



February 16, 2016

Enza Charles
City of San Diego
1200 Third Avenue, Suite 700
San Diego, CA 92101

RE: AT&T Site ID#: SD0387 (The Twist) – 3C Scope
Site Address: 2905 Nile Street, San Diego, CA 92104

Dear Enza:

As a courtesy, AT&T would like to inform you of a site change that will take place in the next few months. Due to the ever-changing pace of technology, periodically equipment needs to be modified and/or replaced. The purpose of the modification is to improve cellular traffic capacity for businesses and residents within the surrounding community.

Please accept this correspondence as AT&T's request to modify its site at the above-referenced location. The attached drawings dated 11/10/15 outline the proposed modifications and the scope of work is as follows:

- Remove and replace (1) antenna per sector, total of (3)
- Install (1) RRU per sector, total of (3)
- Install (1) surge protector
- Installation/replacement of equipment within existing equipment room
- Install DC power and fiber cables

Please indicate your acknowledgement and consent of the AT&T site modifications by signing below and returning this document to us at your earliest convenience via email (lynn.sivertsen@mmtelecominc.com) or facsimile (866-208-7916), and the original copies returned to me at the below address. If you have any questions, please do not hesitate to contact me at (858) 663-3593.

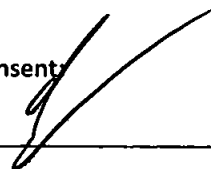
Thank you for your assistance in this matter.

Sincerely,

Lynn Sivertsen
M&M Telecom, Inc.
Consultant for AT&T Mobility

Acknowledgement & Consent

Signature


Cybele Thompson

Director, Real Estate Assets

Print Name and Date

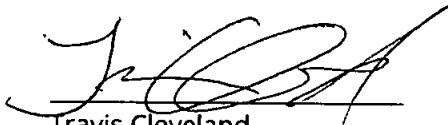
February 16, 2016

Approval Type: Substantial Conformance Review (SCR) to
Project No. 233690 (Spectrum Act¹)
Approval Nos. 843461 and 882706
Expires: January 26, 2022.
SCR Approval No.: 1645829
SCR Project Name: AT&T – The Twist
SCR Project No.: 458409
Site Address: 2903 1/3 Nile Street

The Development Services Department has approved a Process One SCR for this project. The SCR was determined to be consistent with the objectives, standards, guidelines and/or conditions of the previously approved Permit.

The approved modifications include: Replace one antenna per sector (3 total), install one RRU per sector (per previous entitlement), install one surge protector, install XMU, equipment cabinet, and cabling.

The requested changes to the previously approved Exhibits "A" for this project have been determined to be consistent with the general intent, terms and conditions of the previous approval (identified above) as well as any other applicable regulations, development standards and guidelines of the Municipal Code in effect for this site. All applicable and relevant conditions and findings of approval as specified in the previous approval shall remain in full effect for this site, unless otherwise specified by the Development Services Department.


Travis Cleveland
Development Project Manager

¹ Spectrum Act refers to Title VI, section 6409(a) of the 2012 Middle Class Tax Relief and Job Creation Act now codified at 47 U.S.C. section 1455 ("Section 6409 Wireless Facilities Deployment") and Federal Communications Commission Report and Order FCC-14-153 ("Wireless Infrastructure Order").

2013 CALIFORNIA BUILDING CODE
2013 CALIFORNIA RESCUE CODE
2013 CALIFORNIA TILE IN
2013 CALIFORNIA FIRE CODE
2013 CALIFORNIA ENERGY CODE
2013 CALIFORNIA PLUMBING CODE
2013 CALIFORNIA MECHANICAL CODE
2013 CALIFORNIA ELECTRICAL CODE
94-222-B CODE

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

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

4167 WIRELESS PROPOSES TO MODIFY AN EXISTING WIRELESS INSTALLATION. THE SCOPE WILL CONSIST OF THE FOLLOWING:

- REMOVE AND REPLACE (1) ANTENNA PER SECTOR. TOTAL OF (3)
- INSTALL (1) PRE-APPROVED WPA FOR SECTOR. TOTAL OF (3)
- INSTALL (1) SOURCE PROTECTION.
- INSTALL DC POWER AND FIBER CABLES.
- INSTALL WPA #2 ON (1) (L) PULLER CABINET.
- INSTALL (1) (1) RECEIVER ON (1) POWER PLANT.

PROJECT VALUATION = \$40,000.00

PROPERTY OWNER: CITY OF SAN DIEGO
PROJECT AND RECORDING: JUDICIAL PAPER ADMINISTRATION BUILDING
5115 PARK BOLLINGWAY

APPLICANT: AGAT
5738 PACIFIC CEMETER BLVD
SAN DIEGO, CA 92111

APPLICANT REPRESENTATIVE: MARK TELECOM INC.
6886 MONROE AVENUE
CARLSBAD, CA 92011

ZONING JURISDICTION: CITY OF SAN DIEGO

ZONING DISTRICT: RS-1-1

LOT/ACRES (PLOT A1): 37.47 16.89" N

LOT/ACRES (PLOT A2): 117.45 16.89" N

PARCEL # 548-338-05-01

OCCUPANCY GROUP: UNCLASSIFIED

CONSTRUCTION TYPE: V-8

OTHER USE/LESS FACILITIES: NONE

POWER COMPANY: SDGE

TELEPHONE COMPANY: AGAT

LOCAL JURISDICTIONS:

AN ORDINANCE SETTING ASIDE AND DEDICATING LOTS 25 AND 26 IN BLOCK 2, LOTS 33-40, INCLUDING, IN BLOCK 8 AND LOTS 30, 36, AND 37 IN BLOCK 22 OF CITY HEIGHTS, AND LOT 29 IN BLOCK "A", LOTS 1 AND 2 IN BLOCK "B" LOT 23 IN BLOCK "C", LOT 23 IN BLOCK "D", AND LOTS 3, 4, AND A PORTION OF LOT 2 IN BLOCK "E" OF MONOLAH, IN THE CITY OF SAN DIEGO, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, FOR A PUBLIC PARK.

PERSONAL HISTORY:
MARIA MORGAN
WALN TELECOM INC.
8800 GARDENA DRIVE
CARLSBAD, CA 92011
PHONE: (760) 672-1903
FAX: (760) 672-1903

EMPLOYMENT:
TELECOM MANAGEMENT GROUP
14003 AVENIDA VENTURA #0
SAN DIEGO, CA 92120
PHONE: (606) 248-7570
EMAIL:
T.M.GROUP@TELECOM.MANAGEMENT.GROUP.COM

NEW ADDRESS:
 1700 SHERIDAN
 MAIN TELECOM INC.
 6800 MINNEAPOLIS DRIVE
 CARLSBAD, CA 92011
 PHONE: (609) 865-3563
 FAX: (609) 865-3563
 E-MAIL: info@maintelecom.com

BY ENGINEER:
ZORCE WILCOX
 P.E.
 5738 PACIFIC CENTER BLDG.
 SAN DIEGO, CA 92121
 PHONE: (619) 592-2161
 EMAIL: zorc@att.com

CONSTRUCTION:
ROBERT POLSO
 CROSBY NETWORKS
 PHONE: (408) 307-9892
 EMAIL: RPOLSO@crossby-networks.com

**JOHN
LIM HICKS**
MAN TELECOM INC.
6800 MIRAGE CIRCLE
CARLSBAD, CA 92011
PHONE: (800)682-8312
EMAIL: JOHN.HICKS@MANTELECOM.COM

CONSTRUCTION
KORAN FOLIO
GOODMAN NETWORKS
PHONE: (408) 307-6862
E-MAIL: goodman@goodman-networks.com



**CITY OF SAN DIEGO-DEVELOPMENT SERVICES DEPARTMENT
ENTITLEMENTS-WIRELESS COMMUNICATION FACILITIES**

EXHIBIT "A"

THE TWIST

Project Number:

Approval Date:

Signed (1st Sheet):

Spectrum Act SCR
to 233690

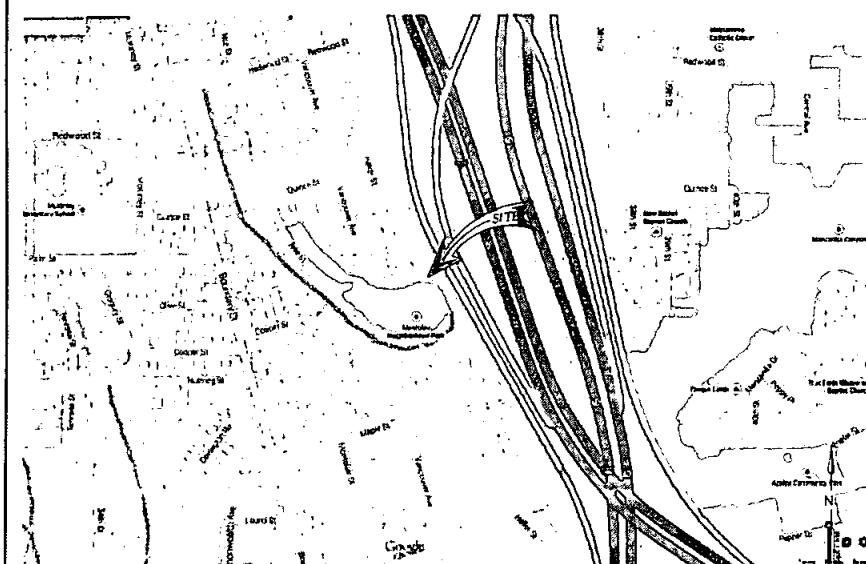
SD0387

E BC (WCS)

10085141

2905 NILE STREET
SAN DIEGO, CA 92104

VICINITY MAP



NO SCALE

DRIVING DIRECTIONS FROM AT&T OFFICE

DIRECTIONS FROM AT&T OFFICE:

HEAD SOUTHWEST ON PACIFIC CENTER BLVD TOWARD MOCELLAR CT. TURN LEFT ONTO LUSK BLVD. TURN RIGHT ONTO MIRA MESA BLVD. CONTINUE ONTO SORRENTO VALLEY RD. USE THE RIGHT 3 LANES TO TURN SLIGHTLY RIGHT ONTO THE INTERSTATE 60 S RAMP. FOLLOW I-60S 5 TAKE EXIT 15 FOR NORTH PARK WAY. TURN LEFT ON BOUNDARY STREET. TURN LEFT ONTO THORN STREET. TURN RIGHT ONTO MLF STREET. DESTINATION WILL BE ON THE LEFT.

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.

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.

ALAT COMPLIANCE:	DATE:
ALAT BY ENGINEER:	DATE:
ALAT OPERATOR/TONER:	DATE:
ALAT PM:	DATE:
CONSTRUCTION:	DATE:
SITE ACQUISITION:	DATE:
SITE OWNER:	DATE:

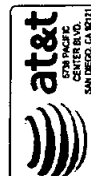
SHEET NO.	SHEET TITLE
11	TITLE SHEET
12	GENERAL NOTES
13	GENERAL NOTES
14	PHOTO SIMULATION AND ECHOLOG DAILY NOTES
15	SAFE PLAN
16	ENLARGED SAFE PLAN
17	ENLARGED LAYOUT
18	PROPOSED ANTENNA LAYOUT AND ANTENNA SCHEDULE
19	SAFE ELEVATIONS
20	SAFE ELEVATIONS
21	SAFE DETAILS
22	ELECTRICAL PLAN (EQUIPMENT)
23	ANTENNA ECHOLOG PLAN
24	ELECTRICAL OF ONE-LINE ECHOLOG
25	ECHOLOG DETAIL

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



Know what's below.
Call before you dig.

△	100% C23 PC OADR R117	91-18
□	100% C23	11-10
○	100% C23	11-04
Rev	Descriptions	Dates



133HS 3711

SD0387
THE TWIST
2805 NILE STREET
SAN DIEGO, CA 92104
LTE 3C (WCS)



Project number

Grown by:

[illegible]

Support for

1

11

1. FOR THE PURPOSE OF CONSTRUCTION DRAWINGS, THE FOLLOWING DEFINITIONS SHALL APPLY:
GENERAL CONTRACTOR - OVERLAND CONTRACTING INC. (BAY)
SUBCONTRACTOR - CONTRACTOR (CONSTRUCTION)

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 PERIODIC MAINTENANCE AND INSPECTION, APPROXIMATELY 2 TIMES PER MONTH, BY "A&I" TECHNICIANS.
34. NO OUTDOOR STORAGE OF SOLID WASTE CONTAINERS ARE PROPOSED.

39. ALL MATERIAL SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST REVISION "AT&T" MOBILEITY GROUNDING STANDARD TECHNICAL SPECIFICATION FOR CONSTRUCTION OF GSM/GPRS WIRELESS SITES" AND "TECHNICAL SPECIFICATION FOR CONSTRUCTION OF GROUNDING", IN CASE OF A CONFLICT BETWEEN THE CONSTRUCTION SPECIFICATION AND THE DRAWINGS THE DRAWINGS SHALL GOVERN.

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.

PROVIDED BY THE SITE OWNER. CONTRACTORS SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.

AND REQUIREMENTS.

40. ALL COMPANY CABLE INSTALLATIONS TO FOLLOW MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS.

41. NO NOISE, SMOKE, DUST, ODOOR, OR VIBRATIONS WILL RESULT FROM THIS PROJECT (DELETE THIS NOTE IF THE SITE WILL HAVE A GENERATOR)

43. NO LANDSCAPING IS PROPOSED AT THIS SITE.
(REVISE THIS NOTE ACCORDING TO THE SITE CONFIGURATION)

[illegible]

PART 1 - GENERAL

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

- PART 2 - ENCLIC

2.1 SUITABLE BACKFILL: ASTM D2921 (CLASS 1, 2, 3 OR 4A) FREE FROM FROZEN LUMPS, REF. STONES OR ROCKS LARGER THAN 3 INCHES IN ANY DIMENSION OR OTHER MATERIAL THAT WOULD BE IMPEDIMENTAL MATERIAL UNDESIRABLE FOR BACKFILL.

2.2 NON-POROUS GRANULAR EMBANKMENT AND BACKFILL: ASTM D2321 (CLASS II (A OR B)) AGGREGATE, FREE FROM FROZEN LUMPS, REFUSE, STONES OR ROCKS LARGER THAN 3 IN. ANY DIMENSION OR OTHER MATERIAL THAT MAY MAKE THE INORGANIC MATERIAL UNSUITABLE

2.3 POROUS GRANULAR EMBANKMENT AND BACKFILL: ASTM D2321 (CLASS II, III OR IV) COARSE AGGREGATE FREE FROM FROZEN LUMPS, REFUSE, STONES OR ROCKS LARGER THAN 3 INCH DIMENSION OR OTHER MATERIAL THAT MAY MAKE THE INORGANIC MATERIAL UNSUITABLE FOR

2.4 SELECT STRUCTURAL FILL: GRANULAR FILL MATERIAL MEETING THE REQUIREMENTS OF ASTM 1 FOR USE AROUND AND UNDER STRUCTURES WHERE STRUCTURAL FILL MATERIAL ARE REQUIRED

2.6 COARSE AGGREGATE FOR ACCESS ROAD SUBBASE COURSE SHALL CONFORM TO ASTM D2940.

2.7 **UNDESIRABLE MATERIAL:** HIGH AND MODERATELY PLASTIC SILTS AND CLAYS (CLAYEY), MATERIALS CONTAINING REFUSE, FROZEN LUMPS, CRUMPSHED BITUMINOUS MATERIAL, VEGETATIVE MATERIAL, STONES IN EXCESS OF 3 INCHES IN ANY DIMENSION, AND DEBRIS AS DETERMINED BY THE CONSTRUCTION MANAGER. TYPICAL THESE WILL BE SOILS CLASSIFIED BY ASTM AS PT, MH, CH

2.8 GEOTEXTILE FABRIC: MINAMI 500K OR APPROVED EQUAL.

MANUFACTURED FOR MARKING AND LOCATING UNDERGROUND UTILITIES, 8 INCHES WIDE WITH MINIMUM THICKNESS OF 0.004 INCH. TAPE SHALL HAVE MINIMUM STRENGTH OF 1500 PSI IN BOTH DIRECTIONS AND MANUFACTURED WITH INTEGRAL CONDUCTORS, FOR BACKING OR OTHER MEANS TO ENABLE DETECTION BY A METAL DETECTOR WHEN BURIED UP TO 3 FEET DEEP. THE METALLIC

PROTECT IT FROM CORROSION. TAPE COLOR SHALL BE RED FOR ELECTRIC UTILITIES AND OR TELECOMMUNICATION UTILITIES.

EXHIBIT "A"

Project Number:

Approval Date:

Signed (1st Sheet)

- 3.1. GENERAL:
1. BEFORE STARTING GENERAL SITE PREPARATION ACTIVITIES, INITIAL EXPOSURE AND SEDIMENT MONITORING MUST BE CONDUCTED TO DETERMINE THE EXTENT OF CONTAMINATION AND SUCH CONDITION THAT IN THE EVENT OF A RAIN THE SITE WILL BE DRAINED AT ANY TIME.
 2. BEFORE ALL SURVEY, LAYOUT, STAKING, AND MARKING, ESTABLISH AND MAINTAIN ALL LINES, GRADATIONS, ELEVATIONS AND BECHAMONS NEEDED FOR EXECUTION OF THE WORK.
 3. CLEAR AND GRADE THE AREA WITHIN THE LIMITS OF THE SITE REMOVE TREES, BRUSH, STAMPS, AND OTHER OBSTACLES TO THE WORK. ALL DEBRIS MUST BE REMOVED OR PHOTOGRAPHED THROUGH THE SURVEY OF THE PROJECT AND MUST BE CLEARED.
4. COMMUNICATION FACILITIES
1. REMOVE TOPSOIL MATERIALS TO A DEPTH OF NO LESS THAN 12 INCHES BELOW THE ORIGINAL GRADE SURFACE. ROOTS, STAMPS, AND OTHER DEBRIS, WINDMILL AND REFUSE DEBRIS OR OTHER OBSTACLES TO THE WORK MUST BE REMOVED TO A DEPTH OF NO LESS THAN 12 INCHES TO A DEPTH OF NO LESS THAN 6 INCHES AND REMOVE TO A DEPTH OF 12 INCHES ALL ROOTS AND OTHER OBSTACLES TO THE WORK.
 2. REMOVE TOPSOIL MATERIALS COMPLETELY FROM THE SURFACE UNTIL THE SOIL NO LONGER SHOWS THE DEFINITION OF TOPSOIL AND MOIST MOIST TOPSOIL WITH SURFACE OR OTHER UNSUBSISTANT MATERIALS.
 3. IF DEPTH OF EXCAVATION TO GREATER DEPTH IS INDICATED, FILL DEPRESSIONS WITH FILL OR OTHER MATERIALS AND GRADING AND REDEMPTION WORK COMPLETELY WITH SUITABLE MATERIALS.
 4. REMOVE FROM THE SITE AND DISPOSE IN AN AUTHORIZED LANDFILL ALL DEBRIS RESULTING FROM CLEAVING AND GRADING OF OBSTACLES. BURNING WILL NOT BE PERMITTED.
 5. PRIOR TO EXCAVATING, THOROUGHLY EXAMINE THE AREA TO BE EXCAVATED AND/OR TO BE CLEARED INDICATED ON THE DRAWINGS AND TO ASCERTAIN THE EXISTENCE AND LOCATION OF ANY STRUCTURE, UNDERGROUND STRUCTURE, OR OTHER NOT SHOWN ON THE DRAWINGS AND THE PROPOSED CONSTRUCTION. NOTIFY THE CONSTRUCTION MANAGER OF ANY OBSTRUCTIONS THAT WILL PREVENT ACCOMPLISHMENT OF THE WORK AS INDICATED ON THE DRAWINGS.
 6. EXCAVATE AND STOCK PILE ALL EXCAVATED MATERIALS SUITABLE FOR DISPOSAL AS A LEGAL, SAFE AND UNDESTRUCTIVE MANNER.

1. AS SOON AS PRACTICAL, AFTER COMPLETING CONSTRUCTION OF THE RELATED STRUCTURE, INCLUDING EXPIRATION OF THE SPECIFIED MAXIMUM DURING PERIOD FOR CAST-IN-PLACE BACKFILL, BACKFILL THE EXCAVATION WITH APPROVED MATERIAL TO RESTORE THE REQUIRED FINISHED GRADE.
2. PRIOR TO PLACING BACKFILL AROUND STRUCTURES, ALL FORMS SHALL BE REMOVED AND THE EXCAVATION CLEANED OF ALL TRAILER CURBS, AND UNSUITABLE MATERIALS.
3. BACKFILL BY PLACING AND COMPACTING SUFFICIENT BACKFILL MATERIAL OR SELECT GRANULAR BACKFILL MATERIAL WHEN REQUIRED IN UNIFORM HORIZONTAL LAYERS OF NO MORE THAN 6-INCHES THICKNESS. EXHAUSTIVE TESTING SHALL BE CONDUCTED TO DETERMINE COMPACTORS ARE USED, THE FILL MATERIAL SHALL BE PLACED IN LIFTS NOT TO EXCEED 6 INCHES IN LAYERS DEPTH AND COMPACTED.
4. THE ENGINEER IDENTIFY THAT THE CONTRACTOR HAS NOT OBTAINED THE SPECIFIED DENSITY, THE SUCCEEDING LAYER SHALL NOT BE PLACED UNTIL THE SPECIFICATION REQUIREMENTS ARE MET UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER. EXHAUSTIVE TESTING CHANGING CHANGING SHALL BE REQUIRED APPROPRIATE ACTION IS NECESSARY, SUCH AS SOAKING AND DRIVING, ADDING WATER, OR INCREASING THE COMPACTING EFFORT.
5. 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 698.
- 3.5 TRENCH EXCAVATION
 1. UTILITY TRENCHES SHALL BE EXCAVATED TO THE LINES AND GRADES SHOWN ON THE DRAWINGS OR AS DIRECTED BY THE LOCAL AUTHORITY. BACKFILL SHALL BE SHETTING AND BRIDGING AS REQUIRED TO PREVENT COLLAPSE OR SLIDING OF THE TRENCH WALLS.
 2. EXTEND THE TRENCH WIDTH A MINIMUM OF 6 INCHES BEYOND THE OUTSIDE EDGE OF THE OUTERMOST CONDUIT.
 3. WHEN SOFT LIEING, OR OTHERWISE UNDESIRABLE 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.
- 3.6 TRENCH BACKFILL:
 1. PROVIDE GRANULAR BEDDING MATERIAL IN ACCORDANCE WITH THE DRAWINGS AND THE UTILITY REQUIREMENTS.
 2. NOTIFY THE GENERAL CONTRACTOR 24 HOURS IN ADVANCE OF BACKFILLING.
 3. CONDUCT UTILITY CHECK TESTS BEFORE BACKFILLING. BACKFILL AND COMPACT TRENCH BEFORE ACCEPTANCE TESTING.
 4. PLACE GRANULAR TRENCH BACKFILL UNIFORMLY ON BOTH SIDES OF THE CONDUITS IN 6-INCH THICKNESS LAYERS. BACKFILL EACHES OVER THE CONDUITS, SLOPE RAIL AND TAMP BACKFILL INTO SPACE AROUND CONDUITS.
 5. PROTECT CONDUIT FROM LATERAL MOVEMENT, IMPACT DAMAGE, OR UNBALANCED LOADING.
 6. ABOVE THE CONDUIT EMBEDEDMENT ZONE, PLACE AND COMPACT SATISFACTORY BACKFILL MATERIAL IN 6-INCH MAXIMUM LOGUE THICKNESS LAYS TO RESTORE THE REQUIRED FINISHED SURFACE GRADE.
 7. COMPACT FINISH 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 95 PERCENT OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE MODIFIED PROCTOR TEST, ASTM D 1557.
- 3.5 AGGREGATE ACCESS ROAD
 1. CLEAR GRASS, STRIP, AND EXCAVATE FOR THE ACCESS ROAD TO THE LINES AND GRADES INDICATED ON THE DRAWINGS. SCARIFY TO A DEPTH OF 6 INCHES AND PROOF-ROLL. ALL HILLS, RUTS, SOFT PLACES, AND OTHER DEFECTS SHALL BE CORRECTED.
 2. 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.
 3. AFTER PREPARATION OF THE SUBGRADE IS COMPLETE, THE GEOTEXTILE FABRIC (FABRIC BODIES) SHALL BE LAYED TO THE LINES INDICATED ON THE DRAWINGS BY HOLLING THE FABRIC OUT LONGITUDINALLY ALONG THE ROADWAY. THE FABRIC SHALL NOT BE DRAGGED ACROSS THE SUBGRADE, PLACE THE EXTERE ROLL IN A SINGLE OPERATION, ROLLING OUT AS SHAGGOLY AS POSSIBLE.
 4. OVERLAPS PARALLEL TO THE ROADWAY WALL BE PERMITTED AT THE CENTERLINE AND AT LOCATIONS BEYOND THE ROADWAY SURFACE WIDTH (I.E. WITHIN THE SHOULDER WIDTH) ON BOTH LONGITUDINAL OVERLAPS SHALL BE LOCATED BETWEEN THE CENTERLINE AND THE SHOULDER. PARALLEL OVERLAPS SHALL BE A MINIMUM OF 3 FEET BIDE.
 5. 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 BE MINIMUM 4 FEET BIDE.
 6. ALL OVERLAPS SHALL BE PRINED WITH STRIPES OR HAVE A MINIMUM OF 10 INCHES LONG TO BE COVERED POSTERIORLY DURING PLACEMENT OF AGGREGATE. PIN LONGITUDINAL SEAMS AT THE CENTERLINE AND SHOULDER.

△	95% CD PG COMPONENT	01-10-98
1	95% CD	11-10-18
2	95% CD	11-04-05
Qty.	Description	Date



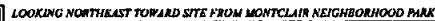
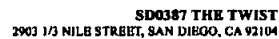
GENERAL NOTES

SD0387
THE TWIST
3905 NILE STREET
SAN DIEGO, CA 92104

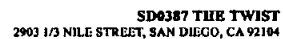


Project Number: _____
 Prepared By: **DRD/**
 Checked By: **DRD**
 Date: _____

T2



PROPOSED AT&T ANTENNAE LOCATED
TO THE INTERFERENCE PROPOSED ONLY
W/THIN 3000 FT. ANTENNA



PROCESSED AT THE AIRMAIL ROUTE
JAN 10 1945
MAIL ROOM

[illegible][illegible]

CITY OF SAN DIEGO-DEVELOPMENT SERVICES DEPARTMENT
ENTITLEMENTS-WIRELESS COMMUNICATION FACILITIES

EXHIBIT "A"

Project Number:

Approval Date:

Signed (1st Sheet):

[illegible]

100-1054701

1	10% CD	11-10-15
6	10% CD	11-10-15
10	10% CD	11-10-15
15	10% CD	11-10-15
20	10% CD	11-10-15
25	10% CD	11-10-15
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35	10% CD	11-10-15
40	10% CD	11-10-15
45	10% CD	11-10-15
50	10% CD	11-10-15
55	10% CD	11-10-15
60	10% CD	11-10-15
65	10% CD	11-10-15
70	10% CD	11-10-15
75	10% CD	11-10-15
80	10% CD	11-10-15
85	10% CD	11-10-15
90	10% CD	11-10-15
95	10% CD	11-10-15
100	10% CD	11-10-15



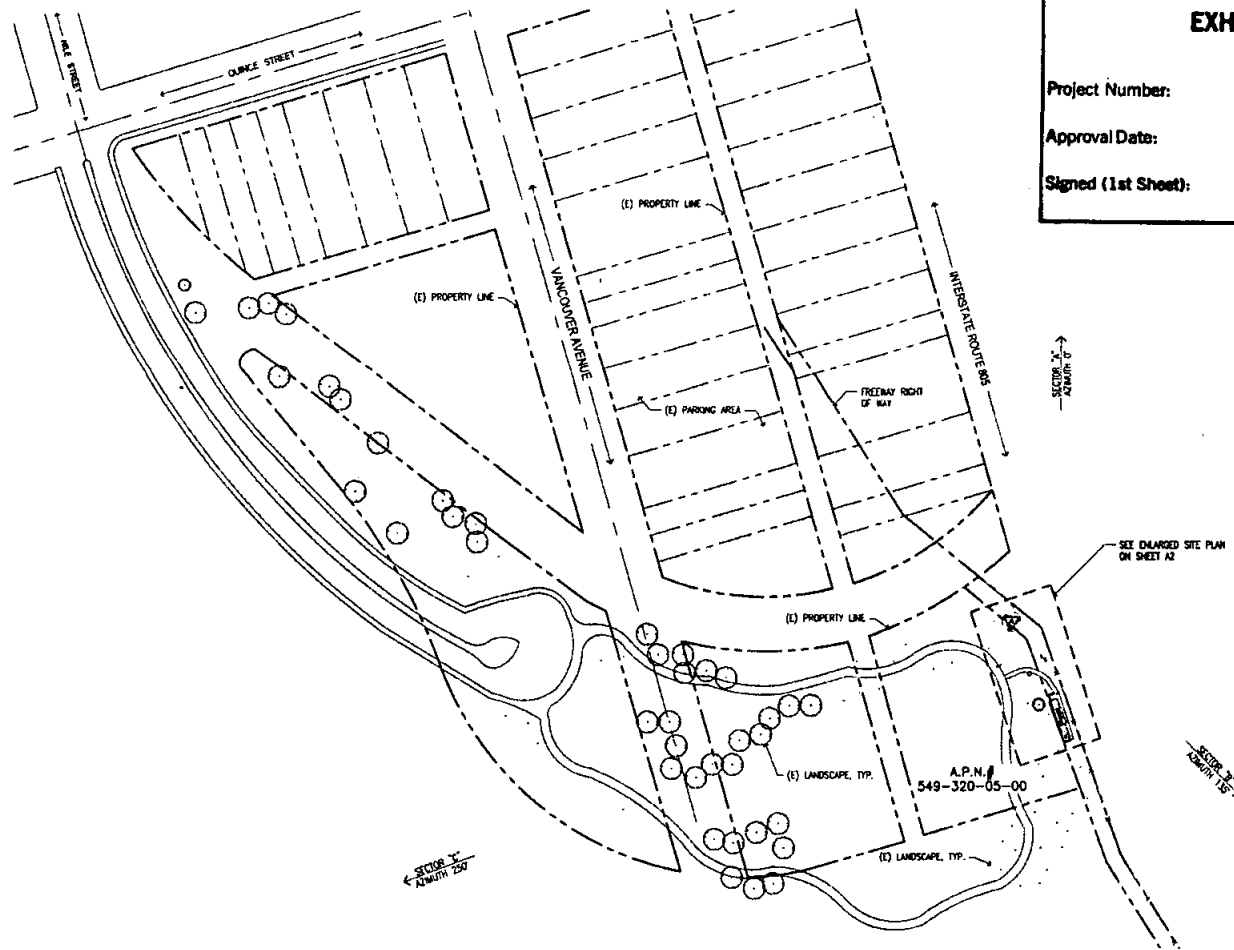
PHOTO SIMULATION AND STORM QUALITY NOTES

SD0387
THE TWIST
2905 NILE STREET
SAN DIEGO, CA 92104
LTE 3C (WCS)



Project Number
Drawn by: URG/JP
Checked by: DRO
Sheet Size

T4



CITY OF SAN DIEGO-DEVELOPMENT SERVICES DEPARTMENT
ENTITLEMENTS-WIRELESS COMMUNICATION FACILITIES

EXHIBIT "A"

Project Number: 158409
Approval Date: 2/16/16
Signed (1st Sheet): TC

Rev	Description	Date
1	ISSUED	11-10-15
2	REVISED	11-10-15
3	REVISED	11-10-15
4	REVISED	11-10-15

at&t

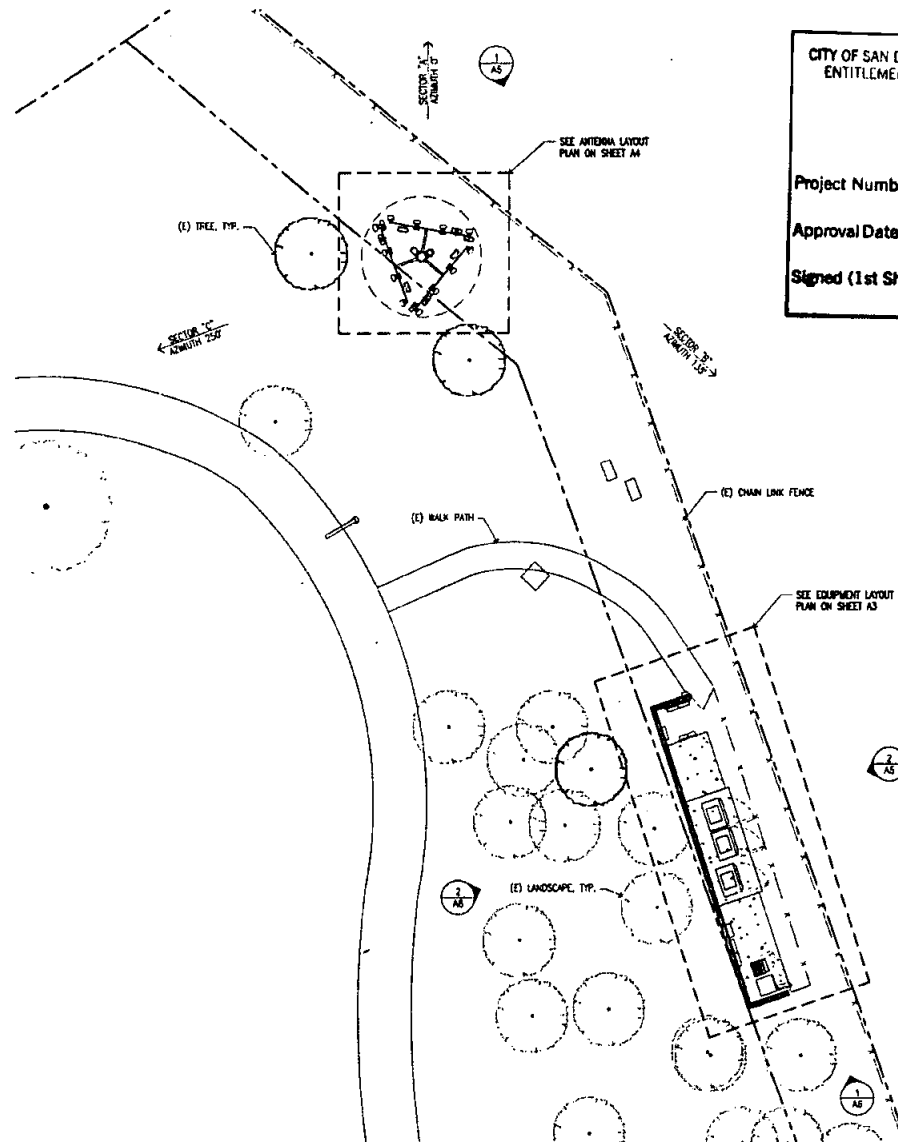


SITE PLAN

SD0387
THE TWIST
2805 NILE STREET
SAN DIEGO, CA 92104
LTE SC (WGS)



Project Number: 158409
Drawn by: DQ/TP
Checked by: DQ
Sheet No: A1



CITY OF SAN DIEGO-DEVELOPMENT SERVICES DEPARTMENT
ENTITLEMENTS-WIRELESS COMMUNICATION FACILITIES

EXHIBIT "A"

Project Number: 458709

Approval Date: 2/16/16

Signed (1st Sheet): TC

REVISED	DATE	BY
1	01-11-14	WKS/CD
2	11-18-14	WKS/CD
3	11-18-14	WKS/CD
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99	11-18-14	WKS/CD
100	11-18-14	WKS/CD



ENLARGED SITE PLAN

S00087
THE TWIST
2905 NILE STREET
SAN DIEGO, CA 92104
LTE 3C (MCS)



Project Number: 458709

Drawn by: CRD/TP

Checked by: CRD

Sheet No: A2

NO.	DESCRIPTION	DATE
1	REVISION	11-16-15
2	REVISION	11-16-15
3	REVISION	11-16-15

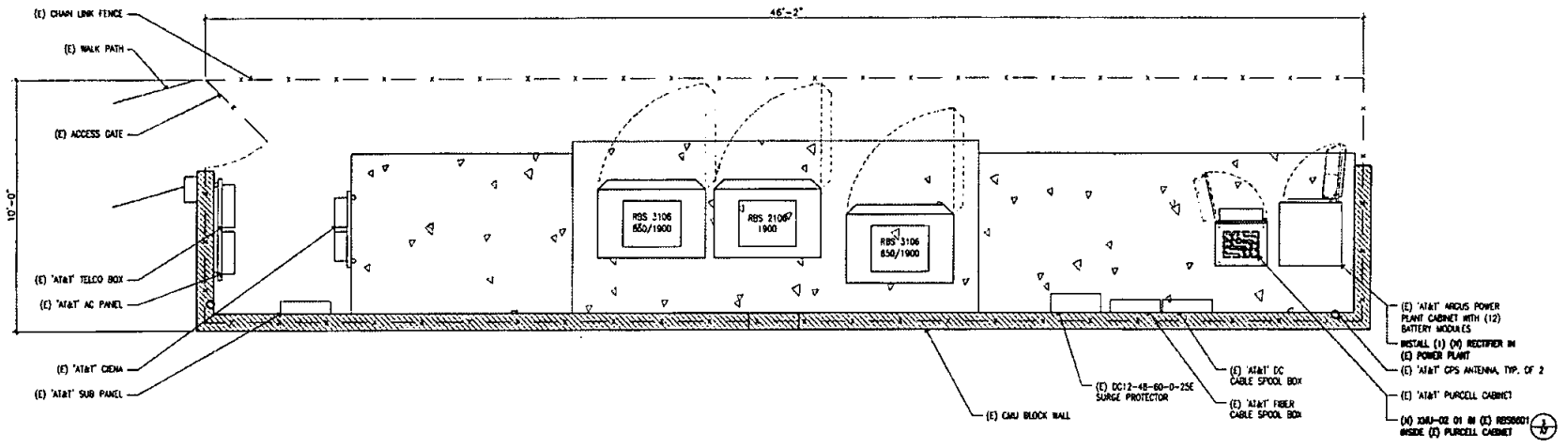


ENLARGED
EXISTING & NEW
EQUIPMENT PLAN

SUBMIT
THE FIRST
SHEET
SAN DIEGO, CA 92104
LTE 3C (WCS)



Project Number: _____
 Drawn by: CRO/RP
 Checked by: ERO
 Date for: _____
A3



EXISTING SITE BATTERY INFORMATION

MANUFACTURER	SERIES	MODEL NO.	TYPE	QTY	ELECTROLYTES (GAL)		WEIGHT (LBS.)	
					EACH	TOTAL	EACH	TOTAL
EXIDE / GNB	MARATHON	M12V155FT	VRLA	24	2.17	52.08	119	2856
TOTAL ELECTROLYTES IN GALLONS						52.08		

NOTES:
 NO NEW BATTERIES WILL BE ADDED IN THIS PROJECT

CITY OF SAN DIEGO-DEVELOPMENT SERVICES DEPARTMENT
ENTITLEMENTS-WIRELESS COMMUNICATION FACILITIES

EXHIBIT "A"

Project Number: 458409

Approval Date: 2/16/16

Signed (1st Sheet): _____

EXISTING ANTENNA SCHEDULE						
SECTOR	AZIMUTH	MODEL NO.	ANTENNA TIP HEIGHT	RRU	TMA	COAX/FIBER LENGTH
A	1	07	27'-0"	(1) RRU (1) RRU 8/4	(1) TMA-078P111.D01	165'
	2	07			(1) TMA-078P111.D01	
	3	07			(1) TMA-078P111.D01	
	4	07			(1) TMA-078P111.D01	
B	1	132	27'-0"	(1) RRU (1) RRU 8/4	(1) TMA-078P111.D01	165'
	2	132			(1) TMA-078P111.D01	
	3	132			(1) TMA-078P111.D01	
	4	132			(1) TMA-078P111.D01	
C	1	250	27'-0"	(1) RRU (1) RRU 8/4	(1) TMA-078P111.D01	165'
	2	250			(1) TMA-078P111.D01	
	3	250			(1) TMA-078P111.D01	
	4	250			(1) TMA-078P111.D01	

NEW ANTENNA SCHEDULE						
SECTOR	AZIMUTH	MODEL NO.	ANTENNA TIP HEIGHT	RRU	TMA	COAX/FIBER LENGTH
A	1	07	27'-0"	(1) RRU (1) RRU 8/4	(1) TMA TMA E15201P13	165'
	2	07			(1) TMA TMA E15201P13	
	3	07			(1) TMA TMA E15201P13	
	4	07			(1) TMA TMA E15201P13	
B	1	132	27'-0"	(1) RRU (1) RRU 8/4	(1) TMA TMA E15201P13	165'
	2	132			(1) TMA TMA E15201P13	
	3	132			(1) TMA TMA E15201P13	
	4	132			(1) TMA TMA E15201P13	
C	1	250	27'-0"	(1) RRU (1) RRU 8/4	(1) TMA TMA E15201P13	165'
	2	250			(1) TMA TMA E15201P13	
	3	250			(1) TMA TMA E15201P13	
	4	250			(1) TMA TMA E15201P13	

CITY OF SAN DIEGO-DEVELOPMENT SERVICES DEPARTMENT
ENTITLEMENTS-WIRELESS COMMUNICATION FACILITIES

EXHIBIT "A"

Project Number:

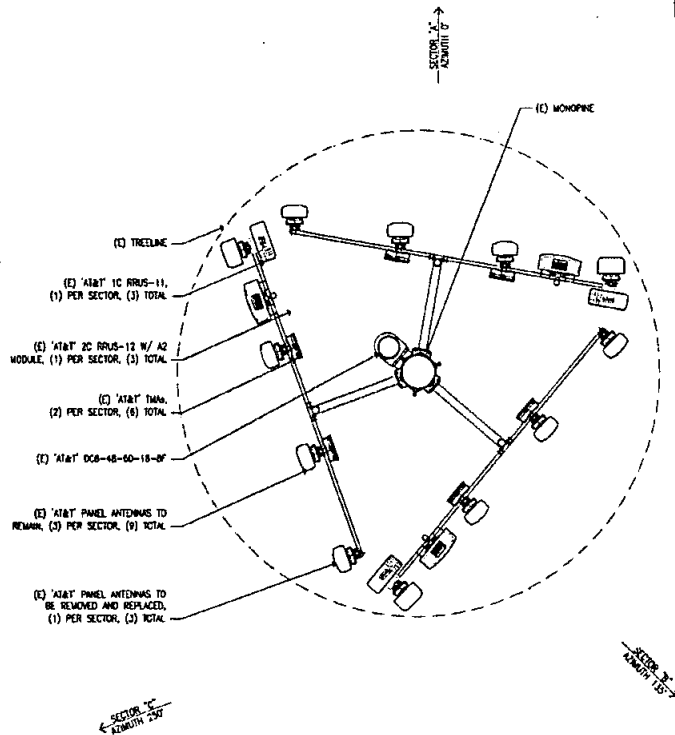
458409

Approval Date:

2/16/16

Signed (1st Sheet):

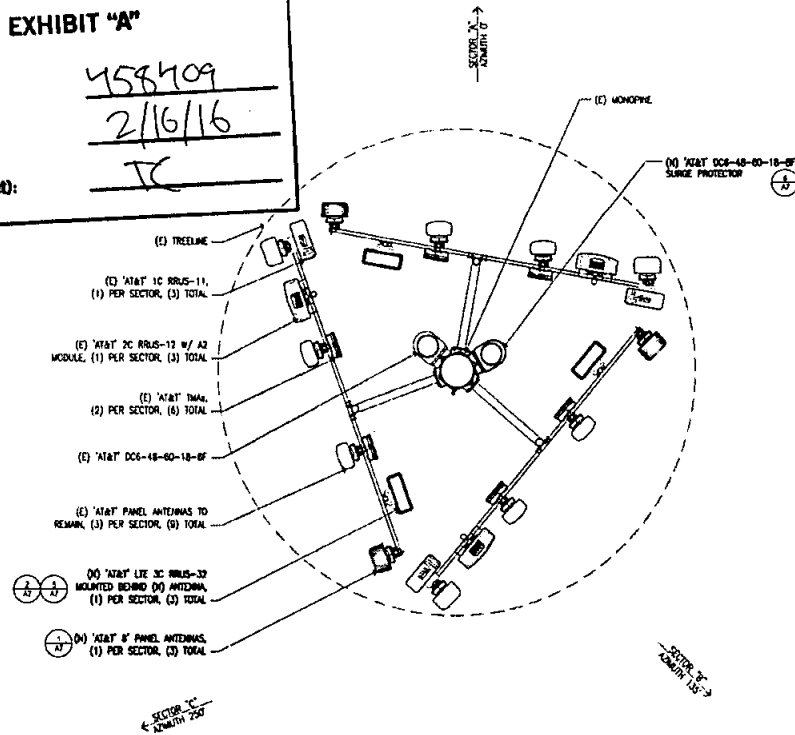
TC



(E) ENLARGED ANTENNA LAYOUT

1/2" = 1'-0"

2



(N) ENLARGED ANTENNA LAYOUT

1/2" = 1'-0"

1

Rev.	Description	Date
1	ISSUED	01-16-16
2	REVISED	11-06-16
3	REVISED	11-06-16



ENLARGED
EXISTING & NEW
ANTENNA LAYOUT

SUICAT
THE TWIST
2905 NILE STREET
SAN DIEGO, CA 92104
LTE 3C (WCS)



Project Number	
Drawn by	ERD/JP
Checked by	ERD
Printed by	

A4

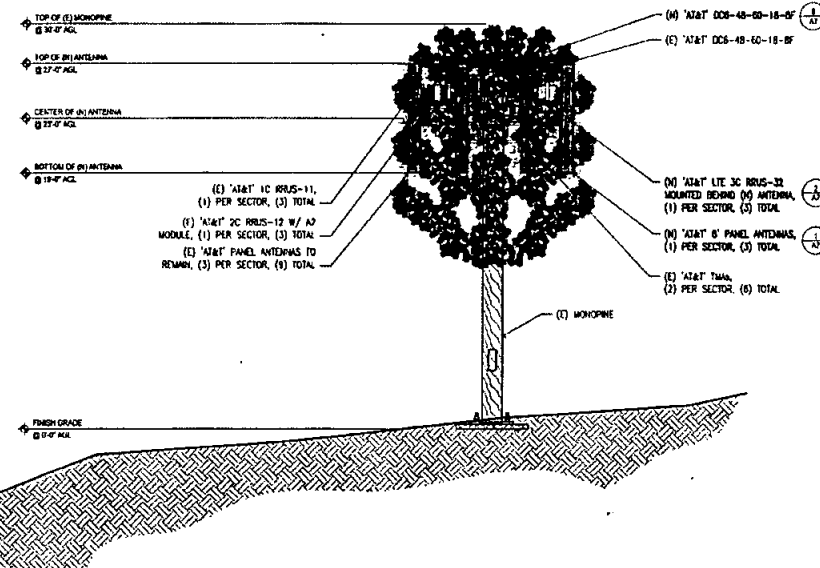
CITY OF SAN DIEGO-DEVELOPMENT SERVICES DEPARTMENT
ENTITLEMENTS-WIRELESS COMMUNICATION FACILITIES

EXHIBIT "A"

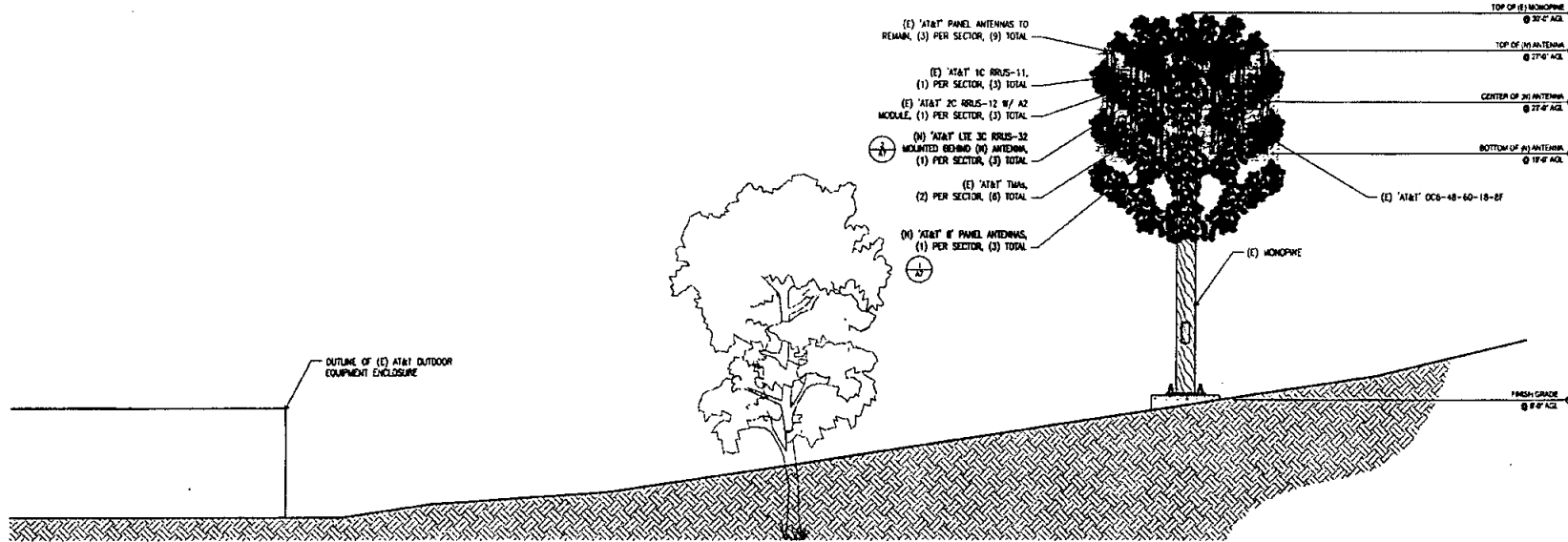
Project Number: 458709

Approval Date: 2/16/16

Signed (1st Sheet): TC



NORTH ELEVATION 1/4" = 1'-0" 1



EAST ELEVATION 1/4" = 1'-0" 2

REV	DATE	BY	CHKD	DESCRIPTION
1	01-16-14	WCS	WCS	11-16-13
2	01-16-14	WCS	WCS	11-16-13
3	01-16-14	WCS	WCS	11-16-13
4	01-16-14	WCS	WCS	11-16-13



SITE ELEVATIONS

30037
THE TWIST
2905 NILE STREET
SAN DIEGO, CA 92104
LTE 3C (WCS)



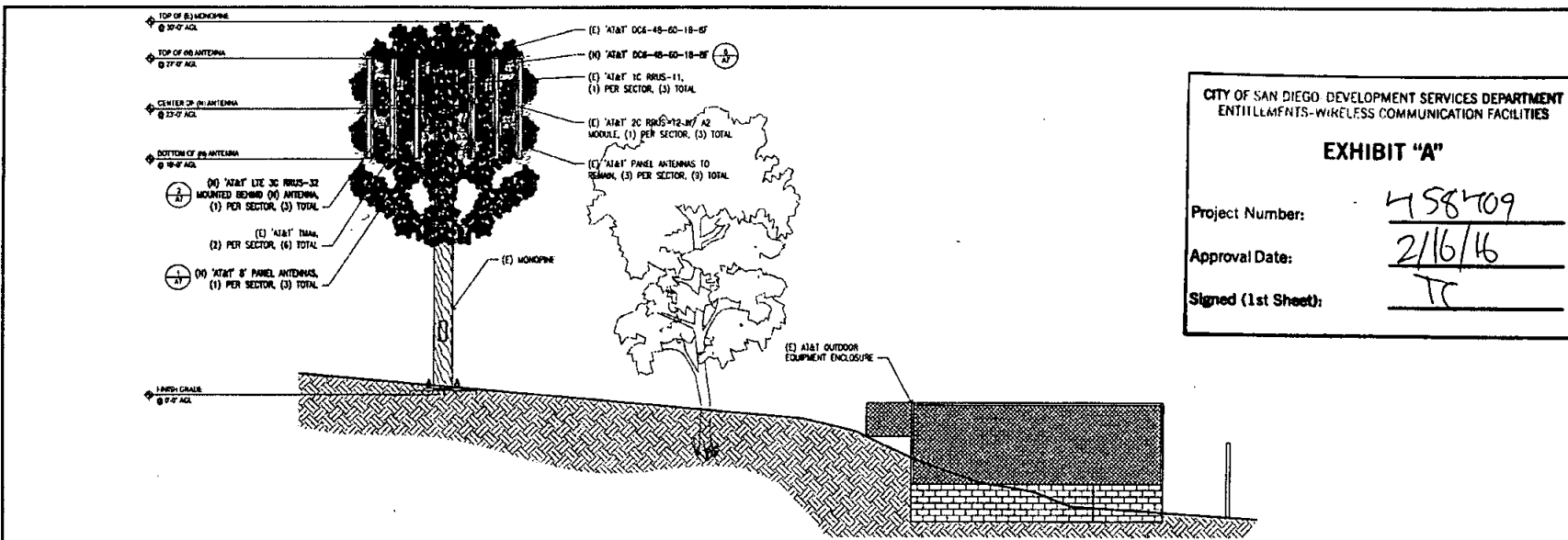
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Drawn by: CRD/JP

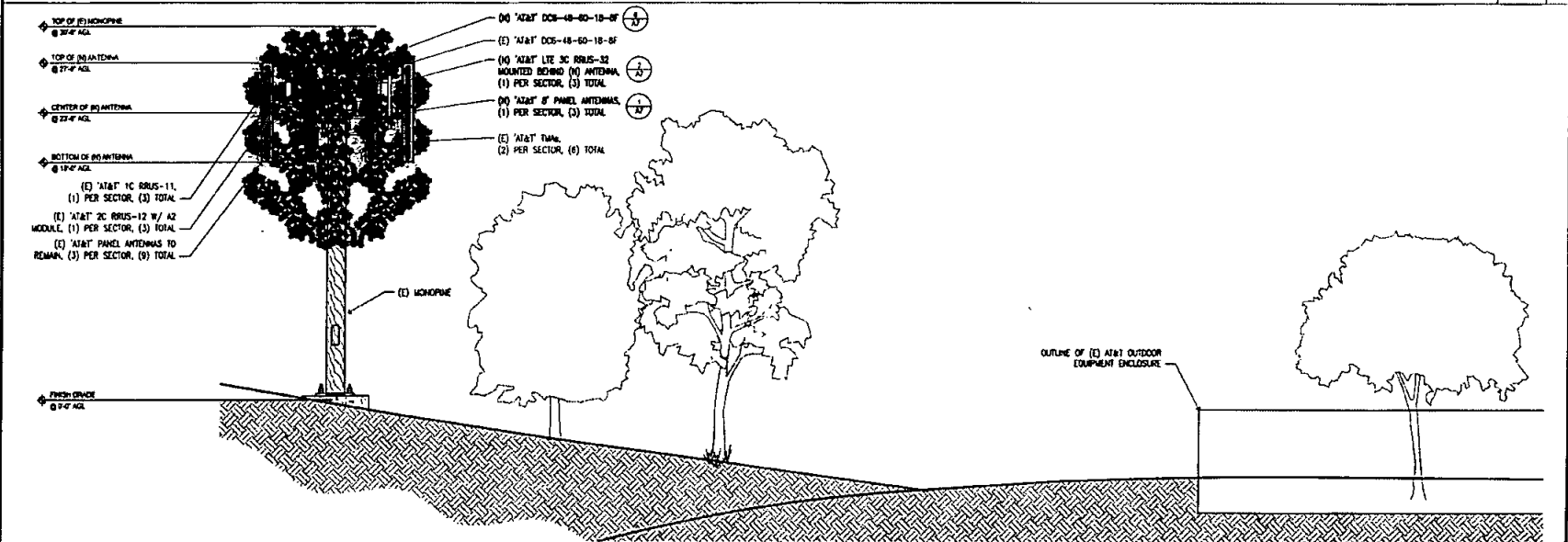
Checked by: CRD

When Issued: _____

A5



SOUTH ELEVATION 1/4" = 1'-0" 1



WEST ELEVATION 1/4" = 1'-0" 2

CITY OF SAN DIEGO DEVELOPMENT SERVICES DEPARTMENT
ENTITLEMENTS-WIRELESS COMMUNICATION FACILITIES

EXHIBIT "A"

Project Number: 458409

Approval Date: 2/16/16

Signed (1st Sheet): TC

DATE	12-15-14
BY	12-15-14
1	12-15-14
2	12-15-14
3	12-15-14
4	12-15-14
5	12-15-14
6	12-15-14
7	12-15-14
8	12-15-14
9	12-15-14
10	12-15-14



SITE ELEVATIONS

500387
THE TWIST
2905 HILE STREET
SAN DIEGO, CA 92104
LTE 3C (WCS)

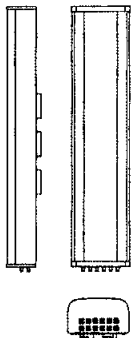
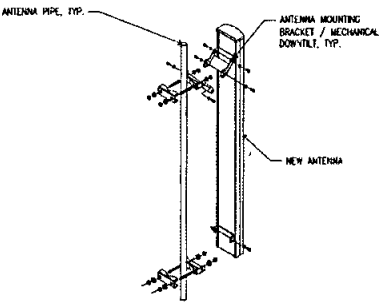
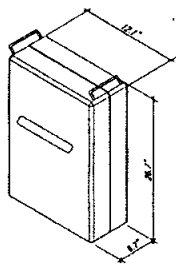
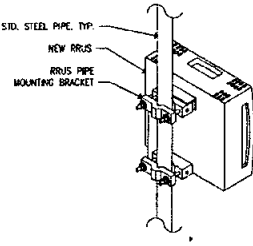
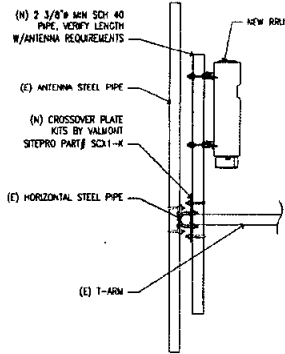
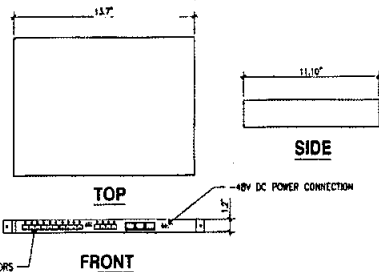
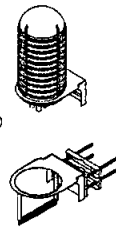


Project Number: 458409

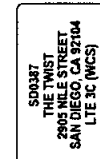
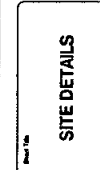
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Checked by: END

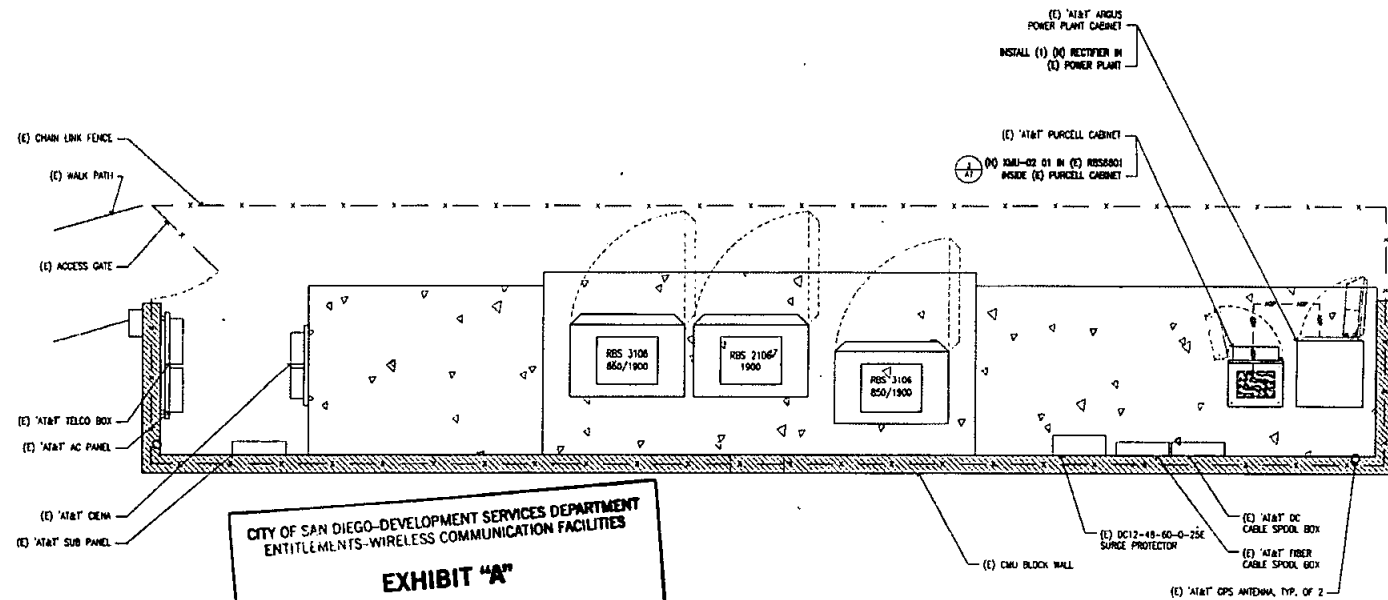
Sheet No: A6

CCI TPA-65R-LCUUUU-H8 DIMENSIONS (LxWxH) 96.0x14.4x8.6 IN (2437x366x218 MM) SURVIVAL WIND SPEED > 150 MPH (> 241 KPH) FRONT WIND LOAD 340 LBS (1514 N) @ 100 MPH (161 KPH) SIDE WIND LOAD 225 LBS (1001 N) @ 100 MPH (161 KPH) EQUIVALENT FLAT PLATE AREA 13.3 F12 (1.2 M2) WEIGHT 75 LBS (34.0 KG) NET SYSTEM HEIGHT 8.6 LBS (3.0 KG) CONNECTOR 12 x 4.3-10 FEMALE MOUNTING POLE 2 TO 5 IN (5 TO 12 CM) 		CITY OF SAN DIEGO-DEVELOPMENT SERVICES DEPARTMENT ENTITLEMENTS-WIRELESS COMMUNICATION FACILITIES EXHIBIT "A" Project Number: <u>458409</u> Approval Date: <u>2/16/16</u> Signed (1st Sheet): <u>TC</u>
ANTENNA SPECIFICATIONS NTS 1	ANTENNA MOUNT NTS 4	NOT USED NTS 7
ERICSSON RRUS-32 DIMENSIONS, INCHES: 12.1"x6.7"x26.7" (INCLUDES SUNSHIELD) POWER REQUIREMENT: -48V DC TOTAL WEIGHT: 60 lbs (FULLY EQUIPPED) TEMPERATURE: TBD  NOTE: PHYSICAL DIMENSIONS DO NOT INCLUDE COLLAPSIBLE HANDLE WHICH IS AN EXTRA 2.2 INCHES IN HEIGHT.	  PIPE ATTACHMENT DETAIL	NOT USED NTS 8
RRU SPECIFICATIONS NTS 2	RRU MOUNTING DETAIL NTS 5	NOT USED NTS 8
ERICSSON XMU 02 01 DIMENSIONS, INCHES: 13.7"x11.1"x1.2" NOMINAL OPERATING VOLTAGE: 48 VDC TOTAL WEIGHT: ± 4.02 lbs  RRU CONNECTORS 48V DC POWER CONNECTION	RAYCAP DC6-48-60-18-8F DIMENSIONS, INCHES: 250x170x794mm NOMINAL OPERATING VOLTAGE: 48 VDC NOMINAL DISCHARGE CURRENT: 20 A 8/20µs MAXIMUM DISCHARGE CURRENT: 60 A 8/20µs MAXIMUM CONTINUOUS OPERATING VOLTAGE: 75 VDC VOLTAGE PROTECTION RATING: 400 V WIND LOADING: 150 MPH SUSTAINED (105.7 lbs) 195 MPH GUST (213.6 lbs) TOTAL WEIGHT: 32.8 lbs 	NOT USED NTS 9
XMU 02 01 SPECIFICATION NTS 3	DC6-48-60-18-8F SURGE PROTECTOR DETAIL NTS 6	NOT USED NTS 9

DATE	01-16-16
BY	0001-10
DATE	11-16-15
BY	0001-10
DATE	11-16-15
BY	0001-10



Project Number	
Drawn by	ERD/RP
Checked by	ERD
Sheet No	A7



CITY OF SAN DIEGO-DEVELOPMENT SERVICES DEPARTMENT
ENTITLEMENTS-WIRELESS COMMUNICATION FACILITIES

EXHIBIT "A"

Project Number: 458409

Approval Date: 2/16/16

Signed (1st Sheet): TC

NOTES

1. THE CONDUIT ROUTING ARE DIAGRAMMATICALLY SHOWN ON THE PLANS AND ARE ONLY APPROXIMATIONS. THE EXACT LOCATION AND ROUTING SHALL BE FIELD VERIFIED.
2. ALL ELECTRICAL EQUIPMENT AND CONTROLLING DEVICES SHALL BE PROVIDED WITH ENGRAVED LAUREL NAMEPLATES, INDICATING THE CIRCUITS ORIGIN AND ALL EQUIPMENT TERMINATIONS.
3. SUBCONTRACTOR SHALL PROVIDE STRAIN-RELIEF AND CABLE SUPPORTS FOR ALL CABLE ASSEMBLIES, COAX CABLES, AND FIBER OPTIC CABLES. CABLE STRAIN-RELIEFS, CABLE SUPPORTS SHALL BE APPROVED FOR THE PURPOSE. INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
4. SUBCONTRACTOR SHALL PROVIDE ALL BREAKERS, CONDUITS AND CIRCUITS AS REQUIRED FOR A COMPLETED SYSTEM AND SHALL BE IN COMPLIANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
5. WHEN TYPE "TC-ER" CABLE IS UTILIZED IN THE ELECTRICAL SYSTEM, TYPE "TC-ER" CABLE SHALL BE INSTALLED WITHIN A CABLE TRAY SYSTEM, CONDUIT SYSTEMS OR A COMBINATION OF BOTH AND SHALL BE ELECTRICALLY CONTINUOUS. ALL RACEWAYS SHALL BE APPROVED FOR THEIR PURPOSE.

ABBREVIATIONS

- AC ALTERNATING CURRENT
- AMC AMPERAGE INTERRUPTION CAPACITY
- ATS AUTOMATIC TRANSFER SWITCH
- AWG AMERICAN WIRE GAUGE
- BTC BARE TINNED COPPER CONDUCTOR
- BATT BATTERY
- CHG CHARGING
- COMM COMMON
- DC DIRECT CURRENT
- DN DIAMETER
- DWG DRAWING
- EC ELECTRICAL CONDUCTOR
- EMT ELECTRICAL METALLIC TUBING
- FF FACILITY INTERFACE FRAME
- GEN GENERATOR
- GPS GLOBAL POSITIONING SYSTEM
- HVAC HEAT/VENTILATION/AIR CONDITIONING
- IGR INTERIOR GROUNDING RING (HALO)
- IGR MASTER GROUNDING BAR
- MIN MINIMUM
- M/W MICROWAVE
- MTS MANUAL TRANSFER SWITCH
- NEC NATIONAL ELECTRICAL CODE
- OC ON CENTER
- PP POLARIZING PRESERVING
- PCU PRIMARY CONTROL UNIT
- POU PROTOCOL DATA UNIT
- RECT RECTIFIER
- RMC RIGID METALLIC CONDUIT
- RPM REMOTE RADIO HEAD
- RWB RACEWAY
- SIAD SMART INTEGRATED ACCESS DEVICE
- TSSS TRANSPARENT VOLTAGE SUPPRESSION SYSTEM
- TYP TYPICAL
- UPS UNINTERRUPTIBLE POWER SOURCE

ELECTRICAL PLAN (EQUIPMENT) 1/2" = 1'-0" 1

UNDERGROUND TELCO --- UST --- UST --- UST --- UST ---

UNDERGROUND TELCO/POWER --- UST/P --- UST/P --- UST/P --- UST/P ---

UNDERGROUND DUCT --- UCD --- UCD --- UCD --- UCD ---

ABOVE GROUND POWER --- ACP --- ACP --- ACP --- ACP ---

OVERHEAD POWER --- OHP --- OHP --- OHP --- OHP ---

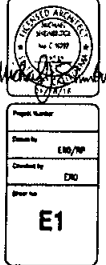
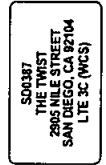
UNDERGROUND POWER --- UCP --- UCP --- UCP --- UCP ---

ABOVE GROUND TELCO --- ACT --- ACT --- ACT ---

ABOVE GROUND TELCO/POWER --- ACT/P --- ACT/P --- ACT/P ---

GRAPHICS LEGEND MTS 2

REV	DESCRIPTION	DATE
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2	REVISED	11-10-15
3	REVISED	11-10-15
4	REVISED	11-10-15



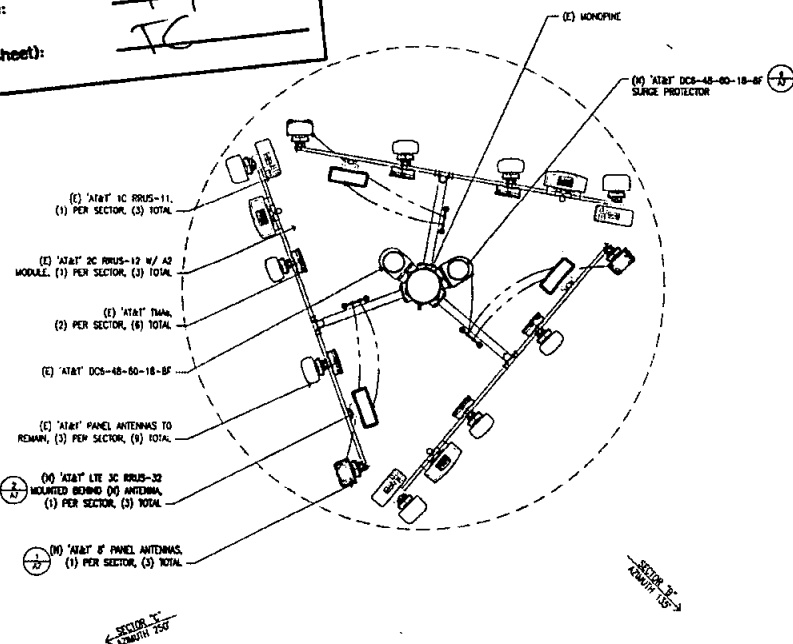
CITY OF SAN DIEGO-DEVELOPMENT SERVICES DEPARTMENT
ENTITLEMENTS-WIRELESS COMMUNICATION FACILITIES

EXHIBIT "A"

Project Number: 458409

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Signed (1st Sheet): TC



NOTES:

- GROUNDING IS SHOWN DIAGRAMMATICALLY ONLY.
- THE SUBCONTRACTOR SHALL SUPPLY 'AT&T' WITH THE RESULTS FROM PRE-CONSTRUCTION AND POST-CONSTRUCTION OHM TESTING (GROUNDING) RESULTS ON ALL MODIFIED CELL SITES AND AS REQUIRED BY 'AT&T' STANDARD TP-76418.
- THE SUBCONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE A "TALL OF POTENTIAL" TEST ON THE PROPOSED SUPPLEMENTAL GROUNDING FIELD PRIOR TO FINAL CONNECTION OF THE GROUNDING SYSTEM TO EQUIPMENT. THE TEST SHALL BE PERFORMED BY A QUALIFIED AND CERTIFIED TESTING AGENT. PROVIDE INDEPENDENT TEST RESULTS TO THE PROJECT MANAGER FOR REVIEW. THE GROUNDING SYSTEM RESISTANCE TO EARTH GROUNDING SHALL NOT EXCEED FIVE (5) OHMS. IF THE GROUNDING TEST EXCEEDS THE MAXIMUM OF (5) OHMS, THE SUBCONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ADDITIONAL GROUNDING RODS AND CONNECTIONS AS REQUIRED TO MEET THE (5) OHMS' MAXIMUM.
- THE INSPECTOR HAVING JURISDICTION SHALL INSPECT ALL GROUNDING CONNECTIONS FOR TIGHTNESS. EXOTHERMIC WELDED CONNECTIONS SHALL BE APPROVED BEFORE BEING PERMANENTLY CONCEALED.
- SUBCONTRACTOR SHALL GROUND ALL EQUIPMENT, INCLUDING ANTENNAS, RET MOTORS, TMA'S, COAX CABLES, AND RET CONTROL CABLES AS A COMPLETE SYSTEM. GROUNDING SHALL BE EXECUTED BY QUALIFIED PERSONNEL IN COMPLIANCE WITH MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.

NOTES

- THE CONDUIT ROUTING ARE DIAGRAMMATICALLY SHOWN ON THE PLANS AND ARE ONLY APPROXIMATIONS. THE EXACT LOCATION AND ROUTING SHALL BE FIELD VERIFIED.
- ALL ELECTRICAL EQUIPMENT AND CONTROLLING DEVICES SHALL BE PROVIDED WITH ENGRAVED LAMOOD MARKERS, INDICATING THE CIRCUITS ORIGIN AND ALL EQUIPMENT TERMINATIONS.
- SUBCONTRACTOR SHALL PROVIDE STRAIN-RELIEF AND CABLE SUPPORTS FOR ALL CABLE ASSEMBLIES, COAX CABLES, AND RET CONTROL CABLES. CABLE STRAIN-RELIEFS, CABLE SUPPORTS SHALL BE APPROVED FOR THE PURPOSE. INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
- SUBCONTRACTOR SHALL PROVIDE ALL BREAKERS, CONDUITS AND CIRCUITS AS REQUIRED FOR A COMPLETED SYSTEM AND SHALL BE IN COMPLIANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
- WHEN TYPE "TC-ET" CABLE IS UTILIZED IN THE ELECTRICAL SYSTEM, TYPE "TC-ET" CABLE SHALL BE INSTALLED WITHIN A CABLE TRAY SYSTEM, CONDUIT SYSTEMS OR A COMBINATION OF BOTH AND SHALL BE ELECTRICALLY CONTINUOUS. ALL RACEWAYS SHALL BE APPROVED FOR THEIR PURPOSE.

ABBREVIATIONS

AC	ALTERNATING CURRENT
ALC	AMPLITUDE INTERLUPTION CAPACITY
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
BTC	BARE THINNED COPPER CONDUCTOR
BATT	BATTERY
CHG	CHARGING
COMM	COMMON
DC	DIRECT CURRENT
DA	DIAMETER
DWG	DRAWING
EC	ELECTRICAL CONDUCTOR
EMT	ELECTRICAL METALLIC TUBING
FI	FACILITY INTERFACE FRAME
GEN	GENERATOR
GPS	GLOBAL POSITIONING SYSTEM
HVAC	HEAT/VENTILATION/AIR CONDITIONING
IGR	INTERIOR GROUNDING RING (HALO)
MOB	MASTER GROUNDING BAR
MIN	MINIMUM
M/W	MICROWAVE
NTS	MANUAL TRANSFER SWITCH
NEC	NATIONAL ELECTRICAL CODE
OC	ON CENTER
PP	POLARIZING PRESERVING
PCU	PRIMARY CONTROL UNIT
FDU	PROTOCOL DATA UNIT
RECT	RECTIFIER
RMC	RIGID METALLIC CONDUIT
RRH	REMOTE RADIO HEAD
RNY	RACEWAY
SIAD	SMART INTEGRATED ACCESS DEVICE
TVSS	TRANSIENT VOLTAGE SUPPRESSION SYSTEM
TYP	TYPICAL
UPS	UNINTERRUPTIBLE POWER SOURCE

EXOTHERMIC
COMPRESSION TYPE CONNECTIONS (TWO HOLE
LUG OR EQUIVALENT)

UNDERGROUND TELCO — UCT — UCT — UCT —
UNDERGROUND TELCO/POWER — UCT/P — UCT/P —

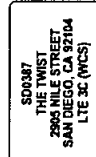
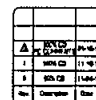
OVERHEAD POWER — OHP — OHP — OHP —
UNDERGROUND POWER — UGP — UGP — UGP —

ABOVE GROUND TELCO — AGT — AGT — AGT —
ABOVE GROUND TELCO/POWER — AGT/P — AGT/P —

GRAPHICS LEGEND NTS 2

ANTENNA ELECTRICAL & GROUNDING PLAN 1/2" = 1'-0" 1

TEST GROUND ROD WITH INSPECTION SLEEVE	GROUNDING CONDUCTOR	CHEMICAL ELECTROLYTIC GROUNDING SYSTEM	UNDERGROUND DUCT	— UGD — UGD — UGD —
EXOTHERMIC WITH INSPECTION SLEEVE	GROUNDING BAR	GROUND ROD WITH INSPECTION SLEEVE	ABOVE GROUND POWER	— AGP — AGP — AGP —



Project Number: _____

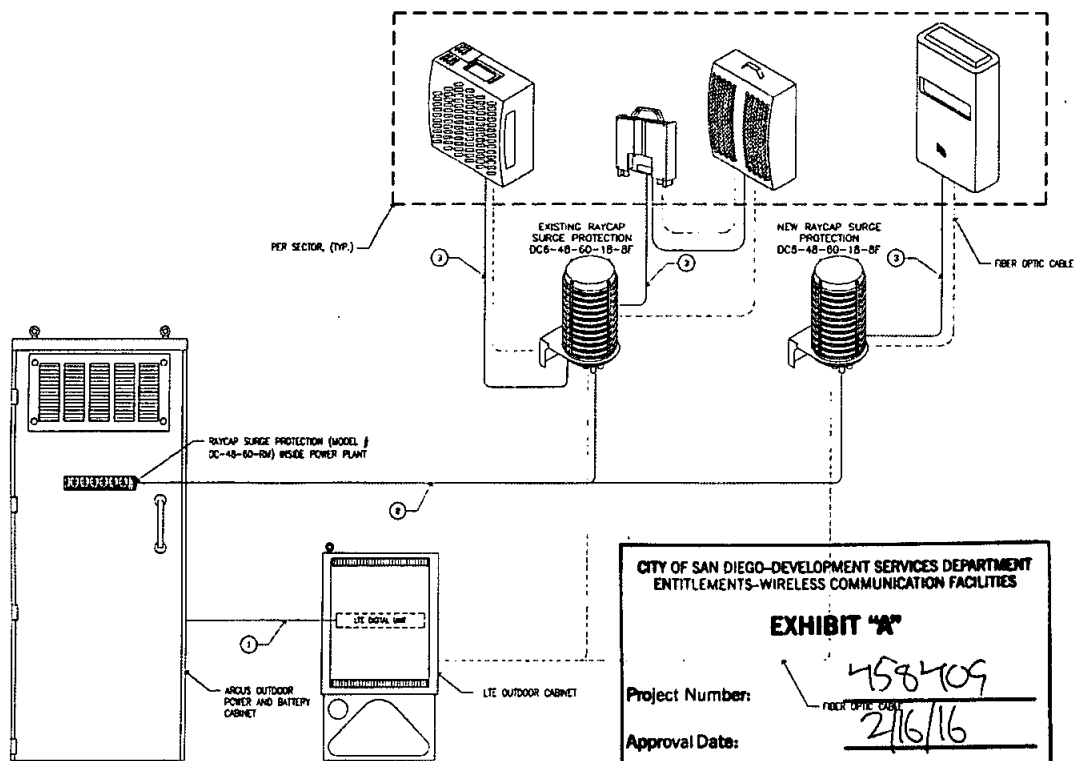
Drawn by: ENU/JP

Checked by: ENU

Scale: 1/2" = 1'-0"

Sheet No: **E2**

DC CIRCUIT SCHEDULE				
	BREAKER	FROM	TO	CONFIGURATION
①	SDA / 1P	-480C DISTRIBUTION PANEL	LTE OUTDOOR CABINET	(2) #10 THHN/THWN/VW-1 TYPE 1C-OR DC CABLE
②	N/A	RAYCAP SURGE PROTECTION DCB-48-60-18-M	RAYCAP SURGE PROTECTION DCB-48-60-18-M	(7) #8-THHN/THWN/VW-1 TYPE 1C-OR DC CABLE
③	N/A	RAYCAP SURGE PROTECTION DCB-48-60-18-M	REMOTE RADIO UNIT	(1) 2-#12 THHN/THWN/VW-1 TYPE 1C-OR DC CABLE



CITY OF SAN DIEGO-DEVELOPMENT SERVICES DEPARTMENT
ENTITLEMENTS-WIRELESS COMMUNICATION FACILITIES

EXHIBIT "A"

Project Number:

Approval Date:

Signed (1st Sheet):

458709

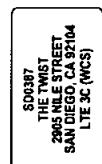
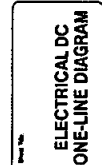
2/16/16

TC

ELECTRICAL GENERAL NOTES

- THE DRAWINGS REPRESENT THE GENERAL ARRANGEMENT AND LOCATIONS OF THE ELECTRICAL WORK. DATA PRESENTED ON THESE DRAWINGS ARE AS ACCURATE AS PLANNING CAN DETERMINE, BUT FIELD VERIFICATION OF ALL DIMENSIONS, LOCATIONS, LEVELS, ETC., TO SURE FIELD CONDITIONS IS REQUIRED.
- REVIEW ALL ARCHITECTURAL, STRUCTURAL, AND MECHANICAL DRAWINGS AND ADJUST ALL WORK TO MEET THE REQUIREMENTS OF CONDITIONS SHOWN. THE ARCHITECTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER ALL OTHER DRAWINGS. DISCREPANCIES BETWEEN DIFFERENT PLANS, OR BETWEEN DRAWINGS AND OR REGULATIONS AND CODES COVERING THE INSTALLATION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN WRITING BEFORE THE DATE OF BID OPENING. IF DISCREPANCIES ARE NOT REPORTED, THE CONTRACTOR SHALL, AT HIS OWN RISK, OBTAIN THE BEST QUANTITY OR BETTER QUALITY, AND APPROPRIATE ADJUSTMENTS WILL BE MADE AFTER CONTRACT AWARD.
- THE DRAWINGS DO NOT INDICATE THE ACTUAL METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SUPERVISING AND DIRECTING ALL CONSTRUCTION WORK, MEANS, METHODS, TECHNIQUES, AND SEQUENCES.
- ALL EXISTING JOB SITE CONDITIONS, DIMENSIONS, AND SERVICE REQUIREMENTS SHALL BE VERIFIED BY THE CONTRACTOR BEFORE START OF CONSTRUCTION AND/OR FABRICATION OF MATERIALS. ANY DISCREPANCIES ENCOUNTERED SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD FOR CLARIFICATION.
- CONTRACTOR SHALL COORDINATE WITH ALL TRADES AND WORKMEN THE CLOSURE, PATCH, REPAIR OR REPLACEMENT OF ALL OPENINGS WHERE ITEMS HAVE BEEN REMOVED OR OPENED AS REQUIRED TO COMPLETE NEW WORK.
- ALL WORK SHALL BE IN ACCORDANCE WITH THE 2014 EDITION OF THE CALIFORNIA ELECTRICAL CODE (CEC), GOVERNMENT LAWS, ORDINANCES, RULES AND REGULATIONS ADOPTED BY THE LOCAL AUTHORITY, FEDERAL, STATE AND LOCAL CODES HAVING JURISDICTION, AND LOCAL FIRE MARSHALLS. IN THE EVENT OF CONFLICT BETWEEN THE ABOVE AUTHORITIES AND THESE CONSTRUCTION DOCUMENTS, THE MOST RESTRICTIVE SHALL GOVERN.
- ALL WORK SHALL BE DONE IN THE BEST POSSIBLE MANNER AND WORKMANSHIP BASED ON STANDARD CONSTRUCTION PRACTICES.
- ELECTRICAL CONTRACTOR TO FURNISH AND INSTALL A COMPLETELY WIRED AND OPERATIONAL ELECTRICAL SYSTEM AND PROVIDE ALL NECESSARY FINAL CONNECTIONS TO ALL EQUIPMENT.
- CONDUIT ROUTING SHOWN ON DRAWINGS ARE DIAGNOSTIC ONLY. EXACT ROUTING OF CONDUIT SHALL BE DETERMINED BY THE CONTRACTOR. ANY ADDITIONAL COST REQUIRED BY THE ROUTING OF ADDITIONAL CONDUITS SHALL BE INCURRED BY THE ELECTRICAL CONTRACTOR.
- ALL EQUIPMENT AND MATERIALS FURNISHED, DELIVERED, AND INSTALLED SHALL BE NEW, IN PERFECT CONDITION, IN UNIFORM MANUFACTURER'S ORIGINAL CONTAINERS AND OF THE HIGHEST QUALITY. STANDARD PRODUCTS SHALL BE FROM MANUFACTURERS REGULARLY ENGAGED IN THE PRODUCTION OF SUCH EQUIPMENT AND MATERIALS, AND SHALL BE OF THE LATEST STANDARD DESIGN. MATERIAL AND EQUIPMENT SHALL BEAR APPROVAL BY U.L. LISTING AND OTHER APPROPRIATE AGENCIES.
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE INTEGRITY OF ALL FIRE-RATED WALLS, CEILING AND ROOF ASSEMBLIES PENETRATED. ALL CORING, CUTTING, PATCHING, AND RETROWING OF WALLS, SURFACES AND OPENINGS PENETRATED OR ALTERED BY HIS INSTALLATION SHALL BE SEALED WITH U.L. LISTED SEALANT AT ALL PENETRATIONS. FURNISH AND INSTALL APPROVED EXPANSION FITTING WHERE RACEWAY CROSSES AN EXPANSION JOINT. HOWEVER, NO CUTTING AND/OR PENETRATION OF WORK OF OTHER TRADES OR OF ANY STRUCTURAL MEMBER SHALL BE DONE WITHOUT THE CONSENT OF THE ARCHITECT.
- ELECTRICAL CONTRACTOR SHALL PROVIDE TEMPORARY POWER AND ADEQUATE LIGHTING AS REQUIRED.
- FURNISH AND INSTALL FULL WIRE IN ALL EMPTIES CONDUITS AND AUXILIARY SYSTEMS, TELEPHONE, SECURITY, FIRE ALARM SYSTEMS, DATA, AND TELEVISION, ETC. VERIFY FULL WIRE REQUIREMENTS WITH OTHER SYSTEM VENDORS. CAP ALL EXPOSED CONDUIT ENDS.
- ALL EXTERIOR ELECTRICAL DEVICES AND EQUIPMENT EXPOSED TO THE OUTSIDE ENVIRONMENT SHALL BE WEATHERPROOF TYPE, NEMA 3R.
- WHERE DISCONNECT SWITCHES ARE UNABLE TO BE MOUNTED DIRECTLY TO THE EQUIPMENT, THE CONTRACTOR SHALL PROVIDE AN APPROVED STRUCTURAL, SOUND INDIVIDUAL MOUNTING SUPPORT. NO MODIFICATION SHALL BE DONE THAT WILL COMPROMISE THE U.L. LISTING OR MANUFACTURER'S REQUIREMENTS OF THE EQUIPMENT.
- CONTRACTOR RESPONSIBLE FOR PAYING ALL PERMITS AND APPLICABLE FEES RELATIVE TO THE CONSTRUCTION OF THIS PROJECT.
- MECHANICAL SPLIT SYSTEM HVAC UNITS INSTALLED IN ENCLOSED AREAS. CONTRACTOR TO PROVIDE AN APPROVED LAMP RECEPTACLE, A LIGHT SWITCH, NEAREST TO ENCLOSURE OPENING AND A RECEPTACLE OUTLET NEXT TO FAN COIL UNIT AND CONNECT TO NEAREST RECEPTACLE CIRCUIT. PROVIDE NECESSARY CONTROLS, CONDUCTORS, AND OVERCURRENT PROTECTION TO FAN COIL PER MANUFACTURER'S RECOMMENDATIONS.
- ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR SIZING ALL CONDUIT PER NATIONAL ELECTRICAL CODE (NEC), WHERE DRAWINGS SHOW ONLY CONDUCTOR SIZE AND QUANTITY.
- CONTRACTOR SHALL MAINTAIN GROUND CONTINUITY TO EVERY OUTLET PER N.E.C., TABLE 250-122. PROVIDE A GREEN CONDUCTOR (NOT INDICATED) IN EACH RACEWAY, SIZE OF GROUNDING CONDUCTOR PER NEC ART. 250.
- ALL WIRES AND CABLES SHALL BE COPPER, 600 VOLTS, #12 AWG MINIMUM. EXCEPT CONTROL WIRING WHICH SHALL BE #18 THHN. CONDUCTORS #10 AWG AND SMALLER SHALL BE SOLID. CONDUCTOR #8 AWG AND LARGER SHALL BE STRANDED. TYPE OF INSULATION AS NOTED ON DRAWINGS AND AS FOLLOWS:
 - THHN/THWN-2 INSULATION FOR ALL BRANCH CIRCUIT WIRING & CONTROL CIRCUIT WIRING.
 - THHN-2 USED FOR ALL PANEL FEEDERS AND SERVICE CONDUCTORS.
 - THHN/THWN-2 INSULATION TYPE SHALL BE USED WHERE CONDUCTORS ARE INSTALLED IN CONDUITS EXPOSED TO THE WEATHER.
- ALL UNDERGROUND CONDUITS SHALL BE PVC OR PVC RGS. IN A TRANSITIONAL RISER, ALL PARTS OF THE CONDUIT SYSTEM THAT IS BELOW GRADE SHALL BE RGS WRAP WITH 10 MIL TYPE UP TO 6" ABOVE GRADE.

1	WEEK	11/16/16
2	WEEK	11/16/16
3	WEEK	11/16/16
4	WEEK	11/16/16



Project Number: _____

Drawn by: LRG/TP

Checked by: ETO

Date: 10/16/16

E3

SECTION 7 - SURGE PROTECTORS

- (EC) CELL REFERENCE GROUNDING BAR (IF COLLOCATED)
- (EC) GENERATOR FRAMEWORK (IF AVAILABLE) (#2 AWG)
- (EC) TELCO GROUNDING BAR (#2 AWG)
- (EC) COMMERCIAL POWER COMMON NEUTRAL/GROUNDING BOND (3/0)
- (EC) FIBER GROUNDING BAR (#2 AWG)
- (EC) POWER ROOM REFERENCE GROUNDING BAR (#2 AWG)
- (CAT1*) RECTIFIER FRAMES

SECTION "A" - SURGE ABSORBERS

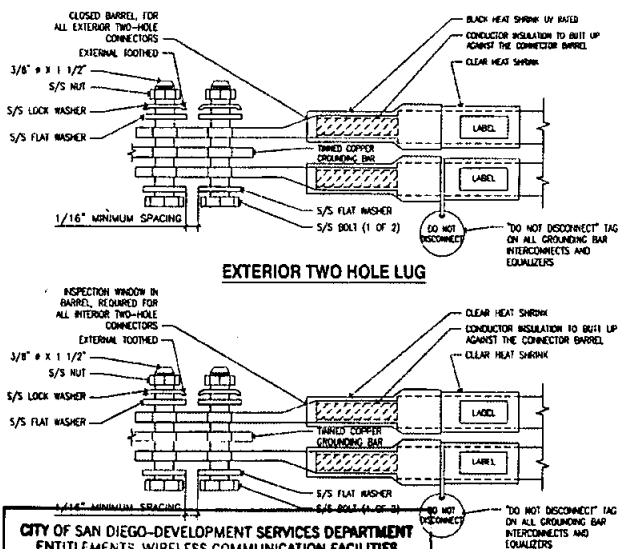
(EC) INTERIOR GROUNDING RING (#2 AWG)
(EC) EXTERNAL EARTH GROUNDING FIELD (BURIED GROUNDING RING) (#2 AWG)
(EC) METALLIC COLD WATER PIPE (IF AVAILABLE) (1/0 AWG)
(EC) BUILDING STEEL (IF AVAILABLE) (1/0 AWG)

SECTION "N" - NON-ISOLATED GROUNDING ZONE EQUIPMENT

(EC) WISC NON-ISOLATED GROUNDING ZONE
(EQUIPMENT) ("A1A1")-48V POWER SUPPLY RETURN BARE

SECTION 1' - ISOLATED GROUNDING ZONE

(A1&T) ALL ISOLATED GROUNDING REFERENCE
(A1&T) GROUNDING WINDOW BAR

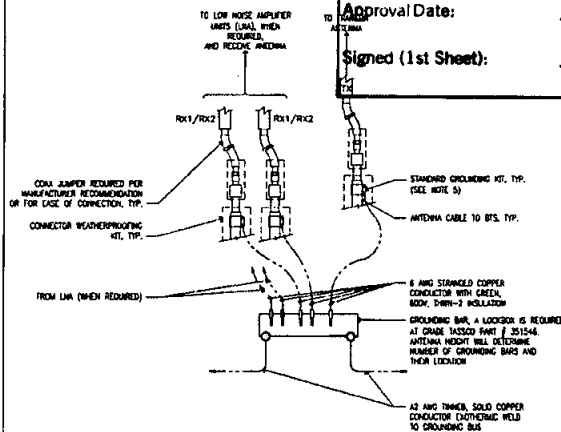


~~EXHIBIT~~ ~~MA~~

(MGB) REFERENCE GROUNDING BAR	NTS	1
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TWO HOLE LUG	MTS	2
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1. EXOTHERMIC WELDING (2) TWO 1/2 IN. BARE THINNED SOLID COPPER CONDUCTORS TO GROUNDING BAR. ROUTE CONDUCTORS TO BURIED GROUNDING RING AND PROVIDE PARALLEL EXOTHERMIC WELD.
2. ALL GROUNDING BARS SHALL BE STAMPED IN TO THE METAL. IF STOLEN DO NOT RECYCLE. THE CONTRACTOR SHALL USE PERMANENT MARKING TO DRAW THE LINES BETWEEN EACH SECTION AND LABEL EACH SECTION ("P", "A", "N", "T") WITH 1" HIGH LETTERS.
3. ALL HARDWARE SHALL BE STAINLESS STEEL 3/8" INCH DIAMETER OR LARGER. ALL HARDWARE 18-8 STAINLESS STEEL INCLUDING LOCK WASHERS. COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING.
4. FOR GROUND BOND TO STEEL ONLY: INSERT A CADMIUM PLAT WASHER BETWEEN LUG AND STEEL. COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING.
5. DO NOT INSTALL CABLE GROUNDING KIT AT A BEND AND ALWAYS DIRECT GROUNDING CONDUCTOR DOWN TO GROUNDING BUS.
6. NUT & WASHER SHALL BE PLACED ON THE FRONT SIDE OF THE GROUNDING BAR AND BOLTED ON THE BACK SIDE. INSTALL BLACK HEAT-SHRINKING TUBE, 600 VOLT INSULATION, ON ALL GROUNDING TERMINATIONS. THE INTENT IS TO WEATHERPROOF THE COMPRESSION CONNECTION.
7. SUPPLIED AND INSTALLED BY CONTRACTOR.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ADDITIONAL GROUNDING BAR AS REQUIRED, PROVIDING SPOUSE CONNECTION POINTS.



Project Number:

Approval Date:

Signed (1st Sheet):

GROUNDING NOTES	NIS	3
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ANTENNA GROUNDING BAR	NIS	4
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GROUNDING CONDUCTOR TO GROUNDING BAR	NTS	5
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