

ENGINEERING
2019 CALIFORNIA BUILDING CODE 2019 CALIFORNIA FIRE CODE 2019 CALIFORNIA MEP CODE 2019 CALIFORNIA MECHANICAL CODE 2019 CALIFORNIA PLUMBING CODE 2019 CALIFORNIA ELECTRICAL CODE 2019 CALIFORNIA ENERGY CODE 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE TIA-222-H

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 INFORMATION	
SITE NAME:	SANTA ROSA
SITE #:	CCL00335
SITE ADDRESS:	1700 HOEN AVENUE SANTA ROSA, CA 95405
COUNTY:	SONOMA
JURISDICTION:	CITY OF SANTA ROSA
PROPOSED USE:	UNMANNED TELECOMMUNICATION FACILITY
APN:	009-231-04
CURRENT ZONING:	R-1-6
CONSTRUCTION TYPE:	V-B
STRUCTURE HEIGHT:	82'-7"
PROPERTY OWNER:	CITY OF SANTA ROSA 100 SANTA ROSA AVE SANTA ROSA, CA 95409
APPLICANT:	AT&T 5001 EXECUTIVE PARKWAY, SAN RAMON, CA 94583
UTILITY POWER:	PG&E
UTILITY TELEPHONE:	AT&T
LATITUDE:	38.4400339
LONGITUDE:	-122.6943339
LAT/LONG TYPE:	NAD 83
GROUND ELEVATION:	± 190'-0" AMSL

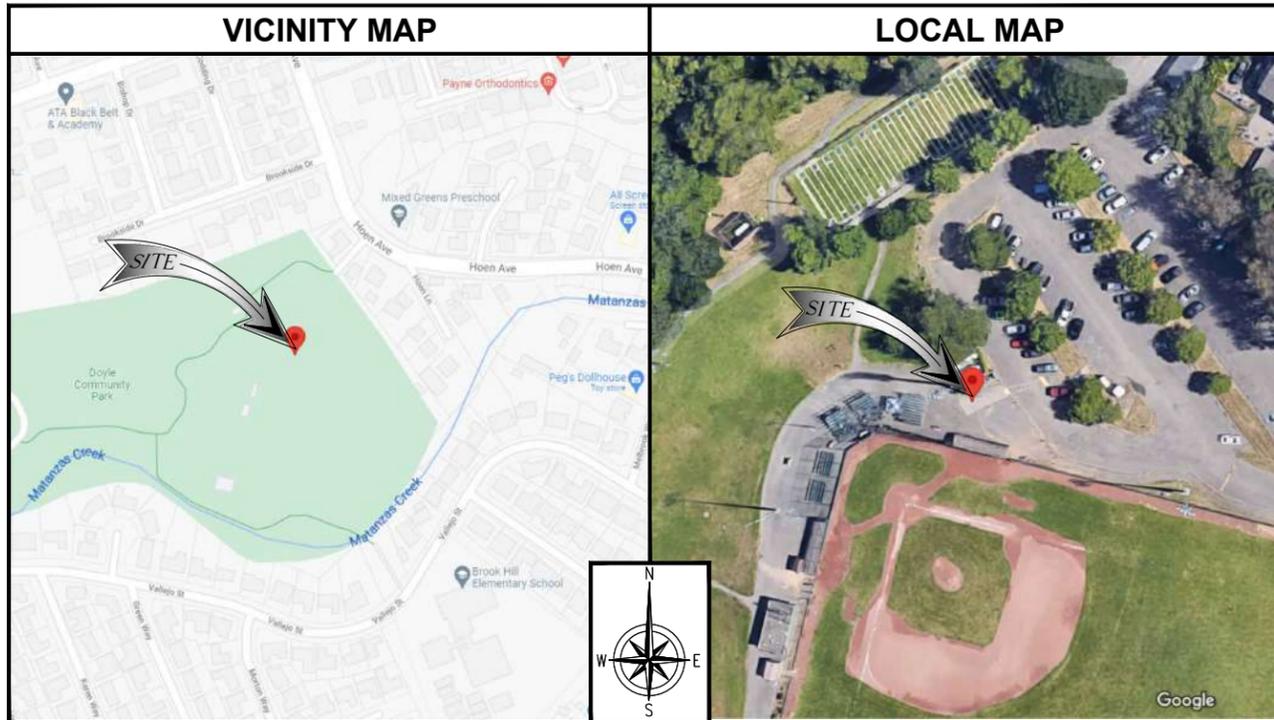
PROJECT TEAM	
RF ENGINEER:	
CONTACT:	SYED HASSAN
PHONE:	
EMAIL:	SH558B@ATT.COM
CONSTRUCTION MANAGER II:	
CONTACT:	ERIC WILLIAMS
PHONE:	(949) 648-3131
EMAIL:	ERIC.A.WILLIAMS@ERICSSON.COM
A&E:	
CONTACT:	MARIA MORRIS
PHONE:	800-678-1169 EXT. 2063; 714-292-4636
EMAIL:	MARIA.MORRIS@PRAMIRA.COM
PERMITTING:	
PRAMIRA	
ADDRESS:	2552 WALNUT AVE, SUITE 200, TUSTIN, CA 92780
CONTACT:	GENESIS ALBAN
PHONE:	800-678-1169 EXT. 2128; 925-490-4788
EMAIL:	GENESIS.ALBAN@PRAMIRA.COM
LEASING:	
PRAMIRA	
ADDRESS:	2552 WALNUT AVE, SUITE 200, TUSTIN, CA 92780
CONTACT:	GLORIA SHIN
PHONE:	213-392-4003
EMAIL:	GLORIA.SHIN@PRAMIRA.COM



FA CODE: 10093007 SITE ID: CCL00335
USID:15996
SITE NAME: SANTA ROSA
1700 HOEN AVENUE
SANTA ROSA, CA 95405
SITE TYPE: 82'-7" LIGHT POLE

PACE ID MRSFR087388 MRSFR087405 MRSFR087427 MRSFR087412 MRSFR087401	TECHNOLOGIES 4TXRX ANTENNA RETROFIT 5G NR 1SR CBAND BWE SOFTWARE CARRIER BBU RECONFIGURATION 5G NR 1SR CBAND	PTN 3705A115C5 3705A114Z8 3705A11619 3705A114V9 3705A11541
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RFDS VER. #2.00 / DATE: 01/25/2022



CD DRAWING
IF USING 11"x17" PLOT, DRAWINGS WILL BE HALF SCALE

PROJECT DESCRIPTION
AT&T MOBILITY PROPOSES TO MODIFY AN (E) WIRELESS INSTALLATION. THE SCOPE WILL CONSIST OF THE FOLLOWING:
AT ANTENNA LEVEL: <ul style="list-style-type: none"> REMOVE (3) (E) COMMSCOPE (JAHH-65A-R3B) PANEL ANTENNAS, (1) PER SECTOR (3) TOTAL REMOVE (3) (E) RRU-11 B12, (1) PER SECTOR (3) TOTAL REMOVE (3) (E) RRU-12 B5, (1) PER SECTOR (3) TOTAL INSTALL (3) (N) CCI (DMP65R-BU4DA-K) PANEL ANTENNA, (1) PER SECTOR (3) TOTAL INSTALL (3) (N) ERICSSON (AIR6449 B77D) PANEL ANTENNA, (1) PER SECTOR (3) TOTAL INSTALL (3) (N) ERICSSON (CBAND AIR ANTENNA) PANEL ANTENNA, (1) PER SECTOR (3) TOTAL INSTALL (3) (N) RRU 4449 B12A, (1) PER SECTOR (3) TOTAL INSTALL (1) (N) DC9 SQUID AT (N) 45° RAD CENTER WITH 2 POWER / 1 FIBER, (1) TOTAL INSTALL (1) (N) DUAL PIPE RING MOUNT AT (N) 45° RAD CENTER
AT EQUIPMENT LEVEL: <ul style="list-style-type: none"> REMOVE (3) (E) UMTS CABINET REMOVE (8) (E) STRINGS OF 150 AH BATTERIES WITHIN (E) BATTERY RACK INSTALL (1) (N) BATTERY CABINET INSTALL (1) (N) PURCELL CABINET INSTALL (1) (N) BASEBAND 6648 IN (N) PURCELL CABINET INSTALL (7) (N) RECTIFIERS WITHIN (E) DC POWER PLANT INSTALL (6) (N) STRINGS OF 190 AH BATTERIES WITHIN (N) BATTERY CABINET
<p style="text-align: center;"> City of Santa Rosa Planning & Economic Development Department May 16, 2022 RECEIVED </p>

DRAWING INDEX	
SHEET NO:	DESCRIPTION:
T-1	TITLE SHEET
T-2	RF SIGNAGE
T-3	PHOTOSIMS
T-4	PHOTOSIMS
GN-1	GENERAL NOTES
GN-2	GENERAL NOTES
A-1	SITE PLAN
A-2	ENLARGED SITE PLAN
A-3	EQUIPMENT LAYOUT
A-4	ANTENNA LAYOUT
A-5	ELEVATIONS
A-6	ELEVATIONS
D-1	DETAILS
D-2	DETAILS
D-3	DETAILS
D-4	DETAILS
D-5	DETAILS
RF-1	RFDS

DO NOT SCALE DRAWINGS
 SUBCONTRACTOR SHALL VERIFY ALL PLANS & EXISTING DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.



CCL00335
 SANTA ROSA
 1700 HOEN AVENUE
 SANTA ROSA, CA 95405
 82'-7" LIGHT POLE



REV	DATE	DESCRIPTION	INT
0	04/29/2022	100% CDS	GCA
B	04/11/2022	95% CDS	RAR
A	02/08/2022	90% CDS	RAR

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

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1

SIGNAGE AND STRIPING INFORMATION

1. 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 1mW/cm² AND THE OCCUPATIONAL LIMIT OF RF EXPOSURE ALLOWED BY AT&T IS 5mW/cm²
3. IF THE BOTTOM OF THE ANTENNA IS MOUNTED (8) EIGHT FEET ABOVE THE GROUND OR ROOF 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 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 BARRICADES AND STRIPING.
5. IF THE PUBLIC LIMIT OF RF EXPOSURE ON THE SITE IS NOT EXCEEDED AND THE AREA IS NOT 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.
6. ALL TRANSMIT ANTENNAS REQUIRE A (3) THREE LANGUAGE WARNING SIGN WRITTEN IN ENGLISH, 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.
7. PHOTOS OF ALL STRIPING, BARRICADES, AND SIGNAGE WILL BE PART OF THE CONTRACTORS 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 RF 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.

NOTES:

1. WARNING SIGN TO BE MOUNTED AT ANTENNA LOCATIONS.
2. SIGN SHALL COMPLY WITH ANSI C95.2 COLOR, SYMBOL, AND CONTENT CONVENTIONS.
3. SIGNAGE SHALL BE CLEARLY LABELED IN A PHENOLIC LABEL WITH A WHITE BACKGROUND AND BLACK LETTERING, AND SHALL BE READABLE FROM AT LEAST (15) FEET FROM THE SIGN.
4. PROPOSED 12"x20" PLASTIC SIGN.

NOTICE TO WORKERS
 RADIO FREQUENCY ANTENNAS ON THIS ROOF. PLEASE EXERCISE CAUTION AROUND ANTENNAS AND OBEY POSTED SIGNS AND/OR MARKINGS. FOR ACCESS TO RESTRICTED AREAS OR FOR FURTHER INFORMATION, PLEASE CALL 1-800-638-2822 (SITE NUMBER: CCL00335)
IN ACCORDANCE WITH FCC RULES 47 CFR 1.1310

AVISO A TRABAJADORES
 EXISTEN ANTENAS DE RADIOFRECUENCIA EN ESTE TECHO. POR FAVOR USE PRECAUCION ALREDEDOR DE LAS ANTENAS Y OBEDEZCA A LAS ZONAS RESTRINGIDAS O PARA OBTENER MAS INFORMACION, LLAME AL TELEFONO 1-800-638-2822 (NUMERO DE SITIO: CCL00335)
DE ACUERDO A LAS REGLAS DE FCC 47 CFR 1.1310

工作人員注意
 此屋宇房頂有射頻天線裝置。在天線範圍內請小心，並遵照各已張貼之指示及/或標識行事。如需進入禁區範圍或索取更多資料，請致電 1-800-832-6662。此站區號：CCL00335
依據 FCC 條例第 47 條 CFR 1.1310 嚴執行

SIGN SHALL BE A PHENOLIC LABEL WITH WHITE BACKGROUND AND BLACK LETTERING. THE TITLE BLOCK SHALL BE A RED BACKGROUND AND 1" HIGH WHITE LETTERING.

NOTE:
SIGN TO BE PERMANENTLY MOUNTED AT THE FOLLOWING LOCATIONS:

1. CELL SITE EQUIPMENT ROOM DOOR
2. BATTERY LOCATION WITHIN PROXIMITY OF BATTERY DISCONNECT
3. FCC (FIRE CONTROL CENTER) ROOM WITHIN PROXIMITY OF THE FIRE ALARM PANEL
4. BUILDING'S MAIN ELECTRICAL ROOM WITHIN PROXIMITY OF THE MAIN SHUTOFF
5. THE CELL SITE MAIN ELECTRICAL DISCONNECT

EMERGENCY SHUT DOWN

FOR IMMEDIATE SHUT DOWN OF ALL RADIO FREQUENCY EMISSIONS OF THIS SITE.

1. CALL CONTACT NUMBER AND GIVE SITE IDENTIFICATION NO. AND CONTACT.
2. DISCONNECT POWER LOCATED ON LEFT SIDE OF THE ROOM ADJACENT TO THE DOOR. EMERGENCY SHUTDOWN SIGNAGE MOUNTED ON (E) MTS.
3. DISCONNECT BACKUP POWER AT BATTERY DISCONNECT. LOCATED ON LEFT SIDE OF THE ROOM ADJACENT TO THE DOOR.

TYPICAL MULTI-LANGUAGE SIGN

4

EMERGENCY SHUT DOWN SIGNAGE

1

NOTICE

Radio frequency fields beyond this point may exceed the FCC general public exposure limit.

Obeys all posted signs and site guidelines for working in radio frequency environments.

In accordance with Federal Communication Commission rules on radio frequency emissions 47 CFR 1.1307 (b).

SITE NO.: CCL00335

CAUTION

AT&T operates antennas at this structure. At this point you are entering an area where radio frequency (RF) fields may exceed the FCC Occupational exposure limits.

Follow safety guidelines for working in an RF environment.

Keep 62 ft. away from the fronts of the antennas.

Contact AT&T at 800-638-2822, opt. 9, 3 and follow their instructions prior to performing any maintenance or repairs above this point.

Cell Site USID: CCL00335

NOTICE SIGN

5

CAUTION SIGN

2

INFORMATION SIGN 1-1
 N.T.S.

INFORMATION SIGN 1-2
 N.T.S.

NOTES:

MULTIPLE SIGNS INSTALLED AT EACH RF STRIPING ZONE.

CAUTION

AT&T operates antennas at this site. In the Striped Area you are entering an area where radio frequency (RF) fields may exceed the FCC Occupational Exposure Limits.

Follow safety guidelines for working in an RF environment.

Contact AT&T at 800-638-2822, option 9 and 3, and follow their instructions prior to performing maintenance or repairs within the striped area.

Cell Site USID: CCL00335

CCL00335
 SANTA ROSA
 1700 HOEN AVENUE
 SANTA ROSA, CA 95405
 82'-7" LIGHT POLE



5001 EXECUTIVE PKWY.
 SAN RAMON, CA 94583



4120 DUBLIN BLVD STE
 450 DUBLIN,
 CALIFORNIA 94568

PLANS PREPARED BY:



REV	DATE	DESCRIPTION	INT
0	04/29/2022	100% CDS	GCA
B	04/11/2022	95% CDS	RAR
A	02/08/2022	90% CDS	RAR

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SHEET TITLE
RF SIGNAGE

SHEET NUMBER
T-2

SIGNAGE AND STRIPING INFORMATION

7 INFORMATION SIGN

6 CAUTION SIGN - RF STRIPING AREA

3

SHOT MAP
 AT&T NODE: CCL00335
 PROJECT NAME: SANTA ROSA



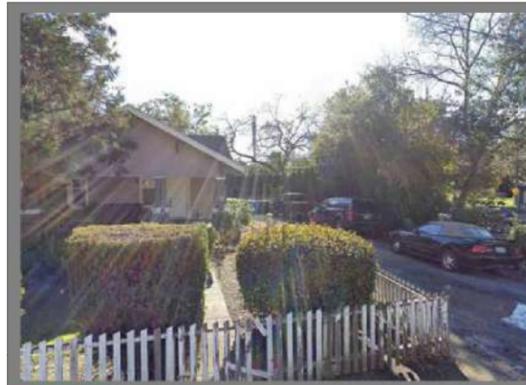
PROPOSED SITE LOCATION



SITE COORDINATES
 LATITUDE: 38.4400339
 LONGITUDE: -122.6943339



VIEW 1



VIEW 2

<p>CCL00335 SANTA ROSA 1700 HOEN AVENUE SANTA ROSA, CA 95409</p>	 NETWORK EVOLUTION SIMPLIFIED 2552 WALNUT AVE, SUITE 200A TUSTIN, CA 92780
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CCL00335
 SANTA ROSA
 1700 HOEN AVENUE
 SANTA ROSA, CA 95405
 82'-7" LIGHT POLE



5001 EXECUTIVE PKWY.
 SAN RAMON, CA 94583



4120 DUBLIN BLVD STE
 450 DUBLIN,
 CALIFORNIA 94568

PLANS PREPARED BY:



Pramira
 ARCHITECTURAL & ENGINEERING SERVICES

REV	DATE	DESCRIPTION	INT
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SHEET TITLE
PHOTOSIMS

SHEET NUMBER
T-3



EXISTING



EXISTING



PROPOSED



PROPOSED

CCL00335
SANTA ROSA
1700 HOEN AVENUE
SANTA ROSA, CA 95405
82'-7" LIGHT POLE



5001 EXECUTIVE PKWY.
SAN RAMON, CA 94583



ERICSSON

4120 DUBLIN BLVD STE
450 DUBLIN,
CALIFORNIA 94568

PLANS PREPARED BY:



ARCHITECTURAL & ENGINEERING SERVICES

REV	DATE	DESCRIPTION	INT
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SHEET TITLE

PHOTOSIMS

SHEET NUMBER

T-4

CCL00335
SANTA ROSA
1700 HOEN AVENUE
SANTA ROSA, CA 95409

**VIEW 1: LOOKING SOUTH WEST ACROSS
SITE ACCESS ROAD**



2552 WALNUT AVE, SUITE 200A
TUSTIN, CA 92780

CCL00335
SANTA ROSA
1700 HOEN AVENUE
SANTA ROSA, CA 95409

**VIEW 2: LOOKING SOUTH WEST ACROSS
HOEN AVE**



2552 WALNUT AVE, SUITE 200A
TUSTIN, CA 92780

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 REV H. THE SPECIFICATION IS THE RULING 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 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 OTHERWISE 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:
 A) TRANSMITTER
 B) RF FILTER
 C) MFTS RACK
 D) AUXILIARY EQUIPMENT IN MFTS RACK
 E) PUMP ASSEMBLY
 F) HEAT EXCHANGER
 G) HOSE AND HOSE MANIFOLDS (ANY COPPER OR STEEL SECTIONS PROVIDE BY CONTRACTOR)
 H) UHF ANTENNA AND MOUNTING BRACKETS, GPS ANTENNAS AND KU ANTENNAS
 I) UHF COAX AND HANGERS
 K) 480-208 & 208-400 ELECTRICAL TRANSFORMERS (RE: E-2 FOR SPECIALIZED TRANSFORMERS PROVIDED BY CONTRACTOR)
 L) AUTOMATIC TRANSFER SWITCH AND GENERATOR
 M) EQUIPMENT SHELTER (SHELTERS FURNISHED IN FACTORY W/ HVAC EQUIPMENT AND ELECTRICAL DISTRIBUTION PANEL)
 N) 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 THE CONTRACT DOCUMENTS, EXISTING CONDITIONS AND/OR DESIGN INTENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE WORK.
- 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 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.
- 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.
- INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS UNLESS SPECIFICALLY OTHERWISE INDICATED OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.
- MAKE NECESSARY PROVISIONS TO PROTECT EXISTING SURFACES, EQUIPMENT, IMPROVEMENTS, PIPING ETC. AND IMMEDIATELY REPAIR ANY DAMAGE THAT OCCURS DURING CONSTRUCTION.
- 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.
- 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 COMPLETION OF CONSTRUCTION.
- MINIMUM BEND RADIUS OF ANTENNA CABLES SHALL BE IN ACCORDANCE WITH CABLE MANUFACTURERS RECOMMENDATIONS.
- 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 APPLICABLE REGULATORY AUTHORITIES
- CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF 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 STRINGENT.
- THE INTENT OF THE PLANS AND SPECIFICATIONS IS TO PERFORM THE CONSTRUCTION IN ACCORDANCE WITH THE CALIFORNIA BUILDING STANDARDS CODE, TITLES 19 AND 24. CALIFORNIA CODE OF REGULATIONS. SHOULD ANY CONDITIONS DEVELOP NOT COVERED BY THE APPROVED PLANS AND SPECIFICATIONS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS, A CHANGE ORDER DETAILED 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 WITH 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 HIMSELF WITH ANY/ALL CONDITIONS AFFECTING 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 VERIFIED BY THE CONTRACTOR, PRIOR TO THE SUBMITTING OF HIS BID. FAILURE TO COMPLY WITH THIS PARAGRAPH 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 ORDINANCES OF THE LOCAL POWER & TELEPHONE COMPANIES HAVING JURISDICTION AND SHALL INCLUDE BUT NOT BE LIMITED TO:
 A. UL - UNDERWRITERS LABORATORIES
 B. NEC - NATIONAL ELECTRICAL CODE
 C. NEMA - NATIONAL ELECTRICAL MANUFACTURERS ASSOC.
 D. OSHA - OCCUPATIONAL SAFETY AND HEALTH ACT
 E. SBC - STANDARD BUILDING CODE
 F. 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.
- EXISTING SERVICES: CONTRACTOR SHALL NOT INTERRUPT EXISTING SERVICES WITHOUT WRITTEN PERMISSION OF THE OWNER.
- CONTRACTOR SHALL PAY FOR ANY/ALL PERMITS, FEES, INSPECTIONS AND TESTING. CONTRACTOR IS TO OBTAIN PERMITS AND APPROVED SUBMITTALS PRIOR TO THE WORK BEGINNING OR ORDERING EQUIPMENT.
- THE TERM "PROVIDE" USED IN CONSTRUCTION DOCUMENTS AND SPECIFICATIONS, INDICATES THAT THE CONTRACTOR 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.
- 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.
- IT IS NOT THE INTENT OF THESE PLANS TO SHOW EVERY MINOR DETAIL OF THE CONSTRUCTION. CONTRACTOR IS EXPECTED TO FURNISH AND INSTALL ALL ITEMS FOR A COMPLETE ELECTRICAL SYSTEM AND PROVIDE ALL REQUIREMENTS FOR THE EQUIPMENT TO BE PLACED IN PROPER WORKING ORDER.
- ELECTRICAL SYSTEM SHALL BE AS COMPLETELY AND EFFECTIVELY GROUNDED, AS REQUIRED BY SPECIFICATIONS, SET FORTH BY AT&T.
- 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.
- ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION.
- 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 THEREIN.
- 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.
- 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.
- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OR MANUFACTURERS CATALOG INFORMATION OF ANY/ALL LIGHTING FIXTURES, SWITCHES AND ALL OTHER ELECTRICAL ITEMS FOR APPROVAL BY THE CONSTRUCTION MANAGER PRIOR TO INSTALLATION.
- 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.
- 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 BY EXPOSURE TYPE.
- 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 'BRITZ ZINC' OR 'GOLD GALV'.
- SUPPORT OF ALL ELECTRICAL WORK SHALL BE AS REQUIRED BY NEC.
- 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.
- 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.
- SERVICE: 240/120V, SINGLE PHASE, 3 WIRE CONNECTION AVAILABLE FROM UTILITY COMPANY. OWNER OR OWNERS AGENT WILL APPLY FOR POWER.
- TELEPHONE SERVICE: CONTRACTOR SHALL PROVIDE EMPTY CONDUITS WITH PULL STRINGS AS INDICATED ON DRAWINGS.
- ELECTRICAL AND TELCO RACEWAYS TO BE BURIED A MINIMUM OF 2' DEPTH.
- 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".
- ALL BOLTS SHALL BE STAINLESS STEEL

GROUNDING NOTES

- COMPRESSION CONNECTIONS (2), 2 AWG BARE TINNED SOLID COPPER CONDUCTORS TO 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", "T") WITH 1" HIGH LETTERS.
 - 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 MATING.
 - NUT & WASHER SHALL BE PLACED ON THE FRONT SIDE OF THE GROUNDING BAR AND 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 MANUFACTURER.
- 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 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 THHN/THWN. ALL GROUND WIRE SHALL BE SOLID TIN COATED OR STRANDED GREEN INSULATED WIRE.
 - 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.
 - NOTIFY ARCHITECT/ENGINEER IF THERE ARE ANY DIFFICULTIES INSTALLING GROUNDING SYSTEM DUE TO SITE SOIL CONDITIONS.
 - BARE GROUNDING CONDUCTOR SHALL BE HARD DRAWN TINNED COPPER SIZES AS NOTED ON PLAN.
 - 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 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.
 B. CADWELD, EXOTHERMIC WELDS (WELDED CONNECTIONS).
 C. TWO (2) HOLE TINNED COPPER COMPRESSION (LONG BARREL) FITTINGS (BUS BAR CONNECTIONS).
 D. ALL CRIMPED CONNECTIONS SHALL HAVE EMBOSSED MANUFACTURER'S DIEMARK VISIBLE AT THE CRIMP (RESULTING FROM USE OF PROPER CRIMPING DEVICES).
 E. PRIOR TO ANY LUG-BUSSBAR CONNECTIONS, THE BUSSBAR SHALL BE CLEANED BY USE OF "SCOTCH-BRITE" OR PLAIN STEEL WOOL AS TO REMOVE ALL SURFACE OXIDATION AND CONTAMINANTS. A COATING OF "NO-OX-ID" SHALL BE APPLIED TO THE CONNECTION SURFACES.
 F. ALL CONNECTION HARDWARE SHALL BE TYPE 316 SS (NOT ATTRACTED TO MAGNETS).
 G. THE GROUND RING SHALL BE INSTALLED 24" MINIMUM BEYOND ANY BUILDING DRIP LINE.
 H. 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.

CCL00335
 SANTA ROSA
 1700 HOEN AVENUE
 SANTA ROSA, CA 95405
 82'-7" LIGHT POLE



REV	DATE	DESCRIPTION	INT
0	04/29/2022	100% CDS	GCA
B	04/11/2022	95% CDS	RAR
A	02/08/2022	90% CDS	RAR

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

SHEET TITLE
GENERAL NOTES

SHEET NUMBER
GN-1

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.
- SIZE, LOCATION AND TYPE OF ANY UNDERGROUND UTILITIES OR IMPROVEMENTS 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 THE INFORMATION SHOWN ON THE PLANS OR THE MANNER OF THEIR REMOVAL OR ADJUSTMENT. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING EXACT LOCATION OF ALL EXISTING 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 REMOVING OR ADJUSTING EXISTING UTILITIES.
- CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES BOTH HORIZONTALLY AND VERTICALLY 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 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 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 PROCTOR DENSITY.
- ALL FILL SHALL BE PLACED IN UNIFORM LIFTS. THE LIFTS THICKNESS SHOULD NOT EXCEED THAT WHICH CAN BE PROPERLY COMPACTED THROUGHOUT ITS ENTIRE DEPTH WITH THE EQUIPMENT AVAILABLE.
- 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.
- 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.
- CONTRACTOR AND/OR DEVELOPER SHALL BE RESPONSIBLE FOR CONSTRUCTION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS DURING CONSTRUCTION FOR PROTECTION OF ADJACENT PROPERTIES, ROADWAYS AND WATERWAYS AND SHALL BE MAINTAINED IN PLACE THROUGH FINAL JURISDICTIONAL INSPECTION & RELEASE OF SITE.
- CONTRACTOR SHALL INSTALL/CONSTRUCT ALL NECESSARY SEDIMENT/SILT CONTROL FENCING AND PROTECTIVE MEASURES WITHIN THE LIMITS OF SITE DISTURBANCE PRIOR TO CONSTRUCTION.
- NO SEDIMENT SHALL BE ALLOWED TO 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.
- 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.
- CLEARING OF VEGETATION AND TREE REMOVAL SHALL BE ONLY AS PERMITTED AND BE HELD TO A MINIMUM. ONLY 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.
- 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

- 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 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 DRY 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 FULL DEPTH AND EITHER 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 PRIOR 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 AS 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 RECURRENT OF VEGETATIVE GROWTH AND EXTEND TO WITHIN 1 FOOT OUTSIDE THE SITE FENCING 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.
- WHEN SUB GRADE OR PREPARED GROUND SURFACE HAS A DENSITY LESS THAN THAT REQUIRED FOR THE FILL MATERIAL, SCARIFY THE GROUND SURFACE TO DEPTH REQUIRED, PULVERIZE, MOISTURE-CONDITION AND/OR AERATE 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 OPERATIONS, 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.
- 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.
- 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 "MATTIS" 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.
- 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
- ALL EXTERIOR EXPOSED STEEL AND HARDWARE SHALL BE HOT DIPPED GALVANIZED.
- ALL WELDING SHALL BE PERFORMED USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC 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" CONNECTIONS AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.
- NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8" DIA. ASTM A307 BOLTS UNLESS NOTED OTHERWISE.
- FIELD MODIFICATIONS ARE TO BE COATED WITH ZINC ENRICHED PAINT.

CONCRETE MASONRY NOTES

- 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.
- ALL HORIZONTAL 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.
- PROVIDE ONE BAR DIAMETER (A MINIMUM OF 1/2") GROUT BETWEEN MAIN REINFORCING AND MASONRY 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 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, ALKAU OR ORGANIC MATERIAL.
- 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 $f_c \approx 2,500$ PSI AT 28 DAYS UNLESS NOTED OTHERWISE.
- 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 CLASS "B" AND ALL HOOKS SHALL BE STANDARD UNLESS NOTED OTHERWISE.
- 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 LARGER.....2 IN.
#5 AND SMALLER & WWF1-1/2 IN.
CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR NOT CAST AGAINST THE GROUND:
SLAB AND WALL3/4 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 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# & MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURES.

FIRE DEPARTMENT NOTES

- THE AT&T PROJECT MANAGER'S DIRECTION, THE CONTRACTOR SHALL PROVIDE "HILTI" HIGH PERFORMANCE FIRE STOP SYSTEM # CP601S AT ALL FIRE RATED PENETRATION INSTALLED PER MANUFACTURE'S LATEST INSTALLATION SPECIFICATION.
- ALL PENETRATIONS THROUGH FIRE RATED ASSEMBLIES SHALL BE CONSTRUCTED SO AS TO MAINTAIN AN EQUAL OR GREATER FIRE RATING.
- BUILDINGS UNDERGOING CONSTRUCTION, ALTERATION OR DEMOLITION SHALL BE IN ACCORDANCE WITH CFC ARTICLE 87. [CFC 8701]
- ADDRESS SHALL BE PROVIDED FOR ALL NEW AND EXISTING BUILDINGS IN A POSITION AS TO BE PLAINLY SEEN VISIBLE AND LEGIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY [CFC 901.4.4, FHPS POLICY P-00-6]
- DECORATIVE MATERIALS SHALL BE MAINTAINED IN A FLAME-RETARDANT CONDITION. [CALIF. CODE OF REGS., TITLE 19, 3.08, 3.21, CEC 2501.5]
- ALL VALVES CONTROLLING THE WATER SUPPLY FOR AUTOMATIC SPRINKLER SYSTEM AND WATER-FLOW SWITCHES ON AL SPRINKLER SYSTEMS SHALL BE ELECTRICALLY MONITORED WHERE THE NUMBER OF SPRINKLERS IS A 100 OR MORE. [CBC 904.3.1, CFC 1003.3.1]
- INSTALLATION OF FIRE ALARM SYSTEMS SHALL BE IN ACCORDANCE WITH CFC 1007.
- AT LEAST ONE FIRE EXTINGUISHER WITH A MINIMUM RATING OF 2A-10BC SHALL BE PROVIDED WITHIN 75 FT. MAXIMUM TRAVEL DISTANCE FOR EACH 6,000 SQ. FT. OR PORTION THEREOF ON EACH FLOOR [CFC 1002, UFC STANDARD 10-1, CALIF. CODE OF REGS., TITLE 19, 3.29]
- 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 JURISDICTION (SAN DIEGO FIRE DEPARTMENT).
- 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 100.3]

CCL00335
SANTA ROSA
1700 HOEN AVENUE
SANTA ROSA, CA 95405
82'-7" LIGHT POLE



REV	DATE	DESCRIPTION	INT
0	04/29/2022	100% CDS	GCA
B	04/11/2022	95% CDS	RAR
A	02/08/2022	90% CDS	RAR

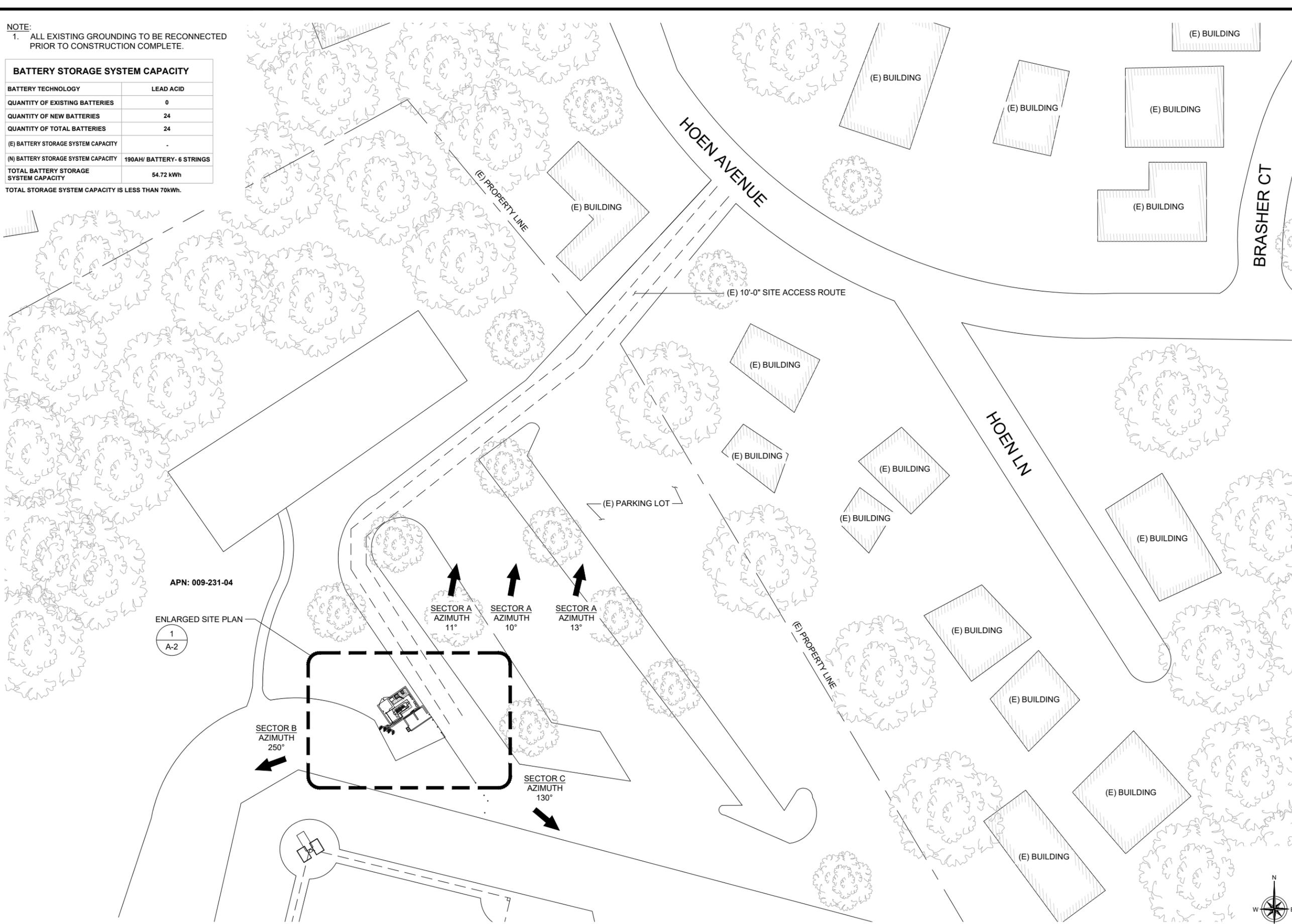
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SHEET TITLE
GENERAL NOTES

SHEET NUMBER
GN-2

NOTE:
1. ALL EXISTING GROUNDING TO BE RECONNECTED PRIOR TO CONSTRUCTION COMPLETE.

BATTERY STORAGE SYSTEM CAPACITY	
BATTERY TECHNOLOGY	LEAD ACID
QUANTITY OF EXISTING BATTERIES	0
QUANTITY OF NEW BATTERIES	24
QUANTITY OF TOTAL BATTERIES	24
(E) BATTERY STORAGE SYSTEM CAPACITY	-
(N) BATTERY STORAGE SYSTEM CAPACITY	190AH/ BATTERY- 6 STRINGS
TOTAL BATTERY STORAGE SYSTEM CAPACITY	54.72 kWh
TOTAL STORAGE SYSTEM CAPACITY IS LESS THAN 70kWh.	



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5001 EXECUTIVE PKWY.
SAN RAMON, CA 94583

4120 DUBLIN BLVD STE
450 DUBLIN,
CALIFORNIA 94568

PLANS PREPARED BY:

Pramira
ARCHITECTURAL & ENGINEERING SERVICES

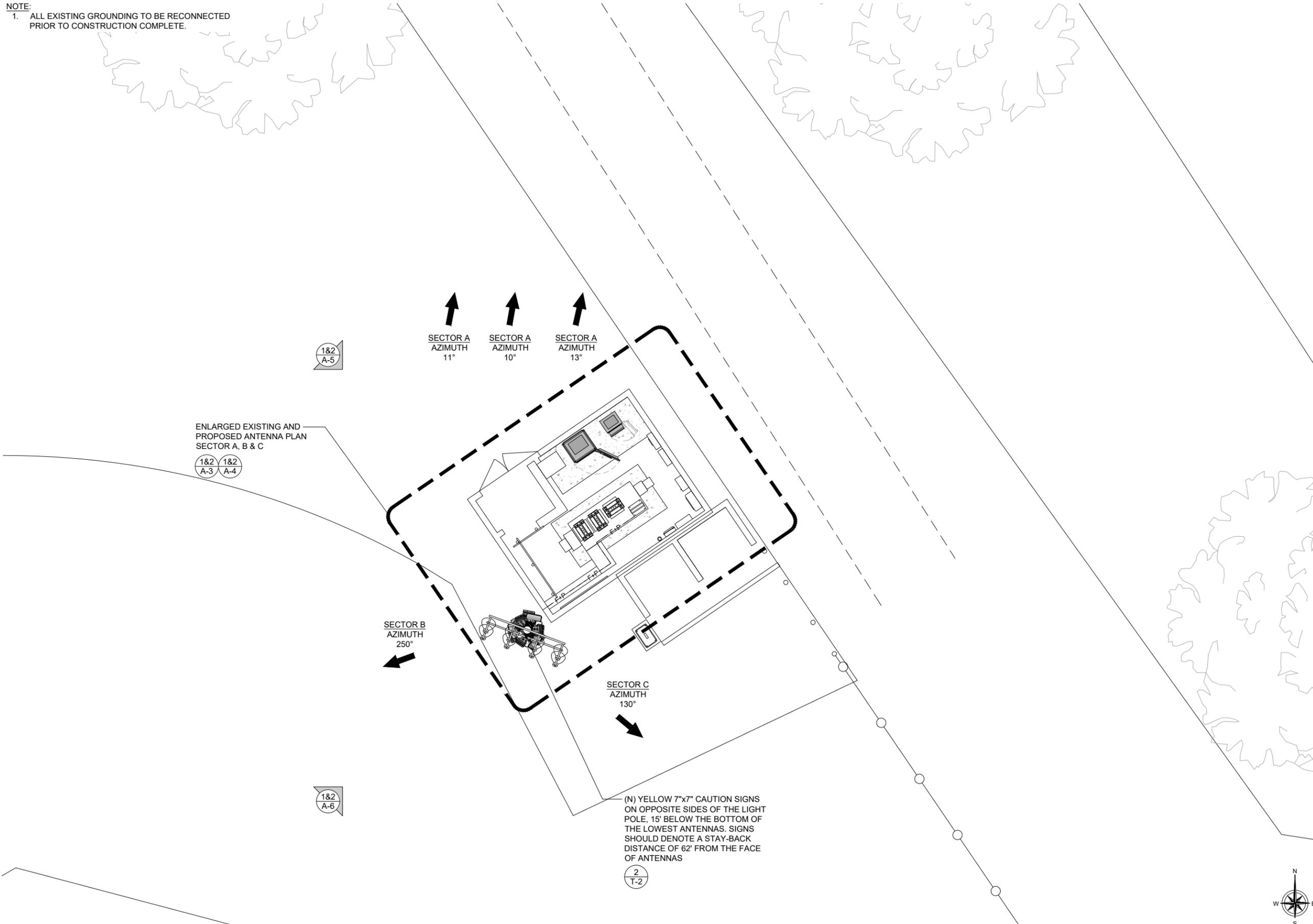
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SHEET TITLE
SITE PLAN

SHEET NUMBER
A-1

NOTE:
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ERICSSON

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SHEET TITLE
**ENLARGED
SITE PLAN**

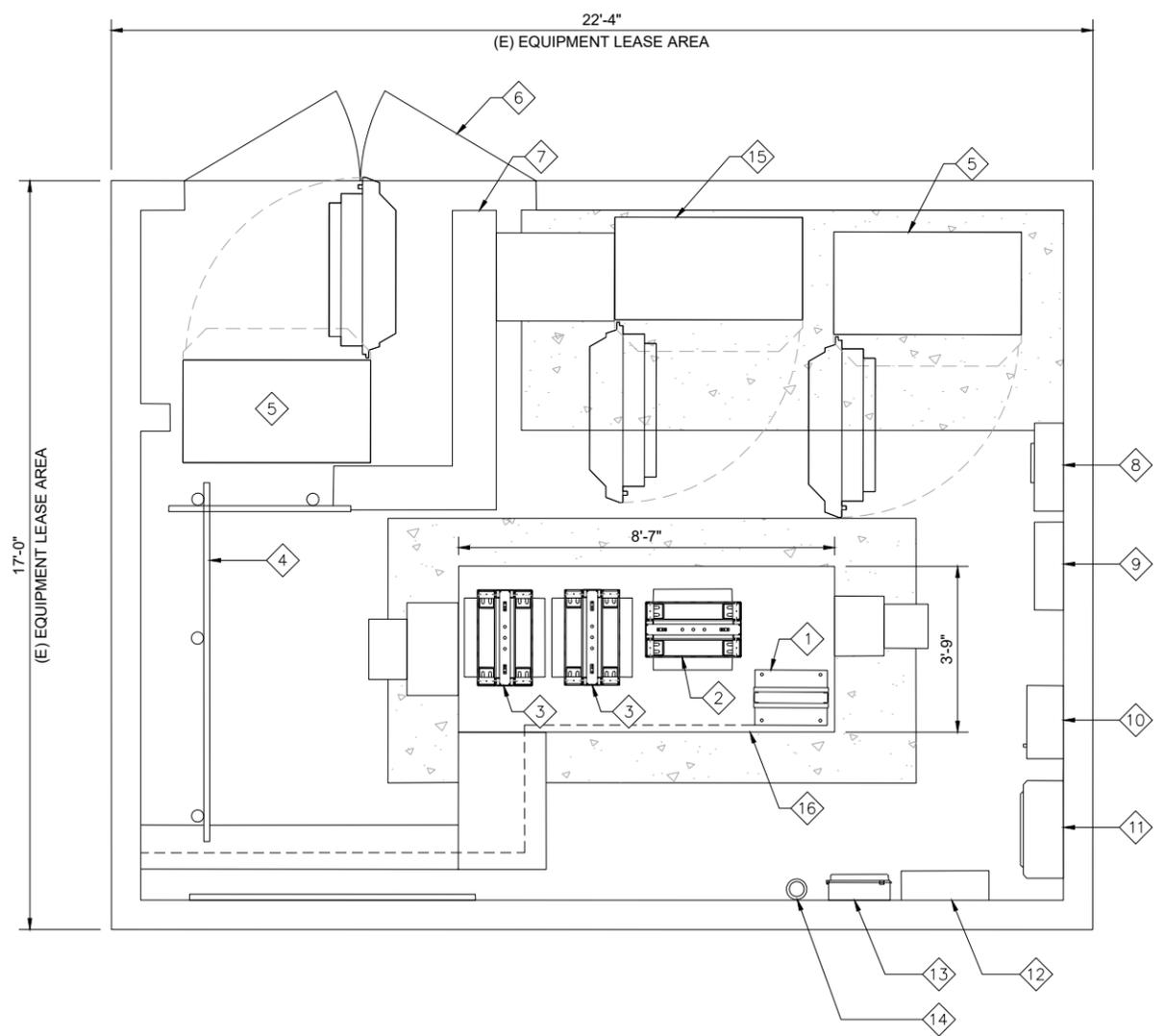
SHEET NUMBER

A-2



EXISTING EQUIPMENT LAYOUT KEY NOTES

- 1 (E) (2) DUS5216 UNITS WITHIN (2) (E) 6601 CHASSIS IN (E) 19" RACK
- 2 (E) AT&T DC POWER PLANT
- 3 (E) AT&T BATTERY RACK INSIDE (E) SUN WEST CABINET, WITH 8 STRINGS OF 150AH BATTERY TO BE REMOVED
- 4 (E) H-FRAME
- 5 (E) RBS 3106 CABINET TO BE REMOVED
- 6 (E) ACCESS GATE
- 7 (E) CABLE TRAY, TYP.
- 8 (E) AT&T METER WITH DISCONNECT
- 9 (E) AT&T TRANSFER SWITCH
- 10 (E) AT&T ELECTRICAL PANEL
- 11 (E) AT&T TELCO DEMARCATION BOX
- 12 (E) FTP CABINET
- 13 (E) CIENA CABINET
- 14 (E) GPS ANTENNA
- 15 (E) RBS 2106 CABINET TO BE REMOVED
- 16 (E) SUN WEST WALK-IN CABINET WITH (3) (E) DC-12 SURGE PROTECTORS INSIDE



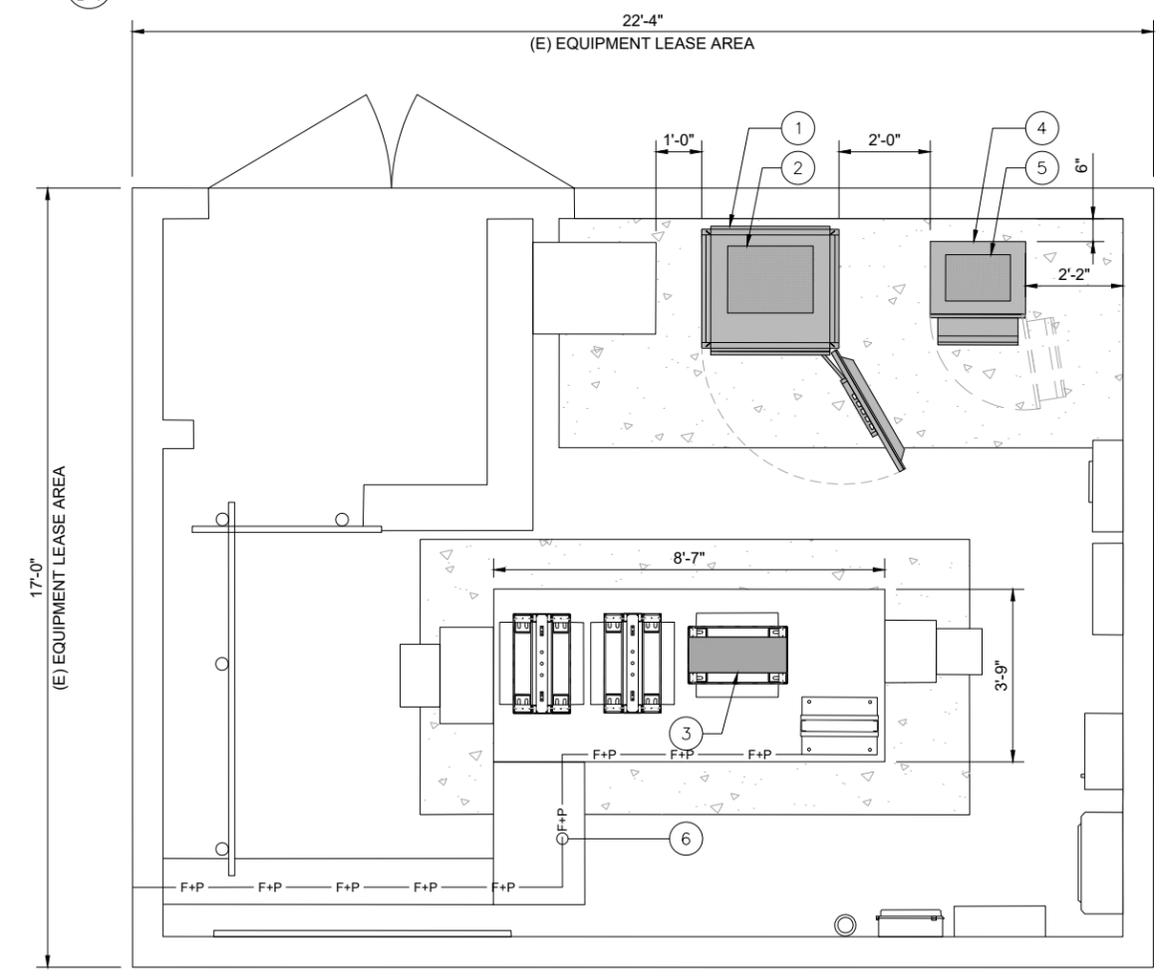
EXISTING EQUIPMENT LAYOUT

24"x36" SCALE: 1/2" = 1'-0"
11"x17" SCALE: 1/4" = 1'-0"



PROPOSED EQUIPMENT LAYOUT KEY NOTES

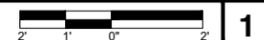
- 1 INSTALL (1) (N) AT&T BATTERY CABINET
- 2 INSTALL (6) (N) STRINGS OF 190 AH BATTERIES WITHIN (N) BATTERY CABINET
- 3 INSTALL (7) (N) AT&T RECTIFIERS WITHIN (E) DC POWER PLANT
- 4 INSTALL (1) (N) PURCELL CABINET
- 5 INSTALL (1) (N) AT&T 6648 BASEBAND UNIT WITHIN (N) PURCELL CABINET
- 6 INSTALL (2) (N) POWER / (1) FIBER CABLE FROM (N) DC9 TO (E) EQUIPMENT AREA



PROPOSED EQUIPMENT LAYOUT

NOTE:
1. ALL EXISTING GROUNDING TO BE RECONNECTED PRIOR TO CONSTRUCTION COMPLETE.

24"x36" SCALE: 1/2" = 1'-0"
11"x17" SCALE: 1/4" = 1'-0"



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SHEET TITLE
EQUIPMENT LAYOUT

SHEET NUMBER
A-3

(E) COMMSCOPE (JAHH-65A-R3B) PANEL ANTENNA TO BE REMOVED, (1) PER SECTOR (3) TOTAL

(E) DC-6 SURGE SUPPRESSOR, (4) TOTAL

1
D-1

1
D-2

SECTOR B
AZIMUTH
250°



@ 72'-0" RAD CENTER

SECTOR A
AZIMUTH
11°



(E) RRUS-11 B12 TO BE REMOVED, (1) PER SECTOR (3) TOTAL

3
D-1

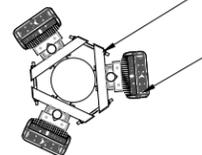
2
D-2

(E) RRUS-12 B5 TO BE REMOVED, (1) PER SECTOR (3) TOTAL

4
D-1

2
D-2

SECTOR C
AZIMUTH
130°



@ 68'-3" RAD CENTER

(E) TRI-SECTOR MOUNT (1) TOTAL

8
D-4

(E) RRUS-32 B66A TO REMAIN, (1) PER SECTOR (3) TOTAL

6
D-1

2
D-2

SECTOR A
AZIMUTH
10°



(E) RRUS-32 B30 TO REMAIN, (1) PER SECTOR (3) TOTAL

5
D-1

2
D-2

(E) RRUS-4478 B14 TO REMAIN, (1) PER SECTOR (3) TOTAL

7
D-1

2
D-2

SECTOR B
AZIMUTH
250°



@ 65'-0" RAD CENTER

(E) KATHREIN (800-10964 K) PANEL ANTENNA TO REMAIN, (1) PER SECTOR (3) TOTAL

2
D-1

1
D-2

SECTOR C
AZIMUTH
130°



(E) DUAL PIPE RING MOUNT (2) TOTAL

2
D-5

(E) RRUS-E2 B29 TO REMAIN, (1) PER SECTOR (3) TOTAL

8
D-1

2
D-2

SECTOR B
AZIMUTH
250°



@ 54'-0" RAD CENTER

SECTOR A
AZIMUTH
13°



(E) COMMSCOPE (JAHH-65A-R3B) PANEL ANTENNA TO REMAIN, (1) PER SECTOR (3) TOTAL

1
D-1

1
D-2

SECTOR C
AZIMUTH
130°



(E) RRUS-32 B2 TO REMAIN, (1) PER SECTOR (3) TOTAL

9
D-1

2
D-2



24"x36" SCALE: 1/2" = 1'-0"
11"x17" SCALE: 1/4" = 1'-0"



2

PROPOSED ANTENNA LAYOUT

(N) RRUS-4449 B5/B12, (1) PER SECTOR (3) TOTAL

2
D-2

4
D-4

(N) CCI (DMP65R-BU4DA-K) PANEL ANTENNA MOUNTED ON TO (E) PIPE MOUNT, (1) PER SECTOR (3) TOTAL

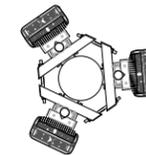
1
D-2

1
D-4

SECTOR B
AZIMUTH
250°



@ 72'-0" RAD CENTER



@ 68'-3" RAD CENTER

SECTOR A
AZIMUTH
11°



SECTOR C
AZIMUTH
130°



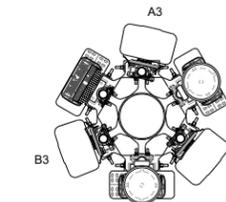
SECTOR A
AZIMUTH
10°



SECTOR C
AZIMUTH
130°



@ 65'-0" RAD CENTER



@ 54'-0" RAD CENTER

SECTOR A
AZIMUTH
13°



SECTOR C
AZIMUTH
130°



SECTOR B
AZIMUTH
250°



SECTOR B
AZIMUTH
250°



@ 45'-0" RAD CENTER

SECTOR A
AZIMUTH
10°



(N) ERICSSON (AIR6449 B77D) PANEL ANTENNA AND CBAND AIR ANTENNA STACK-MOUNTED ONTO (E) PIPE MOUNT, (1) PER SECTOR (3) TOTAL

1
D-2

2
D-4

3
D-4

2
D-5

SECTOR C
AZIMUTH
130°



24"x36" SCALE: 1/2" = 1'-0"
11"x17" SCALE: 1/4" = 1'-0"



1

EXISTING ANTENNA LAYOUT

CCL00335
SANTA ROSA
1700 HOEN AVENUE
SANTA ROSA, CA 95405
82'-7" LIGHT POLE



5001 EXECUTIVE PKWY.
SAN RAMON, CA 94583



4120 DUBLIN BLVD STE
450 DUBLIN,
CALIFORNIA 94568

PLANS PREPARED BY:



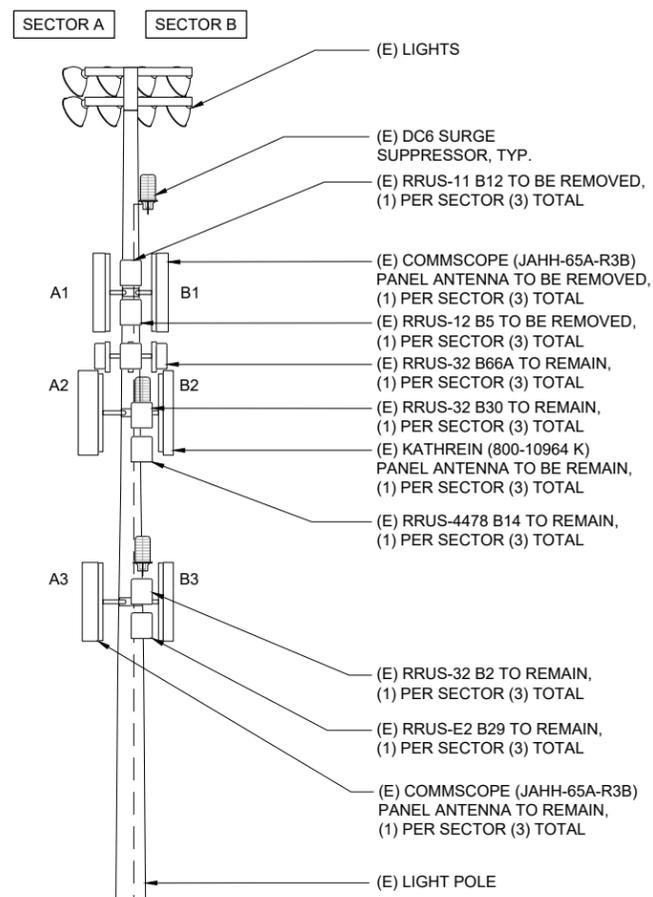
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SHEET TITLE
ANTENNA LAYOUT

SHEET NUMBER
A-4

- T.O. (E) STADIUM LIGHT
ELEV. 85'-1" AGL
- T.O. (E) LIGHT STANDARD
ELEV. 82'-7" AGL
- TOP OF (E) PANEL ANTENNA
ELEV. 74'-4" AGL
- RAD CENTER OF (E) PANEL ANTENNA
ELEV. 72'-0" AGL
- RAD CENTER OF (E) RRUS
ELEV. 68'-3" AGL
- TOP OF (E) PANEL ANTENNA
ELEV. 66'-6" AGL
- RAD CENTER OF (E) PANEL ANTENNA
ELEV. 65'-0" AGL
- TOP OF (E) PANEL ANTENNA
ELEV. 56'-4" AGL
- RAD CENTER OF (E) PANEL ANTENNA
ELEV. 54'-0" AGL



- (E) ACCESS GATE
- (E) EQUIPMENT LEASE AREA
- (E) GPS ANTENNA

FINISHED GRADE
ELEV. ±0'-0" AGL

EXISTING NORTHWEST ELEVATION

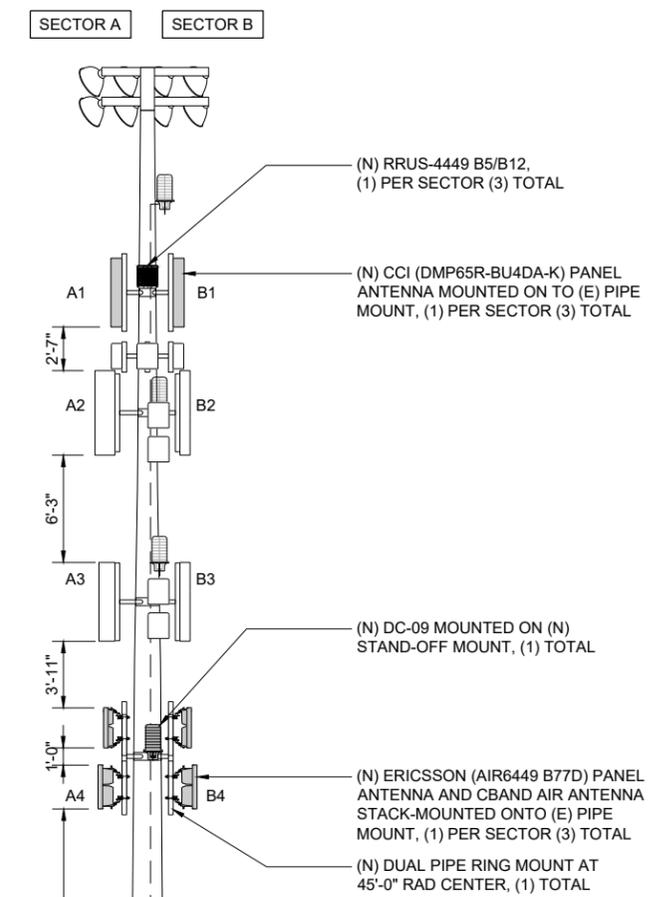
24"x36" SCALE: 3/16" = 1'-0"
11"x17" SCALE: 3/32" = 1'-0"



2

NOTE:
1. ALL EXISTING GROUNDING TO BE RECONNECTED PRIOR TO CONSTRUCTION COMPLETE.

- T.O. (E) STADIUM LIGHT
ELEV. 85'-1" AGL
- T.O. (E) LIGHT STANDARD
ELEV. 82'-7" AGL
- TOP OF (N) PANEL ANTENNA
ELEV. 74'-0" AGL
- RAD CENTER OF (N) PANEL ANTENNA
ELEV. 72'-0" AGL
- RAD CENTER OF (E) RRUS
ELEV. 68'-3" AGL
- TOP OF (E) PANEL ANTENNA
ELEV. 66'-6" AGL
- RAD CENTER OF (E) PANEL ANTENNA
ELEV. 65'-0" AGL
- TOP OF (E) PANEL ANTENNA
ELEV. 56'-4" AGL
- RAD CENTER OF (E) PANEL ANTENNA
ELEV. 54'-0" AGL
- TOP OF (N) PANEL ANTENNA
ELEV. 47'-11" AGL
- RAD CENTER OF (N) PANEL ANTENNA
ELEV. 45'-0" AGL



FINISHED GRADE
ELEV. ±0'-0" AGL

PROPOSED NORTHWEST ELEVATION

24"x36" SCALE: 3/16" = 1'-0"
11"x17" SCALE: 3/32" = 1'-0"



1

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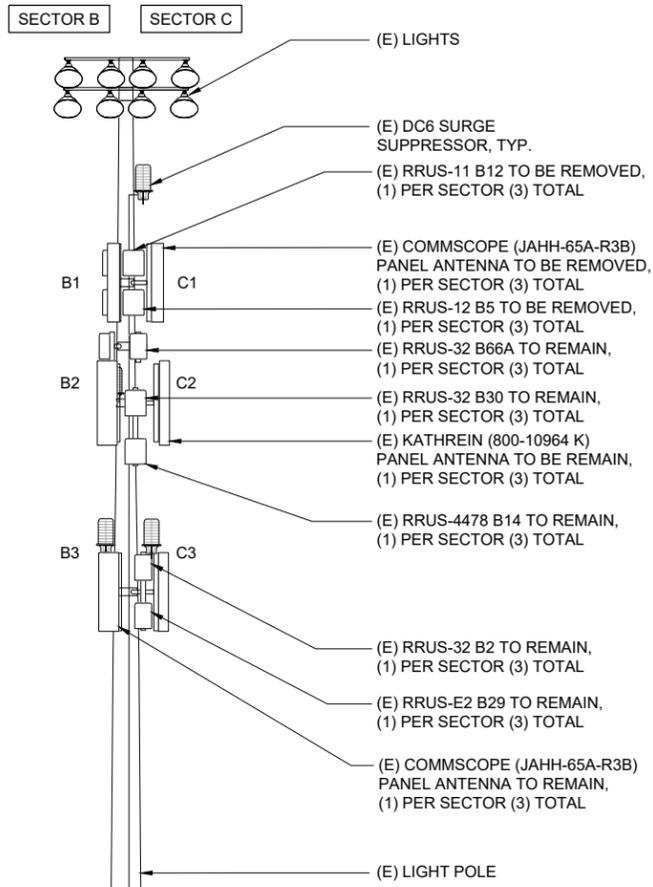
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SHEET TITLE
ELEVATIONS

SHEET NUMBER
A-5

- T.O. (E) STADIUM LIGHT
ELEV. 85'-1" AGL
- T.O. (E) LIGHT STANDARD
ELEV. 82'-7" AGL
- TOP OF (E) PANEL ANTENNA
ELEV. 74'-4" AGL
- RAD CENTER OF (E) PANEL ANTENNA
ELEV. 72'-0" AGL
- RAD CENTER OF (E) RRUS
ELEV. 68'-3" AGL
- TOP OF (E) PANEL ANTENNA
ELEV. 66'-6" AGL
- RAD CENTER OF (E) PANEL ANTENNA
ELEV. 65'-0" AGL
- TOP OF (E) PANEL ANTENNA
ELEV. 56'-4" AGL
- RAD CENTER OF (E) PANEL ANTENNA
ELEV. 54'-0" AGL



(E) EQUIPMENT LEASE AREA

FINISHED GRADE
ELEV. ±0'-0" AGL

EXISTING SOUTHWEST ELEVATION

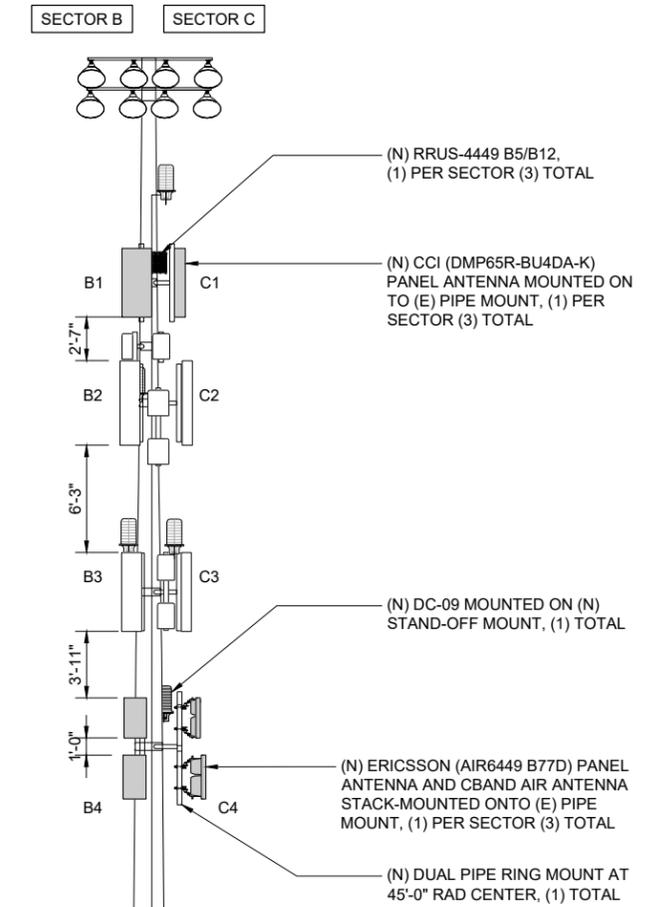
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11"x17" SCALE: 3/32" = 1'-0"



2

NOTE:
1. ALL EXISTING GROUNDING TO BE RECONNECTED PRIOR TO CONSTRUCTION COMPLETE.

- T.O. (E) STADIUM LIGHT
ELEV. 85'-1" AGL
- T.O. (E) LIGHT STANDARD
ELEV. 82'-7" AGL
- TOP OF (N) PANEL ANTENNA
ELEV. 74'-0" AGL
- RAD CENTER OF (N) PANEL ANTENNA
ELEV. 72'-0" AGL
- RAD CENTER OF (E) RRUS
ELEV. 68'-3" AGL
- TOP OF (E) PANEL ANTENNA
ELEV. 66'-6" AGL
- RAD CENTER OF (E) PANEL ANTENNA
ELEV. 65'-0" AGL
- TOP OF (E) PANEL ANTENNA
ELEV. 56'-4" AGL
- RAD CENTER OF (E) PANEL ANTENNA
ELEV. 54'-0" AGL
- TOP OF (N) PANEL ANTENNA
ELEV. 47'-11" AGL
- RAD CENTER OF (N) PANEL ANTENNA
ELEV. 45'-0" AGL



FINISHED GRADE
ELEV. ±0'-0" AGL

PROPOSED SOUTHWEST ELEVATION

24"x36" SCALE: 3/16" = 1'-0"
11"x17" SCALE: 3/32" = 1'-0"



1

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SANTA ROSA, CA 95405
82'-7" LIGHT POLE



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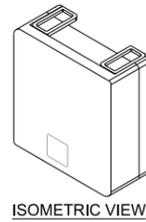
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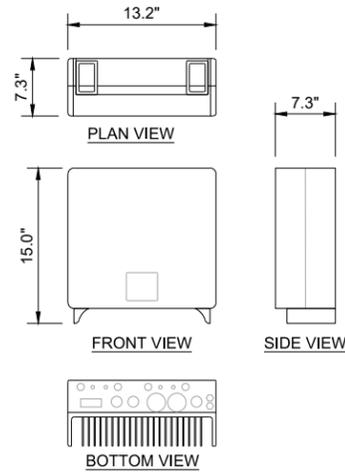
SHEET TITLE
ELEVATIONS

SHEET NUMBER
A-6

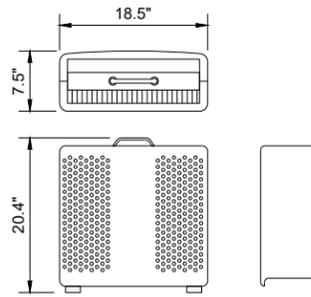
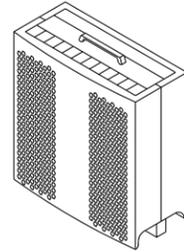
MANUFACTURER: ERICSSON
 MODEL NUMBER: RRUS-4478 B14
 DIMENSIONS (HxWxD): 15.0"x13.2"x7.3"
 POWER CONSUMPTION: 4x40 WATTS
 WEIGHT: 59.4 LBS
 TEMPERATURE: -40° TO 55° C



ISOMETRIC VIEW



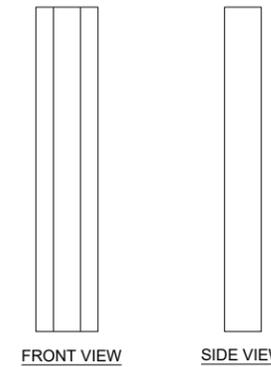
MANUFACTURER: ERICSSON
 MODEL NUMBER: RRUS-12 B5
 DIMENSIONS (HxWxD): 20.4"x18.5"x7.5"
 TOTAL WEIGHT: 58 LBS



MANUFACTURER: COMMSCOPE
 MODEL NUMBER: JAHH-65A-R3B
 OP. FREQ BAND: 698-896MHz AND 1695-2400MHz
 DIMENSIONS (HxWxD): 55.1"x13.8"x8.2"
 TOTAL WEIGHT: 54.01 LBS
 RET INTERFACE: 8 X 4.3-10 FEMALE



PLAN VIEW



FRONT VIEW

SIDE VIEW

CCL00335
 SANTA ROSA
 1700 HOEN AVENUE
 SANTA ROSA, CA 95405
 82'-7" LIGHT POLE



5001 EXECUTIVE PKWY.
 SAN RAMON, CA 94583



ERICSSON

4120 DUBLIN BLVD STE
 450 DUBLIN,
 CALIFORNIA 94568

PLANS PREPARED BY:



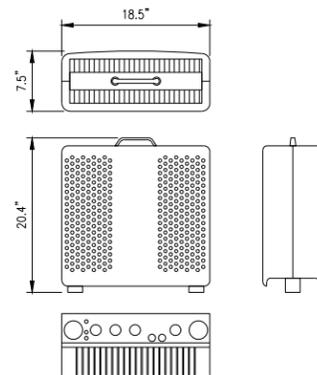
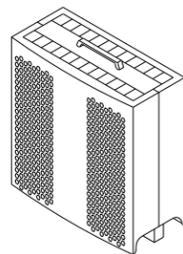
REV	DATE	DESCRIPTION	INT
0	04/29/2022	100% CDS	GCA
B	04/11/2022	95% CDS	RAR
A	02/08/2022	90% CDS	RAR

(E) RRUS-4478 B14 SPECIFICATIONS

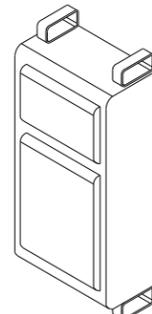
(E) RRUS-12 B5 SPECIFICATIONS

(E) COMMSCOPE JAHH-65A-R3B

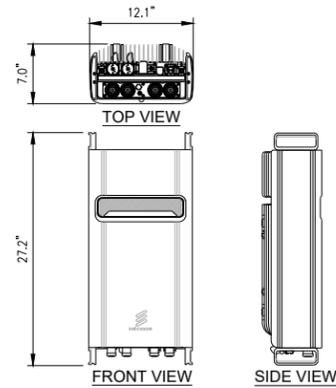
MANUFACTURER: ERICSSON
 MODEL NUMBER: RRUS-E2 B29
 DIMENSIONS (HxWxD): 20.4"x18.5"x7.5"
 TOTAL WEIGHT: 53 lbs



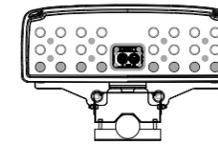
ERICSSON RRUS-32 B30
 MANUFACTURER: ERICSSON
 MODEL NUMBER: RRUS-32 B30
 DIMENSIONS (HxWxD): 27.2"x12.1"x7.0"
 DC LAD VALUE: 800W
 TOTAL WEIGHT: 53 LBS
 WCS: TX =2350 - 2360 MHz
 RX =2305 - 2315 MHz



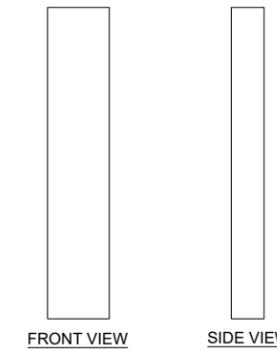
ISOMETRIC VIEW



KATHREIN 800-10964K
 MANUFACTURER: KATHREIN
 MODEL NUMBER: 800-10964K ANTENNA
 DIMENSIONS (HxWxD): 59.0"x20.0"x6.90"
 TOTAL WEIGHT: 83.8 LBS



PLAN VIEW



FRONT VIEW

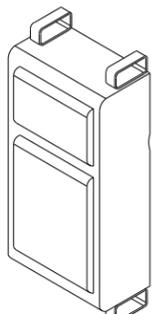
SIDE VIEW

(E) RRUS-E2 B29 SPECIFICATIONS

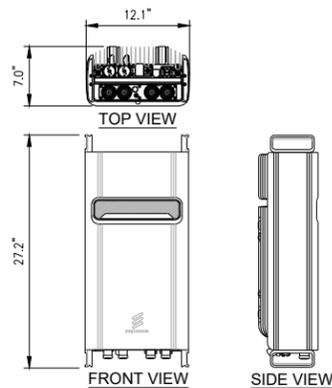
(E) RRUS-32 B30 SPECIFICATIONS

(E) KATHREIN 800-10964K ANTENNA

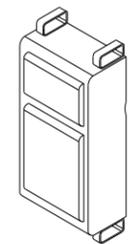
ERICSSON RRUS-32 B2
 MANUFACTURER: ERICSSON
 MODEL NUMBER: RRUS-32 B2
 DIMENSIONS (HxWxD): 27.2"x12.1"x7.0"
 DC LAD VALUE: 800W
 TOTAL WEIGHT: 53 LBS
 WCS: TX =2350 - 2360 MHz
 RX =2305 - 2315 MHz



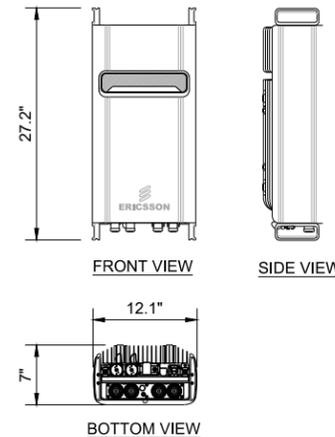
ISOMETRIC VIEW



MANUFACTURER: ERICSSON
 MODEL NUMBER: RRUS-32 B66
 DIMENSIONS (HxWxD): 27.2"x12.1"x7"
 POWER CONSUMPTION: 910 WATTS
 TOTAL WEIGHT: 53 LBS



ISOMETRIC VIEW

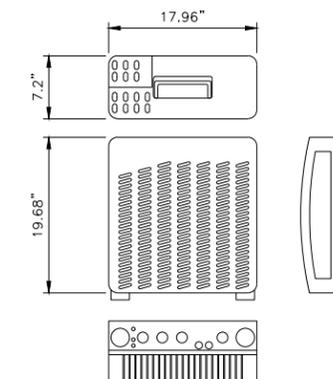
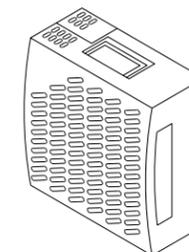


FRONT VIEW

SIDE VIEW

BOTTOM VIEW

MANUFACTURER: ERICSSON
 MODEL NUMBER: RRUS-11 B12
 DIMENSIONS (HxWxD): 19.68"x16.96"x7.2"
 TOTAL WEIGHT: 55.11 lbs



(E) RRUS-32 B2 SPECIFICATIONS

(E) RRUS-32 B66A SPECIFICATIONS

(E) RRUS-11 B12 SPECIFICATIONS

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 TO ALTER THIS DOCUMENT.

SHEET TITLE

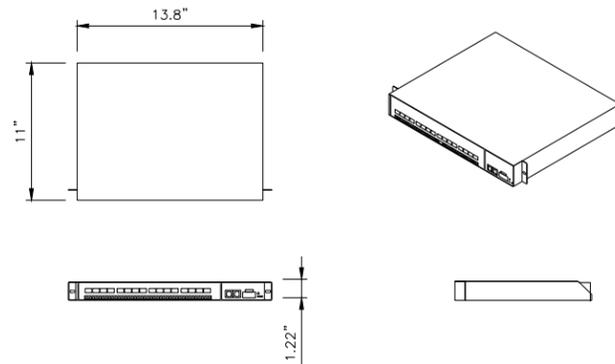
DETAILS

SHEET NUMBER

D-1

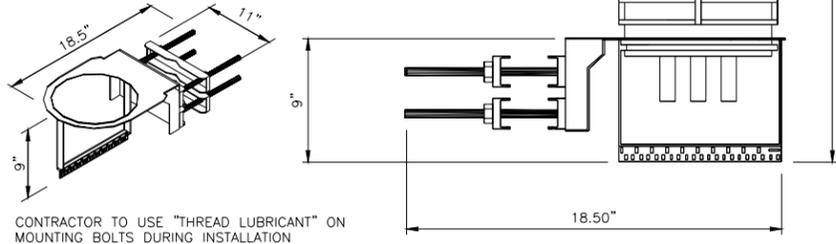
ERICSSON BASEBAND UNIT 5216

DIMENSIONS, WxDxH: (13.8"x11"x1.22")
MAX POWER CONSUMPTION: 80 W
BREAKER SIZE: MIN 15 A, MAX 20 A
TOTAL WEIGHT: 8.8 lbs

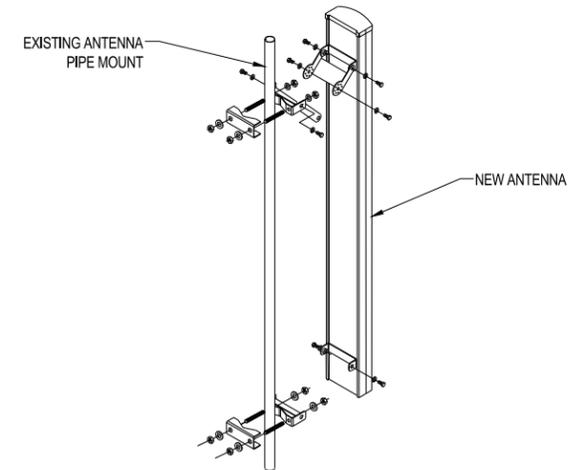


RAYCAP DC6-48-60-18-8F

DIMENSIONS, WxDxH: 11.0"x18.50"x24.0"
NOMINAL OPERATING VOLTAGE: 48 VDC
NOMINAL DISCHARGE CURRENT: 20 kA 8/20µs
MAXIMUM DISCHARGE CURRENT: 60 kA 8/20µs
MAXIMUM CONTINUOUS OPERATING VOLTAGE: 75 VDC
VOLTAGE PROTECTION RATING: 400 V
WIND LOADING: 150 MPH (SUSTAINED)
 195 MPH (GUST)
TOTAL WEIGHT: 32.8 lbs



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



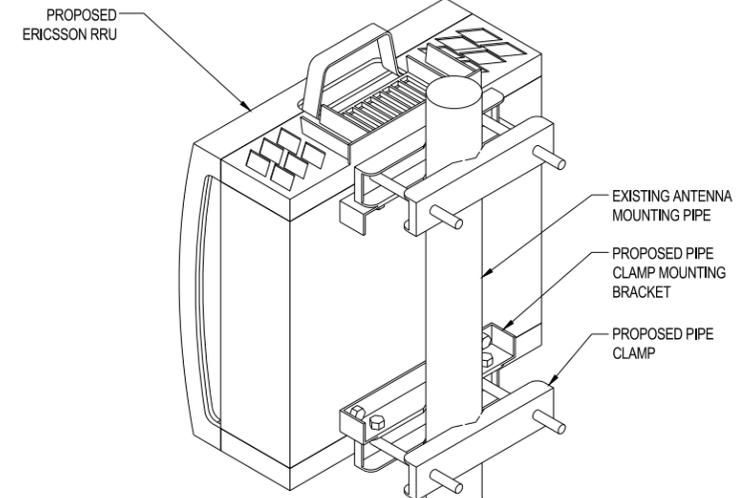
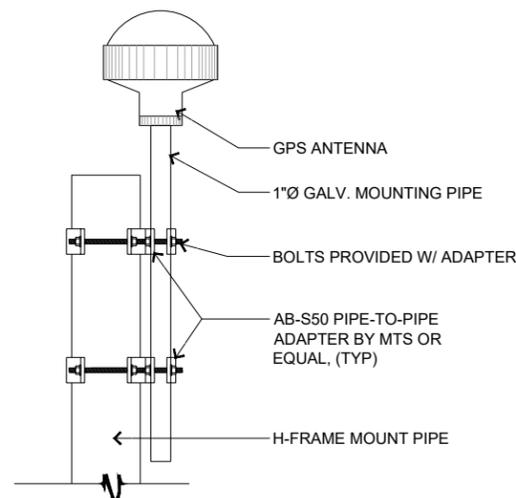
(E) BASEBAND 5216

7 (E) DC-6 SURGE SUPPRESSOR

4 (E) & (N) TYPICAL ANTENNA MOUNT DETAIL

1

MANUFACTURER: ERICSSON
MODEL NUMBER: 6601 V2 CHASSIS
DIMENSIONS (WxDxH): 19"x13.77"x2.59"
NOMINAL VOLTAGE: -48VDC
OPERATING VOLTAGE RANGE: -40.0 TO -57.6VDC
NON-DESTRUCTIVE VOLTAGE RANGE: 0 TO -60VDC
POWER CONSUMPTION: 250W
WEIGHT: <22.04"



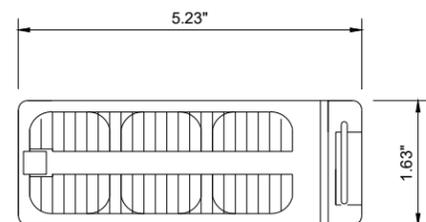
(E) ERICSSON - 6601 V2 CHASSIS

8 (E) GPS ANTENNA

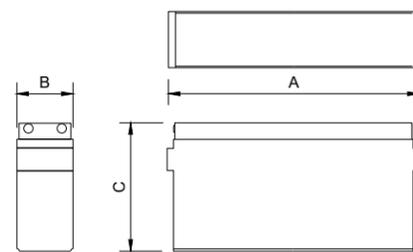
5 (E) & (N) TYPICAL RRU PIPE MOUNTING DETAIL

2

MANUFACTURER: GE
LENGTH: 13.58 INCHES
WIDTH: 5.23 INCHES
HEIGHT: 1.63 INCHES
WEIGHT: 5.05 LBS.
VOLTAGE RANGE: 42-60VDC
INPUT CURRENT: 41A @ 54.5VDC/54A @ 42VDC
OUTPUT CURRENT: 75A @ 27.2V
VOLTAGE ADJUST RANGE: 23-28VDC

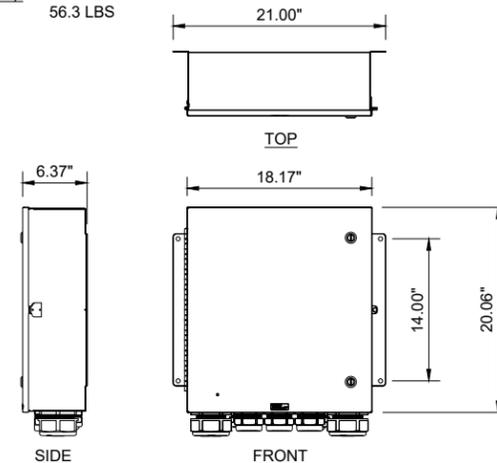


DEKA FAHRENHEIT 150HT BATTERY



Model Number		Capacity (AH) 8 Hr To 1.75 VPC @ 25°C	Nominal Dimensions			Nominal Weight		
Voltage	Inches		Millimeters	lbs.	Kg			
HT150ET	12	145 AH	A	B	C			
			22.17	4.97	11.63	563	126.3	295.5
							103	47

DC12-48-60-0-25E
MANUFACTURER: RAYCAP
MODEL: DC12-48-60-0-25E
DIMENSIONS (HxWxD): 6.37"x20.06"x18.17"
TOTAL WEIGHT: 56.3 LBS



(E) & (N) GE RECTIFIER

9 (E) BATTERY SPECIFICATIONS

6 (E) DC12 SURGE SUPPRESSOR

3

CCL00335
 SANTA ROSA
 1700 HOEN AVENUE
 SANTA ROSA, CA 95405
 82'-7" LIGHT POLE



5001 EXECUTIVE PKWY.
 SAN RAMON, CA 94583



ERICSSON

4120 DUBLIN BLVD STE
 450 DUBLIN,
 CALIFORNIA 94568

PLANS PREPARED BY:



Pramira
 ARCHITECTURAL & ENGINEERING SERVICES

REV	DATE	DESCRIPTION	INT
0	04/29/2022	100% CDS	GCA
B	04/11/2022	95% CDS	RAR
A	02/08/2022	90% CDS	RAR

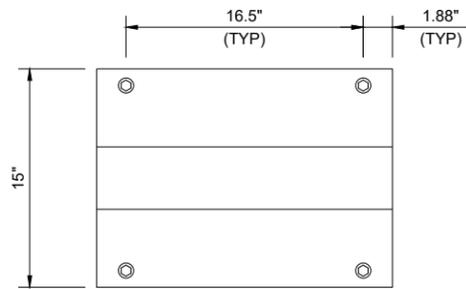
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SHEET TITLE

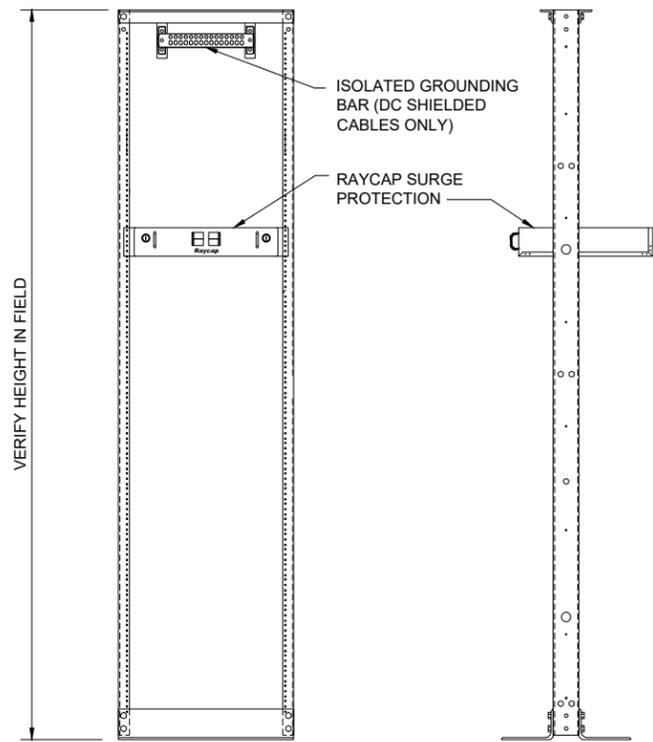
DETAILS

SHEET NUMBER

D-2



PLAN

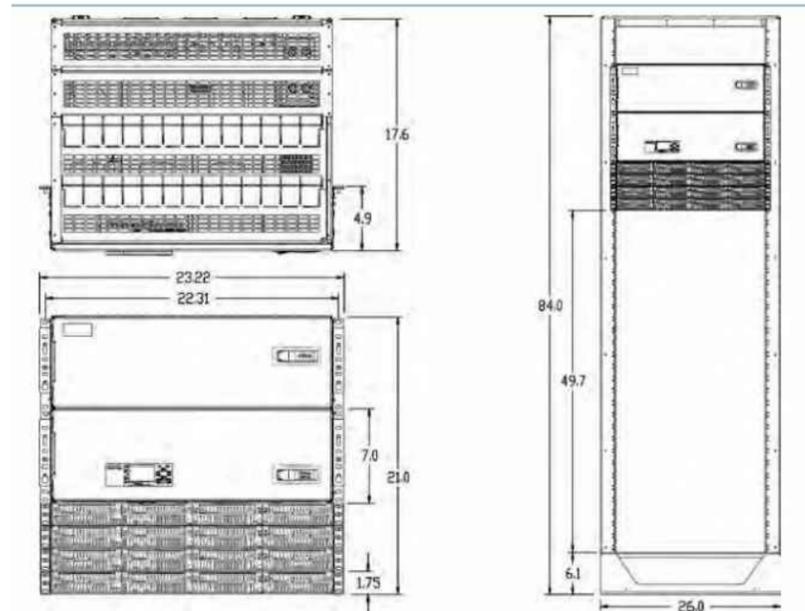


FRONT VIEW

SIDE VIEW

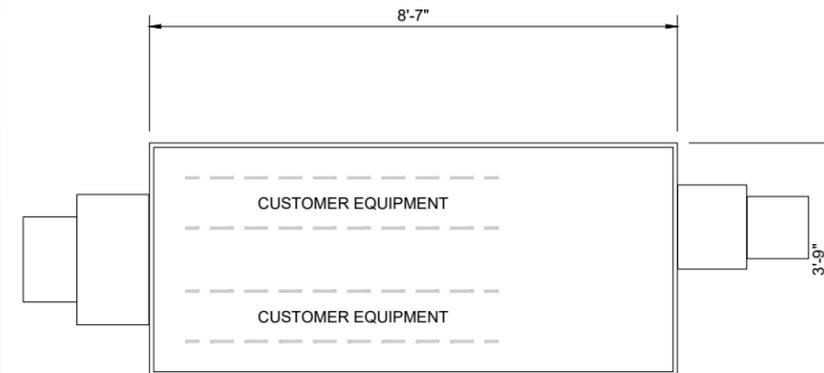
GE INFINITY S - POWER SYSTEM

CODE: NES4824-23-AC1-PS16-DC1E-LVBD
 DIMENSIONS HxWxD: 84"x26"x21" (FULL SIZE RACK)
 48"x26"x21" (HALF SIZE RACK)
 21"x23.22"x17.6" (POWER SYSTEM UNIT)
 WEIGHT: 292 LBS



SUN WEST PRODUCT - FLEX-LINE EQUIPMENT CABINET
 CABINET DIMENSIONS: TBD BY CUSTOMER CONFIGURATION
 CABINET WEIGHT: TBD BY CONFIGURATION (LESS CUSTOMER EQUIPMENT)
 CABINET MATERIAL: ALUMINUM, WELDED CONSTRUCTION
 6" BASE FRAME STEEL, FORMED, WELDED, GALVANIZED,
 FORK TUBES AND CRANE PICKS
 U.L. LISTED NEMA 3R ALUMINUM CABINET / PE STAMPED
 @ 150 MPH WIND LOAD & RATED SEISMIC ZONE 4

RATING:
 EQUIPMENT:
 (1) DC POWER PLANT
 (2) HALF-SIZE BATTERY RACK
 (1) 19" FIF RACK



CCL00335
 SANTA ROSA
 1700 HOEN AVENUE
 SANTA ROSA, CA 95405
 82'-7" LIGHT POLE



5001 EXECUTIVE PKWY.
 SAN RAMON, CA 94583



4120 DUBLIN BLVD STE
 450 DUBLIN,
 CALIFORNIA 94568

PLANS PREPARED BY:



REV	DATE	DESCRIPTION	INT
0	04/29/2022	100% CDS	GCA
B	04/11/2022	95% CDS	RAR
A	02/08/2022	90% CDS	RAR

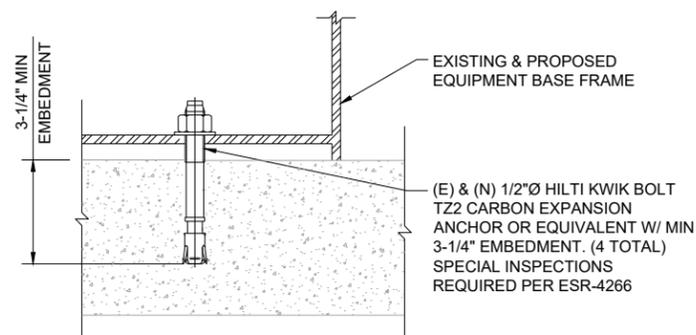
(E) FIF RACK

5 (E) DC POWER PLANT

3 (E) SUN WEST CABINET

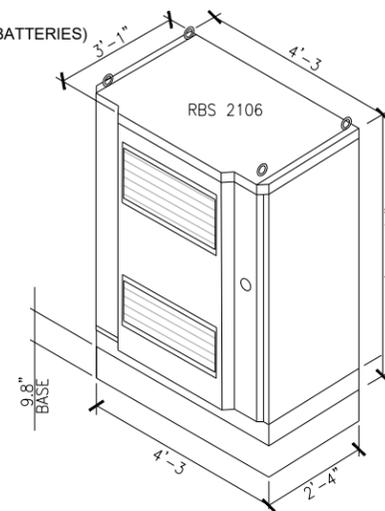
1

NOTE:
 1. EXISTING CONCRETE SLAB IS 6" MINIMUM (FIELD VERIFY).



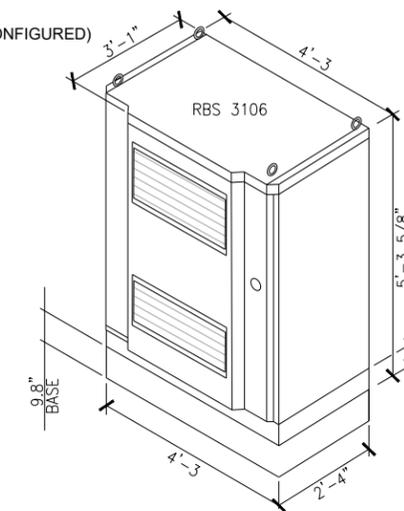
(E) & (N) CONCRETE ANCHOR DETAIL

MANUFACTURER: ERICSSON
 MODEL NUMBER: RBS 2106
 DIMENSIONS (HxWxD): 63.5"x51.2"x37.0"
 TOTAL WEIGHT: 1235 LBS (WITHOUT BATTERIES)



6 (E) RBS 2106 CABINET

MANUFACTURER: ERICSSON
 MODEL NUMBER: RBS 3106
 DIMENSIONS (HxWxD): 64.2"x51.2"x30.5"
 TOTAL WEIGHT: 1889 LBS (FULLY CONFIGURED)



4 (E) RBS 3106 CABINET

2

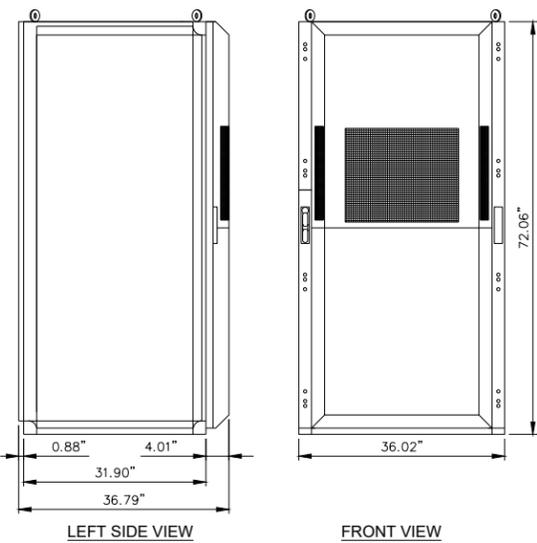
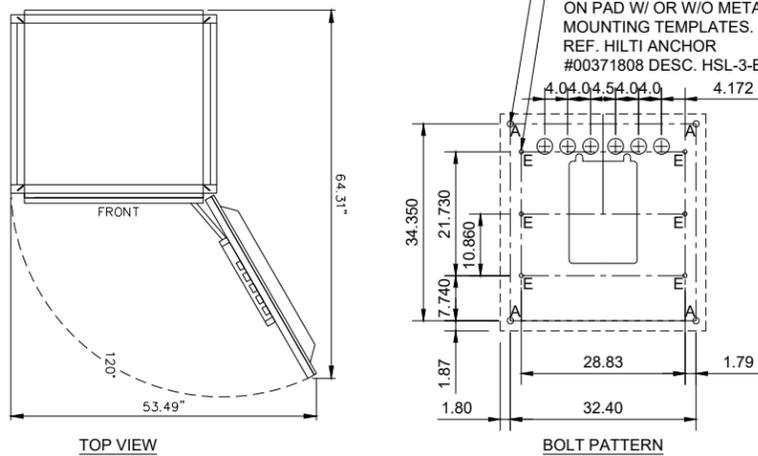
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SHEET TITLE
DETAILS

SHEET NUMBER
D-3

EMERSON OUTDOOR NEXTEND FLEX BATTERY ENCLOSURE

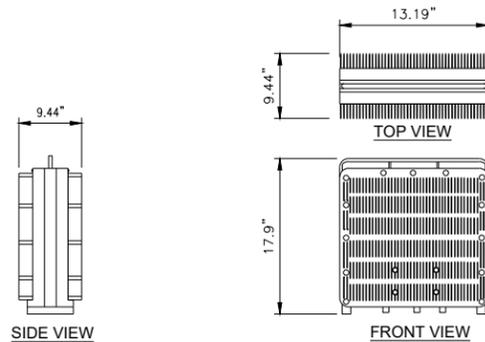
AT&T NUMBER: NEQ.15918
 VERTIV NUMBER: F2012495
 DIMENSIONS (HxWxD): 72.1"x36.0"x36.8"
 WEIGHT: 2944 lbs WITH (8) BATTERIES



(N) BATTERY ENCLOSURE

ERICSSON RRUS-4449 B5/B12

MANUFACTURER: ERICSSON
 DIMENSIONS (HxWxD): 17.9"x13.19"x9.44"
 POWER CONSUMPTION: 320W
 TOTAL WEIGHT: 70.55 LBS
 TEMPERATURE: -40° TO 55° C



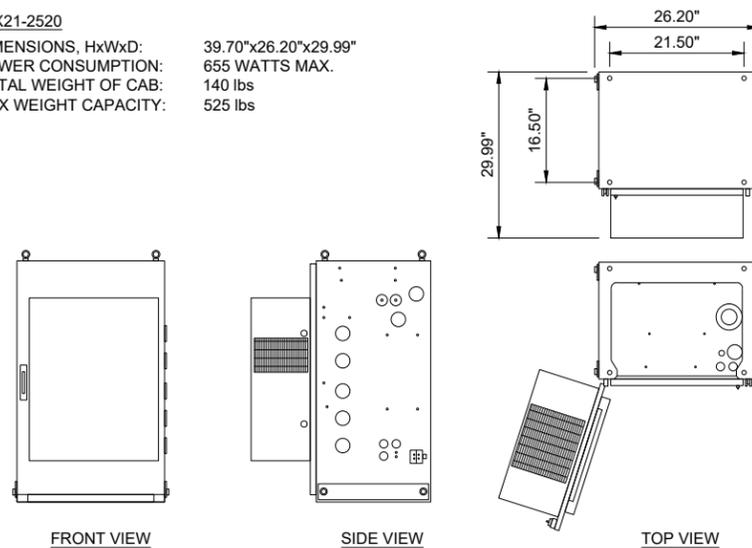
(N) RRUS-4449 B5/B12 SPECIFICATIONS

MANUFACTURER: ERICSSON
 MODEL NUMBER: BASEBAND 6648
 DIMENSIONS (HxWxD): 1.75"x19"x13.86"
 TOTAL WEIGHT: 16.53 LBS



(N) ERICSSON BASEBAND 6648

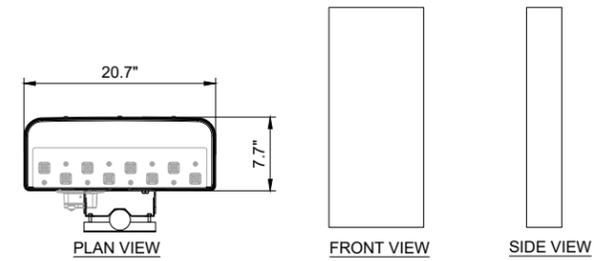
FLX21-2520
 DIMENSIONS (HxWxD): 39.70"x26.20"x29.99"
 POWER CONSUMPTION: 655 WATTS MAX.
 TOTAL WEIGHT OF CAB: 140 lbs
 MAX WEIGHT CAPACITY: 525 lbs



(N) FLX21 2520

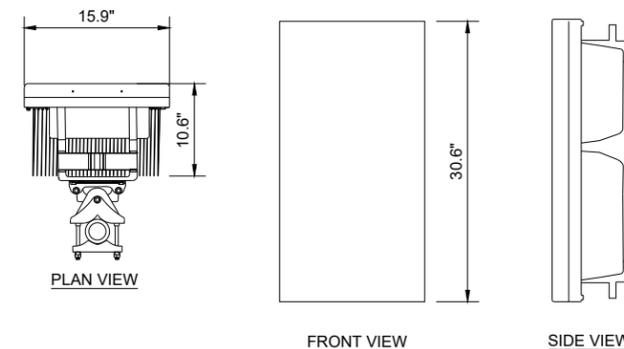
CCI: DMP65R-BU4DA-K

MANUFACTURER: ERICSSON
 OP. FREQ BAND: 698-896MHz AND 1695-2400MHz
 BAND: MULTIBAND
 DIMENSIONS (HxWxD): 48.0"x20.7"x7.7"
 TOTAL WEIGHT: 67.9 LBS



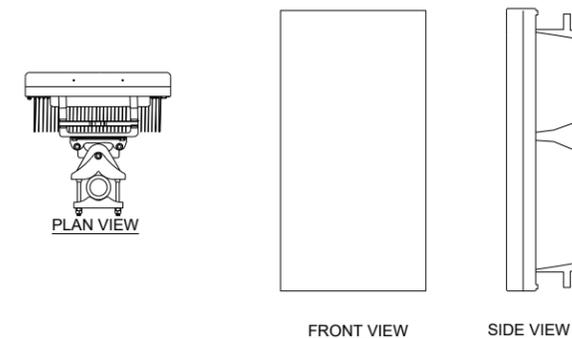
(N) COMMSCOPE DMP65R-BU4DA-K

MANUFACTURER: ERICSSON
 MODEL NUMBER: AIR6449 B77D
 DIMENSIONS (HxWxD): 30.60"x15.9"x10.6"
 TOTAL WEIGHT: 83.8 LBS (WITHOUT RET OR MOUNTING HARDWARE)



(N) ERICSSON - AIR6449 B77D ANTENNA

ERICSSON: CBAND AIR ANTENNA
 DIMENSIONS (HxWxD): 31.1"x16.1"x7.3"
 WEIGHT: 44 lbs. (WITHOUT RET OR MOUNTING HARDWARE)



(N) ERICSSON - AIR6419 B77G ANTENNA

CCL00335
 SANTA ROSA
 1700 HOEN AVENUE
 SANTA ROSA, CA 95405
 82'-7" LIGHT POLE



5001 EXECUTIVE PKWY.
 SAN RAMON, CA 94583



ERICSSON

4120 DUBLIN BLVD STE
 450 DUBLIN,
 CALIFORNIA 94568

PLANS PREPARED BY:



REV	DATE	DESCRIPTION	INT
0	04/29/2022	100% CDS	GCA
B	04/11/2022	95% CDS	RAR
A	02/08/2022	90% CDS	RAR

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SHEET TITLE

DETAILS

SHEET NUMBER

D-4

(E) TRI-SECTOR MONOPOLE MOUNT

7

4

1

8

6

3

Construction

- Utilizes TPPL technology. Thin positive grids are produced from high purity lead using a unique manufacturing process to maximize corrosion resistance and service life while increasing energy density
- Separators are AGM made from high purity, superior quality fibers. The electrolyte is absorbed within the AGM, preventing acid spills in case of accidental damage
- Electrolyte is produced from extremely high purity acid to reduce self-discharge rates and float currents
- Container and cover made from flame retardant UL94-V0 material, highly resistant to shock and vibration
- Front terminal batteries use tin-plated copper terminals.
- Self-regulating one way pressure relief valves prevent ingress of atmospheric oxygen

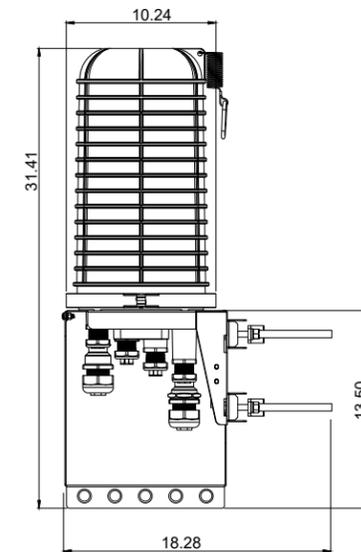
Installation and Operation

- Space efficient footprint
- VRLA design, reduces maintenance requirements
- Lifting handles for easy handling
- Greater than 10 year life expectancy in float service at 77°F (25°C)
- TPPL technology provides increased active material surface area which yields increased energy density
- Operating temperature: -40°F (-40°C) to 122°F (50°C)
Recommended temperature: 68°F (20°C) to 86°F (30°C)

Standards

- Approved as non-hazardous cargo for ground, sea and air transportation in accordance with US DOT Regulation 49 and ICAO & IATA Packing Instruction 806. Please see our SDS for complete details at www.enersys.com
- Complies with Telcordia® SR-4228, Network Equipment Building System (NEBS™) Criteria Levels
- The management systems governing the manufacture of this product are ISO 9001:2008 and ISO 14001:2004 certified

MANUFACTURER: RAYCAP
 MODEL NUMBER: DC9-48-60-24-8C-EV
 DIMENSIONS (HxWxD): 31.4" x 10.24" x 18.28"
 TOTAL WEIGHT: SYSTEM: 18.5 LBS
 MOUNT: 10.2 LBS
 TOTAL: 28.7 LBS



General Specifications

PowerSafe® SBS Battery	Number of Cells	Nominal Voltage (V)	Nominal Capacity			Nominal Dimensions			Electrolyte (1.300 S.G.)		Pure Acid (H ₂ SO ₄ Acid)		Lead Weight												
			8hr. Rate @ 77°F	10hr. Rate @ 20°F	1.75Vpc	1.80Vpc	Length	Width	Height	Typical Weight	Short Circuit Current	Internal Resistance	Volume (per bloc)	Weight (per bloc)	Volume (per bloc)	Weight (per bloc)									
SBS B8F	6	12	31	31	11.9	303	3.80	97.0	6.26	159	22.7	10.3	1270	10.0	M6 M	0.37	1.42	4.05	1.84	0.11	0.40	1.61	0.73	15.6	7.08
SBS B10F	6	12	38	38	11.9	303	3.80	97.0	7.24	184	28.2	12.8	1390	9.00	M6 M	0.48	1.80	5.1	52.34	0.13	0.51	2.04	0.93	17.7	8.03
SBS B14F	6	12	62	62	11.9	303	3.80	97.0	10.4	264	42.0	19.1	1800	7.00	M6 M	0.78	2.95	8.4	53.83	0.22	0.83	3.35	1.52	29.6	13.4
SBS C11F	6	12	92	91	16.4	417	4.10	105	10.1	256	61.6	27.9	2300	5.50	M6 M	1.28	4.85	13.9	5.50	0.36	1.36	5.50	2.49	43.4	19.7
SBS 100F	6	12	100	100	15.6	395	4.30	108	11.3	287	71.9	32.6	2210	5.60	M6 M	1.34	5.09	14.6	6.60	0.38	1.43	5.77	2.62	49.7	22.5
SBS 112F	6	12	112	112	22.1	561	4.90	125	8.98	228	90.4	41.0	2500	5.00	M6 M	1.71	6.48	18.5	8.41	0.48	1.82	7.35	3.34	56.8	25.8
SBS 145F	6	12	145	145	17.8	452	6.80	172	9.37	238	105	47.6	4100	3.00	M6 M	2.25	8.51	24.3	11.0	0.63	2.39	9.66	4.38	72.4	32.8
SBS 165F	6	12	165	165	17.8	452	6.77	172	10.8	274	117	52.8	3700	2.30	M6 M	2.45	9.27	26.5	12.0	0.64	2.42	9.72	4.41	82.7	37.5
SBS 170F	6	12	170	170	22.1	561	4.90	125	11.1	283	116	52.5	3400	4.00	M6 M	2.09	7.92	22.7	10.3	0.59	2.23	8.99	4.08	82.0	37.2
SBS 190F	6	12	190	190	22.1	561	4.90	125	12.4	316	132	60.0	3800	3.30	M6 M	2.34	8.86	25.3	11.5	0.66	2.49	10.1	4.56	95.8	43.4

**Resistance values are for reference only and not intended to represent an Ohmic Value or Baseline measurement



BATTERY TECHNOLOGY	LEAD ACID
QUANTITY OF EXISTING BATTERIES	0
QUANTITY OF NEW BATTERIES	24
QUANTITY OF TOTAL BATTERIES	24
(E) BATTERY STORAGE SYSTEM CAPACITY	-
(N) BATTERY STORAGE SYSTEM CAPACITY	190AH/ BATTERY - 6 STRINGS
TOTAL BATTERY STORAGE SYSTEM CAPACITY	54.72 kWh
TOTAL STORAGE SYSTEM CAPACITY IS LESS THAN 70kWh.	

(N) DC-9 SURGE ARRESTOR

1

ITEM	QTY	PART NO.	PART DESCRIPTION	UNIT WT.	NET WT.
1	3	X-UGLM	MINI RING MOUNT WELDMENT	21.67	65.00
2	24	G58FW	5/8" HDG USS FLATWASHER	0.07	1.69
3	36	G58LW	5/8" HDG LOCKWASHER	0.03	0.94
4	36	G58NUT	5/8" HDG HEAVY 2H HEX NUT	0.13	4.68
5	6	G58R-24	5/8" x 24" THREADED ROD (HDG.)	0.35	2.11
5	6	G58R-14	5/8" x 14" THREADED ROD (HDG.)	0.35	2.11
6	6	DCP	5-3/4" CLAMP HALF, 1/2" THK.	2.42	14.52
7	12	G58R-6	5/8" x 6" THREADED ROD (HDG.)	0.35	4.22
8	6	X-DAC	DOUBLE ANTENNA MOUNT	5.36	32.16
9	18	SCP	4-1/16" CLAMP HALF, 1/2" THK.	1.25	22.51
10	36	G12R-6	1/2" x 6" THREADED ROD (HDG.)	0.35	12.65
11	72	G12LW	1/2" HDG LOCKWASHER	0.01	1.00
12	72	G12FW	1/2" HDG USS FLATWASHER	0.03	2.45
13	72	G12NUT	1/2" HDG HEAVY 2H HEX NUT	0.07	5.16
TOTAL WT. #				171.20	

(N) SBS BATTERY SPECIFICATION

4

NOTE:

- EXISTING CONCRETE SLAB IS 6" MINIMUM (FIELD VERIFY).

EXISTING & PROPOSED EQUIPMENT BASE FRAME

(E) & (N) 3/4"Ø HILTI KWIK BOLT T22 CARBON EXPANSION ANCHOR OR EQUIVALENT W/ MIN 3-3/4" EMBEDMENT. (4 TOTAL) SPECIAL INSPECTIONS REQUIRED PER ESR-4266

(N) CONCRETE ANCHOR DETAIL

6

FIBER CABLE ASSEMBLY: RFFT-48SM-001-50M

FIBER TYPE: G.657.A2
 TOTAL FIBERS: 48
 JACKET COLOR: BLACK

CORD LENGTH: 50.00 m | 164.04 ft
 CABLE WEIGHT: 91.0 kg/km
 DIAM. OVER JACKET: 10.28 mm | 0.40 in

CONSTRUCTION TYPE: DISCRETE FIBER TRUNK
 MIN. BEND RADIUS: 10.3 cm | 4.0 in
 MIN. BEND RADIUS, FURCATION: 30.0 mm | 1.2 in

(N) FIBER CABLE ASSEMBLY - RFFT-48SM-001-50M

5

(E) & (N) DUAL PIPE RING MOUNT

2

POWER CABLE: PWRT-606-S

CABLE TYPE: POWER
 TOTAL CONDUCTORS: 6
 JACKET COLOR: BLACK

DIAM. OVER CONDUCTOR: 0.1790 in per 19 strands
 DIAM. OVER DIELECTRIC: 6.325 mm | 0.249 in
 DIAM. OVER DRAIN WIRE: 2.5700 in per 7 strands

CABLE WEIGHT: 1324.466 kg/km | 890 lb/kft

(N) POWER CABLE - PWRT-606-S

3

CCL00335
 SANTA ROSA
 1700 HOEN AVENUE
 SANTA ROSA, CA 95405
 82'-7" LIGHT POLE

5001 EXECUTIVE PKWY.
 SAN RAMON, CA 94583

4120 DUBLIN BLVD STE
 450 DUBLIN,
 CALIFORNIA 94568

PLANS PREPARED BY:

ARCHITECTURAL & ENGINEERING SERVICES

REV	DATE	DESCRIPTION	INT
0	04/29/2022	100% CDS	GCA
B	04/11/2022	95% CDS	RAR
A	02/08/2022	90% CDS	RAR

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

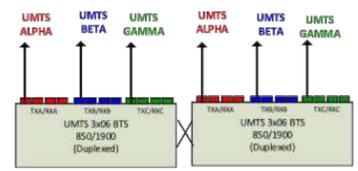
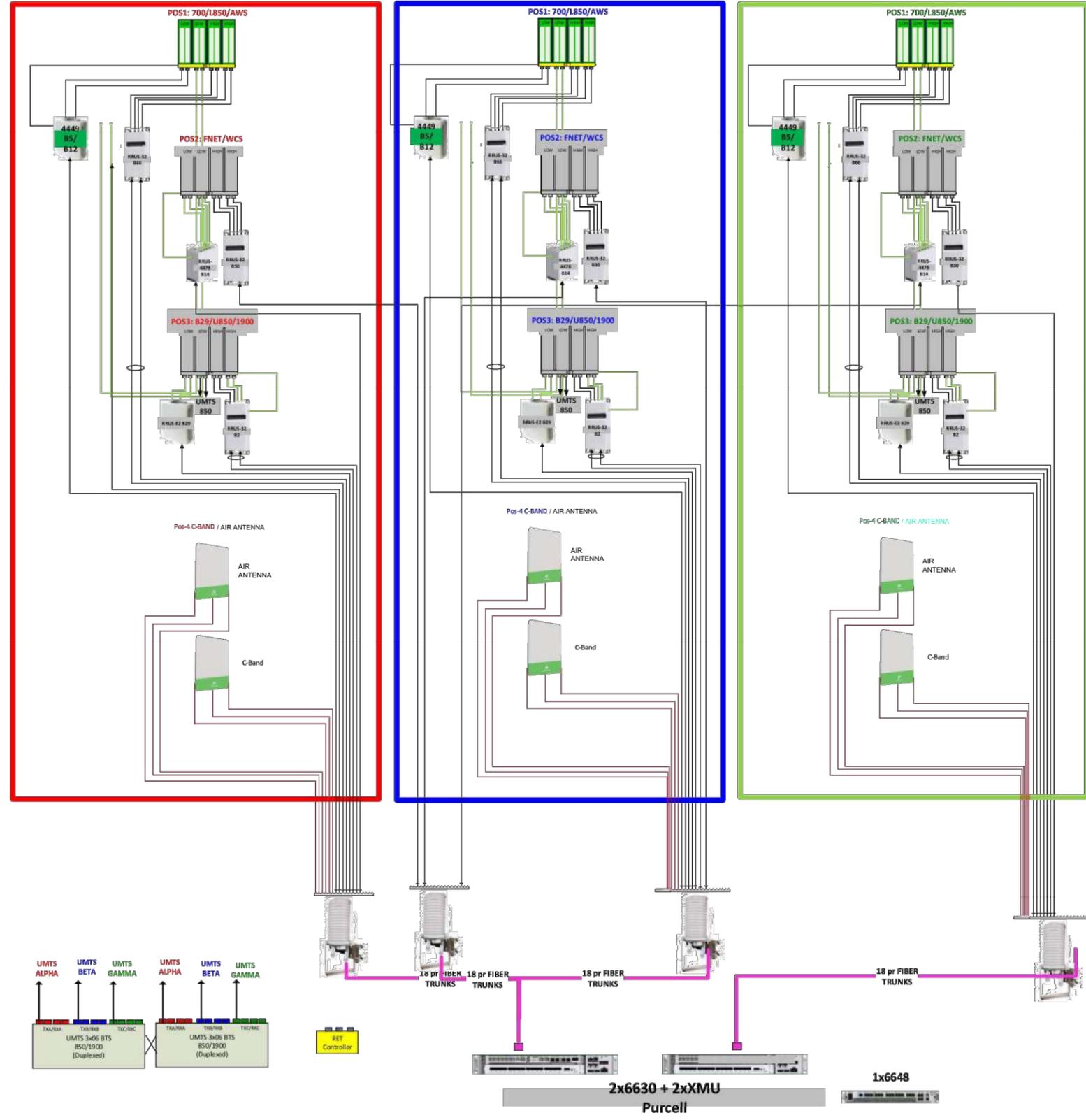
SHEET TITLE
DETAILS

SHEET NUMBER
D-5

ALPHA

BETA

GAMMA



CCL00335
 SANTA ROSA
 1700 HOEN AVENUE
 SANTA ROSA, CA 95405
 82'-7" LIGHT POLE



REV	DATE	DESCRIPTION	INT
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SHEET TITLE
RFDS

SHEET NUMBER
RF-1