DRAWING APPROVAL

LANDLORD:
CONSTRUCTION MANAGER:
RF ENGINEER:
SITE ACQUISITION MANAGER:
ZONING MANAGER:
UTILITY COORDINATOR:
NETWORK OPERATIONS MANAGER:
PROGRAM REGIONAL MANAGER:

ENGINEERING

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

- 2019 CALIFORNIA ENERGY CODE
- 2022 CALIFORNIA BUILDING CODE
- 2019 CALIFORNIA ELECTRICAL CODE 2019 CALIFORNIA FIRE CODE
- 2019 CALIFORNIA GREEN BUILDING CODE 2019 CALIFORNIA MECHANICAL CODE
- 2019 CALIFORNIA PLUMBING CODE 2022 CALIFORNIA EXISTING BUILDING CODE

GENERAL NOTES

THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. A TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT DISTURBANCE OR EFFECT ON DRAINAGE: NO SANITARY SEWER SERVICE, POTABLE WATER, OR TRASH DISPOSAL IS REQUIRED AND NO COMMERCIAL SIGNAGE IS PROPOSED.

SITE I	SITE INFORMATION					
PROPERTY OWNER: ADDRESS:	PUBLIC STORAGE, INC 701 WESTERN AVE					
CONTACT:	GLENDALE, CA 9120 ATTN: LORI KIND (818) 244-8080 EXT 1350					
APPLICANT: ADDRESS:	AT&T 5001 EXECUTIVE PARKWAY SAN RAMON, CA 94583					
CONTACT:	TBD					
SITE ADDRESS:	900 TRANSPORT WAY AND 1300 COMMERCE ST, PETALUMA, CA 9495					
LATITUDE (NAD 83):	38.2575278°					
LONGITUDE (NAD 83):	-122.6408583°					
LONGITUDE/LATITUDE TYPE:	NAD 83					
GROUND ELEVATION:	33' AMSL					
APN #:	007-630-001					
JURISDICTION:	CITY OF PETALUMA					
CURRENT ZONING:	ML - LIGHT INDUSTRIAL					
PROPOSED USE:	UNMANNED TELECOM FACILITY					
EXISTING USE:	UNMANNED TELECOM FACILITY					
CONSTRUCTION TYPE:	II-B					
OCCUPANCY TYPE:	U					

PROJECT TEAM

PROJECT MANAGER: AT&T CONTACT: TBD PHONE: TBD EMAIL: TBD	RF ENGINEER: AT&T CONTACT: TARUN SETHI EMAIL: ts458V@atl.com
TUSTIN, CA 92780 CONTACT: PATRICK PEDROZA PHONE: (800) 678-1169 Ext. 2067	
<u>SITE ACQUISITION:</u> NEXIUS CONTACT: MURPHY JOHNSON PHONE: (225) 229-3637 EMAIL: MURPHY JOHNSON@NEXIUS.COM	PHONE: (925) 949-6817



FA CODE: 10072685 SITE ID: CCL00355 **USID:80090** SITE NAME: PUBLIC STORAGE 900 TRANSPORT WAY AND 1300 COMMERCE ST PETALUMA, CA 94954 PRIMARY PACE ID: MRSFR088149

PACE ID **TECHNOLOGIES BBU RECONFIGURATION WITH NEW IDS** MRSFR088160 **5G NR UPGRADE** MRSFR088170 MRSFR088233 **4TXRX ANTENNA RETROFIT** MRSFR088238 5G NR 1SR CBAND 5G NR 1SR CBAND MRSFR088149 MRSFR088165 5G NR 1DR-2

PTN 3705A11YR1 3705A11YMQ 3705A11YLJ 3705A11YQ1 3705A11YRM 3705A11YNX

NOTE: THE OVERALL HEIGHT OF THE FACILITY W BE A SUBSTANTIAL CHANGE IN THE PHYS TELECOMMUNICATIONS FACILITY AND BA



T&T MOBILITY PROPOSES TO MODIFY AN EXISTING WIRELESS COMMUNICATION SITE. THE SCOPE WILL CONSIST OF THE FOLLOWING

AT ANTENNA LEVEL

REMOVE (6) EXISTING AT&T PANEL ANTENNAS, (2) PER SECTOR. REMOVE (3) EXISTING AT&T DC6 SURGE SUPPRESSOR, (1) PER SECTOR. REMOVE (3) EXISTING AT&T RRUS-11 B12, (1) PER SECTOR. REMOVE (3) EXISTING AT&T RRUS-12 B4, (1) PER SECTOR. INSTALL (3) NEW AT&T PANEL ANTENNAS (QD4612-3D), (1) PER SECTOR. INSTALL (3) NEW AT&T PANEL ANTENNAS (AIR6449 B77D), (1) PER SECTOR. INSTALL (3) NEW AT&T PANEL ANTENNAS (AIR6419 B77G), (1) PER SECTOR. INSTALL (3) NEW AT&T RRUS 4449 B5/12, (1) PER SECTOR. INSTALL (3) NEW AT&T RRUS 4426 B66, (1) PER SECTOR. INSTALL (3) NEW AT&T DC9 SURGE SUPPRESSOR, (1) PER SECTOR.

- INSTALL (3) NEW AT&T #6 AWG DC TRUNK, (1) PER SECTOR. DECOM UMTS FROM SITE.

AT EQUIPMENT LEVEL:. INSTALL (1) NEW AT&T 6648 BBU INSIDE EXISTING EQUIPMENT RACK. INSTALL (1) NEW AT&T 6630 BBU INSIDE EXISTING EQUIPMENT RACK INSTALL (1) NEW AT&T DC12 INSIDE EXISTING EQUIPMENT RACK. INSTALL (1) NEW AT&T 190AH BATTERY STRING WITHIN EXISTING POWER PLANT RACK. (6) TOTAL BATTERY STRINGS INSTALL (1) NEW AT&T BATTERY SHELF UNDER EXISTING DC POWER PLANT RACK. REGROOM ALL AT&T DC12 SURGE SUPPRESSORS TO TOP OF EXISTING EQUIPMENT

RACK. HOUSE

ENSURE GSM/UMTS CABINETS ARE FULLY DISCONNECTED FROM POWER. ENSURE MINIMUM (1) EXISTING RECTIFIERS TO BE SLOTTED/POWERED CORRECTLY

CD DRAWING

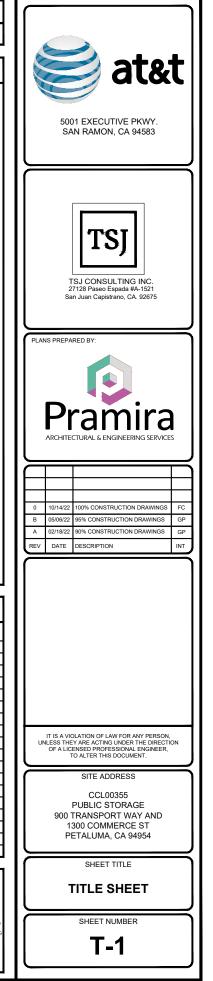
IF USING 11"X17" PLOT, DRAWINGS WILL BE HALF SCALE

PROJECT DESCRIPTION

REMOVE UMTS COAX CABLES IF NEEDED FOR SPACE IN THE CABLE TRAY AND DOG

/ILL NOT BE INCREASED AND THERE WILL NOT
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SE STATION.

NDEX
PLANS
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LI O GETAN LICCATION OF PARTICIPANTS UNDERGROUND PACIFIES BEFORE YOU DEN CALFORNIA GUITH TOL FREE 1400 227 300 MWW/DIGALERTO CALFORNIA STATUTE REDIRES MIL OF 2 WORK DAY NOTICE BEFORE YOU EXCIVITE CALIF Defore You Idia



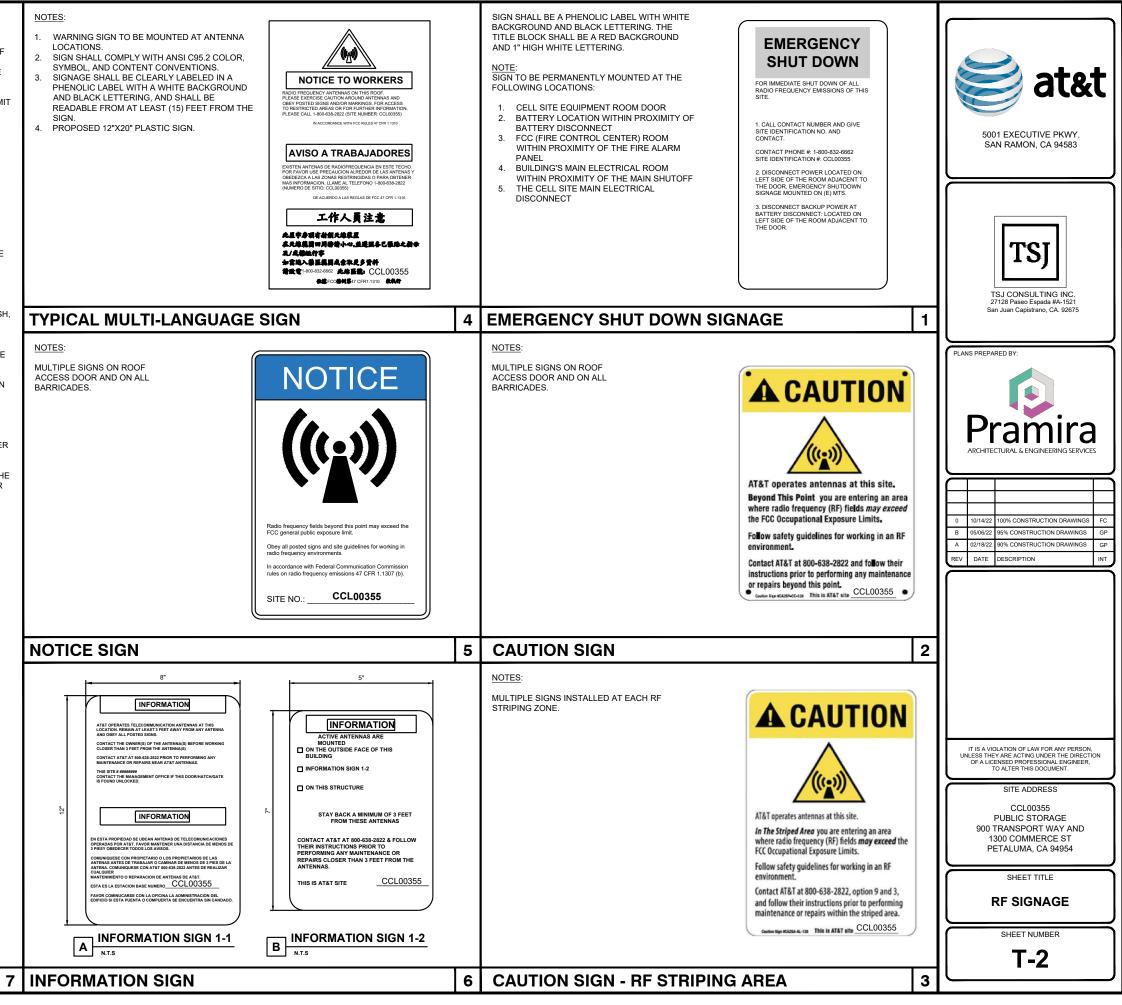
SIGNAGE AND STRIPING INFORMATION

- THE FOLLOWING INFORMATION IS A GUIDELINE WITH RESPECT TO PREVAILING STANDARDS LIMITING HUMAN EXPOSURE TO RADIO FREQUENCY ENERGY AND SHOULD BE USED AS SUCH. IF THE SITE'S EMF REPORT OR ANY LOCAL, STATE OR FEDERAL GUIDELINES OR REGULATION SHOULD BE IN CONFLICT WITH ANY PART OF THESE NOTES OR PLANS, THE MORE RESTRICTIVE GUIDELINE OR REGULATION SHALL BE FOLLOWED AND OVERRIDE THE LESSER
- 2. THE PUBLIC LIMIT OF RF EXPOSURE ALLOWED BY AT&T IS 1mWcm² AND THE OCCUPATIONAL LIMIT OF RF EXPOSURE ALLOWED BY AT&T IS 5mWcm²
- IF THE BOTTOM OF THE ANTENNA IS MOUNTED (8) EIGHT FEET ABOVE THE GROUND OR ROOF 3. LINE OF THE PERSONAL COMMUNICATION SYSTEM (PCS) AND DOES NOT EXCEED THE PUBLIC LIMIT OF RF EXPOSURE LIMIT THEN NO STRIPING OR BARRICADES SHOULD BE NEEDED.
- 4. IF THE PUBLIC LIMIT OF RF EXPOSURE ON THE SITE IS EXCEEDED AND THE AREA IS PUBLICLY ACCESSIBLE (e.g. ROOF ACCESS DOOR CANNOT BE LOCKED OR THERE IS AN EXISTING FIRE EGRESS). THEN BOTH BARRICADES AND STRIPING WILL BE NEEDED AROUND THE ANTENNAS. THE EXACT EXTENT OF THE BARRICADES AND STRIPING WILL BE DETERMINED BY THE FMF. REPORT FOR THE SITE DONE BEFORE OR SHORTLY AFTER THE CONSTRUCTION OF THE SITE. USE THE PLANS AS A GUIDELINE FOR PLACEMENT OF SUCH BARRICADES AND STRIPING.
- IF THE PUBLIC LIMIT OF RF EXPOSURE ON THE SITE IS NOT EXCEEDED AND THE AREA IS NOT 5. PUBLICLY ACCESSIBLE (e.g. ROOF ACCESS DOOR IS LOCKED), THEN JUST STRIPING OUT TO THE PUBLIC LIMIT WILL BE NEEDED AROUND THE ANTENNAS. THE EXACT EXTENT OF THE STRIPING WILL BE DETERMINED BY THE EMF REPORT FOR THE SITE DONE BEFORE OR SHORTLY AFTER THE CONSTRUCTION OF THE SITE, USE THE PLANS AS A GUIDELINE FOR PLACEMENT OF SUCH STRIPING
- ALL TRANSMIT ANTENNAS REQUIRE A (3) THREE LANGUAGE WARNING SIGN WRITTEN IN ENGLISH 6. SPANISH, AND CHINESE. THIS SIGN WILL BE PROVIDED TO THE CONTRACTOR BY THE AT&T CONSTRUCTION MANAGER AT THE TIME OF CONSTRUCTION. THE LARGER SIGN SHALL BE PLACED AT ALL ROOF ACCESS LOCATIONS AND ON ALL BARRICADES IN PLAIN SIGHT AND THE SMALLER SIGN SHALL BE PLACED ON THE ANTENNAS THEMSELVES OR ON THE OUTSIDE OF THE ANTENNA ENCLOSURES IN A MANNER THAT IS EASILY SEEN BY ANY PERSON ON THE ROOF. WARNING SIGNS SHALL COMPLY WITH ANSI C95.2 COLOR, SYMBOL, AND CONTENT CONVENTIONS. ALL SIGNS WILL HAVE AT&T'S NAME AND THE COMPANY CONTACT INFORMATION (e.g. TELEPHONE NUMBER) TO ARRANGE FOR ACCESS TO THE RESTRICTED AREAS. THIS TELEPHONE NUMBER WILL BE PROVIDED TO THE CONTRACTOR BY THE AT&T CONSTRUCTION PROJECT MANAGER AT THE TIME OF CONSTRUCTION.
- PHOTOS OF ALL STRIPING, BARRICADES, AND SIGNAGE WILL BE PART OF THE CONTRACTORS 7. CLOSE OUT PACKAGE AND WILL BE TURNED INTO THE AT&T CONSTRUCTION PROJECT MANAGER AT THE END OF CONSTRUCTION. STRIPING SHALL BE DONE WITH FADE RESISTANT YELLOW SAFETY PAINT IN A CROSS HATCH PATTERN. ALL BARRICADES SHALL BE MADE OF AN RF FRIENDLY MATERIAL SO THAT THEY DO NOT BLOCK OR INTERFERE WITH THE OPERATION OF THE SITE AND SHALL BE PAINTED WITH FADE RESISTANT YELLOW SAFETY PAINT. THE CONTRACTOR SHALL PROVIDE ALL RE FRIENDLY BARRICADES NEEDED AND SHALL PROVIDE THE AT&T CONSTRUCTION PROJECT MANAGER WITH A DETAILED SHOP DRAWING OF EACH BARRICADE.
- 8. ALL REQUIRED SIGNAGE WILL BE INSTALLED AS NEEDED AND FIELD VERIFIED.

SIGNAGE AND STRIPING INFORMATION

NOTES:

- LOCATIONS.
- 2. SYMBOL, AND CONTENT CONVENTIONS.
- PHENOLIC LABEL WITH A WHITE BACKGROUND AND BLACK LETTERING, AND SHALL BE READABLE FROM AT LEAST (15) FEET FROM THE SIGN



GENERAL CONSTRUCTION NOTES

- ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE LOCAL BUILDING CODE, THE LATEST EDITION AND ALL OTHER APPLICABLE CODES AND ORDINANCES.
- CONTRACTOR SHALL CONSTRUCT SITE IN ACCORDANCE WITH THESE DRAWINGS AND CONSTRUCTION SPECIFICATIONS 80-T1196-1 2 REV.H. THE SPECIFICATION IS THE BUILING DOCUMENT AND ANY DISCREPANCIES BETWEEN THE SPECIFICATION AND THESE DRAWINGS SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION
- CONTRACTOR SHALL VISIT THE JOB SITE AND SHALL FAMILIARIZE HIMSELF WITH ALL CONDITIONS AFFECTING THE PROPOSED WORK AND SHALL MAKE PROVISIONS AS TO THE COST THEREOF. CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING 3. HIMSELF WITH ALL CONTRACT DOCUMENTS. FIELD CONDITIONS AND DIMENSIONS AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK. NO COMPENSATION WILL BE AWARDED BASED ON CLAIM OF LACK OF KNOWLEDGE OF FIELD CONDITIONS
- PLANS ARE NOT TO BE SCALED. THESE PLANS ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY UNLESS OTHERWI 4. NOTED. THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT AND APPURTENANCES, AND LABOR NECESSARY TO EFFECT ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS, OWNER PROVIDED MATERIALS WILL INCLUDE THE FOLLOWING. UNLESS NOTED OTHERWISE TRANSMITTER
- RF FILTER MFTS RACK
- AUXILIARY EQUIPMENT IN MFTS RACK
- PUMP ASSEMBLY HEAT EXCHANGER
- HOSE AND HOSE MANIFOLDS (ANY COPPER OR STEEL SECTIONS PROVIDE BY CONTRACTOR)
- UHF ANTENNA AND MOUNTING BRACKETS, GPS ANTENNAS AND KU ANTENNAS
- UHF COAX AND HANGERS
- 480-208 & 208-400 ELECTRICAL TRANSFORMERS (RE: E-2 FOR SPECIALIZED TRANSFORMERS PROVIDED BY CONTRACTOR) AUTOMATIC TRANSFER SWITCH AND GENERATOR
- EQUIPMENT SHELTER (SHELTERS FURNISHED IN FACTORY W/ HVAC EQUIPMENT AND ELECTRICAL DISTRIBUTION PANEL) INTEGRATED LOAD CENTER
- DIMENSIONS SHOWN ARE TO FINISH SURFACES UNLESS OTHERWISE NOTED. SPACING BETWEEN EQUIPMENT IS REQUIRED CLEARANCE. THEREFORE, IT IS CRITICAL TO FIELD VERIFY DIMENSIONS, SHOULD THERE BE ANY QUESTIONS REGARDING TH CONTRACT DOCUMENTS, EXISTING CONDITIONS AND/OR DESIGN INTENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE WORK
- 6. DETAILS ARE INTENDED TO SHOW DESIGN INTENT. MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS, AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE WORK
- CONTRACTOR SHALL RECEIVE CLARIFICATION IN WRITING, AND SHALL RECEIVE IN WRITING AUTHORIZATION TO PROCEED BEFORE STARTING WORK ON ANY ITEMS NOT CLEARLY DEFINED OR IDENTIFIED BY THE CONTRACT DOCUMENTS.
- CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE BEST CONSTRUCTION SKILLS AND ATTENTION, CONTRACTOR 8. SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER CONTRACT, UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF THE WORK AREA, ADJACENT AREAS AND BUILDING OCCUPANTS THAT ARE LIKELY TO BE AFFECTED BY THE WORK UNDER THIS CONTRACT. WORK SHALL CONFORM TO ALL OSHA REQUIREMENTS.
- 10. CONTRACTOR SHALL COORDINATE HIS WORK WITH THE SUPERINTENDENT OF BUILDINGS & GROUNDS AND SCHEDULE HIS ACTIVITIES AND WORKING HOURS IN ACCORDANCE WITH THE REQUIREMENTS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING HIS WORK WITH THE WORK OF OTHERS AS IT MAY RELATE TO RADIO EQUIPMENT, ANTENNAS AND ANY OTHER PORTIONS OF THE WORK. 11.
- 12. INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS UNLESS SPECIFICALLY OTHERWISE INDICATED OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE
- 13. MAKE NECESSARY PROVISIONS TO PROTECT EXISTING SURFACES, EQUIPMENT, IMPROVEMENTS, PIPING ETC. AND IMMEDIATELY REPAIR ANY DAMAGE THAT OCCURS DURING CONSTRUCTION
- 14. IN DRILLING HOLES INTO CONCRETE WHETHER FOR FASTENING OR ANCHORING PURPOSES, OR PENETRATIONS THROUGH THE FLOOR FOR CONDUIT RUNS, PIPE RUNS, ETC., MUST BE CLEARLY UNDERSTOOD THAT REINFORCING STEEL SHALL NOT BE DRILLED INTO, CUT OR DAMAGED UNDER ANY CIRCUMSTANCES (UNLESS NOTED OTHERWISE). LOCATIONS OF REINFORCING STEEL ARE NOT DEFINITELY KNOWN AND THEREFORE MUST BE SEARCHED FOR BY APPROPRIATE METHODS AND EQUIPMENT.
- REPAIR ALL EXISTING WALL SURFACES DAMAGED DURING CONSTRUCTION SUCH THAT THEY MATCH AND BLEND IN WITH ADJACENT SURFACES. 15.
- 16. SEAL PENETRATIONS THROUGH FIRE RATED AREAS WITH U.L. LISTED AND FIRE CODE APPROVED MATERIALS.
- KEEP CONTRACT AREA CLEAN, HAZARD FREE, AND DISPOSE OF ALL DIRT, DEBRIS, AND RUBBISH. EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY OF THE OWNER SHALL BE REMOVED. LEAVE PREMISES IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL ITEMS UNTIL 17. COMPLETION OF CONSTRUCTION.
- 18. MINIMUM BEND RADIUS OF ANTENNA CABLES SHALL BE IN ACCORDANCE WITH CABLE MANUFACTURERS RECOMMENDATIONS
- 19. 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 OTHER OTHER WISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO APPLICABLE REGULATORY AUTHORITIES
- 20. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, II REQUIRED DURING CONSTRUCTION SHALL BE IN CONFORMANCE WITH JURISDICTIONAL OR STATE AND LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL AND COORDINATED WITH LOCAL REGULATORY AUTHORITIES.
- ALL CONSTRUCTION IS TO ADHERE TO AT&T'S INTEGRATED CONSTRUCTION STANDARDS UNLESS CALIFORNIA CODE IS MORE 21. STRINGENT
- 22. THE INTENT OF THE PLANS AND SPECIFICATIONS IS TO PERFORM THE CONSTRUCTION IN ACCORDANCE WITH THE CALIFORNIA BUILDING STANDARDS CODE, CALIFORNIA CODE OF REGULATIONS, SHOULD ANY CONDITIONS DEVELOP NOT COVERED BY THE APPROVED PLANS AND SPECIFICATIONS WHEREIN THE FINISHED WORK WILL NOT COMPLY TO THE CALIFORNIA CODE OF REGULATIONS, A CHANGE ORDER DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY THE JURISDICTION BEFORE PROCEEDING WITH THE WORK.

ELECTRICAL NOTES

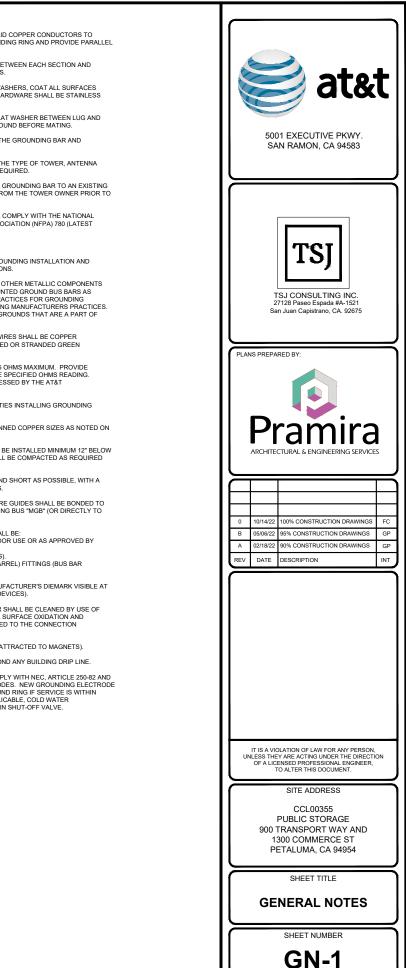
- ELECTRICAL CONTRACTOR SHALL SUPPLY AND INSTALL ANY/ALL ELECTRICAL WORK INDICATED. ANY/ALL CONSTRUCTION SHALL BE IN ACCORDANCE W/DRAWINGS AND ANY/ALL APPLICABLE SPECIFICATIONS. IF ANY PROBLEMS ARE ENCOUNTERED BY COMPLYING WITH THESE REQUIREMENTS, CONTRACTOR SHALL NOTIFY 'CONSTRUCTION MANAGER' AS SOON AS POSSIBLE, AFTER THE DISCOVERY OF THE PROBLEMS, AND SHALL NOT PROCEED WITH THAT PORTION OF WORK, UNTIL THE 'CONSTRUCTION MANAGER' HAS DIRECTED THE CORRECTIVE ACTIONS TO BE TAKEN.
- ELECTRICAL CONTRACTOR SHALL VISIT THE JOB SITE AND FAMILIARIZE HIMSELE WITH ANY/ALL CONDITIONS AFFECTING ELECTRICAL CONTRACTOR SHALL VISIT THE JOB STIE AND FAMILIARIZE HIMSELF WITH ANYALL CONDITIONS AFFEC ELECTRICAL AND COMMUNICATION INSTALLATION AND MAKE PROVISIONS AS TO THE COST THEREOF. ALL EXISTING CONDITIONS OF ELECTRICAL EQUIP., LIGHT FIXTURES, ETC., THAT ARE PART OF THE FINAL SYSTEM, SHALL BE VERI BY THE CONTRACTOR, PRIOR TO THE SUBMITTING OF HIS BID. FAILURE TO COMPLY WITH THIS PARAGRAPH WILL IN RAPH WILL IN NO WAY RELIEVE CONTRACTOR OF PERFORMING ALL WORK NECESSARY FOR A COMPLETE AND WORKING SYSTEM
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE NEC AND ALL CODES AND LOCAL 3 NANCES OF THE LOCAL POWER & TELEPHONE COMPANIES HAVING JURISDICTION AND SHALL INCLUDE BUT NOT BE IMITED TO
- UL UNDERWRITERS LABORATORIES
- NEC NATIONAL ELECTRICAL CODE NEMA - NATIONAL ELECTRICAL MANUFACTURERS ASSOC.
- OSHA OCCUPATIONAL SAFETY AND HEALTH ACT
- SBC STANDARD BUILDING CODE NATIONAL FIRE CODES
- DO NOT SCALE ELECTRICAL DRAWINGS, REFER TO SITE PLANS AND ELEVATIONS FOR EXACT LOCATIONS OF ALL EQUIPMENT, AND CONFIRM WITH 'CONSTRUCTION MANAGER' ANY SIZES AND LOCATIONS WHEN NEEDED. 4.
- 5. EXISTING SERVICES: CONTRACTOR SHALL NOT INTERRUPT EXISTING SERVICES WITHOUT WRITTEN PERMISSION OF THE
- CONTRACTOR SHALL PAY FOR ANYIALL PERMITS, FEES, INSPECTIONS AND TESTING. CONTRACTOR IS TO OBTAIN PERMITS AND APPROVED SUBMITTALS PRIOR TO THE WORK BEGINNING OR ORDERING EQUIPMENT. 6.
- THE TERM "PROVIDE" USED IN CONSTRUCTION DOCUMENTS AND SPECIFICATIONS, INDICATES THAT THE CONTRACTOR 7. SHALL FURNISH AND INSTALL
- CONTRACTOR SHALL CONFIRM WITH LOCAL UTILITY COMPANY ANY/ALL REQUIREMENTS SUCH AS THE: LUG SIZE RESTRICTIONS, CONDUIT ENTRY, SIZE OF TRANSFORMERS, SCHEDULED DOWNTIME FOR THE OWNERS' CONFIRMATION, ETC... ANY/ALL CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE CONSTRUCTION MANAGER, PRIOR TO BEGINNING ANY WORK
- MINIMUM WIRE SIZE SHALL BE #12 AWG, NOT INCLUDING CONTROL WIRING, UNLESS NOTED OTHERWISE. ALL CONDUCTORS SHALL BE COPPER WITH THWN INSULATION.
- 10. OUTLET BOXES SHALL BE PRESSED STEEL IN DRY LOCATIONS, CAST ALLOY WITH THREADED HUBS IN WET/DAMP LOCATIONS AND SPECIAL ENCLOSURES FOR OTHER CLASSIFIED AREAS.
- 11. IT IS NOT THE INTENT OF THESE PLANS TO SHOW EVERY MINOR DETAIL OF THE CONSTRUCTION, CONTRACTOR IS REVECTED OF URNISH AND INSTALL ALL ITEMS FOR A COMPLETE ELECTRICAL SYSTEM AND PROVIDE ALL REQUIREMENTS FOR THE EQUIPMENT TO BE PLACED IN PROPER WORKING ORDER.
- 12. ELECTRICAL SYSTEM SHALL BE AS COMPLETELY AND EFFECTIVELY GROUNDED, AS REQUIRED BY SPECIFICATIONS, SET
- 13. ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR IN A FIRST CLASS. WORKMANLIKE MANNER THE COMPLETED SYSTEM SHALL BE FULLY OPERATIVE AND SUBJECT TO REGULATORY INSPECTION AND APPROVAL BY CONSTRUCTION MANAGER.
- 14. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION.
- 15. CONTRACTOR SHALL GUARANTEE ANY/ALL MATERIALS AND WORK FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN ONE YEAR FROM DATE OF ACCEPTANCE.
- THE CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ANY ADDITIONAL CHARGE AND SHALL INCLUDE THE REPLACEMENT OR THE REPAIR OF ANY OTHER PHASE OF THE INSTALLATION, WHICH MAY HAVE BEEN DAMAGED
- 17. ADEQUATE AND REQUIRED LIABILITY INSURANCE SHALL BE PROVIDED FOR PROTECTION AGAINST PUBLIC LOSS AND ANY/ALL PROPERTY DAMAGE FOR THE DURATION OF WORK.
- PROVIDE AND INSTALL CONDUIT, CONDUCTORS, PULL WIRES, BOXES, COVER PLATES AND DEVICES FOR ALL OUTLETS AS INDICATED.
- 19. DITCHING AND BACK FILL: CONTRACTOR SHALL PROVIDE FOR ALL UNDERGROUND INSTALLED CONDUIT AND/OR CABLES INCLUDING EXCAVATION AND BACKFILLING AND COMPACTION, REFER TO NOTES AND REQUIREMENTS 'EXCAVATION, AND BACKFILLING
- MATERIALS, PRODUCTS AND EQUIPMENT, INCLUDING ALL COMPONENTS THEREOF, SHALL BE NEW AND SHALL APPEAR ON THE LIST OF U.L. APPROVED ITEMS AND SHALL MEET OR EXCEED THE REQUIREMENTS OF THE NEC, NEMA AND IECE. 20.
- 21. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OR MANUFACTURES CATALOG INFORMATION OF ANY/ALL LIGHTING FIXTURES, SWITCHES AND ALL OTHER ELECTRICAL ITEMS FOR APPROVAL BY THE CONSTRUCTION MANAGER PRIOR TO
- 22. ANY CUTTING OR PATCHING DEEMED NECESSARY FOR ELECTRICAL WORK IS THE ELECTRICAL CONTRACTORS RESPONSIBILITY AND SHALL BE INCLUDED IN THE COST FOR WORK AND PERFORMED TO THE SATISFACTION OF THE 'CONSTRUCTION MANAGER' UPON FINAL ACCEPTANCE.
- 23. THE ELECTRICAL CONTRACTOR SHALL LABEL ALL PANELS WITH ONLY TYPEWRITTEN DIRECTORIES. ALL ELECTRICAL WIRING SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR
- DISCONNECT SWITCHES SHALL BE H.P. RATED HEAVY-DUTY, QUICK-MAKE AND QUICK-BREAK ENCLOSURES, AS REQUIRED 24.
- 25. ALL CONNECTIONS SHALL BE MADE WITH A PROTECTIVE COATING OF AN ANTI-OXIDE COMPOUND SUCH AS "NO-OXIDE A" BY DEARBORNE CHEMICAL CO. COAT ALL WIRE SURFACES BEFORE CONNECTING. EXPOSED COPPER SURFACES, INCLUDING GROUND BARS, SHALL BE TREATED - NO SUBSTITUTIONS.
- RACEWAYS: CONDUIT SHALL BE SCHEDULE 40 PVC MEETING OR EXCEEDING NEMA TC2 1990. CONTRACTOR SHALL PLUG AND CAP EACH END OF SPARE AND EMPTY CONDUITS AND PROVIDE TWO SEPARATE PULL STRINGS 200 LBS TEST POLYETHYLENE CORD, ALL CONDUIT BENDS SHALL BE A MINIMUM OF 2 FT. RADIUS, RGS CONDUITS WHEN SPECIFIED SHALL MEET UL-6 FOR GALVANIZED STEEL. ALL FITTINGS SHALL BE SUITABLE FOR USE WITH THREADED RIGID CONDUIT. COAT ALL THREADS WITH 'BRITE ZINC' OR 'GOLD GALV'.
- 27. SUPPORT OF ALL ELECTRICAL WORK SHALL BE AS REQUIRED BY NEC.
- 28. CONDUCTORS: CONTRACTOR SHALL USE 98% CONDUCTIVITY COPPER WITH TYPE THWN INSULATION, 800 VOLT, COLOR CODED, USE SOLID CONDUCTORS FOR WIRE UP TO AND INCLUDING NO. 8 AWG, USE STRANDED CONDUCTORS FOR WIRE ABOVE NO. 8 AWG
- 29. CONNECTORS FOR POWER CONDUCTORS: CONTRACTOR SHALL USE PRESSURE TYPE INSULATED TWIST-ON CONNECTORS FOR NO. 10 AWG AND SMALLER. USE SOLDERLESS MECHANICAL TERMINAL LUGS FOR NO. 8 AWG AND LARGER
- 30. SERVICE: 240/120V, SINGLE PHASE, 3 WIRE CONNECTION AVAILABLE FROM UTILITY COMPANY, OWNER OR OWNERS AGENT WILL APPLY FOR POWER
- 31. TELEPHONE SERVICE: CONTRACTOR SHALL PROVIDE EMPTY CONDUITS WITH PULL STRINGS AS INDICATED OF
- 32. ELECTRICAL AND TELCO RACEWAYS TO BE BURIED A MINIMUM OF 2' DEPTH
- 33. CONTRACTOR SHALL PLACE TWO LENGTHS OF WARNING TAPE AT A DEPTH OF 12" BELOW GROUND AND DIRECTLY ABOVE ELECTRICAL AND TELCO SERVICE CONDUITS. CAUTIONS TAPE TO READ "CAUTION BURIED ELECTRIC" OR "BURIED TELECOMM
- 34. ALL BOLTS SHALL BE STAINLESS STEEL

GROUNDING NOTES

- COMPRESSION CONNECTIONS (2), 2 AWG BARE TINNED SOLID COPPER CONDUCTORS TO 1 GROUNDING BAR. ROUTE CONDUCTORS TO BURIED GROUNDING RING AND PROVIDE PARALLEL EXOTHERMIC WELD
- EC SHALL USE PERMANENT MARKER TO DRAW THE LINES BETWEEN EACH SECTION AND LABEL EACH SECTION ("P", "A", "N", "I") WITH 1" HIGH LETTERS.
- ALL HARDWARE 18-8 STAINLESS STEEL, INCLUDING LOCK WASHERS, COAT ALL SURFACES 3. WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING. ALL HARDWARE SHALL BE STAINLESS STEEL 3/8 INCH DIAMETER OR LARGER
- FOR GROUND BOND TO STEEL ONLY: INSERT A CADMIUM FLAT WASHER BETWEEN LUG AND STEEL, COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING.
- NUT & WASHER SHALL BE PLACED ON THE FRONT SIDE OF THE GROUNDING BAR AND 5. BOLTED ON THE BACK SIDE
- NUMBER OF GROUNDING BARS MAY VARY DEPENDING ON THE TYPE OF TOWER, ANTENNA LOCATION, AND CONNECTION ORIENTATION. PROVIDE AS REQUIRED.
- WHEN THE SCOPE OF WORK REQUIRES THE ADDITION OF A GROUNDING BAR TO AN EXISTING TOWER, THE SUBCONTRACTOR SHALL OBTAIN APPROVAL FROM THE TOWER OWNER PRIOR TO MOUNTING THE GROUNDING BAR TO THE TOWER
- ALL ELECTRICAL AND GROUNDING AT THE CELL SITE SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE (NEC), NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 780 (LATEST EDITION), AND MANUPACTURER.

ADDITIONAL NOTES:

- ALL DETAILS ARE SHOWN IN GENERAL TERMS. ACTUAL GROUNDING INSTALLATION AND CONSTRUCTION MAY VARY DUE TO SITE SPECIFIC CONDITIONS
- GROUND ALL ANTENNA BASES, FRAMES, CABLE RUNS, AND OTHER METALLIC COMPONENTS 10. USING #2 GROUND WIRES AND CONNECT TO SURFACE MOUNTED GROUND BUS BARS AS SHOWN, FOLLOW ANTENNA AND BTS MANUFACTURER'S PRACTICES FOR GROUNDING REQUIREMENTS GROUND COAX SHIELD AT BOTH ENDS USING MANUFACTURERS PRACTICES ALL UNDERGROUND WATER PIPES, METAL CONDUITS AND GROUNDS THAT ARE A PART OF THIS SYSTEM SHALL BE BONDED TOGETHER.
- ALL GROUND CONNECTIONS SHALL BE #2 AWG U.N.O. ALL WIRES SHALL BE COPPER 11. THHN/THWN. ALL GROUND WIRE SHALL BE SOLID TIN COATED OR STRANDED GREEN INSULATED WIRE
- 12. CONTRACTOR TO VERIFY AND TEST GROUND TO SOURCE, 5 OHMS MAXIMUM. PROVIDE SUPPLEMENT GROUNDING RODS AS REQUIRED TO ACHIEVE SPECIFIED OHMS READING. GROUNDING AND OTHER OPTIONAL TESTING WILL BE WITNESSED BY THE AT&T REPRESENTATIVE.
- 13. NOTIFY ARCHITECT/ENGINEER IF THERE ARE ANY DIFFICULTIES INSTALLING GROUNDING SYSTEM DUE TO SITE SOIL CONDITIONS.
- 14. BARE GROUNDING CONDUCTOR SHALL BE HARD DRAWN TINNED COPPER SIZES AS NOTED ON
- 15. ALL HORIZONTALLY RUN GROUNDING CONDUCTORS SHALL BE INSTALLED MINIMUM 12" BELOW GRADE/FROST-LINE IN TRENCH, U.N.O., AND BACK FILL SHALL BE COMPACTED AS REQUIRED BY ARCHITECT.
- ALL GROUND CONDUCTORS SHALL BE RUN AS STRAIGHT AND SHORT AS POSSIBLE, WITH A MINIMUM 12" BENDING RADIUS NOT LESS THAN 90 DEGREES
- ALL SUPPORT STRUCTURES, CABLE CHANNEL WAYS OR WIRE GUIDES SHALL BE BONDED TO 17. GROUND SYSTEM AT A POINT NEAREST THE MAIN GROUNDING BUS "MGB" (OR DIRECTLY TO GROUND-RING).
- ACCEPTABLE CONNECTIONS FOR GROUNDING SYSTEM SHALL BE: a. BURNDY, HY-GRADE U.L. LISTED CONNECTORS FOR INDOOR USE OR AS APPROVED BY AT&T PROJECT MANAGER.
- CADWELD, EXOTHERMIC WELDS (WELDED CONNECTIONS) TWO -(2) HOLE TINNED COPPER COMPRESSION (LONG BARREL) FITTINGS (BUS BAR CONNECTIONS)
- ALL CRIMPED CONNECTIONS SHALL HAVE EMBOSSED MANUFACTURER'S DIEMARK VISIBLE AT THE CRIMP (RESULTING FROM USE OF PROPER CRIMPING DEVICES). 19.
- 20. PRIOR TO ANY LUG-BUSSBAR CONNECTIONS, THE BUSSBAR SHALL BE CLEANED BY USE OF "SCOTCH-BRITE' OR PLAIN STEEL WOOL AS TO REMOVE ALL SUBBACE OXIDATION AND CONTAMINANTS. A COATING OF "NO-OX-ID" SHALL BE APPLIED TO THE CONNECTION
- 21. ALL CONNECTION HARDWARE SHALL BE TYPE 316 SS (NOT ATTRACTED TO MAGNETS).
- 22. THE GROUND RING SHALL BE INSTALLED 24" MINIMUM BEYOND ANY BUILDING DRIP LINE
- ELECTRICAL SERVICE EQUIPMENT GROUNDING SHALL COMPLY WITH NEC, ARTICLE 250-82 AND SHALL BOND ALL EXISTING AND NEW GROUNDING ELECTRODES. NEW GROUNDING ELECTRODE SHALL INCLUDE BUT NOT LIMITED TO GROUND RODS, GROUND RING IF SERVICE IS WITHIN THE RADIO EQUIPMENT LOCATION, BUILDING STEEL IF APPLICABLE, COLD WATER CONNECTIONS MUST BE MADE ON THE STREET SIDE OF MAIN SHUT-OFF VALVE.



SITE WORK NOTES

- DO NOT EXCAVATE OR DISTURB BEYOND THE PROPERTY LINES OR LEASE LINES. UNLESS OTHERWISE NOTED
- DO NOT SCALE BUILDING DIMENSIONS FROM DRAWING 2
- SIZE LOCATION AND TYPE OF ANY UNDERGROUND UTILITIES OR IMPROVEMENTS. 3 SHALL BE ACCURATELY NOTED AND PLACED ON AS-BUILT DRAWINGS BY GENERAL CONTRACTOR AND ISSUED TO ARCHITECT/ENGINEER AT COMPLETION OF PROJECT
- ALL EXISTING UTILITIES, FACILITIES, CONDITIONS AND THEIR DIMENSIONS SHOWN ON PLANS HAVE. BEEN PLOTTED FROM AVAILABLE RECORDS. THE ENGINEER AND OWNER ASSUME NO RESPONSIBILITY WHATSOEVER AS TO THE SUFFICIENCY OR ACCURACY OF ASSUME NO RESPONSIBILITY WHATSOEVER AS TO THE SUFFICIENCY OR ACCURAL THE INFORMATION SHOWN ON THE PLANS OR THE MANNER OF THEIR REMOVAL OR ADJUSTMENT. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING EXACT LOCATION OF ALL SIXSTING UTILITIES AND FACILITIES PRIOR TO START OF CONSTRUCTION. CONTRACTOR SHALL ALSO OBTAIN FROM EACH UTILITY COMPANY DETAILED INFORMATION RELATIVE TO WORKING SCHEDULES AND METHODS OF ENDINING ON ADJUSTING EVICTION. REMOVING OR ADJUSTING EXISTING UTILITIES.
- CONTRACTOR SHALL VERIES ALL EXISTING UTILITIES BOTH HORIZONTALLY AND VERTICALLY PRIOR TO START OF CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES BOTH HORIZONI ALLY AND VERTIGATLY PRIOR TO START OF CONSTRUCTION, ANY DISCREPANCIES OR DOUBTS AS TO THE INTERPRETATION OF PLANS SHALL BE IMMEDIATELY REPORTED TO THE ARCHITECT/ENGINEER FOR RESOLUTION AND INSTRUCTION, AND NO FURTHER WORK SHALL BE PERFORMED UNTIL THE DISCREPANCY IS CHECKED AND CORRECTED BY THE ARCHITECT/ENGINEER. FAILURE TO SECURE SUCH INSTRUCTION MEANS CONTRACTOR WILL HAVE WORKED AT HIS/HER OWN RISK AND EXPENSE. CONTRACTOR SHALL CALL LOCAL DIGGER HOT LINE FOR UTILITY LOCATIONS 48 HOURS PRIOR TO START OF CONSTRUCTION
- ALL NEW AND EXISTING UTILITY STRUCTURES ON SITE AND IN AREAS TO BE DISTURBED BY CONSTRUCTION SHALL BE ADJUSTED TO FINISH ELEVATIONS PRIOR TO FINAL INSPECTION OF WORK.
- GRADING OF THE SITE WORK AREA IS TO BE SMOOTH AND CONTINUOUS IN SLOPE AND IS TO FEATHER INTO EXISTING 7. GRADES AT THE GRADING LIMITS
- ALL TEMPORARY EXCAVATIONS FOR THE INSTALLATION OF FOUNDATIONS, UTILITIES, ETC., SHALL BE PROPERLY LAID BACK OR BRACED IN ACCORDANCE WITH CORRECT OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REQUIREMENTS.
- STRUCTURAL FILLS SUPPORTING PAVEMENTS SHALL BE COMPACTED TO 95% OF 9 MAXIMUM STANDARD PROCTOR DRY DENSITY
- NEW GRADES NOT IN BUILDING AND DRIVEWAY IMPROVEMENT AREA TO BE ACHIEVED BY FILLING WITH APPROVED CLEAN FILL AND COMPACTED TO 95% OF STANDARD 10. PROCTOR DENSITY.
- ALL FILL SHALL BE PLACED IN UNIFORM LIFTS. THE LIFTS THICKNESS SHOULD NOT 11. EXCEED THAT WHICH CAN BE PROPERLY COMPACTED THROUGHOUT ITS ENTIRE DEPTH WITH THE EQUIPMENT AVAILABLE.
- 12. ANY FILLS PLACED ON EXISTING SLOPES THAT ARE STEEPER THAN 10 HORIZONTAL TO 1 VERTICAL SHALL BE PROPERLY BENCHED INTO THE EXISTING SLOPE AS DIRECTED BY A GEOTECHNICAL ENGINEER.
- CONTRACTOR SHALL CLEAN ENTIRE SITE AFTER CONSTRUCTION SUCH THAT NO PAPERS, TRASH, WEEDS, BRUSH OR ANY OTHER DEPOSITS WILL REMAIN. ALL MATERIALS COLLECTED DURING CLEANING OPERATIONS SHALL BE DISPOSED OF OFF-SITE BY THE GENERAL CONTRACTOR.
- 14. ALL TREES AND SHRUBS WHICH ARE NOT IN DIRECT CONFLICT WITH THE IMPROVEMENTS SHALL BE PROTECTED BY THE GENERAL CONTRACTOR
- ALL SITE WORK SHALL BE CAREFULLY COORDINATED BY GENERAL CONTRACTOR WITH LOCAL UTILITY COMPANY, TELEPHONE COMPANY, AND ANY OTHER UTILITY COMPANIES HAVING JURISDICTION OVER THIS LOCATION.

ENVIRONMENTAL NOTES

- ALL WORK PERFORMED SHALL BE DONE IN ACCORDANCE WITH ISSUED PERMITS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYMENT OF FINES AND PROPER CLEAN UP FOR AREAS IN VIOLATION
- 2 CONTRACTOR AND/OR DEVELOPER SHALL BE RESPONSIBLE FOR CONSTRUCTION AND MAINTENANCE OF EROSION AND EDIMENTATION CONTROLED DURING CONSTRUCTION FOR PROTECTION OF ADJACENT PROPERTIES, ROADWAYS AND TATERWAYS AND SHALL BE MAINTAINED IN PLACE THROUGH FINAL JURISDICTIONAL INSPECTION & RELEASE OF SITE
- 3. CONTRACTOR SHALL INSTALL/CONSTRUCT ALL NECESSARY SEDIMENT/SILT CONTROL FENCING AND PROTECTIVE MEASURES WITHIN THE LIMITS OF SITE DISTURBANCE PRIOR TO CONSTRUCTION
- 4. NO SEDIMENT SHALL BE ALLOWED TO EXIT THE PROPERTY. THE CONTRACTOR IS RESPONSIBLE FOR TAKING INV SECUMENT STALL DE ALLUYEL 10 EXIT THE PROPERTY. THE CONTRACTOR IS RESPONSIBLE FOR TAKING ADEQUATE MEASURES FOR CONTROLLING EROSION. ADDITIONAL SEDIMENT CONTROL FENCING MAY BE REQUIRED IN ANY AREAS SUBJECT TO EROSION.
- 5. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE ON THE SITE AT ALL TIMES WITH SILT AND EROSION CONTROL MEASURES MAINTAINED ON THE DOWNSTREAM SIDE OF SITE DRAINAGE. ANY DAMAGE TO ADJACENT PROPERTY AS A RESULT OF EROSION WILL BE CORRECTED AT THE CONTRACTORS EXPENSE
- CONTRACTOR SHALL BE RESPONSIBLE FOR DAILY INSPECTIONS AND ANY REPAIRS OF ALL SEDIMENT CONTROL MEASURES INCLUDING SEDIMENT REMOVAL AS NECESSARY. 6.
- CLEARING OF VEGETATION AND TREE REMOVAL SHALL BE ONLY AS PERMITTED AND BE HELD TO A MINIMUM, ONLY 7. TREES NECESSARY FOR CONSTRUCTION OF THE FACILITIES SHALL BE REMOVED.
- SEEDING AND MULCHING AND/OR SODDING OF THE SITE WILL BE ACCOMPLISHED AS SOON AS POSSIBLE AFTER COMPLETION OF THE PROJECT FACILITIES AFFECTING LAND DISTURBANCE.
- CONTRACTOR SHALL PROVIDE ALL EROSION AND SEDIMENTATION CONTROL MEASURES AS REQUIRED BY LOCAL, COUNTY AND STATE CODES AND ORDINANCES TO PROTECT EMBANKMENTS FROM SOIL LOSS AND TO PREVENT ACCUMULATION OF SOIL AND SILT IN STREAMS AND DRAINAGE PATHS LEAVING THE CONSTRUCTION AREA. THIS MAY INCLUDE SUCH MEASURES AS SILT FENCES, STRAW BALE SEDIMENT BARRIERS, AND CHECK DAMS
- 10. RIP RAP OF SIZES INDICATED SHALL CONSIST OF CLEAN, HARD, SOUND, DURABLE, UNIFORM IN QUALITY STONE FREE OF ANY DETRIMENTAL QUANTITY OF SOFT, FRIABLE, THIN, ELONGATED OR LAMINATED PIECES, DISINTEGRATED MATERIAL, ORGANIC MATTER, OIL, ALKALI, OR OTHER DELETERIOUS SUBSTANCES

FOUNDATION, EXCAVATION AND BACKFILL NOTES

- 1. ALL FINAL GRADED SLOPES SHALL BE A MAXIMUM OF 3 HORIZONTAL TO 1 VERTICAL.
- ALL EXCAVATIONS PREPARED FOR PLACEMENT OF CONCRETE SHALL BE OF UNDISTURBED SOILS, SUBSTANTIALLY 2 HORIZONTAL AND FREE FROM ANY LOOSE, UNSUITABLE MATERIAL OR FROZEN SOILS, AND WITHOUT THE PRESENCE OF POUNDING WATER, DEWATERING FOR EXCESS GROUND WATER SHALL BE PROVIDED WHEN REQUIRED. COMPACTION OF SOILS UNDER CONCRETE PAD FOUNDATIONS SHALL NOT BE LESS THAN 95% OF THE MODIFIED PROCTOR MAXIMUM DR DENSITY FOR THE SOIL IN ACCORDANCE WITH ASTM D1557.
- CONCRETE FOUNDATIONS SHALL NOT BE PLACED ON ORGANIC OR UNSUITABLE MATERIAL IF INADEQUATE BEARING CAPACITY IS REACHED AT THE DESIGNED EXCAVATION DEPTH, THE UNSATISFACTORY SOIL SHALL BE EXCAVATED TO ITS 3. FULL DEPTH AND FITHER BE REPLACED WITH MECHANICALLY COMPACTED GRANULAR MATERIAL OR THE EXCAVATION SHALL BE FILLED WITH CONCRETE OF THE SAME TYPE SPECIFIED FOR THE FOUNDATION. CRUSHED STONE MAY BE USED TO STABILIZE THE BOTTOM OF THE EXCAVATION. ANY STONE SUB BASE MATERIAL, IF USED, SHALL NOT SUBSTITUTE FOR REQUIRED THICKNESS OF CONCRETE.
- ALL EXCAVATIONS SHALL BE CLEAN OF UNSUITABLE MATERIAL SUCH AS VEGETATION, TRASH, DEBRIS, AND SO FORTH 4. RIOR TO BACK FILLING. BACK FILL SHALL CONSIST OF APPROVED MATERIALS SUCH AS EARTH. LOAM. SANDY CLAY SAND AND GRAVEL, OR SOFT SHALE, FREE FROM CLODS OR LARGE STONES OVER 2 1/2" MAX DIMENSIONS. ALL BACK FILL SHALL BE PLACED IN COMPACTED LAYERS
- ALL FILL MATERIALS AND FOUNDATION BACK FILL SHALL BE PLACED IN MAXIMUM 6"THICK LIFTS BEFORE COMPACTION. EACH LIFT SHALL BE WETTED IF REQUIRED AND COMPACTED TO NOT LESS THAN 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY FOR SOIL IN ACCORDANCE WITH ASTM D1557.
- NEWLY PLACED CONCRETE FOUNDATIONS SHALL CURE A MINIMUM OF 72 HRS PRIOR TO BACK FILLING
- FINISHED GRADING SHALL BE SLOPED TO PROVIDE POSITIVE DRAINAGE AND PREVENT STANDING WATER. THE FINAL (FINISH) ELEVATION OF SLAB FOUNDATIONS SHALL SLOPE AWAY IN ALL DIRECTIONS FROM THE CENTER. FINISH GRADE OF CONCRETE PADS SHALL BE A MAXIMUM OF 4 INCHES ABOVE FINAL FINISH GRADE ELEVATIONS. PROVIDE SURFACE FILL GRAVEL TO ESTABLISH SPECIFIED ELEVATIONS WHERE REQUIRED.
- NEWLY GRADED SURFACE AREAS TO RECEIVE GRAVEL SHALL BE COVERED WITH GEOTEXTILE FABRIC TYPE: TYPAR-3401 A MANUFACTURED BY "CONSTRUCTION MATERIAL 1-800-239.3841" OR AN APPROVED EQUIVALENT. SHOWN ON PLANS. THE GEOTEXTILE FABRIC SHALL BE BLACK IN COLOR TO CONTROL THE RECURRENCE OF VEGETATIVE GROWTH AND EXTEND TO WITHIN 1 FOOT OUTSIDE THE SITE FERCING OR ELECTRICAL GROUNDING SYSTEM PERIMETER WHICH EVER IS GREATER. ALL FABRIC SHALL BE COVERED WITH A MINIMUM OF 4" DEEP COMPACTED STONE OR GRAVEL AS SPECIFIED. I.E. FDOT TYPE No. 57 FOR FENCED COMPOUND: FDOT TYPE No. 67 FOR ACCESS DRIVE AREA.
- IN ALL AREAS TO RECEIVE FILL, REMOVE ALL VEGETATION, TOPSOIL, DEBRIS, WET AND UNSATISFACTORY SOIL MATERIALS, OBSTRUCTIONS, AND DELETERIOUS MATERIALS FROM GROUND SURFACE. PLOW STRIP OR BREAK UP SLOPED SURFACES STEEPER THAN 1 VERTICAL TO 4 HORIZONTAL SUCH THAT FILL MATERIAL WILL BIND WITH EXISTING/PREPARED SOIL SURFACE.
- 10. WHEN SUB GRADE OR PREPARED GROUND SURFACE HAS A DENSITY LESS THAN THAT REQUIRED FOR THE FILL MATERIAL SCARIEV THE GROUND SURFACE TO DEPTH REQUIRED. PULVERIZE, MOISTURE-CONDITION AND/OR AFRATE THE SOILS AND RECOMPACT TO THE REQUIRED DENSITY PRIOR TO PLACEMENT OF FILLS.
- IN AREAS WHICH EXISTING GRAVEL SURFACING IS REMOVED OR DISTURBED DURING CONSTRUCTION OPERATION REPLACE GRAVEL SURFACING TO MATCH ADJACENT GRAVEL SURFACING AND RESTORED TO THE SAME THICKNESS AND COMPACTION AS SPECIFIED. ALL RESTORED GRAVEL SURFACING SHALL BE FREE FROM CORRUGATIONS AND WAVES.
- 12 EXISTING GRAVEL SURFACING MAY BE EXCAVATED SEPARATELY AND REUSED WITH THE CONDITION THAT ANY UNFAVORABLE AMOUNTS OF ORGANIC MATTER. OR OTHER DELETERIOUS MATERIALS ARE REMOVED PRIOR TO REUSE. FURNISH ANY ADDITIONAL GRAVEL RESURFACING MATERIAL AS NEEDED TO PROVIDE A FULL DEPTH COMPACTED SURFACE THROUGHOUT SITE.
- 13. GRAVEL SUB SURFACE SHALL BE PREPARED TO REQUIRED COMPACTION AND SUB GRADE ELEVATIONS BEFORE GRAVEL SURFACING IS PLACED AND/OR RESTORED. ANY LOOSE OR DISTURBED MATERIALS SHALL BE THOROUGHLY COMPACTED AND ANY DEPRESSIONS IN THE SUB GRADE SHALL BE FILLED AND COMPACTED WITH APPROVED SELECTED MATERIAL GRAVEL SURFACING MATERIAL SHALL NOT BE USED FOR FILLING DEPRESSIONS IN THE SUB GRADE.
- PROTECT EXISTING GRAVEL SURFACING AND SUB GRADE IN AREAS WHERE EQUIPMENT LOADS WILL OPERATE. USE PLANKING 'MATTS' OR OTHER SUITABLE PROTECTION DESIGNED TO SPREAD EQUIPMENT LOADS AS MAY BE NECESSARY REPAIR ANY DAMAGE TO EXISTING GRAVEL SURFACING OR SUB GRADE WHERE SUCH DAMAGE IS DUE TO THE CONTRACTORS OPERATIONS.
- DAMAGE TO EXISTING STRUCTURES AND/OR UTILITIES RESULTING FROM CONTRACTORS NEGLIGENCE SHALL BE REPAIRED AND/ OR REPLACED TO THE OWNERS SATISFACTION AT NO ADDITIONAL COST TO THE CONTRACT.
- 16. ALL SUITABLE BORROW MATERIAL FOR BACK FILL OF THE SITE SHALL BE INCLUDED IN THE BID. EXCESS TOPSOIL AND UNSUITABLE MATERIAL SHALL BE DISPOSED OF OFF SITE AT LOCATIONS APPROVED BY GOVERNING AGENCIES AT NO ADDITIONAL COST TO THE CONTRACT

STRUCTURAL STEEL NOTES

- ALL STEEL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE AISC MANUAL OF STEEL CONSTRUCTION. STEEL SECTIONS SHALL BE IN ACCORDANCE WITH ASTM AS INDICATED BELOW W-SHAPES: ASTM A992 50 KSI ANGLES, BARS CHANNELS: ASTM A36, 36 KSI HSS SECTIONS: ASTM 500, 46 KSI PIPE SECTIONS: ASTM A53-E. 35 KSI
- 2. ALL EXTERIOR EXPOSED STEEL AND HARDWARE SHALL BE HOT DIPPED GALVANIZED.
- ALL WELDING SHALL BE PERFORMED USING F70XX FLECTRODES AND WELDING 3. SHALL CONFORM TO A ISC WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL OF STEEL CONSTRUCTION". PAINTED SURFACES SHALL BE TOUCHED UP
- BOLTED CONNECTIONS SHALL BE ASTM A325 BEARING TYPE 3/4"Ø CONNECTIONS AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED
- NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8" DIA. ASTM A307 BOLTS UNLESS NOTED
- 6 FIELD MODIFICATIONS ARE TO BE COATED WITH ZINC ENRICHED PAINT

CONCRETE MASONRY NOTES

- ALL HORIZONTAL REINFORCEMENT SHALL BE PLACED IN BOND BEAM OR LINTEL BEAM UNITS
- ALL HORIZON IAL REINFORCEMENT SHALL BE PLACED IN BOND BEAM OR LINTEL BEAM UNITS. WHEN GROUTING IS STOPPED FOR ONE HOUR OR LONGER, HORIZONTAL CONSTRUCTION JOINTS SHALL BE FORMED BY STOPPING THE GROUT POUR 1-1/2' BELOW TOP OF THE UPPERMOST UNIT. ALL BOND BEAM BLOCK SHALL BE "DEEP CUT" UNITS. PROVIDE INSPECTION AND CLEAN-OUT HOLES AT BASE OF VERTICAL CELLS HAVING GROUT LIFTS IN EXCESS OF 4'.0' OF HEIGHT.
- ALL GROUT SHALL BE CONSOLIDATED WITH A MECHANICAL VIBRATOR. CEMENT SHALL BE AS SPECIFIED FOR CONCRETE.
- REINFORCING BARS SEE NOTES UNDER "REINFORCING STEEL" FOR REQUIREMENTS.
- ACUIDE ONE BAR DIAMETER (A MINIMUM OF 1/2) GROUT BETWEEN MAIN REINFORCING AND MASUNRY UNITS. LOW LIFT CONSTRUCTION, MAXIMUM GROUT POUR HEIGHT IS 4 FEET. NOT USED. ALL CELLS IN CONCRETE BLOCKS SHALL BE FILLED SOLID WITH GROUT, EXCEPT AS NOTED IN THE DRAWINGS OR
- SPECIFICATIONS CELLS SHALL BE IN VERTICAL ALIGNMENT. DOWELS IN FOOTINGS SHALL BE SET TO ALIGN WITH CORES
- ALKAU OR ORGANIC MATERIAL. 19. BRICK SHALL CONFORM TO ASTM C-62 AND SHALL BE GRADE MW OR BETTER.

STRUCTURAL CONCRETE NOTES

- ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301-16, ACI 318-14 AND THE SPECIFICATION FOR CAST-IN-PLACE CONCRETE.
- ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH fc'=2,500 PSI AT 28 DAYS UNLESS NOTED 2.
- 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 3. CLASS "B" AND ALL HOOKS SHALL BE STANDARD UNLESS NOTED OTHERWISE
- THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR
- CONCRETE EXPOSED TO EARTH OR WEATHER: #6 AND LARGER2 IN. #5 AND SMALLER & WWF 1-1/2 IN
- BEAMS AND COLUMNS.....

1-1/2 IN

- A 3/4" CHAMFER SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE U.N.O. IN ACCORDANCE WITH ACI 5. 301 SECTION 4.2.4
- HOLES TO RECEIVE EXPANSION/WEDGE ANCHORS SHALL BE 1/8" LARGER IN DIAMETER THAN THE ANCHOR BOLT, DOWEL OR ROD AND SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. LOCATE AND AVOID CUTTING EXISTING REBAR WHEN DRILLING HOLES IN ELEVATED CONCRETE SLABS.
- USE AND INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER ICC ER# & NUFACTURER'S WRITTEN RECOMMENDED PROCEDURES.

FIRE DEPARTMENT NOTES

- FIRE STOP SYSTEM # CP601S AT ALL FIRE RATED PENETRATION INSTALLED PER MANUFACTURE'S LATEST INSTALLATION SPECIFICATION
- AL OR GREATER FIRE RATIN
- 3. BUILDINGS UNDERGOING CONSTRUCTION, ALTERATION OR DEMOLITION SHALL BE IN ACCORDANCE WITH CFC CHAPTER 33. [CFC 2019]
- SIBLE AND LEGIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY. CFC CHAPTER 5, SECTION 505.1 ICFC 20191
- 807.1 [CFC 2019]
- 6. ALL VALVES CONTROLLING THE WATER SUPPLY FOR AUTOMATIC SPRINKLER SYSTEM AND WATER-FLOW CHES ON AL SPRINKLER SYSTEMS SHALL BE ELECTRICALLY MONITORED WHERE THE NUMBER OF SPRINKLERS IS A 100 OR MORE. CFC CHAPTER 9, SECTION 903.4 [CFC 2019]
- 8. THE SIZE AND DISTRIBUTION OF PORTABLE FIRE EXTINGUISHERS SHALL BE IN ACCORDANCE WITH CFC SECTIONS 906.3.1 THROUGH 906.3.4, [CFC 2019]
- 9. CONTRACTOR SHALL VERIFY IN FIELD THE EXISTENCE OR INSTALLATION OF A FIRE EXTINGUISHER WITH A MINIMUM RATING OF 2A-10BC, WITH A CHARGE STATUS ACCEPTABLE TO THE LOCAL FIRE AUTHORITY HAVING JURSDICTION.
- 10. COMPLETE PLANS AND SPECIFICATIONS FOR ALARM SYSTEMS: FIRE-EXTINGUISHING SYSTEMS, INCLUDING AUTOMATIC SPRINKLERS AND OTHER FIRE-PROTECTION SYSTEMS SHALL BE SUBMITTED TO FIRE AND LIFE SAFETY FOR REVIEW AND APPROVAL TO INSTALLATION. CFC CHAPTER 9, SECTION 901.2 [CFC 2019]

CONCRETE MASONRY UNITS SHALL BE MEDIUM WEIGHT UNITS CONFORMING TO ASTM C90, GRADE N-1.

CONCRETE MASONRY UNITS SHALL BE MEDIUM WEIGHT UNITS CONFORMING TO ASTM C90, GRADE N-1, (FM=1,500 PS). MEDIUM WEIGHT (115 PCF). MORTAR SHALL BE TYPE 'S" (MINIMUM 1,800 PSI AT 28 DAYS). GROUT SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI AT 28 DAYS. ALL CELLS CONTAINING REINFORCING STEEL OR EMBEDDED ITEMS AND ALL CELLS IN RETAINING WALLS AND WALLS BELOW GRADE SHALL BE SOLID GROUTED. MINIMUM COMPRESSIVE STRENGT IN DEVICE IN DOUD DEMICAL UNITS.

PROVIDE ONE BAR DIAMETER (A MINIMUM OF 1/2") GROUT BETWEEN MAIN REINFORCING AND MASONRY UNITS.

CONTAINING REINFORCING STEEL. REFER TO ARCHITECTURAL DRAWINGS FOR SURFACE AND HEIGHT OF UNITS, LAYING PATTERN AND JOINT TYPE. SAND SHALL BE CLEAN, SHARP AND WELL GRADED, FREE FROM INJURIOUS AMOUNTS OF DUST, LUMPS, SHALE,

THE AT&T PROJECT MANAGER'S DIRECTION, THE CONTRACTOR SHALL PROVIDE "HILTI" HIGH PERFORMANCE

ALL PENETRATIONS THROUGH FIRE RATED ASSEMBLIES SHALL BE CONSTRUCTED SO AS TO MAINTAIN AN

4 ADDRESS SHALL BE PROVIDED FOR ALL NEW AND EXISTING BUILDINGS IN A POSITION AS TO BE PLAINLY SEEN.

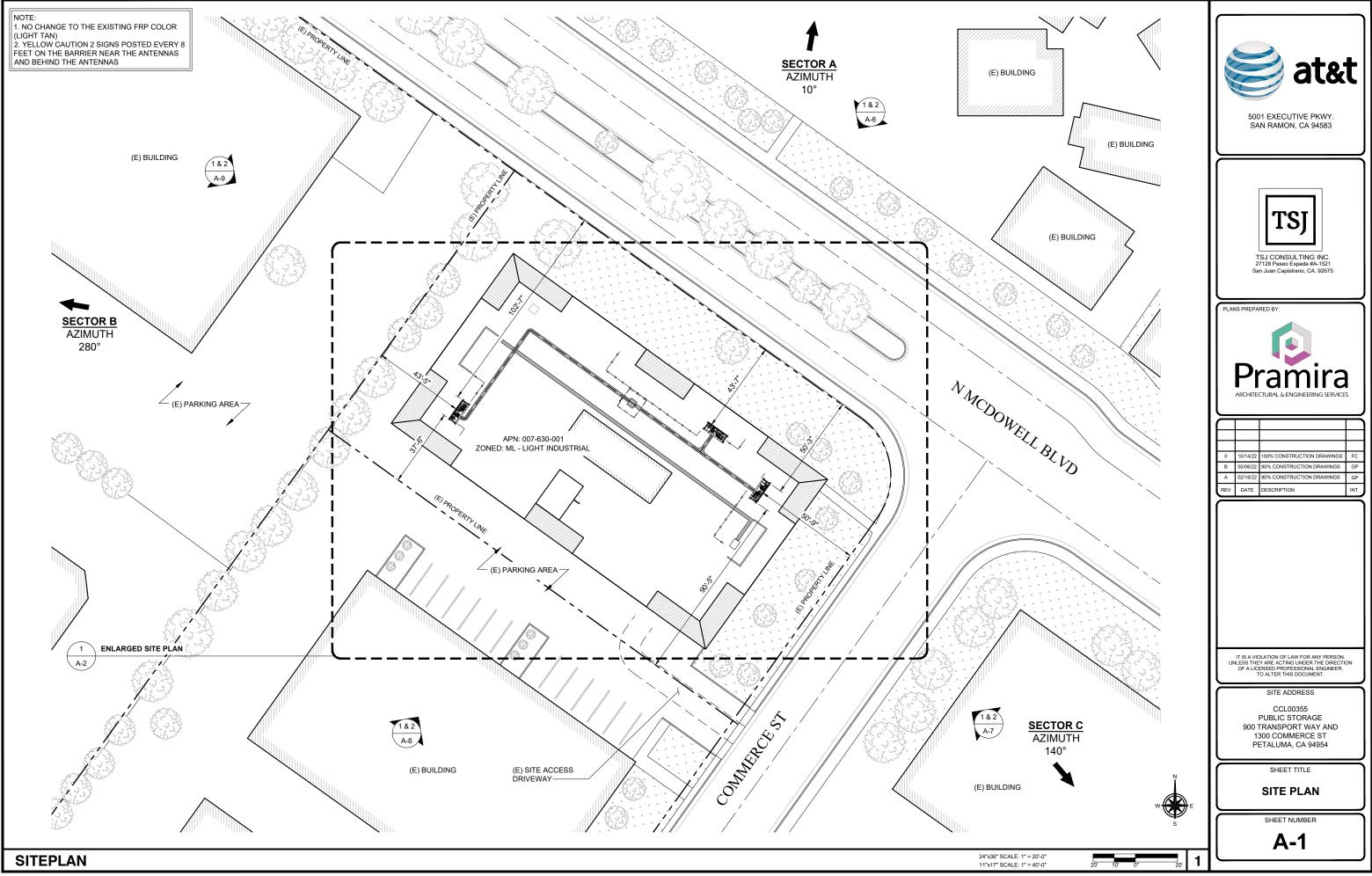
5. DECORATIVE MATERIALS SHALL BE MAINTAINED IN A FLAME-RETARDANT CONDITION. CFC CHAPTER 8, SECTION

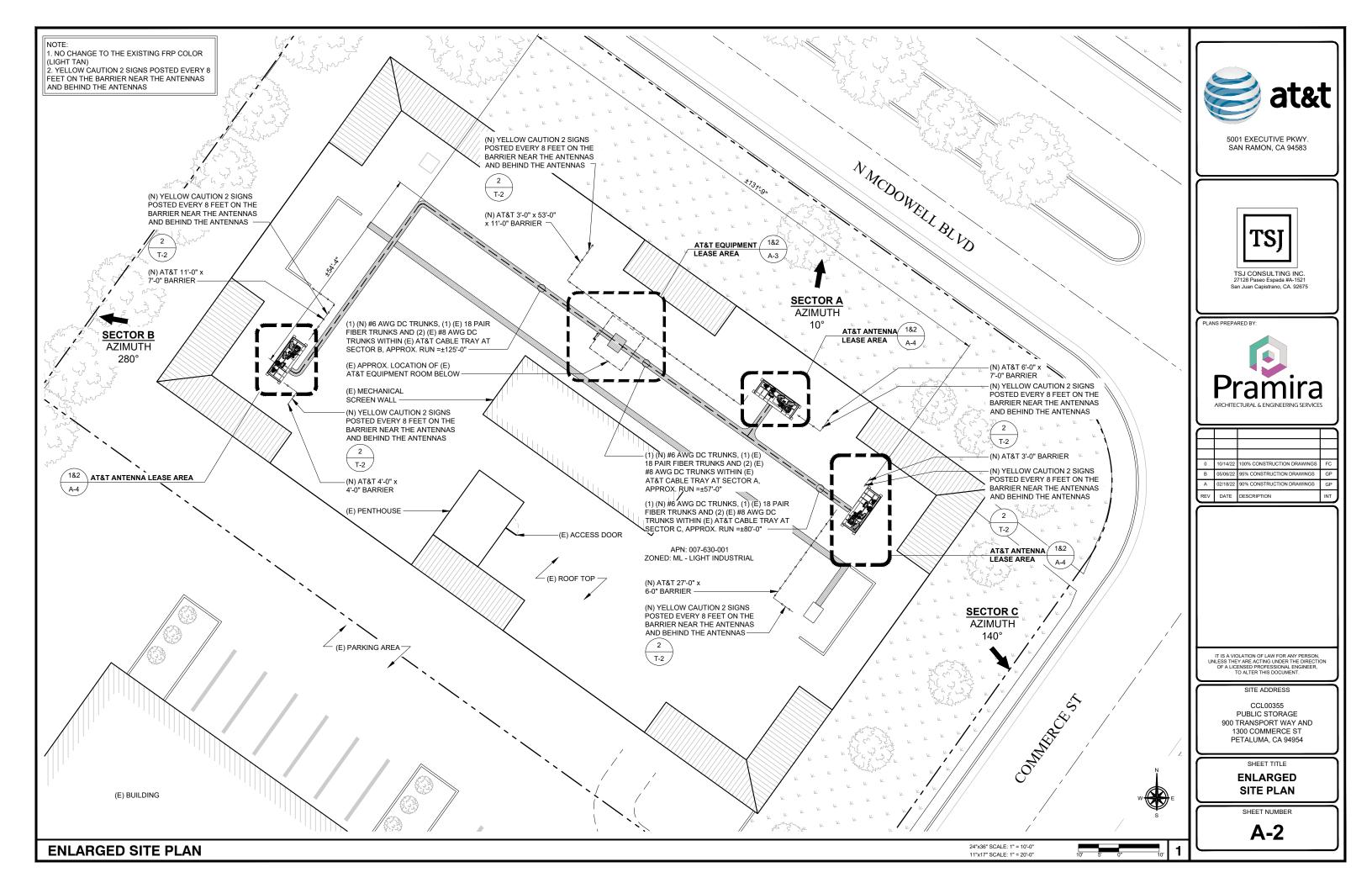
7. INSTALLATION OF FIRE ALARM SYSTEMS SHALL BE IN ACCORDANCE WITH CFC CHAPTER 9, SECTION 907 [CFC

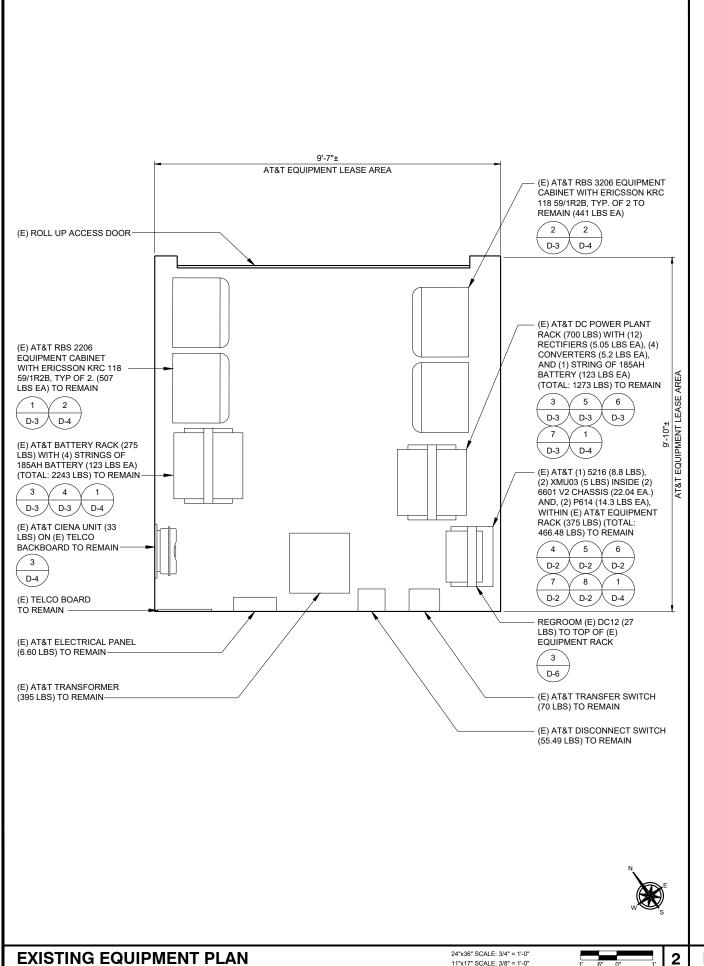


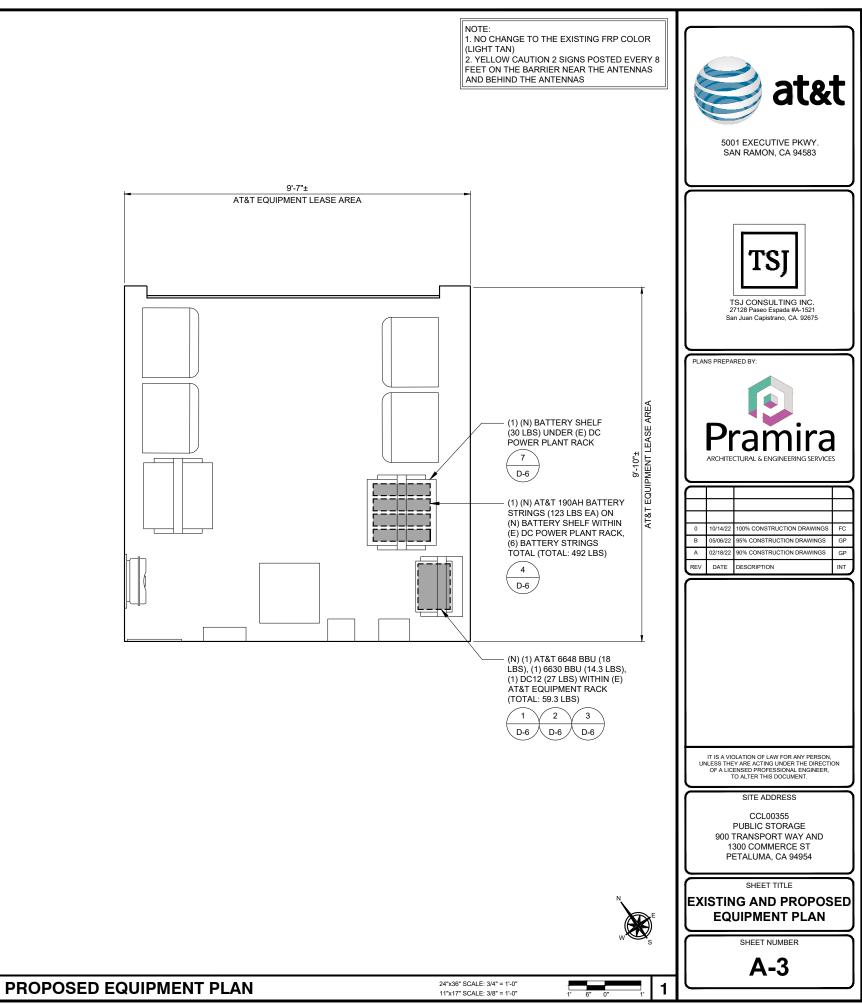
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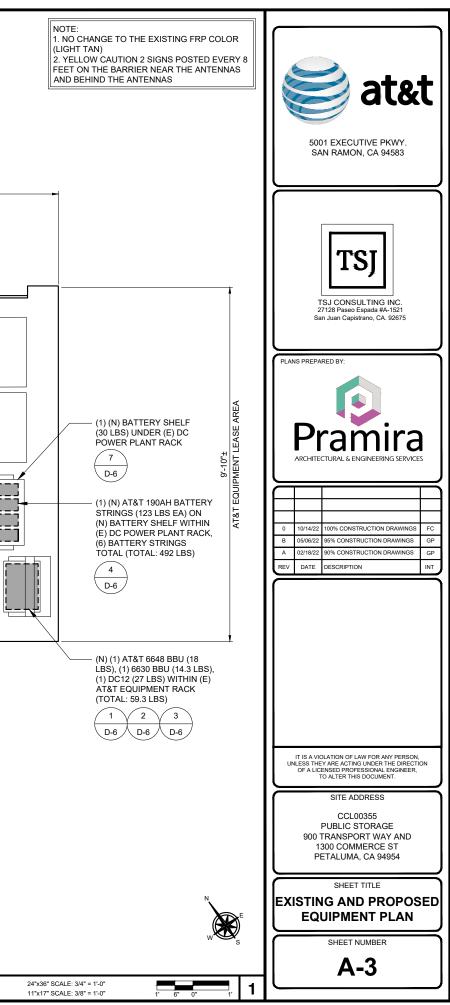
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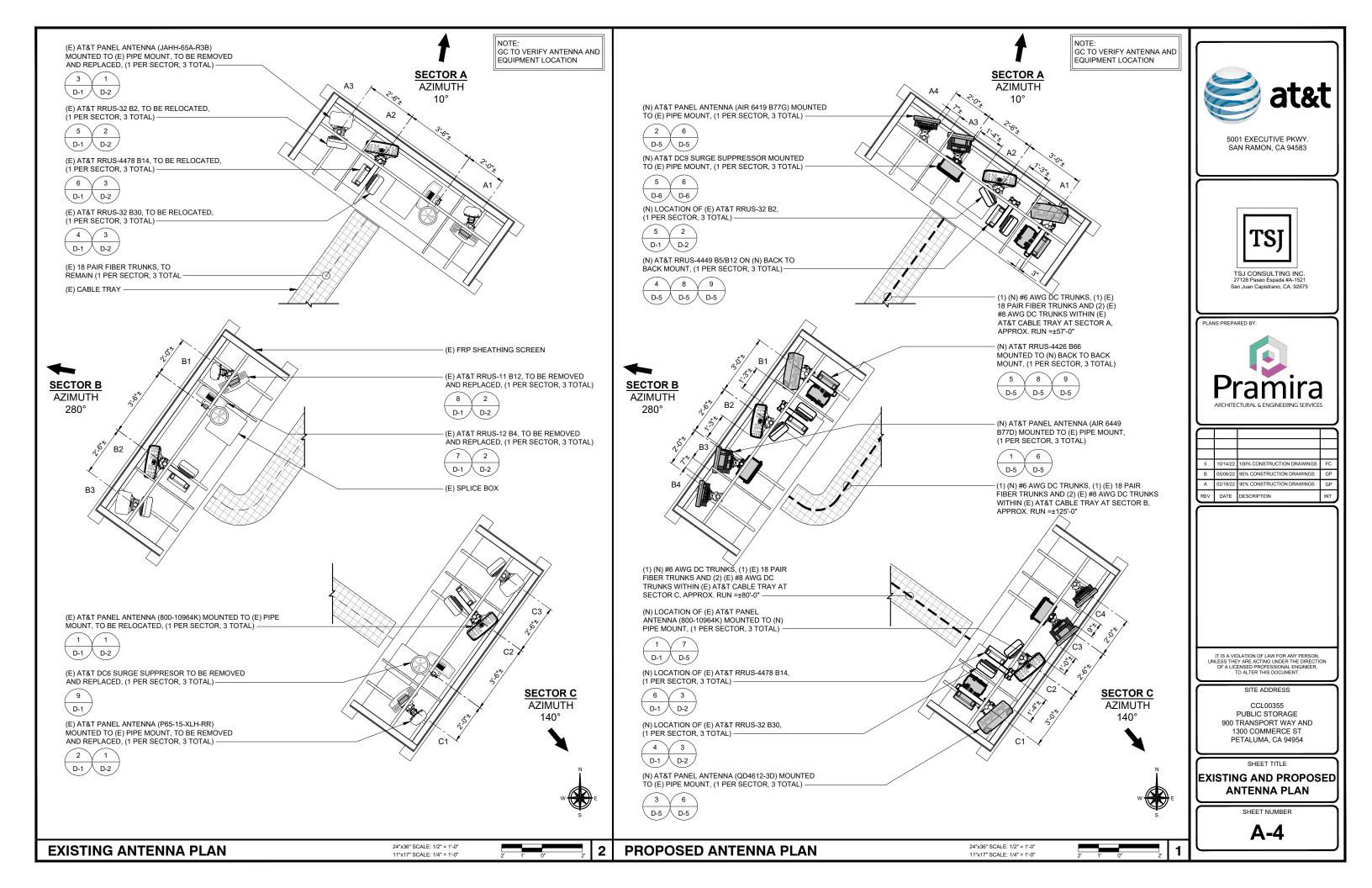








EXISTING EQUIPMENT PLAN



NOTES TO CONTRACTOR:

1. CONTRACTOR IS TO REFER TO MOST CURRENT RADIO FREQUENCY DATA SHEET (RFDS) PRIOR TO CONSTRUCTION

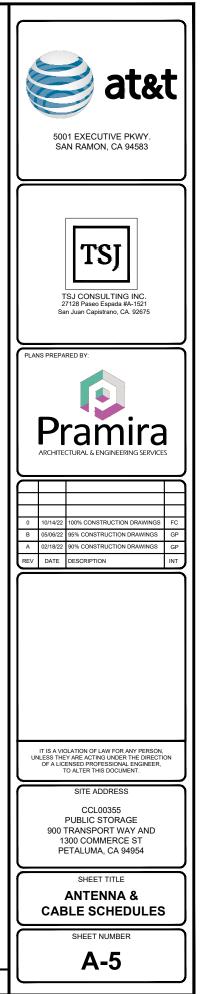
2. CABLE LENGTHS WERE DETERMINED BASED ON VISUAL INSPECTION DURING SITE-WALK. CONTRACTOR TO VERIFY ACTUAL LENGTH DURING PRE-CONSTRUCTION WALK

RFDS REV#: 2; DATE: 02/01/20	2/01/2022 (N) ANTENNA & CABLE SCHEDULE										
SECTOR	1				2			3			
SECTOR NAME		AL	PHA		BETA				GAI	MMA	
ANTENNA	1	2	3	4	1	2	3	4	1	2	
MODEL #	(1) QD4612-3D (N)	(1) 800-10964K (E)	(1) AIR 6449 B77D (N) (1) AIR 6419 B77G (N)	(1) QD4612-3D (N)	(1) 800-10964K (E)	(1) AIR 6449 B77D (N)	(1) AIR 6419 B77G (N)	(1) QD4612-3D (N)	(1) 800-10964K (E)	(1) All
AZIMUTH	10°	10°	10°	10°	280°	280°	280°	280°	140°	140°	
RAD CENTER	41'-0"	41'-0"	41'-10"	42'-0"	41'-0"	41'-0"	41'-10"	42'-0"	41'-0"	41'-0"	
PORTS											
ACTIVE TECHNOLOGY	LTE 700, 5G 850, LTE 1900, LTE AWS, 5G AWS	LTE 700, LTEWCS	5G CBAND	5G DOD	LTE 700, 5G 850, LTE 1900, LTE AWS, 5G AWS	LTE 700, LTEWCS	5G CBAND	5G DOD	LTE 700, 5G 850, LTE 1900, LTE AWS, 5G AWS	LTE 700, LTEWCS	
ELEC. DOWNTILT	-	-	-	-	-	-	-	-	-	-	
RRUS TYPE	(1) RRU 4449 B5/B12 (N) (1) RRU 4426 B66 (N) (1) RRU 32 B2 (E)	(1) RRU 4478 B14 (E) (1) RRU 32 B30 (E)	-	-	(1) RRU 4449 B5/B12 (N) (1) RRU 4426 B66 (N) (1) RRU 32 B2 (E)	(1) RRU 4478 B14 (E) (1) RRU 32 B30 (E)	-	-	(1) RRU 4449 B5/B12 (N) (1) RRU 4426 B66 (N) (1) RRU 32 B2 (E)	(1) RRU 4478 B14 (E) (1) RRU 32 B30 (E)	
HYBRID TRUNK TYPE FROM EQUIPMENT OVP/COVP TO ANTENNA BREAKOUT BOX/COVP		Т	BD			Т	BD			T	BD
HCS TRUNK CABLE ESTIMATED LENGTH	TBD			TBD				TI	BD		
TRUNK CABLE FACTORY LENGTH	н твр			TBD			TBD				
DC TRUNK	(2) (E) #8 AWG AND (1) (N) #6 AWG DC POWER TRUNK		(2) (E) #8 AWG AND (1) (N) #6 AWG DC POWER TRUNK			(2) (E) #8 AWG AND (1) (N) #6 AWG					
DC TRUNK LENGTH	±35'-0"		±120'-0"		±80'-0"						
FIBER TRUNK	(1) (E) 18 PAIR FIBER TRUNK		(1) (E) 18 PAIR FIBER TRUNK			(1) (E) 18 PAIR FIBER					
FIBER TRUNK LENGTH	±35'-0"				±12	20'-0"			±80	0'-0"	

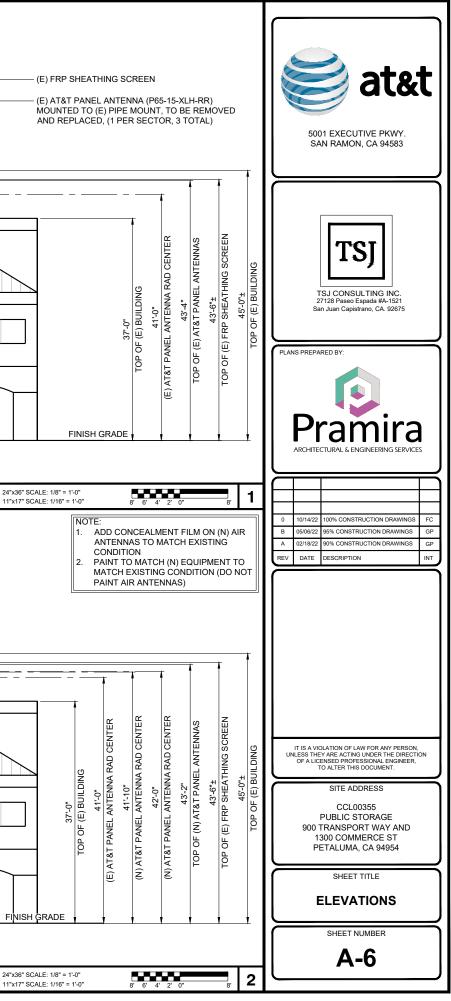
NOTE: 1. CABLE LENGTHS ARE APPROXIMATIONS ONLY BASED ON PREVIOUS OTHER VENDOR DRAWINGS AND HAVE NOT BEEN FIELD VERIFIED.

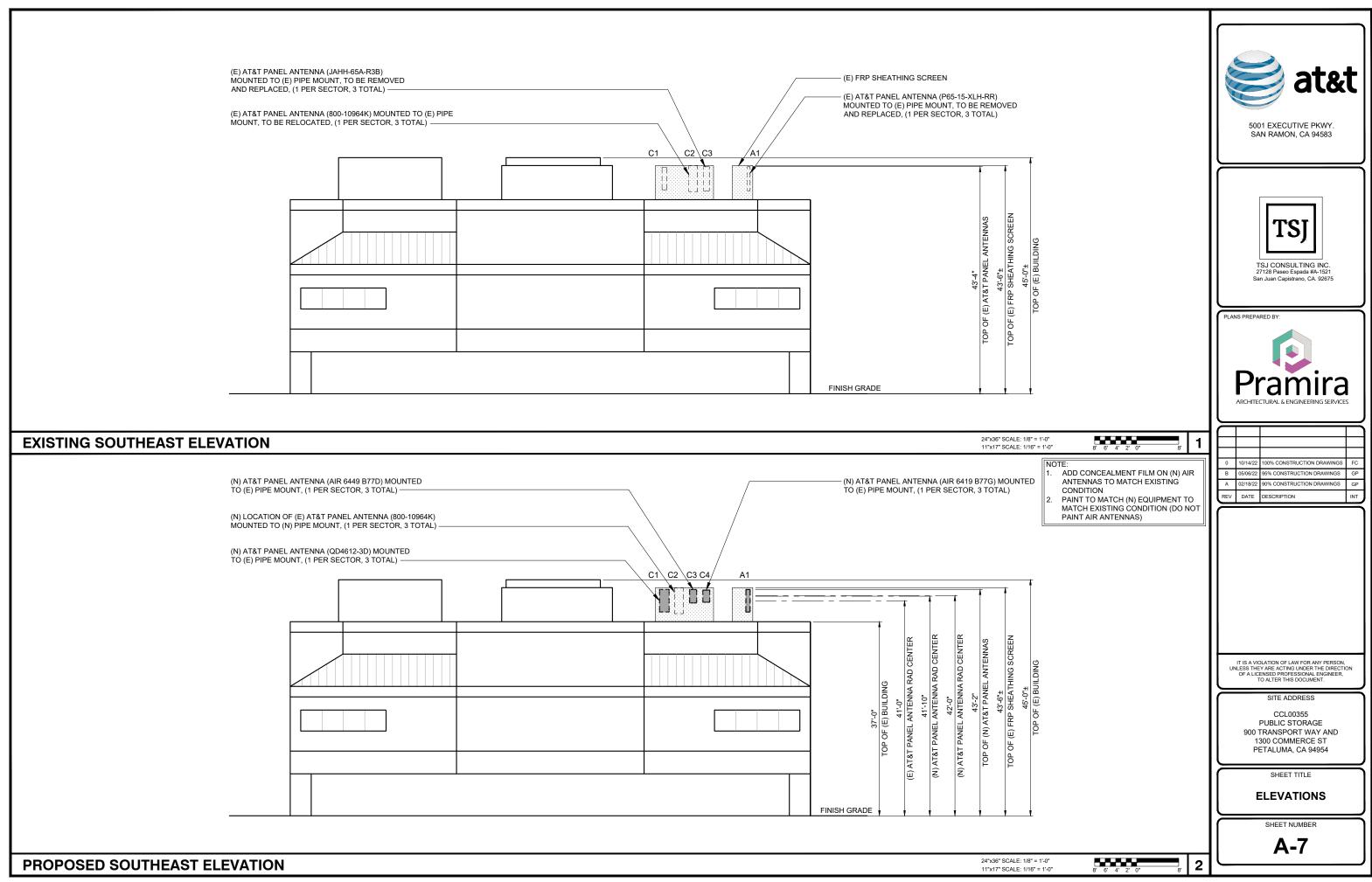
ANTENNA AND CABLE SCHEDULE

Ą	
3	4
AIR 6449 B77D (N)	(1) AIR 6419 B77G (N)
140°	140°
41'-10"	42'-0"
5G CBAND	5G DOD
-	-
-	-
WG DC POWER TR	UNK
BER TRUNK	



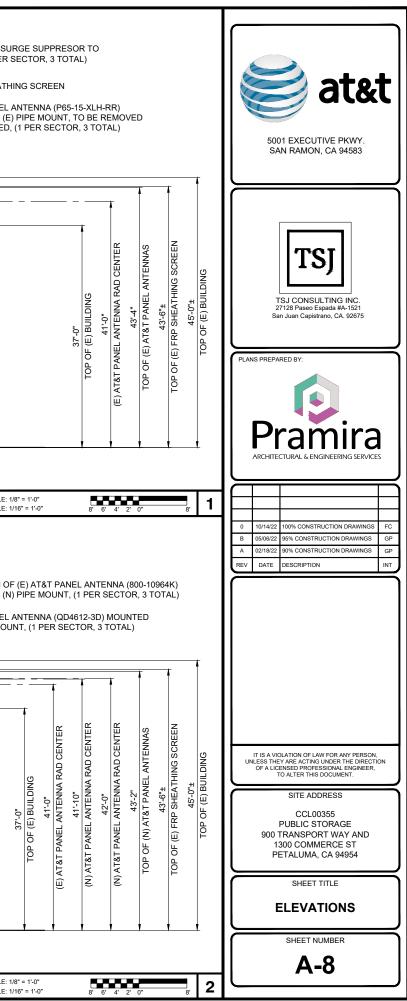
(E) MECHANICAL SCREEN WALL	E) PIPE			(E) (E) (E) (E) ANI
(E) AT&T PANEL ANTENNA (800-10964K) MOUNTED TO (MOUNT, TO BE RELOCATED, (1 PER SECTOR, 3 TOTAL)	A1 A2 A3			B1
		, <u> </u>		
			(650) SECURITY SECURITY PUBLIC STORAGE	
EXISTING NORTHEAST ELEVA	ATION			24"x36" SCALE: 11"x17" SCALE:
(N) AT&T PANEL ANTENNA (AIR 6449 B77D) MOUNTED TO (E) PIPE MOUNT, (1 PER SECTOR, 3 TOTAL) (N) LOCATION OF (E) AT&T PANEL ANTENNA (800-10964 MOUNTED TO (N) PIPE MOUNT, (1 PER SECTOR, 3 TOTA C4	K) AL A1 A2 A3 A4	(N) AT&T PANEL ANTENNA TO (E) PIPE MOUNT, (1 PEF	(N) AT&T PANEL ANTENNA (QD4612 TO (E) PIPE MOUNT, (1 PER SECTO (AIR 6419 B77G) MOUNTED R SECTOR, 3 TOTAL)	-3D) MOUNTED R, 3 TOTAL)
		,		
			(60) ITE 4700 SECURITY PUBLIC STORAGE	
				FINISH GRA
PROPOSED NORTHEAST ELE	VATION			24"x36" SCALE: 11"x17" SCALE:



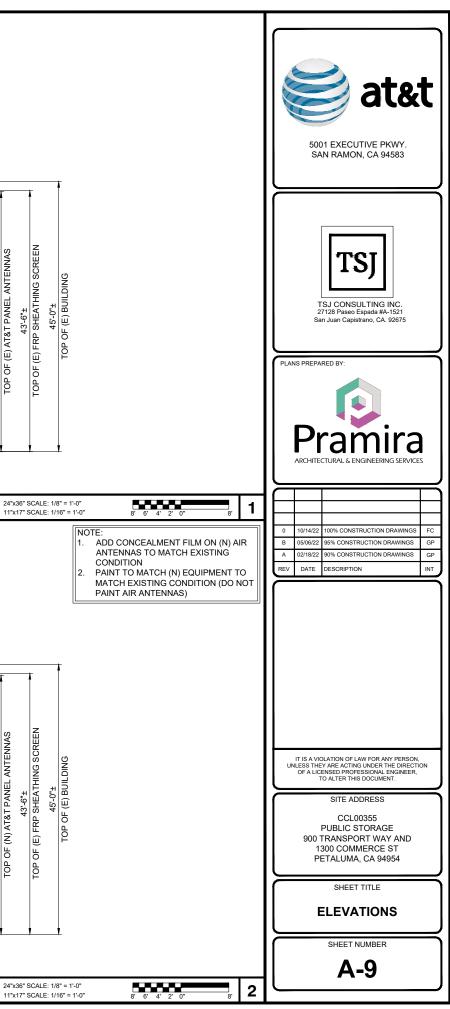


24"x36"	SCALE
11"x17"	SCALE

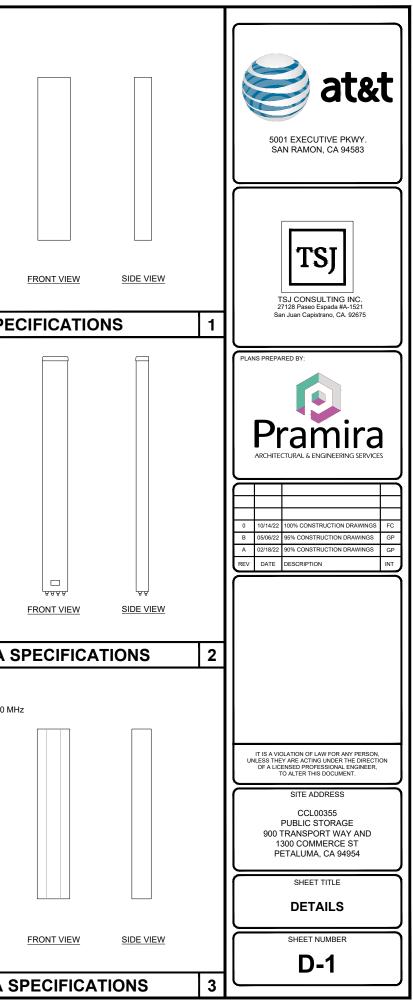
	(E) AT&T PANEL ANTENNA (800-10964K) MOUNTED TO (E) PIP MOUNT, TO BE RELOCATED, (1 PER SECTOR, 3 TOTAL) (E) AT&T PANEL ANTENNA (JAHH-65A-R3B) MOUNTED TO (E) PIPE MOUNT, TO BE REMOVED AND REPLACED, (1 PER SECTOR, 3 TOTAL) (E) MECHANICAL SCREEN WALL	E	(E) AT&T DC6 S REMAIN, (1 PEF (E) FRP SHEAT (E) AT&T PANE MOUNTED TO (AND REPLACE)
B3			
	VATION		FINISH GRADE
NOTE: 1. ADD CONCEALMENT FILM ON (N) AIR ANTENNAS TO MATCH EXISTING CONDITION 2. PAINT TO MATCH (N) EQUIPMENT TO MATCH EXISTING CONDITION (DO NOT PAINT AIR ANTENNAS)	(N) AT&T PANEL ANTENNA (AIR 6449 B77D) MOUNTED TO (E) PIPE MOUNT, (1 PER SECTOR, 3 TOTAL) (N) AT&T PANEL ANTENNA (AIR 6419 B77G) MOUNTED TO (E) PIPE MOUNT, (1 PER SECTOR, 3 TOTAL)		(N) LOCATION MOUNTED TO ((N) AT&T PANE TO (E) PIPE MO
B3			

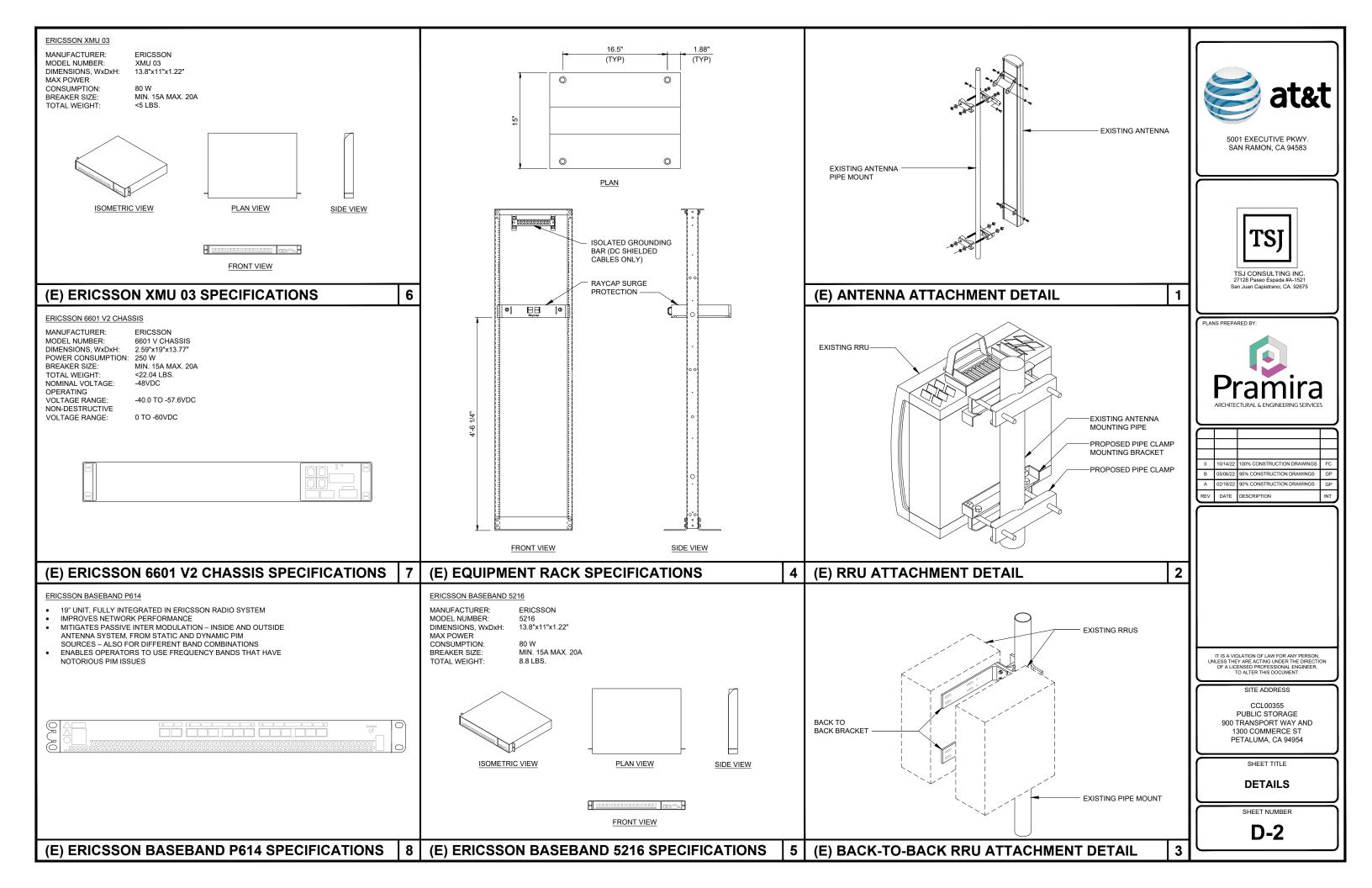


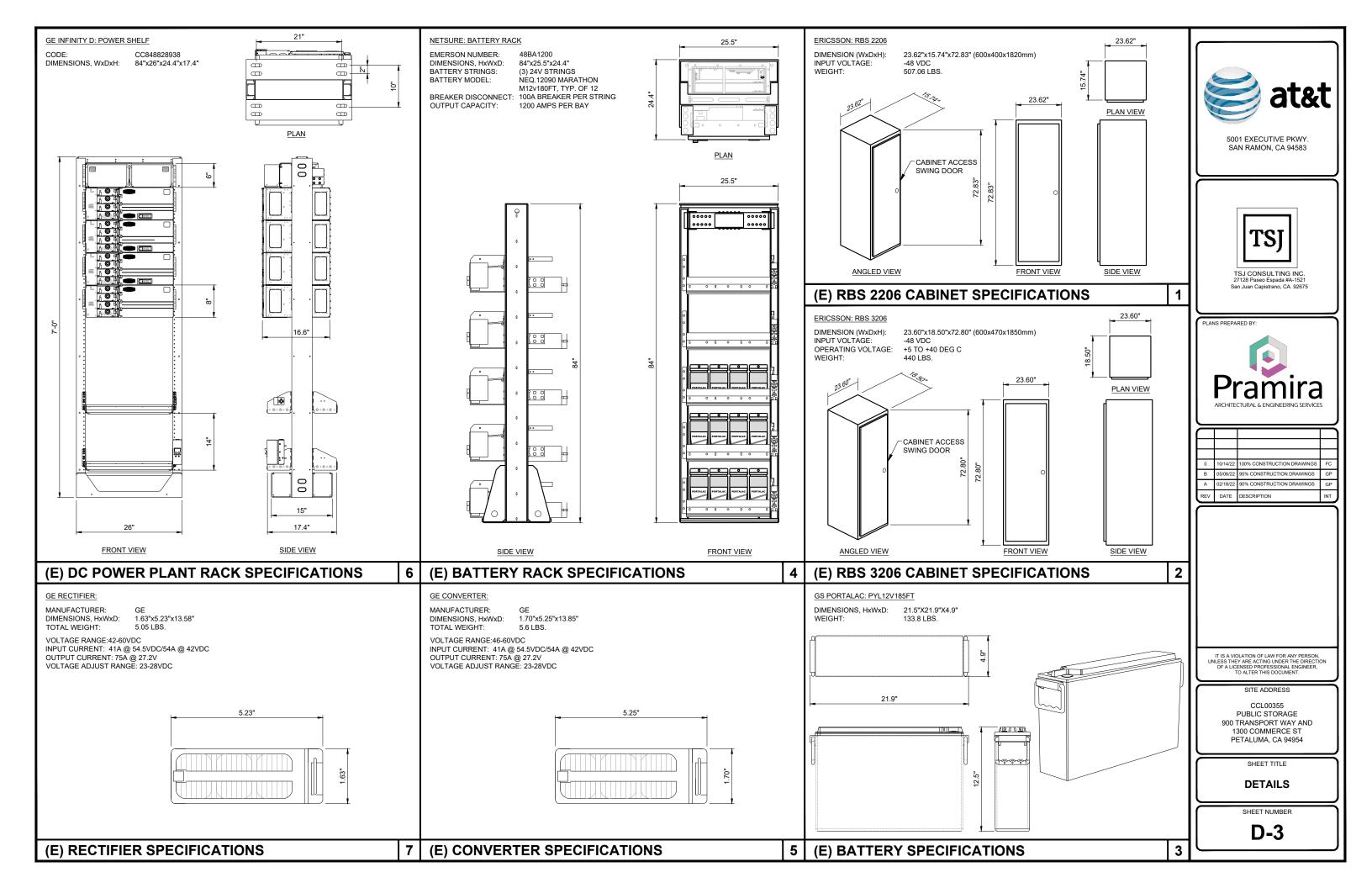
	(E) AT&T PANEL ANTENNA (800-10964K) MOUNT MOUNT, TO BE RELOCATED, (1 PER SECTOR, 3 (E) AT&T PANEL ANTENNA (JAHH-65A-R3B) MOUNTED TO (E) PIPE MOUNT, TO BE REMOVEI AND REPLACED, (1 PER SECTOR, 3 TOTAL) ——	TOTAL)	(E) AT&T DC6 SURGE SUF REMAIN, (1 PER SECTOR, (E) AT&T PANEL ANTENN, MOUNTED TO (E) PIPE MO AND REPLACED, (1 PER S (E) FRP SHEATHING SCR (E) MECHANICAL SCREEN B1 B2 B3	, 3 TOTAL) A (P65-15-XLH-RR) OUNT, TO BE REMOVED SECTOR, 3 TOTAL) EEN N WALL
CAST TING WORTHWEST ELEVATION				37 ⁻⁰ 37 ⁻⁰ TOP OF (E) BL 41 (E) AT&I PANEL ANT TOP OF (E) AT&I TOP OF (E) FRP 3
TO (E) PIPE MOUNT, (1 PER SECTOR, 3 TOTAL) (N) AT&T PANEL ANTENNA (AIR 6419 B770) MOUNTED TO (E) PIPE MOUNT, (1 PER SECTOR, 3 TOTAL) (N) AT&T PANEL ANTENNA (ID4612-30) MOUNTED TO (E) PIPE MOUNT, (1 PER SECTOR, 3 TOTAL) A3 04 (3 C2 C1 0 B1 B2 B3 B4 A3 04 (3 C2 C1 C1 B1 B2 B3 B4 B1 B2	EXISTING NORTHWEST ELEVATION			24"x36" SCALE: 11"x17" SCALE:
Structure of the second	TO (E) PIPE MOUNT, (1 PER SECTOR, 3 TOTAL) -		MOUNTED TO (N) PIPE MO	OUNT, (1 PER SECTOR, 3 TOTAL)



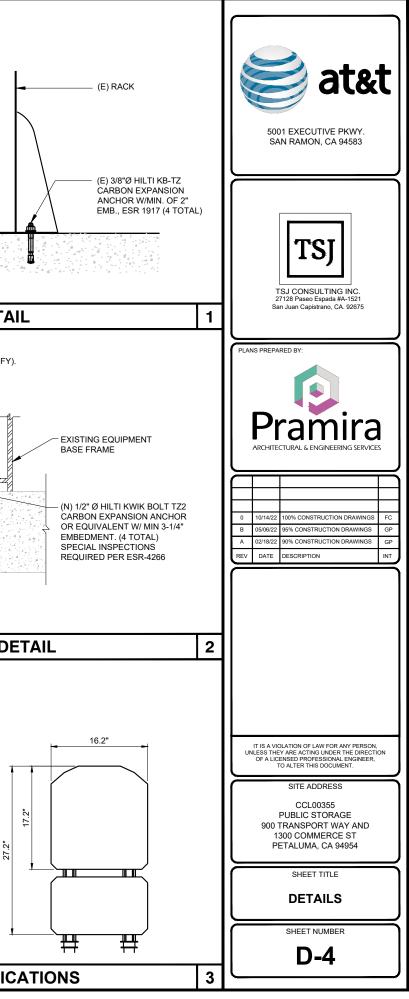
DIMENSIONS (HXWD): 55.1x13.78%189" DIMENSIONS (HXWD): 55.1x13.78%189" RET INTERFACE: 51.x13.78%189" RET INTERFACE: 51.x13	ERICSSON: RRUS-12 B4 DIMENSIONS (HxWxD): 20.4"X18.5"X7.5" TOTAL WEIGHT: 50 LBS			ERICSSON: RRUS-32 B30 DIMENSIONS (HxWxD): 27.2"X12.1"X7.0" TOTAL WEIGHT: 53 LBS			KATHREIN: 800-10964K: DIMENSIONS (HxWxD): 59.0"x20.00"x6.90" WEIGHT: 83.8 LBS
Processors Andre 11 82 Demonstrate (MMCC) Processors 22 (E) EXCLUSION (MMCC) Proces	PLAN VIEW				line ee (SIDE VIEW	PLAN VIEW
INMERICIDE (NAME) S. BITLES S. BITLES DEMENSIONE (NAME) 27.27.27.17.07 DEMENSIONE (NAME) DEMENSione (NAME) <td>(E) ERICSSON RRUS-12 B4 S</td> <td>PECIFICATIO</td> <td>NS 7</td> <td>(E) ERICSSON RRUS-32 E</td> <td>330 SPECIFICATION</td> <td>NS 4</td> <td>(E) KATHREIN ANTENNA SP</td>	(E) ERICSSON RRUS-12 B4 S	PECIFICATIO	NS 7	(E) ERICSSON RRUS-32 E	330 SPECIFICATION	NS 4	(E) KATHREIN ANTENNA SP
PLAN VIEW DEAL VIEW DEAL VIEW DEAL VIEW DEAL VIEW DEAL VIEW RENT VIEW SIDE VIEW EXAN VIEW EXAN VIEW SIDE VIEW EXAN VIEW CE) EXCINCT VIEW SIDE VIEW EXAN VIEW EXAN VIEW EXAN VIEW MICHAR DOCUMENTS/ EXCINCT VIEW SIDE VIEW SIDE VIEW SIDE VIEW SIDE VIEW MICHAR DOCUMENTS// EXCINCT COLUMNOUTING B (E) ERICSSON RRUS-412 B2 SIDE VIEW SIDE VIEW MICHAR DOCUMENTS// EXCINCT VIEW 304 LBS COLUMNOUTING SIDE VIEW MULTIPANO OD SUNCER HOUNTING Image: Columnout Colu	DIMENSIONS (HxWxD): 19.68"X16.96"X7.2"			DIMENSIONS (HxWxD): 27.2"X12.1"X7.0"			DIMENSIONS (HxWxD): 51"x12"6" WEIGHT, W/ BRACKETS: 40 LBS.
RAYCAP. DOG-48-60-18-8F DIMENSIONS (HAWAD): 247x11*x18.50° TOTAL WEIGHT: 32.8 LBS MULTEAND BAB-06-48-60-18-8F DIMENSIONS (HAWAD): 247x11*x18.50° TOTAL WEIGHT: 32.8 LBS MULTEAND BAB-06-48-240 DIMENSIONS (HAWAD): 25.1 x13.2*X7.3* DIMENSIONS (HAWAD): 25.1 x12.4*X7.3* DIME					lee eel	SIDE VIEW	PLAN VIEW
RAYCAP. DOG-48-60-18-8F DIMENSIONS (HAWAD): 247x11*x18.50° TOTAL WEIGHT: 32.8 LBS MULTEAND BAB-06-48-60-18-8F DIMENSIONS (HAWAD): 247x11*x18.50° TOTAL WEIGHT: 32.8 LBS MULTEAND BAB-06-48-240 DIMENSIONS (HAWAD): 25.1 x13.2*X7.3* DIMENSIONS (HAWAD): 25.1 x12.4*X7.3* DIME							
DIMENSIONS (HXWXD): 24'X11'X15.50" 22.8 LBS DIMENSIONS (HXWXD): 24'X11'X15.50" 22.8 LBS DIMENSIONS (HXWXD): 15.0'X13.2'X7.3" DIMENSIONS (HXWXD): 15.0'X13.2'X7.3' DIMENSIONS (HXWXD): 15.0'X13.2'X7.3' DIMENSIONS (HXWXD): 15.0'X13.2'X7.3' DIMENSIONS (HXWXD): 15.0'X13.2'X7.3' DIMENSIONS (HXWXD): 15.0'X13.2'X7.3' DIMENSIONS (HXWXD): 15.0'X13.2'X7.3' DIMENSIONS (HXWX	(E) ERICSSON RRUS-11 B12	SPECIFICATIO	2NS 8	L (E) ERICSSON RRUS-32 E	SZ SPECIFICATIONS	5 5	(E) POWERWAVE ANTENNA
C SURGER MOUNTING HARDWARE 11" DIA 18.50" (N) 3" Ø MOUNTING PIPE (N) 3" Ø MOUNTING (N) STAINLESS STEEL BANDING PLAN VIEW ERONT VIEW SIDE VIEW	DIMENSIONS (HxWxD): 24"x11"x18.50" TOTAL WEIGHT: 32.8 LBS			DIMENSIONS (HxWxD): 15.0"X13.2"X7.3"			BAND: MULTIBAND OP. FREQ. BAND: 698-896-MHz AND 1695-2400 DIMENSIONS (HxWxD): 55.1:x13.78"x8.189" WEIGHT: 53 LBS.
(E) DC6 SURGE SUPPRESSOR SPECIFICATIONS 9 (E) ERICSSON RRUS-4478 B14 SPECIFICATIONS 6 (E) COMMSCOPE ANTENNA	DC SURGER SUPPRESSOR DC SURGER MOUNTING HARDWARE	(N) PIP	E STAINLESS STEEL NDING				
	(E) DC6 SURGE SUPPRESSO	R SPECIFICA	TIONS 9	(E) ERICSSON RRUS-4478	B14 SPECIFICATI	ONS 6	(E) COMMSCOPE ANTENNA

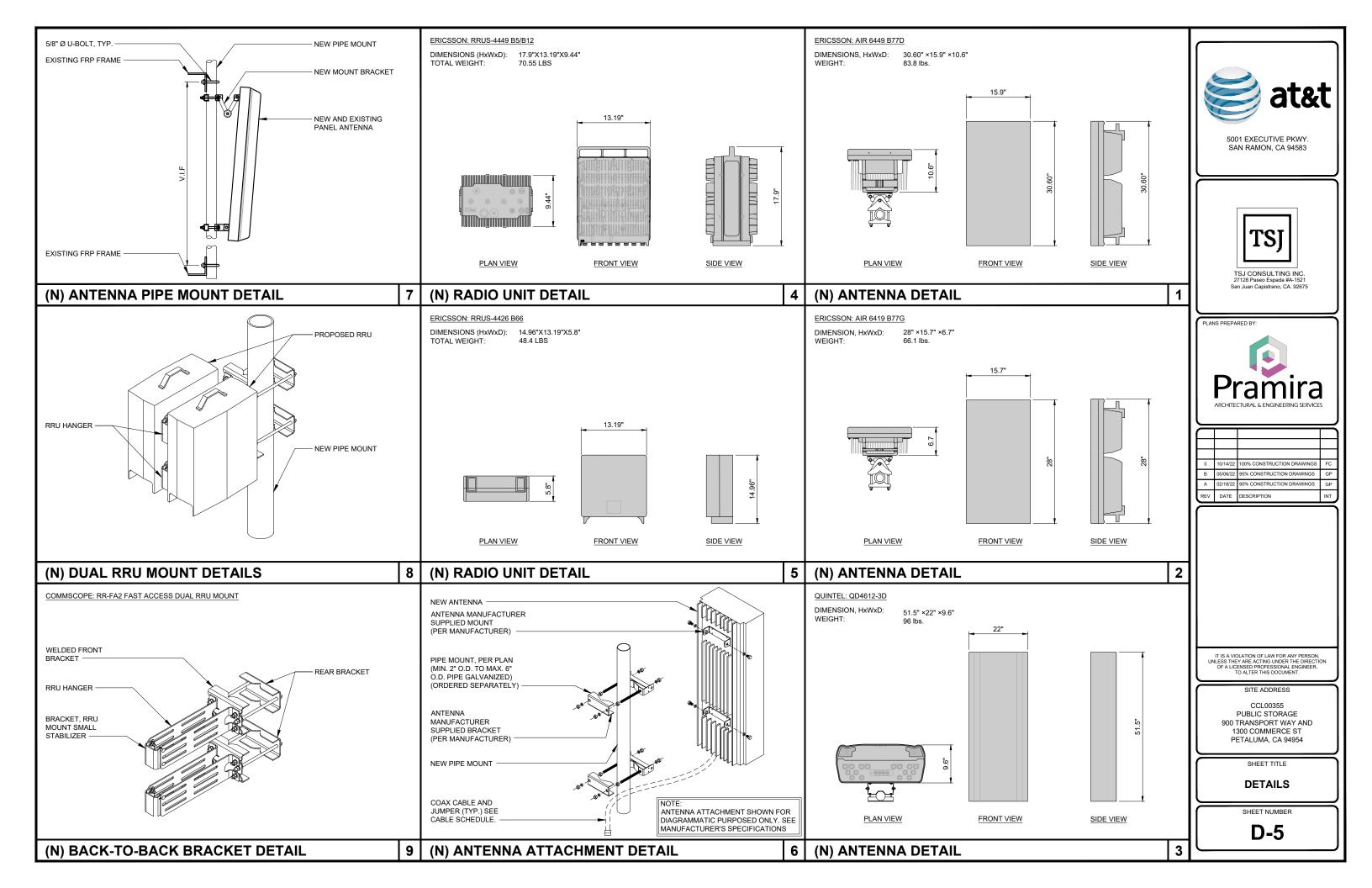


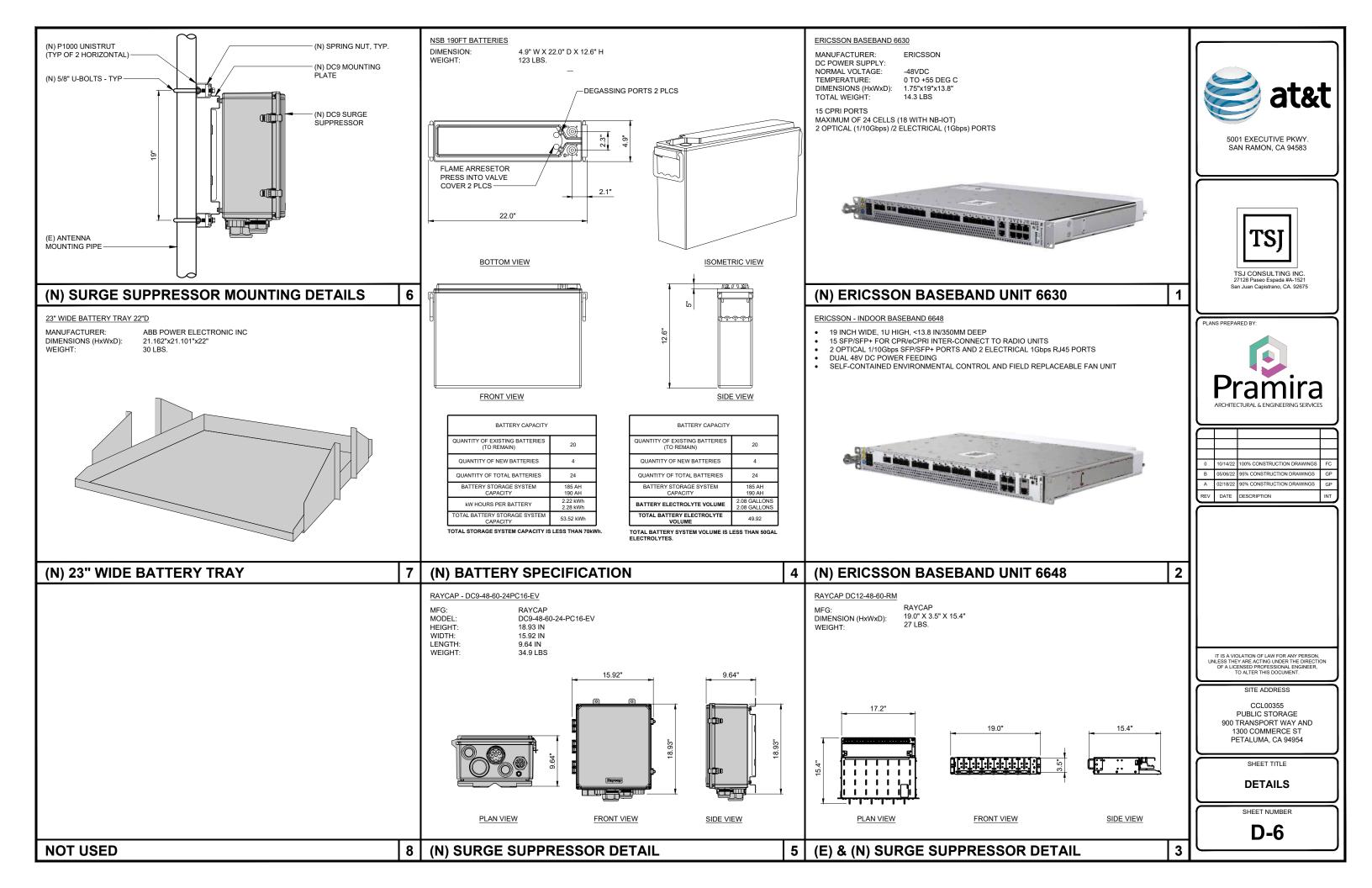




				NOTE: VERIFY MOUNTING HOLES WITH MANUFACTURE PRIOR TO INSTALLATION
NOT USED	7	NOT USED 4	4	(E) RACK ANCHORAGE DET
				NOTE: EXISTING CONCRETE SLAB IS 6" MINIMUM (FIELD VERI
NOT USED	8	NOT USED 5	5	(E) CABINET ANCHORAGE
				CIENA CABINET MANUFACTURER: CIENA MODEL NUMBER: CIENA 3931 DIMENSIONS (H:WxD): 17.2"x16.2"x6.4" TOTAL WEIGHT: 33 LBS.
NOT USED	9	NOT USED 6	6	(E) CIENA CABINET SPECIF







GENERAL NOTES:

- PLAN DRAWINGS SHOWN HEREIN ARE DIAGRAMMATIC AND DOES NOT NECESSARILY DEPICT THE EXACT EQUIPMENT QUANTITIES, LOCATION, LAYOUT AND CONFIGURATION. 1. REFER TO ARCHITECTURAL PLANS FOR EXACT EQUIPMENT LOCATION, LAYOUT AND CONFIGURATION.
- 2. PLAN DRAWINGS SHOWN HEREIN DO SHOW THE NECESSARILY DEPICT ELECTRICAL REQUIREMENTS OF INDIVIDUAL EQUIPMENT AND DEVICES SUCH AS THE EQUIPMENT GROUNDING REQUIREMENTS. POWER REQUIREMENTS AND TELCO RACEWAY REQUIREMENTS.
- REFER TO ARCHITECTURAL PLANS FOR THE LOCATION OF 3. POWER AND TELCO POINT OF CONNECTIONS, THE DISTANCE OF THE RUN AND THE SUGGESTED CONDUIT ROUTING. FIELD VERIFY EXISTING CONDITIONS SPECIFICALLY FOR CONDUIT ROUTING PRIOR TO BID.
- ALL NEW GROUNDING WORK SHALL BE IN ACCORDANCE TO 4. THE AT&T GROUNDING STANDARDS

ALL WORK SHALL BE IN ACCORDANCE TO THE AT&T GROUNDING STANDARDS MORE SPECIFICALLY, ALL CONNECTIONS SHALL BE MADE WITH AN EXOTHERMIC WELD PROCESS. WHERE EXOTHERMIC WELDS ARE NOT POSSIBLE, A 2-HOLE COMPRESSION TYP LUG IS PERMITTED

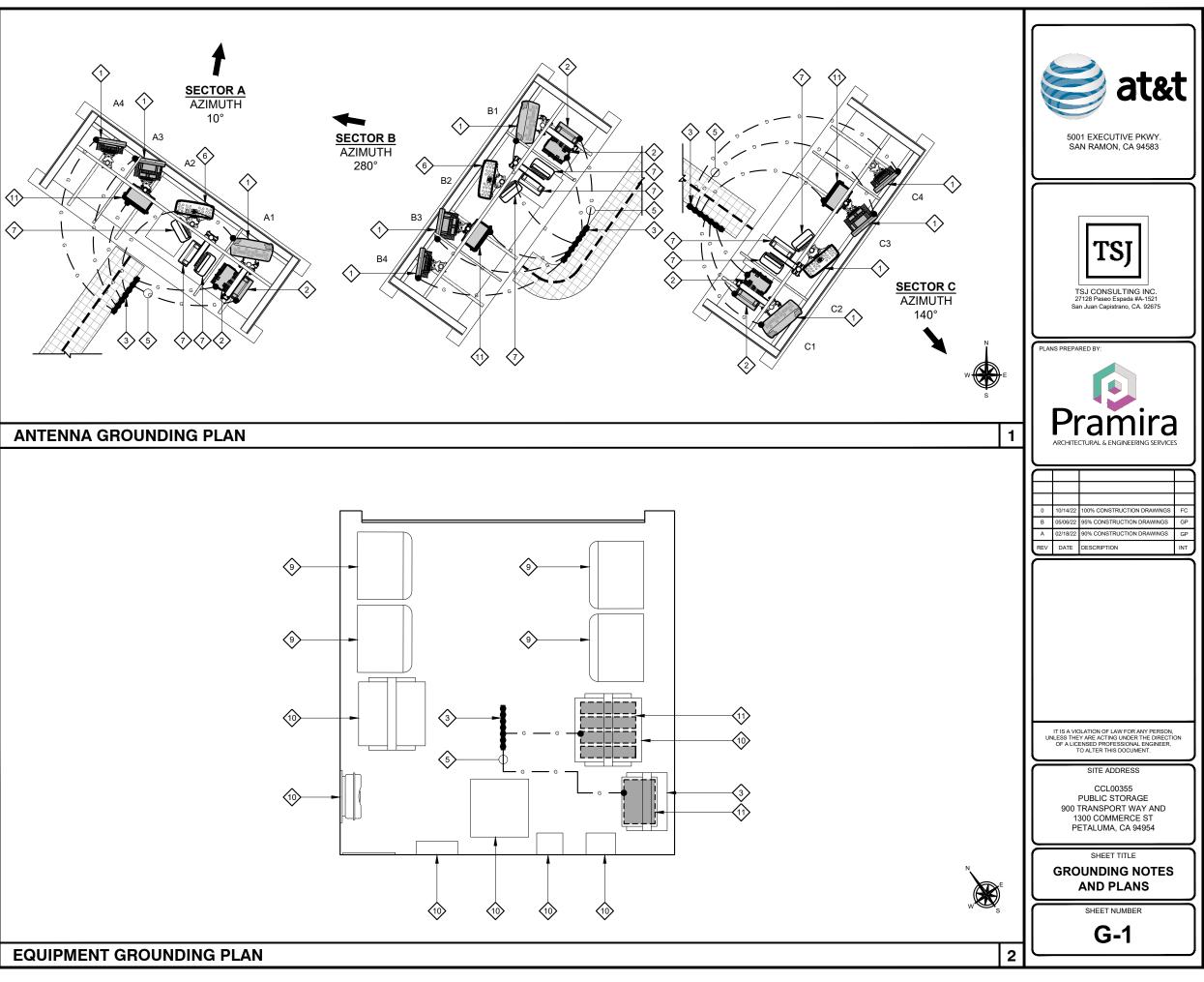
KEY NOTES

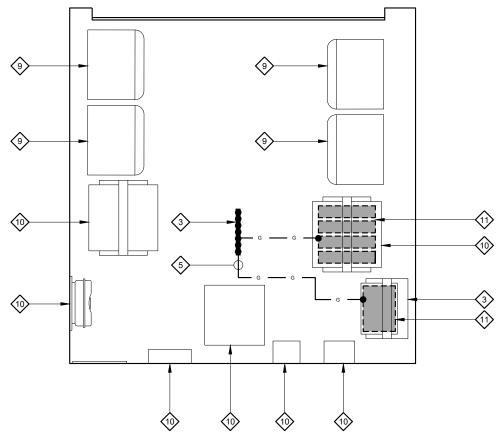
(N) AT&T ANTENNAS $\langle 1 \rangle$

- (N) AT&T RRUS $\langle 2 \rangle$
- $\langle 3 \rangle$ (E) AT&T GROUNDING BUSS BAR AT CEILING LEVEL
- $\langle 4 \rangle$ (E) AT&T GROUNDING SYSTEM
- #2 AWG INSULATED, COPPER WIRE $\langle 5 \rangle$ (UNLESS OTHERWISE SPECIFIED)
- (E) AT&T ANTENNA $\langle 6 \rangle$ PREVIOUSLY GROUNDED
- (E) AT&T RRUS PREVIOUSLY $\langle \gamma \rangle$ GROUNDED
- (E) AT&T SURGE SUPPRESSOR \langle PREVIOUSLY GROUNDED
- (E) AT&T EQUIPMENT CABINET أ⊘ PREVIOUSLY GROUNDED
- (E) AT&T EQUIPMENT (10) PREVIOUSLY GROUNDED
- $\langle 1 \rangle$ (N) AT&T EQUIPMENT

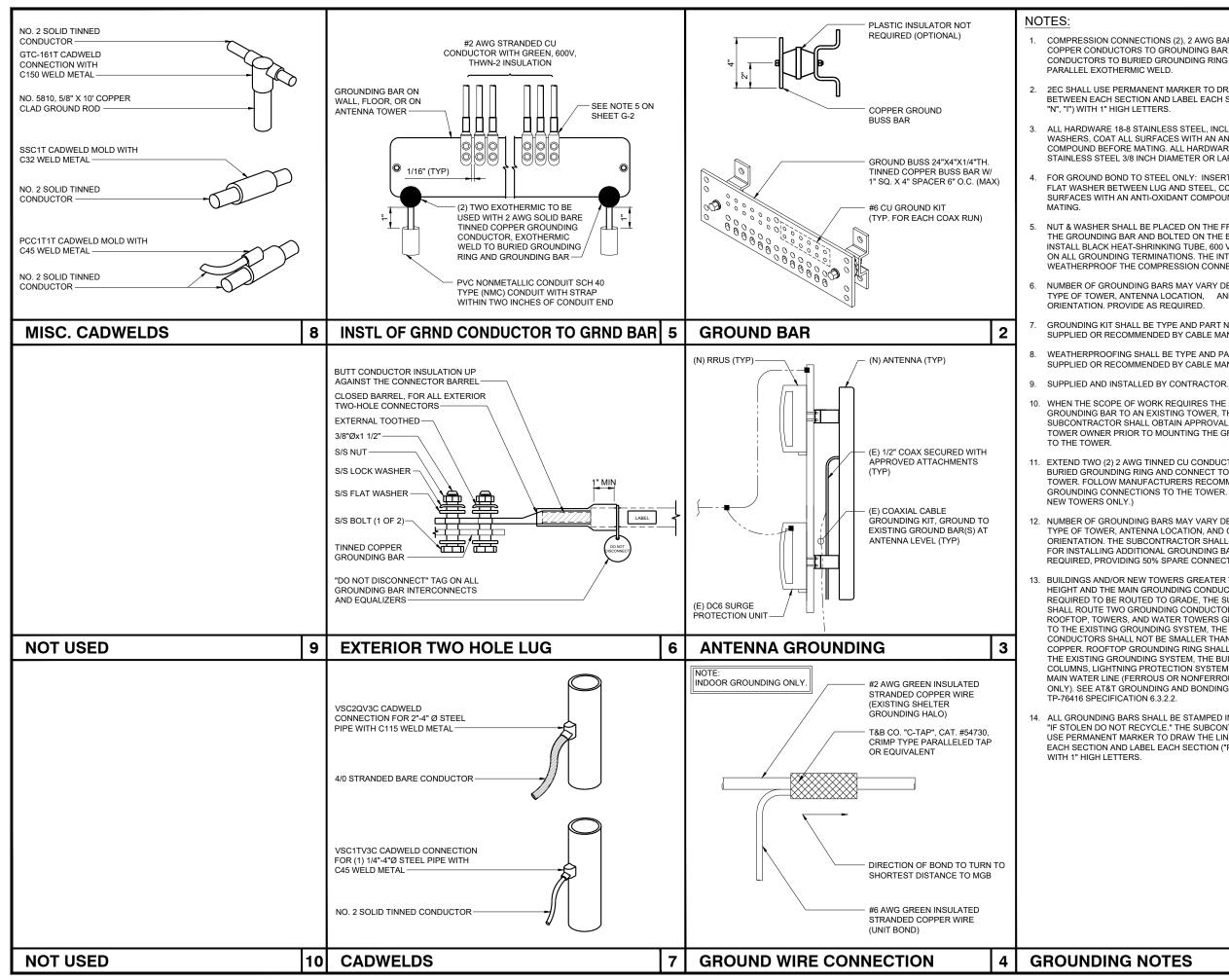
LEGENDS

MECHANICAL CONNECTION	•
EXOTHERMIC WELD (CADWELD/THERMOWELD) CONNECTION	
TEST GROUND ROD WITH INSPECTION SLEEVE	
EXOTHERMIC WITH INSPECTION SLEEVE	
GROUNDING CONDUCTOR	G G
GROUND BAR	******





LEGENDS AND NOTES 3



COMPRESSION CONNECTIONS (2), 2 AWG BARE TINNED SOLID COPPER CONDUCTORS TO GROUNDING BAR. ROUTE CONDUCTORS TO BURIED GROUNDING RING AND PROVIDE

2EC SHALL USE PERMANENT MARKER TO DRAW THE LINES BETWEEN EACH SECTION AND LABEL EACH SECTION ("P", "A",

ALL HARDWARE 18-8 STAINLESS STEEL, INCLUDING LOCK WASHERS, COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING. ALL HARDWARE SHALL BE STAINLESS STEEL 3/8 INCH DIAMETER OR LARGER

FOR GROUND BOND TO STEEL ONLY: INSERT A CADMIUM FLAT WASHER BETWEEN LUG AND STEEL. COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE

NUT & WASHER SHALL BE PLACED ON THE FRONT SIDE OF THE GROUNDING BAR AND BOLTED ON THE BACK SIDE. INSTALL BLACK HEAT-SHRINKING TUBE, 600 VOLT INSULATION, ON ALL GROUNDING TERMINATIONS. THE INTENT IS TO WEATHERPROOF THE COMPRESSION CONNECTION

NUMBER OF GROUNDING BARS MAY VARY DEPENDING ON THE AND CONNECTION

GROUNDING KIT SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER

WEATHERPROOFING SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.

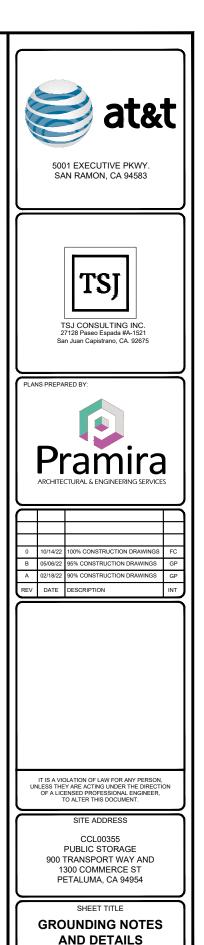
10. WHEN THE SCOPE OF WORK REQUIRES THE ADDITION OF A GROUNDING BAR TO AN EXISTING TOWER. THE SUBCONTRACTOR SHALL OBTAIN APPROVAL FROM THE TOWER OWNER PRIOR TO MOUNTING THE GROUNDING BAR

11. EXTEND TWO (2) 2 AWG TINNED CU CONDUCTOR FROM BURIED GROUNDING RING AND CONNECT TO THE PROPOSED TOWER, FOLLOW MANUFACTURERS RECOMMENDATIONS FOR GROUNDING CONNECTIONS TO THE TOWER. (APPLICABLE TO

NUMBER OF GROUNDING BARS MAY VARY DEPENDING ON THE TYPE OF TOWER, ANTENNA LOCATION, AND CONNECTION ORIENTATION. THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ADDITIONAL GROUNDING BARS AS REQUIRED PROVIDING 50% SPARE CONNECTION POINTS

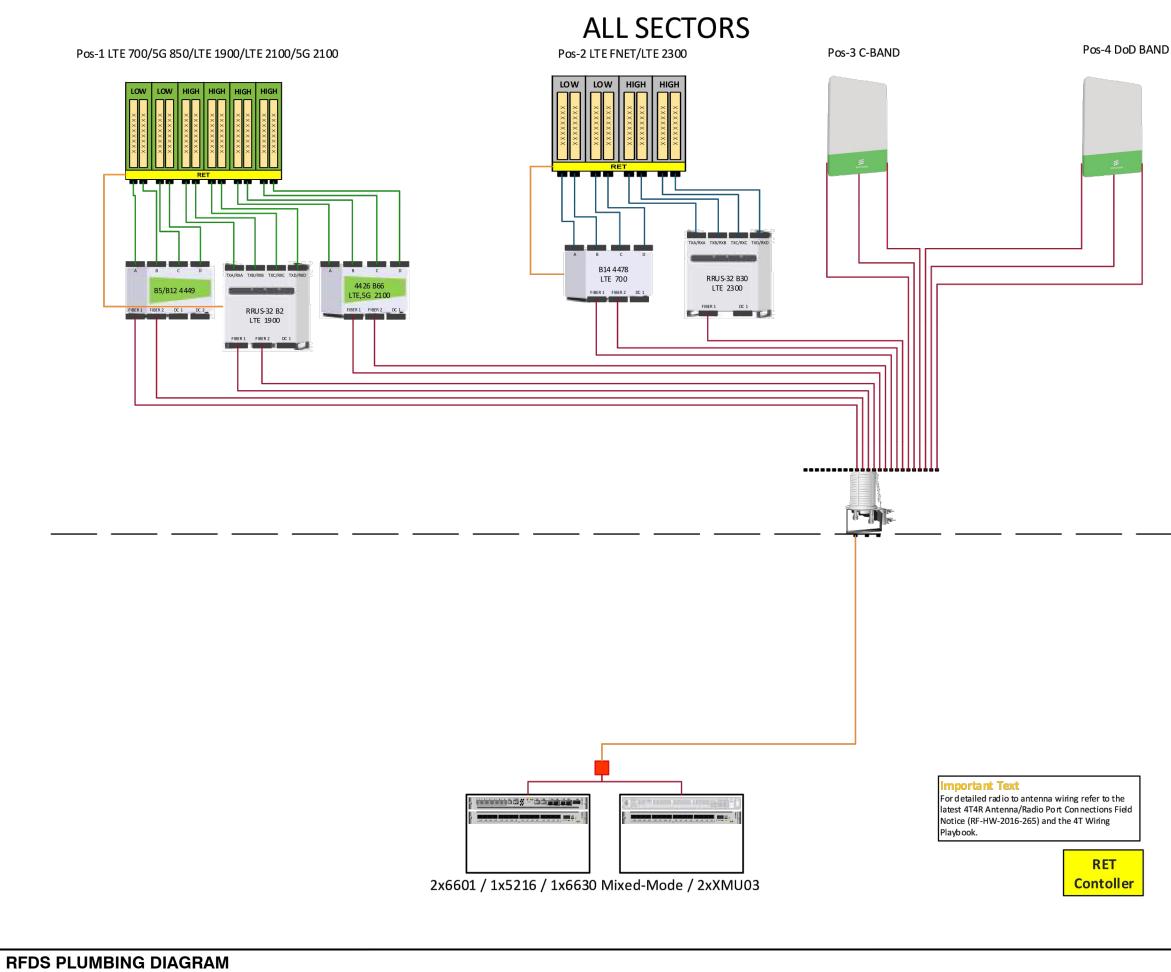
13. BUILDINGS AND/OR NEW TOWERS GREATER THAN 75 FEET IN HEIGHT AND THE MAIN GROUNDING CONDUCTORS ARE REQUIRED TO BE ROUTED TO GRADE, THE SUBCONTRACTOR SHALL ROUTE TWO GROUNDING CONDUCTORS FROM THE ROOFTOP, TOWERS, AND WATER TOWERS GROUNDING RING. TO THE EXISTING GROUNDING SYSTEM, THE GROUNDING CONDUCTORS SHALL NOT BE SMALLER THAN 2/0 AWG 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). SEE AT&T GROUNDING AND BONDING STANDARDS

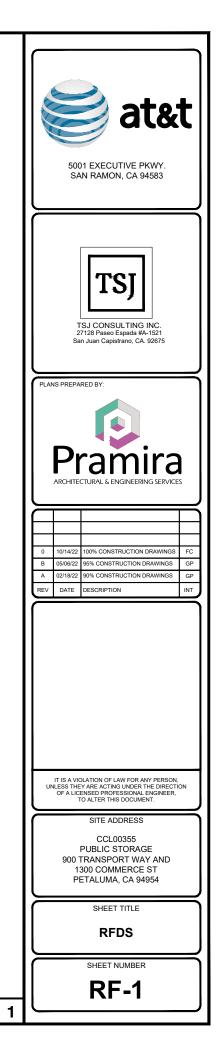
ALL GROUNDING BARS SHALL BE STAMPED IN TO THE METAL "IF STOLEN DO NOT RECYCLE." THE SUBCONTRACTOR SHALL USE PERMANENT MARKER TO DRAW THE LINES BETWEEN EACH SECTION AND LABEL EACH SECTION ("P", "A", "N", "I")



SHEET NUMBER **G-2**

1





Hatch Line