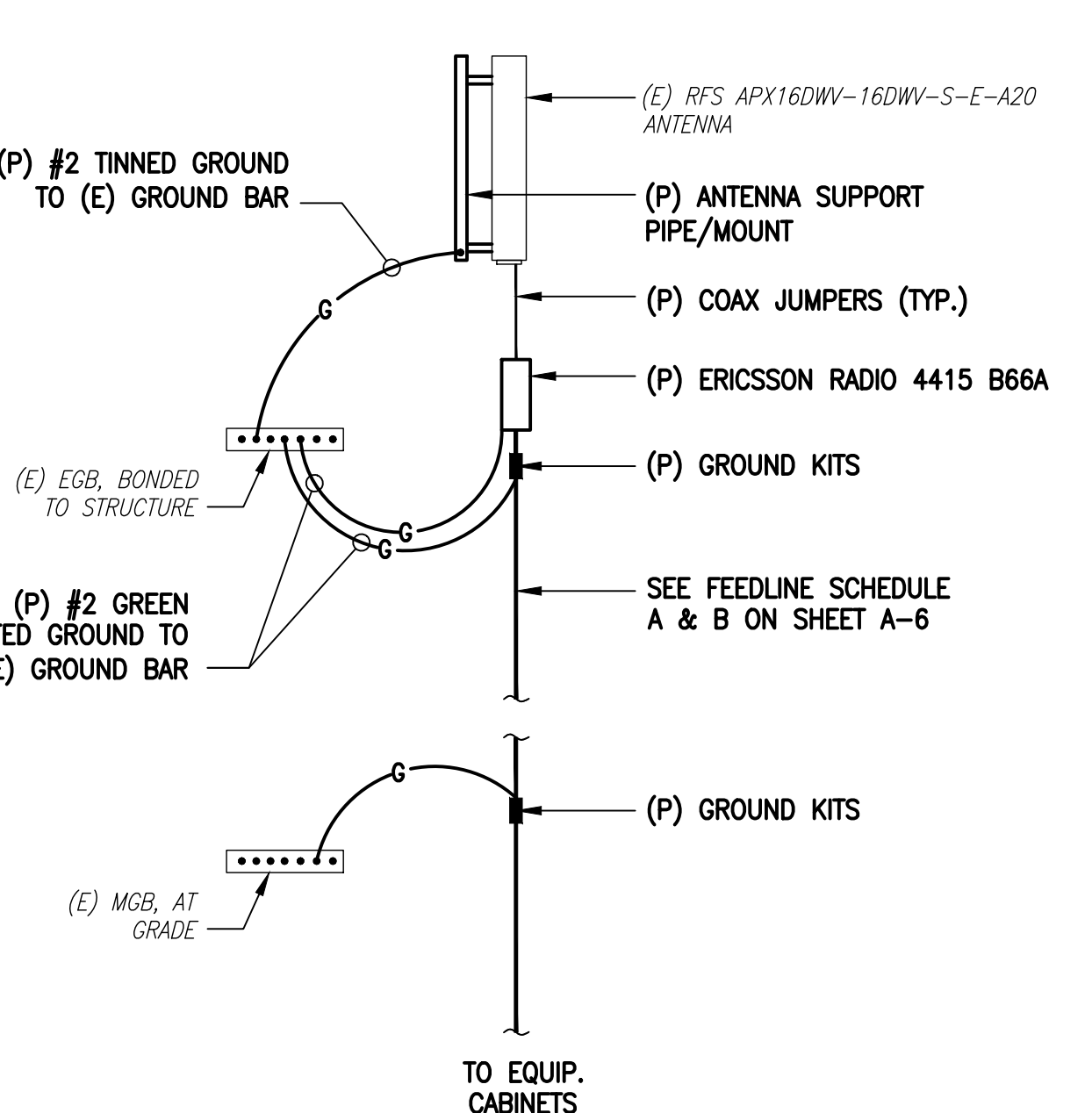
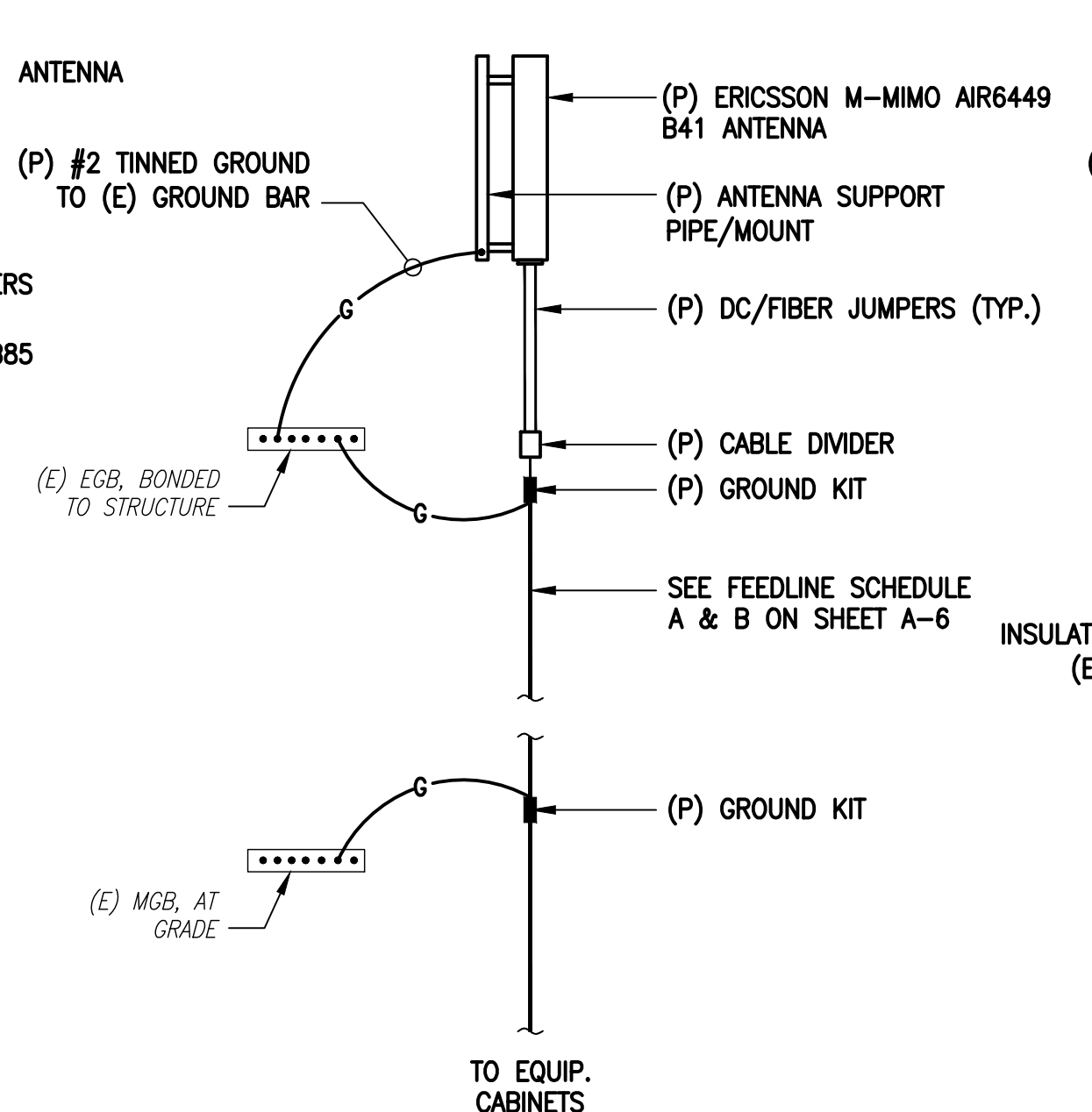
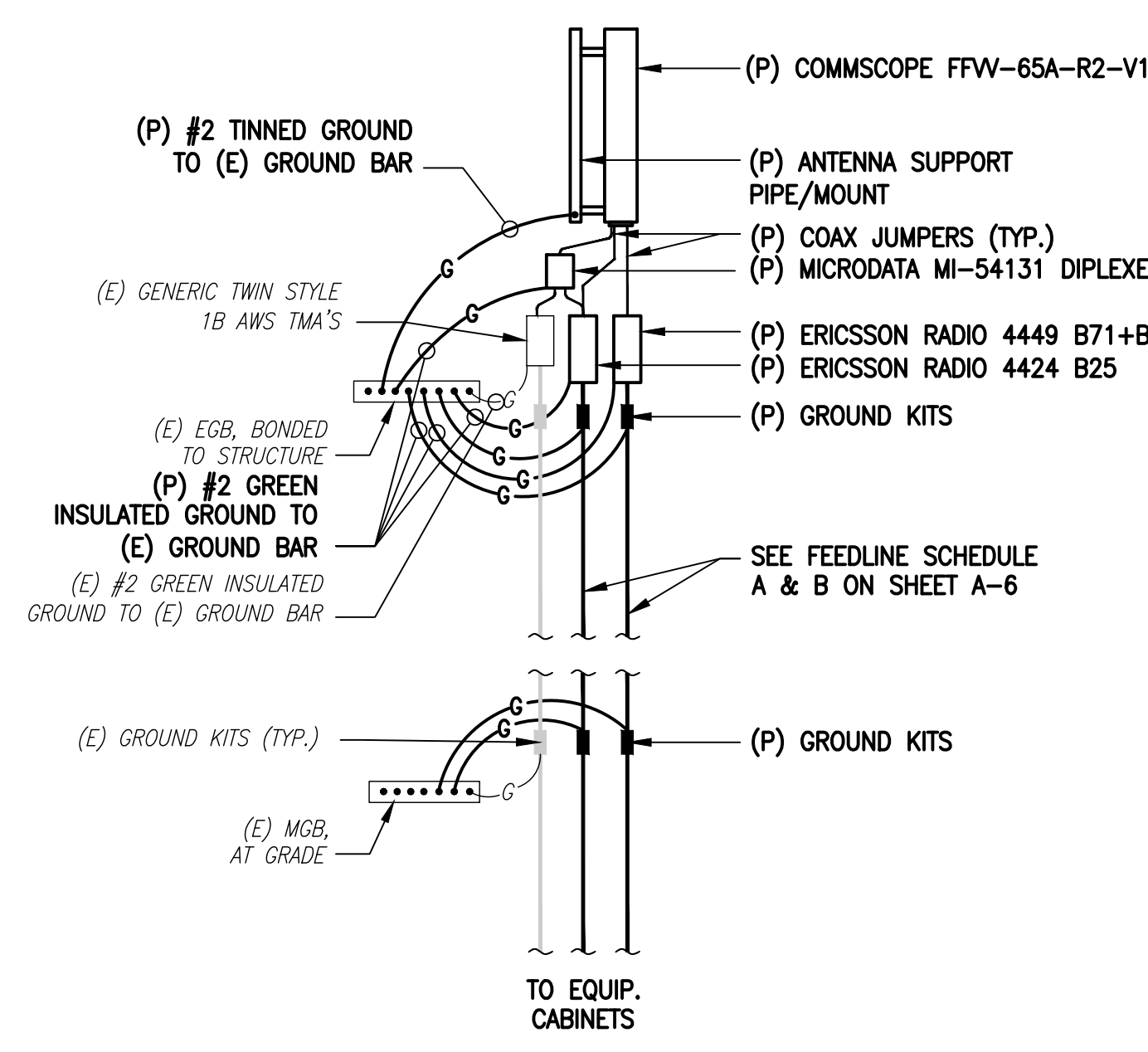


NOTES:
1. "DOUBLING UP" OR "STACKING" OF CONNECTION IS NOT PERMITTED.
2. OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATIONS.
3. CADWELL DOWNLEADS FROM UPPER EGB, LOWER EGB AND MGB.

TYPICAL GROUND BAR CONNECTIONS DETAIL
SCALE: NOT TO SCALE
3
E-1



GROUND BAR (EGB)
SCALE: NOT TO SCALE
5
E-1



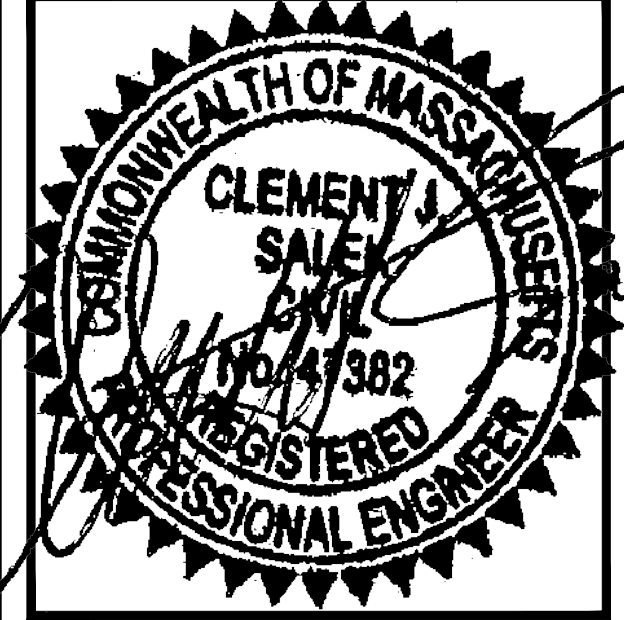
COAX CABLE CONNECTION AND GROUNDING DETAIL
SCALE: NOT TO SCALE
4
E-1

ELECTRICAL AND GROUNDING NOTES

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

T-Mobile
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APPROVALS

STRUCTURE OWNER _____

LEASING _____

R.F. _____

ZONING _____

CONSTRUCTION _____

A/E _____

PROJECT NO: 4BN0106A

DRAWN BY: JRV

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BN106/1662 COMM
AVE RT
1662 COMMONWEALTH AVENUE
BRIGHTON, MA 02135

SHEET TITLE
ELECTRIC & GROUNDING DETAILS

SHEET NUMBER
E-1

Nicole Lesser

Subject: FW: 4BN0106A- 1662 Comm Ave Brighton MA 02135- T-Mobile Anchor Project LL CONSENT

From: Joseph Sullivan <joe@commonwealthri.com>
Sent: Thursday, May 6, 2021 2:33 PM
To: Nicole Lesser <nlesser@jleeassociates.net>; Brian Sullivan <bsullivan@jleeassociates.net>; Julia Stewart <jstewart@jleeassociates.net>; Emily St. Germain <estgermain@jleeassociates.net>
Subject: 4BN0106A- 1662 Comm Ave Brighton MA 02135- T-Mobile Anchor Project LL CONSENT

Please see the LL consent Below... thank you

Thank you for the opportunity to earn your business,

Joseph Sullivan, CFO DRE American Wireless Management
JLEE Associates T-Mobile Construction & RE Consultant Manager
MAINE NSD L600/Air32/L1900/700MHZ/Metro-Keep/Projects, P.M.
joseph@commonwealthri.com
781-866-9646 office
978-512-2708 direct

----- Forwarded Message -----

From: Joseph Sullivan <joe@commonwealthri.com>
To: Rich Kulhawik <rich@rotenbergmanagement.com>
Sent: Thursday, May 6, 2021, 02:31:45 PM EDT
Subject: Re: 4BN0106A- 1662 Comm Ave Brighton MA 02135- T-Mobile Anchor Project LL Review

Hello Richard

Thank you for your Consent to start the Anchor Upgrade Project. I will be sure to keep you and your office in the loop as we move closer to the start date.

Per our discussion, I will be sure to help with any Amendments in the future that require the expansion of the Antenna Facility and go outside the current Lease Rights. I passed along your concerns/anguish with the additional costs you suffered when you had to move the TMO roof top equipment during your Rubber Membrane replacement at your building.

Also... please feel free to contact me with any questions or concerns, and thank you again for your time and effort on this matter.

Thank you for the opportunity to earn your business,

Joseph Sullivan, CFO DRE American Wireless Management
JLEE Associates T-Mobile Construction & RE Consultant Manager

MAINE NSD L600/Air32/L1900/700MHZ/Metro-Keep/Projects, P.M.
joseph@commonwealthri.com
781-866-9646 office
978-512-2708 direct

On Thursday, May 6, 2021, 02:18:13 PM EDT, Rich Kulhawik <rich@rotenbergmanagement.com> wrote:

Hi Joe,

Sorry for the delay.

On behalf of the Condominium at 1662-1666 Commonwealth, I approve The T-Mobile Upgrade Project, and Consent to the start of Construction Scheduling noted above.

SITE CONTACT FOR ACCESS & CONSTRUCTION:

Richard Kulhawik

617-935-9481

Property Manager

Condominium at 1662-1666 Commonwealth

From: Joseph Sullivan <joe@commonwealthri.com>
Reply-To: Joseph Sullivan <joe@commonwealthri.com>
Date: Tuesday, May 4, 2021 at 7:31 AM
To: Rich Kulhawik <rich@rotenbergmanagement.com>
Subject: Re: 4BN0106A- 1662 Comm Ave Brighton MA 02135- T-Mobile Anchor Project LL Review

Hello Rich

Could you send me that email consent we discussed a couple weeks ago on the phone? I need to enter this site on our schedule and I am getting daily requests on dates. If you need anything on my end, please feel free to call or email... thank you