



BLACK & VEATCH
Building a world of difference

January 29, 2015.

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

RE: Site Address: 11498 Camino Ruiz, San Diego (the "Property")
 Site Name: NS0622 Camino Ruiz Park
 Agreement: Lease Agreement, dated January 19, 2011 (the "Lease") between The City of San Diego ("City") and New Cingular Wireless PCS, LLC (AT&T Mobility, ("Lessee").

Dear Ms. Charles,

As part of the continuous effort to keep its network up to date, New Cingular Wireless PCS, LLC, dba AT&T Mobility would like to perform the following modifications (changes) as described in the attached approved and stamped plans, to the site referenced above:

Antennas: The site was originally leased and permitted for nine (9) four-foot antennas. AT&T is proposing to revise the design to twelve (12) six-foot antennas. One (1) additional GPS antennas to be mounted to one of the existing radio cabinets.

Radio Equipment: Install one (1) additional Radio Cabinet, and reconfigure a second Radio Cabinet within the existing block wall enclosure.

Ancillary Equipment: Install two (2) Remote Radio Units ("RRU's") in each of the three antenna sectors. One Surge Suppressor will also be installed within the tree structure. One additional conduit will be installed between the equipment and the Surge Suppressor for fiber connectivity and power. Please see attached plans for details.

Pursuant to Section 10.3, Improvements and Alterations of the Lease Agreement, "If changes in technology occur during the term that require Lessee to upgrade the Communications Equipment, Lessee may perform such upgrading, provided that (1) Lessee obtains City's prior written consent ..." In order to comply with such requirement, AT&T Mobility would like to request City's consent and approval to complete the items described above. "

By signing this letter, City is providing its consent and approval to allow AT&T Mobility to perform the proposed modifications described herein. Upon signature, please return to my attention at:

Black & Veatch
10089 Willow Creek Rd., Suite 350
San Diego, CA 92131

Please call me at (619) 806-0858 should you have any questions or require further information. Thank you for your consideration.

Sincerely,

Jeff Goldman

Jeff Goldman, agent
for AT&T Mobility

CITY OF SAN DIEGO ACKNOWLEDGEMENT AND CONSENT

By: _____
Name: _____
Title: **Cybele Thompson**
 Director, Real Estate Assets
Date: 2/2/15

NOTES:

1. A REVIEW SHALL BE REQUIRED TO VERIFY THAT THE STRUCTURE OR MODIFICATION TO EXISTING STRUCTURES SHOWN ON THESE PLANS DO NOT REQUIRE FEDERAL, ARIZONA COMMUNICATIONS AUTHORIZATION BECAUSE PER SECTION 17.15 (a) OF THE 14.02 OF THE CODE OF FEDERAL REGULATIONS CHAPTER 17, NOTIFICATION IS NOT REQUIRED.

2. THE EXISTING POWER IS CURRENTLY BEING ANALYZED BY OTHERS TO DETERMINE ITS STRUCTURAL CAPACITY TO CARRY THE PROPOSED LOADS. THESE ENGINEERS HAVE BEEN ADVISED THAT THE TOWER IS ADEQUATE TO SUPPORT THE PROPOSED LOADS. HOWEVER, INSTALLATION OF THE PROPOSED EQUIPMENT SHALL NOT CONSTITUTE AN APPROVED STRUCTURAL ANALYSIS HAS BEEN RECEIVED BY THE OWNER OR A/E/C AND HAS BEEN REVIEWED BY BLACK & VEATCH. CONSTRUCTION SHALL REFERENCE THE TOWER STRUCTURAL ANALYSIS/DESIGN DRAWINGS FOR DIRECTIONS ON CABLE DISTRIBUTION/LOADING.

3. CONSTRUCTION SHALL CONTACT MAINTENANCE DEPT. 325-1133 AT THE CITY OF SAN DIEGO PARK AND RECREATION DEPARTMENT AT LEAST 72 HOURS PRIOR TO START OF WORK.

LEGEND:

- (E) MAPS AREA
- (E) CABLE STONE SAMPLE

LINE	BEARING	LENGTH
11	N85°34'12"E	114.90
12	N14°14'52"E	220.22
13	N74°43'22"E	97.80
14	S79°31'44"E	38.60
15	N43°36'30"E	25.74
16	S54°28'44"E	24.50
17	N02°42'12"E	4.80
18	N41°29'42"E	7.33
19	N41°28'28"E	98.22
20	N82°31'28"E	58.11
21	N42°30'42"E	53.68
22	S22°08'28"E	32.80
23	S65°41'28"E	18.02
24	N65°10'22"E	58.17
25	S11°20'38"E	74.07
26	N63°11'12"E	25.80
27	N75°30'38"E	92.08
28	N67°28'20"E	32.77
29	S62°24'48"E	46.30
30	N65°24'50"E	23.99
31	N47°40'28"E	24.3
32	N62°24'42"E	13.67
33	N75°25'24"E	28.37
34	S62°40'48"E	3.50
35	N44°28'12"E	20.77
36	S62°10'38"E	31.80
37	N48°24'58"E	172.44
38	S62°45'24"E	78.97
39	N07°42'42"E	72.24
40	S85°18'48"E	22.27
41	S62°23'12"E	30.78
42	S62°13'12"E	70.42

LINE	BEARING	LENGTH
135	S64°38'52"E	104.25
136	S68°36'36"E	178.90
137	S62°38'14"E	43.77
138	S24°21'24"E	37.93
139	S13°31'22"E	31.27
140	S24°14'30"E	58.17
141	N46°52'38"E	75.27
142	N67°45'20"E	63.02
143	S02°22'53"E	22.78
144	S01°24'18"E	9.20
145	N69°38'10"E	14.44
146	S07°46'02"E	81.45
147	S02°18'02"E	31.10
148	N77°38'08"E	65.27
149	S08°08'18"E	56.23
150	N65°04'10"E	48.79
151	S78°12'22"E	96.85
152	N60°07'12"E	98.64
153	S72°16'32"E	74.97
154	S02°20'04"E	38.65
155	S62°46'42"E	72.16
156	N66°08'19"E	70.11
157	N64°25'17"E	32.67
158	N07°12'24"E	54.98
159	N77°44'10"E	78.85
160	S46°28'52"E	192.67
161	S17°33'02"E	56.14
162	S62°20'58"E	72.23
163	S62°30'24"E	122.80
164	S66°22'24"E	43.86
165	S60°48'50"E	107.95
166	N38°22'00"E	7.82

CURVE	RADIUS	BEARING	LENGTH
C1	25.000'	170°21'	128.90
C2	150.000'	172°30'	334.02
C3	15.000'	107°18'	30.87

STATE OF SAN DIEGO - COUNTY OF SAN DIEGO
 COUNTY ENGINEER
 I hereby certify that the above described project conforms with the applicable provisions of the California Public Works Law.
 Date: 12-18-11
 Signature: [Signature]
 Title: COUNTY ENGINEER

SITE PLAN



5715 PACIFIC CENTER BLVD.
 SAN DIEGO, CA 92121



BLACK & VEATCH

10800 CHANDLER DRIVE
 OVERLAND PARK, KANSAS 66210
 (913) 426-3000

PROJECT NO: 122002
 DRAWN BY: JSA
 CHECKED BY: JSA

NO.	DATE	DESCRIPTION
1	11/12/11	CITY COMMENTS
2	11/14/11	CITY COMMENTS
3	11/14/11	CITY COMMENTS
4	11/14/11	CITY COMMENTS
5	11/14/11	CITY COMMENTS
6	11/14/11	CITY COMMENTS
7	11/14/11	CITY COMMENTS
8	11/14/11	CITY COMMENTS
9	11/14/11	CITY COMMENTS
10	11/14/11	CITY COMMENTS

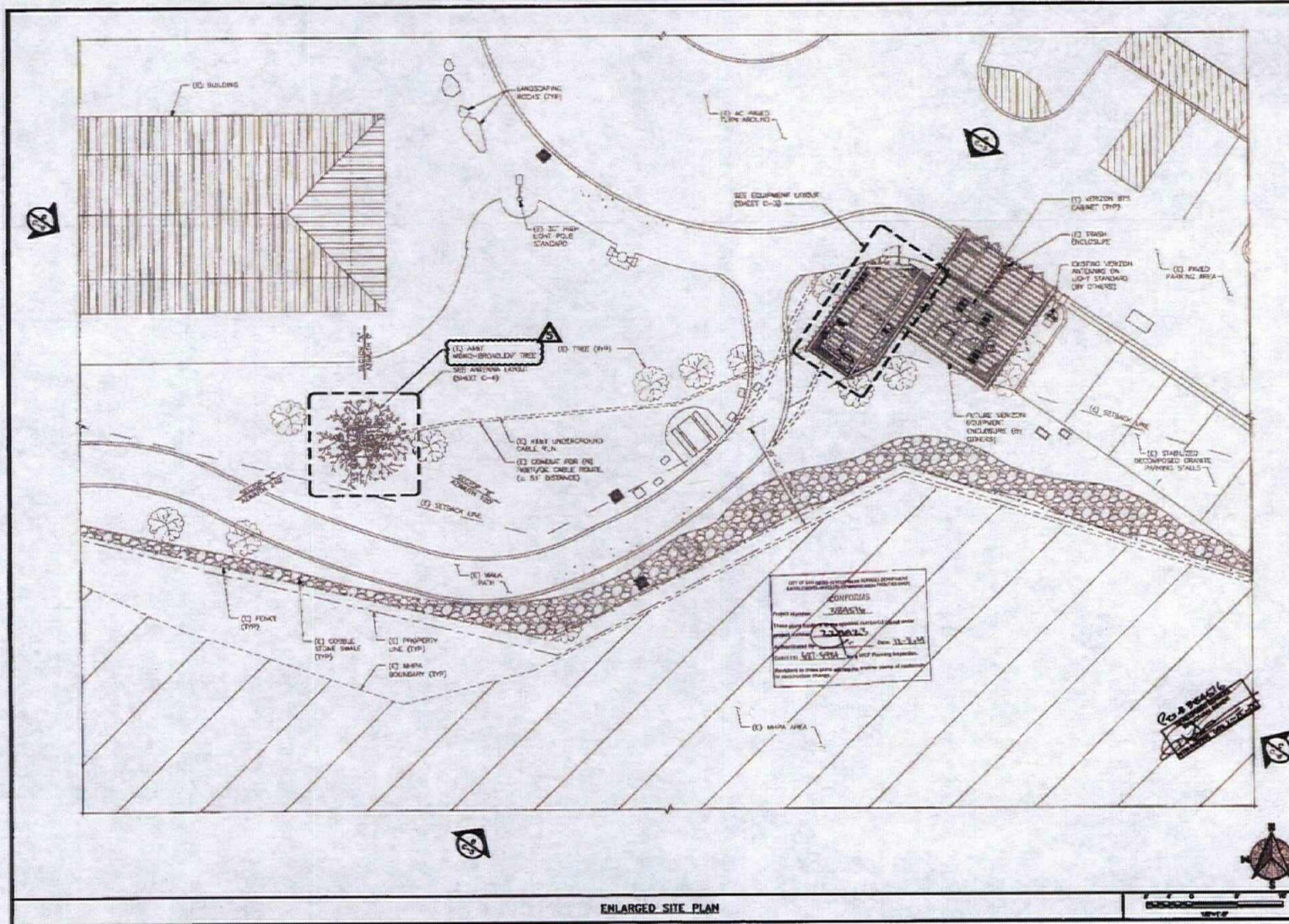


IT IS A VIOLATION OF THE P.E. SEAL ACT, PENALTY \$10,000 PER VIOLATION, TO USE A P.E. SEAL FOR ANY PROJECT OTHER THAN THAT FOR WHICH THE P.E. WAS LICENSED.

NS0622
 CAMINO RUIZ PARK
 CAMINO RUIZ & CALLE CRISTOBAL
 SAN DIEGO, CA 92126
 LTE OPTIMAL

SHEET TITLE
 SITE PLAN

SHEET NUMBER
 C-1



3738 PACIFIC CENTER BLVD.
SAN DIEGO, CA 92137



BLACK & VEATCH

10000 GRANDVIEW DRIVE
CHERRY HILLS, MISSOURI 63015
(314) 432-2000

PROJECT NO. 123456

DRAWN BY: DJ

CHECKED BY: DJ

NO.	DATE	DESCRIPTION
1	11/11/14	CTV COMMENTS
2	11/11/14	CTV COMMENTS
3	11/11/14	CTV COMMENTS
4	11/11/14	CTV COMMENTS
5	11/11/14	CTV COMMENTS
6	11/11/14	CTV COMMENTS
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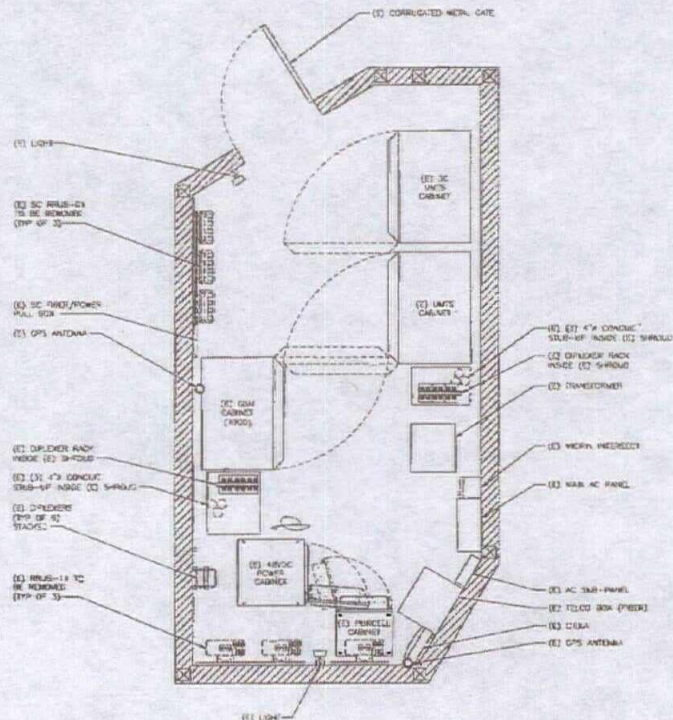
IT IS A VIOLATION OF LAW FOR ANY PERSON,
WHETHER THEY ARE A PROFESSIONAL ENGINEER,
TO REUSE THIS DOCUMENT.

NS0622
CAMINO RUIZ PARK
CAMINO RUIZ & CALLE CRISTOBAL
SAN DIEGO, CA 92126
LTE OPTIMAL

SHEET TITLE
ENLARGED SITE PLAN

SHEET NUMBER
C-2

Y. TRELLIS ROOF NOT SHOWN FOR CLARITY.



(E) EQUIPMENT LAYOUT



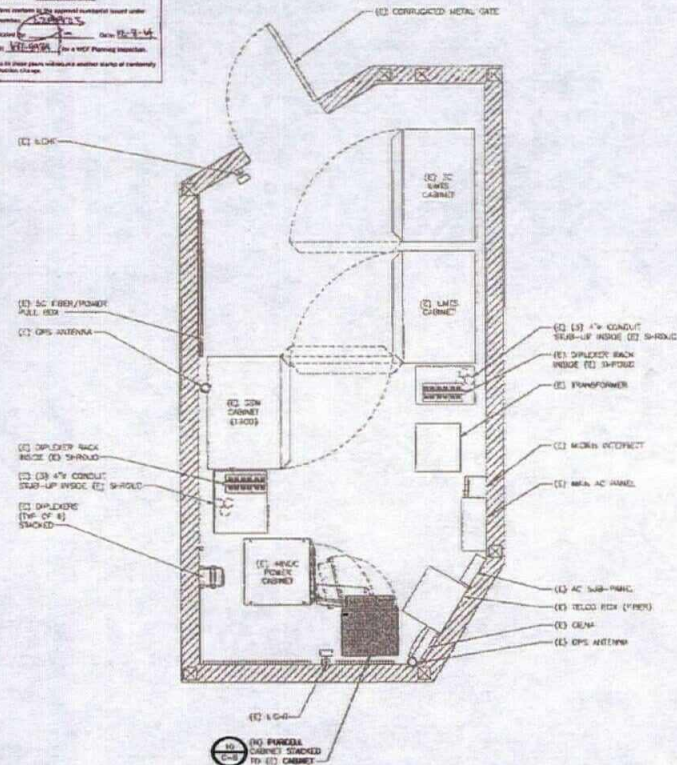
B. TIRELESS ROOF NOT SHOWN FOR CLIMATE.

CONFORMAS

These plans conform to the approved municipal board order

[illegible]

for osteoporosis, 17.6 age.



(N) EQUIPMENT LAYOUT



5738 PACIFIC CENTER BLVD
SAN DIEGO, CA 92121



BLACK & VEATCH

10260 GRANDVIEW DRIVE
OVERLAND PARK, KANSAS 66214
(913) 458-7000

PROJECT NO: 122002

Of course, the

0-000000 00

3	05/13/14	DRY COMPLETES
2	05/08/14	DRY SUBMITTAL
1	05/04/13	DRY COMPLETES
0	05/07/11	ISSUED FOR CONSTRUCTION



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

N50622
CAMINO RUIZ PARK
CAMINO RUIZ & CALLE CRISTOBAL
SAN DIEGO, CA 92126
LTE OPTIMAL

SHEET TITLE
EQUIPMENT LAYOUT

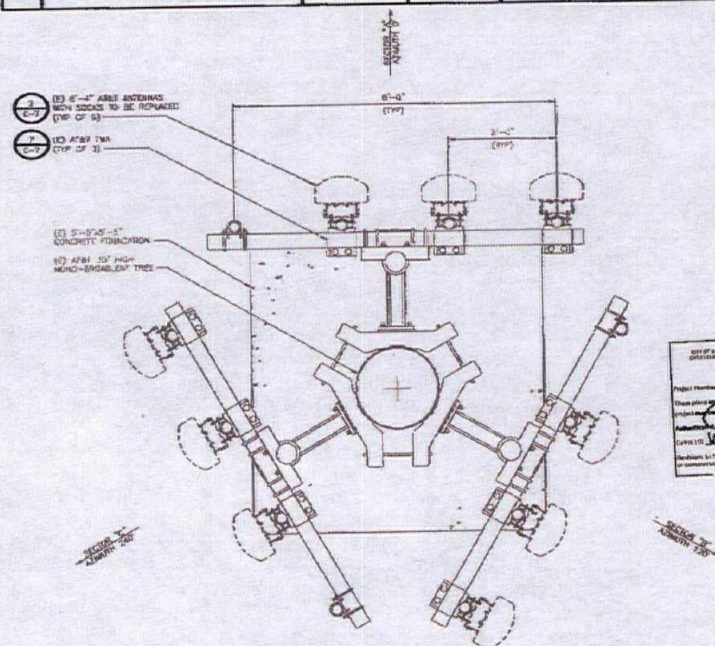
SHEET NUMBER

C-3

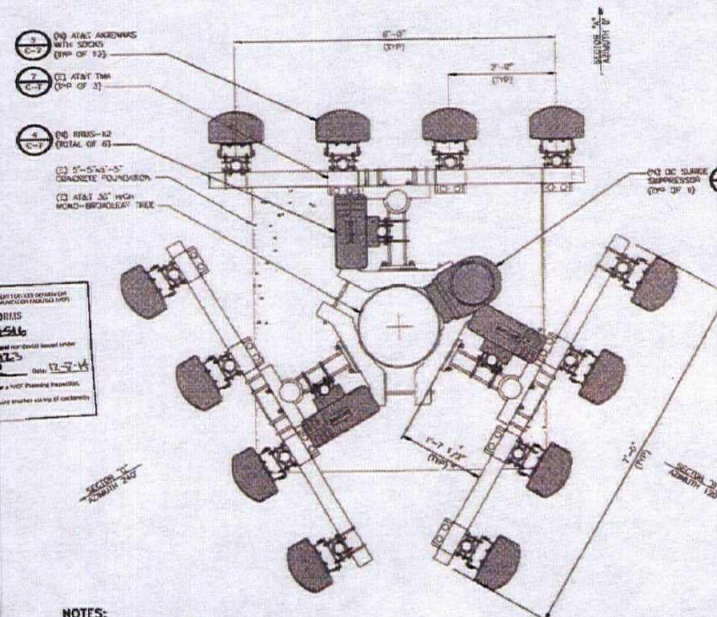
EXISTING ANTENNA SCHEDULE															
SECTION	ANTENNA						SURGE SUPPRESSOR				WIRELESS SIGNAL LINE				
	POS.	SERIES	MODEL NO.	SIZE	ARMATURE	TOP HT.	#	MODEL NO.	#	MODEL NO.	#	TYPE	COAX	FIBER	OPTICAL
A	1	REINFORC.	REINFORC. K	6'-4"	0	25'-0"	1	YHMP-GMP133-001							
	2	REINFORC.	REINFORC. K	6'-4"			2	YHMP-GMP133-001							
	3	REINFORC.	REINFORC. K	6'-4"			3	YHMP-GMP133-001							
	4														
B	1	REINFORC.	REINFORC. K	6'-4"	300	25'-0"	1	YHMP-GMP133-001							
	2	REINFORC.	REINFORC. K	6'-4"			2	YHMP-GMP133-001							
	3	REINFORC.	REINFORC. K	6'-4"			3	YHMP-GMP133-001							
	4														
C	1	REINFORC.	REINFORC. K	6'-4"	240	25'-0"	1	YHMP-GMP133-001							
	2	REINFORC.	REINFORC. K	6'-4"			2	YHMP-GMP133-001							
	3	REINFORC.	REINFORC. K	6'-4"			3	YHMP-GMP133-001							
	4														
TOTALS	9 ANTENNAS						9 TWA's		0 SURGE SUPPRESSORS		0 DC POWER		0 FIBER		20 COAX

FROM ANTENNA SCHEDULE															
SECTION	ANTENNA					TWA		SURGE SUPPRESSORS		DC		TRANSMISSION LINE			
	POS.	SERIES	MODEL NO.	SIZE	ARMATURE	TOP HT.	#	MODEL NO.	#	MODEL NO.	#	MODEL NO.	TYPE	WAVELENGTH	
A	1	REINFORC	REINFORC	6'-4"	0	25'-0"	1	YHMP-GMP133-001	2	YHMP-GMP133-001	2	YHMP-G2			
	2	REINFORC	REINFORC	6'-4"			1	YHMP-GMP133-001							
	3	REINFORC	REINFORC	6'-4"			1	YHMP-GMP133-001							
	4	REINFORC	REINFORC	6'-4"			1	YHMP-GMP133-001							
B	1	REINFORC	REINFORC	6'-4"	320	25'-0"	1	YHMP-GMP133-001	2	YHMP-GMP133-001	2	YHMP-G2	2	20' 10"	140'
	2	REINFORC	REINFORC	6'-4"			1	YHMP-GMP133-001							
	3	REINFORC	REINFORC	6'-4"			1	YHMP-GMP133-001							
	4	REINFORC	REINFORC	6'-4"			1	YHMP-GMP133-001							
C	1	REINFORC	REINFORC	6'-4"	340	25'-0"	1	YHMP-GMP133-001	2	YHMP-G2					
	2	REINFORC	REINFORC	6'-4"			1	YHMP-GMP133-001							
	3	REINFORC	REINFORC	6'-4"			1	YHMP-GMP133-001							
	4	REINFORC	REINFORC	6'-4"			1	YHMP-GMP133-001							
TOTALS	12 ANTENNAS						9 TWA'S		1 SURGE SUPPRESSORS		6 DC POWER		2 FIBER 20 COAX		

*FIBER OPTIC CABLES HAVE MULTIPLE FIBER Pairs WITHIN EACH CABLE ASSEMBLY, CAPABLE OF SERVING DATA TO THE TEL AT 20 MBPS.
**DC POWER TRUNK CABLES HAVE MULTIPLE CONDUCTORS WITHIN EACH CABLE ASSEMBLY, CAPABLE OF PROVIDING POWER FOR THREE MBPS.



(E) ANTENNA LAYOUT



(N) ANTENNA LAYOUT



5735 AVENUE CENTER BLVD
SAN DIEGO, CA 92121



BLACK & VEATCH

10800 CHANDLER DRIVE
OVERLAND PARK, KANSAS 66210
(913) 456-2000

PROJECT NO. 132082
DRAWN BY: BJ
CHECKED BY: JL

REV	DATE	DESCRIPTION
1	01/15/82	REV COMMENTS
2	01/15/82	REV COMMENTS
3	01/15/82	REV COMMENTS
4	01/15/82	REV COMMENTS
5	01/15/82	REV COMMENTS
6	01/15/82	REV COMMENTS
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8	01/15/82	REV COMMENTS
9	01/15/82	REV COMMENTS
10	01/15/82	REV COMMENTS

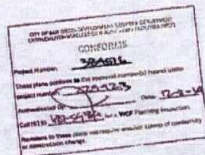


IT IS A VIOLATION OF LAW FOR ANY PERSON
UNLESS THEY ARE ACTING UNDER THE DIRECTION
OF A LICENSED PROFESSIONAL ENGINEER
TO ALTER THIS DOCUMENT.

NS0622
CAMINO RUIZ PARK
CAMINO RUIZ & CALLE CROSTBORN
SAN DIEGO, CA 92126
LTE OPTIMAL

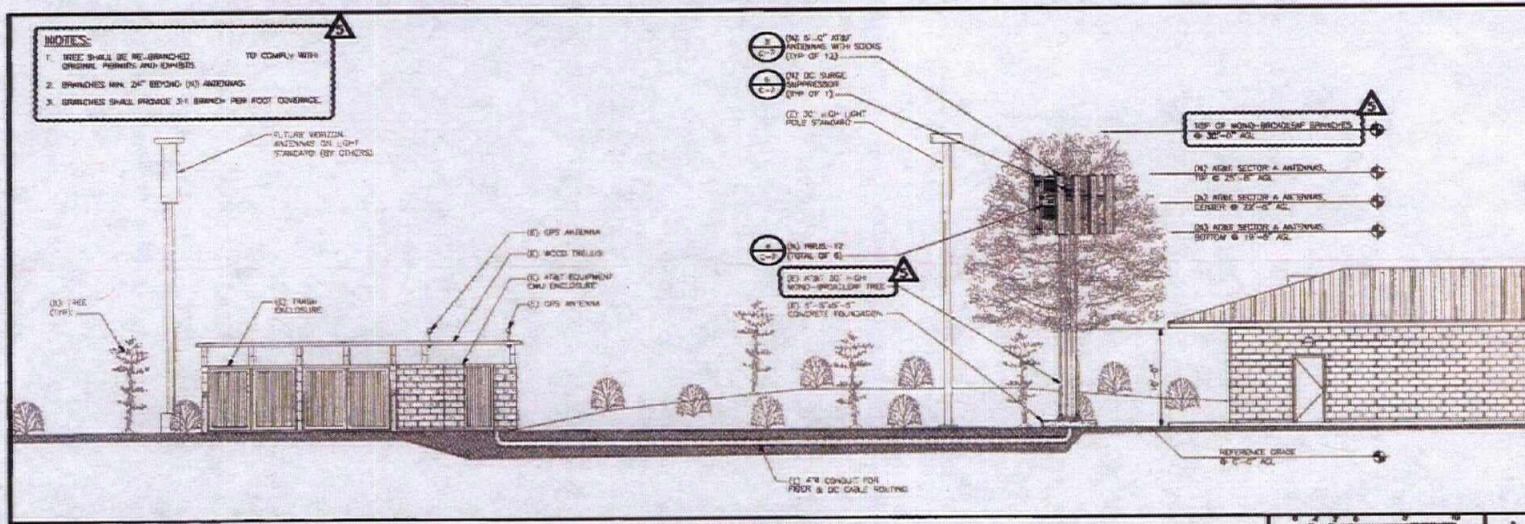
SHEET TITLE
ANTENNA LAYOUT

SHEET NUMBER
C-4

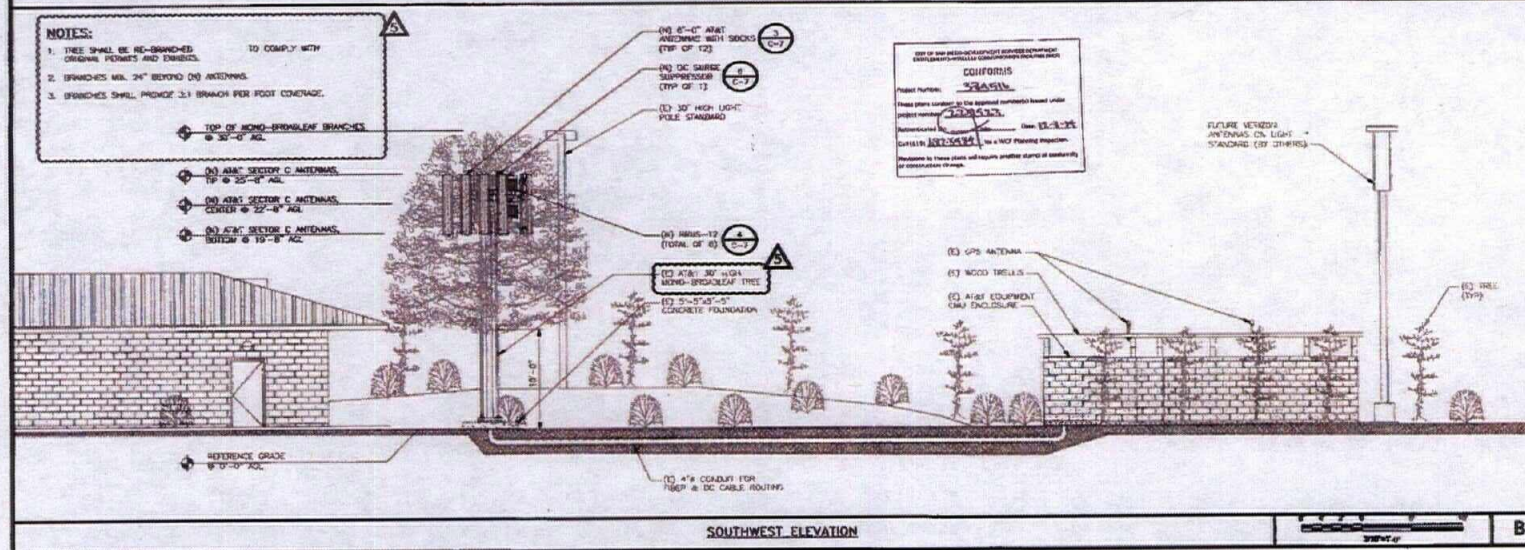


	8'-0" BRANCH LAYOUT 10'-0" AGL	SCALE N.T.S.		8'-0" BRANCH LAYOUT 11'-0" AGL	SCALE N.T.S.		8'-0" BRANCH LAYOUT 12'-0" AGL	SCALE N.T.S.		8'-0" BRANCH LAYOUT 13'-0" AGL	SCALE N.T.S.
	8'-0" BRANCH LAYOUT 14'-0" AGL	SCALE N.T.S.		8'-0" BRANCH LAYOUT 15'-0" AGL	SCALE N.T.S.		8'-0" BRANCH LAYOUT 16'-0" AGL	SCALE N.T.S.		8'-0" BRANCH LAYOUT 17'-0" AGL	SCALE N.T.S.
	8'-0" BRANCH LAYOUT 18'-0" AGL	SCALE N.T.S.		8'-0" BRANCH LAYOUT 19'-0" AGL	SCALE N.T.S.		8'-0" BRANCH LAYOUT 20'-0" AGL	SCALE N.T.S.		8'-0" BRANCH LAYOUT 21'-0" AGL	SCALE N.T.S.
	8'-0" BRANCH LAYOUT 22'-0" AGL	SCALE N.T.S.		8'-0" BRANCH LAYOUT 23'-0" AGL	SCALE N.T.S.		8'-0" BRANCH LAYOUT 24'-0" AGL	SCALE N.T.S.		8'-0" BRANCH LAYOUT 25'-0" AGL	SCALE N.T.S.
	8'-0" BRANCH LAYOUT 26'-0" AGL	SCALE N.T.S.		8'-0" BRANCH LAYOUT 27'-0" AGL	SCALE N.T.S.		8'-0" BRANCH LAYOUT 28'-0" AGL	SCALE N.T.S.		8'-0" BRANCH LAYOUT 29'-0" AGL	SCALE N.T.S.
	8'-0" BRANCH LAYOUT 30'-0" AGL	SCALE N.T.S.		8'-0" BRANCH LAYOUT 31'-0" AGL	SCALE N.T.S.		8'-0" BRANCH LAYOUT 32'-0" AGL	SCALE N.T.S.		8'-0" BRANCH LAYOUT 33'-0" AGL	SCALE N.T.S.
	8'-0" BRANCH LAYOUT 34'-0" AGL	SCALE N.T.S.		8'-0" BRANCH LAYOUT 35'-0" AGL							





NORTHEAST ELEVATION



SOUTHWEST ELEVATION



3035 PACIFIC CENTER BLVD
SAN DIEGO, CA 92121



BLACK & VEATCH

10000 CAMINO DEL RIO
OVERLAND PARK, KANSAS 66213
(913) 486-2000

PROJECT NO. 12082

SHEET NO. 1A

CHECKED BY: JC

REV	DATE	DESCRIPTION
1	11/12/14	REVISED FOR CONSTRUCTION
2	04/28/14	REVISED FOR CONSTRUCTION
3	08/11/14	REVISED FOR CONSTRUCTION
4	04/28/14	REVISED FOR CONSTRUCTION
5	04/28/14	REVISED FOR CONSTRUCTION
6	04/28/14	REVISED FOR CONSTRUCTION
7	04/28/14	REVISED FOR CONSTRUCTION



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UNLESS THEY ARE A LICENSED PROFESSIONAL ENGINEER
TO SIGN THIS DOCUMENT

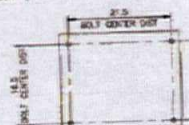
NS0622
CAMINO DEL RIO, PARK
CAMINO DEL RIO & CALLE CRISTOBAL
SAN DIEGO, CA 92126
LTE OPTIMAL

SHEET TITLE
ELEVATIONS

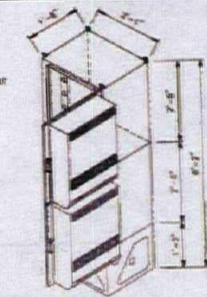
SHEET NUMBER
C-5

PURCELL LTE ERICSSON CABINET FLX1695

DIMENSIONS: 60"x36"x72" (1524x914x1829)
 COLOR: GRAY
 MOUNTING OPTIONS: 1/2" & 4" FLANGES, HOLE, POLE, W-FLANGE, WALL, UNISTRUT, RAYO MOUNTING OPTIONS
 MAXIMUM TEMPERATURE: 40° C
 SOLAR LOAD: 754 W/m²
 WEIGHT (FULLY LOADED): 227 LBS. EA.



ANCHORAGE PLAN

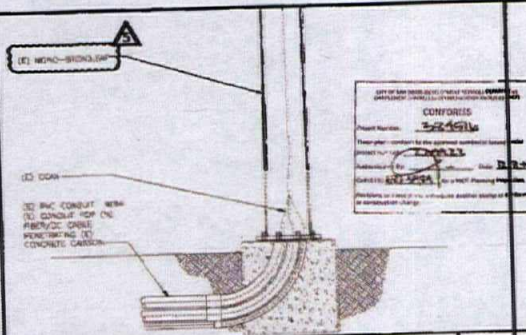


NOTE: FOR CABINET TO CORRECTLY MOUNT, USE
 PURCELL ACT PART NUMBER 000011000

PURCELL LTE ERICSSON DETAIL

NO SCALE

10



CONDUIT ROUTING DETAIL

NO SCALE

11

NOT USED

NO SCALE

12

NOT USED

NO SCALE

13

NOT USED

NO SCALE

14

NOT USED

NO SCALE

15

NOT USED

NO SCALE

16

NOT USED

NO SCALE

17

NOT USED

NO SCALE

18



5736 PACIFIC CENTER BLVD
 SAN DIEGO, CA 92121



BLACK & VEATCH

10550 CINDYVIEW DRIVE
 OVERLAND PARK, KANSAS 66210
 (913) 456-2000

PROJECT NO. 122002

DRAWN BY: DA

CHECKED BY: JG

REV	DATE	DESCRIPTION
5	11/17/11	DRY COMMENTS
4	04/24/11	DRY COMMENTS
3	04/11/11	DRY COMMENTS
2	04/07/11	DRY COMMENTS
1	04/07/11	DRY COMMENTS
0	04/07/11	DRY COMMENTS

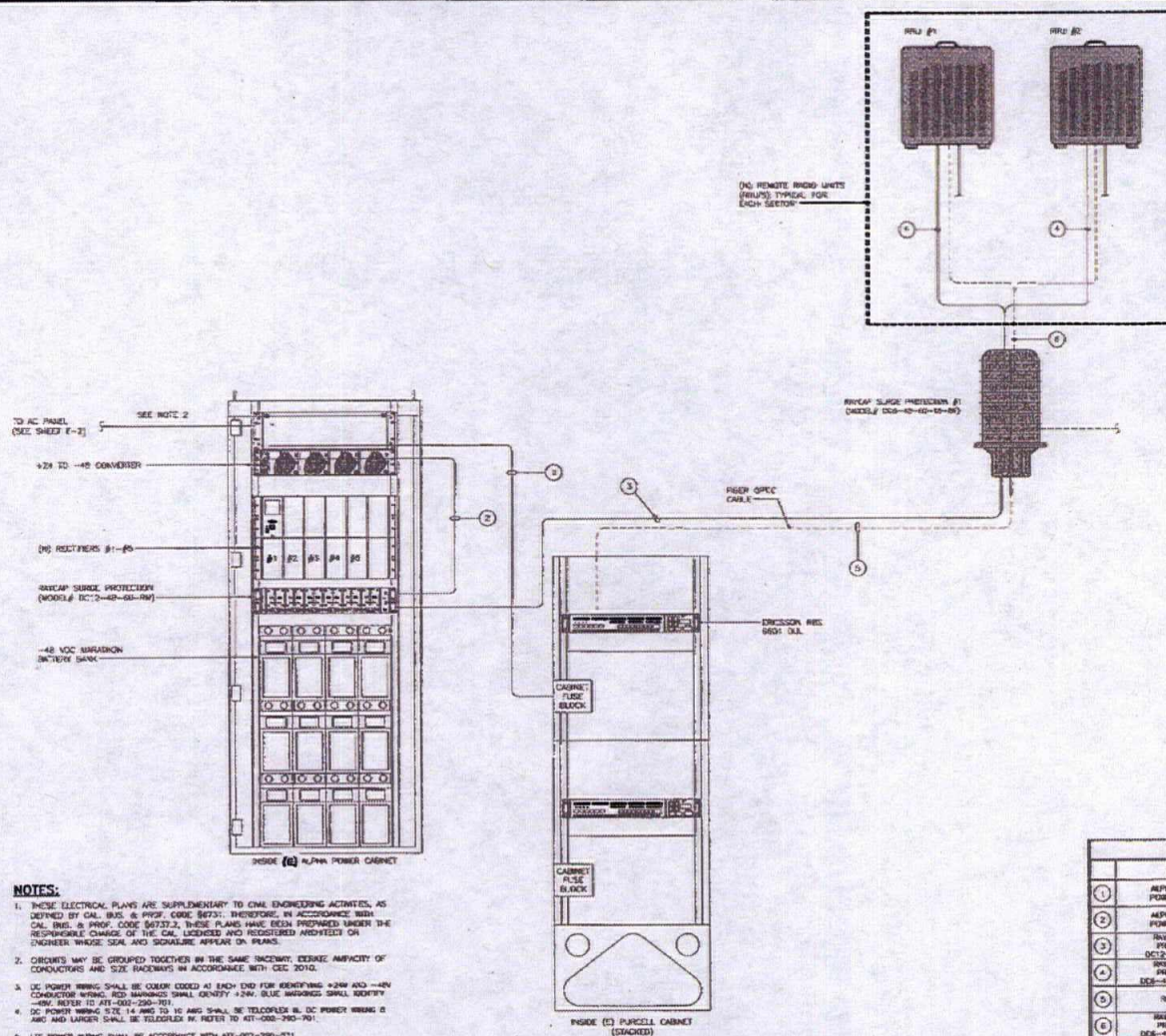


I, **DAVID A. JONES**, a duly licensed Professional Engineer, State of California, do hereby certify that the above is a true and correct copy of the original.

NS0622
 CAMINO RUIZ PARK
 CAMINO RUIZ & CALLE CRISTOBAL
 SAN DIEGO, CA 92126
 LTE OPTIMAL

SHEET TITLE
 DETAILS

SHEET NUMBER
 C-8



NOTES:

1. THESE ELECTRICAL PLANS ARE SUPPLEMENTARY TO CIVIL ENGINEERING ACTIVITIES, AS DEFINED BY CAL. BUS. & PROP. CODE 86731. THEREFORE, IN ACCORDANCE WITH CAL. BUS. & PROP. CODE 86732.2, THESE PLANS HAVE BEEN PREPARED UNDER THE RESPONSIBLE CHARGE OF THE CIVIL ENGINEER AND REGISTERED ARCHITECT OR ENGINEER WHOSE SEAL AND SIGNATURE APPEAR ON PLANS.
2. CIRCUITS MAY BE GROUPED TOGETHER IN THE SAME TRUNKING, DECKED, AMPLIFIED, OF CONDUCTORS AND SIZE TRUNKING IN ACCORDANCE WITH CEC 2010.
3. DC POWER WIRING SHALL BE COLOR CODED AT EACH END FOR IDENTIFYING +24V AND -48V CONDUCTOR WIRING. RED MARKINGS SHALL IDENTIFY +24V, BLUE MARKINGS SHALL IDENTIFY -48V. REFER TO ATT-000-230-701.
4. DC POWER WIRING SIZE 14 AWG TO 16 AWG SHALL BE TELECOM 18. DC POWER WIRING 18 AWG AND LARGER SHALL BE TELECOM 18. REFER TO ATT-000-230-701.
5. LITE POWER WIRING SHALL BE ACCORDANCE WITH ATT-000-230-521.

ELECTRICAL DC ONE-LINE DIAGRAM

NO SCALE



15700 PACIFIC CENTER BLVD
SAN DIEGO, CA 92127



BLACK & VEATCH

10350 SHAWNEE DRIVE
OVERLAND PARK, KANSAS 66210
(913) 438-2000

PROJECT NO. 123080
DRAWN BY: DJ
CHECKED BY: JC

3	06/1/14	CIVIL COMMENTS
2	05/24/14	DP SUBMITTAL
1	05/04/14	CIVIL COMMENTS
C	07/20/13	FIELD FOR CONSTRUCTION
REV	DATE	DESCRIPTION

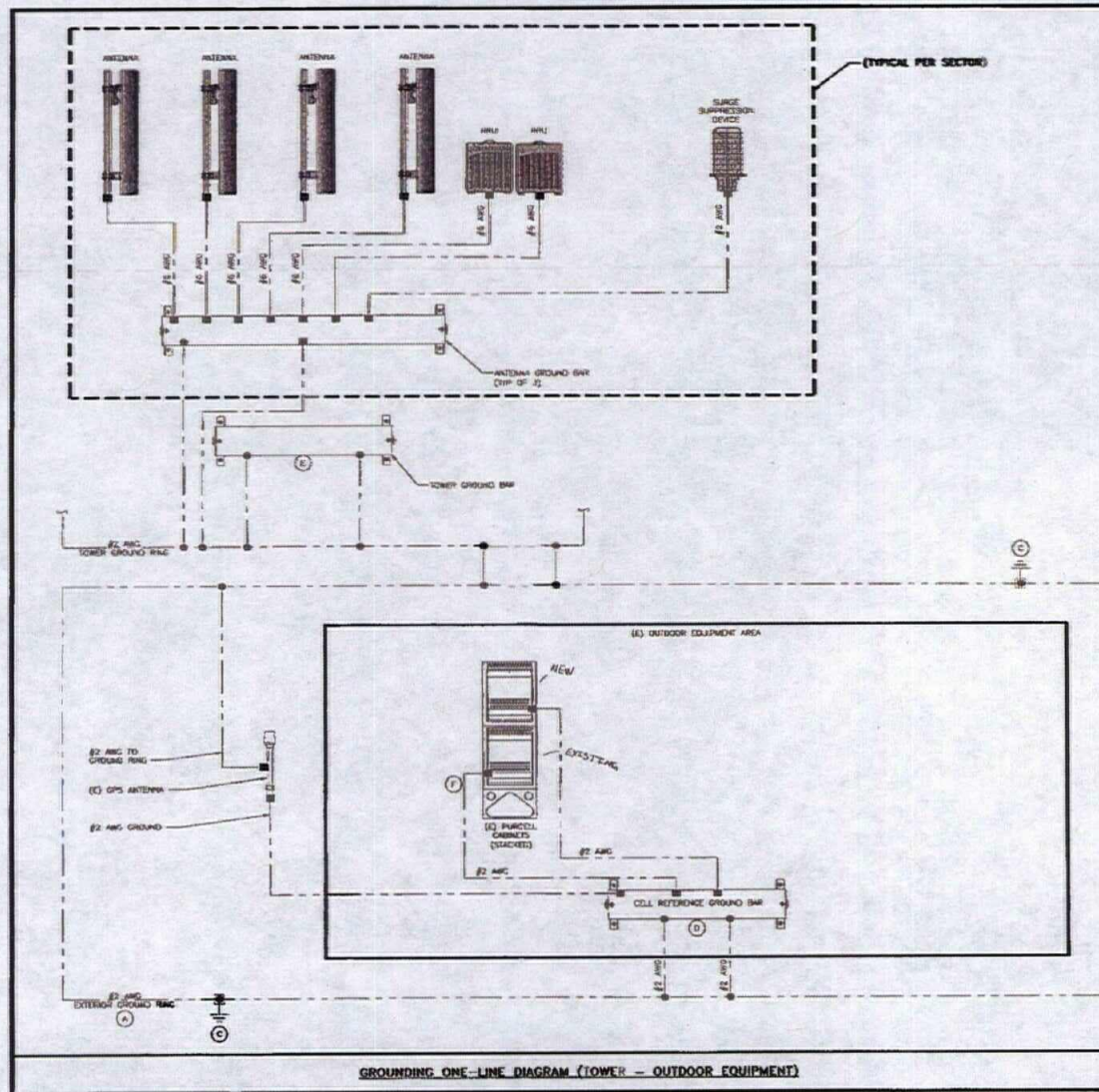


IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO REPRODUCE THIS DOCUMENT.

NS0622
CAMINO RUIZ PARK
CAMINO RUIZ & CALLE CRESTON
SAN DIEGO, CA 92126
LTE OPTIMAL

SHEET TITLE:
**ELECTRICAL DC
ONE-LINE DIAGRAM**

SHEET NUMBER
E-1



- ELECTRICAL CONNECTION
■ MECHANICAL CONNECTION
- GROUND ROD
□ TEST GROUND ROD WITH INSPECTION SURVEY
- LEGEND**
- GROUNDING IS SHOWN ORIGINALLY ONLY.
 - CONNECTION SHALL GROUND ALL EQUIPMENT AS A COMPLETE SYSTEM. GROUNDING SHALL BE IN COMPLIANCE WITH FCC SECTION 22.1 AND 22.2 AND 22.3 AND 22.4 AND 22.5 AND 22.6 AND 22.7 AND 22.8 AND 22.9 AND 23.1 AND 23.2 AND 23.3 AND 23.4 AND 23.5 AND 23.6 AND 23.7 AND 23.8 AND 23.9 AND 24.1 AND 24.2 AND 24.3 AND 24.4 AND 24.5 AND 24.6 AND 24.7 AND 24.8 AND 24.9 AND 25.1 AND 25.2 AND 25.3 AND 25.4 AND 25.5 AND 25.6 AND 25.7 AND 25.8 AND 25.9 AND 26.1 AND 26.2 AND 26.3 AND 26.4 AND 26.5 AND 26.6 AND 26.7 AND 26.8 AND 26.9 AND 27.1 AND 27.2 AND 27.3 AND 27.4 AND 27.5 AND 27.6 AND 27.7 AND 27.8 AND 27.9 AND 28.1 AND 28.2 AND 28.3 AND 28.4 AND 28.5 AND 28.6 AND 28.7 AND 28.8 AND 28.9 AND 29.1 AND 29.2 AND 29.3 AND 29.4 AND 29.5 AND 29.6 AND 29.7 AND 29.8 AND 29.9 AND 30.1 AND 30.2 AND 30.3 AND 30.4 AND 30.5 AND 30.6 AND 30.7 AND 30.8 AND 30.9 AND 31.1 AND 31.2 AND 31.3 AND 31.4 AND 31.5 AND 31.6 AND 31.7 AND 31.8 AND 31.9 AND 32.1 AND 32.2 AND 32.3 AND 32.4 AND 32.5 AND 32.6 AND 32.7 AND 32.8 AND 32.9 AND 33.1 AND 33.2 AND 33.3 AND 33.4 AND 33.5 AND 33.6 AND 33.7 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- NOTES**
- EXTERIOR GROUND RING: #2 AWG SOLID COPPER, BURIED AT A DEPTH OF AT LEAST 30 INCHES BELOW GRADE, OF 8 INCHES BELOW THE FOOT LINE AND APPROXIMATELY 24 INCHES FROM THE EXTERIOR WALL OF FOOTING. (ATT-TP-76416 2.2.3.5/7.5.1)
 - TOWER GROUND RING: THE GROUND RING SYSTEM SHALL BE INSTALLED AROUND AN ANTENNA TOWER'S LEGS AND/OR CLIMBING LADDERS. WHERE DEFENSE SYSTEMS HAVE BEEN PROVIDED FOR THE TOWER AND THE BUILDING, AT LEAST TWO RINGS SHALL BE MADE BETWEEN THE TOWER RING GROUND SYSTEM AND THE BUILDING RING GROUND SYSTEM USING MINIMUM #1 AWG SOLID COPPER CONDUCTORS. (ATT-TP-76416 7.5.1)
 - GROUNDING: ALL LITTLE COPPER CLAD STEEL MINIMUM 3/4" DIAMETER BY 10' HIGH TOWER. ALL GROUND RODS MUST BE INSTALLED WITH PROTECTION SLEEVES. GROUND RODS SHALL BE ORDER TO THE DEPTH OF GROUND RING CONDUCTOR. (ATT-TP-76416 7.5.1)
 - CELL REFERENCE GROUND: THE POINT OF GROUND REFERENCE FOR ALL COMMUNICATIONS EQUIPMENT FRAMES. ALL BORDERS ARE MADE WITH #2 AWG TOWERED GREEN INSULATED COPPER CONDUCTORS, BOND TO GROUND RING WITH (1) #2 SOLID THINER COPPER CONDUCTORS. (ATT-TP-76416 7.5.1)
 - TOWER AND GROUND RING: #2 AWG SOLID TOWERED COPPER BOND TO THE TOWER GROUND RING. (ATT-TP-76416 7.5.1)
 - FRAME GROUNDING: THE BONDING POINT FOR TELECOM EQUIPMENT FRAMES SHALL BE THE GROUND BUS THAT IS NOT SEPARATED FROM THE EQUIPMENT METAL TRANSDUCER, BOND THE FRAME GROUND BUS TO THE "T" SECTION OF THE CELL REFERENCE GROUND BUS. (ATT-TP-76416 7.5.1)
 - FRAME AND GROUNDING: METAL FENCING WITHIN 7 FEET OF THE EXTERIOR GROUND RING FOR OBJECTS BONDING TO THE EXTERIOR GROUND RING SHALL BE BONDING TO THE GROUND RING WITH A #2 AWG SOLID TOWERED COPPER CONDUCTOR AT AN INTERVAL NOT EXCEEDING 20 FEET. BONDING SHALL BE MADE AT EACH GATE POST AND ACROSS GATE SPANNERS. (ATT-TP-76416 7.12.2.2)
 - EXTERIOR GROUND RING: METAL OBJECTS SHALL BE BONDING TO THE EXTERIOR GROUND RING. (ATT-TP-76416 7.12.2)
 - KEY: BONDING SUPPORT: FROM KEY POINTS SHALL BE BONDING TO THE GROUND RING WITH #2 AWG BARE TOWERED COPPER CONDUCTOR, PROVIDE EXTERIORING HELDS AT 80% THE ICE BRIDGE LID AND BURIED GROUND RING. (ATT-TP-76416 7.12.2)
- GROUNDING KEY NOTES**

3735 PACIFIC CENTER BLVD
SAN DIEGO, CA 92121

10000 SANDEWAVE DRIVE
OVERLAND PARK, KANSAS 66210
(913) 438-2000

PROJECT NO: 112002

DRAWN BY: DJ

CHECKED BY: JE

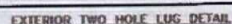
REV	DATE	DESCRIPTION
1	08/11/14	1. NEW COMMENTS
2	02/28/14	2. NEW COMMENTS
3	04/04/13	3. NEW COMMENTS
4	09/05/12	4. NEW COMMENTS
5	05/05/12	5. NEW COMMENTS

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS FIRST AND FOREMOST, UNDER THE GUIDANCE OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

NS0622
CAMINO RUIZ PARK
CAMINO RUIZ & CALLE CRISTOBAL
SAN DIEGO, CA 92126
LTE OPTIMAL

SHEET TITLE
GROUNDING
ONE-LINE DIAGRAM

SHEET NUMBER
G-1



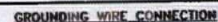
NO SCALE



NO SCALE

- ## NOTES

NO SCANS



NO SCALE

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NO SCALE

18



NO SCALE

1



10250 GRAYVIEW DRIVE
OVERLAND PARK, KANSAS 66210
(913) 436-2000

PROJECT NO.	122082
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6/10/2014 11:54 AM

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3	06/11/94	DRU COMMENTS
2	03/22/94	SP SUBMITTAL
1	04/04/93	DRU COMMENTS
0	02/04/91	RELEASE FOR CONFIRMATION
REV	DATE	DESCRIPTION



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

NS0622
CAMINO RUIZ PARK
CAMINO RUIZ & CALLE CRISTOBAL
SAN DIEGO, CA 92126
LTE OPTIMAL

SHEET TITLE
GROUNDING DETAILS

SAFETY NUMBER

G-2

