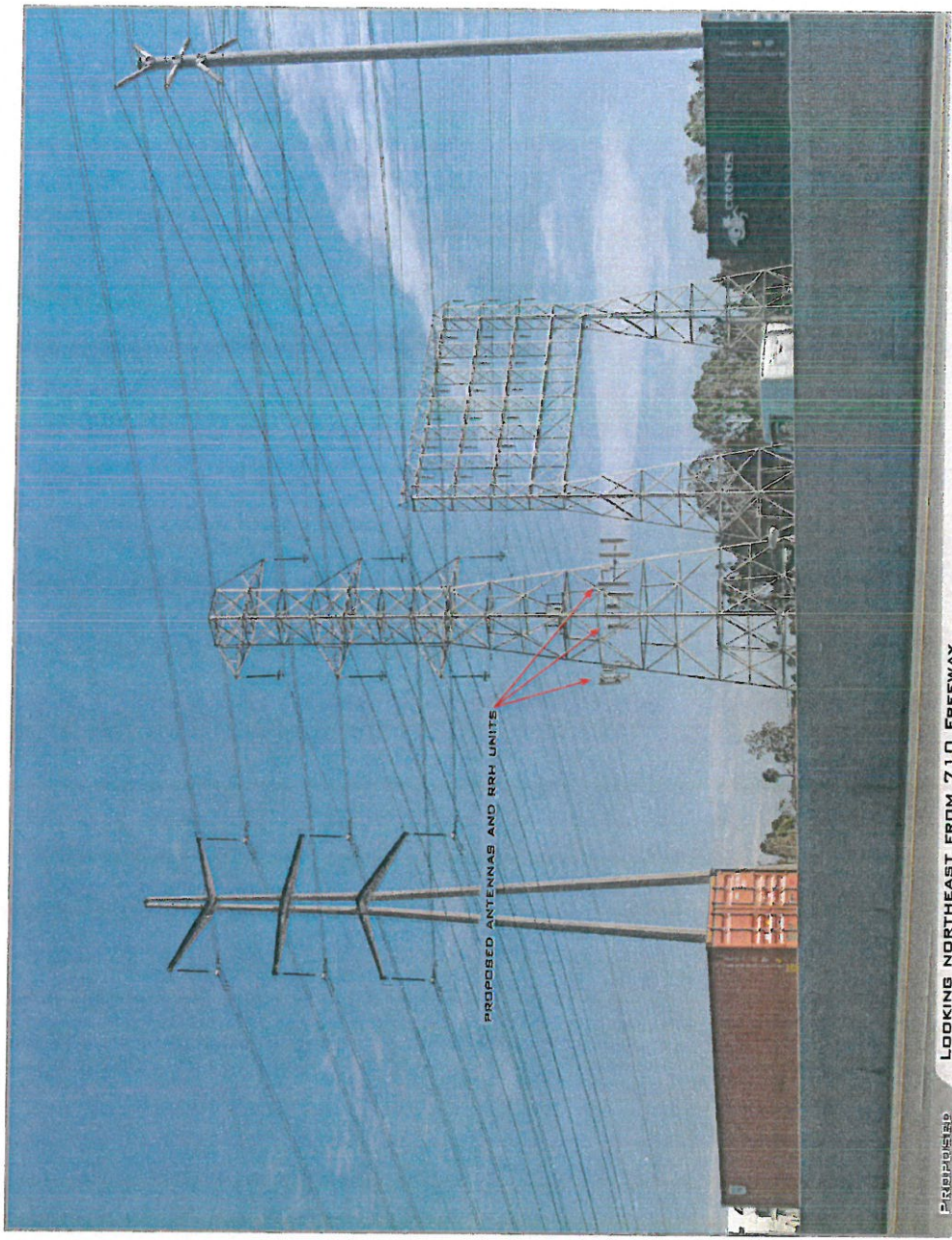




LA 74664B  
HINSON-LIGHTHIPE 220KV  
6227-6245 DE FOREST AVENUE LONG BEACH CA 90805



VIEW 1



ACCURACY OF PHOTO SIMULATION BASED UPON INFORMATION PROVIDED BY PROJECT APPLICANT.



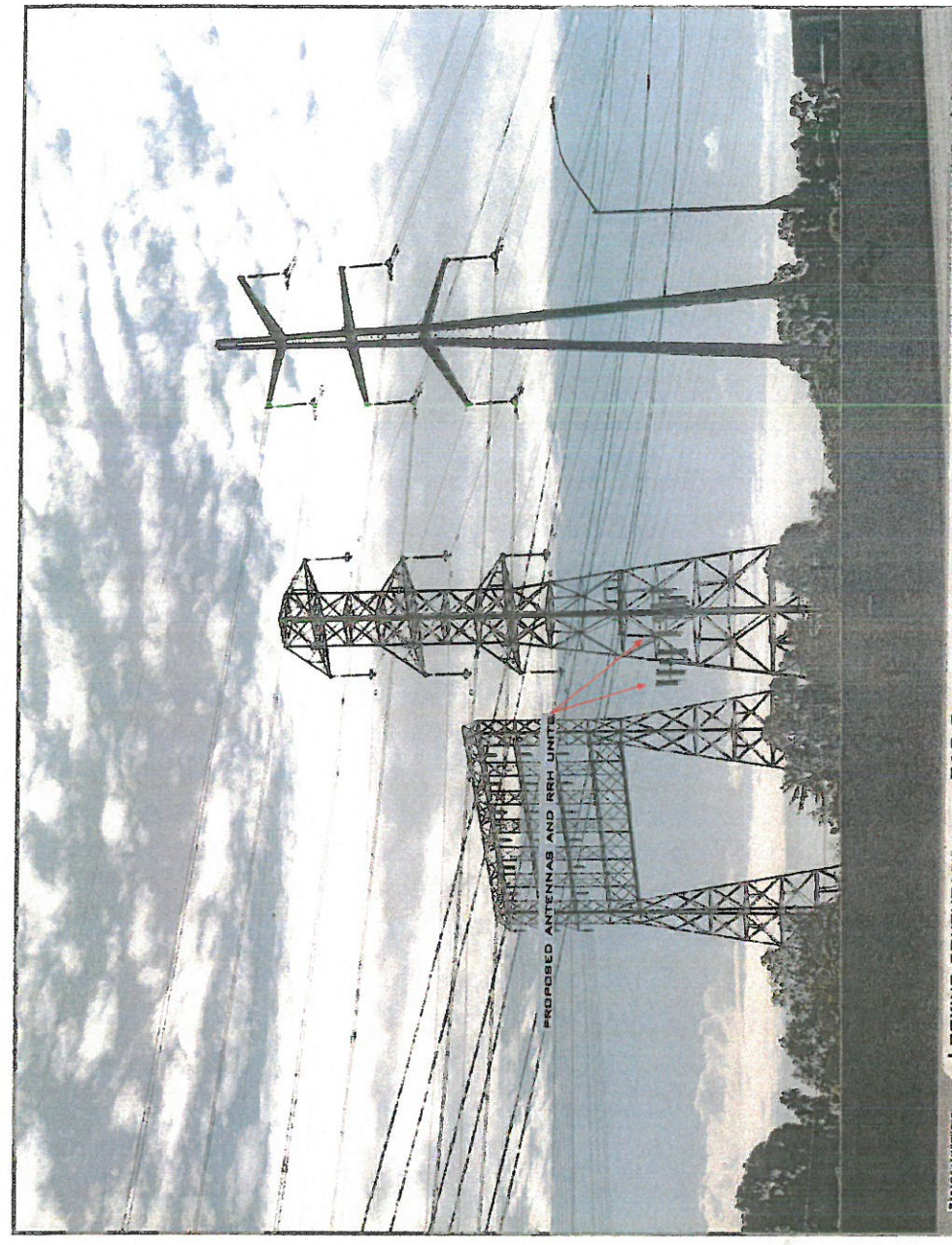
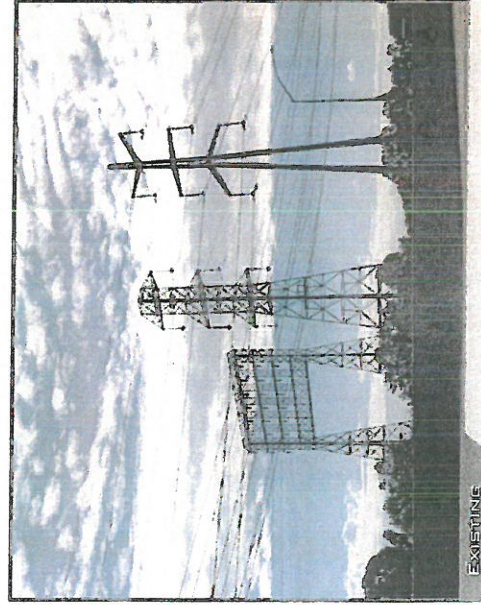


**LA 74664B**  
**HINSON-LIGHTHIPE 220KV**

6227-6245 DE FOREST AVENUE LONG BEACH CA 90805



VIEW 2



ACCURACY OF PHOTO SIMULATION BASED UPON INFORMATION PROVIDED BY PROJECT APPLICANT.

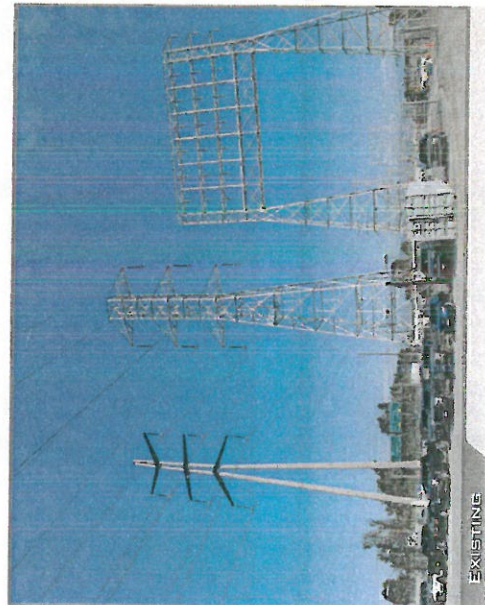




**LA 74664B**  
**HINSON-LIGHTHIPE 220KV**  
6227-6245 DE FOREST AVENUE LONG BEACH CA 90805

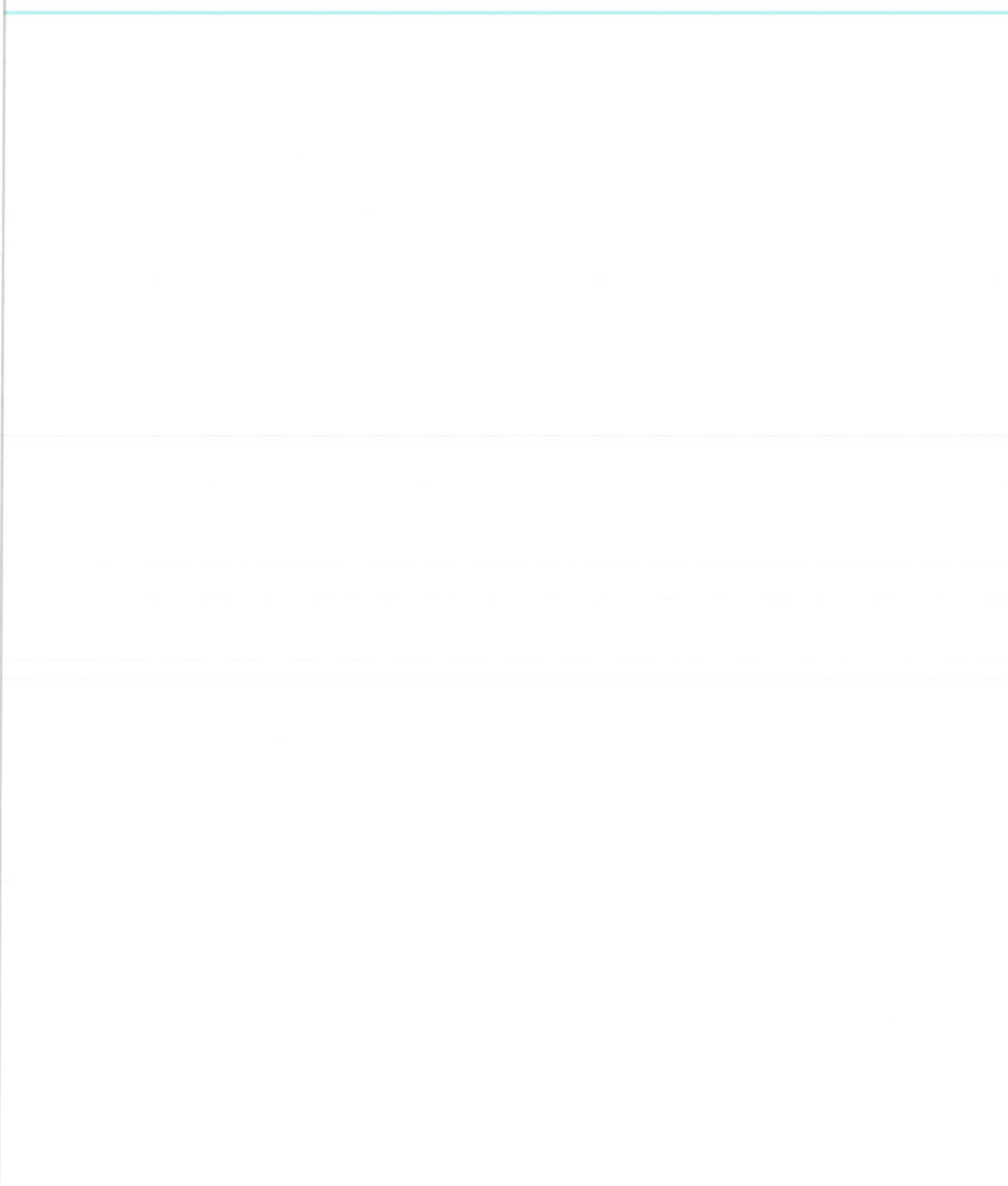


VIEW 3



PROPOSED LOOKING NORTH FROM ACCESS ROAD

ACCURACY OF PHOTO SIMULATION BASED UPON INFORMATION PROVIDED BY PROJECT APPLICANT.





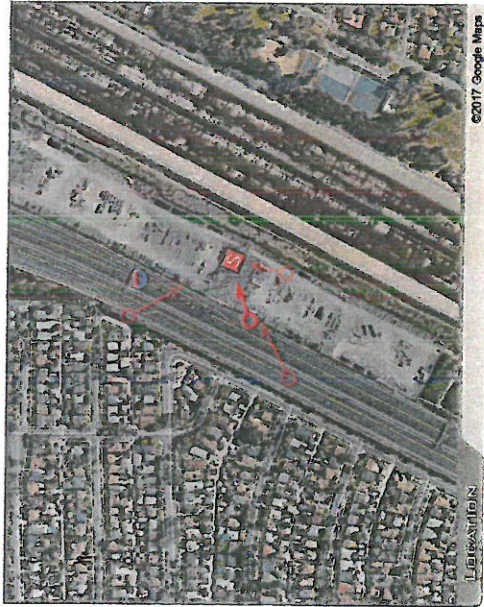


**LA74664B**  
**HINSON-LIGHTHIPE 220KV**

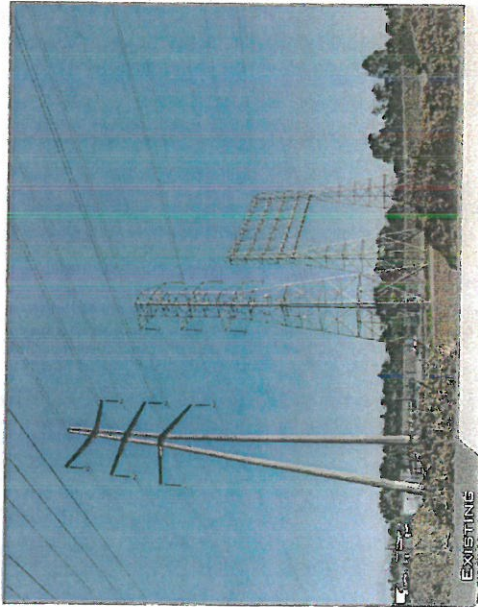
6227-6245 DE FOREST AVENUE LONG BEACH CA 90805



LA 74664 B



©2017 Google Maps



LOOKING NORTHEAST FROM 710 FREEWAY

ACCURACY OF PHOTO SIMULATION BASED UPON INFORMATION PROVIDED BY PROJECT APPLICANT.



# T-Mobile

**SITE NUMBER: LA74664B**  
**SITE NAME: HINSON-LIGHTHIPE 220kV**  
**(SCE TOWER #:M7-T5 YEAR BUILT: 1975)**  
**6290 1/2 WHITE AVENUE,**  
**LONG BEACH, CA 90805**



**UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA**  
 800-227-2600  
 48 HOURS BEFORE YOU DIG

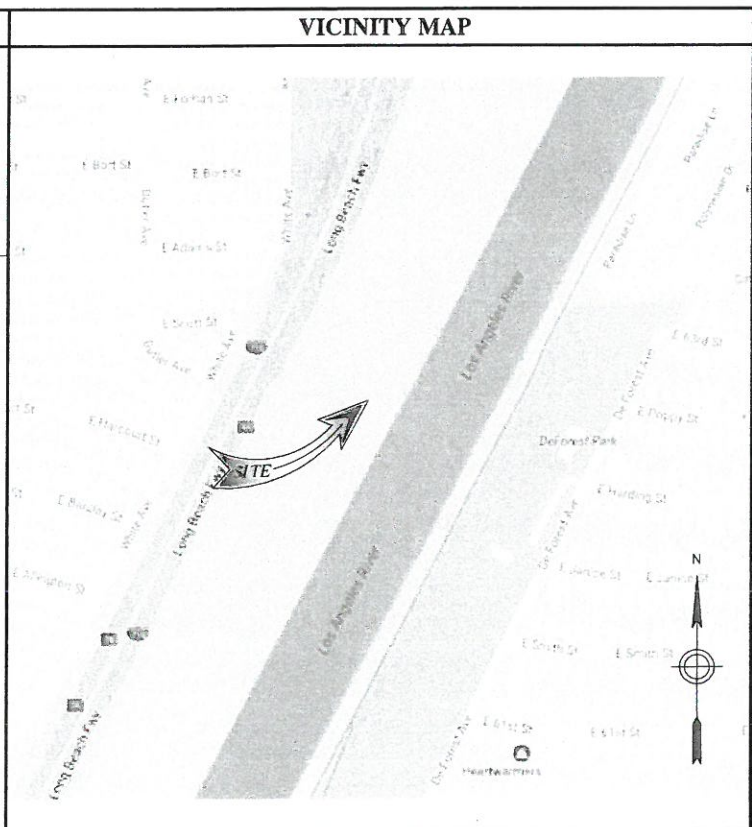


THE INFORMATION CONTAINED IN THIS SET OF DRAWINGS IS PROPRIETARY & CONFIDENTIAL TO T-MOBILE. ANY USE OR DISCLOSURE OTHER THAN AS IT RELATES TO T-MOBILE IS STRICTLY PROHIBITED.



2030 MAIN STREET, SUITE 200  
 IRVINE, CA 92614

NSB SCOPE OF WORK: (RFDS VERSION 9/22/17)		
<p>SCOPE OF WORK: INSTALLATION OF NEW TELECOMMUNICATION FACILITY CONSISTING OF THE FOLLOWING:</p> <ul style="list-style-type: none"> <li>• INSTALL (1) 18'-0" x 18'-0" CMU WALL ENCLOSURE</li> <li>• INSTALL (1) BBU CABINET ON (1) (P) CONCRETE PAD</li> <li>• INSTALL (2) RBS 6102 CABINETS ON (1) (P) CONCRETE PAD</li> <li>• INSTALL (1) GPS ANTENNA</li> <li>• INSTALL (1) H-FRAME</li> <li>• INSTALL (1) TELCO CABINET ON (P) H-FRAME</li> <li>• INSTALL (1) PPC w/GEN/PLUG ON (P) H-FRAME</li> <li>• INSTALL (1) CABLE SHROUD</li> <li>• INSTALL (9) PANEL ANTENNA, (3) PER SECTOR, (3) SECTORS TOTAL</li> <li>• INSTALL (3) RRUS, (1) PER SECTOR, (3) PER SECTOR TOTAL</li> </ul>		
<p><b>SITE ADDRESS:</b> 6290 1/2 WHITE AVENUE, LONG BEACH, CA 90805</p> <p><b>PROPERTY OWNER/LESSOR:</b> SOUTHERN CALIFORNIA EDISON 2 INNOVATION WAY, 1ST FLOOR POMONA, CA 91768</p> <p><b>CONTACT PHONE:</b> (626) 695-5888</p> <p><b>ZONING:</b> PUBLIC RIGHT-OF-WAY</p> <p><b>JURISDICTION:</b> CITY OF LONG BEACH</p> <p><b>LATITUDE:</b> 33.86840000 N</p> <p><b>LONGITUDE:</b> -118.19482223 W</p> <p><b>APN:</b> 7125-037-801</p> <p><b>CURRENT USE:</b> WIRELESS COMM. FACILITY</p> <p><b>PROPOSED USE:</b> WIRELESS COMM. FACILITY</p> <p><b>ACCESSIBILITY REQUIREMENTS:</b> THE FACILITY IS UNMANNED AND NOT FOR CONTINUOUS HUMAN HABITATION. DISABLED/CHALLENGED ACCESS IS NOT REQUIRED PER CBC 2016, SECTION 11B-203.4 (LIMITED ACCESS SPACE)</p>	<p><b>APPLICANT:</b> T-MOBILE WEST CORPORATION 3257 E. GUASTI RD, SUITE 200 ONTARIO, CA 91761</p> <p><b>CONTACT:</b> AMIEE WEEKS T-MOBILE WEST, LLC Amiee.Weeks3@t-mobile.com</p> <p><b>SITE ACQ / ZONING CONTACT:</b> JILLIANNE NEWCOMER J5 INFRASTRUCTURE PARTNERS jnewcomer@j5ip.com (951) 382-2523</p> <p><b>PROJECT MANAGER:</b> ERIC LITTLE J5 INFRASTRUCTURE PARTNERS elittle@j5ip.com (949) 842-7002</p> <p><b>ENGINEER:</b> FRANCIS DONG J5 INFRASTRUCTURE PARTNERS fdong@j5ip.com (949) 247-7767 x112</p> <p><b>A&amp;E MANAGER:</b> JOHAR DE LA CRUZ J5 INFRASTRUCTURE PARTNERS jdelacruz@j5ip.com (714) 902-3051</p> <p><b>RF ENGINEER:</b> CHRISTOPHER GAMBOA T-MOBILE Christopher.Gamboas7@T-mobile.com</p> <p><b>CONSTRUCTION MANAGER:</b> MATT TRIBBETT VANTAGE COMPANY (951) 897-5601 matthew.tribett@vantagecompany.com</p>	



SHT	DRAWING INDEX	REV
T01	TITLE SHEET	7
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**SITE NUMBER:**  
**LA74664B**  
**SITE NAME:**  
**HINSON-LIGHTHIPE 220kV**

6290 1/2 WHITE AVENUE,  
 LONG BEACH, CA 90805

APPROVALS:			
	PRINT NAME	SIGNATURE	DATE
LAND OWNER:			
DEVELOP. MANAGER:			
CONST. MANAGER:			
PROJECT MANAGER:			
ZONING MANAGER:			
TMO RF ENGINEER:			
SAC. REP.:			
CONST. MANAGER:			
NETWORK OPS:			

REV	DATE	DESCRIPTION
7	09/23/18	100% ZD - UPDATE SITE ADDRESS
6	02/20/18	100% ZD - SCE REDLINES
5	01/24/18	100% ZD - SCE REDLINES
4	12/08/17	100% ZD - SCE REDLINES
3	11/17/17	100% ZD - MINOR REDLINES
2	10/24/17	100% ZD REVISION PER SCE #2
1	09/27/17	100% ZD REVISION PER RFDS
0	09/08/17	100% ZD ISSUED FOR ZONING
E	08/31/17	90% ZD REVISION PER SCE
D	07/18/17	90% ZD PRELIM SURVEY ADDED
C	07/14/17	90% ZD REVISION PER DRM
B	07/06/17	90% ZD REVISION PER DRM
A	07/03/17	90% ZD ISSUED FOR REVIEW

**STATEMENTS**

STRUCTURAL: STRUCTURAL ANALYSIS IS NOT WITHIN THE SCOPE OF WORK CONTAINED IN THIS DRAWINGS SET. FOR ANALYSIS OF EXISTING AND/OR PROPOSED COMPONENTS, REFER TO STRUCTURAL ANALYSIS PROVIDED UNDER SEPARATE COVER.

ANTENNA MOUNT ANALYSIS IS NOT WITHIN THE SCOPE OF WORK CONTAINED IN THIS DRAWING SET. FOR ANALYSIS OF ANTENNA MOUNT TO SUPPORT EXISTING AND/OR PROPOSED COMPONENTS, REFER TO ANTENNA MOUNT STRUCTURAL ANALYSIS PROVIDED UNDER SEPARATE COVER.

PROPRIETARY INFORMATION: THE INFORMATION CONTAINED WITHIN THIS SET OF DRAWINGS IS PROPRIETARY T-MOBILE. ANY USE OR DISCLOSURE OTHER THAN AS IT RELATES TO T-MOBILE IS STRICTLY PROHIBITED.

**GENERAL CONTRACTOR NOTES**

**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.

**CODE COMPLIANCE**

PER CALIFORNIA BUILDING STANDARDS CODE, "TITLE 24 OF THE CALIFORNIA CODE OF REGULATIONS" GOVERNS THE DESIGN AND CONSTRUCTION OF ALL BUILDING OCCUPANCIES AND ASSOCIATED FACILITIES AND EQUIPMENT THROUGHOUT CALIFORNIA. RELEVANT CODE SECTIONS ARE (BUT NOT LIMITED TO):

- 2016 CALIFORNIA BUILDING CODE
- 2016 CALIFORNIA ELECTRICAL CODE
- 2016 CALIFORNIA ENERGY CODE
- 2016 CALIFORNIA HISTORICAL BUILDING CODE
- 2016 CALIFORNIA FIRE CODE
- 2016 CALIFORNIA EXISTING BUILDING CODE
- CITY/COUNTY ORDINANCES
- ANSI/ITIA-222-G-2009

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  
**T01**



- FOR THE PURPOSE OF THIS CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:  
CONTRACTOR - GENERAL CONTRACTOR (CONSTRUCTION) AND ANY LOWER TIER SUBCONTRACTORS.  
ENGINEER - J5 INFRASTRUCTURE PARTNERS  
OWNER - T-MOBILE WIRELESS
- CONTRACTOR SHALL VISIT THE CELL SITE PRIOR TO THE SUBMISSION OF BIDS TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY, CONFLICT, OR OMISSION FOUND SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION, PRIOR TO BID SUBMISSION & PRIOR TO COMMENCEMENT OF ANY WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTION OF ANY ERRORS, OMISSIONS, OR DISCREPANCIES DISCOVERED AFTER THE COMMENCEMENT OF CONSTRUCTION WHICH HAVE NOT BEEN BROUGHT TO THE ATTENTION OF THE ENGINEER. ANY COSTS INCURRED TO REMEDY THE SITUATION SHALL BE AT THE EXPENSE OF THE CONTRACTOR. THE ENGINEER SHALL APPROVE ALL METHODS USED TO CORRECT THE SITUATION.
- ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK.  
  
ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- THE CONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUITS AND OTHER CABLES. CONTRACTOR SHALL UTILIZE EXISTING TRAYS AND/OR SHALL ADD NEW TRAYS AS NECESSARY.
- THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGES SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
- CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
- AT ANY TIME DURING THE DURATION OF CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SECURITY OF THE SITE. CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.
- AS MAY BE REQUIRED BY THE GOVERNING AGENCY OR PROPERTY OWNER, THE CONTRACTOR SHALL PROVIDE TEMPORARY POWER, WATER, OR TOILET FACILITIES.
- THE EXISTING CELL SITE IS ASSUMED TO BE IN FULL COMMERCIAL OPERATION. ANY CONSTRUCTION WORK BY SUBCONTRACTOR SHALL NOT DISRUPT THE EXISTING NORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MUST BE COORDINATED WITH THE OWNER. ALSO, WORK MAY NEED TO BE SCHEDULED FOR AN APPROPRIATE MAINTENANCE WINDOW USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT.
- THE CONTRACTOR SHALL COMPLY WITH ALL OSHA REGULATIONS DURING THE ENTIRE CONSTRUCTION PERIOD. SINCE THE CELL SITE MAY BE ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE REQUIRED TO BE WORN TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.
- THE CONTRACTOR SHALL NOT USE OR INSTALL ANY MATERIAL CONTAINING ASBESTOS OR LEAD PAINT CONTENT. THE USE OF SUCH MATERIAL IS STRICTLY PROHIBITED.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES, WHETHER OR NOT SHOWN ON PLANS, AND TO AVOID OR PROTECT THEM FROM ANY DAMAGE. ANY COSTS INCURRED TO REPAIR UTILITIES DAMAGED DURING CONSTRUCTION SHALL BE AT THE SOLE COST OF THE CONTRACTOR. TELEPHONE 811 FOR USA DIG ALERT.
- THE GOVERNING AGENCY MAY REQUIRE A COPY OF THE APPROVED PLANS TO BE KEPT ON SITE AT ALL TIMES. THE CONTRACTOR SHALL MAKE SUCH A SET AVAILABLE FOR INSPECTION AT ALL TIMES. ANY DEVIATIONS FROM THE APPROVED SET SHALL BE DOCUMENTED AND PROVIDED TO THE ENGINEER FOR APPROVAL. THE CONTRACTOR SHALL BEAR THE SOLE COST TO CORRECT ANY INSTALLATION WHICH DEVIATES FROM APPROVED PLANS AND IS NOT ACCEPTED BY THE ENGINEER.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL MEANS & METHODS, TECHNIQUES, SEQUENCING, AND PROCEDURES REQUIRED TO PERFORM THE WORK. ANY ANALYSIS OF THE STRUCTURE UNDER TEMPORARY CONSTRUCTION LOADING CONDITIONS IS OUTSIDE OF THE SCOPE OF THESE DRAWINGS. THE CONTRACTOR SHOULD EVENLY DISTRIBUTE ANY MATERIAL TO BE STORED ON SITE DURING CONSTRUCTION SO THAT THE LOAD DOES NOT EXCEED THE STRUCTURES DESIGNED LIVE LOAD; OR PROVIDE TEMPORARY SHORING OR BRACING IN THESE AREAS.
- DRAWINGS ARE NOT TO BE SCALED. DIMENSIONS SHOWN TAKE PRECEDENCE OVER SCALE.
- ALL NEW COMPONENTS ADD TO THE EXTERIOR OF THE STRUCTURE, WHICH ARE VISIBLE FROM PUBLIC VIEW, SHALL BE PAINTED TO MATCH THE EXISTING CONDITIONS.
- ALL DETAILS AND NOTES INDICATED IN THESE PLANS ARE THE MINIMUM REQUIREMENTS.
- IT MAY BE NECESSARY TO TEMPORARILY RELOCATE, REMOVE, REPLACE, OR WORK AROUND VARIOUS ARCHITECTURAL FEATURES, PIPES, FIXTURES, CABLING, OR OTHER NON-STRUCTURAL ITEMS IN ORDER TO COMPLETE THE PROPOSED WORK. CONTRACTOR SHALL RESTORE THESE ITEMS TO THEIR ORIGINAL CONDITION AT THEIR EXPENSE UNLESS OTHERWISE NOTED IN THESE PLANS.

**GENERAL NOTES**

**SYMBOLS**

- |   |   |
|---|---|
| SOLID GROUND BUS BAR  | GROUND ROD WITH ACCESS (TEST WELL)            |
| SOLID NEUTRAL BUS BAR   | GROUNDING WIRE, DASHED REPRESENTS UNDERGROUND |
| SUPPLEMENTAL GROUND CONDUCTOR   | TELEPHONE LINE, DASHED REPRESENTS UNDERGROUND |
| 2-POLE THERMAL-MAGNETIC CIRCUIT BREAKER                                       | COAXIAL CABLE, DASHED REPRESENTS UNDERGROUND  |
| SINGLE-POLE THERMAL-MAGNETIC CIRCUIT BREAKER                                  | ANTENNA COAX                                  |
| XIT GROUND ROD (CHEMICAL)   | OVERHEAD ELECTRICAL CABLES                    |
| GROUND ROD  |   |
| DISCONNECT SWITCH   |   |
| UTILITY METER   |   |
| EXOTHERMIC CONNECTION (CADWELD) TO GROUND RING AND COMPRESSION TO GROUND HALO |   |
| COMPRESSION, CLAMP, OR DOUBLE HOLE LUG TYPE GROUND CONNECTION                 |   |

**ABBREVIATIONS**

- |                                 |                                       |
|---------------------------------|---------------------------------------|
| AGL ABOVE GRADE LEVEL           | (P) PROPOSED                          |
| (E) EXISTING                    | EMT ELECTRICAL METALLIC TUBING        |
| MIN MINIMUM                     | GND GROUND                            |
| N.T.S. NOT TO SCALE             | GPS GLOBAL POSITIONING SYSTEM         |
| REF REFERENCE                   | GFCI GROUND FAULT CIRCUIT INTERRUPTER |
| RF RADIO FREQUENCY              | BTWC BARE TINNED COPPER WIRE          |
| T.B.D. TO BE DETERMINED         |                                       |
| TYP TYPICAL                     |                                       |
| EGR EQUIPMENT GROUND RING       |                                       |
| AWG AMERICAN WIRE GAUGE         |                                       |
| MGB MASTER GROUND BUS           |                                       |
| EG EQUIPMENT GROUND             |                                       |
| BCW BARE COPPER WIRE            |                                       |
| GEN GENERATOR                   |                                       |
| IGR INTERIOR GROUND RING (HALO) |                                       |

**LEGEND**

- ALL GROUNDING WORK SHALL COMPLY WITH THE LATEST EDITION OF THE CALIFORNIA ELECTRICAL CODE, AS WELL AS WITH ALL LOCAL, STATE, AND NATIONAL CODES, LAWS, AND ORDINANCES APPLICABLE TO GROUNDING WORK.
- EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
- THE CONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION SO AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT.
- ALL DETAILS ARE SHOWN IN GENERAL TERMS. ACTUAL GROUNDING INSTALLATION SHALL BE ACCORDING TO SPECIFIC SITE CONDITIONS.
- GROUNDING CONDUCTORS SHALL BE #2 AWG SOLID BARE TINNED COPPER WIRE, UNLESS NOTED OTHERWISE.
- APPROVED ANTIOXIDANT COATINGS (I.E., CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
- INSTALL GROUND CONDUCTORS AND GROUND ROD A MINIMUM OF 1'-0" FROM CONCRETE SLAB, FOOTING, OR FENCE.
- ALL GROUNDING INSTALLATIONS AND CONNECTIONS SHALL BE MADE BY AN ELECTRICAL CONTRACTOR.
- MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
- METAL CONDUIT AND TRAY SHALL BE GROUNDED AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH 6 AWG COPPER WIRE AND UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
- GROUND CONDUCTORS USED IN THE FACILITY GROUND AND LIGHTNING PROTECTION SYSTEMS SHALL NOT BE ROUTED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METAL SUPPORT CLIPS OR SLEEVES THROUGH WALLS OR FLOORS. WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDITIONS, NON-METALLIC MATERIAL SUCH AS PVC PLASTIC CONDUIT SHALL BE USED. WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (E.G., NON-METALLIC CONDUIT PROHIBITED BY LOCAL CODE) THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT.
- CHEMICAL GROUND SHALL BE XIT, CHEM-ROC, OR APPROVED EQUAL, WHEN REQUIRED.
- CONNECTIONS TO THE GROUND BARS SHALL NOT BE DOUBLED UP OR STACKED. BACK-TO-BACK CONNECTIONS ON OPPOSITE SIDES OF THE GROUND BAR ARE PERMITTED.
- NOTIFY PROJECT MANAGER IF THERE ARE DIFFICULTIES INSTALLING GROUNDING SYSTEM DUE TO SOIL CONDITIONS.
- ANY EQUIPMENT, BOX, SKID TO BE GROUNDED AND DOES NOT HAVE A DESIGNATED GROUND CONNECTION SHALL BE DRILLED AS NECESSARY TO CONNECT A GROUND WIRE. REMOVE PAINT IN AREA UNDER LUG. APPLY ANTI-OXIDANT COMPOUND AND CONNECT WITH TWO-HOLE, COMPRESSION LUG.

**GROUNDING NOTES**

- CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL MEANS AND METHODS TO COMPLETE ALL UPGRADES AS INDICATED IN THIS DOCUMENT.
- ALL DIMENSIONS, SECTIONS AND DETAILS OF THE EXISTING STRUCTURE ARE INCLUDED FOR INFORMATION PURPOSES ONLY. THE CONTRACTOR SHALL VERIFY ALL RELEVANT INFORMATION PRIOR TO CONSTRUCTION OR FABRICATION. NOTIFY THE ENGINEER-OF-RECORD IMMEDIATELY OF ANY DISCREPANCIES. ALL NEW WORK SHALL ACCOMMODATE EXISTING CONDITIONS.
- CONTRACTOR IS RESPONSIBLE FOR ERECTING TEMPORARY BARRICADES AND/OR FENCING TO PROTECT THE SAFETY OF THE PUBLIC DURING CONSTRUCTION. THE CONTRACTOR SHALL REMOVE ALL TEMPORARY BARRIERS AND REPAIR ALL DAMAGE TO PROPERTY ON THE SITE CAUSED BY THIS CONSTRUCTION. THE COST OF REPAIR IS THE CONTRACTOR'S RESPONSIBILITY.
- ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, AND FEDERAL REQUIREMENTS.
- COORDINATE WORK INDICATED ON THESE DRAWINGS WITH THE NEW EQUIPMENT, EXISTING EQUIPMENT, WAVEGUIDE ETC.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL MEASUREMENTS AT THE SITE PRIOR TO ORDERING ANY MATERIALS OR CONDUCTING ANY WORK.
- ALL DETAILING, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO AISC SPECIFICATIONS AND CODES, LATEST EDITION.
- CONTRACTOR SHALL COLD-GALVANIZE ALL RAW STEEL AS REQUIRED DURING CONSTRUCTION PROCESS.

**GENERAL UPGRADE NOTES**



THE INFORMATION CONTAINED IN THIS SET OF DRAWINGS IS PROPRIETARY & CONFIDENTIAL TO T-MOBILE. ANY USE OR DISCLOSURE OTHER THAN AS IT RELATES TO T-MOBILE IS STRICTLY PROHIBITED.



**SITE NUMBER:**  
**LA74664B**  
**SITE NAME:**  
**HINSON-LIGHTHIPE 220kV**  
  
6227-6245 DE FOREST AVE.  
LONG BEACH, CA 90805

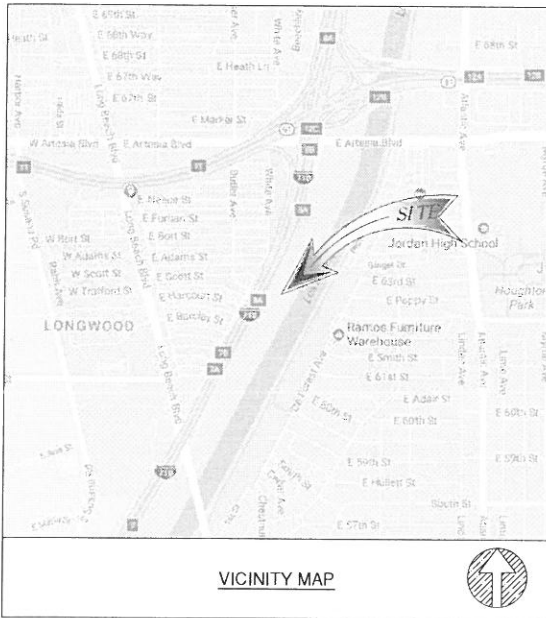
REV	DATE	DESCRIPTION
4	12/08/17	100% ZD - SCE REDLINES
3	11/17/17	100% ZD - MINOR REDLINES
2	10/24/17	100% ZD REVISION PER SCE #2
1	09/27/17	100% ZD REVISION PER RFDS
0	09/08/17	100% ZD ISSUED FOR ZONING
E	08/31/17	90% ZD REVISION PER SCE
D	07/18/17	90% ZD PRELIM SURVEY ADDED
C	07/14/17	90% ZD REVISION PER DRM
B	07/06/17	90% ZD REVISION PER DRM
A	07/03/17	90% ZD ISSUED FOR REVIEW

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, ABBREVIATIONS, AND SYMBOLS**

SHEET NUMBER  
**T02**





**APN**  
7125-037-801

**SITE ADDRESS**  
COOLIDGE TRIANGLE LONG BEACH, CA 90805

**RECORD OWNER**  
SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION

**TITLE REPORT**  
THE PRELIMINARY TITLE REPORT WAS PREPARED BY COMMONWEALTH LAND TITLE INSURANCE COMPANY WITH ORDER NUMBER 09204511-920-CMM-CM8 DATED JULY 20, 2017.

**BASIS OF BEARING**  
THE CENTERLINE OF FLOOD CONTROL CHANNEL BEARING  $N26^{\circ}09'49''E$  WAS USED AS BASIS OF BEARING FOR THIS SURVEY.

**BENCH MARK**  
SITE ELEVATIONS ARE ESTABLISHED FROM THE GPS DERIVED ORTHOMETRIC HEIGHTS BY APPLICATION OF NGS "GEOID 12A" MODELED SEPARATIONS TO ELLIPSOID HEIGHTS DETERMINED BY OBSERVATIONS OF THE "LEICA SMARTNET" REAL TIME NETWORK. ALL ELEVATIONS SHOWN HEREON ARE REFERENCED TO NAVD83.

**FLOOD ZONE**  
THE FLOOD MAP FOR THE SELECTED AREA IS NUMBER 06037C1955F EFFECTIVE ON 9/26/2008.

**LEGAL DESCRIPTION**

ALL THAT CERTAIN REAL PROPERTY SITUATED IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:  
 PARCEL 1, IN THE CITY OF LONG BEACH, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS SHOWN ON LICENSED SURVEYOR'S MAP FILED IN BOOK 30 PAGES 22 TO 25 INCLUSIVE OF RECORDS OF SURVEY, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.  
 EXCEPT THEREFROM THAT PORTION LYING SOUTH OF THE EASTERLY PROLONGATION OF THE SOUTHERLY LINE ON TRACT NO. 7717, AS PER MAP RECORDED IN BOOK 164 PAGES 27 TO 31 INCLUSIVE OF MAPS OF SAID COUNTY.  
 ALSO EXCEPT THEREFROM ALL OIL, GAS, AND OTHER HYDROCARBON SUBSTANCES OR MINERALS UNDER SAID LAND, AS PROVIDED IN THE DEED RECORDED IN BOOK 6677 PAGE 279, OFFICIAL RECORDS.  
 NOTE: THIS COMPANY HAS PROVIDED SAID DESCRIPTION AS AN ACCOMMODATION FOR THE PURPOSE OF FACILITATING THIS REPORT.  
 SAID DESCRIPTION MAY NOT BE AN INSURABLE PARCEL PURSUANT TO THE SUBDIVISION MAP ACT OF THE STATE OF CALIFORNIA AND SHOULD NOT BE RELIED UPON TO CONVEY OR ENCUMBER SAID LAND, UNTIL APPROVED BY THE APPROPRIATE GOVERNING AGENCY.

**SCHEDULE B**

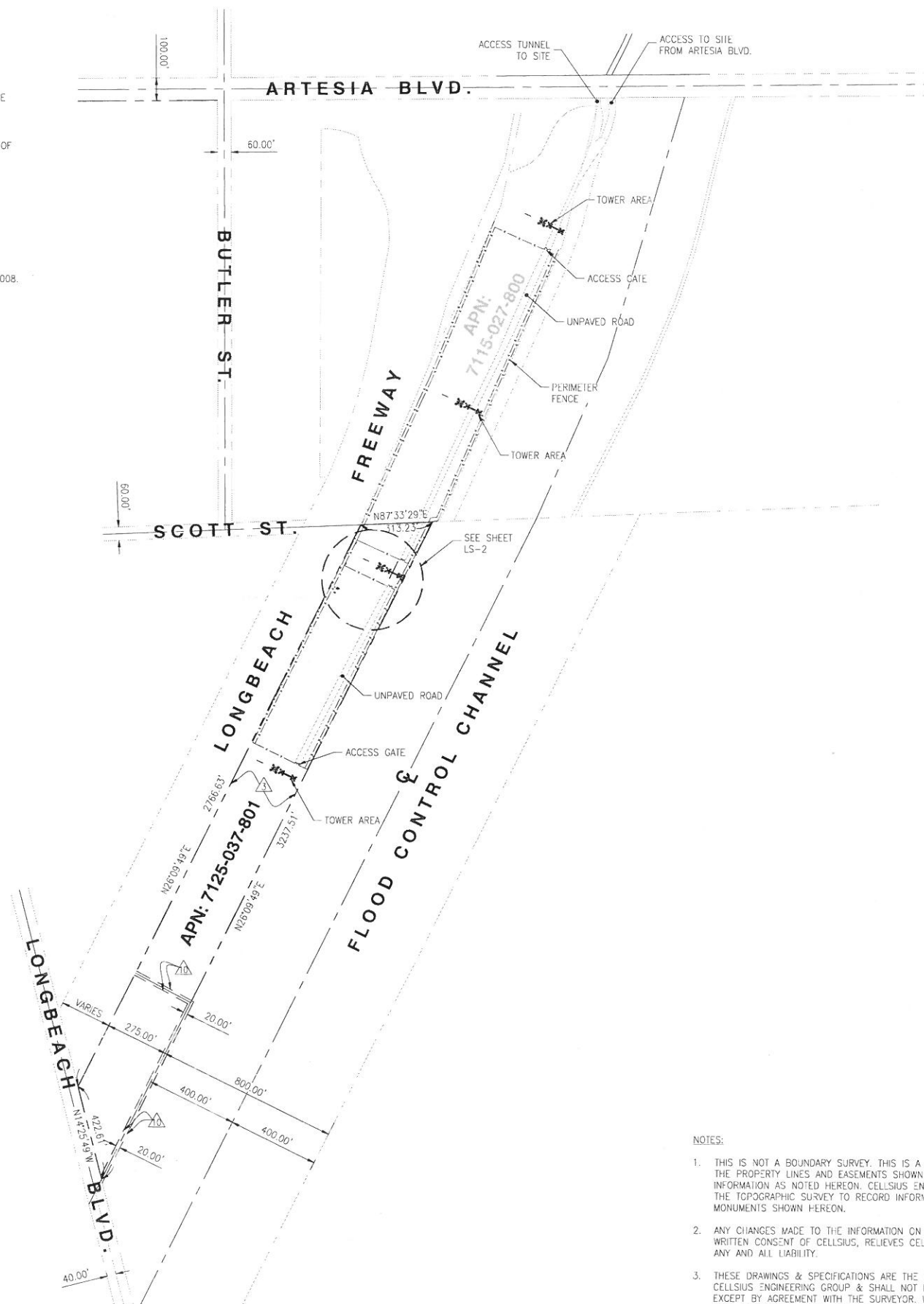
ITEMS A-C, 14 ARE TAX/LIENS RELATED.  
 ITEMS 1, 16 ARE RIGHTS RELATED.  
 ITEMS 2, 4, 5, 12, 13, 15 ARE DEED RELATED.

8. EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS RESERVED IN A DOCUMENT:  
 RESERVED BY: CARSON ESTATE COMPANY  
 PURPOSE: FOR WATER PIPE LINES, OIL PIPE LINES, GAS PIPE LINES, OR FOR OTHER UTILITIES, BUT NOT FOR ELECTRIC POWER LINES OR WIRES FOR THE DISTRIBUTION OF ELECTRIC ENERGY  
 RECORDING NO: IN BOOK 6191 PAGE 22 OFFICIAL RECORDS  
 AFFECTS: SAID LAND

9. EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:  
 GRANTED TO: SOUTHERN FUEL COMPANY, A CORPORATION  
 PURPOSE: CONDUITS AND PIPE LINE  
 RECORDING DATE: JULY 19, 1938  
 RECORDING NO: IN BOOK 15957 PAGE 35 OFFICIAL RECORDS  
 AFFECTS: AS DESCRIBED THEREIN.

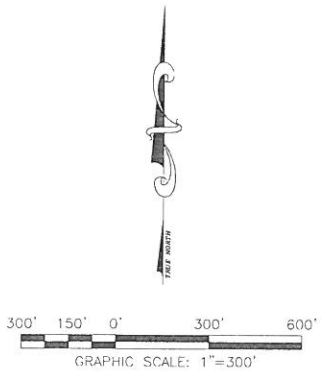
10. EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:  
 GRANTED TO: CITY OF LONG BEACH, A CALIFORNIA MUNICIPAL CORPORATION  
 PURPOSE: STORM DRAIN PURPOSES  
 RECORDING DATE: FEBRUARY 9, 1953  
 RECORDING NO: 3092 IN BOOK 40924 PAGE 262 OFFICIAL RECORDS  
 AFFECTS: AS DESCRIBED THEREIN.  
 AN AGREEMENT TO MODIFY THE TERMS AND PROVISIONS OF THE SAID DOCUMENT, AS THEREIN PROVIDED  
 EXECUTED BY: SOUTHERN CALIFORNIA EDISON COMPANY, A CALIFORNIA CORPORATION AND THE CITY OF LONG BEACH, A CALIFORNIA MUNICIPAL CORPORATION  
 RECORDING DATE: DECEMBER 1, 1959  
 RECORDING NO: 2823 OFFICIAL RECORDS

11. EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS CONDEMNED BY AN INSTRUMENT,  
 ENTITLED: FINAL ORDER OF CONDEMNATION  
 COURT: SUPERIOR COURT, COUNTY OF LOS ANGELES  
 CASE NO.: C 52628  
 IN FAVOR OF: STATE OF CALIFORNIA, ACTING BY AND THROUGH THE DEPARTMENT OF TRANSPORTATION  
 PURPOSE: FREEWAY PURPOSES  
 RECORDING DATE: JANUARY 27, 1975  
 RECORDING NO: 2797 OFFICIAL RECORDS  
 AFFECTS: AS DESCRIBED THEREIN.



**NOTES:**

1. THIS IS NOT A BOUNDARY SURVEY. THIS IS A SPECIALIZED TOPOGRAPHIC MAP. THE PROPERTY LINES AND EASEMENTS SHOWN HEREON ARE FROM RECORD INFORMATION AS NOTED HEREON. CELLSIUS ENGINEERING GROUP TRANSLATED THE TOPOGRAPHIC SURVEY TO RECORD INFORMATION USING FOUND MONUMENTS SHOWN HEREON.
2. ANY CHANGES MADE TO THE INFORMATION ON THIS PLAN, WITHOUT THE WRITTEN CONSENT OF CELLSIUS, RELIEVES CELLSIUS ENGINEERING GROUP OF ANY AND ALL LIABILITY.
3. THESE DRAWINGS & SPECIFICATIONS ARE THE PROPERTY & COPYRIGHT OF CELLSIUS ENGINEERING GROUP & SHALL NOT BE USED ON ANY OTHER WORK EXCEPT BY AGREEMENT WITH THE SURVEYOR. WRITTEN DIMENSIONS SHALL TAKE PREFERENCE OVER SCALED & SHALL BE VERIFIED ON THE JOB SITE. ANY DISCREPANCY SHALL BE BROUGHT TO THE NOTICE OF THE SURVEYOR PRIOR TO COMMENCEMENT OF ANY WORK.
4. FIELD SURVEY COMPLETED ON JULY 16, 2017.



**T-Mobile**  
 2008 MCGAW AVENUE  
 IRVINE, CA 92614

**INFRASTRUCTURE PARTNERS**  
 AZ - CA - CO - ID - NM - NV - TX - UT

**CELLSIUS ENGINEERING GROUP**  
 10005 MUIRLANDS BLVD., SUITES E & F  
 IRVINE, CA 92618  
 Tel. (949) 202-2311 | Fax. (888) 505-2977

REV	DATE	DESCRIPTION
1	09/7/2017	FINAL SURVEY
0	07/13/2017	PRELIMINARY SURVEY

ISSUED DATE:  
**SEPTEMBER 7, 2017**

ISSUED FOR:  
**FINAL SURVEY**

LICENSURE:

PROJECT INFORMATION:  
**LA74664**  
**DR. FOREST PARK SCE TOWER**  
**COOLIDGE TRIANGLE**  
**LONG BEACH, CA 90805**

DRAWN BY: **AA**  
 CHECKED BY: **AJK**

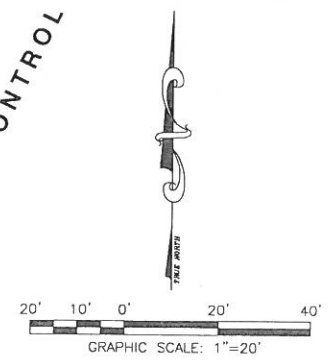
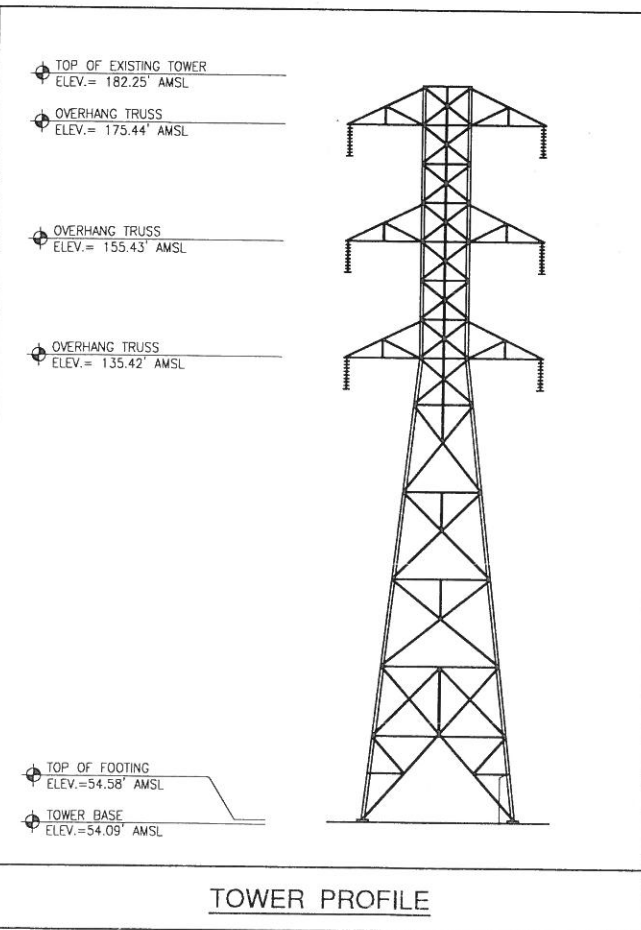
SHEET TITLE:  
**TOPOGRAPHIC SURVEY**

SHEET NUMBER:  
**LS-1**



**LEGEND**

- CENTER LINE
- - - PROPERTY LINE
- x-x-x- CHAIN-LINK FENCE
- w-w-w- WOOD FENCE
- o-o-o- WROUGHT IRON FENCE
- █-█-█- RETAINING WALL
- EDGE OF PAVEMENT
- HT HEIGHT
- TC TOP OF CURB
- TW TOP OF WALL
- EG EXISTING GRADE
- FS FINISH SURFACE
- HH HAND HOLE
- TP TOP OF PARAPET
- RS ROOF SURFACE
- PK PEAK
- JB JUNCTION BOX
- TR TRANSFORMER
- WM WATER METER
- CT CABINET
- VT VAULT
- PB PULL BOX
- MP METER PEDESTAL
- BW BACK WALK
- SS SANITARY SEWER MANHOLE
- SD STORMWATER DRAIN MANHOLE
- CV GAS VALVE
- WV WATER VALVE
- TM TELECOM MANHOLE
- ELECTRICAL MANHOLE
- FIRE HYDRANT
- CATCH BASIN
- PEDESTRIAN SIGNAL LIGHT
- EXISTING STREET LIGHT
- EXISTING TRAFFIC SIGNAL
- POWER POLE
- EXISTING SIGN
- GUY WIRE ANCHOR
- TREE
- PINE TREE
- BUSH
- PALM TREE
- ▨ EXISTING GRASS/TURF
- ▨ EXISTING CONCRETE



**T-Mobile**  
 2008 MCGAW AVENUE  
 IRVINE, CA 92614

**INFRASTRUCTURE PARTNERS**  
 AZ - CA - CO - ID - NM - NV - TX - UT

**CELSIUS ENGINEERING GROUP**  
 10005 MUIRLANDS BLVD., SUITES E & F  
 IRVINE, CA 92618  
 tel. (949) 202-2311 | fax. (888) 505-2977

REV	DATE	DESCRIPTION
1	09/7/2017	FINAL SURVEY
0	07/18/2017	FINAL SURVEY

ISSUED DATE: **SEPTEMBER 7, 2017**

ISSUED FOR: **FINAL SURVEY**

LICENSURE:

PROJECT INFORMATION:  
**LA74664**  
 DR. FOREST PARK SCE TOWER  
 COOLIDGE TRIANGLE  
 LONG BEACH, CA 90805

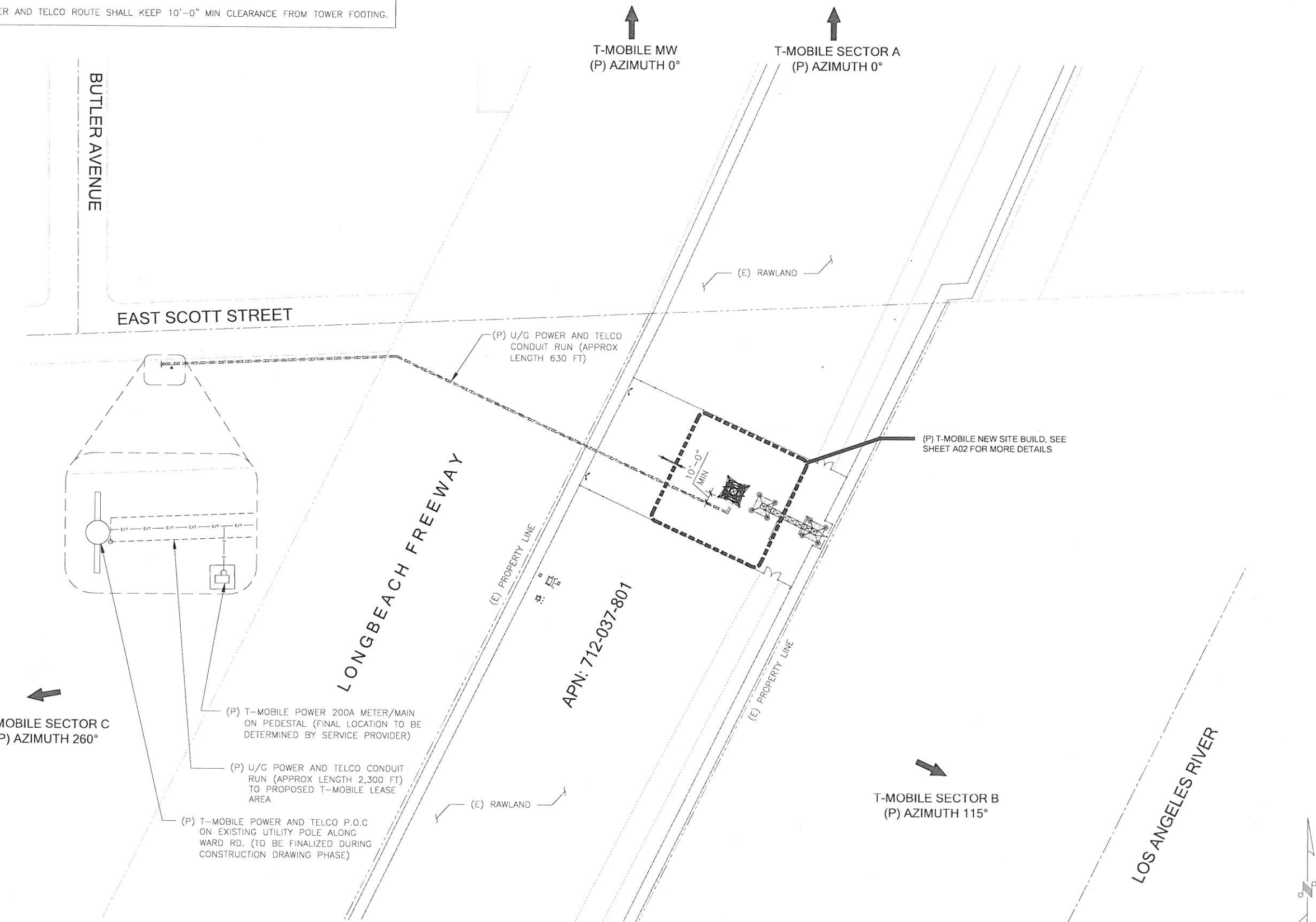
DRAWN BY: AA  
 CHECKED BY: AJK

SHEET TITLE: **TOPOGRAPHIC SURVEY**

SHEET NUMBER: **LS-2**



NOTE:  
1. POWER AND TELCO ROUTE SHALL KEEP 10'-0" MIN CLEARANCE FROM TOWER FOOTING.



THE INFORMATION CONTAINED IN THIS SET OF DRAWINGS IS PROPRIETARY & CONFIDENTIAL TO T-MOBILE ANY USE OR DISCLOSURE OTHER THAN AS IT RELATES TO T-MOBILE IS STRICTLY PROHIBITED



**SITE NUMBER:**  
**LA74664B**  
**SITE NAME:**  
**HINSON-LIGHTHIPE 220kV**  
6227-6245 DE FOREST AVE.  
LONG BEACH, CA 90805

REV	DATE	DESCRIPTION	
4	12/08/17	100% ZD - SCE REDLINES	JY
3	11/17/17	100% ZD - MINOR REDLINES	JD
2	10/24/17	100% ZD REVISION PER SCE #2	JD
1	09/27/17	100% ZD REVISION PER RFDS	JD
0	08/06/17	100% ZD ISSUED FOR ZONING	JD
E	08/03/17	90% ZD REVISION PER SCE	PS
D	07/18/17	90% ZD PRELIM SURVEY ADDED	JD
C	07/14/17	90% ZD REVISION PER DRM	JD
B	07/06/17	90% ZD REVISION PER DRM	BH
A	07/03/17	90% ZD ISSUED FOR REVIEW	BH

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  
**SITE PLAN**

SHEET NUMBER  
**A01**

**SITE PLAN**

24"x36" SCALE: 1" = 50'-0"  
11"x17" SCALE: 1" = 100'-0"  
50' 25' 0' 50'

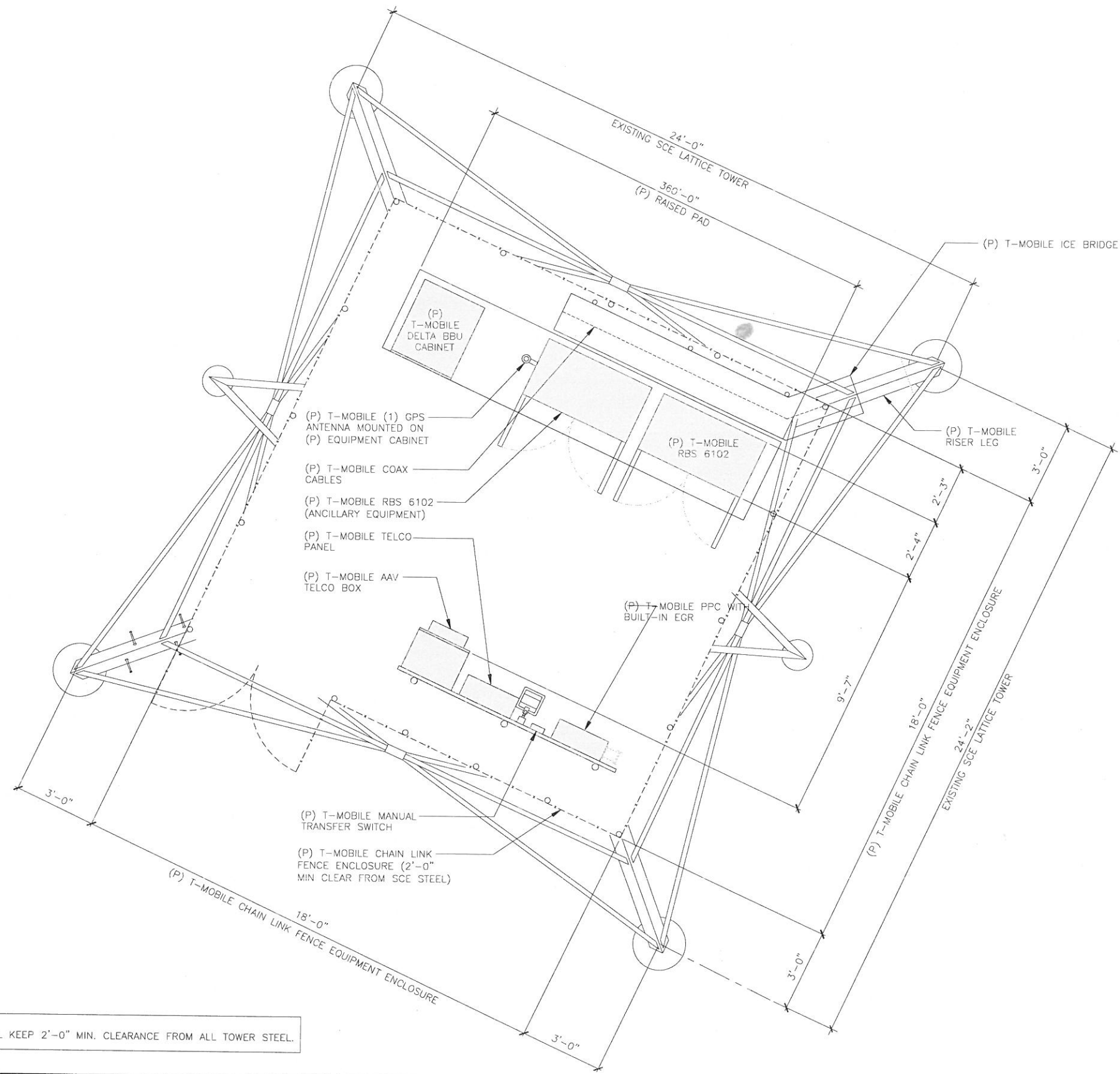


REV	DATE	DESCRIPTION
4	12/08/17	100% ZD - SCE REDLINES
3	11/17/17	100% ZD - MINOR REDLINES
2	10/24/17	100% ZD REVISION PER SCE #2
1	09/27/17	100% ZD REVISION PER RFDS
0	09/08/17	100% ZD ISSUED FOR ZONING
E	08/31/17	90% ZD REVISION PER SCE
D	07/18/17	90% ZD PRELIM SURVEY ADDED
C	07/14/17	90% ZD REVISION PER DRM
B	07/06/17	90% ZD REVISION PER DRM
A	07/03/17	90% ZD ISSUED FOR REVIEW

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SHEET TITLE  
**PROPOSED  
EQUIPMENT PLAN**

SHEET NUMBER  
**A02**



NOTE:  
1. LEASE AREA FENCING AND EQUIPMENT SHALL KEEP 2'-0" MIN. CLEARANCE FROM ALL TOWER STEEL.

**PROPOSED EQUIPMENT PLAN**





THE INFORMATION CONTAINED IN THIS SET OF DRAWINGS IS PROPRIETARY & CONFIDENTIAL TO T-MOBILE ANY USE OR DISCLOSURE OTHER THAN AS IT RELATES TO T-MOBILE IS STRICTLY PROHIBITED



2030 MAIN STREET, SUITE 200  
IRVINE, CA 92614

**SITE NUMBER:**  
**LA74664B**  
**SITE NAME:**  
**HINSON-LIGHTHIPE 220kV**

6227-6245 DE FOREST AVE.  
LONG BEACH, CA 90805

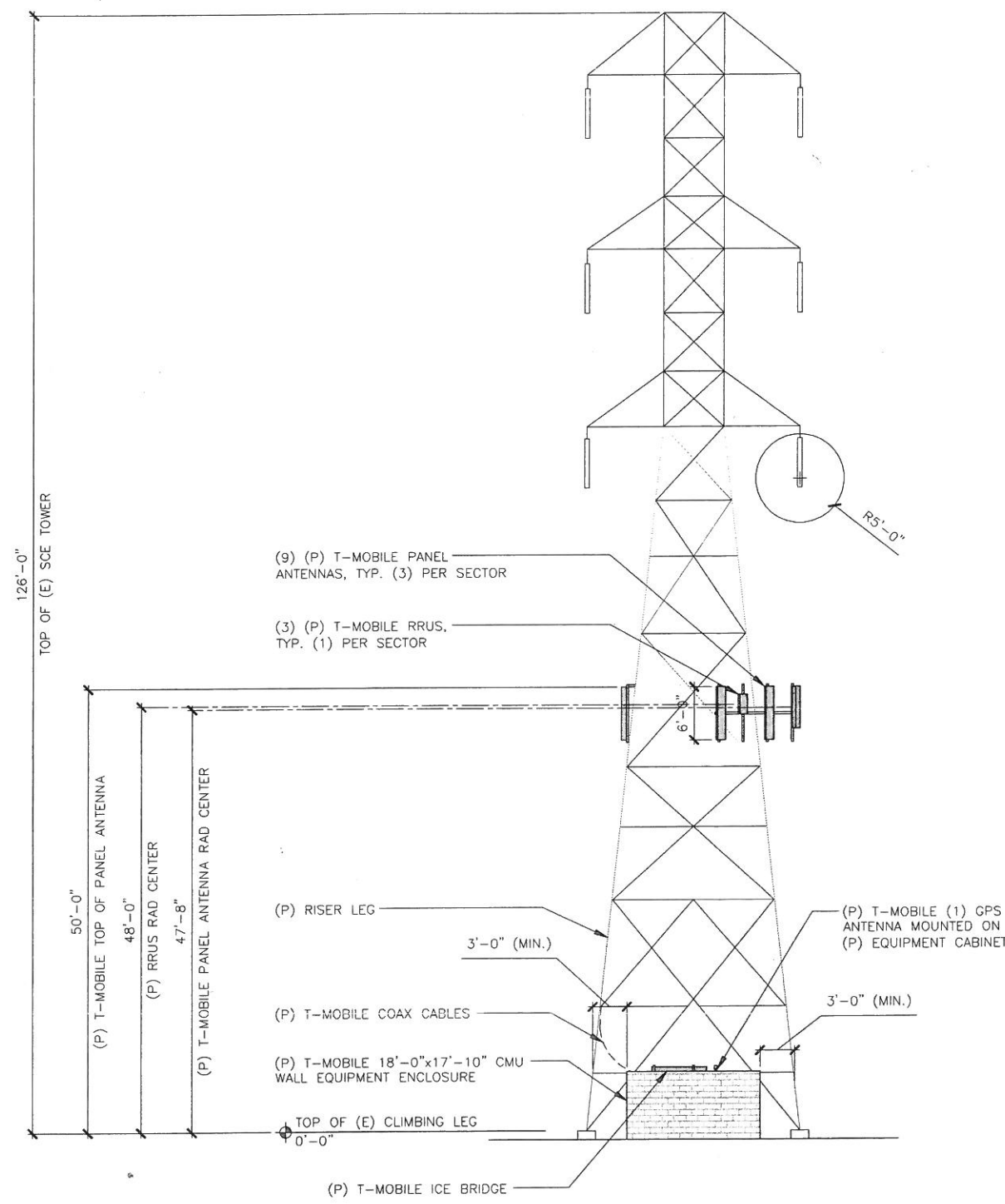
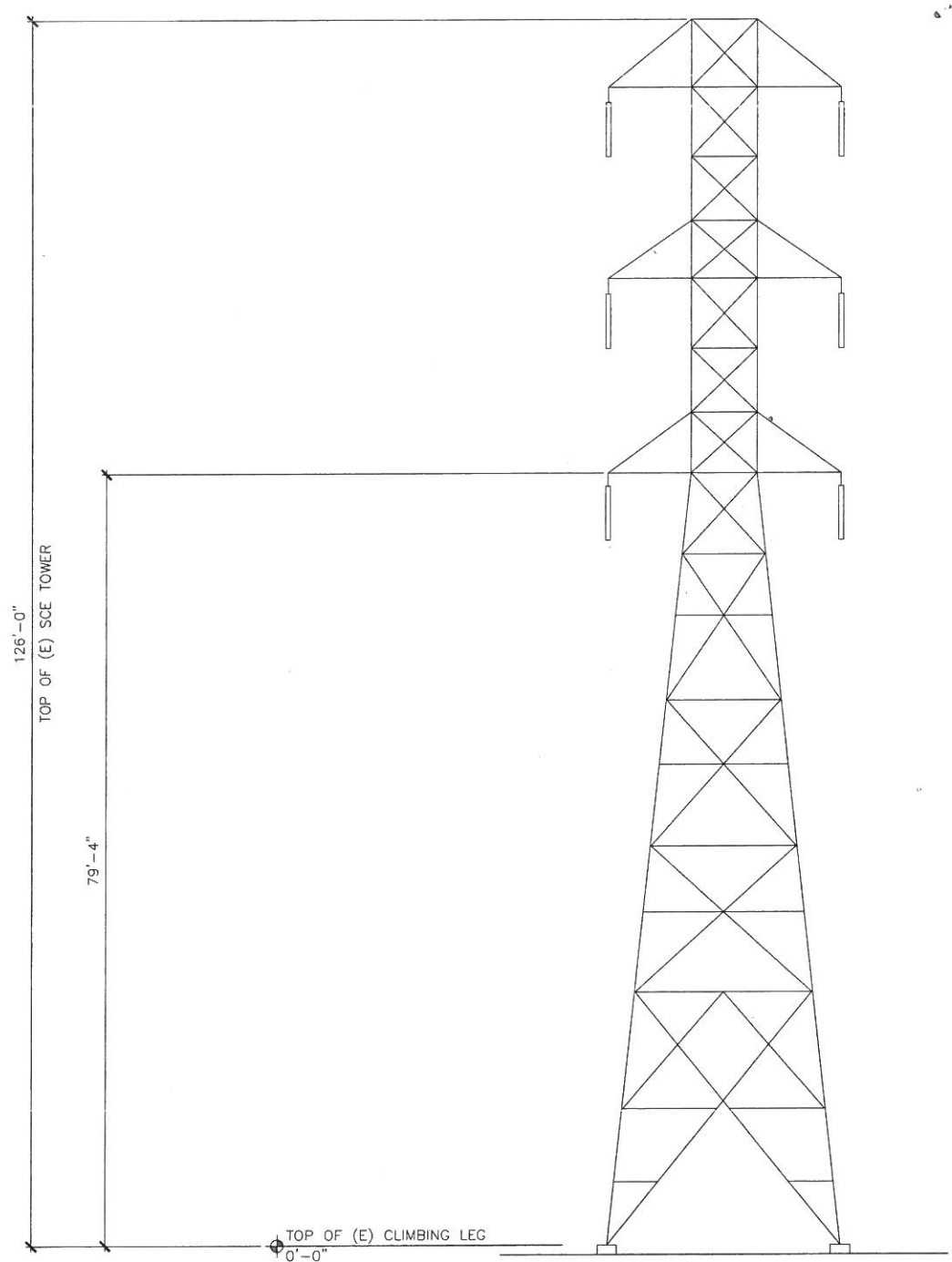
REV	DATE	DESCRIPTION
6	02/20/18	100% ZD: SCE REDLINES PS
5	01/24/18	100% ZD: SCE REDLINES JD
4	12/08/17	100% ZD: SCE REDLINES JY
3	11/17/17	100% ZD: MINOR REDLINES JD
2	10/24/17	100% ZD REVISION PER SCE #2 JD
1	09/27/17	100% ZD REVISION PER RFDS JD
0	09/08/17	100% ZD ISSUED FOR ZONING JD
E	08/31/17	90% ZD REVISION PER SCE PS
D	07/18/17	90% ZD: PRELIM SURVEY ADDED JD
C	07/14/17	90% ZD REVISION PER DRM JD
B	07/06/17	90% ZD REVISION PER DRM BH
A	07/03/17	90% ZD ISSUED FOR REVIEW BH

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SHEET TITLE  
**NORTH ELEVATIONS**

SHEET NUMBER  
**A04**

NOTE:  
1. LEASE AREA FENCING AND EQUIPMENT SHALL KEEP 3'-0" MIN. CLEARANCE FROM ALL TOWER STEEL.  
2. KEEP ALL ARRAYS 1'-0" FOOT AWAY FROM ALL TOWER STEEL.  
3. ALL ANTENNAS WILL BE PAINTED TO MATCH THE COLOR OF SCE TOWER



**EXISTING NORTH ELEVATION**

24"x36" SCALE: 1/8" = 1'-0"  
11"x17" SCALE: 1/16" = 1'-0"  
8' 6' 4' 2' 0'

**PROPOSED NORTH ELEVATION**

24"x36" SCALE: 1/8" = 1'-0"  
11"x17" SCALE: 1/16" = 1'-0"  
8' 6' 4' 2' 0'





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**INFRASTRUCTURE PARTNERS**  
AZ - CA - CO - ID - NM - NV - TX - UT  
2030 MAIN STREET, SUITE 200  
IRVINE, CA 92614

**SITE NUMBER:**  
**LA74664B**  
**SITE NAME:**  
**HINSON-LIGHTHIPE 220kV**  
  
6227-6245 DE FOREST AVE.  
LONG BEACH, CA 90805

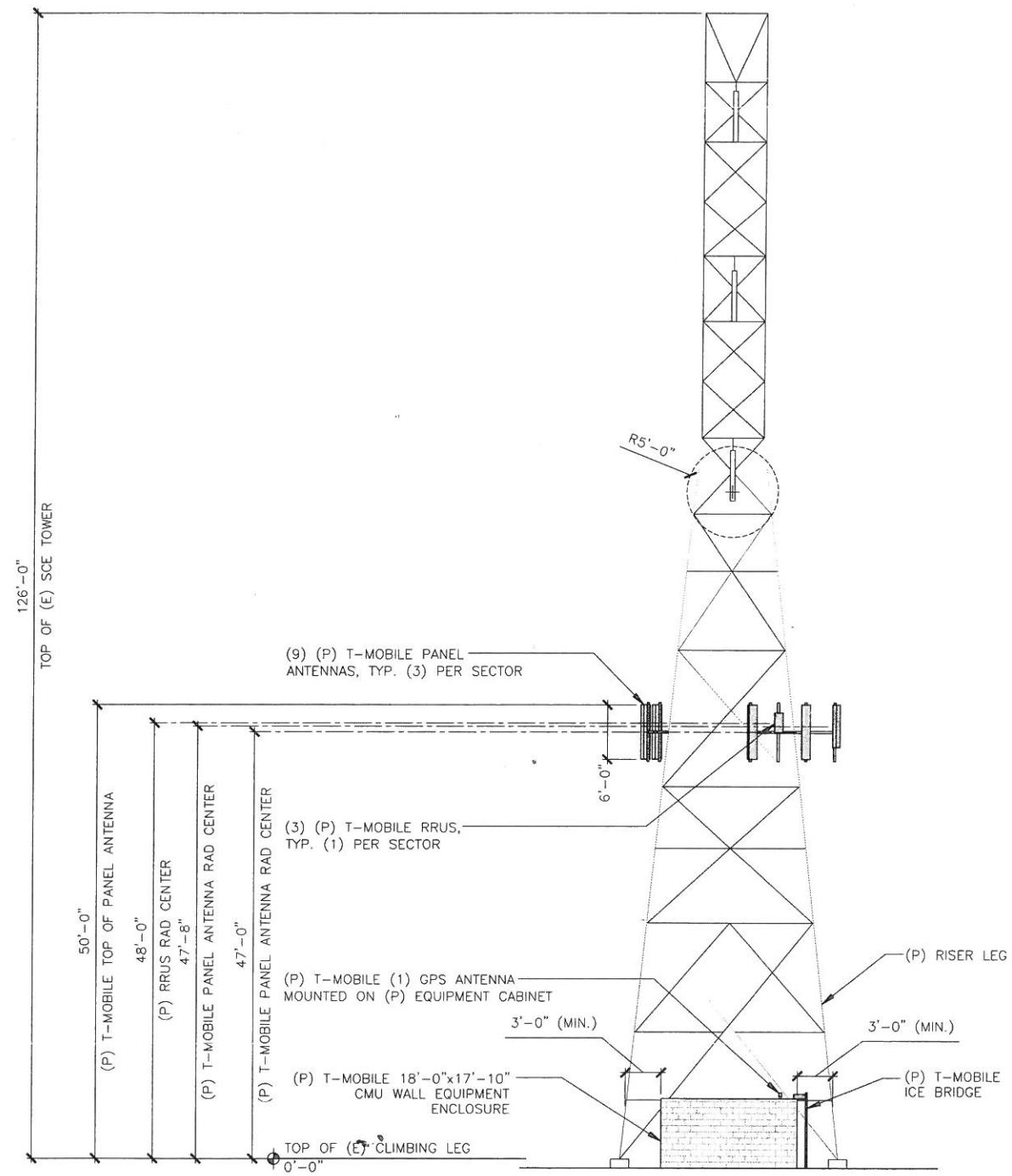
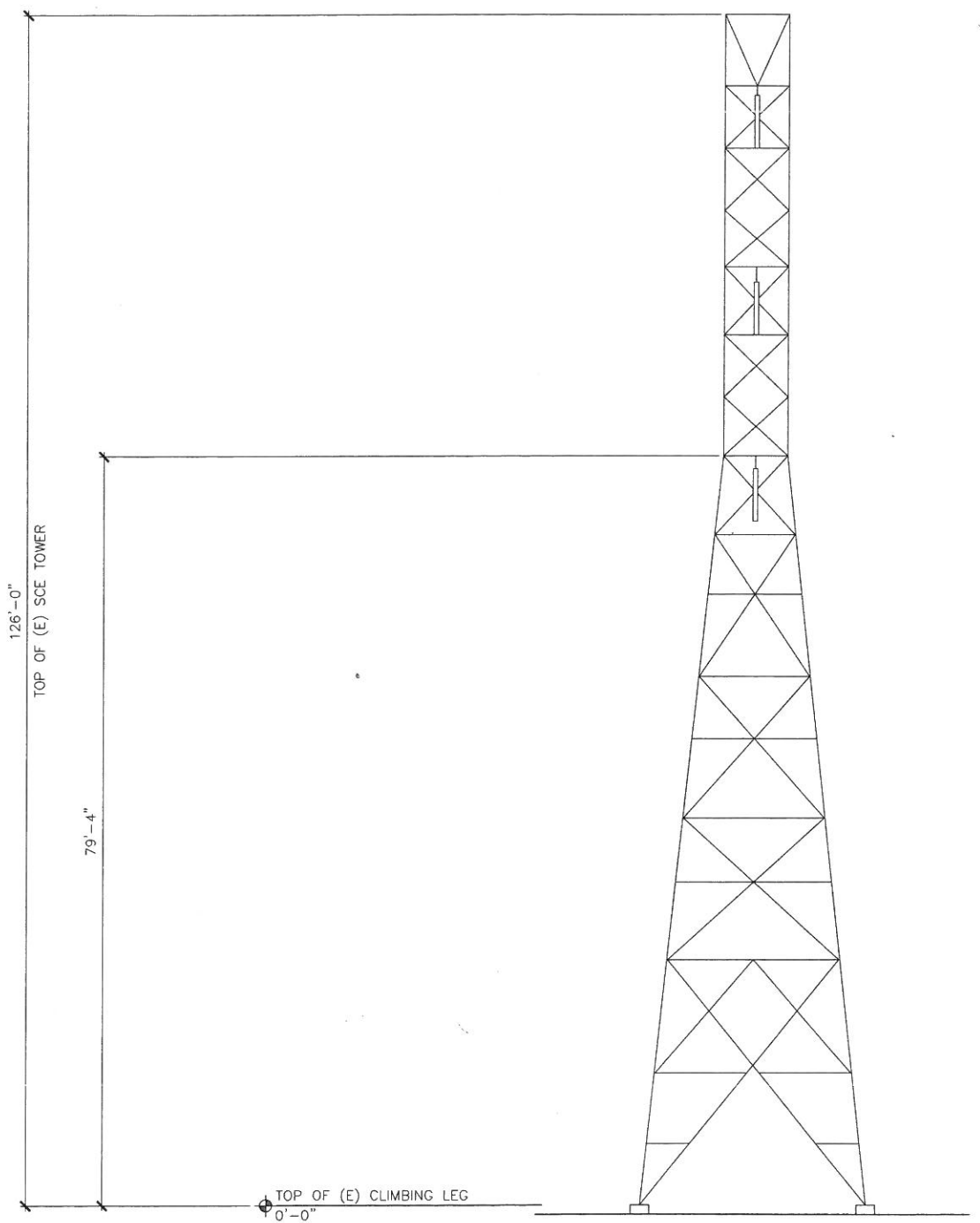
REV	DATE	DESCRIPTION
6	02/20/18	100% ZD: SCE REDLINES PS
5	01/24/18	100% ZD: SCE REDLINES JD
4	12/08/17	100% ZD: SCE REDLINES JY
3	11/17/17	100% ZD: MINOR REDLINES JD
2	10/24/17	100% ZD REVISION PER SCE #2 JD
1	09/27/17	100% ZD REVISION PER RFDS JD
0	09/08/17	100% ZD ISSUED FOR ZONING JD
E	08/31/17	90% ZD REVISION PER SCE PS
D	07/18/17	90% ZD PRELIM SURVEY ADDED JD
C	07/14/17	90% ZD REVISION PER DRM JD
B	07/06/17	90% ZD REVISION PER DRM BH
A	07/03/17	90% ZD ISSUED FOR REVIEW BH

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SHEET TITLE  
**EAST ELEVATIONS**

SHEET NUMBER  
**A05**

NOTE:  
1. LEASE AREA FENCING AND EQUIPMENT SHALL KEEP 3'-0" MIN. CLEARANCE FROM ALL TOWER STEEL.  
2. KEEP ALL ARRAYS 1'-0" FOOT AWAY FROM ALL TOWER STEEL.  
3. ALL ANTENNAS WILL BE PAINTED TO MATCH THE COLOR OF SCE TOWER



**EXISTING EAST ELEVATION**

24"x36" SCALE: 1/8" = 1'-0"  
11"x17" SCALE: 1/16" = 1'-0"  
8' 6' 4' 2' 0'

**PROPOSED EAST ELEVATION**

24"x36" SCALE: 1/8" = 1'-0"  
11"x17" SCALE: 1/16" = 1'-0"  
8' 6' 4' 2' 0'





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**INFRASTRUCTURE PARTNERS**  
AZ - CA - CO - ID - NM - NV - TX - UT  
2030 MAIN STREET, SUITE 200  
IRVINE, CA 92614

**SITE NUMBER:**  
**LA74664B**  
**SITE NAME:**  
**HINSON-LIGHTHIPE 220kV**

6227-6245 DE FOREST AVE.  
LONG BEACH, CA 90805

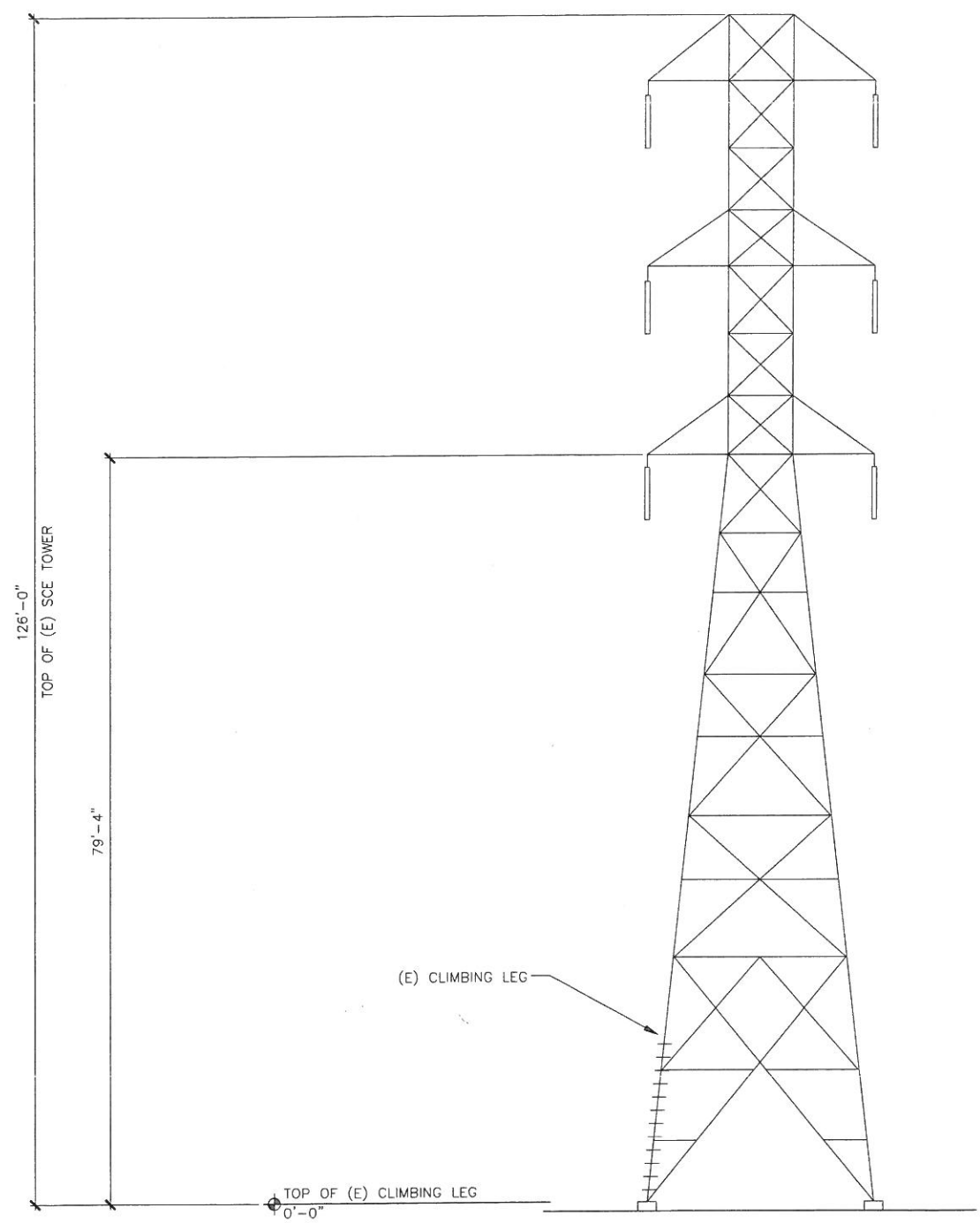
REV	DATE	DESCRIPTION
8	02/20/18	100% ZD: SCE REDLINES PS
5	01/24/18	100% ZD: SCE REDLINES JD
4	12/08/17	100% ZD: SCE REDLINES JY
3	11/17/17	100% ZD: MINOR REDLINES JD
2	10/24/17	100% ZD REVISION PER SCE #2 JD
1	09/27/17	100% ZD REVISION PER RFDS JD
0	09/08/17	100% ZD ISSUED FOR ZONING JD
E	08/31/17	90% ZD REVISION PER SCE PS
D	07/18/17	90% ZD PRELIM SURVEY ADDED JD
C	07/14/17	90% ZD REVISION PER DRM JD
B	07/06/17	90% ZD REVISION PER DRM BH
A	07/03/17	90% ZD ISSUED FOR REVIEW BH

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SHEET TITLE  
**SOUTH ELEVATIONS**

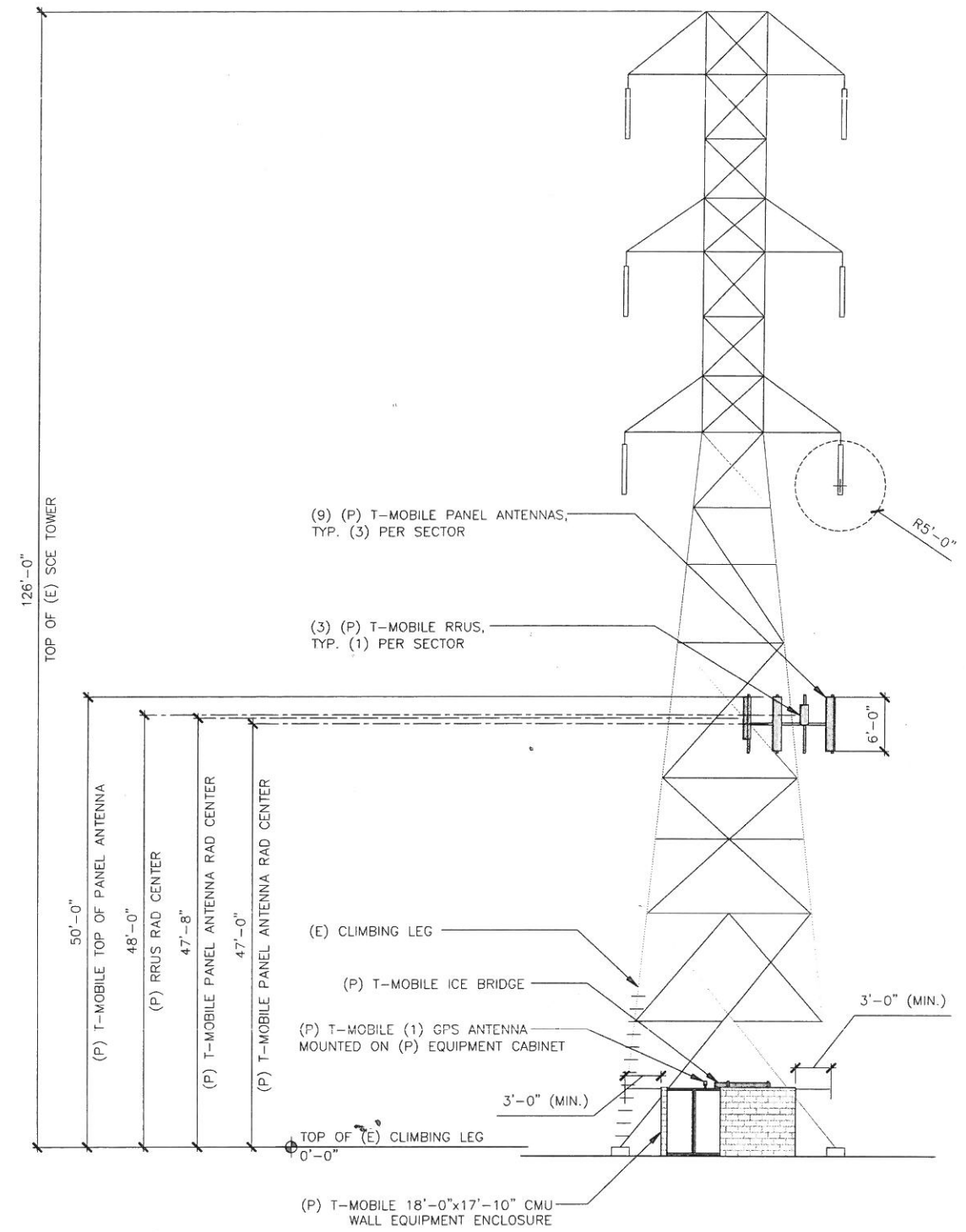
SHEET NUMBER  
**A06**

NOTE:  
1. LEASE AREA FENCING AND EQUIPMENT SHALL KEEP 3'-0" MIN. CLEARANCE FROM ALL TOWER STEEL.  
2. KEEP ALL ARRAYS 1'-0" FOOT AWAY FROM ALL TOWER STEEL.  
3. ALL ANTENNAS WILL BE PAINTED TO MATCH THE COLOR OF SCE TOWER



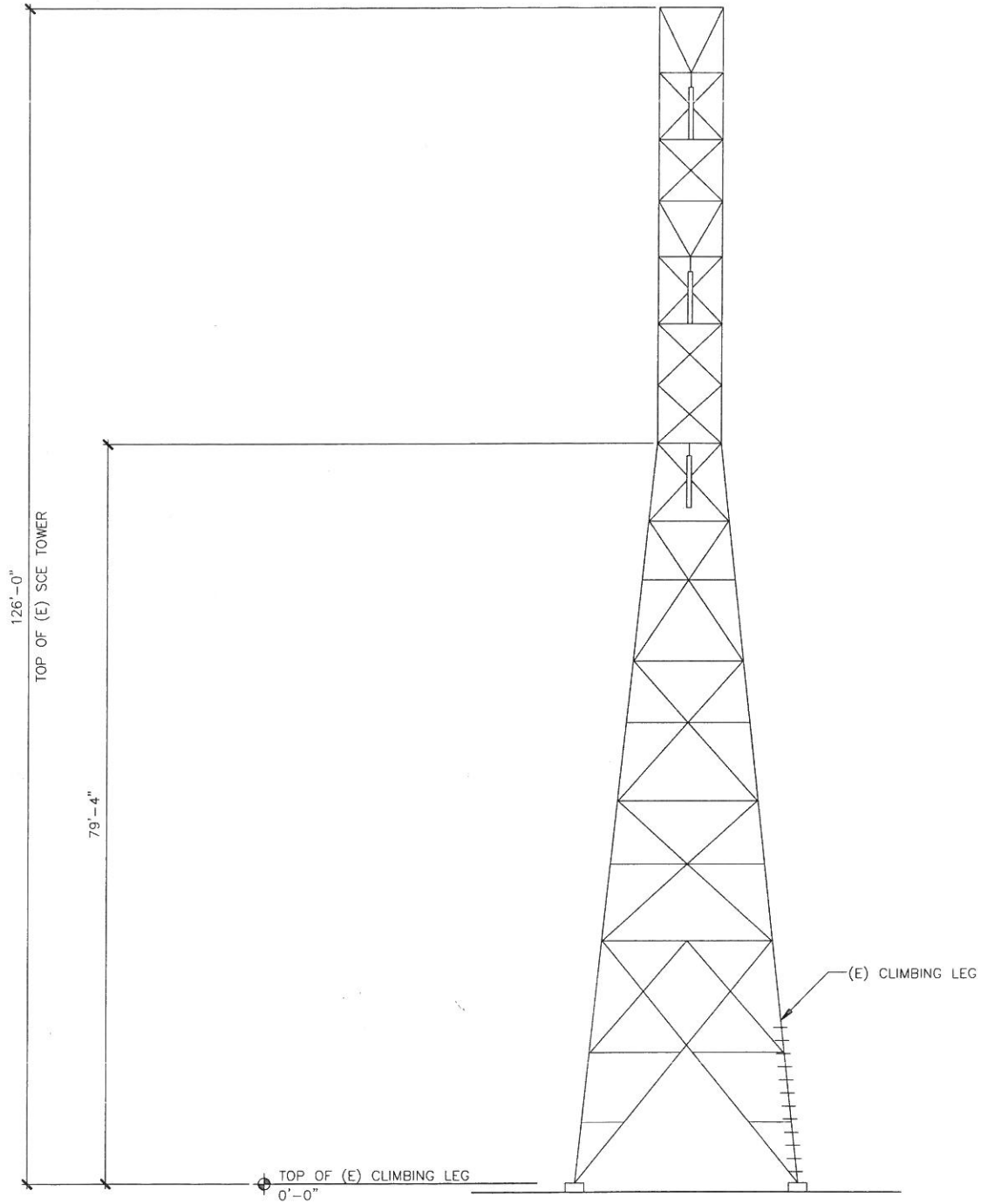
**EXISTING SOUTH ELEVATION**

24"x36" SCALE: 1/8" = 1'-0"  
11"x17" SCALE: 1/16" = 1'-0"  
8' 6' 4' 2' 0' 8'



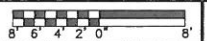
**PROPOSED SOUTH ELEVATION**

24"x36" SCALE: 1/8" = 1'-0"  
11"x17" SCALE: 1/16" = 1'-0"  
8' 6' 4' 2' 0' 8'



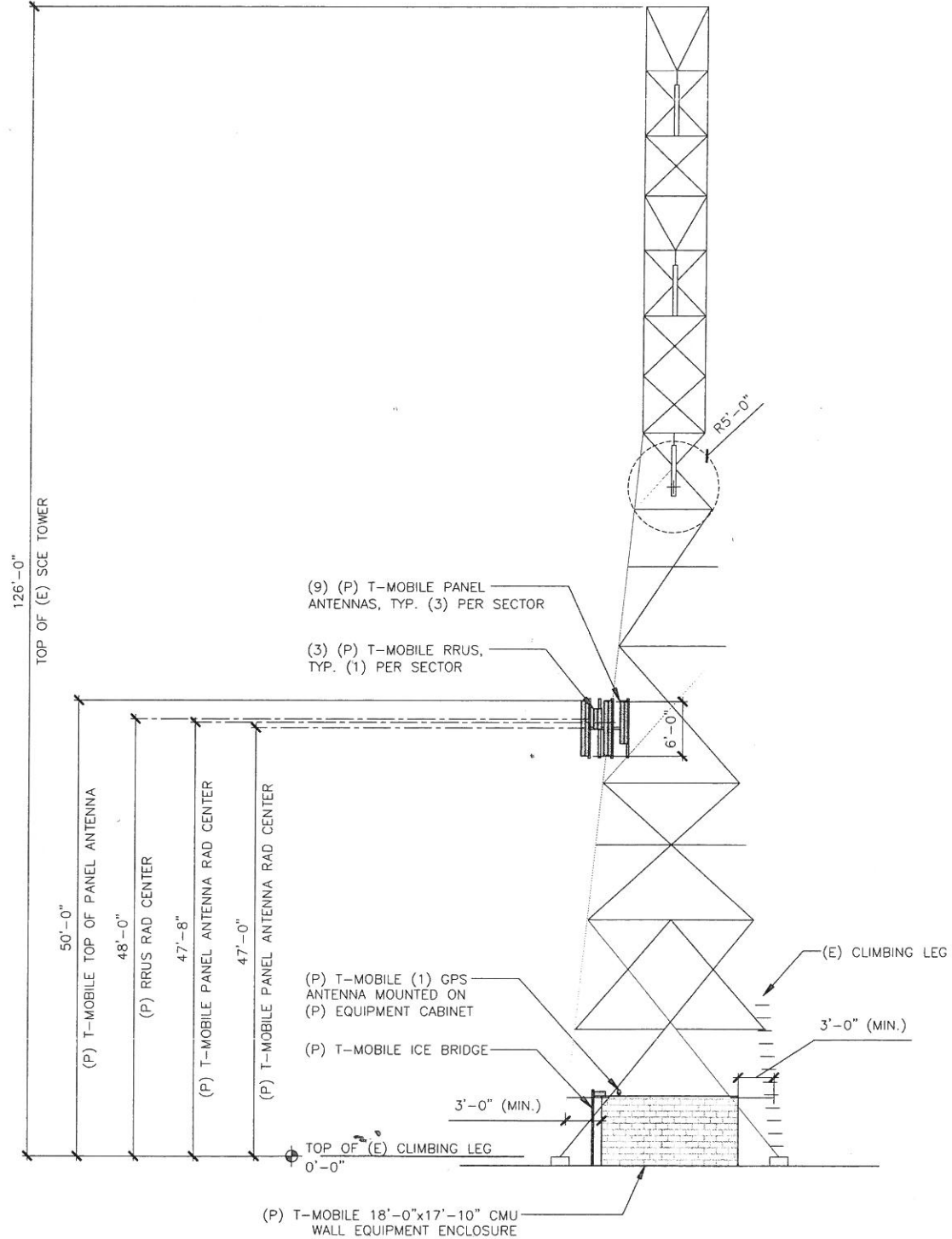
EXISTING WEST ELEVATION

24"x36" SCALE: 1/8" = 1'-0"  
11"x17" SCALE: 1/16" = 1'-0"



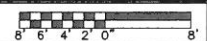
1

NOTE:  
1. LEASE AREA FENCING AND EQUIPMENT SHALL KEEP 3'-0" MIN. CLEARANCE FROM ALL TOWER STEEL.  
2. KEEP ALL ARRAYS 1'-0" FOOT AWAY FROM ALL TOWER STEEL.  
3. ALL ANTENNAS WILL BE PAINTED TO MATCH THE COLOR OF SCE TOWER



PROPOSED WEST ELEVATION

24"x36" SCALE: 1/8" = 1'-0"  
11"x17" SCALE: 1/16" = 1'-0"



2

**T-Mobile**  
T-MOBILE WEST LLC

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**INFRASTRUCTURE PARTNERS**  
AZ - CA - CO - ID - NM - NV - TX - UT  
2030 MAIN STREET, SUITE 200  
IRVINE, CA 92614

SITE NUMBER:  
**LA74664B**  
SITE NAME:  
**HINSON-LIGHTHIPE 220kV**

6227-6245 DE FOREST AVE.  
LONG BEACH, CA 90805

REV	DATE	DESCRIPTION
6	02/20/18	100% ZD: SCE REDLINES PS
5	01/24/18	100% ZD: SCE REDLINES JD
4	12/08/17	100% ZD: SCE REDLINES JY
3	11/17/17	100% ZD: MINOR REDLINES JD
2	10/24/17	100% ZD REVISION PER SCE #2 JD
1	09/27/17	100% ZD REVISION PER RFDS JD
D	09/08/17	100% ZD ISSUED FOR ZONING JD
E	08/31/17	90% ZD REVISION PER SCE PS
D	07/18/17	90% ZD PRELIM SURVEY ADDED JD
C	07/14/17	90% ZD REVISION PER DRM JD
B	07/06/17	90% ZD REVISION PER DRM BH
A	07/03/17	90% ZD ISSUED FOR REVIEW BH

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SHEET TITLE  
**WEST ELEVATIONS**

SHEET NUMBER  
**A07**

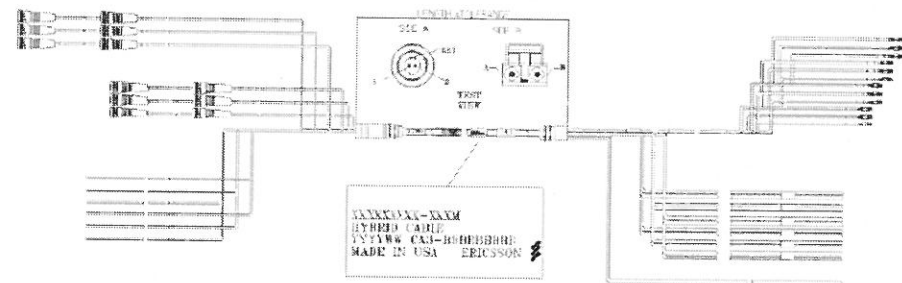


Ericsson Commercial In Confidence

# HCS 6 X 12

ERICSSON HYBRID CABLE, 6 DC PAIRS + 12 OPTICAL PAIRS

UL APPROVED



6 x 12 Weight and diameter	
	6 AWG DC wires
Weight (kg/m)	2.5 (+/- 0.1)
Weight (lb/ft)	1.7 (+/- 0.1)
Diameter (mm)	35 (+/- 2.0 mm)
Diameter (in)	1.38 (+/- 0.1")
Coax standard diameter equivalent	1 3/8"

## ERICSSON 6AWG 6X12 HCS CABLE

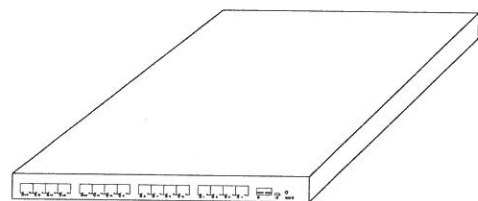
24"x36" SCALE: NTS  
11"x17" SCALE: NTS

3

NOTE:  
1. USE MANUFACTURER SUPPLIED MOUNTING HARDWARE.

### EQUIPMENT SPECIFICATIONS

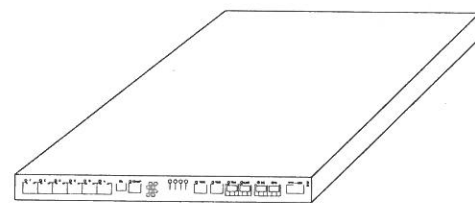
MFG: ERICSSON  
MODEL: R503 XMU  
HEIGHT: 1.22 IN  
WIDTH: 13.80 IN  
DEPTH: 11.00 IN  
WEIGHT: 6.90 LBS



NOTE:  
1. USE MANUFACTURER SUPPLIED MOUNTING HARDWARE.

### EQUIPMENT SPECIFICATIONS

MFG: ERICSSON  
MODEL: DUS41  
HEIGHT: 1.20 IN  
WIDTH: 13.80 IN  
DEPTH: 11.0 IN  
WEIGHT: 6.60 LBS



## XMU SPECIFICATIONS

24"x36" SCALE: NTS  
11"x17" SCALE: NTS

5

## DUS41 SPECIFICATIONS

24"x36" SCALE: NTS  
11"x17" SCALE: NTS

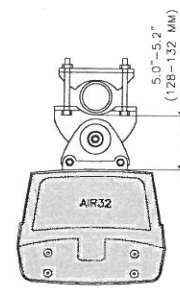
4

## DBXNH-6565B-A2M SPECIFICATION AND MOUNTING DETAIL

24"x36" SCALE: NTS  
11"x17" SCALE: NTS

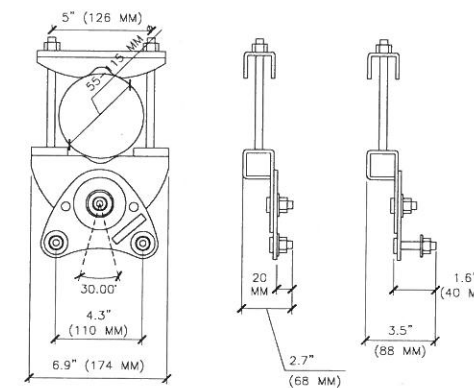
2

Mechanical	AIR21 B4a B2p	AIR32 Single Band (SB) B4a B2p	AIR32 Dual Band (DB) B66Aa B2a
Weight (without mounting brackets)	41 Kg (=90.4 lbs)	48 Kg (=105.8 lbs)	60 Kg (=132.2 lbs)
Dimensions (H x W x D)	1427 x 207 x 200 mm (=56.2" x 12.1" x 7.9")	1439 x 327 x 220 mm (=56.6" x 12.9" x 8.7")	1439 x 327 x 220 mm (=56.6" x 12.9" x 8.7")
Frontal Wind load @ 150 km/h (=42 m/s) wind speed	560 N	650 N	650 N



PLAN

TYPE NO.	B5010070
NAME	AIR CLAMP KIT 55-115 MM
STATUS	BESTELT
VIEW	
SUITABLE FOR MAST DIAMETER	55-115 MM
ANTENNA - MAST DISTANCE F	128-132 MM
NUMBER OF PIECES	2 PIECES
MATERIAL - CLAMP	HOT-DIP GALVANIZED STEEL
-SCREWS	HOT-DIP GALVANIZED STEEL / STAINLESS STEEL
-NUTS	STAINLESS STEEL
TYPE NO.	4,3 KG

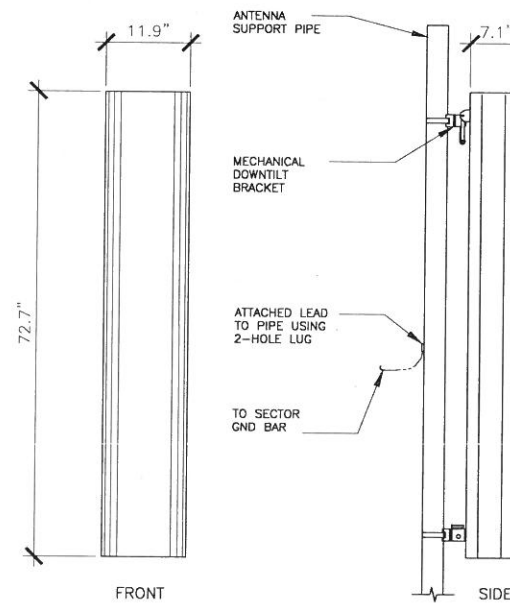


- NOTES:  
1. INSTALL ANTENNA TO EXISTING PIPE MAST USING MANUFACTURERS SUPPLIED BRACKETS AND MOUNTING HARDWARE  
2. SET MECHANICAL DOWNTILT TO VALUE SPECIFIED IN LATEST RFDS

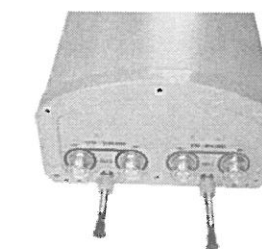
## AIR32 SPECIFICATION AND MOUNTING DETAIL

24"x36" SCALE: NTS  
11"x17" SCALE: NTS

1



4-PORT ANTENNA INFORMATION:  
MANUFACTURER: COMMSCOPE  
MODEL NO.: DBXNH-6565B-A2M  
DIMENSIONS (H x W x D): 72.7" x 11.9" x 7.1"  
WEIGHT: 46.3 LBS



BOTTOM VIEW

MBK-02 Top  
Mounting  
Bracket



MBK-02  
Bottom  
Mounting  
Bracket



ANTENNA BRACKETS



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2030 MAIN STREET, SUITE 200  
IRVINE, CA 92614

SITE NUMBER:  
**LA74664B**  
SITE NAME:  
**HINSON-LIGHTHIPE 220kV**

6227-6245 DE FOREST AVE.  
LONG BEACH, CA 90805

REV	DATE	DESCRIPTION	
4	12/08/17	100% ZD - SCE REDLINES	JY
3	11/17/17	100% ZD - MINOR REDLINES	JD
2	10/24/17	100% ZD REVISION PER SCE #2	JD
1	09/27/17	100% ZD REVISION PER RFDS	JD
0	09/06/17	100% ZD ISSUED FOR ZONING	JD
E	08/31/17	90% ZD REVISION PER SCE	PS
D	07/18/17	90% ZD PRELIM SURVEY ADDED	JD
C	07/14/17	90% ZD REVISION PER DRM	JD
B	07/06/17	90% ZD REVISION PER DRM	BH
A	07/03/17	90% ZD ISSUED FOR REVIEW	BH

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SHEET TITLE

DETAILS

SHEET NUMBER

**D01**



# MI-554nn Diplexer 600/700

## MASS™ Microdata Advanced Site Solutions

With our expertise in site system design we are able to provide a solution for any site sharing or upgrade scenario.

Our focus area is RF-filter based solutions including combiners, multi band TMAs, di-, tri- and quadruplexers.

Our product portfolio supports all frequencies for mobile communication bands ranging from 450 MHz to 6 GHz.

Site and network sharing makes it cost efficient to reach sparsely populated areas where new subscribers can contribute to revenue.

## MASS™ Advantage

**Increases coverage**  
more traffic & higher ARPU

**Increases capacity**  
more traffic & higher ARPU

**Reduces the cost**  
of network expansion

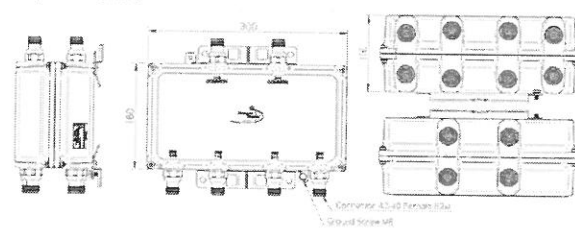
**Minimizes**  
site acquisition issues

## Specifications

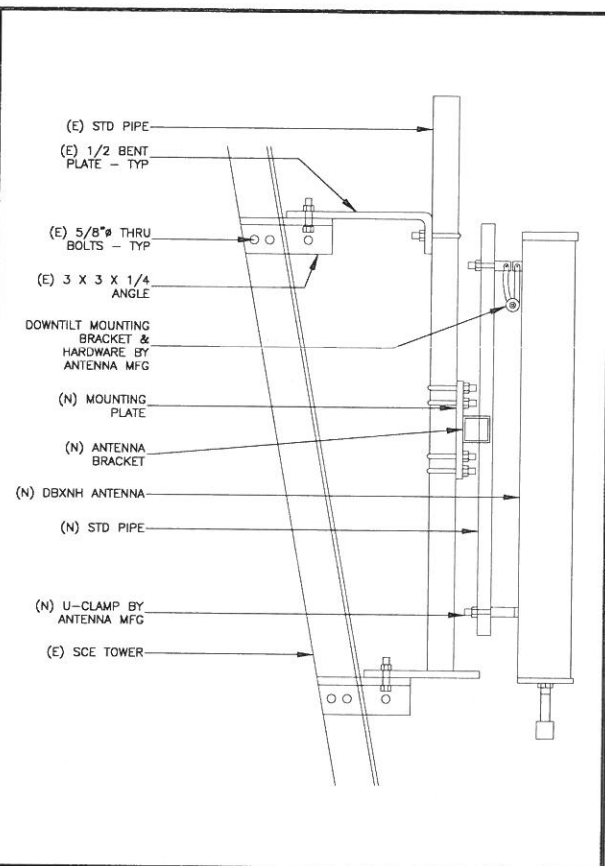
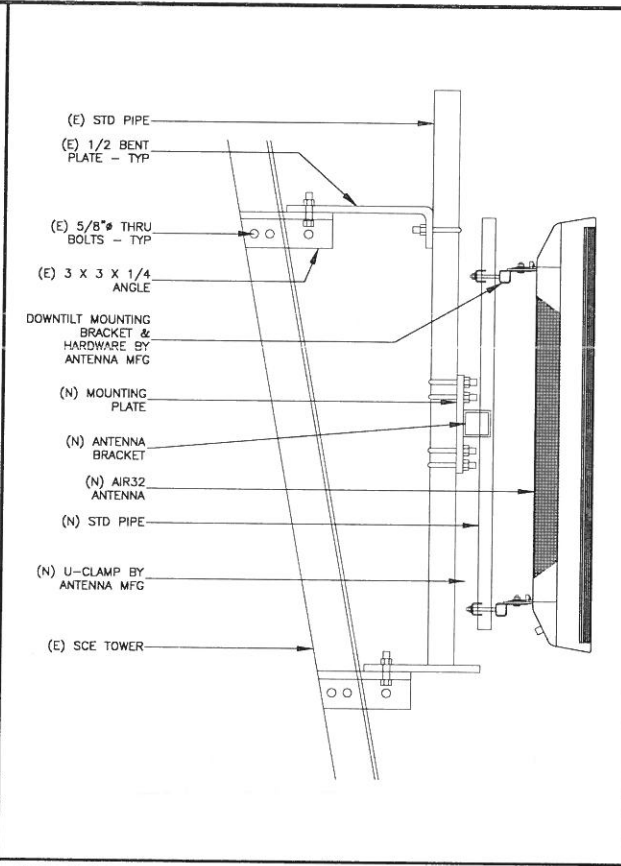
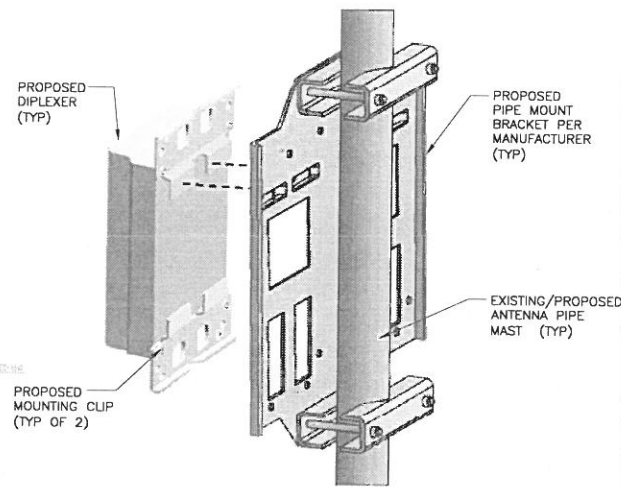
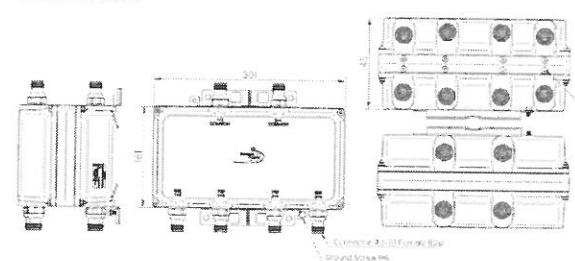
600		
Frequency Band	617 - 688 MHz	
Insertion Loss	<0.3 dB*, <0.55 dB max	
Return Loss	>20 dB *, >10 dB min	
Rejection 698 - 716 MHz	>20 dB	
Rejection 728 - 746 MHz	>50 dB	
Continuous Average Power	350 W	
Intermodulation, 2x43 dBm TX Carrier	-117 dBm	
700		
Frequency Band	698 - 746 MHz	
Insertion Loss	<0.3 dB*, <0.5 dB max	
Return Loss	>20 dB *, >10 dB min	
Rejection 663 - 688 MHz	>20 dB	
Rejection 617 - 642 MHz	>50 dB	
Continuous Average Power	250 W	
Intermodulation, 2x43 dBm TX Carrier	-117 dBm	
Environmental		
Operating Temperature Range	-40 to +65°C   -40 to +149°F	
Operation	ETS 300 019-1-4 Class 4.1E	
Storage	ETS 300 019-1-1 Class 1.2	
Ingress Protection	IP67	
Electrical		
DC By Pass	3 A	With Auto-Sense 2A, drop max 2.4V
AISG pass	Yes	
AISG RL		>12dB
AISG Loss		< 1 dB
Lightning Protection	5 kA @20 us	10 kA @20 us
Input Voltage Power		8-31 V max 0.3 W
Mechanical		
Dimensions (WxHxD) (8:4 version)	300x160x116 mm 11.81x6.30x4.57 in	With Auto-Sense 301x161x145 mm 11.05x6.34x5.71 in
Dimensions (WxHxD) (4:2 version)	To be added	To be added
Connectors	4.3-10 f (x12 8:4 version)	
Mounting	Hose clamps or wall mount (Supporter Pole Diameter: 40-140mm)	
Volume (8:4 version) (4:2 version)	5.6 l 7.0 l	
Weight (8:4 version) (4:2 version)	6.7 kg   14.77 lb 7.2 kg   15.87 lb	
Colour	NCS 1502-R	
Bracket	Included	
Versions		
8:4 Diplexer (8 band 4 common)	MI-5544n	
4:2 Diplexer (4 band 2 common)	MI-5543n	
	*typical	

## Mechanical Drawing

1 The picture is showing MI-5544n

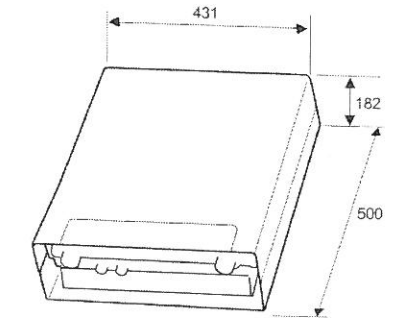
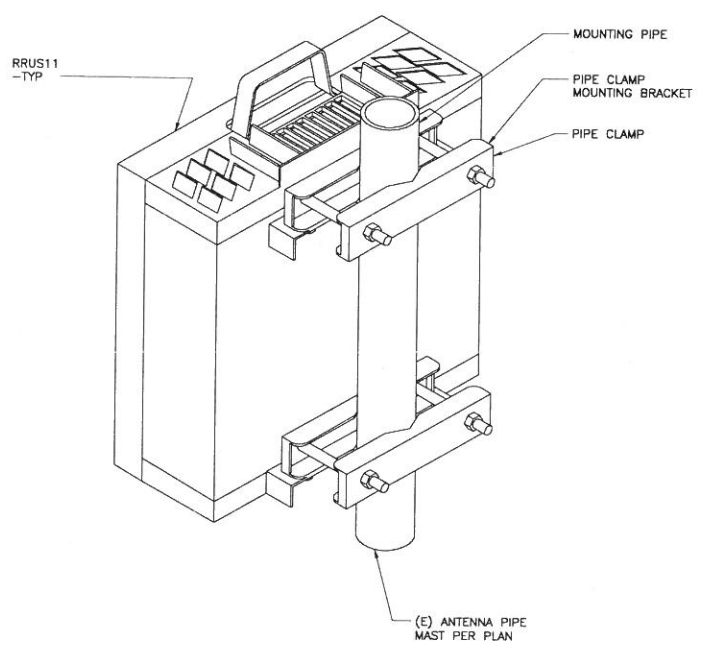


2 The picture is showing MI-5543n



ANTENNA MOUNTING DETAIL (PROVIDED BY SCE) 24"x36" SCALE: NTS 11"x17" SCALE: NTS 1

MANUFACTURER: ERICSSON  
MODEL NO.: RRUS 11 B12  
DIMENSIONS (HXWXD): 500mm (19.6") X 431mm (16.9") X 182 (7.16")  
WEIGHT (WITHOUT MOUNTING): 50.7 LBS (23 KG)



Description	Value
Maximum nominal output power	2x10 W, 2x20 W, 2x30 W, 2x40 W <sup>1)</sup> (subject to license handling)
Number of carriers	One to four carriers (subject to license handling)
Description	
Dimensions with Solar Shield and Handle	
Height	500 mm
Width	431 mm
Depth	182 mm
Weight	
RRUS 11	23 kg
Color	
Gray	

RRUS 11 B12 SPECIFICATION AND DETAIL 24"x36" SCALE: NTS 11"x17" SCALE: NTS 2



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INFRASTRUCTURE PARTNERS  
AZ - CA - CO - ID - NM - NV - TX - UT  
2030 MAIN STREET, SUITE 200  
IRVINE, CA 92614

SITE NUMBER:  
**LA74664B**  
SITE NAME:  
**HINSON-LIGHTHIPE 220kV**  
6227-6245 DE FOREST AVE.  
LONG BEACH, CA 90805

REV	DATE	DESCRIPTION
4	12/08/17	100% ZD - SCE REDLINES
3	11/17/17	100% ZD - MINOR REDLINES
2	10/24/17	100% ZD REVISION PER SCE #2
1	09/27/17	100% ZD REVISION PER RFDS
0	09/08/17	100% ZD ISSUED FOR ZDNING
E	08/31/17	90% ZD REVISION PER SCE
D	07/18/17	90% ZD PRELIM SURVEY ADDED
C	07/14/17	90% ZD REVISION PER DRM
B	07/06/17	90% ZD REVISION PER DRM
A	07/03/17	90% ZD ISSUED FOR REVIEW

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SHEET TITLE  
**DETAILS**

SHEET NUMBER  
**D02**



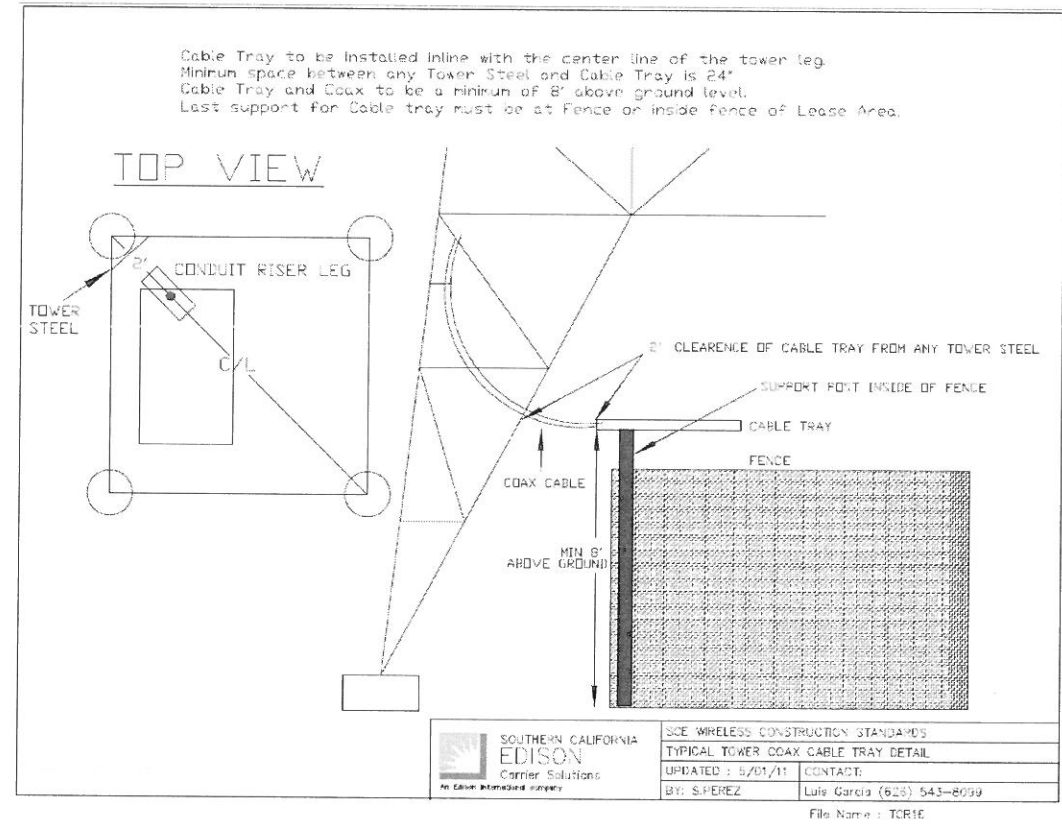


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**INFRASTRUCTURE PARTNERS**  
 AZ - CA - CO - ID - NM - NV - TX - UT  
 2030 MAIN STREET, SUITE 200  
 IRVINE, CA 92614

**SITE NUMBER:**  
**LA74664B**  
**SITE NAME:**  
**HINSON-LIGHTHIPE 220kV**

6227-6245 DE FOREST AVE.  
 LONG BEACH, CA 90805



**SOUTHERN CALIFORNIA EDISON**  
 Carrier Solutions  
 SCE WIRELESS CONSTRUCTION STANDARDS  
 TYPICAL TOWER COAX CABLE TRAY DETAIL  
 UPDATED : 5/20/11 CONTACT:  
 BY: S.PEREZ Luis Garcia (626) 543-8999  
 File Name : TCR1E

NOT USED 24"x36" SCALE: NTS 11"x17" SCALE: NTS 4

**SCE ICE BRIDGE SPECIFICATIONS** 24"x36" SCALE: NTS 11"x17" SCALE: NTS 1

NOT USED

NOT USED

REV	DATE	DESCRIPTION	
4	12/08/17	100% ZD - SCE REDLINES	JY
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SHEET TITLE  
**DETAILS**

SHEET NUMBER  
**D03**

NOT USED 24"x36" SCALE: NTS 11"x17" SCALE: NTS 4

NOT USED 24"x36" SCALE: NTS 11"x17" SCALE: NTS 2