

 **Real Estate
Assets**
City Consent Application

For installation / modification of Telecommunication antenna facility on City owned property

Date

The City of San Diego
Real Estate Assets Department
1200 Third Avenue, Suite 1700
San Diego, California 92101

RE: Site Name: AT&T SS0074 - Hilton Torrey Pines Project # 289104

Site Address: 10950 North Torrey Pines Road, San Diego (the "Property")

Agreement: Agreement dated 8.10.97 (the "agreement") between The City of San Diego ("City") and CHH Torrey Pines Hotel Partners LP ("Lessee" or "Permittee").

AT&T Wireless is seeking Consent from the City to perform the following to the above
Applicant's Name/Carrier
referenced site:

- ☒ Modify, upgrade or changes to existing equipment or Site as describe in the attached plans /
photos.
- ☐ Installation of a New Wireless Communication Facility on City owned property.
- ☐ Apply for new Permit/New Agreement on existing facility - **NO** modifications or changes to
Existing equipment or site.

Describe proposed project below:

Remove & replace (4) antenna & (8) RRU;
Install (8) RRU;
Install (4) WCS filter;
Replace (2) DUS41 w/(2) BBU 5216;
Install (1) RBS6601 w/(1) XMU 0201;
Install (1) Fiber Cable Trunk & (4) DC Power Cable Trunk.

* AT&T has a License Agreement with CHH Torrey Pines Tenant Corporation, Hilton La Jolla Torrey Pines,
14185 N. Dallas Parkway, Suite 1100, Dallas, Texas 75254.

Pursuant to Improvements and Alterations section of the above referenced agreement, "Lessee / Permittee shall not construct any improvements, structures or installations of the Premises or make any alterations to the Premises (with the exception of equipment replacement or repairs) without City's prior written approval."

In order to comply with such requirements, AT&T Wireless would like to request City's consent to submit to Development Services Department for review of the proposed items above.

Sincerely, Chris Harrison, M&M Telecom, Inc. agent for AT&T Wireless

Applicant Signature: C. Harrison

☐ A one-time, **non-refundable Processing Fee** (\$4,920 for long term agreements - \$980 for Short term or ROE Permits) payable to City Treasures, MUST be paid at the time of application. This fee applies even if the agreement is never executed.

City CHH Torrey Pines Hotel Partners, LP has provided its consent and approval to allow applicant to submit application for Required Permits needed for the proposed items listed herein, with the understanding that the Department will be allowed to review the improvement plans prior to any permits being issued and that a pre-construction meeting will be conducted with staff before any work begins, if required.

8/28/18
Date

Chris Eckham VP
Print Name & Title

[Signature]
Signature

City of San Diego, acknowledgement and consent for HILTON TORREY PINES
Site Location

9/14/18
Date

CYRIL C. PETERSON
Print Name & Title

[Signature]
Signature

For READ ONLY

- ☐ Approved and Stamped plans received and attached
☐ Scan as Amendment to Agreement when executed
☐ Processing fee received



Real Estate
Assets

CODE COMPLIANCE

2016 CALIFORNIA BUILDING CODE
2016 CALIFORNIA RESIDENTIAL CODE
2016 CALIFORNIA TITLE 24
2016 CALIFORNIA FIRE CODE
2016 CALIFORNIA ENERGY CODE
2016 CALIFORNIA PLUMBING CODE
2016 CALIFORNIA MECHANICAL CODE
2016 CALIFORNIA ELECTRICAL CODE
TIA-222-G CODE

IN THE EVENT OF CONFLICT, THE MOST RESTRICTIVE CODE SHALL PREVAIL.

PROJECT DESCRIPTION

AT&T WIRELESS PROPOSES TO BUILD A WIRELESS COMMUNICATION FACILITY. THE SCOPE CONSISTS OF THE FOLLOWING:

- REMOVE AND REPLACE (4) ANTENNAS
- REMOVE AND REPLACE (5) RRUs AT ANTENNA AREA
- INSTALL (5) RRUs AT ANTENNA AREA
- INSTALL (4) WCS FILTER AT ANTENNA AREA
- INSTALL (1) SURGE PROTECTOR AT ANTENNA AREA
- REPLACE (2) DUS41 W/ (2) BBU 5216 IN (C) RACK#001
- INSTALL (1) RACK#001 W/ (1) DNU 0201
- INSTALL (1) FIBER CABLE TRUNK AND (4) DC POWER CABLE TRUNKS
- INSTALL (1) EMERSON POWER CABINET W/ (4) RECTIFIERS
- MOVE (12) BATTERY MODULES FROM (C) POWER CABINET TO (4) POWER CABINET

PROJECT VALUATION = \$40,000.00

SITE INFORMATION

PROPERTY OWNER: CITY OF SAN DIEGO
302 C STREET
SAN DIEGO, CA 92121

LANDLORD: CHM TORREY PINES TENANT CORP.
HILTON LA JOLLA TORREY PINES
14150 N. DALLAS PARKWAY, SUITE 1100
DALLAS, TX 75254

APPLICANT: AT&T WIRELESS
5738 PACIFIC CENTER BLVD.
SAN DIEGO, CA 92121

APPLICANT REPRESENTATIVE: MAM TELECOM INC.
6006 MANOSA DRIVE
CARLSBAD, CA 92011

ZONING JURISDICTION: CITY OF SAN DIEGO

ZONING DISTRICT: CN-1-1

LATITUDE (NAD 83): 32° 54' 10.37" N

LONGITUDE (NAD 83): 117° 14' 37.25" W

PARCEL #: 340-011-08-00

OCCUPANCY GROUP: R-1, S-2

CONSTRUCTION TYPE: TYPE I-B AT HOTEL - SPRINKLERED

POWER COMPANY: SDG&E

TELEPHONE COMPANY: AT&T

PROJECT TEAM

PROJECT MANAGER: MARISA HERRERA
MAM TELECOM INC.
6006 MANOSA DRIVE
CARLSBAD, CA 92011
PHONE: (760) 872-1923
EMAIL: MARISA.HERRERA@MAMTELECOMINC.COM

ENGINEERING: TELECOM MANAGEMENT GROUP
14055 ANTONIA VENEZIA #9
SAN DIEGO, CA 92138
PHONE: (858) 248-7678
EMAIL: ESHAW@TELECOMMG.COM

RF ENGINEER: JORGE MELLOCH
AT&T
5738 PACIFIC CENTER BLVD.
SAN DIEGO, CA 92121
PHONE: (650) 782-2161
EMAIL: JMS34@ATT.COM

CONSTRUCTION: PJ PUTZ
BLACK & VEATCH
10009 MILLER CREEK RD., #300
SAN DIEGO, CA 92131
PHONE: (714) 885-7808
EMAIL: PUTZ@PJB.COM



HILTON TORREY PINES

SITE NUMBER: SS0074

LTE 1900 & AWS RETROFIT / LTE WCS / FIRSTNET

FA NUMBER: 10090958
10950 NORTH TORREY PINES ROAD
SAN DIEGO, CA 92037

VICINITY MAP



DRIVING DIRECTIONS FROM AT&T OFFICE

DIRECTIONS FROM AT&T OFFICE:

HEAD SOUTHWEST ON PACIFIC CENTER BLVD TOWARD MCKILLAR CT. TURN RIGHT ONTO LISK BLVD. USE THE RIGHT 2 LANES TO TURN RIGHT ONTO VISTA SORRENTO PKWY. USE THE LEFT 2 LANES TO TURN LEFT ONTO SORRENTO VALLEY BLVD. USE THE MIDDLE LANE TO TURN RIGHT ONTO ROSSELLE ST. TURN LEFT TO MERGE ONTO I-5 S. TAKE EXIT 29 FOR GENESSEE AVE. USE THE RIGHT 2 LANES TO TURN RIGHT ONTO GENESSEE AVE. CONTINUE ONTO N TORREY PINES RD. TAKE THE DOT TOWARD THE LODGE/TORREY PINES GOLF COURSE. KEEP RIGHT AT THE FORK TO CONTINUE TOWARD CALLAN RD. TURN RIGHT ONTO CALLAN RD. TURN LEFT TO MERGE ONTO N TORREY PINES RD. DESTINATION WILL BE ON THE RIGHT.

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.

APPROVALS

THE FOLLOWING PARTIES HEREBY APPROVE AND ACCEPT THESE DOCUMENTS AND AUTHORIZE THE CONTRACTOR TO PROCEED WITH THE CONSTRUCTION DESCRIBED HEREIN. ALL DOCUMENTS ARE SUBJECT TO REVIEW BY THE LOCAL BUILDING DEPARTMENT AND MAY IMPOSE CHANGES OR SITE MODIFICATIONS.

AT&T RF ENGINEER: _____ DATE: _____

AT&T CONSTRUCTION: _____ DATE: _____

AT&T PROJECT MGR: _____ DATE: _____

CNLS VENDOR: _____ DATE: _____

PLANNER: _____ DATE: _____

SITE ACQUISITION: _____ DATE: _____

SITE OWNER: _____ DATE: _____

DRAWING INDEX

SHEET NO.	SHEET TITLE
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T2	GENERAL NOTES
T3	GENERAL NOTES
A1	SITE PLAN
A2	ENLARGED SITE PLAN
A3	ENLARGED EQUIPMENT PLAN
A4	ANTENNA PLAN AND SCHEDULE
A5	SITE ELEVATIONS
A6	SITE ELEVATIONS
A7	SITE DETAILS
E1	ELECTRICAL PLAN
E2	ELECTRICAL DC ONE-LINE DIAGRAM
E3.1	ELECTRICAL AC ONE-LINE DIAGRAM
E3	GROUNDING DETAILS



NOTE:
48 HOURS PRIOR TO DIGGING,
CONTRACTOR TO NOTIFY ALL
UTILITY COMPANIES TO LOCATE
ALL UNDERGROUND UTILITIES.

Rev	Description	Date
1	100% CD	11-29-17
2	80% CD	10-20-17



SS0074
HILTON TORREY PINES RD
10950 N. TORREY PINES RD
SAN DIEGO, CA 92037
LTE 1900 & AWS RETROFIT /
LTE WCS / FIRSTNET



Project Number: _____

Drawn by: **ENC/MP**

Checked by: **ENO**

Sheet No.: **T1**

GENERAL CONSTRUCTION NOTES

1. FOR THE PURPOSE OF CONSTRUCTION DRAWINGS, THE FOLLOWING DEFINITIONS SHALL APPLY:
GENERAL CONTRACTOR - SEE PROJECT TEAM IN TITLE SHEET
SUBCONTRACTOR - CONTRACTOR (CONSTRUCTION)
OWNER - "A" & "B"
2. ALL SITE WORK SHALL BE COMPLETED AS INDICATED ON THE DRAWINGS AND "A" & "B" PROJECT SPECIFICATIONS.
3. GENERAL CONTRACTOR AND SUBCONTRACTOR SHALL VISIT THE SITE AND SHALL FAMILIARIZE THEMSELVES WITH ALL CONDITIONS AFFECTING THE WORK AND SHALL MAKE PROVISIONS. GENERAL CONTRACTOR AND SUBCONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING THEMSELVES WITH ALL CONTRACT DOCUMENTS, FIELD CONDITIONS, DRAWINGS, AND CONFORMING THAT THE WORK WILL 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.
4. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. GENERAL CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF WORK.
5. ALL WORK OBTAINED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL, JURISDICTIONAL CODES, ORDINANCES, AND APPLICABLE REGULATIONS.
6. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
7. PLANS ARE NOT TO BE SOILED. THESE PLANS ARE INTENDED TO BE A DYNAMIC OUTLINE ONLY. UNLESS OTHERWISE NOTED, DIMENSIONS SHOWN ARE TO FINISH SURFACES UNLESS OTHERWISE NOTED. SPACING BETWEEN EQUIPMENT IS THE MINIMUM ALLOWED CLEARANCE. THEREFORE, IT IS CRITICAL FIELD VERIFY DIMENSIONS. SHOULD THERE BE ANY QUESTIONS REGARDING THE CONTRACT DOCUMENTS, THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A CLARIFICATION FROM THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK. DETAILS ARE INTENDED TO SHOW DESIGN INTENT. MODIFICATIONS MAY BE REQUIRED TO SUIT JOB CONDITIONS OR CONDITIONS AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF WORK AND PREPARED BY THE ENGINEER PRIOR TO PROCEEDING WITH WORK.
8. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
9. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROVIDE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE ENGINEER PRIOR TO PROCEEDING.
10. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE SPACE OF 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 AND THE LOCAL JURISDICTION.
11. GENERAL CONTRACTOR SHALL COORDINATE WORK AND SCHEDULE WORK ACTIVITIES WITH OTHER OCCUPANCIES.
12. DETECTION SHALL BE DONE IN A WORKMANSHIP MANNER BY COMPETENT EXPERIENCED WORKMAN IN ACCORDANCE WITH APPLICABLE CODES AND THE BEST ACCEPTED PRACTICE. ALL MEMBERS SHALL BE LAD PLUMB AND TRUE AS INDICATED ON THE DRAWINGS.
13. SEAL PENETRATIONS THROUGH FINE MESH AREAS WITH U.S. LISTED MATERIALS APPROVED BY LOCAL JURISDICTION. SUBCONTRACTOR SHALL KEEP AREA CLEAN, HAZARD FREE, AND DISPOSE OF ALL DEBRIS.
14. WORK PREVIOUSLY COMPLETED IS REPRESENTED BY LIGHT SHOWN LINES AND NOTES. THE SCOPE OF WORK FOR THIS PROJECT IS REPRESENTED BY DARK SHOWN LINES AND NOTES. SUBCONTRACTOR SHALL NOTIFY THE GENERAL CONTRACTOR OF ANY EXISTING CONDITIONS THAT DEVIATE FROM THE DRAWINGS PRIOR TO BEGINNING CONSTRUCTION.
15. SUBCONTRACTOR SHALL PROVIDE WRITTEN NOTICE TO THE CONSTRUCTION MANAGER 48 HOURS PRIOR TO COMMENCEMENT OF WORK.
16. THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PLACEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
17. THE SUBCONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
18. GENERAL CONTRACTOR SHALL COORDINATE AND MAINTAIN ACCESS FOR ALL TRUCKS AND SUBCONTRACTORS TO THE SITE AND/OR BUILDING.
19. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR SECURITY OF THE SITE FOR THE DURATION OF CONSTRUCTION UNTIL JOB COMPLETION.
20. THE GENERAL CONTRACTOR SHALL MAINTAIN IN GOOD CONDITION ONE COMPLETE SET OF PLANS WITH ALL REVISIONS, ADDENDA, AND CHANGE ORDERS ON THE PREMISES AT ALL TIMES.
21. THE GENERAL CONTRACTOR AND SUBCONTRACTOR SHALL PROVIDE PORTABLE FIRE EXTINGUISHERS WITH A RATING OF NOT LESS THAN 2-A OR 2-B AND 10-B AND SHALL BE WITHIN 25 FEET OF TRAVEL DISTANCE TO ALL PORTIONS OF WHERE THE WORK IS BEING COMPLETED DURING CONSTRUCTION.
22. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY THE ENGINEER. EXTENSIVE CAUTION SHOULD BE USED BY THE SUBCONTRACTOR WHEN LOCATING OR DRILLING PILES AROUND OR NEAR UTILITIES. SUBCONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS SHALL INCLUDE BUT NOT BE LIMITED TO: A) FALL PROTECTION, B) CONFINED SPACE, C) ELECTRICAL SAFETY, AND D) TRENCHING & EXCAVATION.
23. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE RELOCATED, CAPPED, PLUGGED OR OTHERWISE DISCONNECTED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, AS DIRECTED BY THE RESPONSIBLE ENGINEER, AND SUBJECT TO THE APPROVAL OF THE OWNER AND/OR LOCAL UTILITIES.
24. THE AREAS OF THE OBSCURE PROPERTY DETURBED BY THE WORK AND NOT COVERED BY THE TOWER, EXCAVATOR OR DRILLING, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION.
25. SUBCONTRACTOR SHALL MINIMIZE DISTURBANCE TO THE EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE FEDERAL AND LOCAL JURISDICTION FOR EROSION AND SEDIMENT CONTROL.
26. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.
27. THE SUBGRADE SHALL BE BROUGHT TO A SMOOTH UNIFORM GRADE AND COMPACTED TO ITS PERCENT REQUIRED PROCTOR DENSITY UNDER PAVEMENT AND STRUCTURES AND 80 PERCENT MODIFIED PROCTOR DENSITY IN OPEN SPACE. ALL TRENCHES IN PUBLIC RIGHT OF WAY SHALL BE BACKFILLED WITH FILLABLE FILL OR OTHER MATERIAL PRE-APPROVED BY THE LOCAL JURISDICTION.
28. ALL NECESSARY RUBBER, STAMPS, DEBRIS, STICKS, STONES, AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LAWFUL MANNER.
29. ALL BROCHURES, OPERATING AND MAINTENANCE MANUALS, CATALOGS, SHOP DRAWINGS, AND OTHER DOCUMENTS SHALL BE TURNED OVER TO THE GENERAL CONTRACTOR AT COMPLETION OF CONSTRUCTION AND PRIOR TO PAYMENT.
30. SUBCONTRACTOR SHALL SUBMIT A COMPLETE SET OF AS-BUILT RECORDS TO THE GENERAL CONTRACTOR UPON COMPLETION OF PROJECT AND PRIOR TO FINAL PAYMENT.
31. SUBCONTRACTOR SHALL LEAVE PREMISES IN A CLEAN CONDITION.

32. THE PROPOSED FACILITY WILL BE UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SEWER SERVICE, AND IS NOT FOR HUMAN HABITAT (NO HANDICAP ACCESS REQUIRED).
33. OCCUPANCY IS LIMITED TO PERFORM MAINTENANCE AND INSPECTION, APPROXIMATELY 2 TIMES PER MONTH, BY "A" & "B" TECHNICIANS.
34. NO OUTDOOR STORAGE OF SOLID WASTE CONTAINERS ARE PROPOSED.
35. ALL MATERIAL SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST REVISION "A" & "B" MOBILITY GROUNDING STANDARD TECHNICAL SPECIFICATION FOR CONSTRUCTION OF CABLE/ROPE WIRELESS SITE" AND TECHNICAL SPECIFICATION FOR FACILITY GROUNDING" IN CASE OF A CONFLICT BETWEEN THE CONSTRUCTION SPECIFICATION AND THE DRAWINGS, THE DRAWINGS SHALL CONTROL.
36. SUBCONTRACTORS SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS REQUIRED FOR CONSTRUCTION. IF SUBCONTRACTOR CANNOT OBTAIN A PERMIT, THEY MUST NOTIFY THE GENERAL CONTRACTOR IMMEDIATELY.
37. SUBCONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.
38. INFORMATION SHOWN ON THESE DRAWINGS HAS BEEN OBTAINED FROM SITE VISITS AND/OR DRAWINGS PROVIDED BY THE SITE OWNER. CONTRACTORS SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
39. NO WHITE STROBE LIGHTS ARE PERMITTED. LIGHTING IF REQUIRED, WILL MEET FIA STANDARDS AND REQUIREMENTS.
40. ALL CRANES, CRANE INSTALLATIONS TO FOLLOW MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS.
41. NO NOISE, SMOKE, DUST, ODOR, OR VIBRATIONS WILL RESULT FROM THIS FACILITY. (DELETE THIS NOTE IF THE SITE WILL HAVE A GENERATOR)
42. NO ADDITIONAL PARKING TO BE PROPOSED. EXISTING ACCESS AND PARKING TO REMAIN. (DELETE THIS NOTE ACCORDING TO THE SITE CONFIGURATION)
43. NO LANDSCAPING IS PROPOSED AT THIS SITE. (DELETE THIS NOTE ACCORDING TO THE SITE CONFIGURATION)

SITE WORK & DRAINAGE

PART 1 - GENERAL

CLEANING, GRUBBING, STRIPPING, EROSION CONTROL, SURVEY, LAYOUT, SUBGRADE PREPARATION AND FINISH GRADING AS REQUIRED TO COMPLETE THE PROPOSED WORK SHOWN IN THESE PLANS.

1.1 REFERENCES

- A. DOE (STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION-CURRENT EDITION)
- B. ASTM (AMERICAN SOCIETY FOR TESTING AND MATERIALS)
- C. OSHA (OCCUPATION SAFETY AND HEALTH ADMINISTRATION)

1.2 INSPECTION AND TESTING

- A. FIELD TESTING OF CANTHROW COMPACTION AND CONCRETE CYLINDERS SHALL BE PERFORMED BY SUBCONTRACTORS INDEPENDENT TESTING LAB. THIS WORK IS TO BE COORDINATED BY THE SUBCONTRACTOR.
- B. ALL WORK SHALL BE INSPECTED AND RELEASED BY THE GENERAL CONTRACTOR WHO SHALL CARRY OUT THE GENERAL INSPECTION OF THE WORK WITH SPECIFIC CONSIDERATION TO PROPER PERFORMANCE OF THE WORK AS SPECIFIED AND/OR CALLED FOR ON THE DRAWINGS. IT IS THE SUBCONTRACTOR'S RESPONSIBILITY TO REQUEST TRIPLE INSPECTIONS PRIOR TO PROCEEDING WITH FURTHER WORK THAT WOULD HAVE PARTS OF WORK INACCESSIBLE OR DIFFICULT TO INSPECT.

1.3 SITE MAINTENANCE AND PROTECTION

- A. PROVIDE ALL NECESSARY JOB SITE MAINTENANCE FROM COMMENCEMENT OF WORK UNTIL COMPLETION OF THE SUBCONTRACT.
- B. AVOID CHANGE TO THE SITE AND TO EXISTING FACILITIES, STRUCTURES, TREES, AND SHRUBS DESIGNATED TO REMAIN. TAKE PROTECTIVE MEASURES TO PREVENT EXISTING FACILITIES THAT ARE NOT DESIGNATED FOR REMOVAL FROM BEING DAMAGED BY THE WORK.
- C. KEEP SITE FREE OF ALL FLOWING WATER.
- D. PROVIDE EROSION CONTROL MEASURES IN ACCORDANCE WITH STATE DOT AND EPA REQUIREMENTS.
- E. PROVIDE AND MAINTAIN ALL TEMPORARY FENCING, BARRICADES, WARNING SIGNALS AND SIMILAR DEVICES NECESSARY TO PROTECT AGAINST THEFT FROM PROPERTY DURING THE ENTIRE PERIOD OF CONSTRUCTION, REMOVAL ALL SUCH DEVICES UPON COMPLETION OF THE WORK.
- F. EXISTING UTILITIES, DO NOT INTERRUPT EXISTING UTILITIES SERVING FACILITIES OWNED BY THE OWNER OR OTHERS, EXCEPT WHEN PROMPTED IN WRITING BY THE ENGINEER AND THEN ONLY AFTER ACCEPTABLE TEMPORARY UTILITY SERVICES HAVE BEEN PROVIDED.

1.4 PROTECT A MINIMUM 48-HOUR NOTICE TO THE ENGINEER AND REMOVE WRITTEN NOTICE TO PROCEED BEFORE INTERRUPTING ANY UTILITY SERVICE.

PART 2 - PRODUCTS

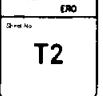
1. FILLABLE BACKFILL: ASTM D2922 (CLAYES 1, 2, 3, 4, 5, 6, 7, 8, 9, 10) FREE FROM FROZEN LAMPS, REFUSE, STONES OR ROCKS LARGER THAN 3 INCHES IN ANY DIMENSION OR OTHER MATERIAL THAT MAY HAVE THE MOISTURE MATERIAL UNSUITABLE FOR BACKFILL.
2. NON-FROZEN GRANULAR EMBANKMENT AND BACKFILL: ASTM D2922 (CLAYES 1, 2, 3, 4, 5, 6, 7, 8, 9, 10) COARSE AGGREGATE, FREE FROM FROZEN LAMPS, REFUSE, STONES OR ROCKS LARGER THAN 3 INCHES IN ANY DIMENSION OR OTHER MATERIAL THAT MAY HAVE THE MOISTURE MATERIAL UNSUITABLE FOR BACKFILL.
3. FROZEN GRANULAR EMBANKMENT AND BACKFILL: ASTM D2922 (CLAYES 1, 2, 3, 4, 5, 6, 7, 8, 9, 10) COARSE AGGREGATE, FREE FROM FROZEN LAMPS, REFUSE, STONES OR ROCKS LARGER THAN 3 INCHES IN ANY DIMENSION OR OTHER MATERIAL THAT MAY HAVE THE MOISTURE MATERIAL UNSUITABLE FOR BACKFILL.
4. SELECT INTERLAYER, FILL, GRANULAR FILL MATERIAL, MEETING THE REQUIREMENTS OF ASTM D2922-15 FOR FILL AROUND AND UNDER STRUCTURES, FILL MATERIAL, ARE REQUIRED.
5. GRANULAR BEDDING AND TRENCH BACKFILL: WELL-GRADED SAND MEETING THE GRANULATION REQUIREMENTS OF ASTM D2922 (75 OR 80-100).
6. COARSE AGGREGATE FOR ACCESS ROAD SUBGRADE COURSE SHALL CONFORM TO ASTM D2922.
7. UNSUITABLE MATERIAL: HIGH AND MODERATELY PLASTIC SILTS AND CLAYS (LL>40), MATERIAL CONTAINING REFUSE, FROZEN LAMPS, DISINTEGRATED BITUMINOUS MATERIAL, VEGETATIVE MATTER, ROCK, STONES IN EXCESS OF 3 INCHES IN ANY DIMENSION, AND DEBRIS AS DETERMINED BY THE CONSTRUCTION MANAGER. TYPICAL THESE WILL BE SOLID CLASSIFIED BY ASTM AS PL, ML, CL, OL, SL, LL, AND CL.
8. GEOTEXTILE FABRIC: MINNY SORE OR APPROVED EQUAL.
9. PLASTIC LINING: DENSE SHALL BE 400 AND 4000 MESH POLYETHYLENE FILM SPECIFICALLY MANUFACTURED FOR LINING AND LACING UNDERGROUND UTILITIES, 1/16" THICK WITH A MINIMUM THICKNESS OF 0.004 INCH. FILM SHALL HAVE MINIMUM STRENGTH OF 1500 PSI IN BOTH DIRECTIONS AND MANUFACTURED WITH INTERIOR CONDUCTIONS, FOR PROTECTION OF OTHER MEANS TO ENABLE DETECTION BY A METAL DETECTOR WHEN BURIED UP TO 3 FEET DEEP. THE METALLIC COAT OF THE FILM SHALL BE ENOUGH TO PROVIDE A PROTECTIVE JACKET OR PROTECT WITH OTHER MEANS TO PROTECT IT FROM CORROSION. TAPE COLOR SHALL BE RED FOR EXISTING UTILITIES AND ORANGE FOR TELECOMMUNICATION UTILITIES.

PART 3 - EXECUTION

3.1 GENERAL

- A. BEFORE STARTING GENERAL SITE PREPARATION ACTIVITIES, INITIAL EROSION AND SEDIMENT CONTROL MEASURES, THE WORK AREA SHALL BE CONSTRUCTED AND MAINTAINED IN SUCH CONDITION THAT IN THE EVENT OF RAIN THE SITE WILL BE DRAINED AT ANY TIME.
- B. BEFORE ALL SURVEY, LAYOUT, STAKING, AND MARKING, ESTABLISH AND MAINTAIN ALL LINES, GRADIES, ELEVATIONS AND BENCHMARKS NEEDED FOR EXECUTION OF THE WORK.
- C. CLEAR AND GRUB THE AREA WITHIN THE LIMITS OF THE SITE, REMOVE TREES, BRUSH, STAMPS, RUBBER AND OTHER DEBRIS AND VEGETATION RESTING ON OR PROTRUDING THROUGH THE SURFACE OF THE SITE AREA TO BE CLEARED.
1. REMOVE THE FOLLOWING MATERIALS TO A DEPTH OF NO LESS THAN 12 INCHES BELOW THE ORIGINAL GROUND SURFACE: ROOTS, STAMPS, AND OTHER DEBRIS, BRUSH, AND RUBBER DISPOSED IN OR PROTRUDING THROUGH THE GROUND SURFACE, FILL, DIRT OR FILL OF THE AREA TO A DEPTH OF NO LESS THAN 8 INCHES, AND REMOVE TO A DEPTH OF 12 INCHES ALL ROOTS AND COVER BEING THEREBY EXPOSED.
2. REMOVE TOPSOIL, MIXING, COMPLETELY FROM THE SURFACE UNTIL THE SOIL NO LONGER MEETS THE DEFINITION OF TOPSOIL, AND MIXING TOPSOIL WITH SUBSOIL OR OTHER UNSUITABLE MATERIALS.
3. EXCEPT WHERE EXCAVATION TO GREATER DEPTH IS INDICATED, FILL DEPRESSIONS RESULTING FROM CLEANING, GRUBBING AND EXCAVATION WORK COMPLETELY WITH SUITABLE FILL.
- A. REMOVE FROM THE SITE AND DISPOSE IN AN AUTHORIZED LANDFILL ALL DEBRIS RESULTING FROM CLEANING AND GRUBBING OPERATIONS. BURNING WILL NOT BE PERMITTED.
- B. PRIOR TO EXCAVATING, THOROUGHLY EXAMINE THE AREA TO BE EXCAVATED AND/OR TRENCHED TO VERIFY THE LOCATION OF FEATURES INDICATED ON THE DRAWINGS AND TO ASCERTAIN THE EXISTENCE AND LOCATION OF ANY STRUCTURE, UNDERGROUND STRUCTURE, OR OTHER ITEM NOT SHOWN THAT MIGHT INTERFERE WITH THE PROPOSED CONSTRUCTION. NOTIFY THE CONSTRUCTION MANAGER OF ANY OBSTRUCTIONS THAT WILL PREVENT ACCOMPLISHMENT OF THE WORK AS INDICATED ON THE DRAWINGS.
- C. REPAIR AND STOCK PILE ALL EXISTING MATERIALS SUITABLE FOR BACKFILL. ALL DECKS EXCAVATED AND UNSUITABLE MATERIALS SHALL BE DISPOSED OF OFF-SITE IN A LAWFUL MANNER.
- 3.2 BACKFILL:
 - A. AS SOON AS PRACTICAL, AFTER COMPLETING CONSTRUCTION OF THE RELATED STRUCTURE, INCLUDING ORIENTATION OF THE SPECIFIED MINIMUM CURING PERIOD FOR CAST-IN-PLACE CONCRETE, BACKFILL THE EXCAVATION WITH APPROVED MATERIAL TO RESTORE THE REQUIRED FINISHED GRADE.
 1. PRIOR TO PLACING BACKFILL AROUND STRUCTURES, ALL FORMS SHALL BE REMOVED AND THE EXCAVATION CLEARED OF ALL TRASH, DEBRIS AND UNSUITABLE MATERIALS.
 2. BACKFILL BY PLACING AND COMPACTING SUITABLE BACKFILL MATERIAL OR SELECT GRANULAR BACKFILL MATERIAL WHEN REQUIRED IN UNIFORM HORIZONTAL LAYERS OF NO GREATER THAN 8-INCHES THICKNESS AND COMPACTED, WHILE HAND OPERATED COMPACTORS ARE USED, THE FILL MATERIAL SHALL BE PLACED IN LIFTS NOT TO EXCEED 4 INCHES IN LOOSE DEPTH AND COMPACTED.
 3. WHENEVER THE DENSITY TESTING INDICATES THAT THE CONSTRUCTION HAS NOT OBTAINED THE SPECIFIED DENSITY, THE SUBSEQUENT LAYER SHALL NOT BE PLACED UNTIL THE SPECIFICATION REQUIREMENTS ARE MET UNLESS OTHERWISE AUTHORIZED BY THE GEOTECHNICAL ENGINEER. THE CONSTRUCTION SHALL TAKE WRITTEN APPROPRIATE ACTION IS NECESSARY, SUCH AS LOOSING AND DRIVING, ADDING WATER, OR INCREASING THE COMPACTIVE EFFORT TO MEET THE MINIMUM COMPACTED REQUIREMENTS.
 - B. THOROUGHLY COMPACT EACH LAYER OF BACKFILL TO A MINIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE MODIFIED PROCTOR TEST, ASTM D 1557.
 - 3.3 TRENCH EXCAVATION:
 - A. UTILITY TRENCHES SHALL BE EXCAVATED TO THE LINES AND GRADIES SHOWN ON THE DRAWINGS OR AS DIRECTED BY THE GENERAL CONTRACTOR PROVIDE SMOOTH, SHEETING AND BRACING AS REQUIRED TO PREVENT CHANGING OR SLIDING OF THE TRENCH WALLS.
 - B. EXTEND THE TRENCH WIDTH A MINIMUM OF 8 INCHES BEYOND THE OUTSIDE EDGE OF THE OUTMOST CONDUIT.
 - C. WHEN SOFT YIELDING OR OTHERWISE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED, BACKFILL AT THE REQUIRED TRENCH TO A DEPTH OF NO LESS THAN 12 INCHES BELOW THE REQUIRED ELEVATION AND BACKFILL WITH GRANULAR BEDDING MATERIAL.
 - 3.4 TRENCH BACKFILL:
 - A. PROVIDE GRANULAR BEDDING MATERIAL IN ACCORDANCE WITH THE DRAWINGS AND THE UTILITY REQUIREMENTS.
 - B. NOTIFY THE GENERAL CONTRACTOR 24 HOURS IN ADVANCE OF BACKFILLING.
 - C. CONDUIT UTILITY CHECK TESTS BEFORE BACKFILLING, BACKFILL AND COMPACT TRENCH BEFORE ACCEPTANCE TESTING.
 - D. PLACE GRANULAR TRENCH BACKFILL UNIFORM ON BOTH SIDES OF THE CONDUITS IN 6-INCH UNCOMPACTED LIFTS, 12 INCHES OVER THE CONDUITS, SOLIDLY RAMP AND TAMP BACKFILL INTO SPACE AROUND CONDUITS.
 - E. PROTECT CONDUIT FROM LATERAL MOVEMENT, IMPACT DAMAGE, OR UNPLANNED LOADING.
 - F. ABOVE THE CONDUIT EMBANKMENT ZONE, PLACE AND COMPACT SATISFACTORY BACKFILL MATERIAL IN 8-INCH MAXIMUM LOOSE THICKNESS LIFTS TO RESTORE THE REQUIRED FINISHED SURFACE GRADE.
 - G. COMPACT FIRM TRENCH BACKFILL TO A DENSITY EQUAL TO OR GREATER THAN THAT OF THE EXISTING UNDISTURBED MATERIAL IMMEDIATELY ADJACENT TO THE TRENCH BUT NO LESS THAN A MINIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE MODIFIED PROCTOR TEST, ASTM D 1557.
 - H. AGGREGATE ACCESS ROAD:
 - A. CLEAR, GRUB, STRIP AND EXCAVATE FOR THE ACCESS ROAD TO THE LINES AND GRADIES INDICATED ON THE DRAWINGS, DEEPLY TO A DEPTH OF 6 INCHES AND PROOF-ROLL. ALL FILL, RUTS, SOFT PLACES AND OTHER DEFECTS SHALL BE CORRECTED.
 - B. THE ENTIRE SUBGRADE SHALL BE COMPACTED TO NOT LESS THAN 95 PERCENT OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE MODIFIED PROCTOR TEST, ASTM D 1557.
 - C. AFTER PREPARATION OF THE SUBGRADE IS COMPLETE, THE GEOTEXTILE FABRIC (MINNY SORE) SHALL BE INSTALLED TO THE LIMITS INDICATED ON THE DRAWINGS BY ROLLING THE FABRIC OUT LONGITUDINALLY ALONG THE ROADWAY. THE FABRIC SHALL NOT BE DRAGGED ACROSS THE SUBGRADE. PLACE THE ENTIRE ROLL IN A SINGLE OPERATION, ROLLING OUT AS SMOOTHLY AS POSSIBLE.
 - D. OVERLAPS PARALLEL TO THE ROADWAY WILL BE PERMITTED AT THE CENTERLINE AND AT LOCATIONS BEYOND THE ROADWAY SURFACE WITHIN (1) WITHIN THE SHOULDER WIDTHS ONLY, NO LONGITUDINAL OVERLAPS SHALL BE LOCATED BETWEEN THE SHOULDER AND THE SHOULDER. PARALLEL OVERLAPS SHALL BE A MINIMUM OF 3 FEET WIDE.
 - E. TRANSVERSE (PERPENDICULAR TO THE ROADWAY) OVERLAPS AT THE END OF A ROLL SHALL OVERLAP IN THE DIRECTION OF THE AGGREGATE PLACEMENT (PREVIOUS ROLL ON TOP) AND SHALL HAVE A MINIMUM LENGTH OF 3 FEET.
 - F. ALL OVERLAPS SHALL BE PINNED WITH STAPLES OR NAILS A MINIMUM OF 10 INCHES LONG TO HOLD PORTION DURING PLACEMENT OF AGGREGATE, PIN LONGITUDINAL, SEAMS AT 25 FOOT CENTERS AND TRANSVERSE SEAMS EVERY 5 FEET.

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D. THE AGGREGATE BASE AND SURFACE COURSE SHALL BE CONSTRUCTED IN LAYERS NOT MORE THAN 4 INCH (COMPACTED) THICKNESS. AGGREGATE TO BE PLACED ON BEDDING FABRIC SHALL BE END-DUMPED ON THE FABRIC FROM THE FREE END OF THE FABRIC OR OVER PREVIOUSLY PLACED AGGREGATE. THE FIRST LAYER SHALL BE BLADED FROM A MINIMUM OF 8 INCHES FROM THE FABRIC TO THE FREE END OF THE FABRIC. THEREAFTER, THE AGGREGATE OR AGGREGATE ON THE AGGREGATE, BE PLACED ON THE ROADWAY WITH LESS THAN 4 INCHES OF MATERIAL COVERING THE FABRIC.

E. THE AGGREGATE SHALL BE IMMEDIATELY COMPACTED TO NOT LESS THAN 95 PERCENT OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE MODIFIED PROCTOR TEST, ASTM D 1587 WITH A TAMING ROLLER OR WITH A PNEUMATIC-TYRED ROLLER, OR WITH A VIBRATORY MACHINE OR ANY COMBINATION OF THE ABOVE. THE TOP LAYER SHALL BE GIVEN A FINAL ROLLING WITH A THREE-SHADES OR TAPERED ROLLER.

3.8. FINISH GRADING:

A. FORM AND ALL DRAINAGE TO PROVIDE POSITIVE DRAINAGE AWAY FROM STRUCTURES AND SURFACES, EVEN SURFACE DRAINAGE OF THE DRIVE AREA WITHIN THE LIMITS OF CONSTRUCTION. GRADING SHALL BE COMPLETED WITH ALL SURROUNDING TOPOGRAPHY AND STRUCTURES.

B. UTILIZE SATISFACTORY FILL MATERIAL, RESULTING FROM THE EXCAVATION WORK IN THE CONSTRUCTION OF FILL, EMBANKMENTS AND FOR REPLACEMENT OF REMOVED UNSUITABLE MATERIALS.

C. ADJUST FINISHED GRADE BY PLACING A MINIMUM OF 4 INCHES OF 1/2" - 3/4" CRUSHED STONE OR TOP SOIL STABILIZER FABRIC.

D. REPAIR ALL ACCESS ROADS AND SURROUNDING AREAS USED DURING THE COURSE OF THIS WORK TO THEIR ORIGINAL CONDITION.

3.7. ASPHALT PAVING ROAD:

A. CHAPTER 830 - CALIFORNIA DEPARTMENT OF TRANSPORTATION FLEXIBLE PAVEMENT

B. DESIGN GUIDE AND STANDARDS FOR ROADWAY REHABILITATION PROJECTS (DHS 78-63)

ELECTRICAL NOTES

PART 1 - GENERAL

1.1. GENERAL CONDITIONS:

A. CONTRACTOR SHALL INSPECT THE EXISTING SITE CONDITIONS PRIOR TO SUBMITTING BID. ANY QUESTIONS ARISING DURING THE BID PERIOD IN REGARDS TO THE SUBCONTRACTOR'S PLANNING THE SCOPE OF WORK, OR ANY OTHER ISSUE RELATED TO THIS PROJECT SHALL BE BROUGHT UP DURING THE BID PERIOD WITH THE PROJECT MANAGER TO CLARIFY. NOT AFTER THE CONTRACT HAS BEEN AWARDED.

B. THE SUBCONTRACTOR SHALL OBTAIN PERMITS, LICENSES, HAVE ALL WORKERS AND PAY ALL FEES REQUIRED FOR THE CONSTRUCTION PERFORMANCE FOR THE WORK UNDER THIS SECTION.

C. DRAWINGS SHOW THE GENERAL ARRANGEMENT OF ALL SYSTEMS AND COMPONENTS COVERED UNDER THIS SECTION. THE SUBCONTRACTOR SHALL VERIFY ALL DIMENSIONS, DRAWING SHALL NOT BE BOULED TO DETERMINE DIMENSIONS.

1.2. LAWS, REGULATIONS, ORDINANCES, STATUTES AND CODES:

A. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE, AND ALL APPLICABLE LOCAL LAWS, REGULATIONS, ORDINANCES, STATUTES AND CODES. CONDUIT BENDS SHALL BE THE MINIMUM BEND FOR THE TRADE SIZE OF CONDUIT IN COMPLIANCE WITH THE LATEST EDITION OF NEC.

1.3. REFERENCES:

A. THE PUBLICATIONS LISTED BELOW ARE PART OF THIS SPECIFICATION. EACH PUBLICATION SHALL BE THE LATEST REVISION AND ADDENDUM IN EFFECT ON THE DATE THIS SPECIFICATION IS ISSUED FOR CONSTRUCTION UNLESS OTHERWISE NOTED. EXCEPT AS INDICATED BY THE REQUIREMENT SPECIFIED HEREIN OR THE DETAILS OF THE DRAWINGS, WORK INCLUDED IN THIS SPECIFICATION SHALL CONFORM TO THE APPLICABLE PROVISIONS OF THESE PUBLICATIONS:

1. ANSI/NFPA (AMERICAN NATIONAL STANDARDS INSTITUTE)

2. ASTM (AMERICAN SOCIETY FOR TESTING AND MATERIALS)

3. ICE (INSULATED CABLE ENGINEERS ASSOCIATION)

4. IEEE (INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS)

5. NFPA (NATIONAL FIRE PROTECTION ASSOCIATION)

6. OSHA (OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION)

7. UL (UNDERWRITERS LABORATORIES, INC.)

8. AT&T GROUNDING AND BONDING STANDARDS TP-78-116

1.4. SCOPE OF WORK:

A. WORK UNDER THIS SECTION SHALL CONSIST OF FURNISHING ALL LABOR, MATERIAL, AND ASSOCIATED SERVICES REQUIRED TO COMPLETE REHABILITATION CONSTRUCTION AND BE OPERATIONAL.

B. ALL ELECTRICAL EQUIPMENT UNDER THIS CONTRACT SHALL BE PROPERLY TESTED, ADJUSTED, AND ALIGNED BY THE SUBCONTRACTOR.

C. THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXCAVATING, DRAINAGE, TRENCHING, BACKFILLING, AND REMOVAL OF EXCESS DIRT.

D. THE SUBCONTRACTOR SHALL FURNISH TO THE OWNER WITH CERTIFICATES OF A FINAL INSPECTION AND APPROVAL FROM THE INSPECTION AUTHORITIES HAVING JURISDICTION.

E. THE SUBCONTRACTOR SHALL PREPARE A COMPLETE SET OF AS-BUILT DRAWINGS, DOCUMENT ALL WIRING EQUIPMENT CONDITIONS, AND CHANGES WHILE COMPLETING THIS CONTRACT. THE AS-BUILT DRAWINGS SHALL BE SUBMITTED AT COMPLETION OF THE PROJECT.

PART 2 - PRODUCTS

2.1. GENERAL:

A. ALL MATERIALS AND EQUIPMENT SHALL BE UL LISTED, NEW, AND FREE FROM DEFECTS.

B. ALL ITEMS OF MATERIALS AND EQUIPMENT SHALL BE ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION AS SUITABLE FOR THE USE INTENDED.

C. ALL EQUIPMENT SHALL BEAR THE UNDERWRITERS LABORATORIES LABEL OF APPROVAL, AND SHALL CONFORM TO REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE.

D. ALL OVERCURRENT DEVICES SHALL HAVE AN INTERRUPTING CURRENT RATING EQUAL TO OR GREATER THAN THE SHORT CIRCUIT CURRENT TO WHICH THEY ARE SUBJECTED, 10,000 PFC MINIMUM, EVERY AVAILABLE SHORT CIRCUIT CURRENT DOES NOT EXCEED THE RATING OF ELECTRICAL EQUIPMENT.

2.2. MATERIALS AND EQUIPMENT:

A. CONDUIT:

1. RIGID METAL CONDUIT (RMC) SHALL BE HOT-DIPPED GALVANIZED IRON AND OUTSIDE INCLUDING ENDS AND FITTINGS AND COATED OR LACQUERED INSIDE IN ACCORD TO GALVANIZING.

2. LIGHTWEIGHT FLEXIBLE METAL CONDUIT SHALL BE UL LISTED.

3. CONDUIT CLAMPS, STRAPS AND SUPPORT SHALL BE SET OR WALLEABLE IRON. ALL FITTINGS SHALL BE COMPRESSED AND CONCRETE TIGHT TYPE. GROUNDING BUSWORK WITH INSULATED TIGHTNESS SHALL BE INSTALLED ON ALL CONDUIT TERMINATIONS.

4. NONMETALLIC CONDUIT AND FITTINGS SHALL BE SCHEDULE 40 PVC. INSTALL USING SOLVENT-CEMENT-TYPE JOINTS AS RECOMMENDED BY THE MANUFACTURER.

B. CONDUCTORS AND CABLE:

1. CONDUCTORS AND CABLE SHALL BE FLAME-RETARDANT, MOISTURE AND HEAT RESISTANT THERMOPLASTIC. SINGLE CONDUCTOR, COPPER, TYPE THHN/THWN-2, 600 VOLT, SIZE AS INDICATED, #12 AWG SHALL BE THE MINIMUM SIZE CONDUCTOR USED.

2. #10 AWG AND SMALLER CONDUCTOR SHALL BE SOLID OR STRANDED AND #8 AWG AND LARGER CONDUCTORS SHALL BE STRANDED.

3. SOLID-STATE, COMPRESSION-TYPE CONNECTORS SHALL BE USED FOR TERMINATION OF ALL STRANDED CONDUCTORS.

4. STRAIN-RELIEF SUPPORTS (SRS) SHALL BE HARBELL HELLER OR APPROVED EQUAL. CABLES SHALL BE SUPPORTED IN ACCORDANCE WITH THE RISE AND CABLE MANUFACTURER'S RECOMMENDATIONS.

5. ALL CONDUCTORS SHALL BE TAGGED AT BOTH ENDS OF THE CONDUCTORS, AT ALL JUNCTION BOXES, J-BOXES, EQUIPMENT AND CABINETS AND SHALL BE IDENTIFIED WITH APPROVED PLASTIC TAGS (ACTION CANNOT, BRAND, OR APPROVED EQUAL).

C. DISCONNECT SWITCHES:

1. DISCONNECT SWITCHES SHALL BE HEAVY DUTY, DEAD-FRONT, QUICK-MAKE, QUICK-BREAK, EXTERNALLY OPERABLE, HANDLE LOCKABLE AND INTERLOCK WITH CIRCUIT IN CLOSED POSITION, RATING AS INDICATED, UL LABELLED FURNISHED IN NEW OR EXISTING, SQUARE-D OR ENGINEERED APPROVED EQUAL.

D. CHEMICAL ELECTROLYTIC GROUNDING SYSTEM:

1. INSTALL CHEMICAL GROUNDING AS REQUIRED, THE SYSTEM SHALL BE ELECTROLYTIC MAINTENANCE FREE. ELECTRODE CORROSION OF RODS WITH A MINIMUM 1/8 INCH DIAMETER SHALL BE INSULATED. PROTECTIVE RODS, AND SMOOTHS MATERIAL, MANUFACTURER SHALL BE LYONDE 3BT GROUNDING ROD TYPE IC2-(P)20 OR IC2-(P)20 (1/2" LENGTH AS REQUIRED).

2. GROUND ACCESS BOX SHALL BE A POLYPLASTIC BOX FOR NON-TRITIC APPLICATIONS, INCLUDING BOLT DOWN FLUSH COVER WITH "BREATHING" HOLES, BT MODEL, P20-23. ALL DISCONNECT SWITCHES AND CONTROLLING DEVICES SHALL BE PROVIDED WITH EXPOSED LAMPOOD RANGELIGHTS INDICATING EQUIPMENT CONTROLLED, BRANCH CIRCUIT TO HUMMINGBIRD, AND THE ELECTRICAL POWER SOURCE.

3. SMOOTHS MATERIAL SHALL BE LYONDE AND LYONDE GROUNDING BRANSEL.

E. SYSTEM GROUNDING:

1. ALL GROUNDING COMPONENTS SHALL BE TYPED AND GROUNDING CONDUCTOR SHALL BE 2 AND 3/4 INCH SOLID, TYPED, COPPER, ABOVE GROUND GROUNDING CONDUCTORS SHALL BE INSULATED. WARE NOTED.

2. GROUNDING BUS SHALL BE BARE, THREADED, GALVANIZED COPPER BARS OF RECTANGULAR CROSS SECTION. STANDARD BUS BARS SHALL BE PROVIDED AND INSTALLED BY THE SUBCONTRACTOR. THEY SHALL NOT BE FURNISHED OR INSTALLED IN THE FIELD. ALL GROUNDING BUS SHALL BE IDENTIFIED WITH MINIMUM 3/4" LETTERS BY WAY OF STENCILING OR DESIGNATION PLATE.

3. CONNECTIONS SHALL BE HIGH-CONDUCTIVITY, HEAVY DUTY, LISTED AND LABELED AS GROUNDING CONNECTIONS FOR THE MATERIALS USED. USE TWO-HOLE COMPRESSION LUGS WITH INSPECTION WINDOW AND CLEAR HEAT SHIELDING.

4. EXOTHERMIC WELDED CONNECTIONS SHALL BE PROVIDED IN SET FORM AND SELECTED FOR THE SPECIFIC TYPES, SIZES, AND COMBINATIONS OF CONDUCTORS AND OTHER ITEMS TO BE CONNECTED.

5. GROUND RODS SHALL BE COPPER-CLAD STEEL WITH HIGH-TENSILE STEEL CORE AND ELECTROLYTIC-BARRIER COATING OUTER SHEATH. HOLE SIZE TO BE 3/8"X10"-10". ALL GROUNDING RODS SHALL BE INSTALLED WITH INSPECTION SLEEVES.

6. INSTALL AN EQUIPMENT GROUNDING CONDUCTOR IN ALL CONDUITS IN COMPLIANCE WITH THE "NEC" SPECIFICATIONS AND NEC. THE EQUIPMENT GROUNDING CONDUCTORS SHALL BE RATED AT ALL JUNCTION BOXES, PULLBOXES, DISCONNECT SWITCHES, STARTERS, AND EQUIPMENT CABINETS.

F. OTHER MATERIALS:

1. THE SUBCONTRACTOR SHALL PROVIDE OTHER MATERIALS, THOUGH NOT SPECIFICALLY DESCRIBED, WHICH ARE REQUIRED FOR A COMPLETELY OPERATIONAL SYSTEM AND PROPER INSTALLATION OF THE WORK.

2. PROVIDE PULL BOXES AND JUNCTION BOXES WHERE SHOWN OR REQUIRED BY NEC.

3. PANELS AND LOGS CONTAIN:

1. ALL PANEL DIRECTORIES SHALL BE TYPEWRITTEN.

PART 3 - EXECUTION

3.1. GENERAL:

A. ALL MATERIAL AND EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

B. EQUIPMENT SHALL BE THOROUGHLY COVERED AND PROTECTED AGAINST DIRT OR WATER, AND AGAINST CHEMICAL OR MECHANICAL DAMAGE PRIOR TO INSTALLATION AND CONSTRUCTION PERIODS.

3.2. LABOR AND WORKMANSHIP:

A. ALL LABOR FOR THE INSTALLATION OF MATERIALS AND EQUIPMENT FURNISHED FOR THE ELECTRICAL SYSTEM SHALL BE INSTALLED BY EMPLOYED WORKMEN, IN A NEAT AND WORKMAN-LIKE MANNER.

B. ALL ELECTRICAL EQUIPMENT SHALL BE ADJUSTED, ALIGNED AND TESTED BY THE SUBCONTRACTOR AS REQUIRED TO PRODUCE THE INTENDED PERFORMANCE.

C. UPON COMPLETION OF WORK, THE SUBCONTRACTOR SHALL THOROUGHLY CLEAN ALL EXPOSED EQUIPMENT, REMOVE ALL LABELS AND ANY DEBRIS, CHANGING OR CORDS AND LEAVE THE INSTALLATION FINISHED AND READY FOR OPERATION.

3.3. COORDINATION:

A. THE SUBCONTRACTOR SHALL COORDINATE THE INSTALLATION OF ELECTRICAL ITEMS WITH THE OWNER-FURNISHED EQUIPMENT SCHEDULE TO PREVENT UNNECESSARY DELAYS IN THE TOTAL WORK.

3.4. INSTALLATION:

A. CONDUIT:

1. ALL ELECTRICAL WIRING SHALL BE INSTALLED IN CONDUIT AS SPECIFIED. NO CONDUIT OR TUBING OF LESS THAN 3/4 INCH TRADE SIZE.

2. PROVIDE RIGID PVC SCHEDULE 40 CONDUIT FOR ALL REBERS, RMC OTHERWISE NOTED. EXT MAY BE INSTALLED FOR EXTERIOR CONDUITS WHERE NOT SUBJECT TO PHYSICAL DAMAGE.

3. THE INSTALLATION OF SCHEDULE 40 PVC AND RMC CONDUITS SHALL BE 34 INCHES MINIMUM DEPTH. ALL 90 DEGREE BENDS SHALL BE RMC. JOINTS SHALL BE RMC. JOINTS SHALL BE RMC. JOINTS SHALL BE RMC.

4. USE GALVANIZED FLEXIBLE STEEL CONDUIT WHERE DIRECT CONNECTION TO EQUIPMENT WITH MOVEMENT, VIBRATION OR FLEXING IS REQUIRED. USE LOCKED TIGHT, FLEXIBLE METAL CONDUIT FOR OUTDOOR APPLICATIONS. INSTALL GALVANIZED FLEXIBLE STEEL CONDUIT AT ALL PORTS OF CONNECTION.

5. RUN OF CONDUIT BETWEEN DEVICES ON EQUIPMENT SHALL NOT CONTAIN MORE THAN THE EQUIVALENT OF THREE QUARTER-BEND. CONDUIT BEND SHALL BE MADE WITH THE UL LISTED BENDER OR FACTORY 90 DEGREE ELBOWS MAY BE USED.

6. FIELD PREPARED CONDUITS SHALL BE CUT SQUARE WITH A CONDUIT CUTTING TOOL AND REAMED TO PROVIDE A SMOOTH INSIDE SURFACE.

7. PROVIDE INSULATED GROUNDING BUSWORK FOR ALL CONDUITS.

8. SUBCONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL CONDUITS DURING CONSTRUCTION. TEMPORARY PROVISIONS IN THE CONDUIT SYSTEM SHALL BE PLANNED OR CAPPED TO PREVENT ENTRANCE OF MOISTURE OR FOREIGN MATTER. SUBCONTRACTOR SHALL REPLACE ANY CONDUITS DAMAGED FROM MATERIALS THAT CANNOT BE REPAIRED.

9. ALL CONDUITS SHALL BE FINISHED CLEAN BY PULLING AN APPROPRIATE SIZE WIPER, THROUGH THE CONDUIT BEFORE INSTALLATION OF CONDUCTORS OR CABLES. CONDUIT SHALL BE FREE OF DIRT AND DEBRIS.

10. INSTALL PULL STRINGS IN ALL CLEAN EMPTY CONDUITS. IDENTIFY PULL STRINGS AT EACH END.

11. INSTALL 3" HIGHLY VISIBLE AND DETECTABLE TAPE 1" ABOVE ALL UNDERGROUND CONDUITS AND CONDUCTORS.

12. CONDUITS SHALL BE INSTALLED IN SUCH A MANNER AS TO INSURE AGAINST COLLECTION OF TRAPPED CONDUCTORS.

13. PROVIDE CORE DRILLING AS NECESSARY FOR PENETRATIONS TO ALLOW FOR REINFORCING AND CABLES TO BE ROUTED THROUGH THE BUILDING. DO NOT PENETRATE STRUCTURAL MEMBERS, BEAMS AND/OR PENETRATIONS IN FINE MESH CONSTRUCTION SHALL BE EFFECTIVELY SEALED WITH FIRE RATED MATERIAL, WHICH SHALL MAINTAIN THE FIRE RATING OF THE WALL OR STRUCTURE. FIRE STOPS AT FLOOR PENETRATIONS SHALL PREVENT INGRESS OF WATER, SMOKE, FIRE, AND FLAMES. ALL MATERIAL SHALL BE UL APPROVED FOR THIS PURPOSE.

B. CONDUCTORS AND CABLE:

1. ALL POWER WIRING SHALL BE COLOR CODED AS FOLLOWS:

PHASE A: RED
PHASE B: BLUE
PHASE C: GREEN
GROUNDING: WHITE

2. PULLING SHALL BE MADE ONLY AT OUTLETS, JUNCTION BOXES, OR ACCESSIBLE RACKS/CONDUITS APPROVED BY THE PROJECT.

3. PULLED CABLES SHALL BE UL APPROVED. SUBCONTRACTOR SHALL USE 1/2 INCH OR MORE ROPE FOR PULLING CONDUIT OR CABLES INTO THE CONDUIT.

4. CABLES SHALL BE NEATLY TRIMMED, WITHOUT INTERLACING, AND BE OF SUFFICIENT LENGTH IN ALL BOXES & EQUIPMENT TO PERMIT EASY RE-ARRANGING. CABLES SHALL BE SECURED IN A MANNER TO AVOID TENSION ON CONDUCTORS OR TERMINALS. CONDUCTORS SHALL BE PROTECTED FROM MECHANICAL ABUSE AND MOISTURE. SHARP BENDS OVER CONDUIT BUSWORK ARE PROHIBITED. DAMAGED CABLES SHALL BE REMOVED AND REPLACED AT THE SUBCONTRACTOR'S EXPENSE.

C. DISCONNECT SWITCHES:

1. INSTALL DISCONNECT SWITCHES LEVEL AND PLUMB. CONNECT TO WIRING SYSTEM AND GROUNDING SYSTEM AS INDICATED.

D. GROUNDING:

1. ALL METALLIC PARTS OF ELECTRICAL EQUIPMENT WHICH DO NOT CARRY CURRENT SHALL BE GROUNDING IN ACCORDANCE WITH THE REQUIREMENTS OF THE BUILDING MANUFACTURER, AT&T GROUNDING AND BONDING STANDARDS TP-78-116, IEEE-80-21.3, AND THE NATIONAL ELECTRICAL CODE.

2. PROVIDE ELECTRICAL GROUNDING AND BONDING SYSTEM INDICATED WITH ASSEMBLY OF MATERIALS, INCLUDING GROUNDING ELECTRODE, BONDING AMPERS AND ADDITIONAL ACCESSORIES AS REQUIRED FOR A COMPLETE INSTALLATION.

3. ALL GROUNDING CONDUCTORS SHALL PROVIDE A STRAIGHT DOWNWARD PATH TO GROUND WITH MINIMUM BEND AS REQUIRED. GROUNDING CONDUCTORS SHALL NOT BE LOOSED OR SHARPLY BENT. ROUTE GROUNDING CONDUCTORS AND CONDUCTORS TO GROUND IN THE SHORTEST AND STRAIGHTEST PATH POSSIBLE TO MINIMIZE TRANSIENT VOLTAGE RISES.

4. BUILDINGS AND/OR NEW TOWER GREATER THAN 75 FEET IN HEIGHT AND WHERE THE MAIN GROUNDING CONDUCTORS ARE REQUIRED TO BE INSTALLED TO GROUND, THE SUBCONTRACTOR SHALL ROUTE TWO GROUNDING CONDUCTORS FROM THE ROOFTOP, TOWER, AND WATER TOWERS GROUNDING RING, TO TWO OUTSIDE GROUNDING SYSTEMS. THE GROUNDING CONDUCTORS SHALL NOT BE SMALLER THAN 3/4 INCH. GROUNDING CONDUCTORS SHALL BE INSTALLED TO GROUND IN THE EXISTING GROUNDING SYSTEM, THE BUILDING STEEL, COLUMNS, LIGHTNING PROTECTION SYSTEMS, AND BUILDING MAIN WATER LINE (OUTDOOR OR INDIVIDUAL MAINS, PIPING ONLY). SEE DRAWING 8.2.2.

5. TOWER GROUNDING AND BONDING CONNECTIONS, INCLUDING BONDING AND BOLTS, IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED TORQUE TIGHTENING VALUES FOR CONNECTIONS AND BOLTS. WHERE MANUFACTURER'S TORQUE TIGHTENING VALUES ARE NOT AVAILABLE, TIGHTEN CONNECTIONS TO COMPLY WITH TIGHTENING TORQUE VALUES SPECIFIED IN UL TO ASSURE PERMANENT AND EFFECTIVE GROUNDING.

6. SUBCONTRACTOR SHALL VERIFY THE LOCATIONS OF GROUNDING ICE-TH-POINTS TO THE EXISTING GROUNDING SYSTEM. ALL UNDERGROUND GROUNDING CONNECTIONS SHALL BE MADE BY THE EXOTHERMIC WELD PROCESS AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

7. ALL GROUNDING CONNECTIONS SHALL BE INSPECTED FOR TIGHTNESS. EXOTHERMIC WELDED CONNECTIONS SHALL BE APPROVED BY THE INSPECTOR HAVING JURISDICTION BEFORE BEING PERMANENTLY CONCEALED.

8. APPLY CORROSION-RESISTANCE FINISH TO FIELD CONNECTIONS AND PLACES WHERE FACTORY APPLIED PROTECTIVE COATING HAS BEEN DESTROYED. USE ROPS-SHIELD AND-CHARGE COMPOUND ON ALL CORROSION GROUNDING CONNECTIONS.

9. A SEPARATE, CONTINUOUS, INSULATED EQUIPMENT GROUNDING CONDUCTOR SHALL BE INSTALLED IN ALL FEEDER AND BRANCH CIRCUITS.

10. BOND ALL INSULATED GROUNDING BUSWORK WITH A BARE 6 AWG GROUNDING CONDUCTOR TO A GROUND BUS.

11. CORRECT BURIED GROUNDING CONDUCTORS SHALL BE INSTALLED AT A MINIMUM DEPTH OF 30" MINIMUM BELOW GRADE, OR IF BELOW THE FIRST LINE, USE THE GREATER OF THE TWO DISTANCES.

12. ALL GROUNDING CONDUCTORS EMBEDDED IN OR PENETRATING CONCRETE SHALL BE INSTALLED IN SCHEDULE 40 PVC CONDUIT.

13. THE INSTALLATION OF CHEMICAL ELECTROLYTIC GROUNDING SYSTEM IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. REMOVE SEALING TAPE FROM LEACHING AND BREATHING HOLES. INSTALL PROTECTIVE BOX FLUSH WITH GROUND.

14. DRIVE GROUND RODS UNTIL TOPS ARE A MINIMUM DISTANCE OF 34" DEPTH OR IF BELOW FIRST LINE, USING THE GREATER OF THE TWO DISTANCES.

15. IF COAL ON THE ICE BRIDGE IS MORE THAN 6 FT. FROM THE GROUNDING BUS AT THE BASE OF THE TOWER, A SECOND GROUNDING ROP SHALL BE USED AT THE END OF THE ICE BRIDGE, TO GROUND THE COAL CABLE GROUNDING RING AND IN-LINE ANCHORS.

16. SUBCONTRACTOR SHALL REPAIR, AND/OR REPLACE, EXISTING GROUNDING SYSTEM COMPONENTS DAMAGED DURING CONSTRUCTION AT THE SUBCONTRACTOR'S EXPENSE.

3.5. ACCEPTANCE TESTING:

A. CERTIFIED PERSONNEL USING CERTIFIED EQUIPMENT SHALL PERFORM REQUIRED TESTS AND SUBMIT WRITTEN TEST REPORTS UPON COMPLETION.

B. WHEN MATERIAL AND/OR WORKMANSHIP IS FOUND NOT TO COMPLY WITH THE SPECIFIED REQUIREMENTS, THE NONCOMPLYING ITEMS SHALL BE REMOVED FROM THE PROJECT SITE AND REPLACED WITH ITEMS COMPLYING WITH THE SPECIFIED REQUIREMENTS PROMPTLY AFTER RECEIPT OF NOTICE FOR NON-COMPLIANCE.

C. TEST PROCEDURES:

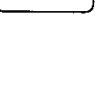
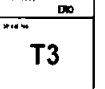
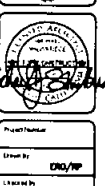
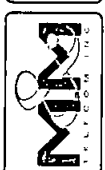
1. ALL FLEXIBLE SHALL HAVE INSULATION TESTED AFTER INSTALLATION, BEFORE CONNECTION TO DEVICES. THE GROUNDING SYSTEM SHALL BE TESTED FIRST FROM SHORT CIRCUIT AND GROUND. TESTING SHALL BE FOR ONE MINUTE USING 1000V DC. PROVIDE WRITTEN DOCUMENTATION FOR ALL TESTS LISTED TO SUBCONTRACTOR.

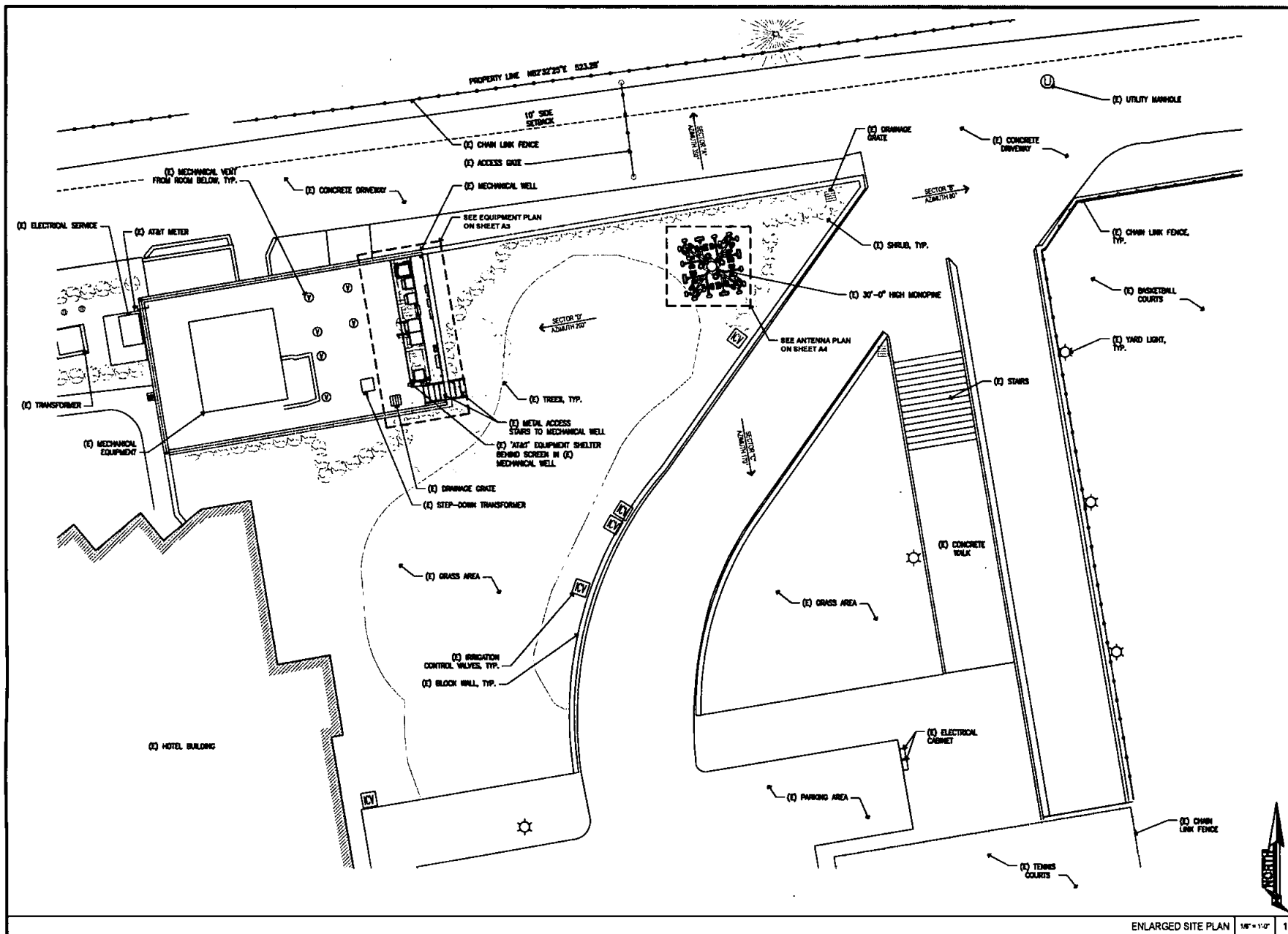
2. PRIOR TO ENERGIZING CIRCUIT, TEST WIRING DEVICES FOR ELECTRICAL CONTINUITY AND PROPER POLARITY CONNECTIONS.

3. MEASURE AND RECORD VOLTAGES BETWEEN PHASES AND BETWEEN PHASE CONDUCTORS AND NEUTRALS. SUBMIT A REPORT OF MAXIMUM AND MINIMUM VOLTAGES.

4. FURNISH GROUNDING TEST TO MEASURE GROUNDING RESISTANCE OF GROUNDING SYSTEM USING THE IEEE STANDARD 3-POINT "VALL-OF-POTENTIAL" METHOD. PROVIDE PLANTED TEST VALUES AND LOCATION DATA, WITHIN THE OWNER'S IMMEDIATELY 9 MEASURED VALUE IS OVER 9 OHMS.

1	1/16/2017	11/21/17
2	8/16/2017	10/21/17
3	8/16/2017	10/21/17
4	8/16/2017	10/21/17





ENLARGED SITE PLAN 1/8" = 1'-0" 1

Rev.	Description	Date
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2	95% CD	10-29-93

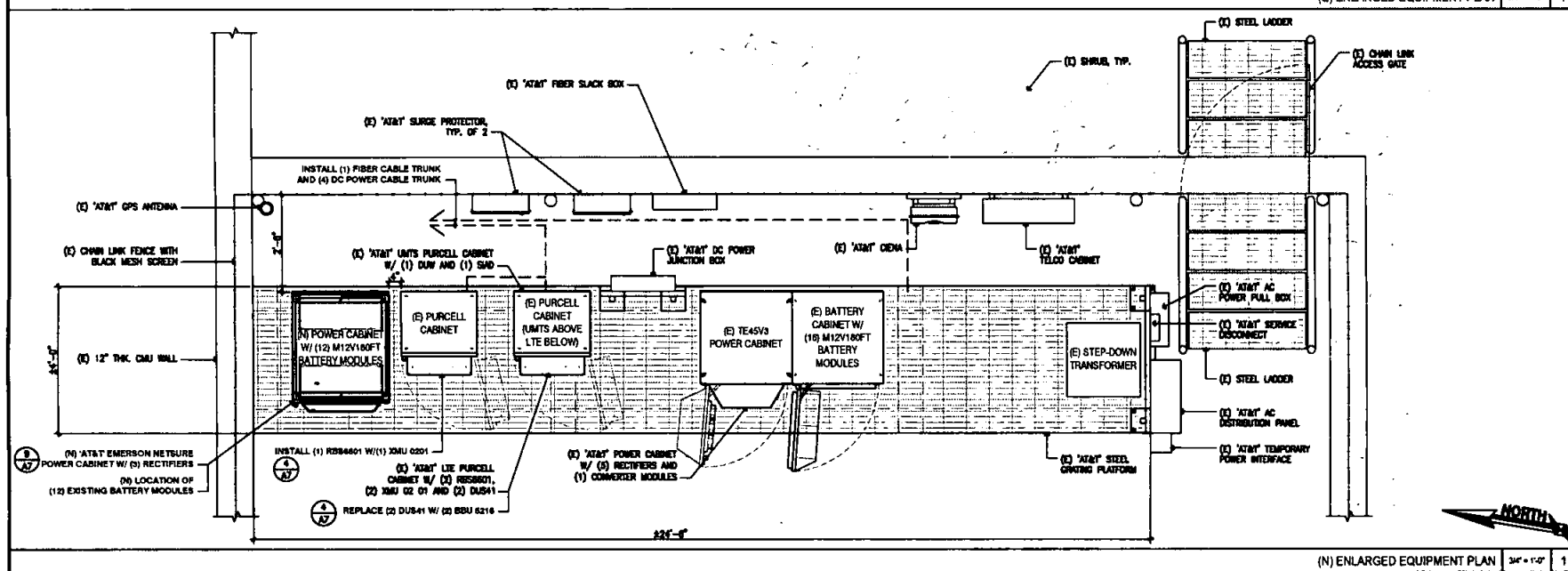
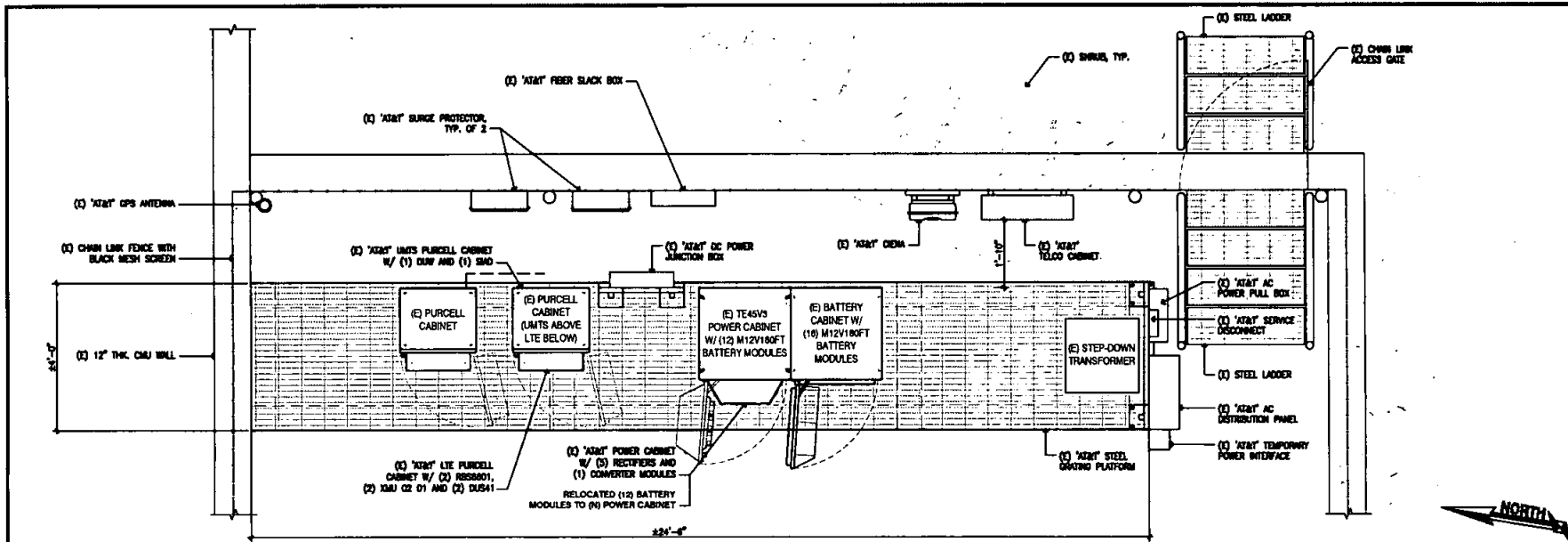


ENLARGED
SITE PLAN

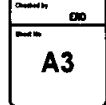
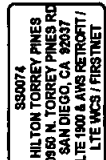
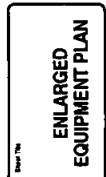
SS0074
HILTON TORREY PINES
HOTEL IN LOS ANGELES, CA
LITE 1000 & 1000 RESTRICTED /
LITE 1000 & 1000 RESTRICTED /
LITE 1000 & 1000 RESTRICTED



Project Number	
Drawn by	END/TP
Checked by	END
Sheet No.	A2



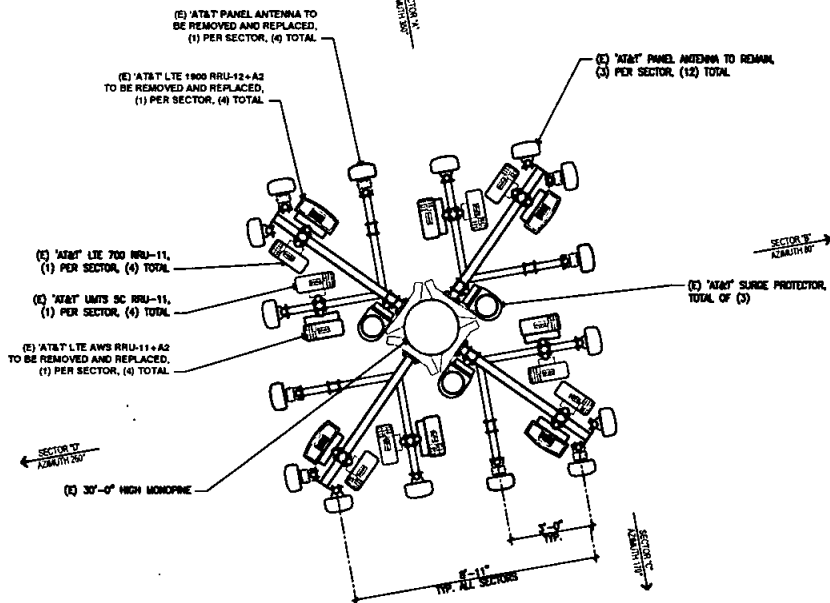
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9	10/11/11	11/21/11
10	10/11/11	11/21/11



EXISTING ANTENNA SCHEDULE									
SECTOR	TECHNOLOGY	ANTENNA			RRU MODEL / QTY.	TWA / FILTER MODEL / QTY.	TRANSMISSION LINES (SIZE / LENGTH FT +/- 5')		
		MAKE / MODEL	AZIMUTH	BO CENTER	TP HEIGHT				
ALPHA SECTOR	A1	LTE 700 / 1900	ETXUM88148518RKTNA	350'	24'-0"	27'-0"	RRU-11 (1) / RRU-12+42 (1)	-	FIBER
	A2	UMTS 850 / LTE AWS	ETXUM88148518RKTNA	350'	24'-0"	27'-0"	RRU-11 (1) / RRU-11+42 (1)	-	FIBER
	A3	SPARE	80010785	350'	24'-0"	27'-0"	-	-	-
	A4	SPARE	80010785	350'	24'-0"	27'-0"	-	-	-
BETA SECTOR	B1	LTE 700 / 1900	ETXUM88148518RKTNA	87'	24'-0"	27'-0"	RRU-11 (1) / RRU-12+42 (1)	-	FIBER
	B2	UMTS 850 / LTE AWS	ETXUM88148518RKTNA	87'	24'-0"	27'-0"	RRU-11 (1) / RRU-11+42 (1)	-	FIBER
	B3	SPARE	80010785	87'	24'-0"	27'-0"	-	-	-
	B4	SPARE	80010785	87'	24'-0"	27'-0"	-	-	-
GAMMA SECTOR	C1	LTE 700 / 1900	ETXUM88148518RKTNA	170'	24'-0"	27'-0"	RRU-11 (1) / RRU-12+42 (1)	-	FIBER
	C2	UMTS 850 / LTE AWS	ETXUM88148518RKTNA	170'	24'-0"	27'-0"	RRU-11 (1) / RRU-11+42 (1)	-	FIBER
	C3	SPARE	80010785	170'	24'-0"	27'-0"	-	-	-
	C4	SPARE	80010785	170'	24'-0"	27'-0"	-	-	-
DELTA SECTOR	D1	LTE 700 / 1900	ETXUM88148518RKTNA	280'	24'-0"	27'-0"	RRU-11 (1) / RRU-12+42 (1)	-	FIBER
	D2	UMTS 850 / LTE AWS	ETXUM88148518RKTNA	280'	24'-0"	27'-0"	RRU-11 (1) / RRU-11+42 (1)	-	FIBER
	D3	SPARE	80010785	280'	24'-0"	27'-0"	-	-	-
	D4	SPARE	80010785	280'	24'-0"	27'-0"	-	-	-

NOTES:

1. MONOPINE NEEDLES NOT SHOW FOR CLARITY.

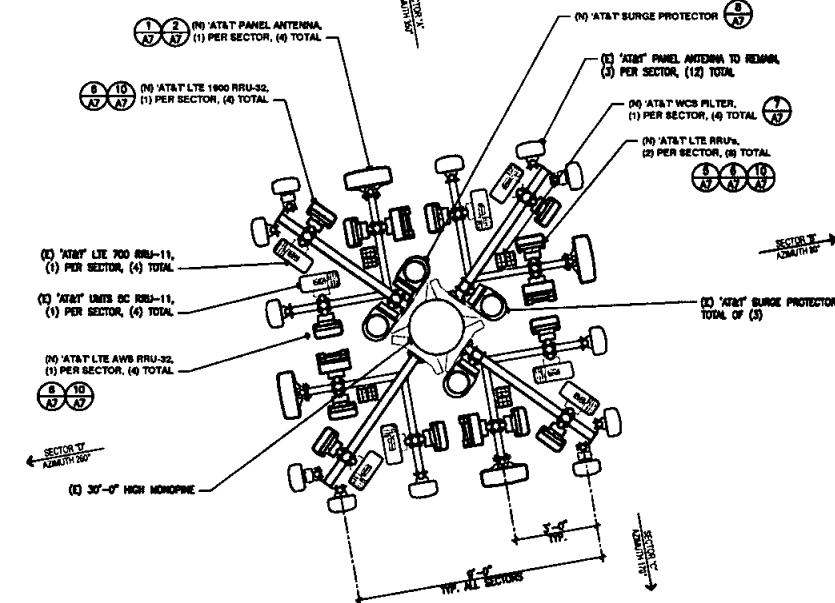


(E) ENLARGED ANTENNA PLAN 34" = 1'-0" 1

NEW ANTENNA SCHEDULE									
SECTOR	TECHNOLOGY	ANTENNA			RRU MODEL / QTY.	TWA / FILTER MODEL / QTY.	TRANSMISSION LINES (SIZE / LENGTH FT +/- 5')		
		MAKE / MODEL	AZIMUTH	BO CENTER	TP HEIGHT				
ALPHA SECTOR	A1	LTE 700 / 1900	ETXUM88148518RKTNA	350'	24'-0"	27'-0"	RRU-11 (1) / RRU-32 (1)	-	FIBER
	A2	UMTS 850 / LTE AWS	ETXUM88148518RKTNA	350'	24'-0"	27'-0"	RRU-11 (1) / RRU-32 (1)	-	FIBER
	A3	LTE WCS / FIRSTNET	80010866K	350'	22'-4"	27'-0"	RRU-32 (1) / RRU B14 4478 (1)	WCS-IMFO-AMT-43 (1)	FIBER
	A4	SPARE	80010785	350'	24'-0"	27'-0"	-	-	-
BETA SECTOR	B1	LTE 700 / 1900	ETXUM88148518RKTNA	87'	24'-0"	27'-0"	RRU-11 (1) / RRU-32 (1)	-	FIBER
	B2	UMTS 850 / LTE AWS	ETXUM88148518RKTNA	87'	24'-0"	27'-0"	RRU-11 (1) / RRU-32 (1)	-	FIBER
	B3	LTE WCS / FIRSTNET	80010866K	87'	22'-4"	27'-0"	RRU-32 (1) / RRU B14 4478 (1)	WCS-IMFO-AMT-43 (1)	FIBER
	B4	SPARE	80010785	87'	24'-0"	27'-0"	-	-	-
GAMMA SECTOR	C1	LTE 700 / 1900	ETXUM88148518RKTNA	170'	24'-0"	27'-0"	RRU-11 (1) / RRU-32 (1)	-	FIBER
	C2	UMTS 850 / LTE AWS	ETXUM88148518RKTNA	170'	24'-0"	27'-0"	RRU-11 (1) / RRU-32 (1)	-	FIBER
	C3	LTE WCS / FIRSTNET	80010866K	170'	22'-4"	27'-0"	RRU-32 (1) / RRU B14 4478 (1)	WCS-IMFO-AMT-43 (1)	FIBER
	C4	SPARE	80010785	170'	24'-0"	27'-0"	-	-	-
DELTA SECTOR	D1	LTE 700 / 1900	ETXUM88148518RKTNA	280'	24'-0"	27'-0"	RRU-11 (1) / RRU-32 (1)	-	FIBER
	D2	UMTS 850 / LTE AWS	ETXUM88148518RKTNA	280'	24'-0"	27'-0"	RRU-11 (1) / RRU-32 (1)	-	FIBER
	D3	LTE WCS / FIRSTNET	80010866K	280'	24'-0"	27'-0"	RRU-32 (1) / RRU B14 4478 (1)	WCS-IMFO-AMT-43 (1)	FIBER
	D4	SPARE	80010785	280'	24'-0"	27'-0"	-	-	-

NOTES:

1. MONOPINE NEEDLES NOT SHOW FOR CLARITY.



(N) ENLARGED ANTENNA PLAN 34" = 1'-0" 2

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2	95% CD	10-26-17
Rev	Description	Date



ANTENNA PLAN
AND SCHEDULE

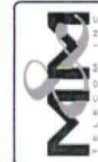
SS0074
HILTON TORREY PINES
8050 N. TORREY PINES RD
LOS ANGELES, CA 90045
LTE 1900 & AWS 1900
LTE WCS / FIRSTNET

TELECOM
SOLUTIONS
San Jose, CA



Project Number
Drawn by: **END/MP**
Checked by: **END**
Sheet No:
A4

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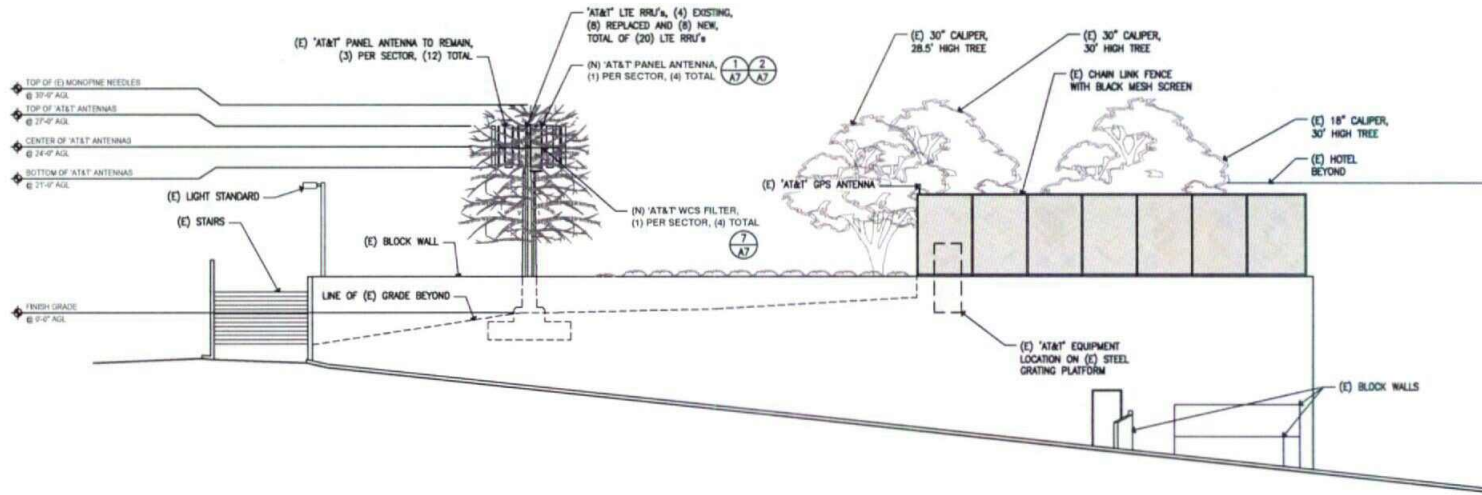


ELEVATIONS

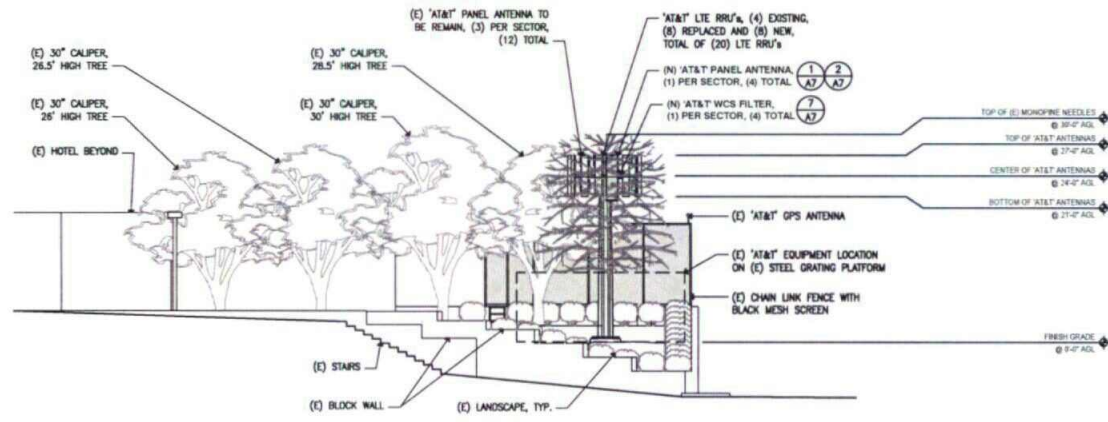
SS0074
HILTON TORREY PINES
10950 N. TORREY PINES RD
SAN DIEGO, CA 92037
LTE 1900 & AWS RETROFIT /
LTE WCS / FIRSTNET



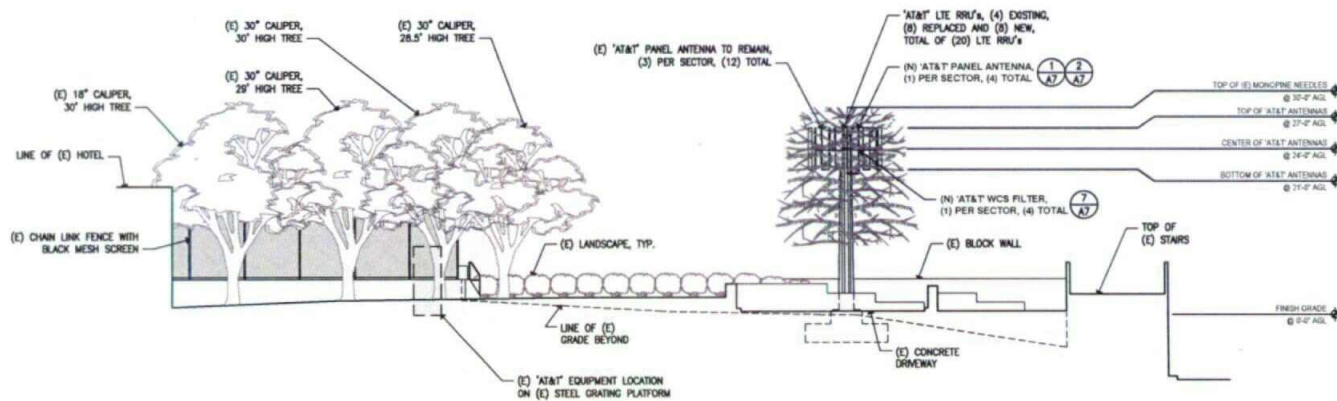
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Sheet No.: **A5**



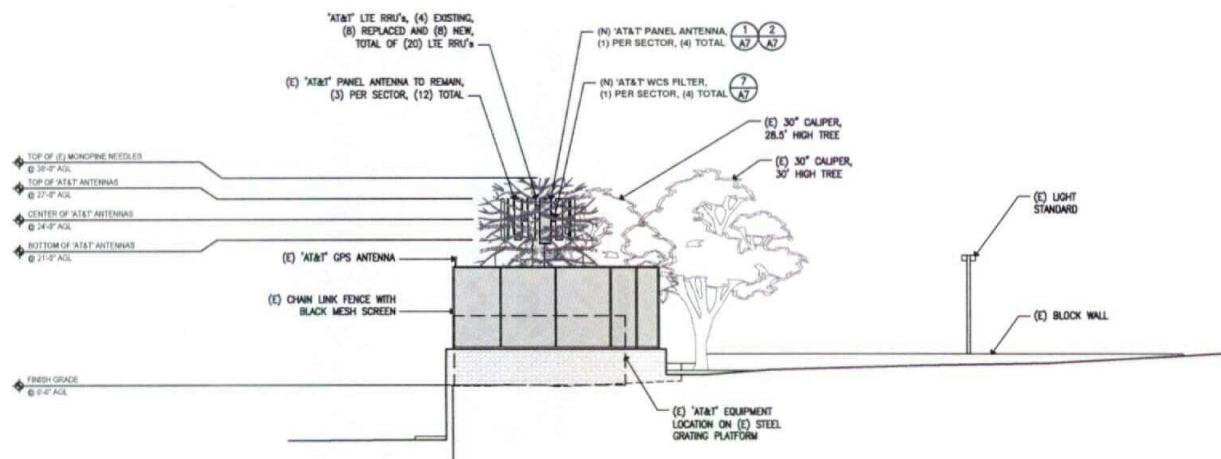
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(N) EAST ELEVATION 1/8" = 1'-0" 2



(N) SOUTH ELEVATION 1/8" = 1'-0" 1



(N) WEST ELEVATION 1/8" = 1'-0" 2

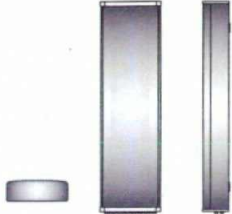
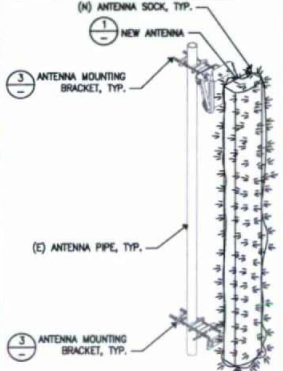
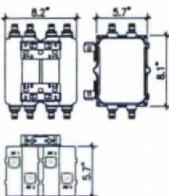
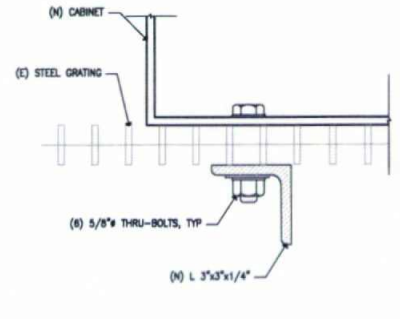
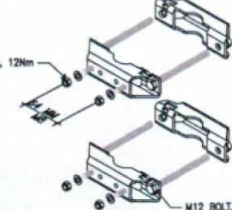
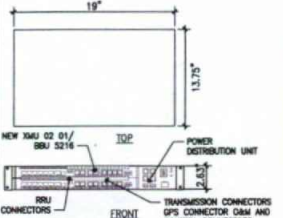
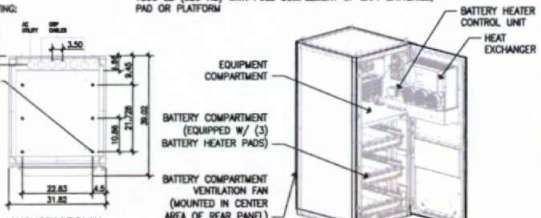
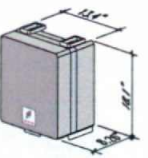
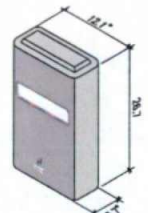
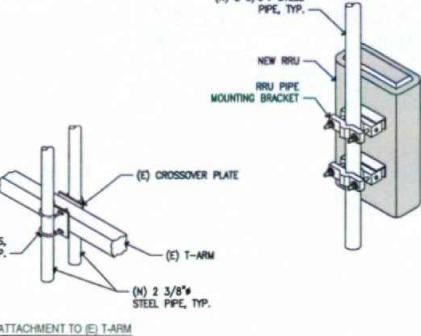
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SS0074
HILTON TORREY PINES
10550 N. TORREY PINES RD
SAN DIEGO, CA 92037
LTE 1500 & AWS RETROFIT /
LTE WCS / FIRSTNET



Project Number	
Drawn by	ENC/HP
Checked by	ERO
Sheet No.	A6

KATHREIN 80010965K DIMENSIONS, LxWxD: 1999 x 508 x 175mm (78.7" x 20" x 6.9") WEIGHT (W/O UT CLAMP): 44.3 kg (97.6 lbs) CONNECTOR: 8 x 4.3-10 FEMALE 						QUAD WCS IMF FOR 2360-2395 MHZ AMT BAND CO-LOCATION MODEL NUMBER: WCS-IMF-AMT-43 PART NUMBER: E15H7P73 DIMENSIONS, HxWxD: 206x144x209 mm (8.1x 5.7 x 8.2 in) WEIGHT: W/O MOUNTING 8 kg (17.6 lbs) W/ MOUNTING 9.3 kg (20.4 lbs) FINISH: GRAY PAINT CONNECTORS, RF: 3-10 FEMALE GROUND TERMINAL DIAMETER, MM (IN) 5 (0.20) 			RAYCAP DC6-48-60-18-8F DIMENSIONS, WxDxH: 280x470x794mm (11"x18.5"x31.25") NOMINAL OPERATING VOLTAGE: 48 VDC NOMINAL DISCHARGE CURRENT: 20 MA 8/20:10 MAXIMUM CONTINUOUS OPERATING VOLTAGE: 60 MA 8/20:10 VOLTAGE PROTECTION RATING: 75 VDC WIND LOADING: 150 MPH SUSTAINED(105.7lbs) TOTAL WEIGHT: 32.8 lbs 																										
(N) ANTENNA SPECIFICATIONS			NTS			1			(N) FILTER SPECIFICATIONS			NTS			7			(N) SURGE PROTECTOR SPECS			NTS			8			(N) POWER CABINET ANCHOR DETAIL			NTS			11		
KATHREIN : 2 X 738 546 MOUNTING KIT  MOUNTING OPTIONS: MODEL: 2 X 738 546 (INCLUDED): 2 X 738 546 WIND LOAD CATEGORY: LIGHT / MEDIUM / HEAVY 850 10008 DESCRIPTION: MOUNTING KIT FOR 2 TO 4.6 INCH (50 TO 115 MM) OD MAST. 4.4 LB (2 KG) TLT MOUNT KIT 0-15 DEGREES DOWNTILT ANGLE 9.5 LB (4.3 KG)			 ERICSSON RBS 6601 DIMENSIONS, WxDxH: 482x350x66mm (19"x13.75"x2.63") NOMINAL OPERATING VOLTAGE: 48 VDC TOTAL WEIGHT: ± 19.8 lbs ERICSSON BBU 5216/XMU 02 01 DIMENSIONS, WxDxH: 350x282x30mm (13.7"x11.1"x1.2") NOMINAL OPERATING VOLTAGE: 48 VDC TOTAL WEIGHT: ± 4.62 lbs			 Outdoor NetSure 512 DC Power System THE NETXTEND™ FLEX SERIES -48VDC/+24VDC POWER/BATTERY ENCLOSURE TECHNICAL SPECIFICATIONS (REQ.15917 / F2012504, REQ.15999 / F1010599) BATTERY: VRLA GNB, UP TO 180 AH (OR EQUIVALENT) SAFT MA-Cod, UP TO 180 AH (OR EQUIVALENT) DIMENSIONS, HxWxD: 1830.3x806x991.1mm (72.06"x31.81"x39.02") FOOTPRINT: 1829x762x762mm (72"x30"x30") ENCLOSURE: 1829x762x990mm (72"x30"x37.8") WEIGHT: 690 LB (314 KG) WITHOUT BATTERIES AND RECTIFIERS 2300 LB (1040 KG) WITH FULL COMPLEMENT OF GNB BATTERIES; 1800 LB (820 KG) WITH FULL COMPLEMENT OF SAFT BATTERIES; PAD OR PLATFORM MOUNTING: ANCHORAGE PLAN BATTERY HEATER CONTROL UNIT HEAT EXCHANGER EQUIPMENT COMPARTMENT BATTERY COMPARTMENT (EQUIPPED W/ (3) BATTERY HEATER PADS) BATTERY COMPARTMENT VENTILATION FAN (MOUNTED IN CENTER AREA OF REAR PANEL)			(N) POWER/BATTERY ENCLOSURE SPECIFICATIONS			NTS			9			NOT USED			NTS			12											
ERICSSON B14 4478 DIMENSIONS, WxDxH: 13.4"x8.26"x18.1" WEIGHT: 55.4 lbs (27 Kg) MAX WIND LOAD: 50M/SEC = 260H BREAKER SIZE: 25A 			ERICSSON RRUS-32 DIMENSIONS, WxDxH: 12.1"x6.7"x26.7" WEIGHT: 24 Kg/53 lbs (W/O MOUNTING HARDWARE): 24 Kg/53 lbs PORTS: CPM 2 PORTS x 10 Gbps FREQUENCY: 82, 866, 830 BREAKER: 30A, 30A, 20A OUTPUT POWER (WATTS): 410, 850, 800 			 (N) 2 3/8" STEEL PIPE, TYP. NEW RRU RRU PIPE MOUNTING BRACKET (E) CROSSOVER PLATE (E) T-ARM (N) 5/8" U-BOLTS, TYP. (N) 2 3/8" STEEL PIPE, TYP. PIPE ATTACHMENT TO (E) T-ARM			(N) RRU MOUNTING DETAIL			NTS			10			NOT USED			NTS			10											
(N) RRU SPECIFICATIONS			NTS			5			(N) RRU SPECIFICATIONS			NTS			6			(N) RRU MOUNTING DETAIL			NTS			10			NOT USED			NTS			10		

1	10/24/17	10/24/17
2	10/24/17	10/24/17
3	10/24/17	10/24/17
4	10/24/17	10/24/17
5	10/24/17	10/24/17
6	10/24/17	10/24/17
7	10/24/17	10/24/17
8	10/24/17	10/24/17
9	10/24/17	10/24/17
10	10/24/17	10/24/17
11	10/24/17	10/24/17
12	10/24/17	10/24/17
13	10/24/17	10/24/17




SITE DETAILS

SS0074
HILTON TORREY PINES RD
10950 N. TORREY PINES RD
SAN DIEGO, CA 92037
LTE 1900 & AWS RETROFIT /
LTE WCS / FIRSTNET





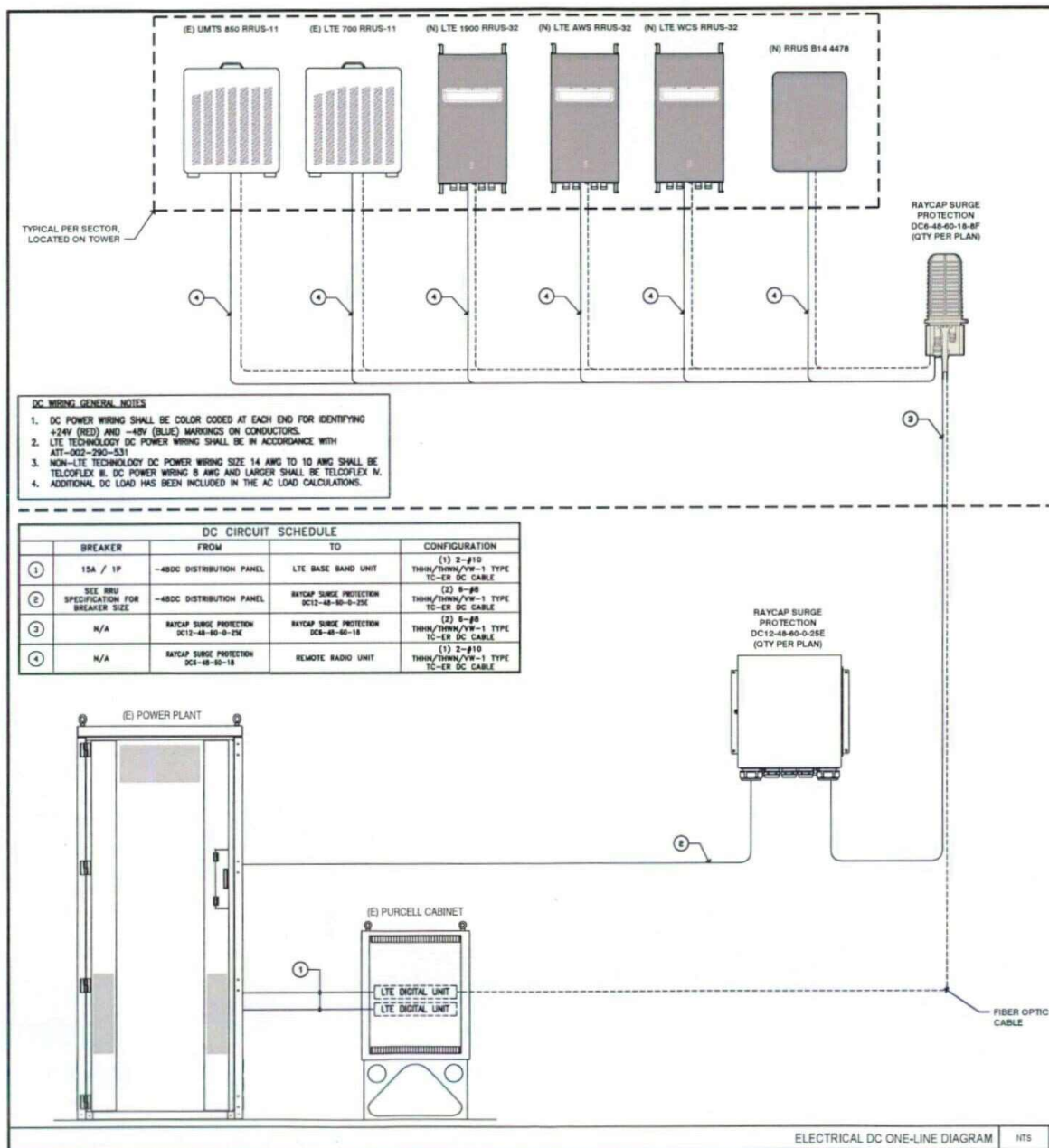
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Drawn by: ENG/MP

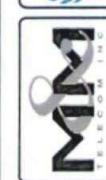
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Sheet No:

A7



1	100% CD	11-21
8	90% CD	10-26
Rev.	Description	Date



ELECTRICAL DC ONE-LINE DIAGRAM

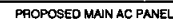
SS0074
HILTON TORREY PINES
1950 N. TORREY PINES RD
SAN DIEGO, CA 92037
LTE 1900 & AWS RETROFIT /
LTE WMS / FIRSTNET



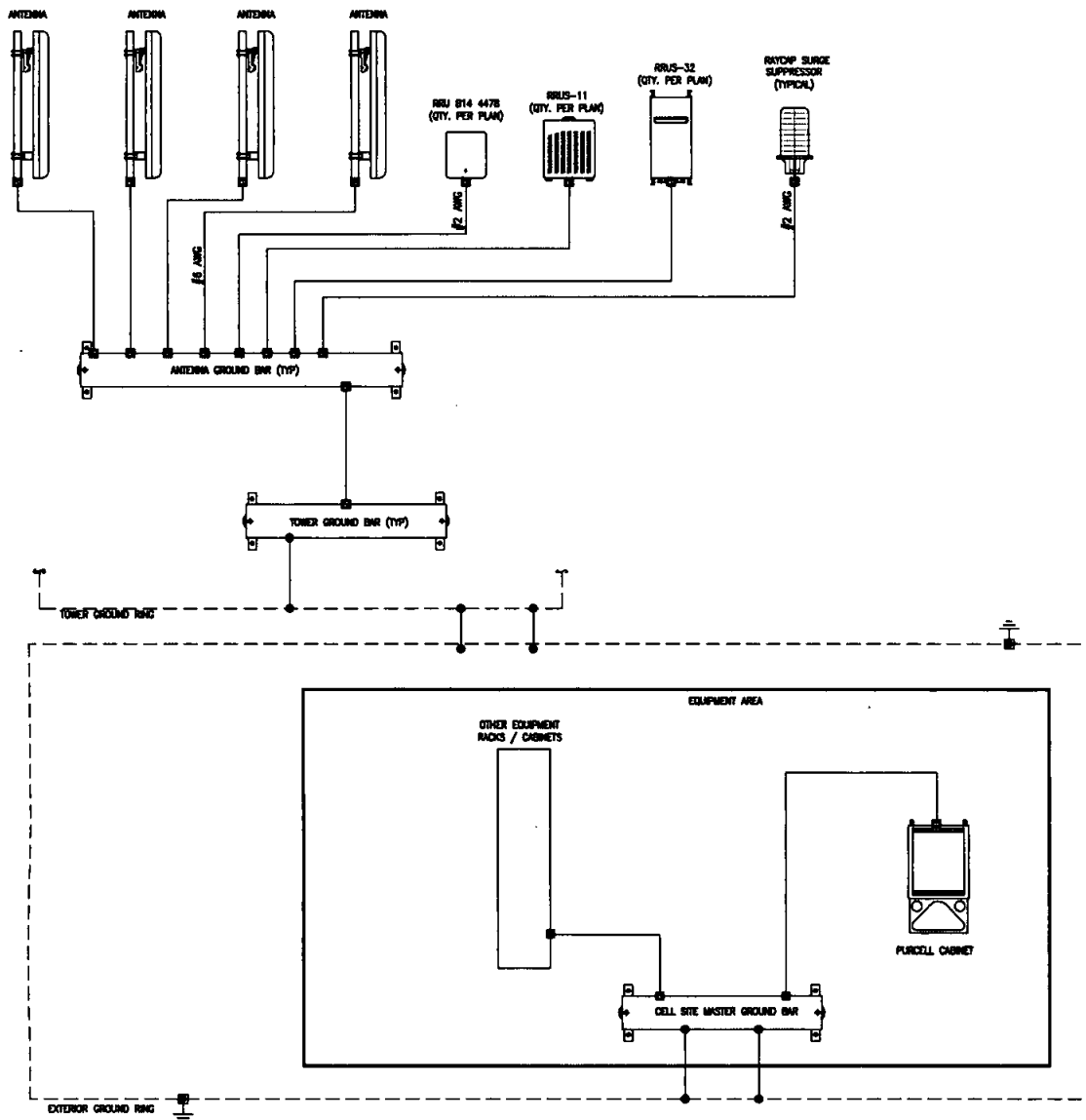
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Drawn by: ERO/MP
Checked by: ERO
Sheet No: E2

NOTES:
CIRCUIT BREAKERS 10,000 A.I.C.

NOTES:
CIRCUIT BREAKERS 10,000 A.I.C.



4. ADDITIONAL DC LOAD HAS BEEN INCLUDED IN THE AC LOAD CALCULATIONS.

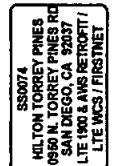
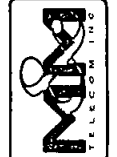
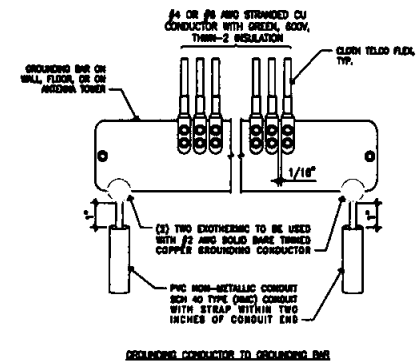
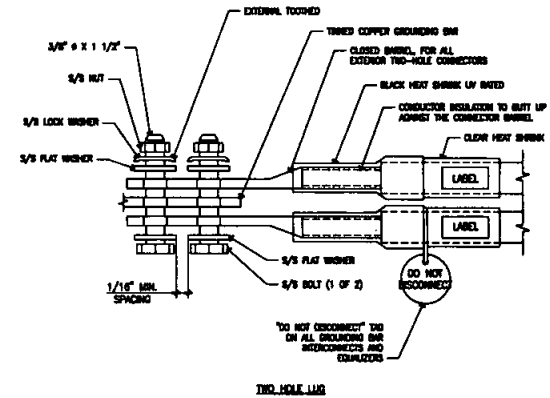


NOTES:

- GROUNDING IS SHOWN DIAGNOSTICALLY ONLY.
- CONTRACTOR SHALL GROUND ALL EQUIPMENT AS A COMPLETE SYSTEM. GROUNDING SHALL BE IN COMPLIANCE WITH CEC SECTION 250 AND ADOPTED GROUNDING AND BONDING REQUIREMENTS (WTT-TP-78416) AND MANUFACTURER'S SPECIFICATIONS.
- ALL GROUND CONDUCTORS SHALL BE COPPER; NO ALUMINUM CONDUCTORS SHALL BE USED.
- GROUNDING EARTH RESISTANCE SHALL NOT EXCEED 25 OHMS. IF A SINGLE ROD, PIPE OR PLATE HAS EARTH RESISTANCE IN EXCESS OF 25 OHMS, SUPPLEMENTAL GROUNDING ELECTRODES SHALL BE ADDED AT 6 FEET MINIMUM INTERVALS IN ORDER TO ACHIEVE EARTH RESISTANCE OF LESS THAN 25 OHMS.

LEGEND

- EXOTHERMIC CONNECTION
- MECHANICAL CONNECTION
- GROUND ROD
- TEST GROUND ROD WITH INSPECTION SLEEVE



Project Number	
Drawn by	END/MP
Checked by	END
Sheet No.	E3