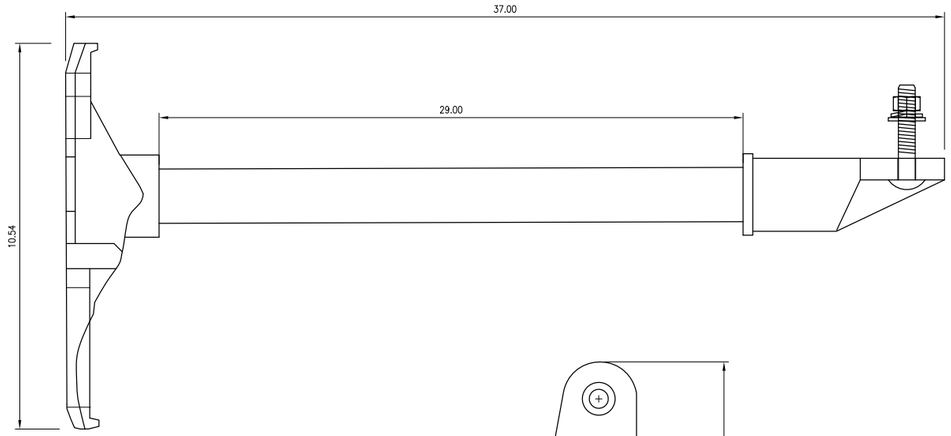

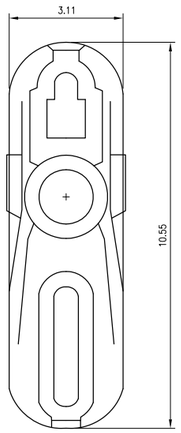

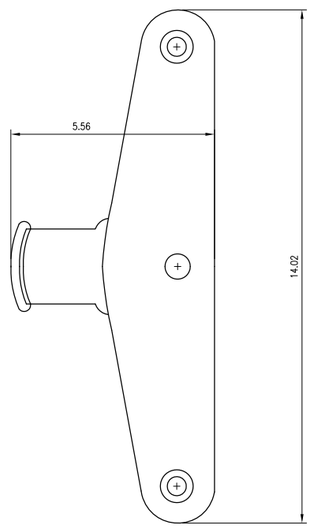

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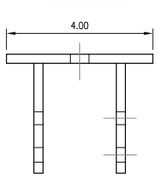
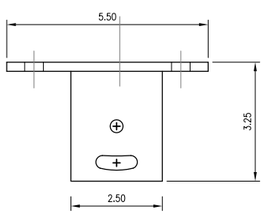
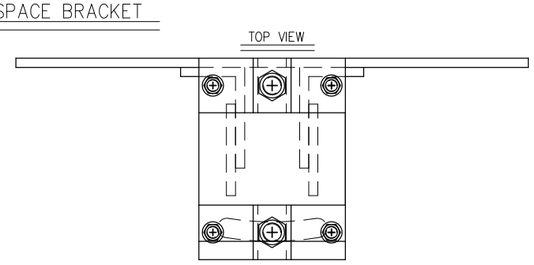
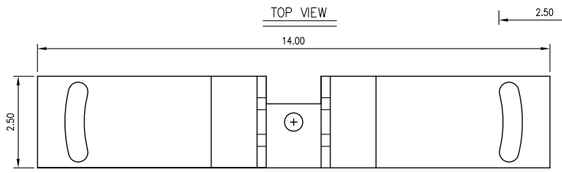
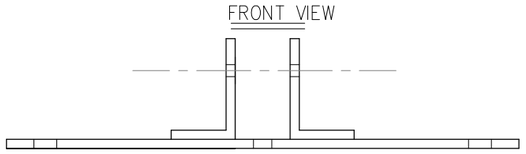
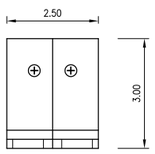


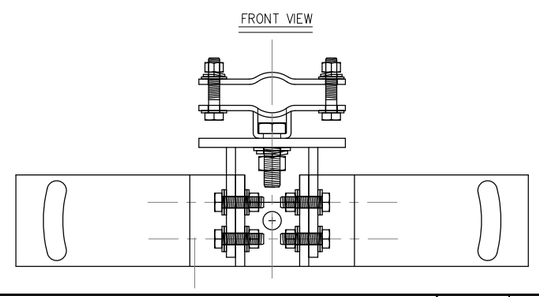












ANTENNA MOUNT N.T.S. 1

UN-USED N.T.S. 2

REV:	DATE/BY:	REVISION DESCRIPTION:
0	FXC 02/10/2014	ISSUED FOR REVIEW
1	FXC 03/08/2014	ISSUED FOR FINAL

ENGINEER/CONSULTANT:

Civil Engineer

CDG

CONNELL DESIGN GROUP, LLC

CONSULTING CIVIL ENGINEERS

26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630

(949) 753-8807 OFFICE - (949) 753-8833 FAX

CLIENT:

CROWN CASTLE

NG WEST, INC.

STAMP:

SITE INFO:

SITE NAME:

MON19m1

VERIZON MONTECITO–MON19m1

SITE ADDRESS: THOMAS BROS PAGE 987 GRID E7
R.O.W. SOUTH SIDE OF ROMERO CANYON RD.
(ACROSS FROM 969 ROMERO CANYON RD)
SANTA BARBARA, CA 93108
LAT: 34.443777
LONG: –119.592570

SHEET TITLE:

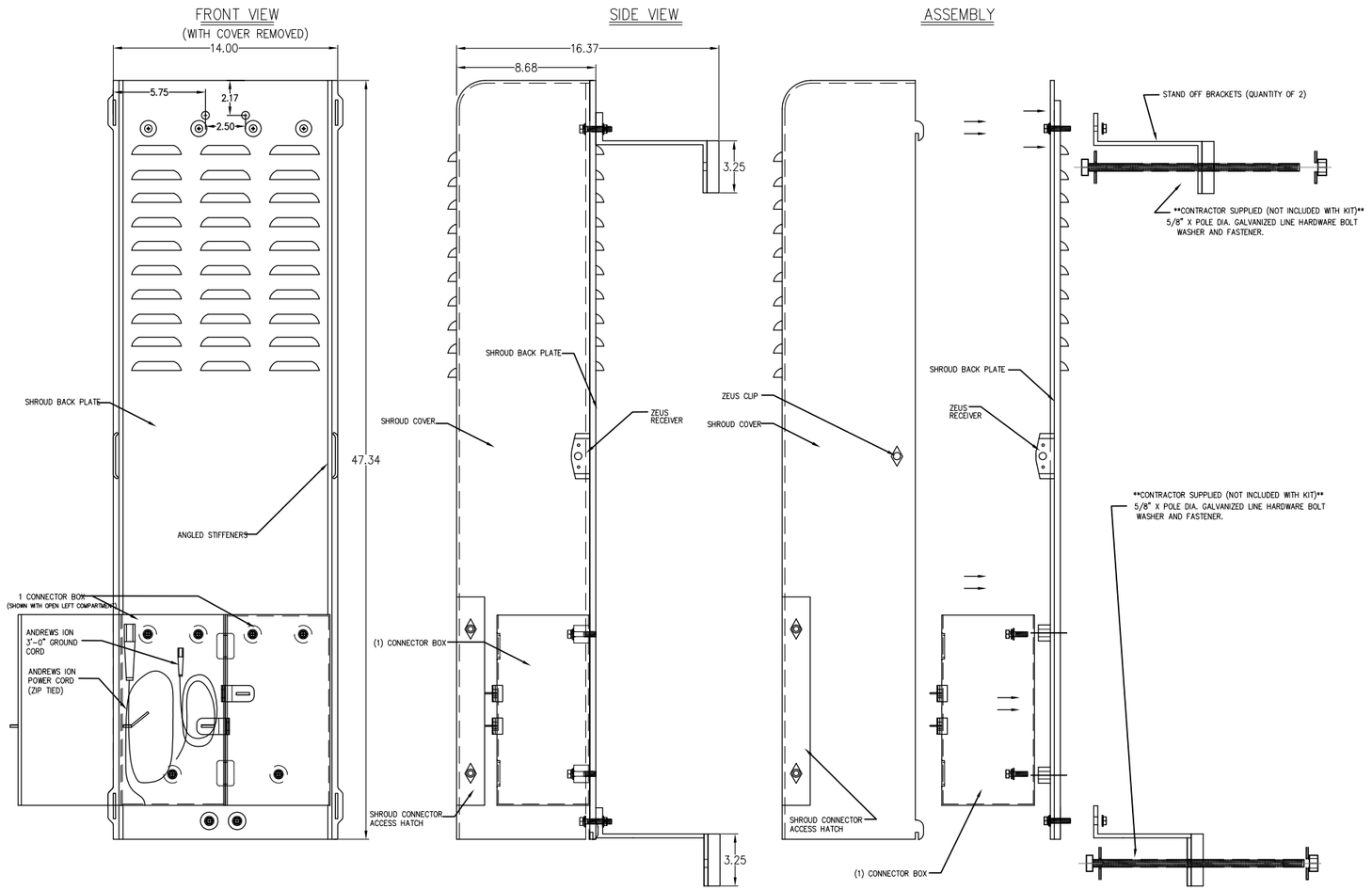
DETAILS

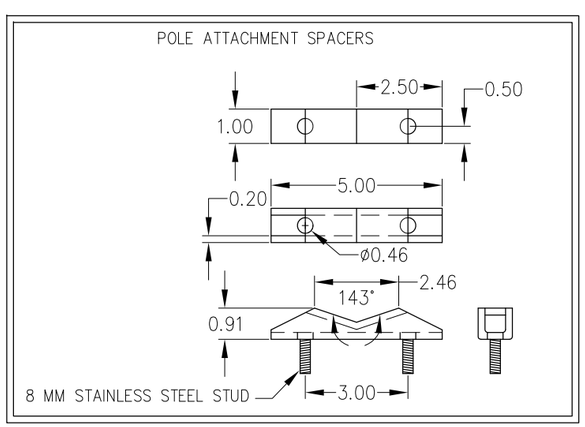
DRAWING INFO:

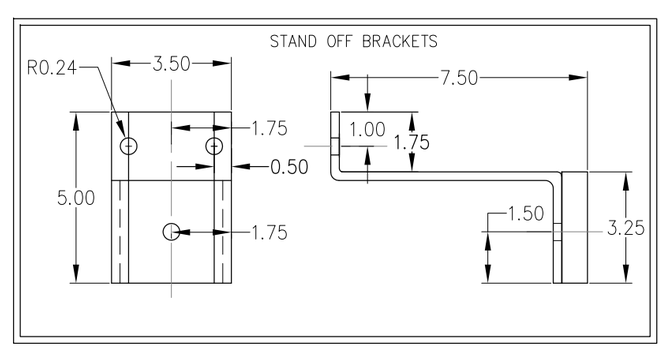
DRAWN BY:
FC

SHEET NUMBER:

D–2







REV:	DATE/BY:	REVISION DESCRIPTION:
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1	FXC 03/08/2014	ISSUED FOR FINAL

ENGINEER/CONSULTANT:

Civil Engineer

CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630
(949) 753-8807 OFFICE - (949) 753-8833 FAX

CLIENT:

CROWN CASTLE
NG WEST, INC.

STAMP:

SITE INFO:

SITE NAME:
MON19m1
VERIZON MONTECITO-MON19m1

SITE ADDRESS: THOMAS BROS PAGE 987 GRID E7
R.O.W. SOUTH SIDE OF ROMERO CANYON RD.
(ACROSS FROM 969 ROMERO CANYON RD)
SANTA BARBARA, CA 93108
LAT: 34.443777
LONG: -119.592570

SHEET TITLE:

DETAILS

DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:

D-3

SHROUD DETAIL | N.T.S. | 1

CROWN CASTLE NG WEST, INC

VERIZON MONTECITO-MON20
R.O.W. SOUTH SIDE OF ROMERO CANYON RD.
(ADJACENT TO 850 ROMERO CANYON)
SANTA BARBARA, CA 93108

GENERAL NOTES

1. APPROVAL OF THESE PLANS BY THE CITY ENGINEER DOES NOT AUTHORIZE ANY WORK TO BE PERFORMED UNTIL A PERMIT HAS BEEN ISSUED.
2. UPON ISSUANCE OF A PERMIT, NO WORK WILL BE PERMITTED ON WEEKENDS OR HOLIDAYS WITHOUT PERMISSION FROM THE ENGINEERING DEPARTMENT.
3. THE APPROVAL OF THIS PLAN OR ISSUANCE OF A PERMIT BY THE LOCAL JURISDICTION DOES NOT AUTHORIZE THE SUBDIVIDER AND OWNER TO VIOLATE ANY FEDERAL, STATE OR CITY LAWS, ORDINANCES, REGULATIONS, OR POLICIES, INCLUDING, BUT NOT LIMITED TO, THE FEDERAL ENDANGERED SPECIES ACT OF 1973 AND AMENDMENTS THERETO (16 USC SECTION 1531 ET.SEQ.).
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SURVEY MONUMENTS AND/OR VERTICAL CONTROL BENCHMARKS WHICH ARE DISTURBED OR DESTROYED BY CONSTRUCTION. A LAND SURVEYOR MUST FIELD LOCATE, REFERENCE, AND/OR PRESERVE ALL HISTORICAL OR CONTROLLING MONUMENTS PRIOR TO ANY EARTHWORK. IF DESTROYED, SUCH MONUMENTS SHALL BE REPLACED WITH APPROPRIATE MONUMENTS BY A LAND SURVEYOR, A CORNER RECORD OR RECORD OF SURVEY, AS APPROPRIATE, SHALL BE FIELD AS REQUIRED BY THE PROFESSIONAL LAND SURVEYORS ACT. IF ANY VERTICAL CONTROL IS TO BE DISTURBED OR DESTROYED, THE LOCAL JURISDICTION FIELD SURVEY SECTION MUST BE NOTIFIED, IN WRITING, AT LEAST 3 DAYS PRIOR TO THE CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE COST OF REPLACING ANY VERTICAL CONTROL BENCHMARKS DESTROYED BY THE CONSTRUCTION.
5. IMPORTANT NOTICE: SECTION 4216 OF THE GOVERNMENT CODE REQUIRES A DIG ALERT IDENTIFICATION NUMBER BE ISSUED BEFORE A "PERMIT TO EXCAVATE" WILL BE VALID. FOR YOUR DIG ALERT I.D. NUMBER, CALL UNDERGROUND SERVICE ALERT, TWO DAYS BEFORE YOU DIG.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR THE POTHOLE AND LOCATING OF ALL EXISTING UTILITIES THAT CROSS THE PROPOSED TRENCH LINE AND MUST MAINTAIN 1' MINIMUM VERTICAL CLEARANCE.
7. CONTRACTOR SHALL SUBMIT TO THE LOCAL JURISDICTION, A CONSTRUCTION PLAN TO PROTECT WATER MAINS PRIOR TO COMMENCING CONSTRUCTION.
8. CONTRACTOR SHALL REPLACE OR REPAIR ALL TRAFFIC SIGNAL LOOPS, CONDUIT, AND LANE STRIPING DAMAGED DURING CONSTRUCTION.
9. CONTRACTOR SHALL NOTIFY THE LOCAL JURISDICTION. A MINIMUM OF 48 HOURS PRIOR TO COMMENCING WORK WITHIN 10' OF ALL SEWER, WATER, AND STORMDRAIN MAIN INCLUDING ALL CROSSINGS.
10. THIS PROJECT WILL BE INSPECTED BY ENGINEERING AND CAPITAL PROJECTS DEPARTMENT, FIELD ENGINEERING DIVISION.
11. AS-BUILT DRAWINGS MUST BE SUBMITTED TO THE CITY RESIDENT ENGINEER PRIOR TO THE ACCEPTANCE OF THIS PROJECT.
12. PUBLIC IMPROVEMENT SUBJECT TO DESUETUDE OR DAMAGE." IF REPAIR OR REPLACEMENT OF SUCH PUBLIC IMPROVEMENTS IS REQUIRED, THE OWNER SHALL OBTAIN THE REQUIRED PERMITS FOR WORK IN THE PUBLIC RIGHT-OFWAY, SATISFACTORY TO THE PERMIT - ISSUING AUTHORITY.
13. PRIOR TO ANY DISTURBANCE TO THE SITE, EXCLUDING UTILITY MARKS-OUTS AND SURVEYING, THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR A PRE-CONSTRUCTION MEETING WITH THE LOCAL JURISDICTION FIELD ENGINEERING DIVISION.
14. PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION SHOWN ON THESE PLANS. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE. THE CONTRACTOR IS RESPONSIBLE TO ATTEND THE LOCAL JURISDICTIONS MONTHLY UTILITY COORDINATION COMMITTEE THE CONSTRUCTION ACTIVITIES WITH THE CITY AND ALL OTHER CONTRACTORS SO THAT NO TRENCH IS CUT WITHIN ANY OF THE CITY STREETS THAT HAVE BEEN CONSTRUCTED, REPAIRED, OR SLURRY SEALED WITHIN THREE YEARS OF THE STREET CONSTRCTUION/RESURFACING DATE.
15. MANHOLES OR COVERS SHALL BE LABELED "CROWN CASTLE" OR "CROWN CASTLE NG WEST".
16. CONTRACTOR SHALL IMPLEMENT AN EROSION AND SEDIMENT CONTROL PROGRAM DURING THE PROJECT CONSTRUCTION ACTIVITIES. THE PROGRAM SHALL MEET THE APPLICABLE REQUIREMENTS OF THE STATE WATER RESOURCE CONTROL BOARD.
17. THE CONTRACTOR SHALL HAVE EMERGENCY MATERIALS AND EQUIPMENT ON HAND FOR UNFORESEEN SITUATIONS, SUCH AS DAMAGE TO UNDERGROUND WATER, SEWER, AND STORM DRAIN FACILITIES WHEREBY FLOWS MAY GENERATE EROSION AND SEDIMENT POLLUTION.

SPECIAL NOTES

THE FOLLOWING NOTES ARE PROVIDED TO GIVE DIRECTIONS TO THE CONTRACTOR BY THE ENGINEER OF WORK. THE CITY ENGINEER'S SIGNATURE ON THESE PLANS DOES NOT CONSTITUTE APPROVAL OF THESE NOTES AND THE CITY WILL NOT BE RESPONSIBLE FOR THEIR ENFORCEMENT.

1. THE CONTRACTOR SHALL VERIFY THE LOCATION EXISTING UNDERGROUND UTILITIES INCLUDING SEWER LATERALS AND WATER SERVICES TO INDIVIDUAL LOTS BOTH VERTICAL AND HORIZONTAL PRIOR TO COMMENCING IMPROVEMENT OPERATIONS.
2. CONTRACTOR SHALL MAKE EXPLORATION EXCAVATIONS AND LOCATE EXISTING FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS OF PLANS IF REVISION IS NECESSARY BECAUSE OF LOCATION OF EXISTING UTILITIES.
3. LOCATION AND ELEVATIONS OF IMPROVEMENTS, TO BE MET BY WORK, SHALL BE CONFIRMED BY FIELD MEASUREMENT PRIOR TO CONSTRUCTION OF NEW WORK.
4. GRADES SHOWN ARE FINISH GRADES, CONTRACTOR SHALL DETERMINE NECESSARY SUB GRADE ELEVATIONS AND SHALL CONSTRUCT SMOOTH TRANSITION BETWEEN FINISH GRADES SHOWN.
5. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE RESPONSIBILITY FOR JOB SITE CONDITION DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY: THAT THIS PROVISION SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXPECTING FOR LIABILITY ARISING FROM SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
6. THE CONTRACTOR SHALL BE TOTALLY RESPONSIBLE FOR COMPLIANCE WITH THE PROVISIONS OF THE STATE OF CALIFORNIA SAFETY ORDERS.
7. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE FROM EXISTING RECORDS AND CORROBORATED, WHERE POSSIBLE WITH FIELD TIES. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING THE LOCATIONS SHOWN, BOTH HORIZONTALLY AND VERTICALLY, PRIOR TO CONSTRUCTION. IF EXISTING LOCATIONS VARY SUBSTANTIALLY FROM THE PLANS, THE ENGINEER SHOULD BE NOTIFIED TO MAKE ANY CONSTRUCTION CHANGES REQUIRED.
8. THE CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT FOR ALL SEWER AND WATER MAIN UNDER CROSSING IN ACCORDANCE WITH PART 1 SECTION 5-2 OF THE STANDARD SPECIFICATION.
9. THE CONTRACTOR SHALL REPLACE OR REPAIR ALL TRAFFIC SIGNAL LOOPS, CONDUITS, AND LANE STRIPING DAMAGED DURING CONSTRUCTION.
10. THE CONTRACTOR SHALL SUBMIT WORK PLANS FOR ALL BORE OPERATIONS TWO WEEKS PRIOR TO COMMENCING WORK.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR THE POTHOLE AND LOCATING OF ALL EXISTING UTILITIES THAT CROSS THE PROPOSED TRENCH LINE AND MUST MAINTAIN 1' MINIMUM VERTICAL CLEARANCE.
12. AS-BUILT DRAWINGS MUST BE SUBMITTED TO THE CITY ENGINEER PRIOR TO ACCEPTANCE OF THIS PROJECT.

VICINITY MAP - N.T.S.

GROUND BUS BAR
MECH. GRND. CONN.
CADWELD
ELECTRIC BOX
TELEPHONE BOX
EXISTING SERVICE POLE
SIDEWALK FLAG
EX. MANHOLE
LIGHT POLE
FOUNDATION
SPOT ELEV.
SET POINT
REVISION
DETAIL REF.
ELEVATION REF.
SECTION REF.
PROP./LEASE LINE
MATCH LINE
WORK POINT
TELE. CONDUIT
CENTERLINE
ELECT. CONDUIT
COAXIAL CABLE
MYERS PEDESTAL
VAULT STANDARD 2'X3'
STEEL POLE

SYMBOLS, LINETYPES AND HATCH PATTERNS

EROSION AND SEDIMENT CONTROL NOTES

TEMPORARY EROSION/SEDIMENT CONTROL, PRIOR TO COMPLETION OF FINAL IMPROVEMENTS, SHALL BE PERFORMED BY THE CONTRACTOR OR QUALIFIED PERSON AS INDICATED BELOW:

1. ALL REQUIREMENTS OF THE LOCAL JURISDICTION "LAND DEVELOPMENT MANUAL, STORM WATER STANDARDS" MUST BE INCORPORATED INTO THE DESIGN AND CONSTRUCTION OF THE PROPOSED GRADING/IMPROVEMENTS CONSISTENT WITH THE APPROVED STORM WATER AND/OR WATER POLLUTION CONTROL PLAN (WPCP).
2. FOR STORM DRAIN INLETS, PROVIDE A GRAVEL BAG SILT BASIN IMMEDIATELY UPSTREAM OF INLET AS INDICATED ON DETAILS.
3. FOR INLETS LOCATED AT SUMPS ADJACENT TO TOP OF SLOPES, THE CONTRACTOR SHALL ENSURE THAT WATER DRAINING TO THE SUMP IS DIRECTED INTO THE INLET AND THAT A MINIMUM OF 1.00" FREEBOARD EXISTS AND IS MAINTAINED ABOVE THE TOP OF THE INLET. IF FREEBOARD IS NOT PROVIDED BY GRADING SHOWN ON THESE PLANS, THE CONTRACTOR SHALL PROVIDE IT VIA TEMPORARY MEASURES, I.E. GRAVEL BAGS OR DIKES.
4. THE CONTRACTOR OR QUALIFIED PERSON SHALL BE RESPONSIBLE FOR CLEANUP OF SILT AND MUD ON ADJACENT STREET(S) AND STORM DRAIN SYSTEM DUE TO CONSTRUCTION ACTIVITY.
5. THE CONTRACTOR OR QUALIFIED PERSON SHALL CHECK AND MAINTAIN ALL LINED AND UNLINED DITCHES AFTER EACH RAINFALL.
6. THE CONTRACTOR SHALL REMOVE SILT AND DEBRIS AFTER EACH MAJOR RAINFALL.
7. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON, ALL NECESSARY MATERIALS SHALL BE STOCKPILED ON SITE AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
8. THE CONTRACTOR SHALL RESTORE ALL EROSION/SEDIMENT CONTROL MEASURES TO WORKING ORDER TO THE SATISFACTION OF THE CITY ENGINEER OR RESIDENT ENGINEER AFTER EACH RUN-OFF PRODUCING RAINFALL.
9. THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION CONTROL MEASURES AS MAY BE REQUIRED BY THE RESIDENT ENGINEER DUE TO UNCOMPLETED GRADING OPERATIONS OR UNFORESEEN CIRCUMSTANCES, WHICH MAY ARISE.
10. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATERS CREATE A HAZARDOUS CONDITION.
11. ALL EROSION/SEDIMENT CONTROL MEASURES PROVIDED PER THE APPROVED GRADING PLAN SHALL BE INCORPORATED HEREON. ALL EROSION/SEDIMENT CONTROL FOR INTERIM CONDITIONS SHALL BE DONE TO THE SATISFACTION OF THE RESIDENT ENGINEER.
12. GRADED AREAS AROUND THE PROJECT PERIMETER MUST DRAIN AWAY FROM THE FACE OF THE SLOPE AT THE CONCLUSION OF EACH WORKING DAY.
13. ALL REMOVABLE PROTECTIVE DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN RAIN IS IMMINENT.
14. THE CONTRACTOR SHALL ONLY GRADE, INCLUDING CLEARING AND GRUBBING FOR THE AREAS FOR WHICH THE CONTRACTOR OR QUALIFIED PERSON CAN PROVIDE EROSION/SEDIMENT CONTROL MEASURES.
15. THE CONTRACTOR SHALL ARRANGE FOR WEEKLY MEETINGS DURING OCTOBER 1ST TO APRIL 30TH FOR PROJECT TEAM (GENERAL CONTRACTOR, QUALIFIED PERSON, EROSION CONTROL SUBCONTRACTOR IF ANY, ENGINEER OF WORK, OWNER AND THE RESIDENT ENGINEER) TO EVALUATE THE ADEQUACY OF THE EROSION/SEDIMENT CONTROL MEASURES AND OTHER RELATED CONSTRUCTION ACTIVITIES.

TRAFFIC CONTROL NOTES

THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN (11" X 17") FOR APPROVAL PRIOR TO STARTING WORK. THE PLAN SHOULD BE SUBMITTED TO THE TRAFFIC CONTROL PERMIT COUNTER. CONTRACTOR SHALL OBTAIN A TRAFFIC CONTROL PERMIT A MINIMUM OF TWO (2) WORKING DAYS PRIOR TO STARTING WORK, AND A MINIMUM FIVE (5) DAYS IF WORK WILL AFFECT A BUS STOP OR AN EXISTING TRAFFIC SIGNAL, OR IF WORK WILL REQUIRE A ROAD OR ALLEY CLOSURE.

FOOTAGE TOTALS	
ASPHALT CUT	-
DIRT TRENCH	-
PUNCH THRU	-
BORE	-
TOTAL	-
R&R SWF TOTAL	-

PROJECT DICTIONARY

SITE ADDRESS: R.O.W. SOUTH SIDE OF ROMERO CANYON RD.
(ADJACENT TO 850 ROMERO CANYON)
SANTA BARBARA, CA 93108

APPLICANT: CROWN CASTLE NG WEST, INC
2125 WRIGHT AVE, SUITE #C9
LA VERNE, CA 91750
CONTACT: HEIDI PAYNE
PHONE: (949) 300-9493

CIVIL ENGINEER: CONNELL DESIGN GROUP, LLC
26455 RANCHO PARKWAY SOUTH
LAKE FOREST, CA 92630
CONTACT: FRANK CARTER
(949) 310-8233 PHONE
(949) 753-8833 FAX

CONSTRUCTION CHANGE TABLE

CHANGE	DATE	EFFECTED OR ADDED SHEET NUMBERS

APPLICABLE CODES

ALL WORK SHALL COMPLY WITH THE FOLLOWING APPLICABLE CODES:

*2010 CALIFORNIA BUILDING CODE
*2010 CALIFORNIA MECHANICAL CODE
*2010 CALIFORNIA PLUMBING CODE
*2010 CALIFORNIA ELECTRICAL CODE

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

PROJECT DESCRIPTION

PROJECT CONSISTS OF INSTALLATION OF:

1. (2) OMNI DIRECTIONAL ANTENNA ON EXISTING UTILITY POLE
2. EQUIPMENT PEDESTAL W/ BBU AND ELECTRICAL METER AT BASE OF POLE

SHEET INDEX:

TITLE SHEET	T-1 - SHEET 1 OF 8
TOPOGRAPHIC SURVEY	C-1 - SHEET 2 OF 8
SITE PLAN	A-1 - SHEET 3 OF 8
PROPOSED ELEVATIONS	A-2 - SHEET 4 OF 8
GRADING PLAN	A-3 - SHEET 5 OF 8
DETAILS	D-1 - SHEET 6 OF 8
DETAILS	D-2 - SHEET 7 OF 8
DETAILS	D-3 - SHEET 8 OF 8

REV:	DATE/BY:	REVISION DESCRIPTION:
0	FXC 03/15/2013	ISSUED FOR REVIEW
1	FXC 03/27/2013	ISSUED FOR FINAL
2	FXC 08/02/2013	ISSUED FOR FINAL
3	FXC 11/06/2013	ISSUED FOR FINAL
4	FXC 03/08/2014	ISSUED FOR FINAL

ENGINEER/CONSULTANT:

Civil Engineer

CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630
(949) 753-8807 OFFICE - (949) 753-8833 FAX

CLIENT:

CROWN CASTLE NG WEST, INC.

STAMP:

SITE INFO:

SITE NAME:
MON20
VERIZON MONTECITO-MON20

SITE ADDRESS: THOMAS BROS PAGE 997 GRID D1
R.O.W. SOUTH SIDE OF ROMERO CANYON RD.
(ADJACENT TO 850 ROMERO CANYON)
SANTA BARBARA, CA 93108
LAT: 34.44327
LONG: -119.59602

SHEET TITLE:

TITLE SHEET

DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:

T-1

SCALE: 1" = 10'

10' 0' 5' 10' 20'

LEGEND:

AC	ASPHALT CONCRETE
BDK	BRASS DISK
BSH	BUSH
BTM	BOTTOM
CLF	CHAIN LINK FENCE
DPL	DRIP LINE
EM	ELECTRICAL METER
EOC	EDGE OF CONCRETE
EP	EDGE OF PAVEMENT
FD	FOUND
GM	GAS METER
INS	INSULATOR
IP	IRON PIPE
NFOW	NORTH FACE OF WALL
NG	NATURAL GROUND
OHW	OVERHEAD WIRE
RK	ROCK
TOE	TOE OF SLOPE
TOP	TOP OF SLOPE
TP	TOP
TR	TREE
TRN	TRANSFORMER
TW	TOP OF WALL
UP	UTILITY POLE
WM	WATER METER
XARM	CROSS ARM

BLOCK WALL

CHAIN LINK FENCE

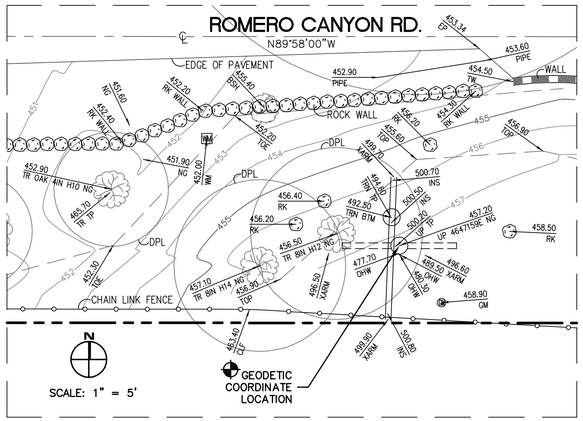
℄ CENTERLINE

FOUND MONUMENT

GAS METER

UTILITY POLE

WATER METER



COORDINATES:

LATITUDE 34°26'35.32" N
LONGITUDE 119°35'45.39" W

NAD 1983 GEODETIC COORDINATES AND ELEVATIONS WERE ESTABLISHED USING SURVEY GRADE "ASHTECH" G.P.S. RECEIVERS AND ASHTECH SURVEY GRADE PRECISION SOFTWARE FOR POST-PROCESSING.

BASIS OF BEARINGS:

THE NORTH RIGHT OF WAY LINE OF ROMERO CANYON ROAD, BEING SOUTH 89°58'00" EAST PER RECORD OF SURVEY, R.S.B. 62/22, RECORDS OF SANTA BARBARA COUNTY.

ASSESSOR'S IDENTIFICATION:

N/A

AREA:

N/A

BENCH MARK REFERENCE:

U.S.G.S. BENCH MARK "BM 472"

UNITED STATES GEOLOGICAL SURVEY BENCH MARK "BM 472" AS SHOWN ON THE "CARPINTERIA" 7.5 MINUTE QUADRANGLE MAP.

ELEVATION: 474.5 FEET A.M.S.L. (NAVD88) (DATUM VERIFIED IN FIELD TO BE WITHIN 1-A ACCURACY STANDARDS)

TITLE REPORT IDENTIFICATION:

N/A

EASEMENT NOTES:

N/A

LEGAL DESCRIPTION:

N/A

DATE OF SURVEY:

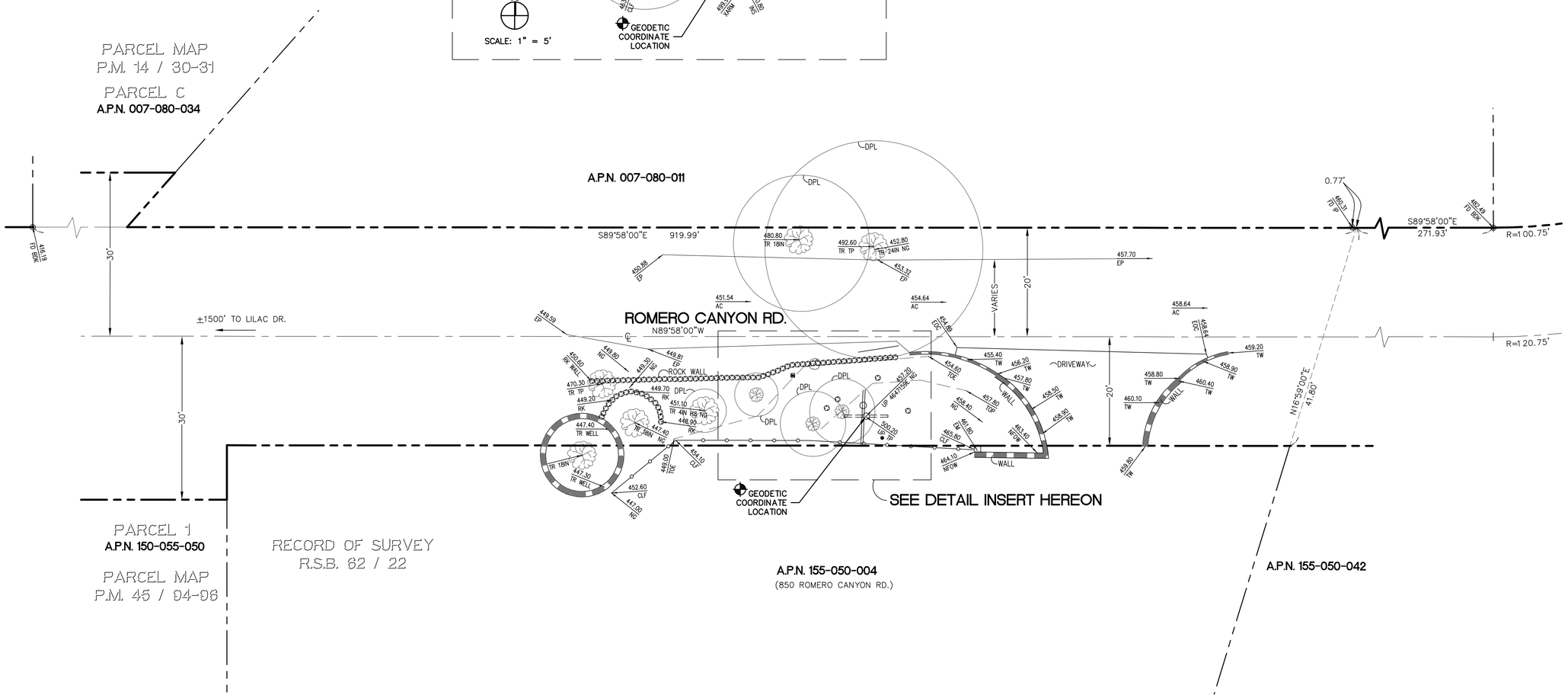
JULY 11, 2013

SURVEYORS NOTE:

THE RIGHT OF WAY LINES AND THEIR DIMENSIONS SHOWN HEREON ARE PER READILY AVAILABLE RECORDED INFORMATION AND THEIR LOCATIONS ARE APPROXIMATE, PENDING RECEIPT OF TITLE REPORT(S) FOR THE ADJACENT REAL PROPERTY.

LIVING PLANTS STATEMENT:

THE HEIGHTS AND ELEVATIONS FOR THE TREES, BUSHES AND OTHER LIVING PLANTS SHOWN HEREON, SHOULD BE CONSIDERED APPROXIMATE (+/-) AND ONLY VALID FOR THE DATE OF THIS SURVEY. THEY ARE PROVIDED AS A GENERAL REFERENCE AND SHOULD NOT BE USED FOR DESIGN PURPOSES.



REV:	DATE/BY:	REVISION DESCRIPTION:
1	07/22/13 JA	ISSUED FOR REVIEW

ENGINEER/CONSULTANT:

CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PKWY. SOUTH
LAKE FOREST, CA 92630-8326
(949) 753-8807 OFFICE - (949) 753-8833 FAX

SITE BUILDER:

CROWN CASTLE NG WEST, INC.

SURVEYOR:

BERT HAZE AND ASSOCIATES, INC.
LAND SURVEYING & MAPPING
3188 AIRWAY AVENUE, SUITE K1
COSTA MESA, CALIFORNIA 92626
714 557-1567 OFFICE
714 557-1568 FAX

JN. 706.233

STAMP:

PROFESSIONAL LAND SURVEYOR
BERT HAZE
No. 7211
Exp. 3-31-14
STATE OF CALIFORNIA

SITE INFO:

SITE NAME:

MON20

VERIZON MONTECITO-MON20

SITE ADDRESS:

R.O.W. SOUTH SIDE OF ROMERO CYN. RD.
(ADJACENT TO 850 ROMERO CYN. ROAD)
SANTA BARBARA, CA 93108

SHEET TITLE:

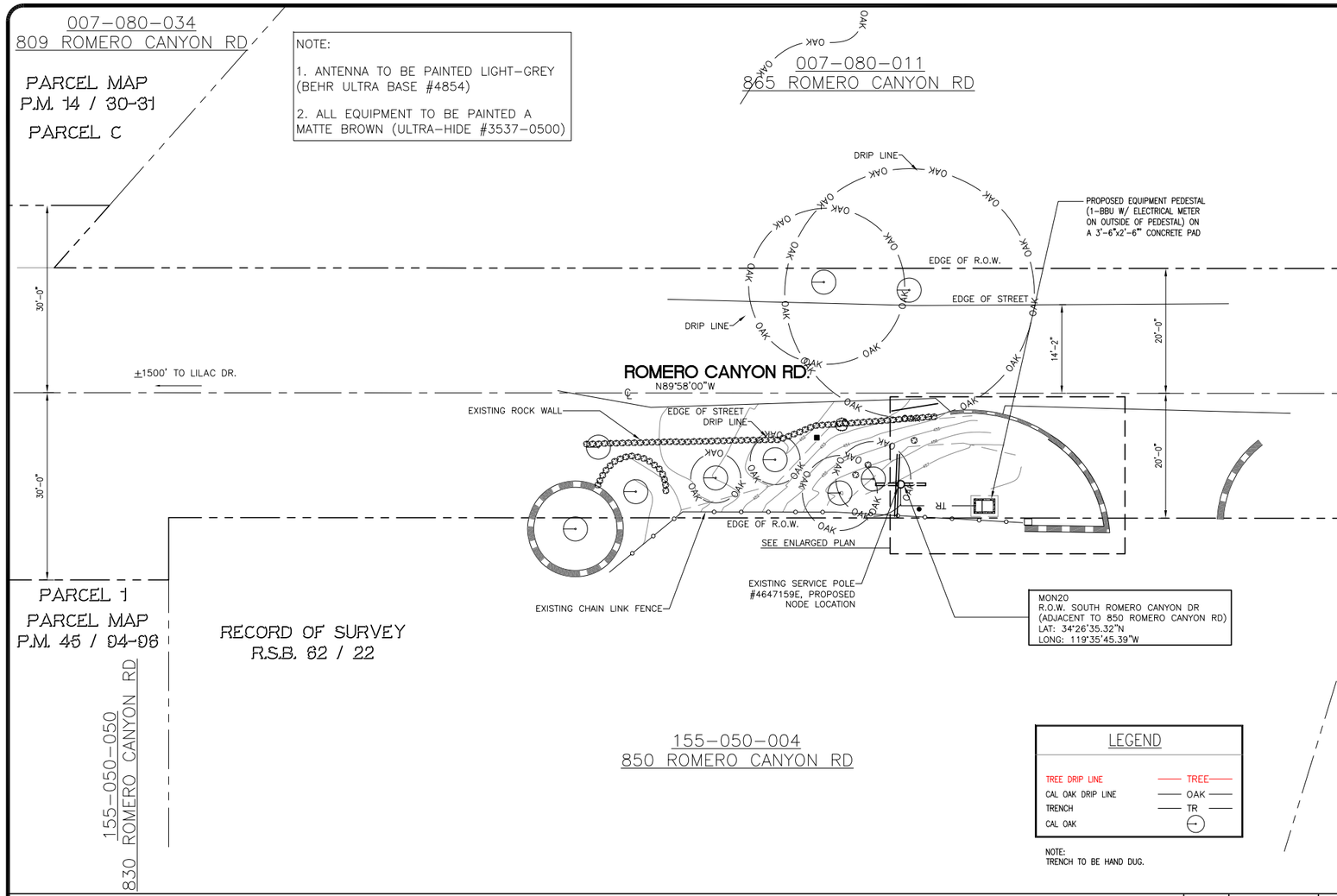
TOPOGRAPHIC SURVEY

DRAWING INFO:

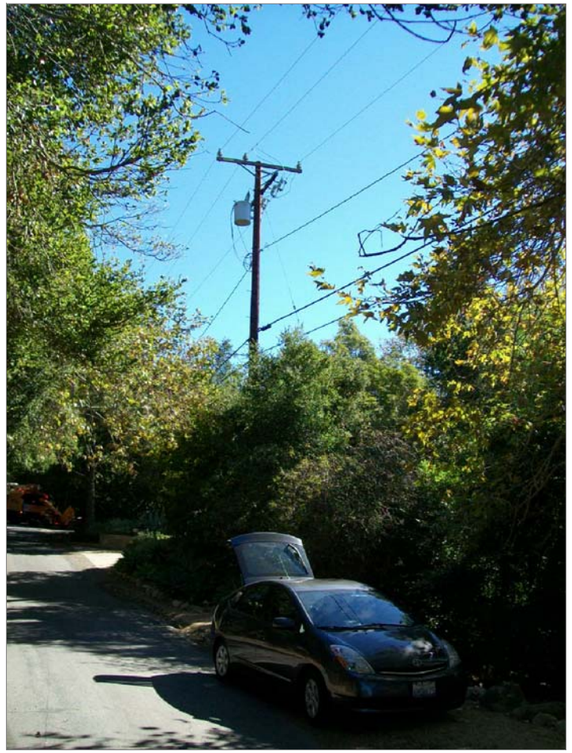
DWG. NAME:	DRAWN BY:	DATE:
MON20	JA	07/22/13

SHEET NUMBER:

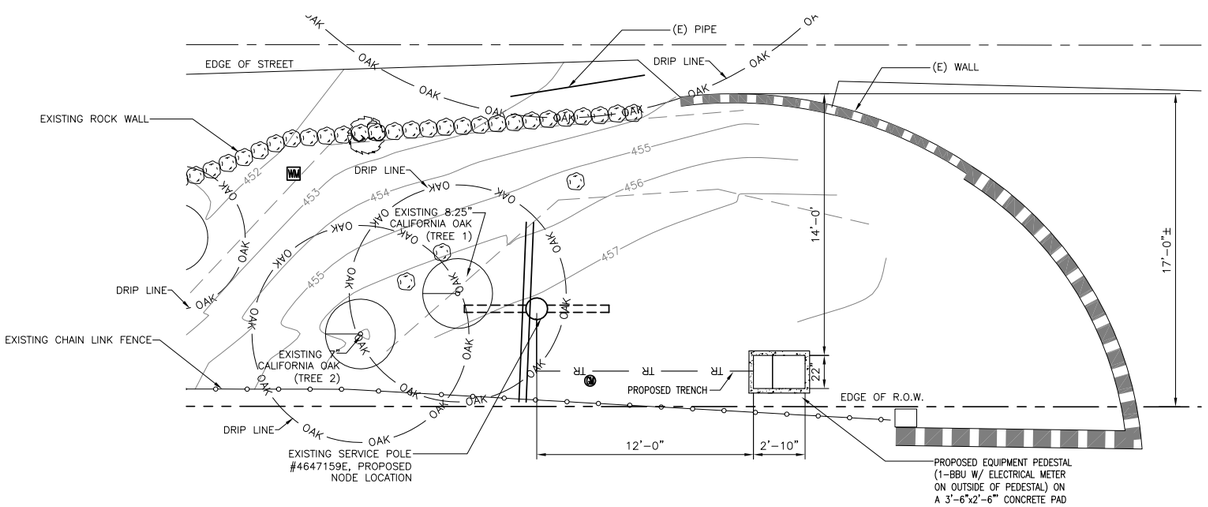
1 OF 1 | C-1



SITE PLAN SCALE: 1"=10'-0" 0 5' 10' 1

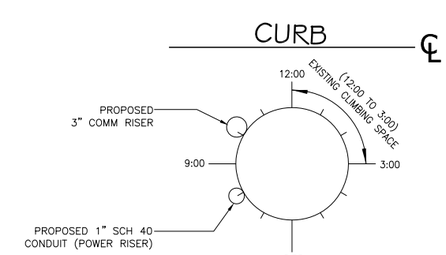


EXISTING PHOTO SCALE: N.T.S. 3



ENLARGED SITE PLAN SCALE: 1/4"=1'-0" 0 2' 4' 2

POLE WILL BE STEPPED IN ACCORDANCE TO G095 STANDARDS IN RESPECT TO CLIMBING SPACE.
1-3" CROWN CASTLE RISER @ 10:00
1-1" POWER RISER @ 8:00



RISER PROFILE SCALE: N.T.S. 4

REV:	DATE/BY:	REVISION DESCRIPTION:
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4	FXC 03/08/2014	ISSUED FOR FINAL

ENGINEER/CONSULTANT:

Civil Engineer
CDG
CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630
(949) 753-8807 OFFICE - (949) 753-8833 FAX

CLIENT:

CROWN CASTLE NG WEST, INC.

STAMP:

SITE INFO:

SITE NAME:
MON20
VERIZON MONTECITO-MON20

SITE ADDRESS: THOMAS BROS PAGE 997 GRID D1
R.O.W. SOUTH SIDE OF ROMERO CANYON RD.
(ADJACENT TO 850 ROMERO CANYON)
SANTA BARBARA, CA 93108
LAT: 34.44327
LONG: -119.59602

SHEET TITLE:

SITE PLAN, ENLARGED SITE PLAN, EXISTING PHOTO AND RISER PROFILE

DRAWING INFO:

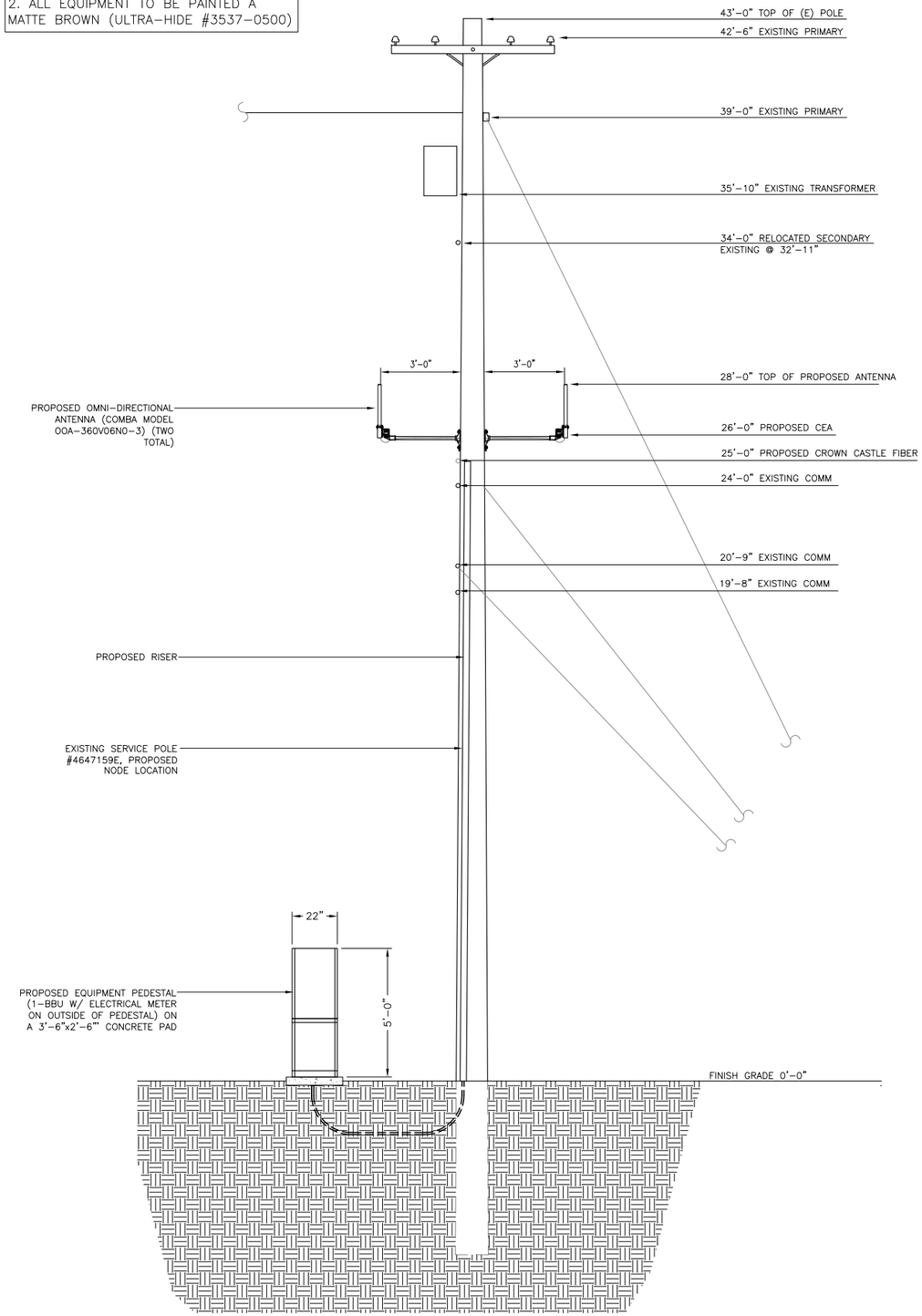
DRAWN BY:
FC

SHEET NUMBER:
A-1

NOTE:

1. ANTENNA TO BE PAINTED LIGHT-GREY (BEHR ULTRA BASE #4854)

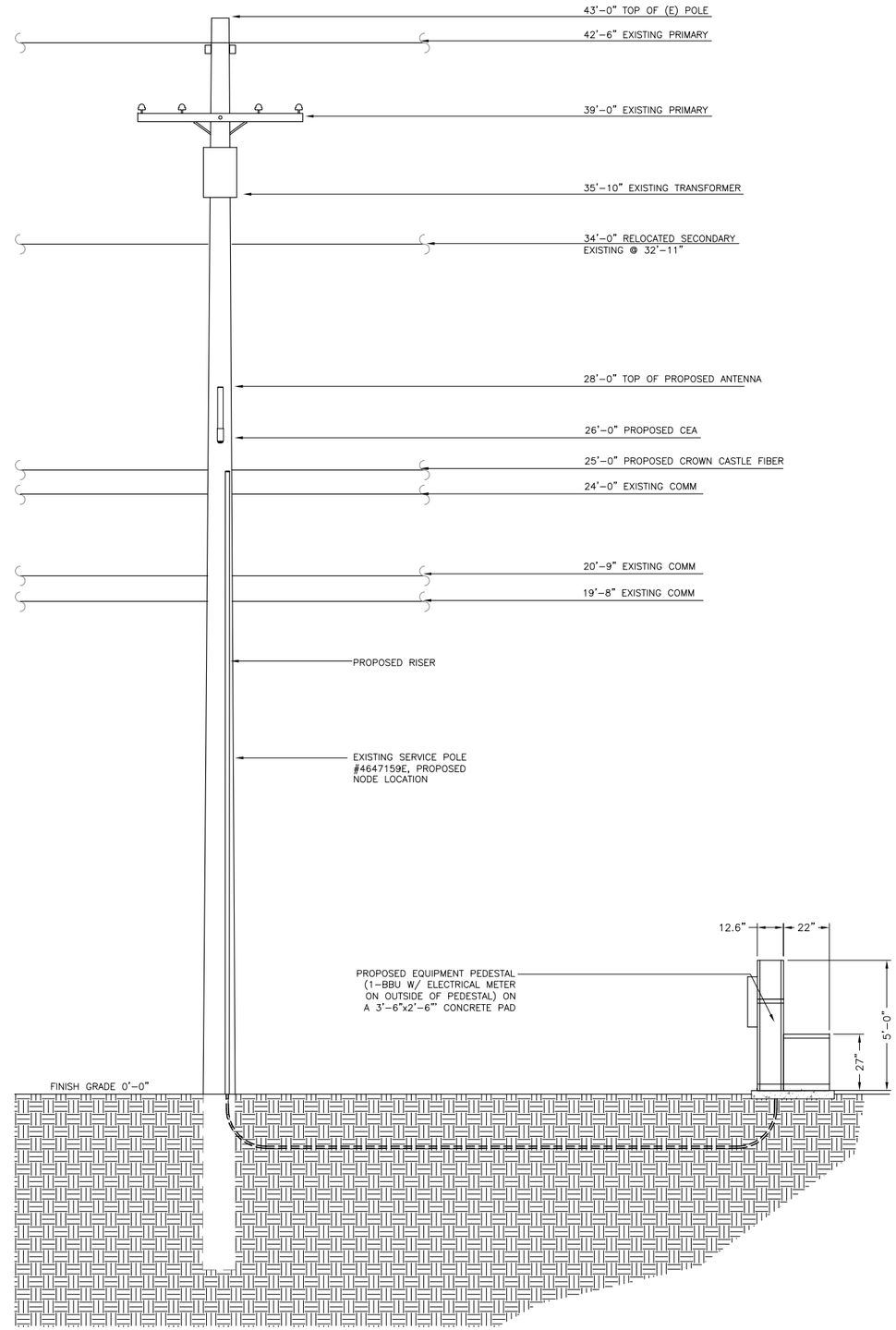
2. ALL EQUIPMENT TO BE PAINTED A MATTE BROWN (ULTRA-HIDE #3537-0500)



PROPOSED ELEVATION LOOKING WEST

SCALE: 3/8"=1'-0" 0 1' 2' 3'

1



PROPOSED ELEVATION LOOKING SOUTH

SCALE: 3/8"=1'-0" 0 1' 2' 3'

2

REV:	DATE/BY:	REVISION DESCRIPTION:
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ENGINEER/CONSULTANT:

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CONSULTING CIVIL ENGINEERS

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CLIENT:

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STAMP:

SITE INFO:

SITE NAME:

MON20

VERIZON MONTECITO-MON20

SITE ADDRESS: THOMAS BROS PAGE 997 GRID D1

R.O.W. SOUTH SIDE OF ROMERO CANYON RD.
(ADJACENT TO 850 ROMERO CANYON)
SANTA BARBARA, CA 93108

LAT: 34.44327
LONG: -119.59602

SHEET TITLE:

ELEVATION

DRAWING INFO:

DRAWN BY:
FC

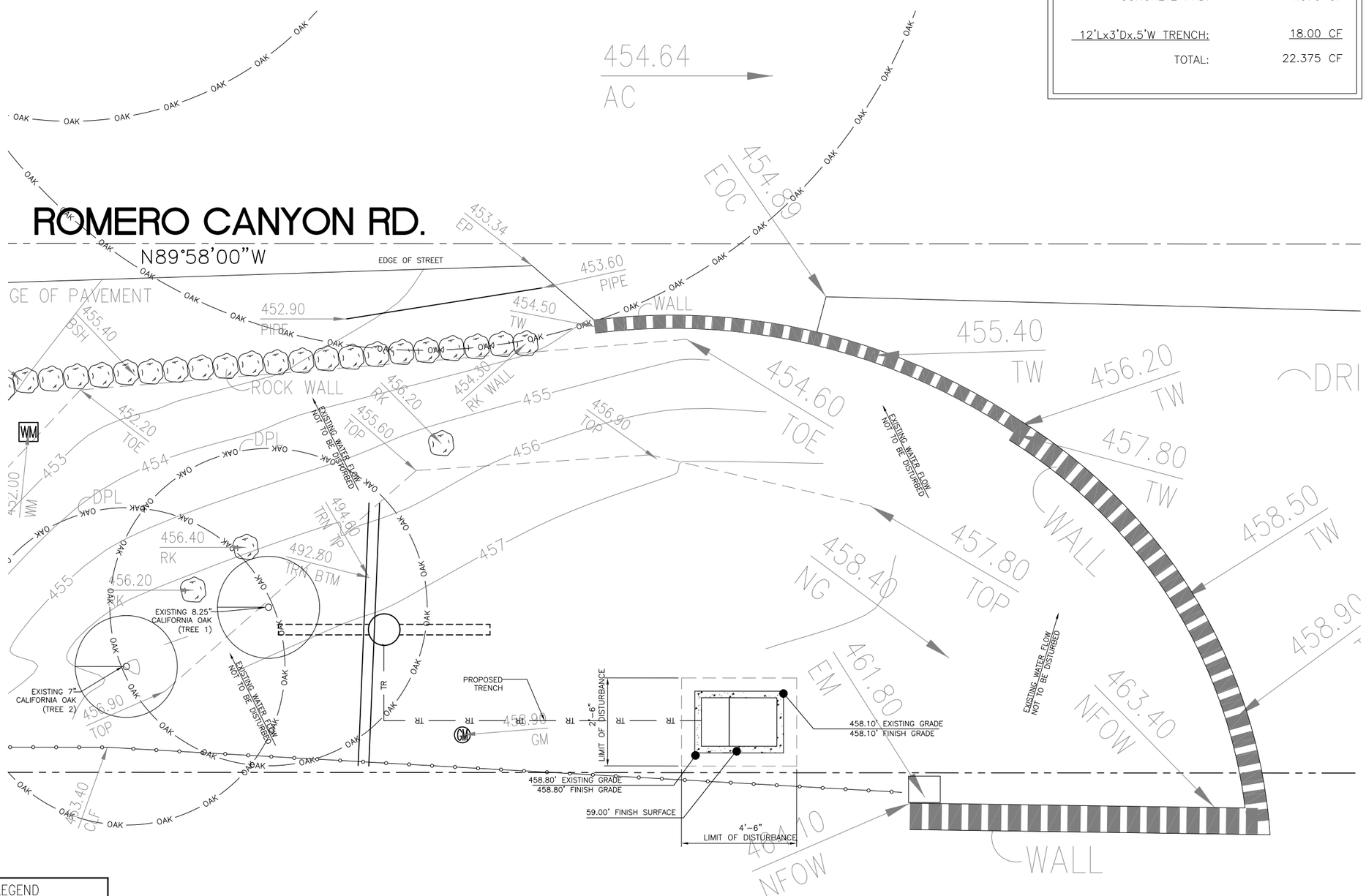
SHEET NUMBER:

A-2

NOTE:
NO CUT AND FILL REQUIRED

GRADING CALCULATION

CONCRETE PAD:	4.375 CF
12'Lx3'Dx.5'W TRENCH:	18.00 CF
TOTAL:	22.375 CF



LEGEND

TREE DRIP LINE	TREE
CAL OAK DRIP LINE	OAK
TRENCH	TR
CAL OAK	

NOTE:
TRENCH TO BE HAND DUG.

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LAT: 34.44327
LONG: –119.59602

SHEET TITLE:

GRADING PLAN

DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:
A–3

Outdoor Omni-directional Antenna

COMBA

OOA-360V06N0-3 VPol, 696-960/1710-2170MHz, 360°, 4.0/6.0 dBi

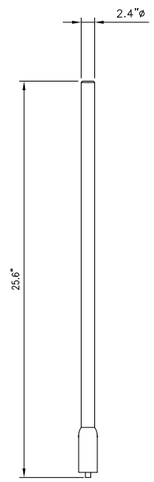
Technical Specifications

Electrical

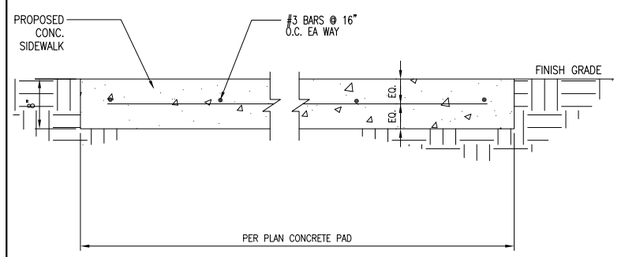
Frequency Range	MHz	696–960	1710–2170
Polarization		Vertical	
Gain	dBi	4.0±1	6.0±1
Horizontal Beamwidth	deg	360	
Vertical Beamwidth	deg	22–53	20–26
Electrical Downtilt–Fixed	deg	0	
VSWR		1.8	
Maximum Power	W	200	
Impedance		50	
Lightning Protection		Direct Ground	

Mechanical

Dimensions, HxDia	mm(in)	650x60 (25.6x2.4)
Weight, with Mounting kit	kg (lb)	1 (2.2)
Radome Material and Color		Fiberglass, Light Grey
Radiating Element Material		Copper
Connector Type and Location		N–Female, Bottom
Operational Temperature		–55 to +70
Operational Humidity	%	95
Operational Wind Speed	km/h (mph)	200 (124)
Shipping Dimensions, HxWxD	mm (in)	670x100x100 (26.4x3.9x3.9)
Shipping Weight	kg (lb)	1.2 (2.65)



ANTENNA SPECIFICATIONS N.T.S. 1



CONCRETE PAD N.T.S. 3

MMOE - Telecom

Multi Mount Outdoor Enclosure

> Compact enclosure design provides ideal fit for locations where aesthetics are important

> Light-weight powder coated aluminum construction offers superior corrosion resistant properties

> Large sun shield, reduces solar heat loading inside the cabinet

> 180° stainless steel piano-hinged door (with two locking open positions) make installation and maintenance easy and convenient

> Thermostat controlled filtered fan cooling and louvered vents ensure reliable operation in high temperature environments

> Various mounting options (including pole mount) make this highly versatile in space constrained mobile broadband applications

Alpha's Multi Mount Outdoor Enclosure (MMOE) - Telecom, is a cost-effective and versatile enclosure ideal for space constrained locations. The Multi Mount can be pole, host, wall or pedestal mounted and can accommodate Alpha's FXM UPS and up to four AlphaCell™ 853XL or 195 GXL front terminal batteries. With a small form factor, the Multi Mount is the perfect choice for locations where confined space necessitates creative installation options.

Alpha Multi Mount Outdoor Enclosure - Telecom

Consult your Alpha representative for P/N configurations

Mechanical

Dimensions:
- mm: 687H x 559W x 457D
- inches: 27H x 22W x 18D

Weight: 27.2kg (60lbs)
Construction: High strength corrosion resistant aluminum
Finish: Powder coated white color
Equipment space: 8H standard 19", 8RU space with one battery shelf
Cable entrance: Bottom of enclosure: 1 x 3" diameter knock-out (2¼" trade size) 4 x 1.125" diameter knock-out (¾" trade size)
Hinge type: Stainless steel piano hinge
Door prop: Aluminum rod, 2 locking open positions
Door latch: Ballcone 216 compression lock with padlock bracket

HVAC Specifications

Cooling: Thermostat controlled 48VDC fan, 100 cfm or better. On at 49°C (120°F) Off at 32°C (89°F)
Door installed louvers: Equipped with splash baffle

Enclosure options

Mounting: Pole, host, wall, or pedestal (please specify if pole used is concrete at time of order)

System Specifications

> System Options
- Alpha AC distribution panel
- Alpha universal automatic transfer switch
- Alpha universal generator transfer switch
- AlphaGuard battery balancer
- Battery heater mats
- Transient voltage surge suppression device

Agency Compliance

Telcordia: GR-63-CORE
NEMA rating: 3R

PEDESTAL SPECIFICATIONS N.T.S. 5

Electrical

Power Supply
Mains power, Vac ..... 115 or 230

Power consumption, Watts ..... 1100 max. < 750 @ normal operation

700 MHz SISO/MIMO

Frequency range, MHz
Uplink ..... 698 to 716/776 to 787
Downlink ..... 728 to 757

Output power per carrier*, dBm

Number of Carriers	1	2	4	8
LTE	43	40**	37	34

850 MHz

Frequency range, MHz
Uplink ..... 824 to 849
Downlink ..... 869 to 894

Output power per carrier*, dBm

Number of Carriers	1	2	4	8
Analog	43	40	37	34
GSM	43	40	37	34
CDMA	43	40	37	34
LTE	43	40**	37	34
UMTS	42	39	36	33

20W for Cell, PCS bands and 700MHz MIMO

1900 MHz

Frequency range, MHz
Uplink ..... 1850 to 1915
Downlink ..... 1930 to 1995

Output power per carrier*, dBm

Number of Carriers	1	2	4	8
GSM	43	40	37	34
CDMA	43	40	37	34
LTE	43	40**	37	34
UMTS	42	39	36	33

CommScope

ION-M7P/7P/85P/19P

Noise figure, dB
IC P3 optimized ..... +10 max.
Noise figure optimized ..... +6 max. 4.5 typical

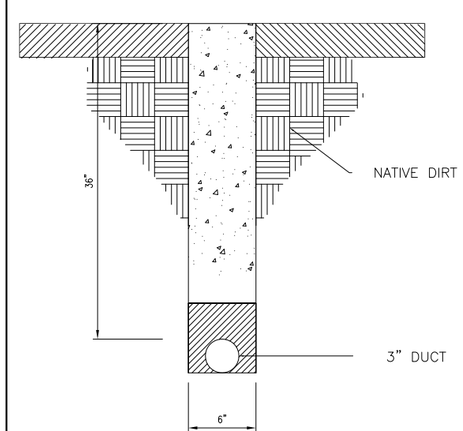
Mechanical****

Height, width, depth, mm (in) ..... 817 x 245 x 218 (32.2 x 9.6 x 8.6)

Weight, kg (lb) 40 (88.2)

Page 1, February 27, 2013 Company Confidential

ION-M7P/7P/85P/19P N.T.S. 2



* TRENCH TO BE BACK FILL WITH NATIVE MATERIAL & COMPACTED TO 90% OR BETTER & REPLACE LANDSCAPING IN KIND.

TRENCH N.T.S. 4

REV:	DATE/BY:	REVISION DESCRIPTION:
0	FXC 03/15/2013	ISSUED FOR REVIEW
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ENGINEER/CONSULTANT:

Civil Engineer

CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630
(949) 753-8807 OFFICE - (949) 753-8833 FAX

CLIENT:

CROWN CASTLE
NG WEST, INC.

STAMP:

SITE INFO:

SITE NAME:
MON20
VERIZON MONTECITO–MON20

SITE ADDRESS: THOMAS BROS PAGE 997 GRID D1
R.O.W. SOUTH SIDE OF ROMERO CANYON RD.
(ADJACENT TO 850 ROMERO CANYON)
SANTA BARBARA, CA 93108
LAT: 34.44327
LONG: –119.59602

SHEET TITLE:

DETAILS

DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:
D–1

REV:	DATE/BY:	REVISION DESCRIPTION:
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SHEET TITLE:

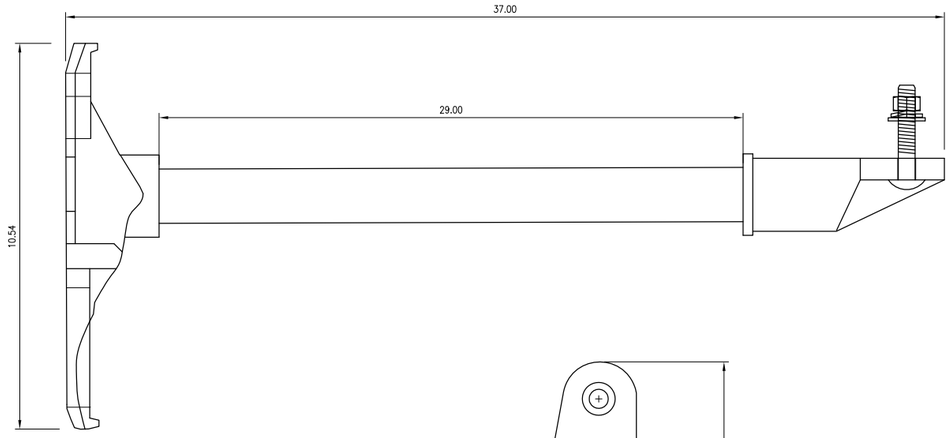
DETAILS

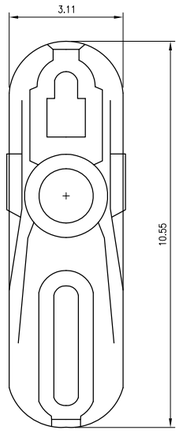
DRAWING INFO:

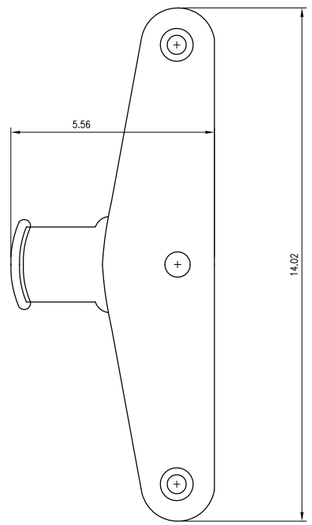
DRAWN BY:
FC

SHEET NUMBER:
D–2

PEDESTAL DETAIL | N.T.S. | 1

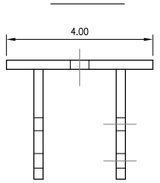


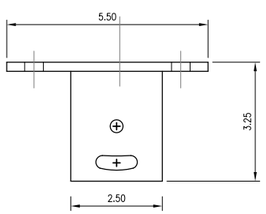




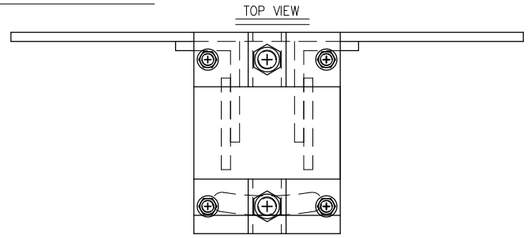
COMM SPACE BRACKET

FRONT VIEW





TOP VIEW



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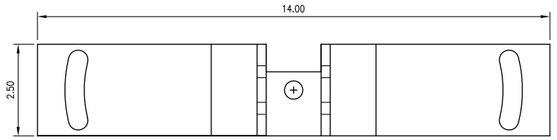
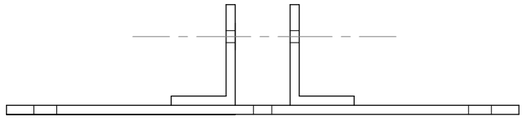
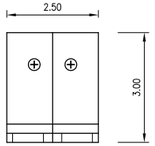


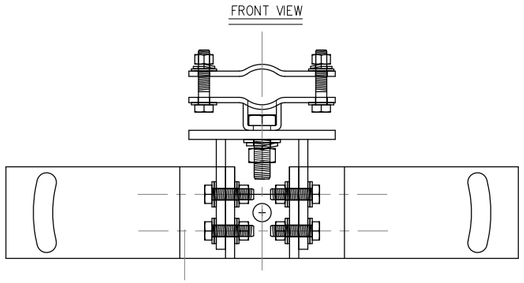
FRONT VIEW



SIDE VIEW



FRONT VIEW



ANTENNA MOUNT | N.T.S. | 1

AlphaCell
General Specifications

Model:	220 GXL	195 GXL	165 GXL
Warranty[1]:	4 to 5 year full replacement	4 to 5 year full replacement	4 to 5 year full replacement
Service Life:	Extended	Extended	Extended
Runtime (minutes)[2]:	220	195	165
Sealed VRLA:	Valve regulated lead acid	Valve regulated lead acid	Valve regulated lead acid
Heat Resistant:	Extreme	Extreme	Extreme
Hydrogen Emission:	Low	Low	Low
Terminals:	Threaded insert 1/4" - 20 UNC	Threaded insert 1/4" - 20 UNC	Threaded insert 1/4"- 20 UNC

Specifications[4]

Model:	220 GXL	195 GXL	165 GXL
Typical Runtime (minutes)[2]:	220	195	165
Cells Per Unit:	6	6	6
Voltage Per Unit:	12.8	12.8	12.8
Conductance Value:	1175	1100	1000
Max. Discharge Current (A):	900	900	800
Short Circuit Current (A):	2800	2600	2500
10 Second Volts @ 100A:	11.4	11.3	11.2
Ohms Impedance 60Hz:	0.0050	0.0050	0.0055
Nominal Capacity at 20hrs: (to 1.75VPC)	109Ah	100Ah	86
Nominal Capacity at 20hrs: (to 1.70VPC)	110Ah	102Ah	87
BCI Group Size:	31	31	27
Weight (lb/kg):	73/33.2	67/30.5	63/28.6
Height w/ Terminals (in/mm):	8.48/215.4	8.48/215.4	8.05/204.5
Width (in/mm)[3]:	13.42/340.9	13.42/340.9	12.5/317.8
Depth (in/mm)[3]:	6.80/172.7	6.80/172.7	6.83/173.4
Operating Temperature Range Discharge:	-40 to 71°C (-40 to 160°F)	-40 to 71°C (-40 to 160°F)	-40 to 71°C (-40 to 160°F)
Charge (with temp compensation):	-23 to 60°C (-9.4 to 140°F)	-23 to 60°C (-9.4 to 140°F)	-23 to 60°C (-9.4 to 140°F)
Float Charging Voltage (Vdc):	13.5 to 13.8	13.5 to 13.8	13.5 to 13.8
AC Ripple Charger:	0.5% RMS or 1.5% of float charge voltage recommended for best results. Max. allowed = 4% P-P		

Notes:
[1] Warranty varies by country and region. Warranty valid only when used with Alpha approved Power Supplies, Chargers and Enclosures. Consult your sales person for details.
[2] Runtimes calculated using a 25A DC constant current load.
[3] Dimensions at top of battery.
[4] See AlphaCell Users Guide for Additional Details.

Typical Standby Time in Minutes @ 25°C/77°F

XM2S0Vac②	4A			6A			8A			10A		
Battery/Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	508	453	396	320	285	249	236	209	183	188	165	144
4 batteries:	701	625	546	444	396	346	329	293	256	261	232	203
6 batteries:	1091	973	853	701	625	546	523	465	407	418	372	325
8 batteries:	1497	1338	1165	969	859	750	720	643	562	577	515	450
9 batteries:	1696	1519	1322	1101	978	853	820	733	640	659	587	514
XM2S0Vac③	12A			14A			16A			18A		
Battery/Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	143	132	115	119	108	92	101	89	77	87	78	66
4 batteries:	210	187	163	169	151	132	144	128	112	124	111	99
6 batteries:	339	301	264	275	245	214	236	209	183	204	182	159
8 batteries:	478	419	367	385	341	299	329	293	256	288	255	223
9 batteries:	538	479	419	440	391	342	377	335	294	329	293	256
XM2S0Vac②	4A			6A			8A			10A		
Battery/Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	798	712	622	508	453	396	377	335	294	300	267	233
4 batteries:	1091	973	853	701	625	546	523	465	407	418	372	325
6 batteries:	1696	1519	1322	1101	978	853	820	733	640	659	587	514
8 batteries:	2288	2097	1708	1497	1338	1165	1122	1005	877	904	809	706
9 batteries:	2590	2345	2037	1699	1519	1322	1273	1143	997	1029	921	803
XM2S0Vac②	12A			14A			16A			18A		
Battery/Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	242	215	188	190	174	151	168	148	125	144	128	107
4 batteries:	339	301	264	275	245	214	236	209	182	204	182	155
6 batteries:	538	479	419	440	391	340	377	335	290	329	293	252
8 batteries:	741	660	577	607	541	470	525	465	402	458	407	351
9 batteries:	843	753	658	692	617	538	597	531	462	523	465	402

*Above calculations based on an AC load with a .96 cable plant power factor.

For contact information visit www.alpha.com

The Alpha Group >

North America	Europe, Middle East & Africa			Asia Pacific	Latin & South America
Canada Tel: +1 604 430 1476 Fax: +1 604 430 8908 Toll Free: +1 800 667 8043 USA Tel: +1 360 647 2360 Fax: +1 360 671 4936	Cyprus Tel: +357 25 375 675 Fax: +357 25 359 595 Russia Tel: +7 495 925 9944 Fax: +7 495 916 1349	Germany Tel: +49 9122 79889 0 Fax: +49 9122 79889 21 United Kingdom Tel: +44 1279 501110 Fax: +44 1279 659076	Lithuania Tel: +370 5 210 5091 Fax: +370 5 210 5290	P.R. China Tel: +852 2736 8863 Fax: +852 2169 7988	Contact USA office

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049-297-10-B002 (06/09)

BATTERY SPECIFICATIONS | N.T.S. | 2

REV:	DATE/BY:	REVISION DESCRIPTION:
0	FXC 03/15/2013	ISSUED FOR REVIEW
1	FXC 03/27/2013	ISSUED FOR FINAL
2	FXC 08/02/2013	ISSUED FOR FINAL
3	FXC 11/06/2013	ISSUED FOR FINAL
4	FXC 03/08/2014	ISSUED FOR FINAL

ENGINEER/CONSULTANT:

Civil Engineer

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CONSULTING CIVIL ENGINEERS
26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630
(949) 753-8807 OFFICE - (949) 753-8833 FAX

CLIENT:

CROWN CASTLE
NG WEST, INC.

STAMP:

SITE INFO:

SITE NAME:
MON20
VERIZON MONTECITO–MON20

SITE ADDRESS: THOMAS BROS PAGE 997 GRID D1
R.O.W. SOUTH SIDE OF ROMERO CANYON RD.
(ADJACENT TO 850 ROMERO CANYON)
SANTA BARBARA, CA 93108
LAT: 34.44327
LONG: –119.59602

SHEET TITLE:

DETAILS

DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:
D–3

CROWN CASTLE NG WEST, INC

VERIZON MONTECITO-MON21

R.O.W. SOUTH SIDE OF CAMINO DEL ROSARIO
(ADJACENT TO 2245 CAMINO DEL ROSARIO)
SANTA BARBARA, CA 93108

GENERAL NOTES

1. APPROVAL OF THESE PLANS BY THE CITY ENGINEER DOES NOT AUTHORIZE ANY WORK TO BE PERFORMED UNTIL A PERMIT HAS BEEN ISSUED.
2. UPON ISSUANCE OF A PERMIT, NO WORK WILL BE PERMITTED ON WEEKENDS OR HOLIDAYS WITHOUT PERMISSION FROM THE ENGINEERING DEPARTMENT.
3. THE APPROVAL OF THIS PLAN OR ISSUANCE OF A PERMIT BY THE LOCAL JURISDICTION DOES NOT AUTHORIZE THE SUBDIVIDER AND OWNER TO VIOLATE ANY FEDERAL, STATE OR CITY LAWS, ORDINANCES, REGULATIONS, OR POLICIES, INCLUDING, BUT NOT LIMITED TO, THE FEDERAL ENDANGERED SPECIES ACT OF 1973 AND AMENDMENTS THERETO (16 USC SECTION 1531 ET.SEQ.).
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SURVEY MONUMENTS AND/OR VERTICAL CONTROL BENCHMARKS WHICH ARE DISTURBED OR DESTROYED BY CONSTRUCTION. A LAND SURVEYOR MUST FIELD LOCATE, REFERENCE, AND/OR PRESERVE ALL HISTORICAL OR CONTROLLING MONUMENTS PRIOR TO ANY EARTHWORK. IF DESTROYED, SUCH MONUMENTS SHALL BE REPLACED WITH APPROPRIATE MONUMENTS BY A LAND SURVEYOR, A CORNER RECORD OR RECORD OF SURVEY, AS APPROPRIATE, SHALL BE FIELD AS REQUIRED BY THE PROFESSIONAL LAND SURVEYORS ACT. IF ANY VERTICAL CONTROL IS TO BE DISTURBED OR DESTROYED, THE LOCAL JURISDICTION FIELD SURVEY SECTION MUST BE NOTIFIED, IN WRITING, AT LEAST 3 DAYS PRIOR TO THE CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE COST OF REPLACING ANY VERTICAL CONTROL BENCHMARKS DESTROYED BY THE CONSTRUCTION.
5. IMPORTANT NOTICE: SECTION 4216 OF THE GOVERNMENT CODE REQUIRES A DIG ALERT IDENTIFICATION NUMBER BE ISSUED BEFORE A "PERMIT TO EXCAVATE" WILL BE VALID. FOR YOUR DIG ALERT I.D. NUMBER, CALL UNDERGROUND SERVICE ALERT, TWO DAYS BEFORE YOU DIG.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR THE POTHOLE AND LOCATING OF ALL EXISTING UTILITIES THAT CROSS THE PROPOSED TRENCH LINE AND MUST MAINTAIN 1' MINIMUM VERTICAL CLEARANCE.
7. CONTRACTOR SHALL SUBMIT TO THE LOCAL JURISDICTION, A CONSTRUCTION PLAN TO PROTECT WATER MAINS PRIOR TO COMMENCING CONSTRUCTION.
8. CONTRACTOR SHALL REPLACE OR REPAIR ALL TRAFFIC SIGNAL LOOPS, CONDUIT, AND LANE STRIPING DAMAGED DURING CONSTRUCTION.
9. CONTRACTOR SHALL NOTIFY THE LOCAL JURISDICTION. A MINIMUM OF 48 HOURS PRIOR TO COMMENCING WORK WITHIN 10' OF ALL SEWER, WATER, AND STORMDRAIN MAIN INCLUDING ALL CROSSINGS.
10. THIS PROJECT WILL BE INSPECTED BY ENGINEERING AND CAPITAL PROJECTS DEPARTMENT, FIELD ENGINEERING DIVISION.
11. AS-BUILT DRAWINGS MUST BE SUBMITTED TO THE CITY RESIDENT ENGINEER PRIOR TO THE ACCEPTANCE OF THIS PROJECT.
12. PUBLIC IMPROVEMENT SUBJECT TO DESUETUDE OR DAMAGE." IF REPAIR OR REPLACEMENT OF SUCH PUBLIC IMPROVEMENTS IS REQUIRED, THE OWNER SHALL OBTAIN THE REQUIRED PERMITS FOR WORK IN THE PUBLIC RIGHT-OFWAY, SATISFACTORY TO THE PERMIT – ISSUING AUTHORITY.
13. PRIOR TO ANY DISTURBANCE TO THE SITE, EXCLUDING UTILITY MARKS-OUTS AND SURVEYING, THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR A PRE-CONSTRUCTION MEETING WITH THE LOCAL JURISDICTION FIELD ENGINEERING DIVISION.
14. PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION SHOWN ON THESE PLANS. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE. THE CONTRACTOR IS RESPONSIBLE TO ATTEND THE LOCAL JURISDICTIONS MONTHLY UTILITY COORDINATION COMMITTEE THE CONSTRUCTION ACTIVITIES WITH THE CITY AND ALL OTHER CONTRACTORS SO THAT NO TRENCH IS CUT WITHIN ANY OF THE CITY STREETS THAT HAVE BEEN CONSTRUCTED, REPAIRED, OR SLURRY SEALED WITHIN THREE YEARS OF THE STREET CONSTRCTUION/RESURFACING DATE.
15. MANHOLES OR COVERS SHALL BE LABELED "CROWN CASTLE" OR "CROWN CASTLE NG WEST".
16. CONTRACTOR SHALL IMPLEMENT AN EROSION AND SEDIMENT CONTROL PROGRAM DURING THE PROJECT CONSTRUCTION ACTIVITIES. THE PROGRAM SHALL MEET THE APPLICABLE REQUIREMENTS OF THE STATE WATER RESOURCE CONTROL BOARD.
17. THE CONTRACTOR SHALL HAVE EMERGENCY MATERIALS AND EQUIPMENT ON HAND FOR UNFORESEEN SITUATIONS, SUCH AS DAMAGE TO UNDERGROUND WATER, SEWER, AND STORM DRAIN FACILITIES WHEREBY FLOWS MAY GENERATE EROSION AND SEDIMENT POLLUTION.

SPECIAL NOTES

THE FOLLOWING NOTES ARE PROVIDED TO GIVE DIRECTIONS TO THE CONTRACTOR BY THE ENGINEER OF WORK. THE CITY ENGINEER'S SIGNATURE ON THESE PLANS DOES NOT CONSTITUTE APPROVAL OF THESE NOTES AND THE CITY WILL NOT BE RESPONSIBLE FOR THEIR ENFORCEMENT.

1. THE CONTRACTOR SHALL VERIFY THE LOCATION EXISTING UNDERGROUND UTILITIES INCLUDING SEWER LATERALS AND WATER SERVICES TO INDIVIDUAL LOTS BOTH VERTICAL AND HORIZONTAL PRIOR TO COMMENCING IMPROVEMENT OPERATIONS.
2. CONTRACTOR SHALL MAKE EXPLORATION EXCAVATIONS AND LOCATE EXISTING FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS OF PLANS IF REVISION IS NECESSARY BECAUSE OF LOCATION OF EXISTING UTILITIES.
3. LOCATION AND ELEVATIONS OF IMPROVEMENTS, TO BE MET BY WORK, SHALL BE CONFIRMED BY FIELD MEASUREMENT PRIOR TO CONSTRUCTION OF NEW WORK.
4. GRADES SHOWN ARE FINISH GRADES, CONTRACTOR SHALL DETERMINE NECESSARY SUB GRADE ELEVATIONS AND SHALL CONSTRUCT SMOOTH TRANSITION BETWEEN FINISH GRADES SHOWN.
5. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE RESPONSIBILITY FOR JOB SITE CONDITION DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS PROVISION SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXPECTING FOR LIABILITY ARISING FROM SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
6. THE CONTRACTOR SHALL BE TOTALLY RESPONSIBLE FOR COMPLIANCE WITH THE PROVISIONS OF THE STATE OF CALIFORNIA SAFETY ORDERS.
7. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE FROM EXISTING RECORDS AND CORROBORATED, WHERE POSSIBLE WITH FIELD TIES. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING THE LOCATIONS SHOWN, BOTH HORIZONTALLY AND VERTICALLY, PRIOR TO CONSTRUCTION. IF EXISTING LOCATIONS VARY SUBSTANTIALLY FROM THE PLANS, THE ENGINEER SHOULD BE NOTIFIED TO MAKE ANY CONSTRUCTION CHANGES REQUIRED.
8. THE CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT FOR ALL SEWER AND WATER MAIN UNDER CROSSING IN ACCORDANCE WITH PART 1 SECTION 5-2 OF THE STANDARD SPECIFICATION.
9. THE CONTRACTOR SHALL REPLACE OR REPAIR ALL TRAFFIC SIGNAL LOOPS, CONDUITS, AND LANE STRIPING DAMAGED DURING CONSTRUCTION.
10. THE CONTRACTOR SHALL SUBMIT WORK PLANS FOR ALL BORE OPERATIONS TWO WEEKS PRIOR TO COMMENCING WORK.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR THE POTHOLE AND LOCATING OF ALL EXISTING UTILITIES THAT CROSS THE PROPOSED TRENCH LINE AND MUST MAINTAIN 1' MINIMUM VERTICAL CLEARANCE.
12. AS-BUILT DRAWINGS MUST BE SUBMITTED TO THE CITY ENGINEER PRIOR TO ACCEPTANCE OF THIS PROJECT.

VICINITY MAP – N.T.S.

GROUND BUS BAR	LIGHT POLE	ELEVATION REF.	ELECT. CONDUIT
MECH. GRND. CONN.	FOUNDATION	SECTION REF.	COAXIAL CABLE
CADWELD	SPOT ELEV.	PROP./LEASE LINE	MYERS PEDESTAL
ELECTRIC BOX	SET POINT	MATCH LINE	VAULT STANDARD 2'X3'
TELEPHONE BOX	REVISION	WORK POINT	STEEL POLE
EXISTING SERVICE POLE		TELE. CONDUIT	
SIDEWALK FLAG		CENTERLINE	
EX. MANHOLE	DETAIL REF.		

SYMBOLS, LINETYPES AND HATCH PATTERNS

EROSION AND SEDIMENT CONTROL NOTES

TEMPORARY EROSION/SEDIMENT CONTROL, PRIOR TO COMPLETION OF FINAL IMPROVEMENTS, SHALL BE PERFORMED BY THE CONTRACTOR OR QUALIFIED PERSON AS INDICATED BELOW:

1. ALL REQUIREMENTS OF THE LOCAL JURISDICTION "LAND DEVELOPMENT MANUAL, STORM WATER STANDARDS" MUST BE INCORPORATED INTO THE DESIGN AND CONSTRUCTION OF THE PROPOSED GRADING/IMPROVEMENTS CONSISTENT WITH THE APPROVED STORM WATER AND/OR WATER POLLUTION CONTROL PLAN (WPCP).
2. FOR STORM DRAIN INLETS, PROVIDE A GRAVEL BAG SILT BASIN IMMEDIATELY UPSTREAM OF INLET AS INDICATED ON DETAILS.
3. FOR INLETS LOCATED AT SUMPS ADJACENT TO TOP OF SLOPES, THE CONTRACTOR SHALL ENSURE THAT WATER DRAINING TO THE SUMP IS DIRECTED INTO THE INLET AND THAT A MINIMUM OF 1.00" FREEBOARD EXISTS AND IS MAINTAINED ABOVE THE TOP OF THE INLET. IF FREEBOARD IS NOT PROVIDED BY GRADING SHOWN ON THESE PLANS, THE CONTRACTOR SHALL PROVIDE IT VIA TEMPORARY MEASURES, I.E. GRAVEL BAGS OR DIKES.
4. THE CONTRACTOR OR QUALIFIED PERSON SHALL BE RESPONSIBLE FOR CLEANUP OF SILT AND MUD ON ADJACENT STREET(S) AND STORM DRAIN SYSTEM DUE TO CONSTRUCTION ACTIVITY.
5. THE CONTRACTOR OR QUALIFIED PERSON SHALL CHECK AND MAINTAIN ALL LINED AND UNLINED DITCHES AFTER EACH RAINFALL.
6. THE CONTRACTOR SHALL REMOVE SILT AND DEBRIS AFTER EACH MAJOR RAINFALL.
7. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON, ALL NECESSARY MATERIALS SHALL BE STOCKPILED ON SITE AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
8. THE CONTRACTOR SHALL RESTORE ALL EROSION/SEDIMENT CONTROL MEASURES TO WORKING ORDER TO THE SATISFACTION OF THE CITY ENGINEER OR RESIDENT ENGINEER AFTER EACH RUN-OFF PRODUCING RAINFALL.
9. THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION CONTROL MEASURES AS MAY BE REQUIRED BY THE RESIDENT ENGINEER DUE TO UNCOMPLETED GRADING OPERATIONS OR UNFORESEEN CIRCUMSTANCES, WHICH MAY ARISE.
10. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATERS CREATE A HAZARDOUS CONDITION.
11. ALL EROSION/SEDIMENT CONTROL MEASURES PROVIDED PER THE APPROVED GRADING PLAN SHALL BE INCORPORATED HEREON. ALL EROSION/SEDIMENT CONTROL FOR INTERIM CONDITIONS SHALL BE DONE TO THE SATISFACTION OF THE RESIDENT ENGINEER.
12. GRADED AREAS AROUND THE PROJECT PERIMETER MUST DRAIN AWAY FROM THE FACE OF THE SLOPE AT THE CONCLUSION OF EACH WORKING DAY.
13. ALL REMOVABLE PROTECTIVE DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN RAIN IS IMMINENT.
14. THE CONTRACTOR SHALL ONLY GRADE, INCLUDING CLEARING AND GRUBBING FOR THE AREAS FOR WHICH THE CONTRACTOR OR QUALIFIED PERSON CAN PROVIDE EROSION/SEDIMENT CONTROL MEASURES.
15. THE CONTRACTOR SHALL ARRANGE FOR WEEKLY MEETINGS DURING OCTOBER 1ST TO APRIL 30TH FOR PROJECT TEAM (GENERAL CONTRACTOR, QUALIFIED PERSON, EROSION CONTROL SUBCONTRACTOR IF ANY, ENGINEER OF WORK, OWNER AND THE RESIDENT ENGINEER) TO EVALUATE THE ADEQUACY OF THE EROSION/SEDIMENT CONTROL MEASURES AND OTHER RELATED CONSTRUCTION ACTIVITIES.

TRAFFIC CONTROL NOTES

THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN (11" X 17") FOR APPROVAL PRIOR TO STARTING WORK. THE PLAN SHOULD BE SUBMITTED TO THE TRAFFIC CONTROL PERMIT COUNTER. CONTRACTOR SHALL OBTAIN A TRAFFIC CONTROL PERMIT A MINIMUM OF TWO (2) WORKING DAYS PRIOR TO STARTING WORK, AND A MINIMUM FIVE (5) DAYS IF WORK WILL AFFECT A BUS STOP OR AN EXISTING TRAFFIC SIGNAL, OR IF WORK WILL REQUIRE A ROAD OR ALLEY CLOSURE.

FOOTAGE TOTALS	
ASPHALT CUT	–
DIRT TRENCH	–
PUNCH THRU	–
BORE	–
TOTAL	–
R&R SWF TOTAL	–

PROJECT DICTIONARY

SITE ADDRESS: R.O.W. SOUTH SIDE OF CAMINO DEL ROSARIO (ADJACENT TO 2245 CAMINO DEL ROSARIO) SANTA BARBARA, CA 93108

APPLICANT: CROWN CASTLE NG WEST, INC
2125 WRIGHT AVE, SUITE #C9
LA VERNE, CA 91750
CONTACT: HEIDI PAYNE
PHONE: (949) 300-9493

CIVIL ENGINEER: CONNELL DESIGN GROUP, LLC
26455 RANCHO PARKWAY SOUTH
LAKE FOREST, CA 92630
CONTACT: FRANK CARTER
(949) 310-8233 PHONE
(949) 753-8833 FAX

CONSTRUCTION CHANGE TABLE

CHANGE	DATE	EFFECTED OR ADDED SHEET NUMBERS

APPLICABLE CODES

ALL WORK SHALL COMPLY WITH THE FOLLOWING APPLICABLE CODES:

*2010 CALIFORNIA BUILDING CODE
*2010 CALIFORNIA MECHANICAL CODE
*2010 CALIFORNIA PLUMBING CODE
*2010 CALIFORNIA ELECTRICAL CODE

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

PROJECT DESCRIPTION

PROJECT CONSISTS OF INSTALLATION OF:

1. (2) OMNI DIRECTIONAL ANTENNAS ON EXISTING UTILITY POLE
2. EQUIPMENT VAULT AT BASE OF EXISTING POLE
3. EQUIPMENT PEDESTAL W/ BBU AND ELECTRICAL METER AT BASE OF POLE

SHEET INDEX:

TITLE SHEET	T-1 – SHEET 1 OF 8
SITE PLAN	A-1 – SHEET 2 OF 8
PROPOSED ELEVATIONS	A-2 – SHEET 3 OF 8
GRADING PLAN	A-3 – SHEET 4 OF 8
DETAILS	D-1 – SHEET 5 OF 8
DETAILS	D-2 – SHEET 6 OF 8
DETAILS	D-3 – SHEET 7 OF 8
DETAILS	D-4 – SHEET 8 OF 8

REV:	DATE/BY:	REVISION DESCRIPTION:
0	FXC 03/21/2013	ISSUED FOR REVIEW
1	FXC 03/27/2013	ISSUED FOR FINAL
2	FXC 11/06/2013	ISSUED FOR FINAL
3	FXC 03/08/2013	ISSUED FOR FINAL

ENGINEER/CONSULTANT:

Civil Engineer
CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630
(949) 753-8807 OFFICE - (949) 753-8833 FAX

CLIENT:

CROWN CASTLE NG WEST, INC.

STAMP:

SITE INFO:

SITE NAME:
MON21
VERIZON MONTECITO-MON21

SITE ADDRESS: THOMAS BROS PAGE 997 GRID D1
R.O.W. SOUTH SIDE OF CAMINO DEL ROSARIO
(ADJACENT TO 2245 CAMINO DEL ROSARIO)
SANTA BARBARA, CA 93108
LAT: 34.44083°
LONG: -119.59919°

SHEET TITLE:

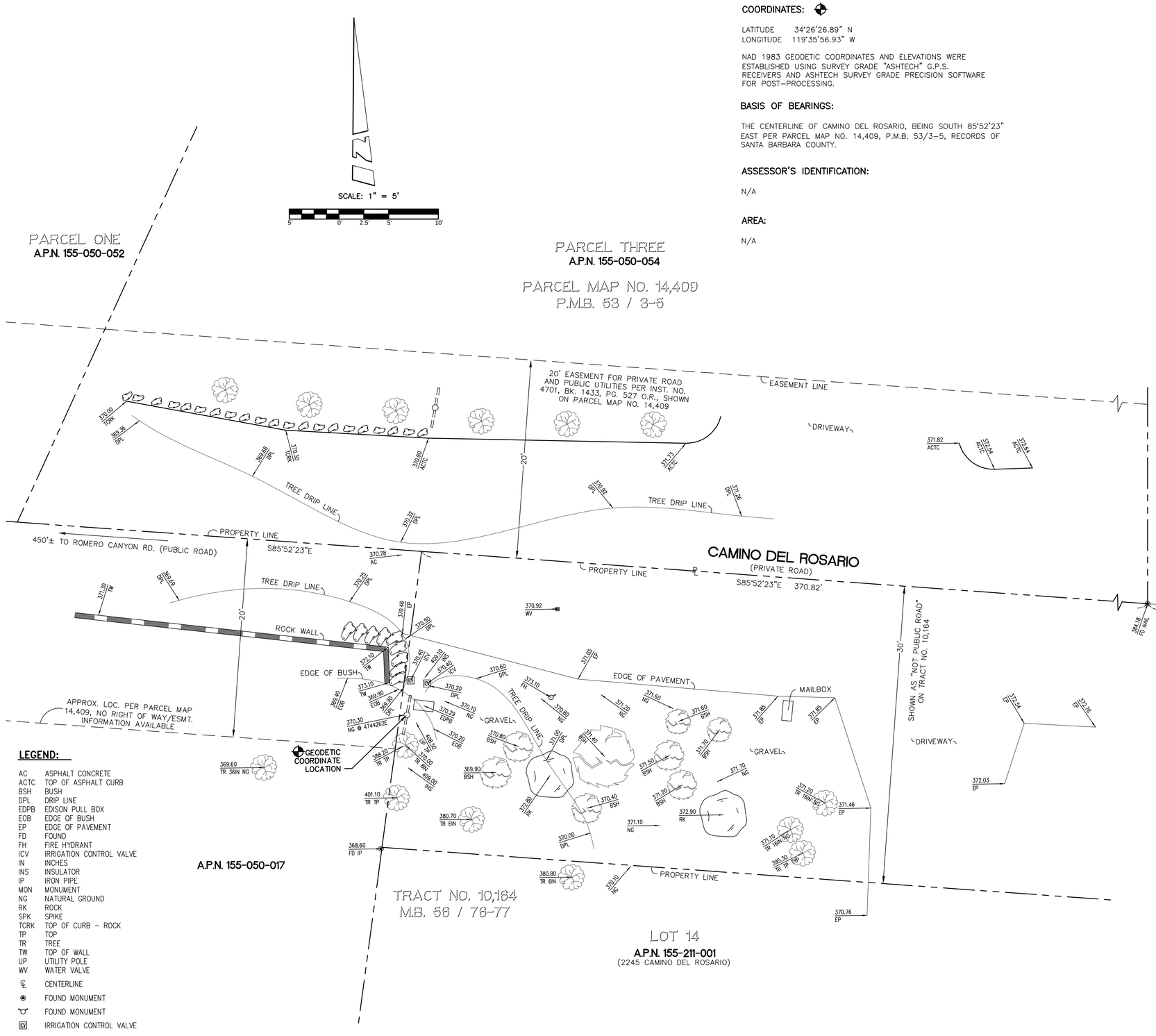
TITLE SHEET

DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:

T-1



LEGEND:

AC	ASPHALT CONCRETE
ACTC	TOP OF ASPHALT CURB
BSH	BUSH
DPL	DRIP LINE
EDPB	EDISON PULL BOX
EOB	EDGE OF BUSH
EP	EDGE OF PAVEMENT
FD	FOUND
FH	FIRE HYDRANT
ICV	IRRIGATION CONTROL VALVE
IN	INCHES
INS	INSULATOR
IP	IRON PIPE
MON	MONUMENT
NG	NATURAL GROUND
RK	ROCK
SPK	SPIKE
TCRK	TOP OF CURB - ROCK
TP	TOP
TR	TREE
TW	TOP OF WALL
UP	UTILITY POLE
WV	WATER VALVE
℄	CENTERLINE
◉	FOUND MONUMENT
☋	FOUND MONUMENT
ICV	IRRIGATION CONTROL VALVE
▭	ROCK WALL
= =O= =	UTILITY POLE
WV	WATER VALVE

COORDINATES:

LATITUDE 34°26'26.89" N
LONGITUDE 119°35'56.93" W

NAD 1983 GEODETIC COORDINATES AND ELEVATIONS WERE ESTABLISHED USING SURVEY GRADE "ASHTECH" G.P.S. RECEIVERS AND ASHTECH SURVEY GRADE PRECISION SOFTWARE FOR POST-PROCESSING.

BASIS OF BEARINGS:

THE CENTERLINE OF CAMINO DEL ROSARIO, BEING SOUTH 85°52'23" EAST PER PARCEL MAP NO. 14,409, P.M.B. 53/3-5, RECORDS OF SANTA BARBARA COUNTY.

ASSESSOR'S IDENTIFICATION:

N/A

AREA:

N/A

BENCH MARK REFERENCE:

U.S.G.S. BENCH MARK "BM 400"

UNITED STATES GEOLOGICAL SURVEY BENCH MARK "BM 400" AS SHOWN ON THE "CARPINTERIA" 7.5 MINUTE QUADRANGLE MAP.

ELEVATION: 402.5 FEET A.M.S.L. (NAVD88) (DATUM VERIFIED IN FIELD TO BE WITHIN 1-A ACCURACY STANDARDS)

TITLE REPORT IDENTIFICATION:

N/A

EASEMENT NOTES:

N/A

LEGAL DESCRIPTION:

N/A

DATE OF SURVEY:

JULY 18, 2013

SURVEYORS NOTE:

THE RIGHT OF WAY LINES AND THEIR DIMENSIONS SHOWN HEREON ARE PER READILY AVAILABLE RECORDED INFORMATION AND THEIR LOCATIONS ARE APPROXIMATE, PENDING RECEIPT OF TITLE REPORT(S) FOR THE ADJACENT REAL PROPERTY.

LIVING PLANTS STATEMENT:

THE HEIGHTS AND ELEVATIONS FOR THE TREES, BUSHES AND OTHER LIVING PLANTS SHOWN HEREON, SHOULD BE CONSIDERED APPROXIMATE (+/-) AND ONLY VALID FOR THE DATE OF THIS SURVEY. THEY ARE PROVIDED AS A GENERAL REFERENCE AND SHOULD NOT BE USED FOR DESIGN PURPOSES.

REV:	DATE/BY:	REVISION DESCRIPTION:
1	07/29/13 MDL	ISSUED FOR REVIEW

ENGINEER/CONSULTANT:

CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PKWY. SOUTH
LAKE FOREST, CA 92630-8326
(949) 753-8807 OFFICE - (949) 753-8833 FAX

SITE BUILDER:

CROWN CASTLE NG WEST, INC.

SURVEYOR:

BERT HAZE AND ASSOCIATES, INC.
LAND SURVEYING & MAPPING
3188 AIRWAY AVENUE, SUITE K1
COSTA MESA, CALIFORNIA 92626
714 557-1567 OFFICE
714 557-1568 FAX

JN. 706.234

STAMP:

PROFESSIONAL LAND SURVEYOR
BERT HAZE
No. 7211
Exp. 3-31-14
STATE OF CALIFORNIA

SITE INFO:

SITE NAME:

MON21
VERIZON MONTECITO-MON21

SITE ADDRESS:

R.O.W. SOUTH SIDE OF OF CAMINO DEL ROSARIO (ADJACENT TO 2245 CAMINO DEL ROSARIO) SANTA BARBARA, CA 93108

SHEET TITLE:

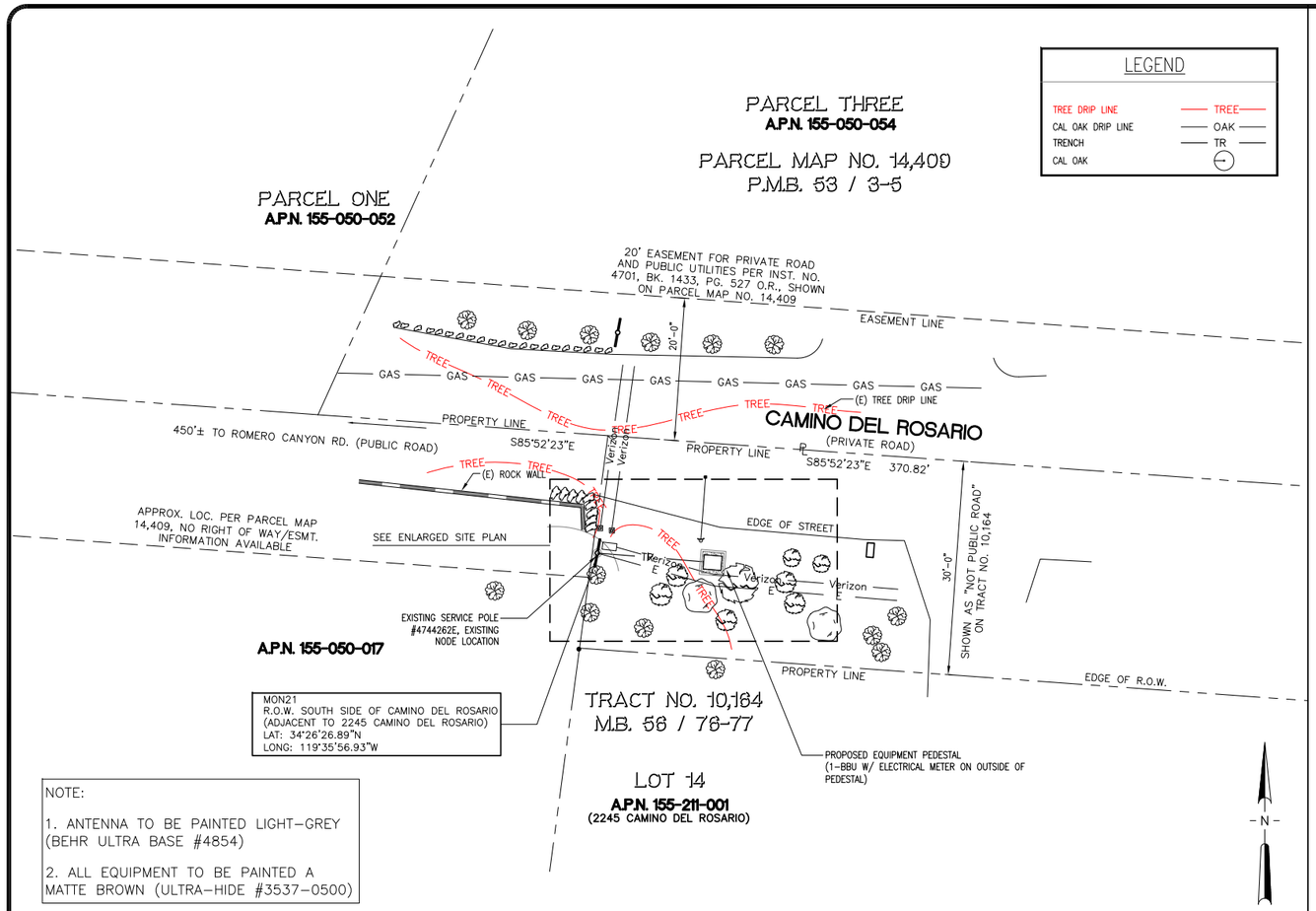
TOPOGRAPHIC SURVEY

DRAWING INFO:

DWG. NAME:	DRAWN BY:	DATE:
MON21	MDL	07/29/13

SHEET NUMBER:

1 OF 1 | C-1

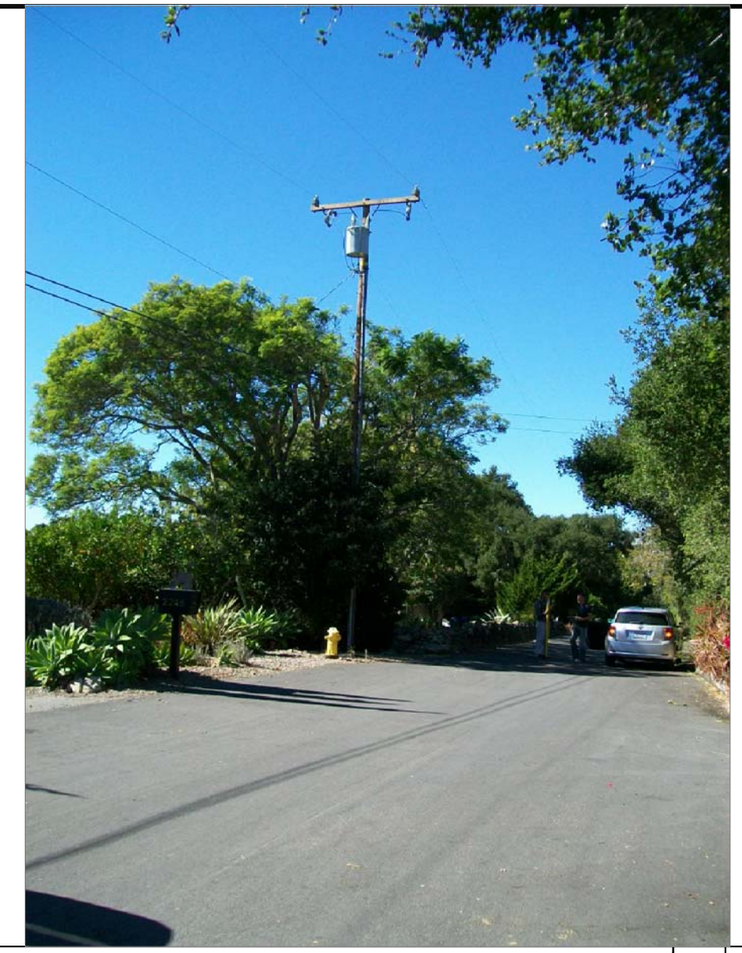


NOTE:

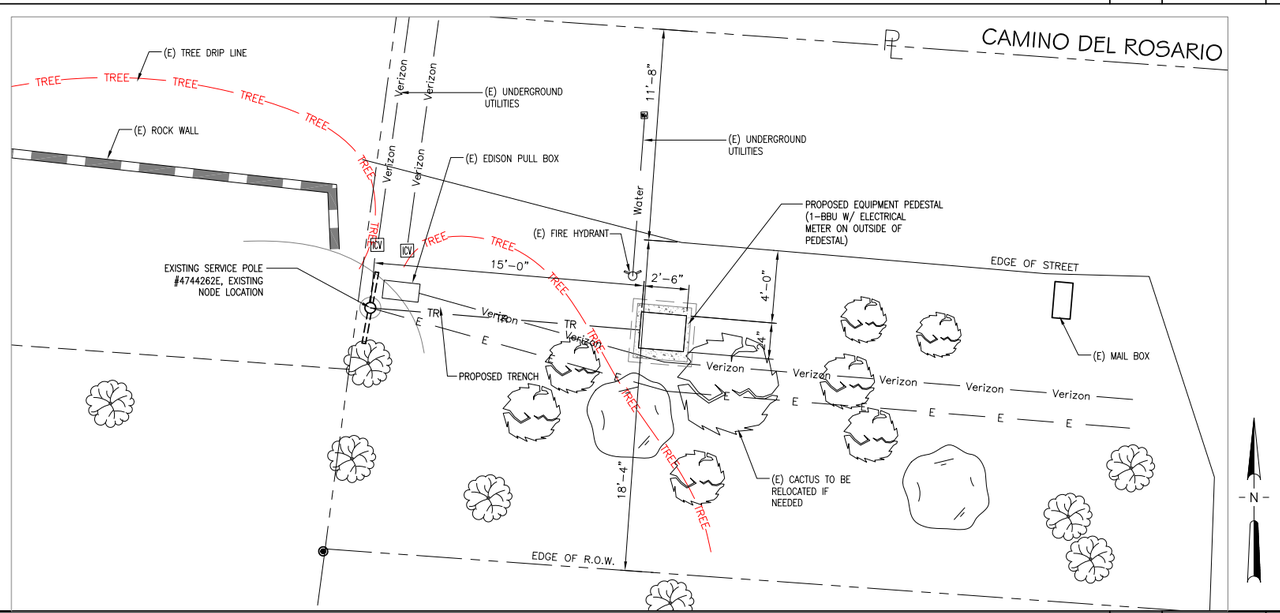
1. ANTENNA TO BE PAINTED LIGHT-GREY (BEHR ULTRA BASE #4854)

2. ALL EQUIPMENT TO BE PAINTED A MATTE BROWN (ULTRA-HIDE #3537-0500)

SITE PLAN SCALE: 1"=10'-0" 0 5' 10' 1



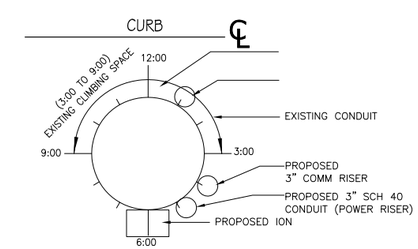
EXISTING PHOTO SCALE: N.T.S. 3



ENLARGED SITE PLAN SCALE: 1/4"=1'-0" 0 2' 4' 2

POLE WILL BE STEPPED IN ACCORDANCE TO G095 STANDARDS IN RESPECT TO CLIMBING SPACE.

1-3" CROWN CASTLE RISER @ 4:00
1-3" POWER RISER @ 5:00



RISER PROFILE SCALE: N.T.S. 4

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ENGINEER/CONSULTANT:

Civil Engineer

CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630
(949) 753-8807 OFFICE - (949) 753-8833 FAX

CLIENT:

CROWN CASTLE NG WEST, INC.

STAMP:

SITE INFO:

SITE NAME:
MON21
VERIZON MONTECITO-MON21

SITE ADDRESS: THOMAS BROS PAGE 997 GRID D1
R.O.W. SOUTH SIDE OF CAMINO DEL ROSARIO
(ADJACENT TO 2245 CAMINO DEL ROSARIO)
SANTA BARBARA, CA 93108
LAT: 34.44083°
LONG: -119.59919°

SHEET TITLE:

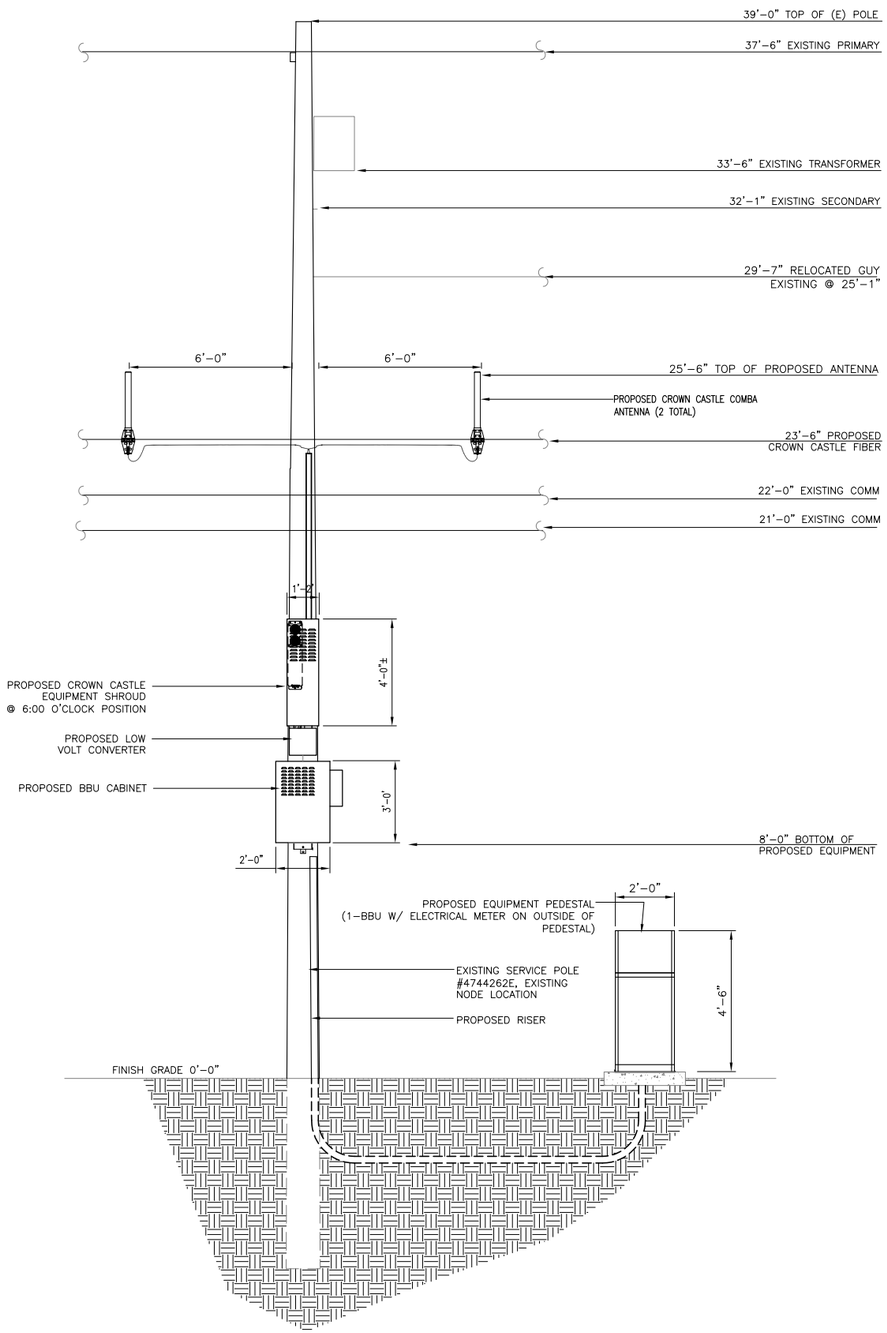
SITE PLAN, ENLARGED SITE PLAN, EXISTING PHOTO AND RISER PROFILE

DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:

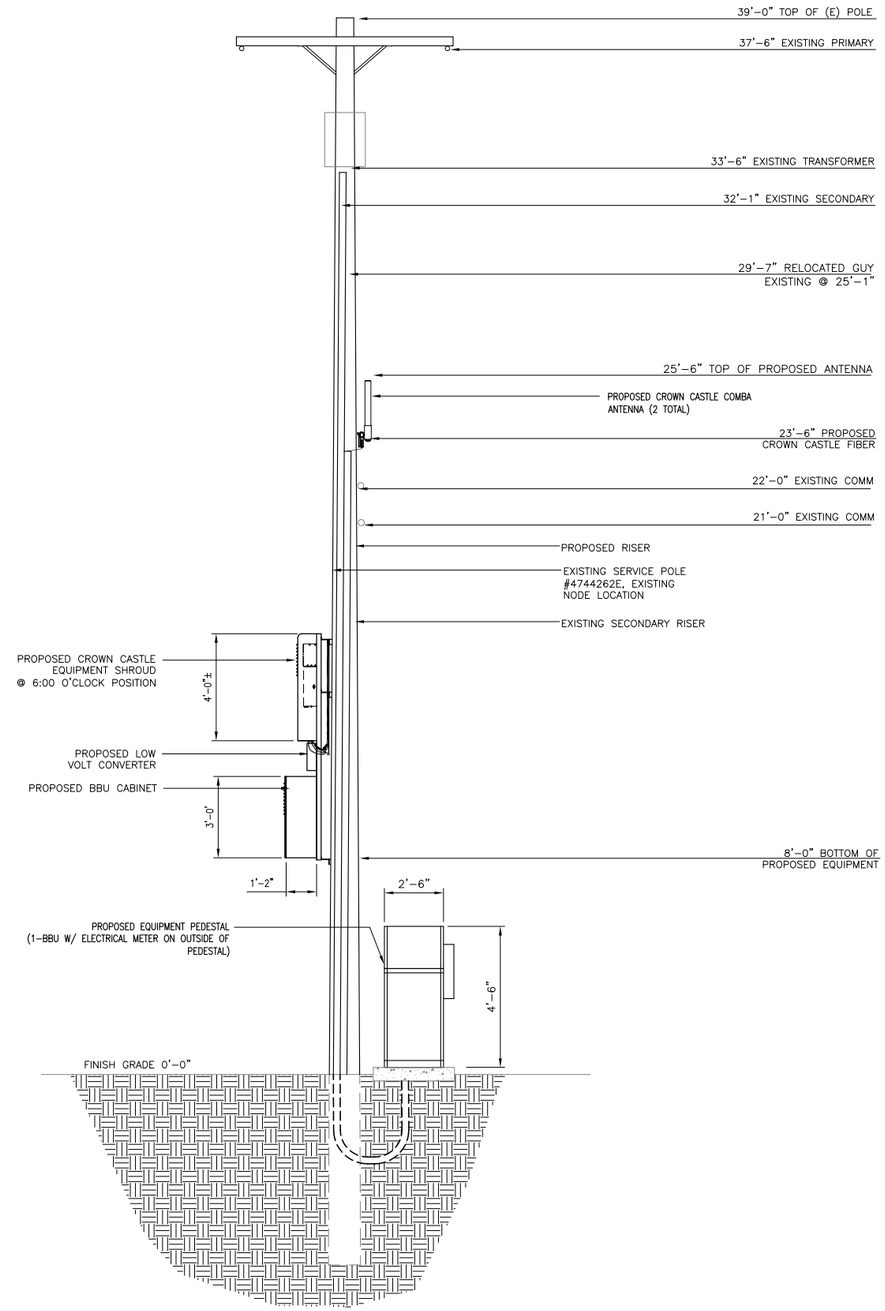
A-1



PROPOSED ELEVATION LOOKING NORTH

SCALE: 3/8"=1'-0" (0 1' 2' 3')

1



PROPOSED ELEVATION LOOKING WEST

SCALE: 3/8"=1'-0" (0 1' 2' 3')

2

NOTE:

1. ANTENNA TO BE PAINTED LIGHT-GREY (BEHR ULTRA BASE #4854)

2. ALL EQUIPMENT TO BE PAINTED A MATTE BROWN (ULTRA-HIDE #3537-0500)

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SHEET TITLE:

ELEVATION

DRAWING INFO:

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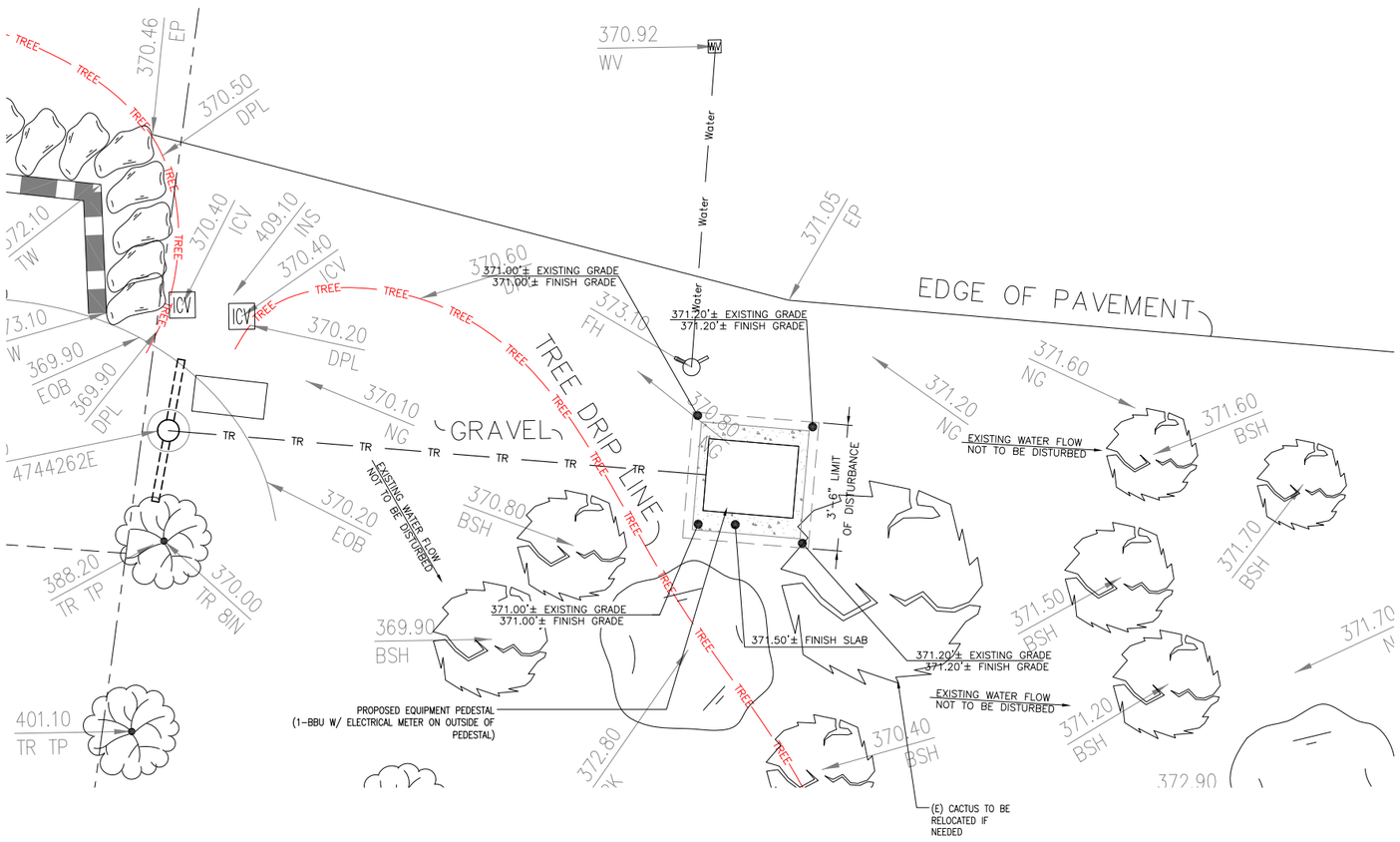
SHEET NUMBER:

A-2

GRADING CALCULATION

CONCRETE PAD:	2.997 CF
15'Lx3'Dx.5'W TRENCH:	22.5± CF
TOTAL:	25.497± CF

NOTE:
NO CUT AND FILL REQUIRED



LEGEND

TREE DRIP LINE	—— TREE ——
CAL OAK DRIP LINE	—— OAK ——
TRENCH	—— TR ——
CAL OAK	(-)

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GRADING PLAN

DRAWING INFO:

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SHEET NUMBER:

A-3

Outdoor Omni-directional Antenna

COMBA

OOA-360V06N0-3 VPol, 696-960/1710-2170MHz, 360°, 4.0/6.0 dBi

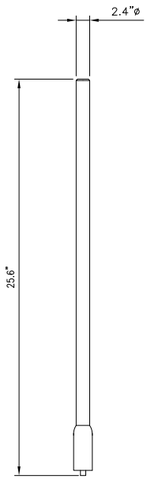
Technical Specifications

Electrical

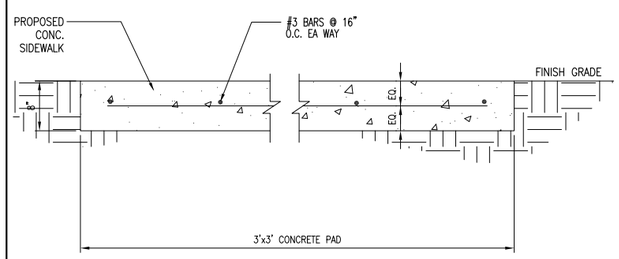
Frequency Range	MHz	696–960	1710–2170
Polarization		Vertical	
Gain	dBi	4.0±1	6.0±1
Horizontal Beamwidth	deg	360	
Vertical Beamwidth	deg	22–53	20–26
Electrical Downtilt–Fixed	deg	0	
VSWR		1.8	
Maximum Power	W	200	
Impedance		50	
Lightning Protection		Direct Ground	

Mechanical

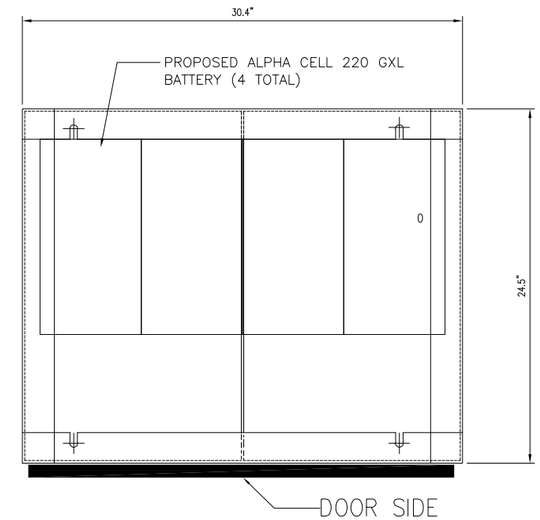
Dimensions, HxDia	mm(in)	650x60 (25.6x2.4)
Weight, with Mounting kit	kg (lb)	1 (2.2)
Radome Material and Color		Fiberglass, Light Grey
Radiating Element Material		Copper
Connector Type and Location		N–Female, Bottom
Operational Temperature		–55 to +70
Operational Humidity	%	95
Operational Wind Speed	km/h (mph)	200 (124)
Shipping Dimensions, HxWxD	mm (in)	670x100x100 (26.4x3.9x3.9)
Shipping Weight	kg (lb)	1.2 (2.65)

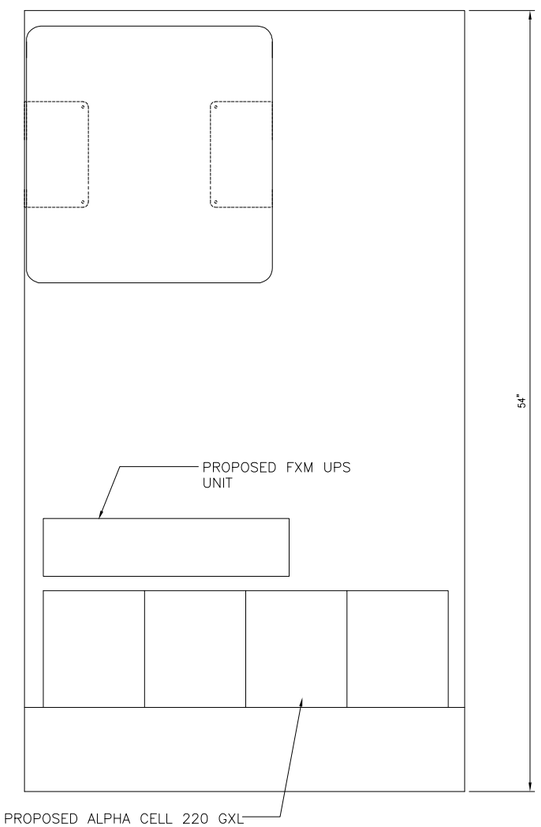


ANTENNA SPECIFICATIONS N.T.S. 1



CONCRETE PAD N.T.S. 3





EQUIPMENT PEDESTAL N.T.S. 5

Electrical

Power Supply
Mains power, Vac ..... 115 or 230

Power consumption, Watts ..... 1100 max. < 750 @ normal operation

700 MHz SISO/MIMO

Frequency range, MHz
Uplink ..... 698 to 716/776 to 787
Downlink ..... 728 to 757

Output power per carrier*, dBm

Number of Carriers	1	2	4	8
LTE	43	40**	37	34

850 MHz

Frequency range, MHz
Uplink ..... 824 to 849
Downlink ..... 869 to 894

Output power per carrier*, dBm

Number of Carriers	1	2	4	8
Analog	43	40	37	34
GSM	43	40	37	34
CDMA	43	40	37	34
LTE	43	40 **	37	34
UMTS	42	39	36	33

20W for Cell, PCS bands and 700MHz MIMO

1900 MHz

Frequency range, MHz
Uplink ..... 1850 to 1915
Downlink ..... 1930 to 1995

Output power per carrier*, dBm

Number of Carriers	1	2	4	8
GSM	43	40	37	34
CDMA	43	40	37	34
LTE	43	40 **	37	34
UMTS	42	39	36	33

CommScope®

ION-M7P/7P/85P/19P

Noise figure, dB
IIP3 optimized ..... +10 max.
Noise figure optimized ..... +6 max. 4.5 typical

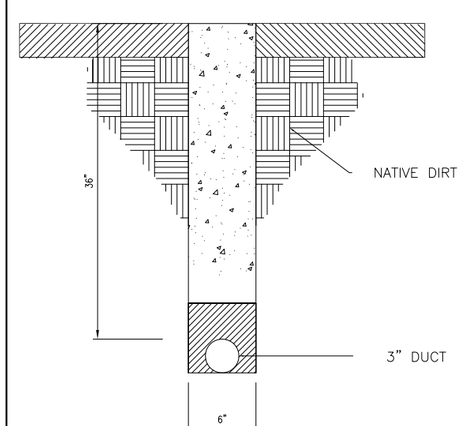
Mechanical****

Height, width, depth, mm (in) ..... 817 x 245 x 218 (32.2 x 9.6 x 8.6)

Weight, kg (lb) 40 (88.2)

Page 1, February 27, 2013 Company Confidential

ION-M7P/7P/85P/19P N.T.S. 2



* TRENCH TO BE BACK FILL WITH NATIVE MATERIAL & COMPACTED TO 90% OR BETTER & REPLACE LANDSCAPING IN KIND.

TRENCH N.T.S. 4

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NG WEST, INC.

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LAT: 34.44083°
LONG: –119.59919°

SHEET TITLE:

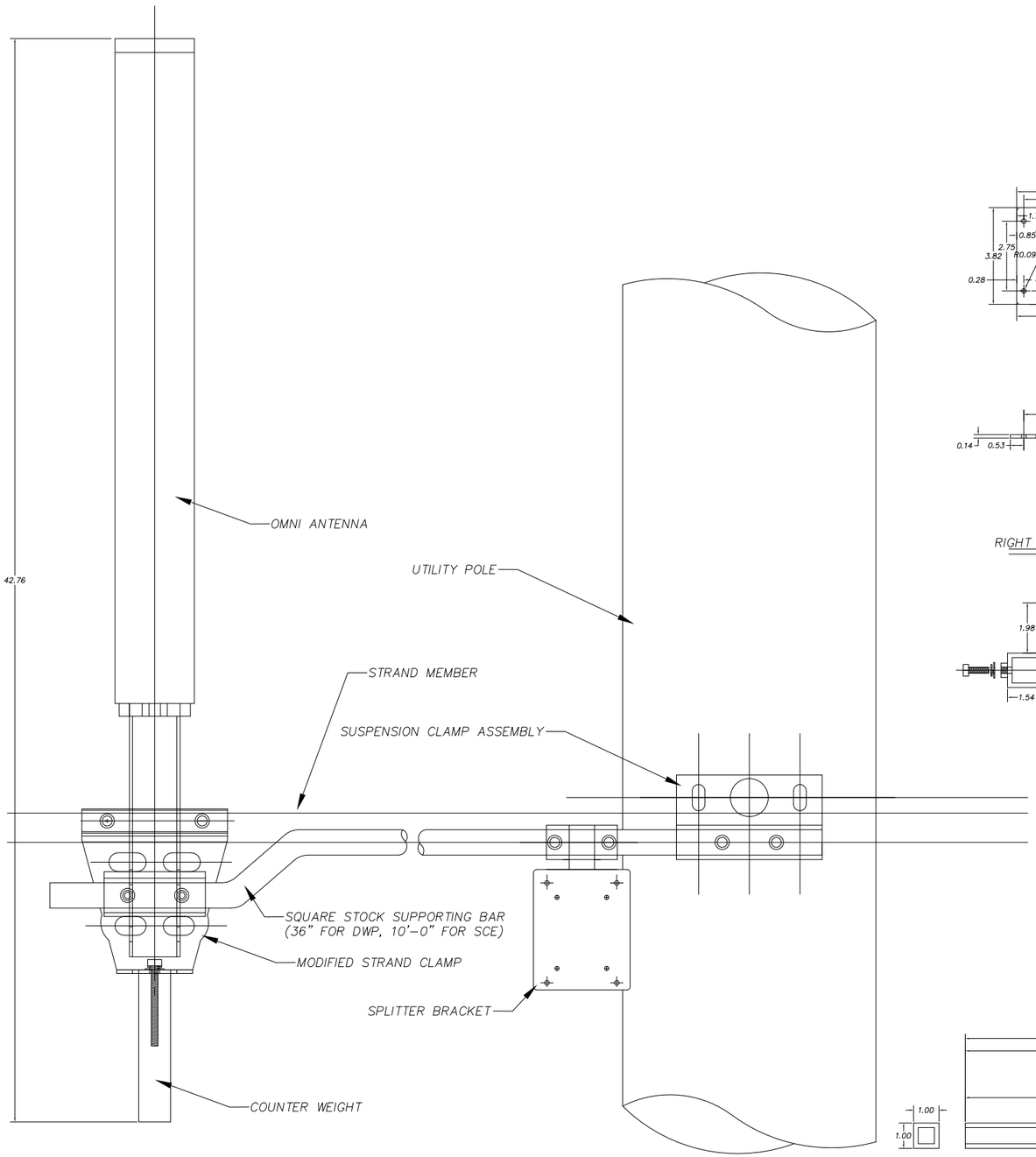
DETAILS

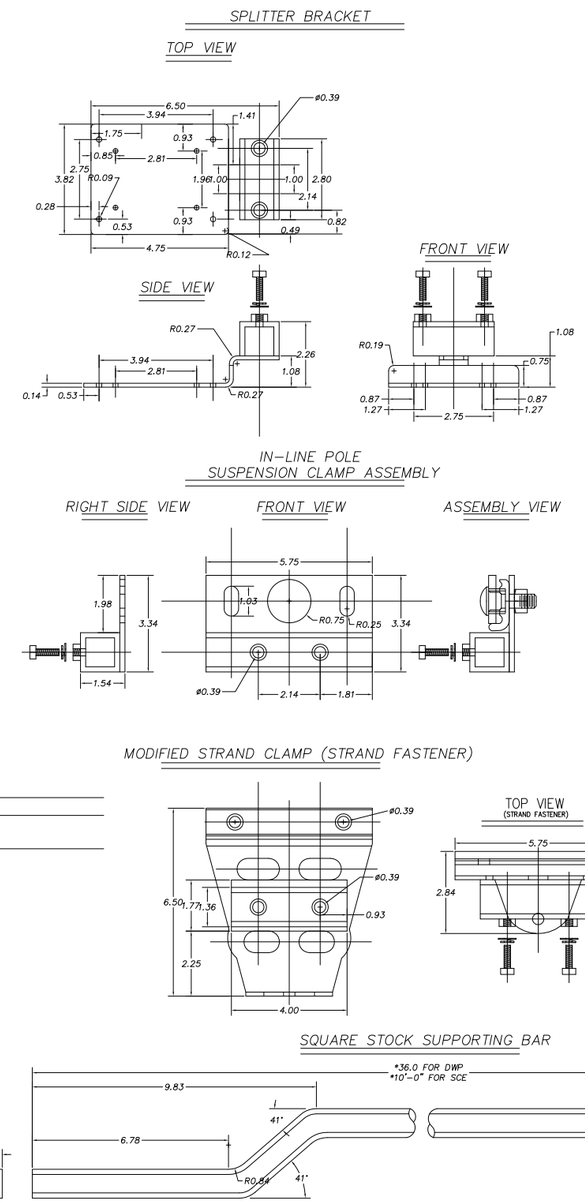
DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:

D–1





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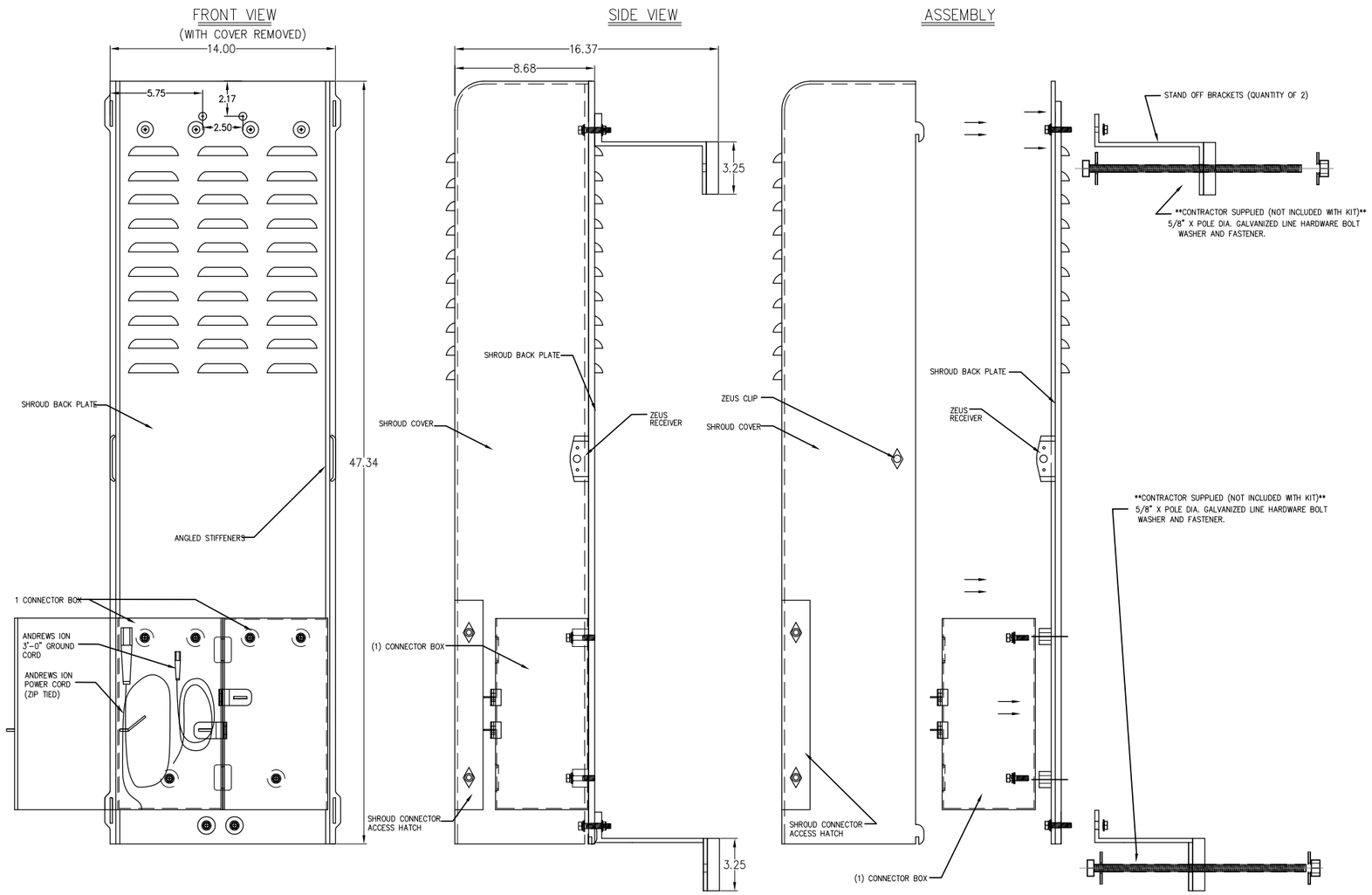
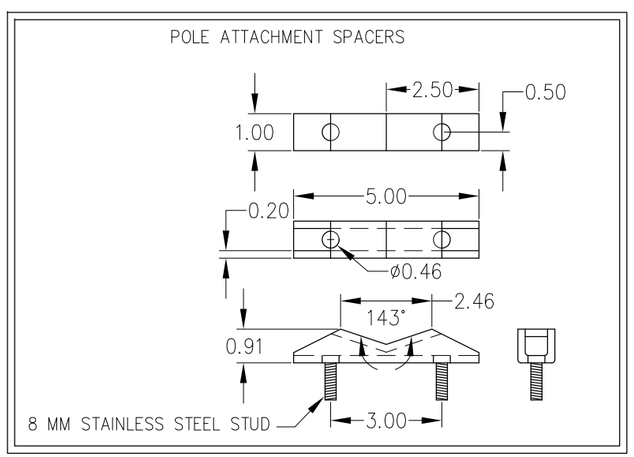
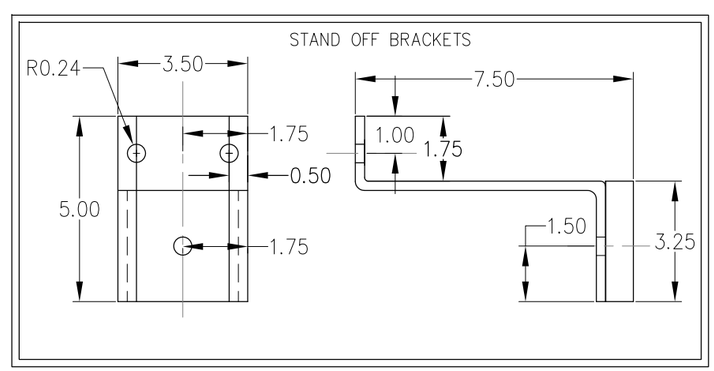
D-2

ANTENNA MOUNT | N.T.S. | 1







SHROUD DETAIL

N.T.S. | 1

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FC

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D-3

AlphaCell
General Specifications

Model:	220 GXL	195 GXL	165 GXL
Warranty[1]:	4 to 5 year full replacement	4 to 5 year full replacement	4 to 5 year full replacement
Service Life:	Extended	Extended	Extended
Runtime (minutes)[2]:	220	195	165
Sealed VRLA:	Valve regulated lead acid	Valve regulated lead acid	Valve regulated lead acid
Heat Resistant:	Extreme	Extreme	Extreme
Hydrogen Emission:	Low	Low	Low
Terminals:	Threaded insert 1/4" - 20 UNC	Threaded insert 1/4" - 20 UNC	Threaded insert 1/4" - 20 UNC

Specifications[4]

Model:	220 GXL	195 GXL	165 GXL
Typical Runtime (minutes)[2]:	220	195	165
Cells Per Unit:	6	6	6
Voltage Per Unit:	12.8	12.8	12.8
Conductance Value:	1175	1100	1000
Max. Discharge Current (A):	900	900	800
Short Circuit Current (A):	2800	2600	2500
10 Second Volts @ 100A:	11.4	11.3	11.2
Ohms Impedance 60Hz:	0.0050	0.0050	0.0055
Nominal Capacity at 20hrs: (to 1.75VPC)	109Ah	100Ah	86
Nominal Capacity at 20hrs: (to 1.70VPC)	110Ah	102Ah	87
BCI Group Size:	31	31	27
Weight (lb/kg):	73/33.2	67/30.5	63/28.6
Height w/ Terminals (in/mm):	8.48/215.4	8.48/215.4	8.05/204.5
Width (in/mm)[3]:	13.42/340.9	13.42/340.9	12.5/317.8
Depth (in/mm)[3]:	6.80/172.7	6.80/172.7	6.83/173.4
Operating Temperature Range			
Discharge:	-40 to 71°C (-40 to 160°F)	-40 to 71°C (-40 to 160°F)	-40 to 71°C (-40 to 160°F)
Charge (with temp compensation):	-23 to 60°C (-9.4 to 140°F)	-23 to 60°C (-9.4 to 140°F)	-23 to 60°C (-9.4 to 140°F)
Float Charging Voltage (Vdc):	13.5 to 13.8	13.5 to 13.8	13.5 to 13.8
AC Ripple Charger:	0.5% RMS or 1.5% of float charge voltage recommended for best results. Max. allowed = 4% P-P		

Notes:
[1] Warranty varies by country and region. Warranty valid only when used with Alpha approved Power Supplies, Chargers and Enclosures. Consult your sales person for details.
[2] Runtimes calculated using a 25A DC constant current load.
[3] Dimensions at top of battery.
[4] See AlphaCell Users Guide for Additional Details.

Typical Standby Time in Minutes @ 25°C/77°F

XM290Vac@	4A			6A			8A			10A		
Battery Runtime:	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	508	453	396	320	285	249	236	209	193	186	165	144
4 batteries:	701	625	546	444	396	346	329	293	256	261	232	203
6 batteries:	1091	978	853	701	625	546	523	465	407	418	372	325
8 batteries:	1487	1338	1186	960	859	750	720	643	562	577	515	450
9 batteries:	1886	1519	1322	1091	978	853	820	733	640	659	587	514

XM290Vac@	12A			14A			16A			18A		
Battery Runtime:	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	149	132	115	119	106	92	101	89	77	87	78	66
4 batteries:	210	187	163	169	151	132	144	128	112	124	111	96
6 batteries:	339	301	264	275	245	214	236	209	183	204	182	159
8 batteries:	478	419	367	385	341	299	329	293	256	288	255	223
9 batteries:	538	479	419	440	391	342	377	335	294	329	293	256

XM260Vac@	4A			6A			8A			10A		
Battery Runtime:	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	798	712	622	508	453	396	377	335	294	300	267	233
4 batteries:	1091	978	853	701	625	546	523	465	407	418	372	325
6 batteries:	1886	1519	1322	1091	978	853	820	733	640	659	587	514
8 batteries:	2288	2067	1798	1487	1338	1165	1122	1006	877	904	809	706
9 batteries:	2590	2345	2037	1886	1519	1322	1273	1143	997	1027	921	803

XM260Vac@	12A			14A			16A			18A		
Battery Runtime:	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	242	215	188	196	174	151	166	148	125	144	128	107
4 batteries:	339	301	264	275	245	214	236	209	182	204	182	155
6 batteries:	538	479	419	440	391	340	377	335	290	329	293	252
8 batteries:	741	660	577	607	541	470	523	465	402	458	407	351
9 batteries:	843	753	658	692	617	538	597	531	462	523	465	402

*Above calculations based on an AC load with a .90 cable plant power factor.

For contact information visit www.alpha.com

The Alpha Group >

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Canada Tel: +1 604 430 1476 Fax: +1 604 430 8908 Toll Free: +1 800 667 8743 USA Tel: +1 360 647 2360 Fax: +1 360 671 4936	Cyprus Tel: +357 25 375 675 Fax: +357 92 359 595 Russia Tel: +7 495 925 9644 Fax: +7 495 916 1349	Germany Tel: +49 9122 79889 0 Fax: +49 9122 79889 21 United Kingdom Tel: +44 1279 501110 Fax: +44 1279 659870	Lithuania Tel: +370 5 210 5291 Fax: +370 5 210 5292	P.R. China Tel: +852 2796 8669 Fax: +852 2199 7968	Contact USA office

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049-297-10-B002 (06/09)

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D–4

CROWN CASTLE NG WEST, INC

VERIZON MONTECITO-MON22

R.O.W. SOUTH SIDE OF VELOZ DR
(ADJACENT TO 2135 VELOZ DR)
SANTA BARBARA, CA 93108

GENERAL NOTES

1. APPROVAL OF THESE PLANS BY THE CITY ENGINEER DOES NOT AUTHORIZE ANY WORK TO BE PERFORMED UNTIL A PERMIT HAS BEEN ISSUED.
2. UPON ISSUANCE OF A PERMIT, NO WORK WILL BE PERMITTED ON WEEKENDS OR HOLIDAYS WITHOUT PERMISSION FROM THE ENGINEERING DEPARTMENT.
3. THE APPROVAL OF THIS PLAN OR ISSUANCE OF A PERMIT BY THE LOCAL JURISDICTION DOES NOT AUTHORIZE THE SUBDIVIDER AND OWNER TO VIOLATE ANY FEDERAL, STATE OR CITY LAWS, ORDINANCES, REGULATIONS, OR POLICIES, INCLUDING, BUT NOT LIMITED TO, THE FEDERAL ENDANGERED SPECIES ACT OF 1973 AND AMENDMENTS THERETO (16 USC SECTION 1531 ET.SEQ.).
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SURVEY MONUMENTS AND/OR VERTICAL CONTROL BENCHMARKS WHICH ARE DISTURBED OR DESTROYED BY CONSTRUCTION. A LAND SURVEYOR MUST FIELD LOCATE, REFERENCE, AND/OR PRESERVE ALL HISTORICAL OR CONTROLLING MONUMENTS PRIOR TO ANY EARTHWORK. IF DESTROYED, SUCH MONUMENTS SHALL BE REPLACED WITH APPROPRIATE MONUMENTS BY A LAND SURVEYOR, A CORNER RECORD OR RECORD OF SURVEY, AS APPROPRIATE, SHALL BE FIELD AS REQUIRED BY THE PROFESSIONAL LAND SURVEYORS ACT. IF ANY VERTICAL CONTROL IS TO BE DISTURBED OR DESTROYED, THE LOCAL JURISDICTION FIELD SURVEY SECTION MUST BE NOTIFIED, IN WRITING, AT LEAST 3 DAYS PRIOR TO THE CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE COST OF REPLACING ANY VERTICAL CONTROL BENCHMARKS DESTROYED BY THE CONSTRUCTION.
5. IMPORTANT NOTICE: SECTION 4216 OF THE GOVERNMENT CODE REQUIRES A DIG ALERT IDENTIFICATION NUMBER BE ISSUED BEFORE A "PERMIT TO EXCAVATE" WILL BE VALID. FOR YOUR DIG ALERT I.D. NUMBER, CALL UNDERGROUND SERVICE ALERT, TWO DAYS BEFORE YOU DIG.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR THE POTHOLE AND LOCATING OF ALL EXISTING UTILITIES THAT CROSS THE PROPOSED TRENCH LINE AND MUST MAINTAIN 1' MINIMUM VERTICAL CLEARANCE.
7. CONTRACTOR SHALL SUBMIT TO THE LOCAL JURISDICTION, A CONSTRUCTION PLAN TO PROTECT WATER MAINS PRIOR TO COMMENCING CONSTRUCTION.
8. CONTRACTOR SHALL REPLACE OR REPAIR ALL TRAFFIC SIGNAL LOOPS, CONDUIT, AND LANE STRIPING DAMAGED DURING CONSTRUCTION.
9. CONTRACTOR SHALL NOTIFY THE LOCAL JURISDICTION. A MINIMUM OF 48 HOURS PRIOR TO COMMENCING WORK WITHIN 10' OF ALL SEWER, WATER, AND STORMDRAIN MAIN INCLUDING ALL CROSSINGS.
10. THIS PROJECT WILL BE INSPECTED BY ENGINEERING AND CAPITAL PROJECTS DEPARTMENT, FIELD ENGINEERING DIVISION.
11. AS-BUILT DRAWINGS MUST BE SUBMITTED TO THE CITY RESIDENT ENGINEER PRIOR TO THE ACCEPTANCE OF THIS PROJECT.
12. PUBLIC IMPROVEMENT SUBJECT TO DESUETUDE OR DAMAGE." IF REPAIR OR REPLACEMENT OF SUCH PUBLIC IMPROVEMENTS IS REQUIRED, THE OWNER SHALL OBTAIN THE REQUIRED PERMITS FOR WORK IN THE PUBLIC RIGHT-OFWAY, SATISFACTORY TO THE PERMIT - ISSUING AUTHORITY.
13. PRIOR TO ANY DISTURBANCE TO THE SITE, EXCLUDING UTILITY MARKS-OUTS AND SURVEYING, THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR A PRE-CONSTRUCTION MEETING WITH THE LOCAL JURISDICTION FIELD ENGINEERING DIVISION.
14. PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION SHOWN ON THESE PLANS. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE. THE CONTRACTOR IS RESPONSIBLE TO ATTEND THE LOCAL JURISDICTIONS MONTHLY UTILITY COORDINATION COMMITTEE THE CONSTRUCTION ACTIVITIES WITH THE CITY AND ALL OTHER CONTRACTORS SO THAT NO TRENCH IS CUT WITHIN ANY OF THE CITY STREETS THAT HAVE BEEN CONSTRUCTED, REPAIRED, OR SLURRY SEALED WITHIN THREE YEARS OF THE STREET CONSTRCTUION/RESURFACING DATE.
15. MANHOLES OR COVERS SHALL BE LABELED "CROWN CASTLE" OR "CROWN CASTLE NG WEST".
16. CONTRACTOR SHALL IMPLEMENT AN EROSION AND SEDIMENT CONTROL PROGRAM DURING THE PROJECT CONSTRUCTION ACTIVITIES. THE PROGRAM SHALL MEET THE APPLICABLE REQUIREMENTS OF THE STATE WATER RESOURCE CONTROL BOARD.
17. THE CONTRACTOR SHALL HAVE EMERGENCY MATERIALS AND EQUIPMENT ON HAND FOR UNFORESEEN SITUATIONS, SUCH AS DAMAGE TO UNDERGROUND WATER, SEWER, AND STORM DRAIN FACILITIES WHEREBY FLOWS MAY GENERATE EROSION AND SEDIMENT POLLUTION.

SPECIAL NOTES

THE FOLLOWING NOTES ARE PROVIDED TO GIVE DIRECTIONS TO THE CONTRACTOR BY THE ENGINEER OF WORK. THE CITY ENGINEER'S SIGNATURE ON THESE PLANS DOES NOT CONSTITUTE APPROVAL OF THESE NOTES AND THE CITY WILL NOT BE RESPONSIBLE FOR THEIR ENFORCEMENT.

1. THE CONTRACTOR SHALL VERIFY THE LOCATION EXISTING UNDERGROUND UTILITIES INCLUDING SEWER LATERALS AND WATER SERVICES TO INDIVIDUAL LOTS BOTH VERTICAL AND HORIZONTAL PRIOR TO COMMENCING IMPROVEMENT OPERATIONS.
2. CONTRACTOR SHALL MAKE EXPLORATION EXCAVATIONS AND LOCATE EXISTING FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS OF PLANS IF REVISION IS NECESSARY BECAUSE OF LOCATION OF EXISTING UTILITIES.
3. LOCATION AND ELEVATIONS OF IMPROVEMENTS, TO BE MET BY WORK, SHALL BE CONFIRMED BY FIELD MEASUREMENT PRIOR TO CONSTRUCTION OF NEW WORK.
4. GRADES SHOWN ARE FINISH GRADES, CONTRACTOR SHALL DETERMINE NECESSARY SUB GRADE ELEVATIONS AND SHALL CONSTRUCT SMOOTH TRANSITION BETWEEN FINISH GRADES SHOWN.
5. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE RESPONSIBILITY FOR JOB SITE CONDITION DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS PROVISION SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXPECTING FOR LIABILITY ARISING FROM SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
6. THE CONTRACTOR SHALL BE TOTALLY RESPONSIBLE FOR COMPLIANCE WITH THE PROVISIONS OF THE STATE OF CALIFORNIA SAFETY ORDERS.
7. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE FROM EXISTING RECORDS AND CORROBORATED, WHERE POSSIBLE WITH FIELD TIES. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING THE LOCATIONS SHOWN, BOTH HORIZONTALLY AND VERTICALLY, PRIOR TO CONSTRUCTION. IF EXISTING LOCATIONS VARY SUBSTANTIALLY FROM THE PLANS, THE ENGINEER SHOULD BE NOTIFIED TO MAKE ANY CONSTRUCTION CHANGES REQUIRED.
8. THE CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT FOR ALL SEWER AND WATER MAIN UNDER CROSSING IN ACCORDANCE WITH PART 1 SECTION 5-2 OF THE STANDARD SPECIFICATION.
9. THE CONTRACTOR SHALL REPLACE OR REPAIR ALL TRAFFIC SIGNAL LOOPS, CONDUITS, AND LANE STRIPING DAMAGED DURING CONSTRUCTION.
10. THE CONTRACTOR SHALL SUBMIT WORK PLANS FOR ALL BORE OPERATIONS TWO WEEKS PRIOR TO COMMENCING WORK.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR THE POTHOLE AND LOCATING OF ALL EXISTING UTILITIES THAT CROSS THE PROPOSED TRENCH LINE AND MUST MAINTAIN 1' MINIMUM VERTICAL CLEARANCE.
12. AS-BUILT DRAWINGS MUST BE SUBMITTED TO THE CITY ENGINEER PRIOR TO ACCEPTANCE OF THIS PROJECT.

VICINITY MAP - N.T.S.

EROSION AND SEDIMENT CONTROL NOTES

TEMPORARY EROSION/SEDIMENT CONTROL, PRIOR TO COMPLETION OF FINAL IMPROVEMENTS, SHALL BE PERFORMED BY THE CONTRACTOR OR QUALIFIED PERSON AS INDICATED BELOW:

1. ALL REQUIREMENTS OF THE LOCAL JURISDICTION "LAND DEVELOPMENT MANUAL, STORM WATER STANDARDS" MUST BE INCORPORATED INTO THE DESIGN AND CONSTRUCTION OF THE PROPOSED GRADING/IMPROVEMENTS CONSISTENT WITH THE APPROVED STORM WATER AND/OR WATER POLLUTION CONTROL PLAN (WPCP).
2. FOR STORM DRAIN INLETS, PROVIDE A GRAVEL BAG SILT BASIN IMMEDIATELY UPSTREAM OF INLET AS INDICATED ON DETAILS.
3. FOR INLETS LOCATED AT SUMPS ADJACENT TO TOP OF SLOPES, THE CONTRACTOR SHALL ENSURE THAT WATER DRAINING TO THE SUMP IS DIRECTED INTO THE INLET AND THAT A MINIMUM OF 1.00" FREEBOARD EXISTS AND IS MAINTAINED ABOVE THE TOP OF THE INLET. IF FREEBOARD IS NOT PROVIDED BY GRADING SHOWN ON THESE PLANS, THE CONTRACTOR SHALL PROVIDE IT VIA TEMPORARY MEASURES, I.E. GRAVEL BAGS OR DIKES.
4. THE CONTRACTOR OR QUALIFIED PERSON SHALL BE RESPONSIBLE FOR CLEANUP OF SILT AND MUD ON ADJACENT STREET(S) AND STORM DRAIN SYSTEM DUE TO CONSTRUCTION ACTIVITY.
5. THE CONTRACTOR OR QUALIFIED PERSON SHALL CHECK AND MAINTAIN ALL LINED AND UNLINED DITCHES AFTER EACH RAINFALL.
6. THE CONTRACTOR SHALL REMOVE SILT AND DEBRIS AFTER EACH MAJOR RAINFALL.
7. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON, ALL NECESSARY MATERIALS SHALL BE STOCKPILED ON SITE AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
8. THE CONTRACTOR SHALL RESTORE ALL EROSION/SEDIMENT CONTROL MEASURES TO WORKING ORDER TO THE SATISFACTION OF THE CITY ENGINEER OR RESIDENT ENGINEER AFTER EACH RUN-OFF PRODUCING RAINFALL.
9. THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION CONTROL MEASURES AS MAY BE REQUIRED BY THE RESIDENT ENGINEER DUE TO UNCOMPLETED GRADING OPERATIONS OR UNFORESEEN CIRCUMSTANCES, WHICH MAY ARISE.
10. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATERS CREATE A HAZARDOUS CONDITION.
11. ALL EROSION/SEDIMENT CONTROL MEASURES PROVIDED PER THE APPROVED GRADING PLAN SHALL BE INCORPORATED HEREON. ALL EROSION/SEDIMENT CONTROL FOR INTERIM CONDITIONS SHALL BE DONE TO THE SATISFACTION OF THE RESIDENT ENGINEER.
12. GRADED AREAS AROUND THE PROJECT PERIMETER MUST DRAIN AWAY FROM THE FACE OF THE SLOPE AT THE CONCLUSION OF EACH WORKING DAY.
13. ALL REMOVABLE PROTECTIVE DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN RAIN IS IMMINENT.
14. THE CONTRACTOR SHALL ONLY GRADE, INCLUDING CLEARING AND GRUBBING FOR THE AREAS FOR WHICH THE CONTRACTOR OR QUALIFIED PERSON CAN PROVIDE EROSION/SEDIMENT CONTROL MEASURES.
15. THE CONTRACTOR SHALL ARRANGE FOR WEEKLY MEETINGS DURING OCTOBER 1ST TO APRIL 30TH FOR PROJECT TEAM (GENERAL CONTRACTOR, QUALIFIED PERSON, EROSION CONTROL SUBCONTRACTOR IF ANY, ENGINEER OF WORK, OWNER AND THE RESIDENT ENGINEER) TO EVALUATE THE ADEQUACY OF THE EROSION/SEDIMENT CONTROL MEASURES AND OTHER RELATED CONSTRUCTION ACTIVITIES.

TRAFFIC CONTROL NOTES

THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN (11" X 17") FOR APPROVAL PRIOR TO STARTING WORK. THE PLAN SHOULD BE SUBMITTED TO THE TRAFFIC CONTROL PERMIT COUNTER. CONTRACTOR SHALL OBTAIN A TRAFFIC CONTROL PERMIT A MINIMUM OF TWO (2) WORKING DAYS PRIOR TO STARTING WORK, AND A MINIMUM FIVE (5) DAYS IF WORK WILL AFFECT A BUS STOP OR AN EXISTING TRAFFIC SIGNAL, OR IF WORK WILL REQUIRE A ROAD OR ALLEY CLOSURE.

FOOTAGE TOTALS	
ASPHALT CUT	-
DIRT TRENCH	-
PUNCH THRU	-
BORE	-
TOTAL	-
R&R SWF TOTAL	-

GROUND BUS BAR
MECH. GRND. CONN.
CADWELD
ELECTRIC BOX
TELEPHONE BOX
EXISTING SERVICE POLE
SIDEWALK FLAG
EX. MANHOLE
LIGHT POLE
FOUNDATION
SPOT ELEV.
SET POINT
REVISION
DETAIL REF.
ELEVATION REF.
SECTION REF.
PROP./LEASE LINE
MATCH LINE
WORK POINT
TELE. CONDUIT
CENTERLINE
ELECT. CONDUIT
COAXIAL CABLE
MYERS PEDESTAL
VAULT STANDARD 2'X3'
STEEL POLE

SYMBOLS, LINETYPES AND HATCH PATTERNS

PROJECT DICTIONARY

SITE ADDRESS: R.O.W. SOUTH SIDE OF VELOZ DR (ADJACENT TO 2125 VELOZ DR) SANTA BARBARA, CA 93108

APPLICANT: CROWN CASTLE NG WEST, INC
2125 WRIGHT AVE, SUITE #C9
LA VERNE, CA 91750
CONTACT: HEIDI PAYNE
PHONE: (949) 300-9493

CIVIL ENGINEER: CONNELL DESIGN GROUP, LLC
26455 RANCHO PARKWAY SOUTH
LAKE FOREST, CA 92630
CONTACT: FRANK CARTER
(949) 310-8233 PHONE
(949) 753-8833 FAX

CONSTRUCTION CHANGE TABLE

CHANGE	DATE	EFFECTED OR ADDED SHEET NUMBERS

APPLICABLE CODES

ALL WORK SHALL COMPLY WITH THE FOLLOWING APPLICABLE CODES:

*2010 CALIFORNIA BUILDING CODE
*2010 CALIFORNIA MECHANICAL CODE
*2010 CALIFORNIA PLUMBING CODE
*2010 CALIFORNIA ELECTRICAL CODE

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

PROJECT DESCRIPTION

PROJECT CONSISTS OF INSTALLATION OF:

1. (2) OMNI DIRECTIONAL ANTENNA ON EXISTING UTILITY POLE
2. EQUIPMENT SHROUD & BBU ON EXISTING POLE

SHEET INDEX:

TITLE SHEET	T-1 - SHEET 1 OF 8
TOPOGRAPHIC SURVEY	C-1 - SHEET 2 OF 8
SITE PLAN	A-1 - SHEET 3 OF 8
PROPOSED ELEVATIONS	A-2 - SHEET 4 OF 8
GRADING PLAN	A-3 - SHEET 5 OF 8
DETAILS	D-1 - SHEET 6 OF 8
DETAILS	D-2 - SHEET 7 OF 8
DETAILS	D-3 - SHEET 8 OF 8

REV:	DATE/BY:	REVISION DESCRIPTION:
0	FXC 03/15/2013	ISSUED FOR REVIEW
1	FXC 04/25/2013	ISSUED FOR FINAL
2	FXC 11/06/2013	ISSUED FOR FINAL
3	FXC 02/18/2014	ISSUED FOR FINAL
4	FXC 03/08/2014	ISSUED FOR FINAL

ENGINEER/CONSULTANT:

Civil Engineer

CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630
(949) 753-8807 OFFICE - (949) 753-8833 FAX

CLIENT:

CROWN CASTLE NG WEST, INC.

STAMP:

SITE INFO:

SITE NAME:
MON22m1
VERIZON MONTECITO-MON22m1

SITE ADDRESS: THOMAS BROS PAGE 997 GRID C1
R.O.W. SOUTH SIDE OF VELOZ DR
(ADJACENT TO 2165 VELOZ DR)
SANTA BARBARA, CA 93108
LAT: 34.441587
LONG: -119.602992

SHEET TITLE:

TITLE SHEET

DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:

T-1

SCALE: 1" = 5'

5' 0' 2.5' 5' 10'

COORDINATES:

LATITUDE 34°26'30.47" N
LONGITUDE 119°36'16.00" W

NAD 1983 GEODETIC COORDINATES AND ELEVATIONS WERE ESTABLISHED USING SURVEY GRADE "ASHTECH" G.P.S. RECEIVERS AND ASHTECH SURVEY GRADE PRECISION SOFTWARE FOR POST-PROCESSING.

BASIS OF BEARINGS:

THE CENTERLINE OF VELOZ DR. BEING SOUTH 80°25'30" EAST PER RECORD OF SURVEY, COUNTRYSIDE ADDITION, R.M. 34 / 94, RECORDS OF SANTA BARBARA COUNTY.

ASSESSOR'S IDENTIFICATION:

N/A

AREA:

N/A

BENCH MARK REFERENCE:

U.S.G.S. BENCH MARK "BM 269"

UNITED STATES GEOLOGICAL SURVEY BENCH MARK "BM 269" AS SHOWN ON THE "CARPINTERIA" 7.5 MINUTE QUADRANGLE MAP.

ELEVATION: 271.5 FEET A.M.S.L. (NAVD88) (DATUM VERIFIED IN FIELD TO BE WITHIN 1-A ACCURACY STANDARDS)

TITLE REPORT IDENTIFICATION:

N/A

EASEMENT NOTES:

N/A

LEGAL DESCRIPTION:

N/A

DATE OF SURVEY:

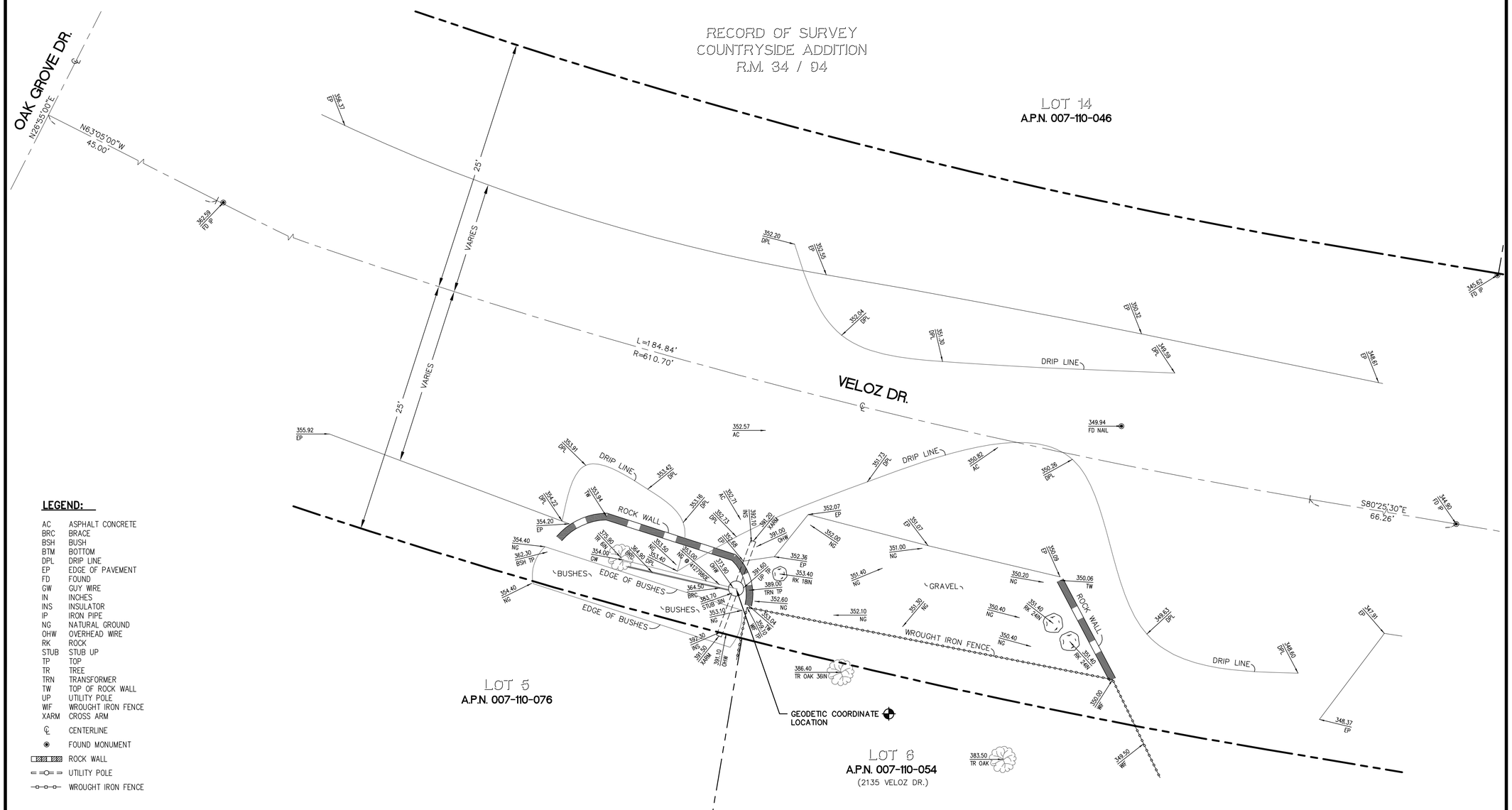
JULY 11, 2013

SURVEYORS NOTE:

THE RIGHT OF WAY LINES AND THEIR DIMENSIONS SHOWN HEREON ARE PER READILY AVAILABLE RECORDED INFORMATION AND THEIR LOCATIONS ARE APPROXIMATE, PENDING RECEIPT OF TITLE REPORT(S) FOR THE ADJACENT REAL PROPERTY.

LIVING PLANTS STATEMENT:

THE HEIGHTS AND ELEVATIONS FOR THE TREES, BUSHES AND OTHER LIVING PLANTS SHOWN HEREON, SHOULD BE CONSIDERED APPROXIMATE (+/-) AND ONLY VALID FOR THE DATE OF THIS SURVEY. THEY ARE PROVIDED AS A GENERAL REFERENCE AND SHOULD NOT BE USED FOR DESIGN PURPOSES.



LEGEND:

AC	ASPHALT CONCRETE
BRC	BRACE
BSH	BUSH
BTM	BOTTOM
DPL	DRIP LINE
EP	EDGE OF PAVEMENT
FD	FOUND
GW	GUY WIRE
IN	INCHES
INS	INSULATOR
IP	IRON PIPE
NG	NATURAL GROUND
OHW	OVERHEAD WIRE
RK	ROCK
STUB	STUB UP
TP	TOP
TR	TREE
TRN	TRANSFORMER
TW	TOP OF ROCK WALL
UP	UTILITY POLE
WIF	WROUGHT IRON FENCE
XARM	CROSS ARM
℄	CENTERLINE
◉	FOUND MONUMENT
▨	ROCK WALL
= =○= =	UTILITY POLE
—o—o—	WROUGHT IRON FENCE

REV:	DATE/BY:	REVISION DESCRIPTION:
1	07/18/13 MDL	ISSUED FOR REVIEW

ENGINEER/CONSULTANT:

CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PKWY. SOUTH
LAKE FOREST, CA 92630-8326
(949) 753-8807 OFFICE - (949) 753-8833 FAX

SITE BUILDER:

CROWN CASTLE
NG WEST, INC.

SURVEYOR:

BERT HAZE
AND ASSOCIATES, INC.
LAND SURVEYING & MAPPING
3188 AIRWAY AVENUE, SUITE K1
COSTA MESA, CALIFORNIA 92626
714 557-1567 OFFICE
714 557-1568 FAX

JN. 706.235

STAMP:

PROFESSIONAL LAND SURVEYOR
BERT HAZE
No. 7211
Exp. 3-31-14
STATE OF CALIFORNIA

SITE INFO:

SITE NAME:

MON22
VERIZON MONTECITO-MON22

SITE ADDRESS:

R.O.W. SOUTH SIDE OF VELOZ DR.
(ADJACENT TO 2135 VELOZ DR.)
SANTA BARBARA, CA 93108

SHEET TITLE:

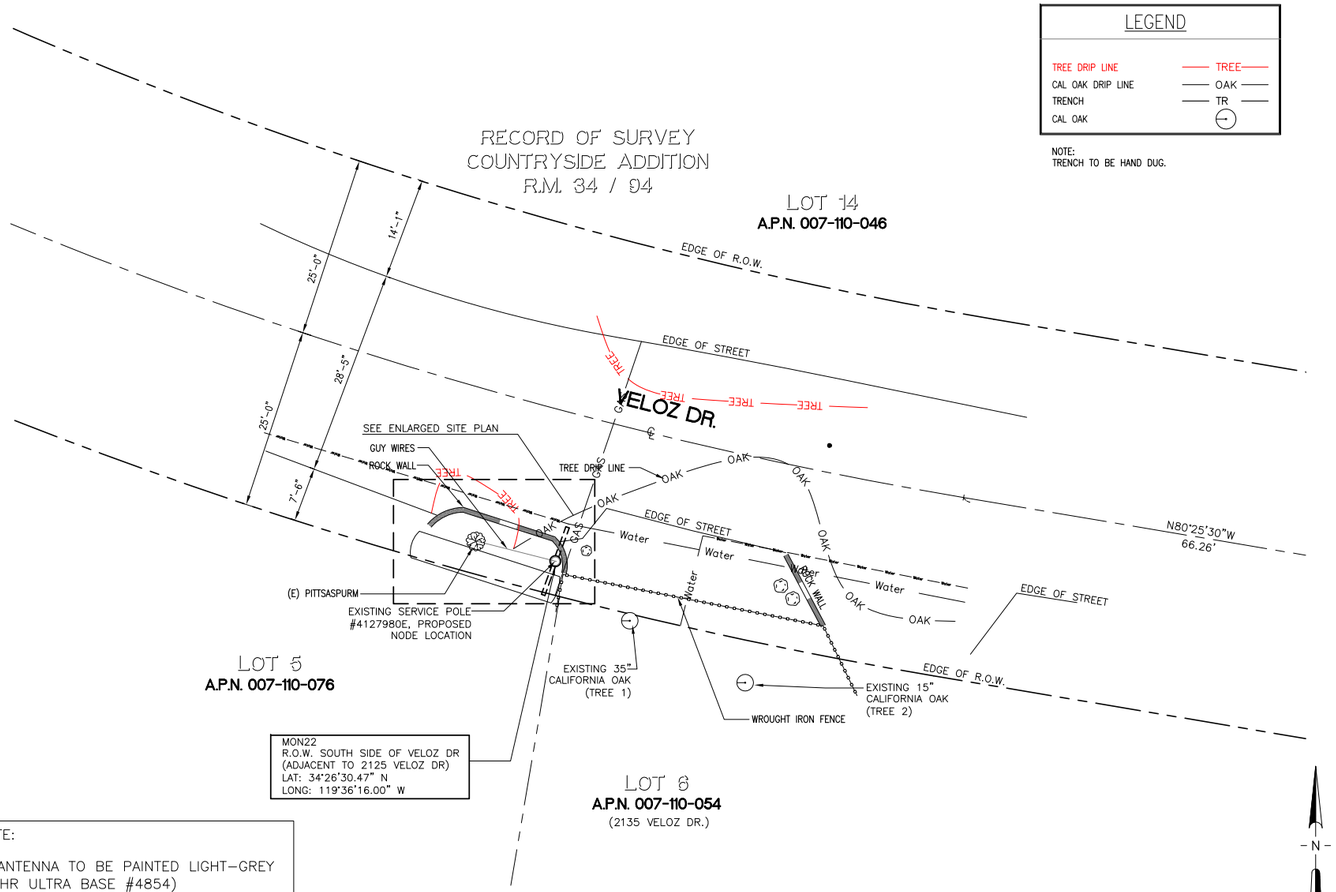
TOPOGRAPHIC SURVEY

DRAWING INFO:

DWG. NAME:	DRAWN BY:	DATE:
MON22	MDL	07/18/13

SHEET NUMBER:

1 OF 1 | C-1



LEGEND

TREE DRIP LINE	—— TREE ——
CAL OAK DRIP LINE	—— OAK ——
TRENCH	—— TR ——
CAL OAK	⊖

NOTE:
TRENCH TO BE HAND DUG.

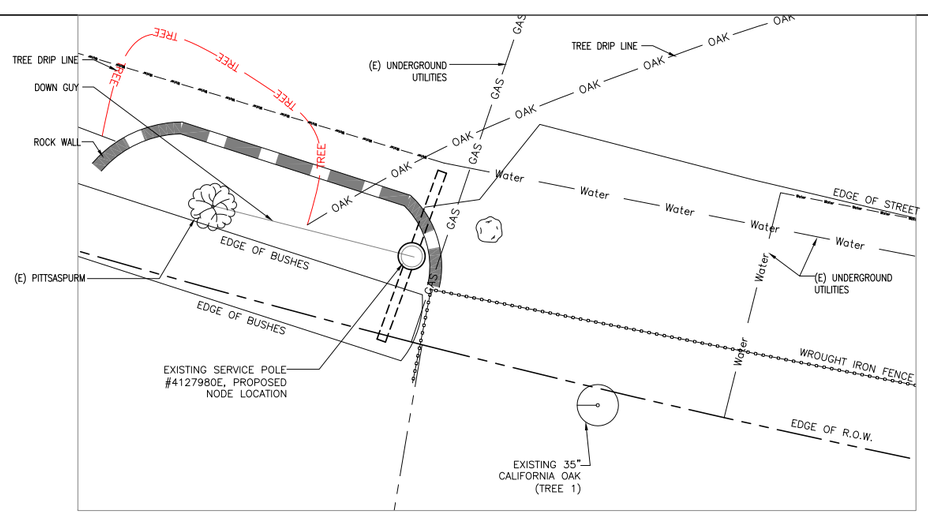
NOTE:

1. ANTENNA TO BE PAINTED LIGHT-GREY (BEHR ULTRA BASE #4854)

2. ALL EQUIPMENT TO BE PAINTED A MATTE BROWN (ULTRA-HIDE #3537-0500)

SITE PLAN SCALE: 1"=10'-0" (0 5' 10') 1

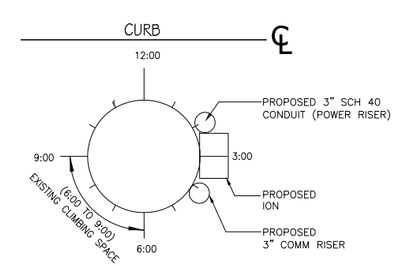
EXISTING PHOTO SCALE: N.T.S. 3



ENLARGED SITE PLAN SCALE: 1/4"=1'-0" (0 2' 4') 2

POLE WILL BE STEPPED IN ACCORDANCE TO G095 STANDARDS IN RESPECT TO CLIMBING SPACE.

1-3" CROWN CASTLE RISER @ 4:00
1-3" POWER RISER @ 2:00



RISER PROFILE SCALE: N.T.S. 4

REV:	DATE/BY:	REVISION DESCRIPTION:
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ENGINEER/CONSULTANT:

Civil Engineer

CDG

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CONSULTING CIVIL ENGINEERS
26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630
(949) 753-8807 OFFICE - (949) 753-8833 FAX

CLIENT:

CROWN CASTLE
NG WEST, INC.

STAMP:

SITE INFO:

SITE NAME:
MON22m1
VERIZON MONTECITO-MON22m1

SITE ADDRESS: THOMAS BROS PAGE 997 GRID C1
R.O.W. SOUTH SIDE OF VELOZ DR
(ADJACENT TO 2165 VELOZ DR)
SANTA BARBARA, CA 93108
LAT: 34.441587
LONG: -119.602992

SHEET TITLE:

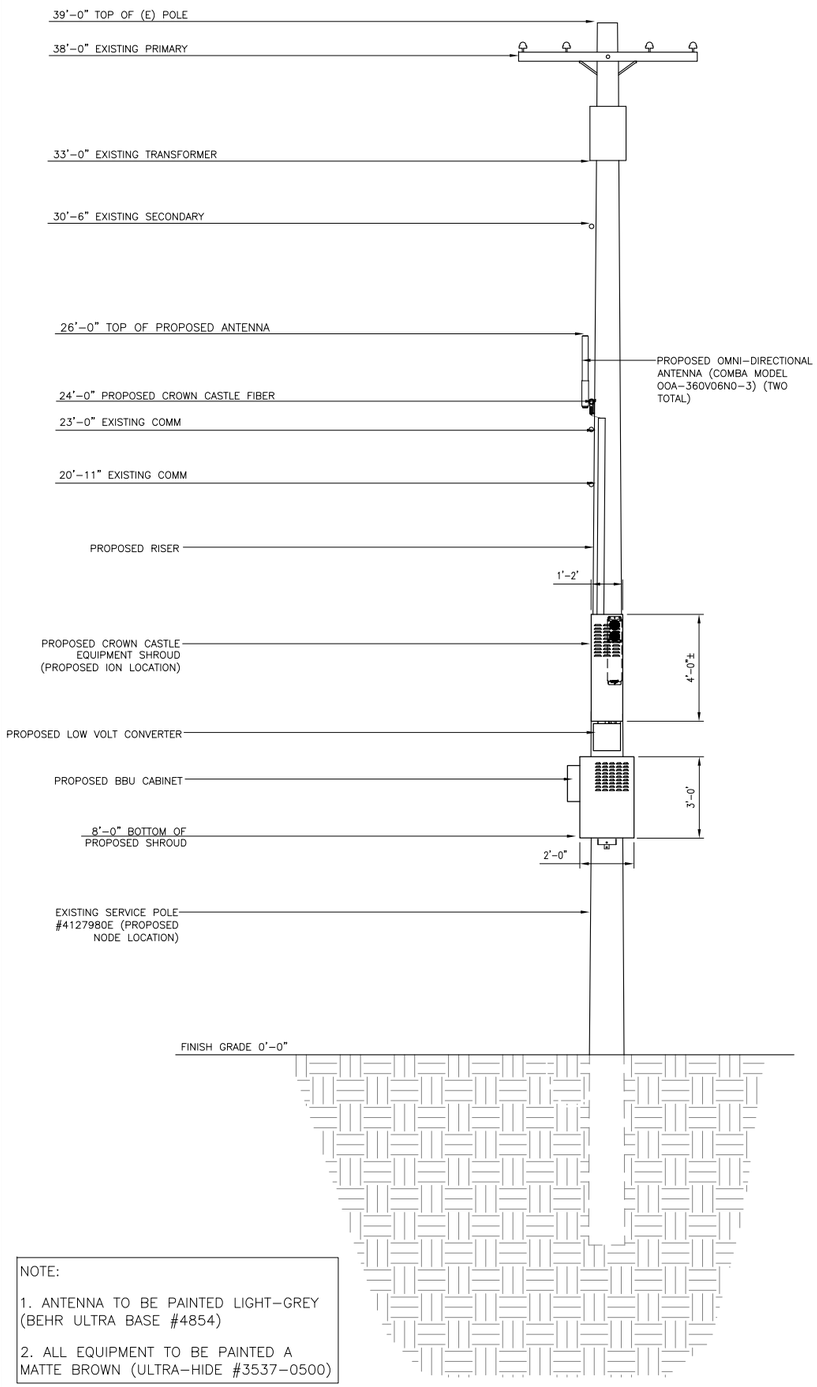
SITE PLAN, ENLARGED SITE PLAN, EXISTING PHOTO AND RISER PROFILE

DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:

A-1



NOTE:

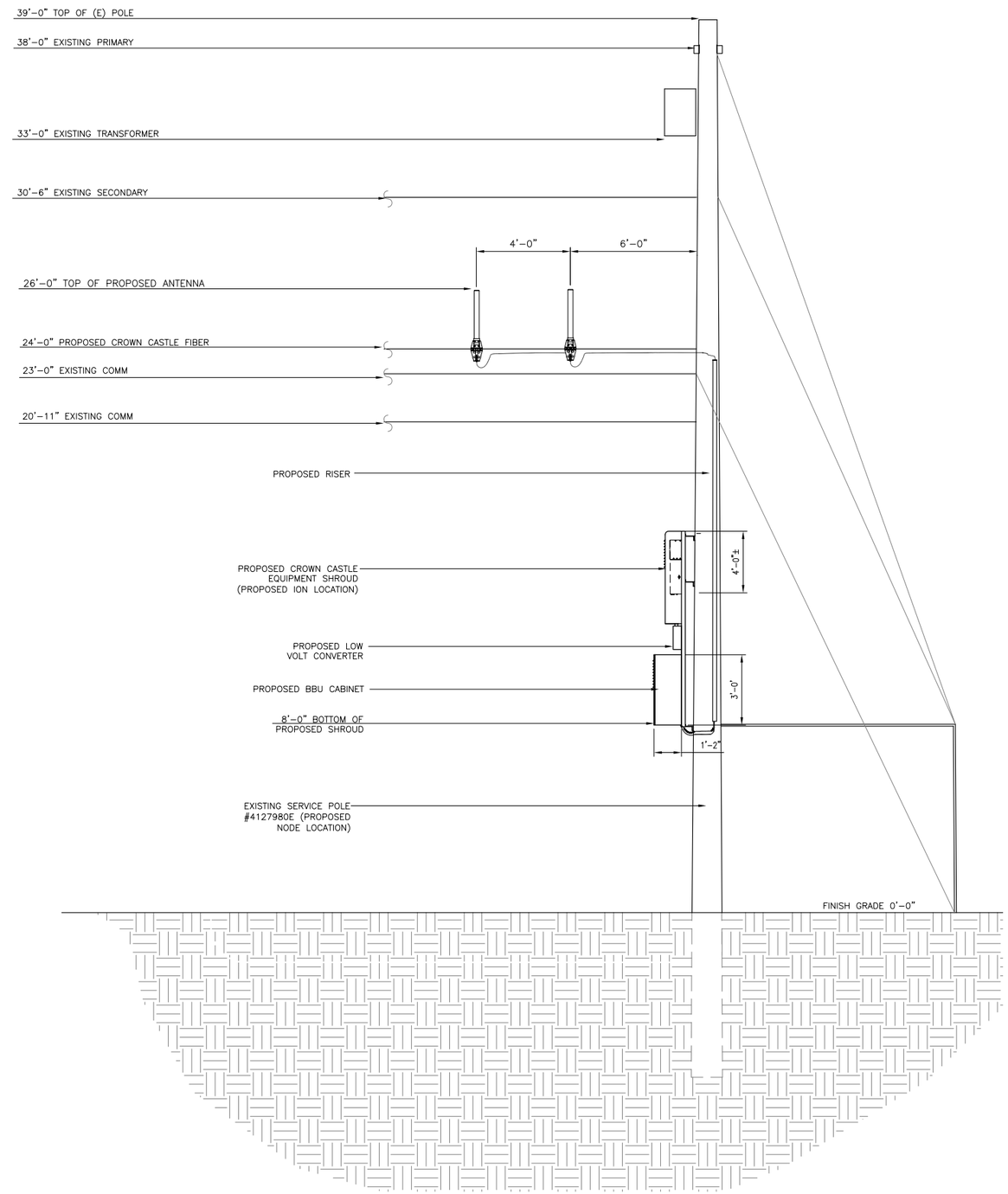
1. ANTENNA TO BE PAINTED LIGHT-GREY (BEHR ULTRA BASE #4854)

2. ALL EQUIPMENT TO BE PAINTED A MATTE BROWN (ULTRA-HIDE #3537-0500)

PROPOSED ELEVATION LOOKING EAST

SCALE: 3/8"=1'-0" 0 1' 2' 3'

1



PROPOSED ELEVATION LOOKING SOUTH

SCALE: 3/8"=1'-0" 0 1' 2' 3'

2

REV:	DATE/BY:	REVISION DESCRIPTION:
0	FXC 03/15/2013	ISSUED FOR REVIEW
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4	FXC 03/08/2014	ISSUED FOR FINAL

ENGINEER/CONSULTANT:

Civil Engineer

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26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630
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CLIENT:

CROWN CASTLE
NG WEST, INC.

STAMP:

SITE INFO:

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MON22m1
VERIZON MONTECITO-MON22m1

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R.O.W. SOUTH SIDE OF VELOZ DR
(ADJACENT TO 2165 VELOZ DR)
SANTA BARBARA, CA 93108
LAT: 34.441587
LONG: -119.602992

SHEET TITLE:

ELEVATION

DRAWING INFO:

DRAWN BY:
FC

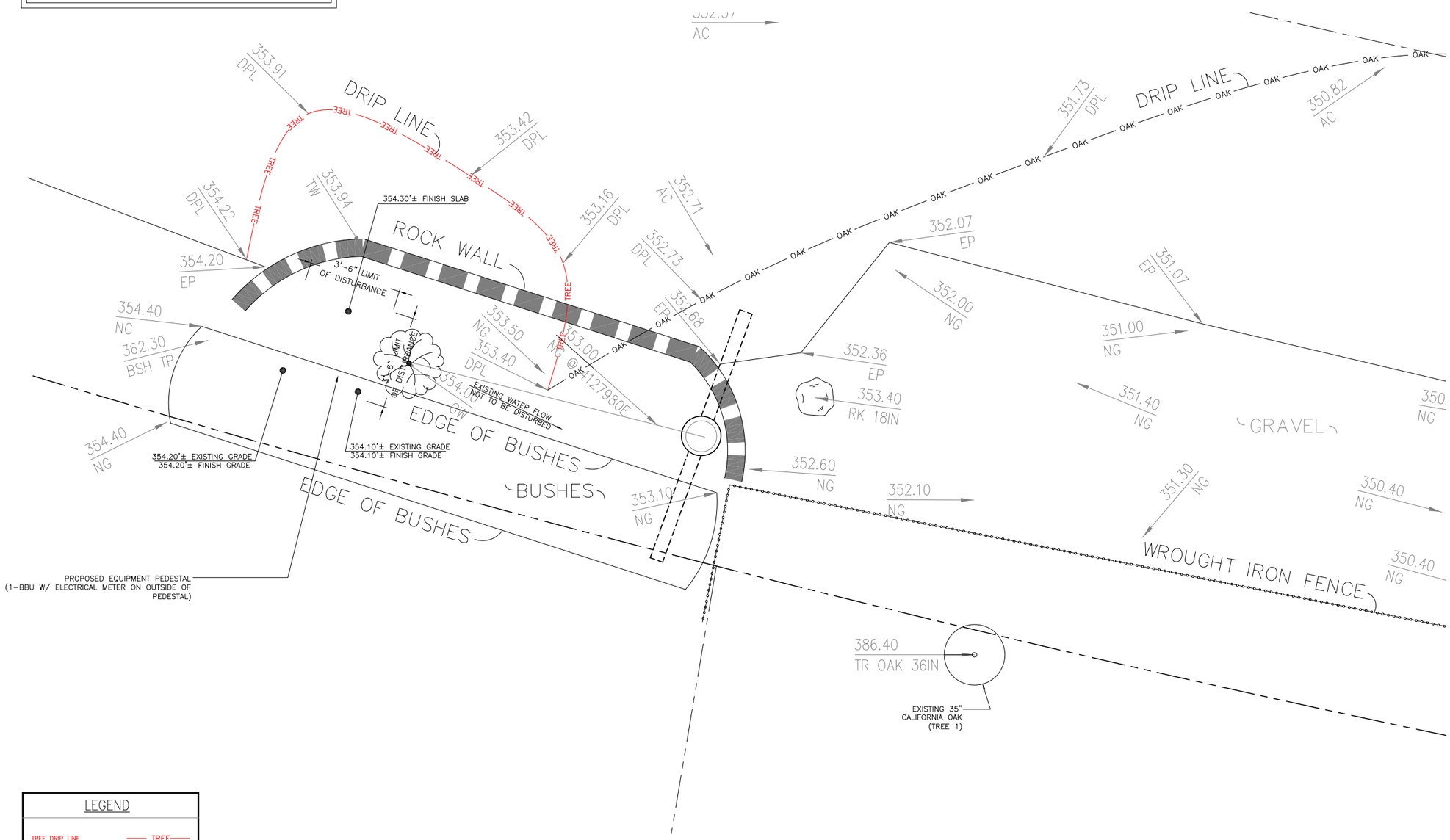
SHEET NUMBER:

A-2

GRADING CALCULATION

CONCRETE PAD:	2.997 CF
12'Lx3'Dx.5'W TRENCH:	18± CF
TOTAL:	20.997± CF

NOTE:
NO CUT AND FILL REQUIRED



LEGEND

TREE DRIP LINE	TREE
CAL OAK DRIP LINE	OAK
TRENCH	TR
CAL OAK	

NOTE:
TRENCH TO BE HAND DUG.

REV:	DATE/BY:	REVISION DESCRIPTION:
0	FXC 03/15/2013	ISSUED FOR REVIEW
1	FXC 04/25/2013	ISSUED FOR FINAL
2	FXC 11/06/2013	ISSUED FOR FINAL
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ENGINEER/CONSULTANT:

Civil Engineer

CDG

CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630
(949) 753-8807 OFFICE - (949) 753-8833 FAX

CLIENT:

CROWN CASTLE
NG WEST, INC.

STAMP:

SITE INFO:

SITE NAME:
MON22m1
VERIZON MONTECITO-MON22m1

SITE ADDRESS: THOMAS BROS PAGE 997 GRID C1
R.O.W. SOUTH SIDE OF VELOZ DR
(ADJACENT TO 2165 VELOZ DR)
SANTA BARBARA, CA 93108
LAT: 34.441587
LONG: -119.602992

SHEET TITLE:

GRADING PLAN

DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:

A-3

Outdoor Omni–directional Antenna

COMBA

OOA-360V06N0-3 VPol, 696-960/1710-2170MHz, 360°, 4.0/6.0 dBi

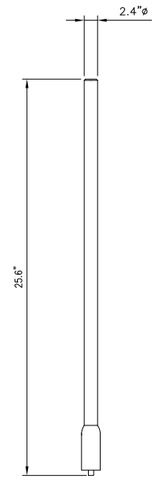
Technical Specifications

Electrical

Frequency Range	MHz	696–960	1710–2170
Polarization		Vertical	
Gain	dBi	4.0±1	6.0±1
Horizontal Beamwidth	deg	360	
Vertical Beamwidth	deg	22–53	20–26
Electrical Downtilt–Fixed	deg	0	
VSWR		1.8	
Maximum Power	W	200	
Impedance		50	
Lightning Protection		Direct Ground	

Mechanical

Dimensions, HxDia	mm(in)	650x60 (25.6x2.4)
Weight, with Mounting kit	kg (lb)	1 (2.2)
Radome Material and Color		Fiberglass, Light Grey
Radiating Element Material		Copper
Connector Type and Location		N–Female, Bottom
Operational Temperature		–55 to +70
Operational Humidity	%	95
Operational Wind Speed	km/h (mph)	200 (124)
Shipping Dimensions, HxWxD	mm (in)	670x100x100 (26.4x3.9x3.9)
Shipping Weight	kg (lb)	1. 2 (2. 65)



ANTENNA SPECIFICATIONS N.T.S. 1

Electrical

Power Supply
Mains power, Vac ..... 115 or 230

Power consumption, Watts ..... 1100 max. < 750 @ normal operation

700 MHz SISO/MIMO

Frequency range, MHz
Uplink ..... 698 to 716/776 to 787
Downlink ..... 728 to 757

Output power per carrier*, dBm

Number of Carriers	1	2	4	8
LTE	43	40**	37	34

850 MHz

Frequency range, MHz
Uplink ..... 824 to 849
Downlink ..... 869 to 894

Output power per carrier*, dBm

Number of Carriers	1	2	4	8
Analog	43	40	37	34
GSM	43	40	37	34
CDMA	43	40	37	34
LTE	43	40 **	37	34
UMTS	42	39	36	33

20W for Cell, PCS bands and 700MHz MIMO

1900 MHz

Frequency range, MHz
Uplink ..... 1850 to 1915
Downlink ..... 1930 to 1995

Output power per carrier*, dBm

Number of Carriers	1	2	4	8
GSM	43	40	37	34
CDMA	43	40	37	34
LTE	43	40 **	37	34
UMTS	42	39	36	33

CommScope

ION-M7P/7P/85P/19P

Noise figure, dB
IC3 optimized ..... +10 max.
Noise figure optimized ..... +6 max. 4.5 typical

Mechanical***

Height, width, depth, mm (in) ..... 817 x 245 x 218 (32.2 x 9.6 x 8.6)

Weight, kg (lb) 40 (88.2)

Page 1, February 27, 2013 Company Confidential

ION-M7P/7P/85P/19P N.T.S. 2

AlphaCell
General Specifications

Model:	220 GXL	195 GXL	165 GXL
Warranty[1]:	4 to 5 year full replacement	4 to 5 year full replacement	4 to 5 year full replacement
Service Life:	Extended	Extended	Extended
Runtime (minutes)[2]:	220	195	165
Sealed VRLA:	Valve regulated lead acid	Valve regulated lead acid	Valve regulated lead acid
Heat Resistant:	Extreme	Extreme	Extreme
Hydrogen Emission:	Low	Low	Low
Terminals:	Threaded insert 1/4" - 20 UNC	Threaded insert 1/4" - 20 UNC	Threaded insert 1/4" - 20 UNC

Specifications[4]

Model:	220 GXL	195 GXL	165 GXL
Typical Runtime (minutes)[2]:	220	195	165
Cells Per Unit:	6	6	6
Voltage Per Unit:	12.8	12.8	12.8
Conductance Value:	1175	1100	1000
Max. Discharge Current (A):	900	900	800
Short Circuit Current (A):	2800	2600	2500
10 Second Volts @ 100A:	11.4	11.3	11.2
Ohms Impedance 60Hz:	0.0050	0.0050	0.0055
Nominal Capacity at 20hrs: (to 1.75VPC)	109Ah	100Ah	86
Nominal Capacity at 20hrs: (to 1.70VPC)	110Ah	102Ah	87
BCI Group Size:	31	31	27
Weight (lb/kg):	73/33.2	67/30.5	63/28.6
Height w/ Terminals (in/mm):	8.48/215.4	8.48/215.4	8.05/204.5
Width (in/mm)[3]:	13.42/340.9	13.42/340.9	12.5/317.8
Depth (in/mm)[3]:	6.80/172.7	6.80/172.7	6.83/173.4
Operating Temperature Range			
Discharge:	-40 to 71°C (-40 to 160°F)	-40 to 71°C (-40 to 160°F)	-40 to 71°C (-40 to 160°F)
Charge (with temp compensation):	-23 to 60°C (-9.4 to 140°F)	-23 to 60°C (-9.4 to 140°F)	-23 to 60°C (-9.4 to 140°F)
Float Charging Voltage (Vdc):	13.5 to 13.8	13.5 to 13.8	13.5 to 13.8
AC Ripple Charger:	0.5% RMS or 1.5% of float charge voltage recommended for best results. Max. allowed = 4% P-P		

Notes:
[1] Warranty varies by country and region. Warranty valid only when used with Alpha approved Power Supplies, Chargers and Enclosures. Consult your sales person for details.
[2] Runtimes calculated using a 25A DC constant current load.
[3] Dimensions at top of battery.
[4] See AlphaCell Users Guide for Additional Details.

Typical Standby Time in Minutes @ 25°C/77°F

XM280Vac@	4A			6A			8A			10A		
Battery Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	508	452	386	329	285	249	206	209	183	180	165	144
4 batteries:	701	625	548	444	386	348	329	290	256	261	232	203
6 batteries:	1061	978	853	701	625	548	523	495	407	418	372	325
8 batteries:	1487	1388	1165	999	859	750	720	643	562	577	515	450
9 batteries:	1686	1599	1322	1001	978	853	820	733	640	659	587	514

XM210Vac@	12A			14A			16A			18A		
Battery Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	149	132	115	119	106	92	101	89	77	87	78	68
4 batteries:	210	187	163	169	151	132	144	128	112	124	111	96
6 batteries:	339	301	264	275	245	214	236	209	183	204	182	159
8 batteries:	478	419	367	385	341	299	329	293	256	288	255	223
9 batteries:	538	479	419	440	391	342	377	335	294	329	293	256

XM280Vac@	4A			6A			8A			10A		
Battery Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	798	712	622	508	453	396	377	335	294	300	267	233
4 batteries:	1061	978	852	701	625	548	523	495	407	418	372	325
6 batteries:	1686	1510	1322	1001	978	853	820	733	640	659	587	514
8 batteries:	2288	2097	1708	1487	1388	1165	1122	1005	877	904	809	706
9 batteries:	2500	2345	2037	1686	1599	1322	1273	1143	997	1027	921	800

XM210Vac@	12A			14A			16A			18A		
Battery Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	242	215	188	190	174	151	159	148	125	144	129	107
4 batteries:	339	301	264	275	245	214	236	209	182	204	182	155
6 batteries:	538	479	419	440	391	340	377	335	290	329	293	252
8 batteries:	741	660	577	607	541	479	525	465	402	458	407	351
9 batteries:	843	755	658	692	617	538	597	531	462	525	465	402

*Above calculations based on an AC load with a .90 cable plant power factor.

For contact information visit www.alpha.com

The Alpha Group >

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049-297-10 B002 (09/09)

BATTERY SPECIFICATIONS N.T.S. 3

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DETAILS

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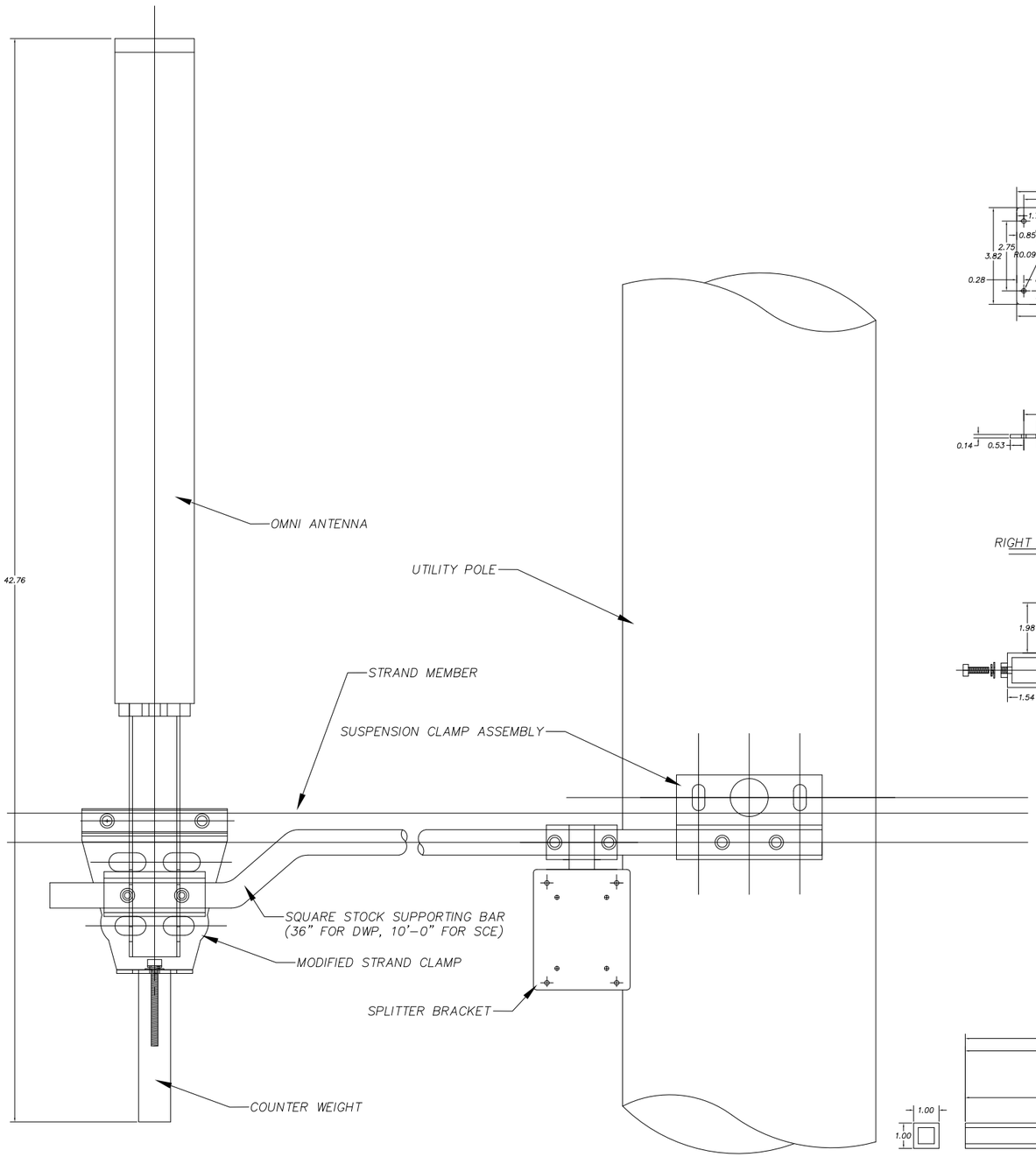
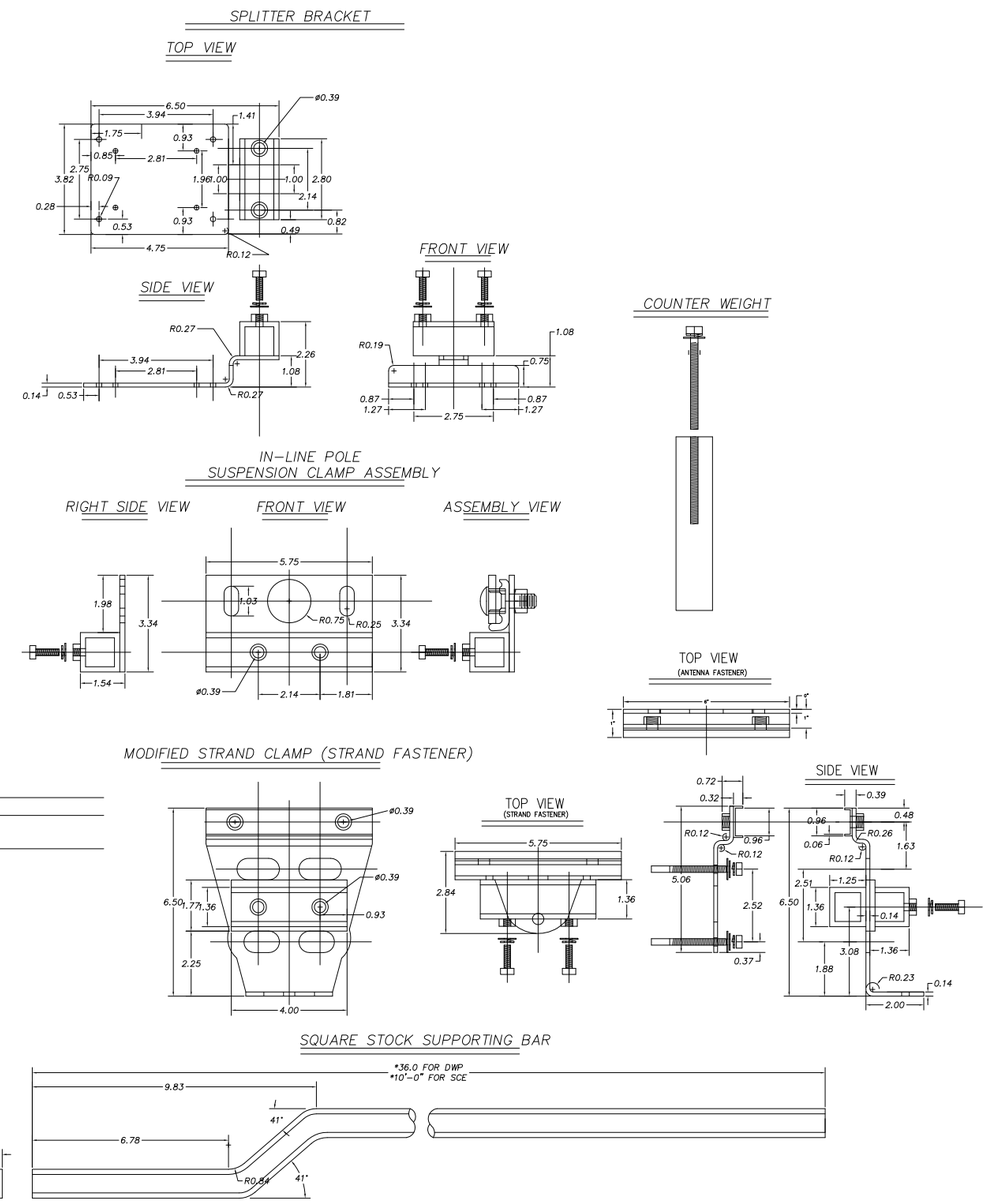
D–1





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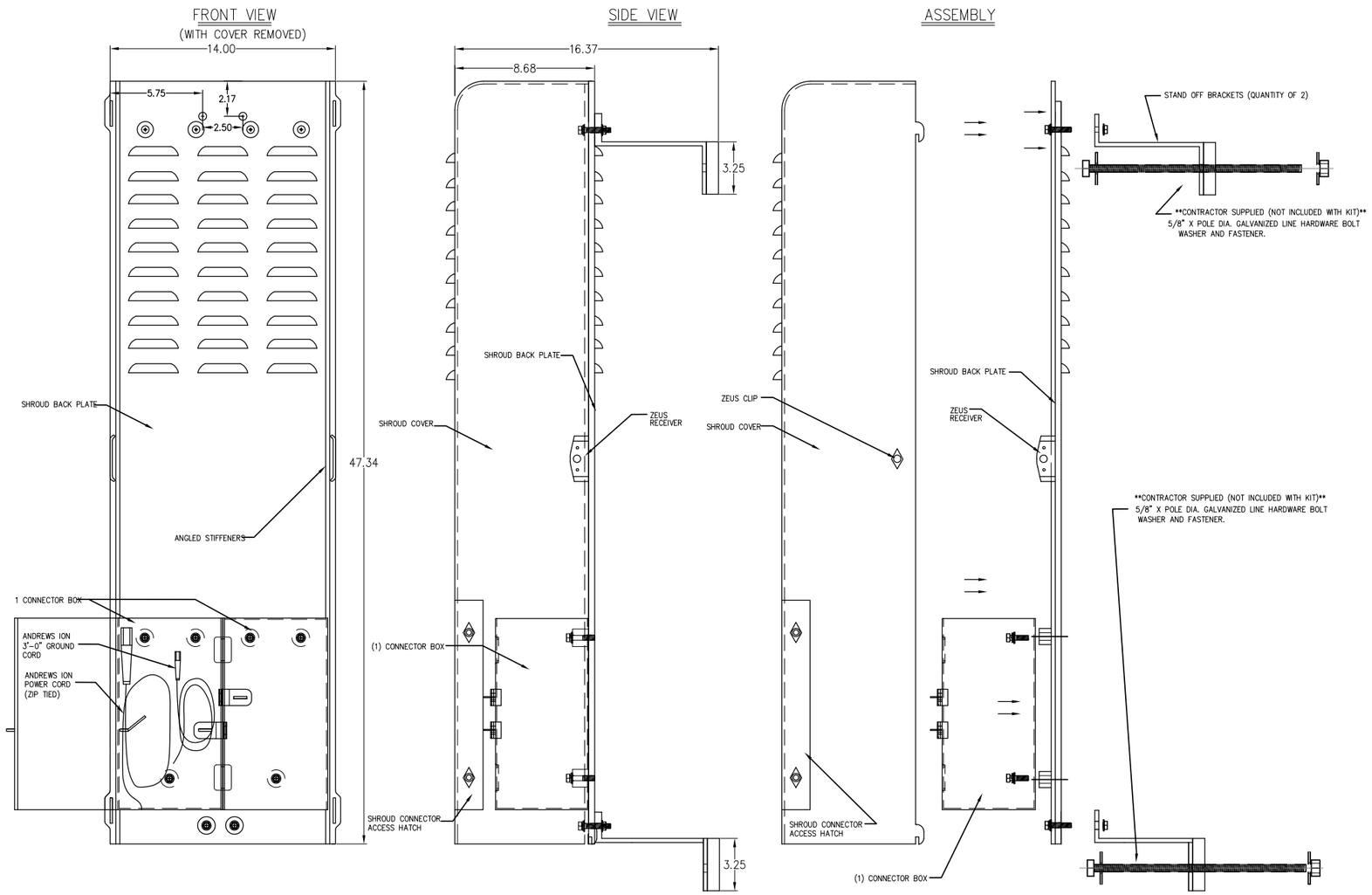
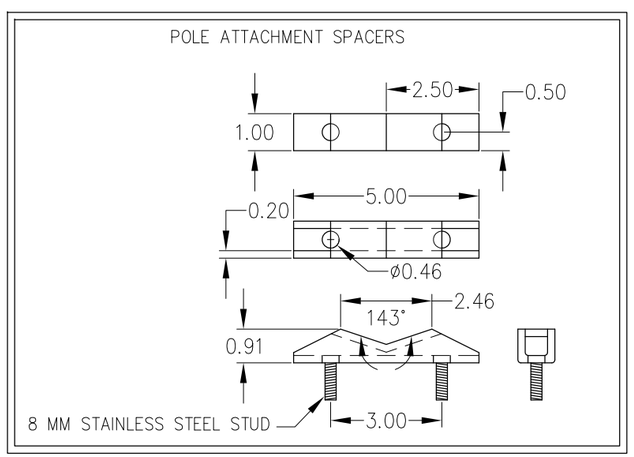
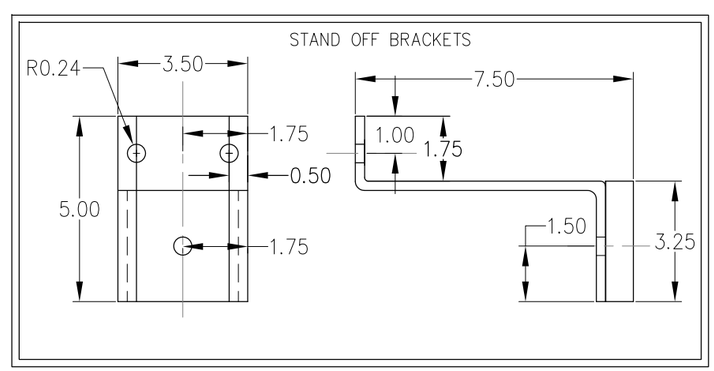
D-2

ANTENNA MOUNT | N.T.S. | 1







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FC

SHEET NUMBER:

D-3

SHROUD DETAIL

N.T.S.

CROWN CASTLE NG WEST, INC

VERIZON MONTECITO-MON23

R.O.W. EAST SIDE OF ROMERO CANYON RD.
(ADJACENT TO 1000 ROMERO CANYON RD)
SANTA BARBARA, CA 93108

GENERAL NOTES

1. APPROVAL OF THESE PLANS BY THE CITY ENGINEER DOES NOT AUTHORIZE ANY WORK TO BE PERFORMED UNTIL A PERMIT HAS BEEN ISSUED.
2. UPON ISSUANCE OF A PERMIT, NO WORK WILL BE PERMITTED ON WEEKENDS OR HOLIDAYS WITHOUT PERMISSION FROM THE ENGINEERING DEPARTMENT.
3. THE APPROVAL OF THIS PLAN OR ISSUANCE OF A PERMIT BY THE LOCAL JURISDICTION DOES NOT AUTHORIZE THE SUBDIVIDER AND OWNER TO VIOLATE ANY FEDERAL, STATE OR CITY LAWS, ORDINANCES, REGULATIONS, OR POLICIES, INCLUDING, BUT NOT LIMITED TO, THE FEDERAL ENDANGERED SPECIES ACT OF 1973 AND AMENDMENTS THERETO (16 USC SECTION 1531 ET.SEQ.).
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SURVEY MONUMENTS AND/OR VERTICAL CONTROL BENCHMARKS WHICH ARE DISTURBED OR DESTROYED BY CONSTRUCTION. A LAND SURVEYOR MUST FIELD LOCATE, REFERENCE, AND/OR PRESERVE ALL HISTORICAL OR CONTROLLING MONUMENTS PRIOR TO ANY EARTHWORK. IF DESTROYED, SUCH MONUMENTS SHALL BE REPLACED WITH APPROPRIATE MONUMENTS BY A LAND SURVEYOR, A CORNER RECORD OR RECORD OF SURVEY, AS APPROPRIATE, SHALL BE FIELD AS REQUIRED BY THE PROFESSIONAL LAND SURVEYORS ACT. IF ANY VERTICAL CONTROL IS TO BE DISTURBED OR DESTROYED, THE LOCAL JURISDICTION FIELD SURVEY SECTION MUST BE NOTIFIED, IN WRITING, AT LEAST 3 DAYS PRIOR TO THE CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE COST OF REPLACING ANY VERTICAL CONTROL BENCHMARKS DESTROYED BY THE CONSTRUCTION.
5. IMPORTANT NOTICE: SECTION 4216 OF THE GOVERNMENT CODE REQUIRES A DIG ALERT IDENTIFICATION NUMBER BE ISSUED BEFORE A "PERMIT TO EXCAVATE" WILL BE VALID. FOR YOUR DIG ALERT I.D. NUMBER, CALL UNDERGROUND SERVICE ALERT, TWO DAYS BEFORE YOU DIG.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR THE POTHOLE AND LOCATING OF ALL EXISTING UTILITIES THAT CROSS THE PROPOSED TRENCH LINE AND MUST MAINTAIN 1' MINIMUM VERTICAL CLEARANCE.
7. CONTRACTOR SHALL SUBMIT TO THE LOCAL JURISDICTION, A CONSTRUCTION PLAN TO PROTECT WATER MAINS PRIOR TO COMMENCING CONSTRUCTION.
8. CONTRACTOR SHALL REPLACE OR REPAIR ALL TRAFFIC SIGNAL LOOPS, CONDUIT, AND LANE STRIPING DAMAGED DURING CONSTRUCTION.
9. CONTRACTOR SHALL NOTIFY THE LOCAL JURISDICTION. A MINIMUM OF 48 HOURS PRIOR TO COMMENCING WORK WITHIN 10' OF ALL SEWER, WATER, AND STORMDRAIN MAIN INCLUDING ALL CROSSINGS.
10. THIS PROJECT WILL BE INSPECTED BY ENGINEERING AND CAPITAL PROJECTS DEPARTMENT, FIELD ENGINEERING DIVISION.
11. AS-BUILT DRAWINGS MUST BE SUBMITTED TO THE CITY RESIDENT ENGINEER PRIOR TO THE ACCEPTANCE OF THIS PROJECT.
12. PUBLIC IMPROVEMENT SUBJECT TO DESUETUDE OR DAMAGE." IF REPAIR OR REPLACEMENT OF SUCH PUBLIC IMPROVEMENTS IS REQUIRED, THE OWNER SHALL OBTAIN THE REQUIRED PERMITS FOR WORK IN THE PUBLIC RIGHT-OFWAY, SATISFACTORY TO THE PERMIT – ISSUING AUTHORITY.
13. PRIOR TO ANY DISTURBANCE TO THE SITE, EXCLUDING UTILITY MARKS-OUTS AND SURVEYING, THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR A PRE-CONSTRUCTION MEETING WITH THE LOCAL JURISDICTION FIELD ENGINEERING DIVISION.
14. PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION SHOWN ON THESE PLANS. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE. THE CONTRACTOR IS RESPONSIBLE TO ATTEND THE LOCAL JURISDICTIONS MONTHLY UTILITY COORDINATION COMMITTEE THE CONSTRUCTION ACTIVITIES WITH THE CITY AND ALL OTHER CONTRACTORS SO THAT NO TRENCH IS CUT WITHIN ANY OF THE CITY STREETS THAT HAVE BEEN CONSTRUCTED, REPAIRED, OR SLURRY SEALED WITHIN THREE YEARS OF THE STREET CONSTRCTUION/RESURFACING DATE.
15. MANHOLES OR COVERS SHALL BE LABELED "CROWN CASTLE" OR "CROWN CASTLE NG WEST".
16. CONTRACTOR SHALL IMPLEMENT AN EROSION AND SEDIMENT CONTROL PROGRAM DURING THE PROJECT CONSTRUCTION ACTIVITIES. THE PROGRAM SHALL MEET THE APPLICABLE REQUIREMENTS OF THE STATE WATER RESOURCE CONTROL BOARD.
17. THE CONTRACTOR SHALL HAVE EMERGENCY MATERIALS AND EQUIPMENT ON HAND FOR UNFORESEEN SITUATIONS, SUCH AS DAMAGE TO UNDERGROUND WATER, SEWER, AND STORM DRAIN FACILITIES WHEREBY FLOWS MAY GENERATE EROSION AND SEDIMENT POLLUTION.

SPECIAL NOTES

THE FOLLOWING NOTES ARE PROVIDED TO GIVE DIRECTIONS TO THE CONTRACTOR BY THE ENGINEER OF WORK. THE CITY ENGINEER'S SIGNATURE ON THESE PLANS DOES NOT CONSTITUTE APPROVAL OF THESE NOTES AND THE CITY WILL NOT BE RESPONSIBLE FOR THEIR ENFORCEMENT.

1. THE CONTRACTOR SHALL VERIFY THE LOCATION EXISTING UNDERGROUND UTILITIES INCLUDING SEWER LATERALS AND WATER SERVICES TO INDIVIDUAL LOTS BOTH VERTICAL AND HORIZONTAL PRIOR TO COMMENCING IMPROVEMENT OPERATIONS.
2. CONTRACTOR SHALL MAKE EXPLORATION EXCAVATIONS AND LOCATE EXISTING FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS OF PLANS IF REVISION IS NECESSARY BECAUSE OF LOCATION OF EXISTING UTILITIES.
3. LOCATION AND ELEVATIONS OF IMPROVEMENTS, TO BE MET BY WORK, SHALL BE CONFIRMED BY FIELD MEASUREMENT PRIOR TO CONSTRUCTION OF NEW WORK.
4. GRADES SHOWN ARE FINISH GRADES, CONTRACTOR SHALL DETERMINE NECESSARY SUB GRADE ELEVATIONS AND SHALL CONSTRUCT SMOOTH TRANSITION BETWEEN FINISH GRADES SHOWN.
5. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE RESPONSIBILITY FOR JOB SITE CONDITION DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS PROVISION SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXPECTING FOR LIABILITY ARISING FROM SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
6. THE CONTRACTOR SHALL BE TOTALLY RESPONSIBLE FOR COMPLIANCE WITH THE PROVISIONS OF THE STATE OF CALIFORNIA SAFETY ORDERS.
7. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE FROM EXISTING RECORDS AND CORROBORATED, WHERE POSSIBLE WITH FIELD TIES. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING THE LOCATIONS SHOWN, BOTH HORIZONTALLY AND VERTICALLY, PRIOR TO CONSTRUCTION. IF EXISTING LOCATIONS VARY SUBSTANTIALLY FROM THE PLANS, THE ENGINEER SHOULD BE NOTIFIED TO MAKE ANY CONSTRUCTION CHANGES REQUIRED.
8. THE CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT FOR ALL SEWER AND WATER MAIN UNDER CROSSING IN ACCORDANCE WITH PART 1 SECTION 5-2 OF THE STANDARD SPECIFICATION.
9. THE CONTRACTOR SHALL REPLACE OR REPAIR ALL TRAFFIC SIGNAL LOOPS, CONDUITS, AND LANE STRIPING DAMAGED DURING CONSTRUCTION.
10. THE CONTRACTOR SHALL SUBMIT WORK PLANS FOR ALL BORE OPERATIONS TWO WEEKS PRIOR TO COMMENCING WORK.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR THE POTHOLE AND LOCATING OF ALL EXISTING UTILITIES THAT CROSS THE PROPOSED TRENCH LINE AND MUST MAINTAIN 1' MINIMUM VERTICAL CLEARANCE.
12. AS-BUILT DRAWINGS MUST BE SUBMITTED TO THE CITY ENGINEER PRIOR TO ACCEPTANCE OF THIS PROJECT.

VICINITY MAP – N.T.S.

GROUND BUS BAR
MECH. GRND. CONN.
CADWELD
ELECTRIC BOX
TELEPHONE BOX
EXISTING SERVICE POLE
SIDEWALK FLAG
EX. MANHOLE
LIGHT POLE
FOUNDATION
SPOT ELEV.
SET POINT
REVISION
DETAIL REF.
ELEVATION REF.
SECTION REF.
PROP./LEASE LINE
MATCH LINE
WORK POINT
TELE. CONDUIT
CENTERLINE
ELECT. CONDUIT
COAXIAL CABLE
MYERS PEDESTAL
VAULT STANDARD 2'X3'
STEEL POLE

SYMBOLS, LINETYPES AND HATCH PATTERNS

EROSION AND SEDIMENT CONTROL NOTES

TEMPORARY EROSION/SEDIMENT CONTROL, PRIOR TO COMPLETION OF FINAL IMPROVEMENTS, SHALL BE PERFORMED BY THE CONTRACTOR OR QUALIFIED PERSON AS INDICATED BELOW:

1. ALL REQUIREMENTS OF THE LOCAL JURISDICTION "LAND DEVELOPMENT MANUAL, STORM WATER STANDARDS" MUST BE INCORPORATED INTO THE DESIGN AND CONSTRUCTION OF THE PROPOSED GRADING/IMPROVEMENTS CONSISTENT WITH THE APPROVED STORM WATER AND/OR WATER POLLUTION CONTROL PLAN (WPCP).
2. FOR STORM DRAIN INLETS, PROVIDE A GRAVEL BAG SILT BASIN IMMEDIATELY UPSTREAM OF INLET AS INDICATED ON DETAILS.
3. FOR INLETS LOCATED AT SUMPS ADJACENT TO TOP OF SLOPES, THE CONTRACTOR SHALL ENSURE THAT WATER DRAINING TO THE SUMP IS DIRECTED INTO THE INLET AND THAT A MINIMUM OF 1.00" FREEBOARD EXISTS AND IS MAINTAINED ABOVE THE TOP OF THE INLET. IF FREEBOARD IS NOT PROVIDED BY GRADING SHOWN ON THESE PLANS, THE CONTRACTOR SHALL PROVIDE IT VIA TEMPORARY MEASURES, I.E. GRAVEL BAGS OR DIKES.
4. THE CONTRACTOR OR QUALIFIED PERSON SHALL BE RESPONSIBLE FOR CLEANUP OF SILT AND MUD ON ADJACENT STREET(S) AND STORM DRAIN SYSTEM DUE TO CONSTRUCTION ACTIVITY.
5. THE CONTRACTOR OR QUALIFIED PERSON SHALL CHECK AND MAINTAIN ALL LINED AND UNLINED DITCHES AFTER EACH RAINFALL.
6. THE CONTRACTOR SHALL REMOVE SILT AND DEBRIS AFTER EACH MAJOR RAINFALL.
7. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON, ALL NECESSARY MATERIALS SHALL BE STOCKPILED ON SITE AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
8. THE CONTRACTOR SHALL RESTORE ALL EROSION/SEDIMENT CONTROL MEASURES TO WORKING ORDER TO THE SATISFACTION OF THE CITY ENGINEER OR RESIDENT ENGINEER AFTER EACH RUN-OFF PRODUCING RAINFALL.
9. THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION CONTROL MEASURES AS MAY BE REQUIRED BY THE RESIDENT ENGINEER DUE TO UNCOMPLETED GRADING OPERATIONS OR UNFORESEEN CIRCUMSTANCES, WHICH MAY ARISE.
10. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATERS CREATE A HAZARDOUS CONDITION.
11. ALL EROSION/SEDIMENT CONTROL MEASURES PROVIDED PER THE APPROVED GRADING PLAN SHALL BE INCORPORATED HEREON. ALL EROSION/SEDIMENT CONTROL FOR INTERIM CONDITIONS SHALL BE DONE TO THE SATISFACTION OF THE RESIDENT ENGINEER.
12. GRADED AREAS AROUND THE PROJECT PERIMETER MUST DRAIN AWAY FROM THE FACE OF THE SLOPE AT THE CONCLUSION OF EACH WORKING DAY.
13. ALL REMOVABLE PROTECTIVE DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN RAIN IS IMMINENT.
14. THE CONTRACTOR SHALL ONLY GRADE, INCLUDING CLEARING AND GRUBBING FOR THE AREAS FOR WHICH THE CONTRACTOR OR QUALIFIED PERSON CAN PROVIDE EROSION/SEDIMENT CONTROL MEASURES.
15. THE CONTRACTOR SHALL ARRANGE FOR WEEKLY MEETINGS DURING OCTOBER 1ST TO APRIL 30TH FOR PROJECT TEAM (GENERAL CONTRACTOR, QUALIFIED PERSON, EROSION CONTROL SUBCONTRACTOR IF ANY, ENGINEER OF WORK, OWNER AND THE RESIDENT ENGINEER) TO EVALUATE THE ADEQUACY OF THE EROSION/SEDIMENT CONTROL MEASURES AND OTHER RELATED CONSTRUCTION ACTIVITIES.

TRAFFIC CONTROL NOTES

THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN (11" X 17") FOR APPROVAL PRIOR TO STARTING WORK. THE PLAN SHOULD BE SUBMITTED TO THE TRAFFIC CONTROL PERMIT COUNTER. CONTRACTOR SHALL OBTAIN A TRAFFIC CONTROL PERMIT A MINIMUM OF TWO (2) WORKING DAYS PRIOR TO STARTING WORK, AND A MINIMUM FIVE (5) DAYS IF WORK WILL AFFECT A BUS STOP OR AN EXISTING TRAFFIC SIGNAL, OR IF WORK WILL REQUIRE A ROAD OR ALLEY CLOSURE.

FOOTAGE TOTALS	
ASPHALT CUT	–
DIRT TRENCH	–
PUNCH THRU	–
BORE	–
TOTAL	–
R&R SWF TOTAL	–

PROJECT DICTIONARY

SITE ADDRESS: R.O.W. EAST SIDE OF ROMERO CANYON RD.
(ADJACENT TO 1000 ROMERO CANYON RD)
SANTA BARBARA, CA 93108

APPLICANT: CROWN CASTLE NG WEST, INC
2125 WRIGHT AVE, SUITE #C9
LA VERNE, CA 91750
CONTACT: HEIDI PAYNE
PHONE: (949) 300-9493

CIVIL ENGINEER: CONNELL DESIGN GROUP, LLC
26455 RANCHO PARKWAY SOUTH
LAKE FOREST, CA 92630
CONTACT: FRANK CARTER
(949) 310-8233 PHONE
(949) 753-8833 FAX

CONSTRUCTION CHANGE TABLE

CHANGE	DATE	EFFECTED OR ADDED SHEET NUMBERS

APPLICABLE CODES

ALL WORK SHALL COMPLY WITH THE FOLLOWING APPLICABLE CODES:

*2010 CALIFORNIA BUILDING CODE
*2010 CALIFORNIA MECHANICAL CODE
*2010 CALIFORNIA PLUMBING CODE
*2010 CALIFORNIA ELECTRICAL CODE

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

PROJECT DESCRIPTION

PROJECT CONSISTS OF INSTALLATION OF:

1. (2) OMNI ANTENNAS ON EXISTING UTILITY POLE
2. EQUIPMENT PEDESTAL W/ BBU, AND ELECTRICAL METER AT BASE OF POLE
3. PROPOSED SHROUD W/ ION ON EXISTING UTILITY POLE

SHEET INDEX:

TITLE SHEET	T-1 – SHEET 1 OF 8
TOPOGRAPHIC SURVEY	C-1 – SHEET 2 OF 8
SITE PLAN	A-1 – SHEET 3 OF 8
PROPOSED ELEVATIONS	A-2 – SHEET 4 OF 8
GRADING PLAN	A-3 – SHEET 5 OF 8
DETAILS	D-1 – SHEET 6 OF 8
DETAILS	D-2 – SHEET 7 OF 8
DETAILS	D-3 – SHEET 8 OF 8

REV:	DATE/BY:	REVISION DESCRIPTION:
0	FXC 03/15/2013	ISSUED FOR REVIEW
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3	FXC 03/08/2014	ISSUED FOR FINAL

ENGINEER/CONSULTANT:

Civil Engineer

CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630
(949) 753-8807 OFFICE - (949) 753-8833 FAX

CLIENT:

CROWN CASTLE NG WEST, INC.

STAMP:

SITE INFO:

SITE NAME:
MON23
VERIZON MONTECITO-MON23

SITE ADDRESS: THOMAS BROS PAGE 987 GRID E7
R.O.W. EAST SIDE OF ROMERO CANYON RD.
(ADJACENT TO 1000 ROMERO CANYON RD)
SANTA BARBARA, CA 93108
LAT: 34.44892
LONG: -119.59215

SHEET TITLE:

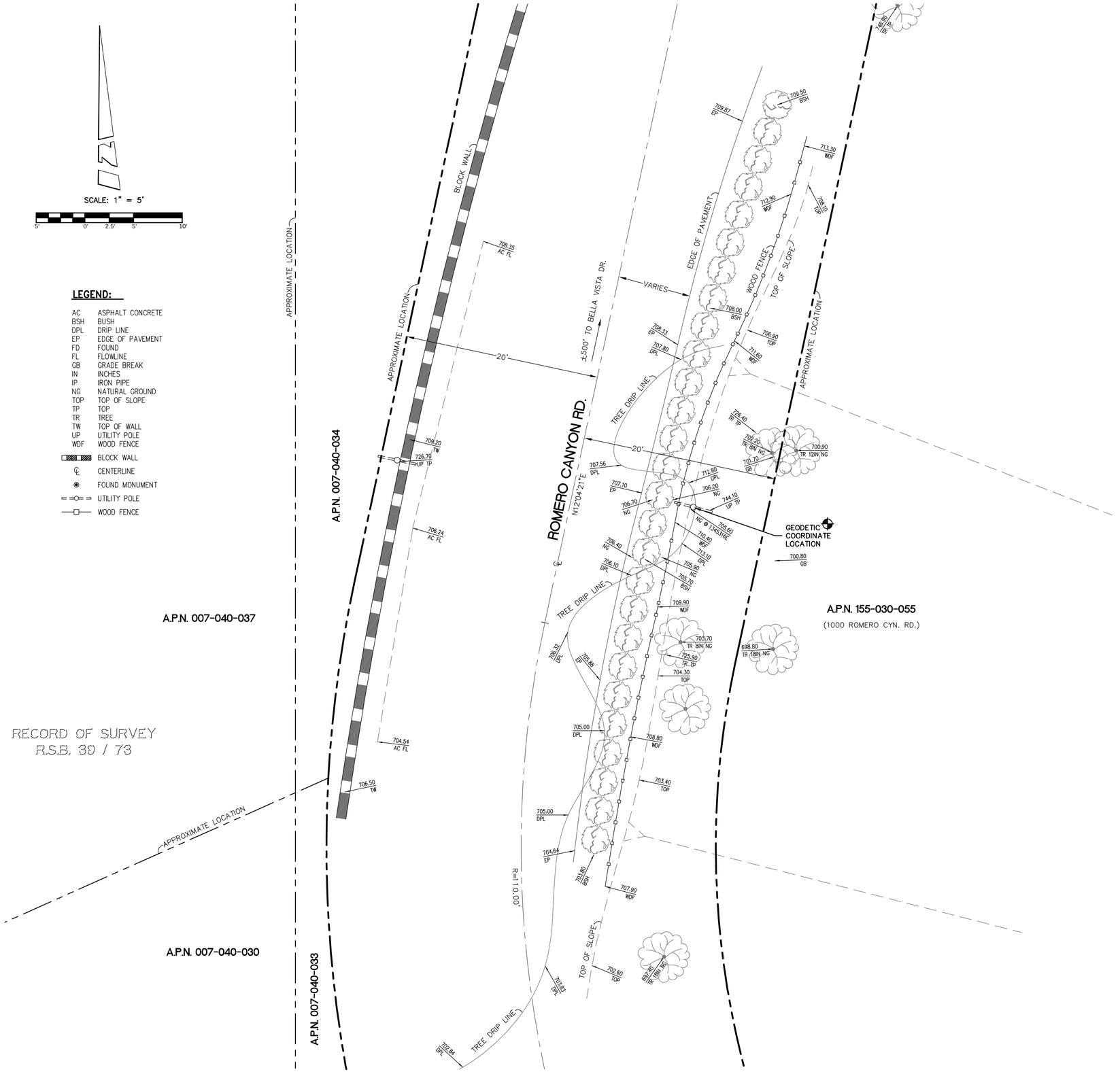
TITLE SHEET

DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:

T-1



COORDINATES:

LATITUDE 34°26'54.99" N
LONGITUDE 119°35'32.18" W

NAD 1983 GEODETIC COORDINATES AND ELEVATIONS WERE ESTABLISHED USING SURVEY GRADE "ASHTECH" G.P.S. RECEIVERS AND ASHTECH SURVEY GRADE PRECISION SOFTWARE FOR POST-PROCESSING.

BASIS OF BEARINGS:

ESTABLISHED BY G.P.S. OBSERVATIONS AND PROCESSED TO CALIFORNIA ZONE 5, NORTH AMERICAN DATUM OF 1983.

ASSESSOR'S IDENTIFICATION:

N/A

AREA:

N/A

BENCH MARK REFERENCE:

U.S.G.S. BENCH MARK "BM 750"

UNITED STATES GEOLOGICAL SURVEY BENCH MARK "BM 750" AS SHOWN ON THE "CARPINTERIA" 7.5 MINUTE QUADRANGLE MAP.

ELEVATION: 752.5 FEET A.M.S.L. (NAVD88) (DATUM VERIFIED IN FIELD TO BE WITHIN 1-A ACCURACY STANDARDS)

TITLE REPORT IDENTIFICATION:

N/A

EASEMENT NOTES:

N/A

LEGAL DESCRIPTION:

N/A

DATE OF SURVEY:

JULY 17, 2013

SURVEYORS NOTE:

THE RIGHT OF WAY LINES AND THEIR DIMENSIONS SHOWN HEREON ARE PER READILY AVAILABLE RECORDED INFORMATION AND THEIR LOCATIONS ARE APPROXIMATE, PENDING RECEIPT OF TITLE REPORT(S) FOR THE ADJACENT REAL PROPERTY.

LIVING PLANTS STATEMENT:

THE HEIGHTS AND ELEVATIONS FOR THE TREES, BUSHES AND OTHER LIVING PLANTS SHOWN HEREON, SHOULD BE CONSIDERED APPROXIMATE (+/-) AND ONLY VALID FOR THE DATE OF THIS SURVEY. THEY ARE PROVIDED AS A GENERAL REFERENCE AND SHOULD NOT BE USED FOR DESIGN PURPOSES.

REV:	DATE/BY:	REVISION DESCRIPTION:
1	07/25/13 MDL/JA	ISSUED FOR REVIEW

ENGINEER/CONSULTANT:

CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PKWY. SOUTH
LAKE FOREST, CA 92630-8326
(949) 753-8807 OFFICE - (949) 753-8833 FAX

SITE BUILDER:

CROWN CASTLE
NG WEST, INC.

SURVEYOR:

BERT HAZE
AND ASSOCIATES, INC.
LAND SURVEYING & MAPPING
3188 AIRWAY AVENUE, SUITE K1
COSTA MESA, CALIFORNIA 92626
714 557-1567 OFFICE
714 557-1568 FAX

JN. 706.236

STAMP:

PROFESSIONAL LAND SURVEYOR
BERT HAZE
No. 7211
Exp. 3-31-14
STATE OF CALIFORNIA

SITE INFO:

SITE NAME:

MON23
VERIZON MONTECITO-MON23

SITE ADDRESS:

R.O.W. EAST SIDE OF ROMERO CANYON RD
(ADJACENT TO 1000 ROMERO CANYON RD)
SANTA BARBARA, CA 93108

SHEET TITLE:

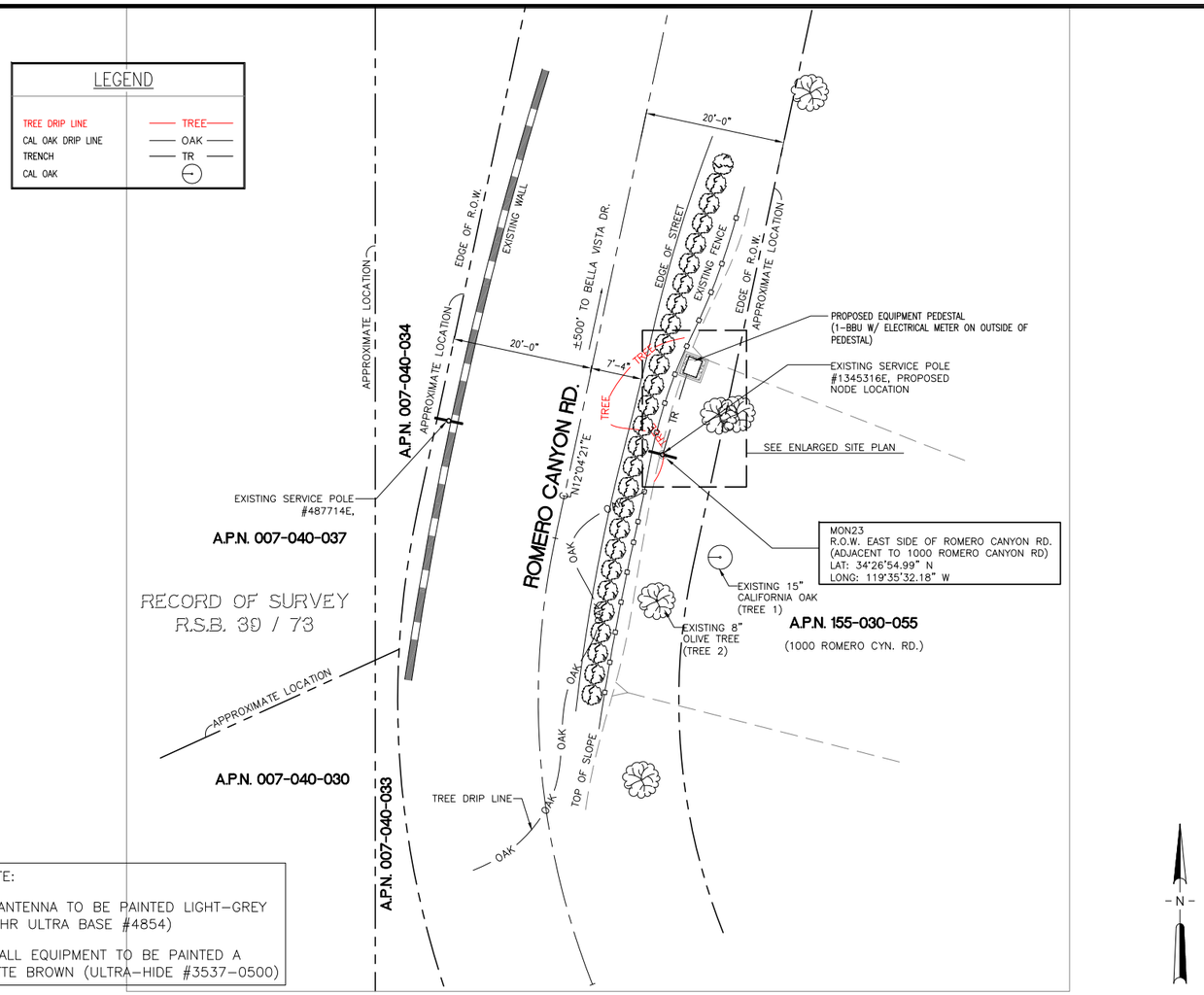
TOPOGRAPHIC SURVEY

DRAWING INFO:

DWG. NAME:	DRAWN BY:	DATE:
MON23	MDL	07/25/13

SHEET NUMBER:

1 OF 1 | C-1

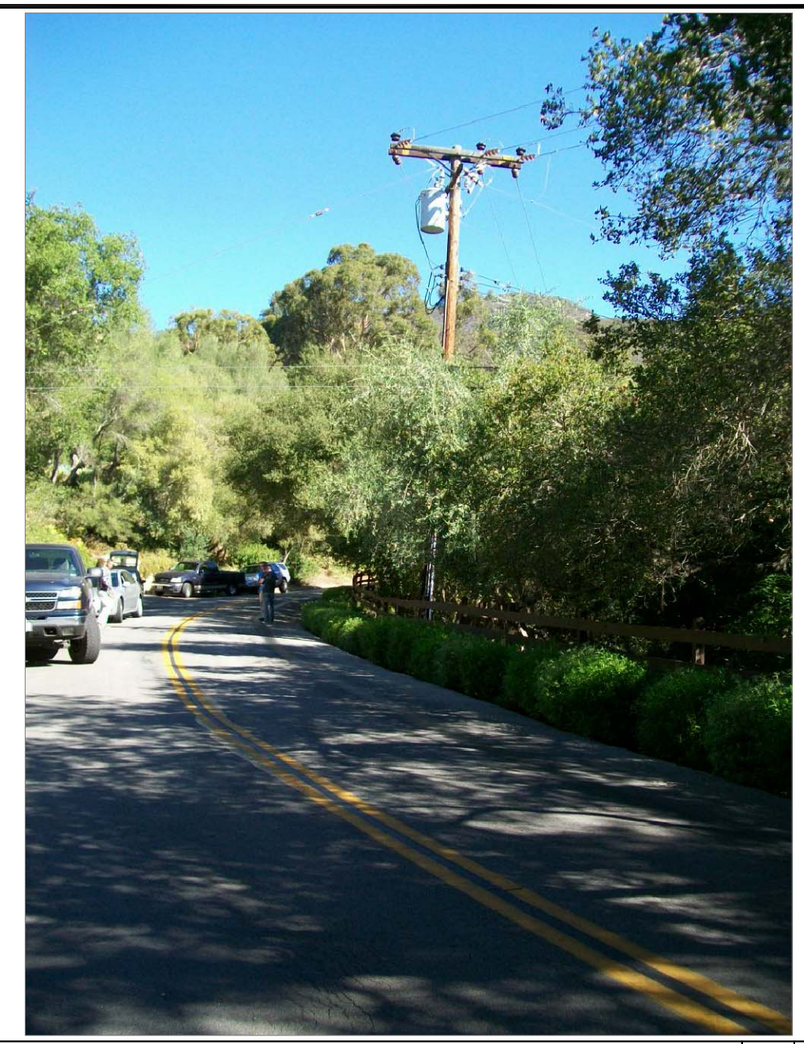


NOTE:

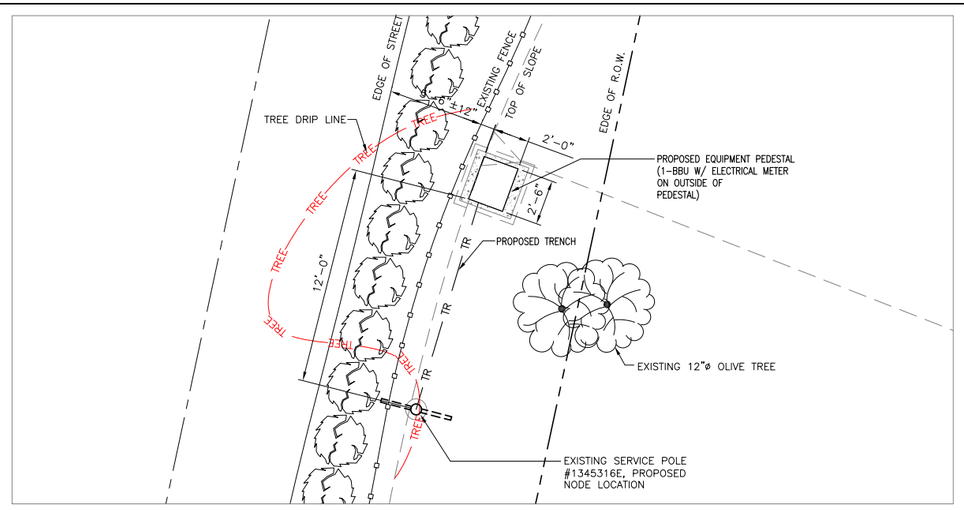
1. ANTENNA TO BE PAINTED LIGHT-GREY (BEHR ULTRA BASE #4854)

2. ALL EQUIPMENT TO BE PAINTED A MATTE BROWN (ULTRA-HIDE #3537-0500)

SITE PLAN | SCALE: 1"=10'-0" (0 5' 10') | 1



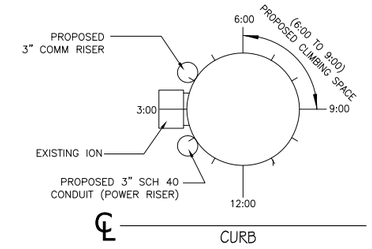
EXISTING PHOTO | SCALE: N.T.S. | 3



ENLARGED SITE PLAN | SCALE: 1/4"=1'-0" (0 2' 4') | 2

POLE WILL BE STEPPED IN ACCORDANCE TO G095 STANDARDS IN RESPECT TO CLIMBING SPACE.

1-3" CROWN CASTLE RISER @ 4:00
1-3" POWER RISER @ 2:00



RISER PROFILE | SCALE: N.T.S. | 4

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ENGINEER/CONSULTANT:

Civil Engineer

CDG

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CONSULTING CIVIL ENGINEERS
26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630
(949) 753-8807 OFFICE - (949) 753-8833 FAX

CLIENT:

CROWN CASTLE NG WEST, INC.

STAMP:

SITE INFO:

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MON23
VERIZON MONTECITO-MON23

SITE ADDRESS: THOMAS BROS PAGE 987 GRID E7
R.O.W. EAST SIDE OF ROMERO CANYON RD.
(ADJACENT TO 1000 ROMERO CANYON RD)
SANTA BARBARA, CA 93108
LAT: 34.44892
LONG: -119.59215

SHEET TITLE:

SITE PLAN, ENLARGED SITE PLAN, EXISTING PHOTO AND RISER PROFILE

DRAWING INFO:

DRAWN BY:
FC

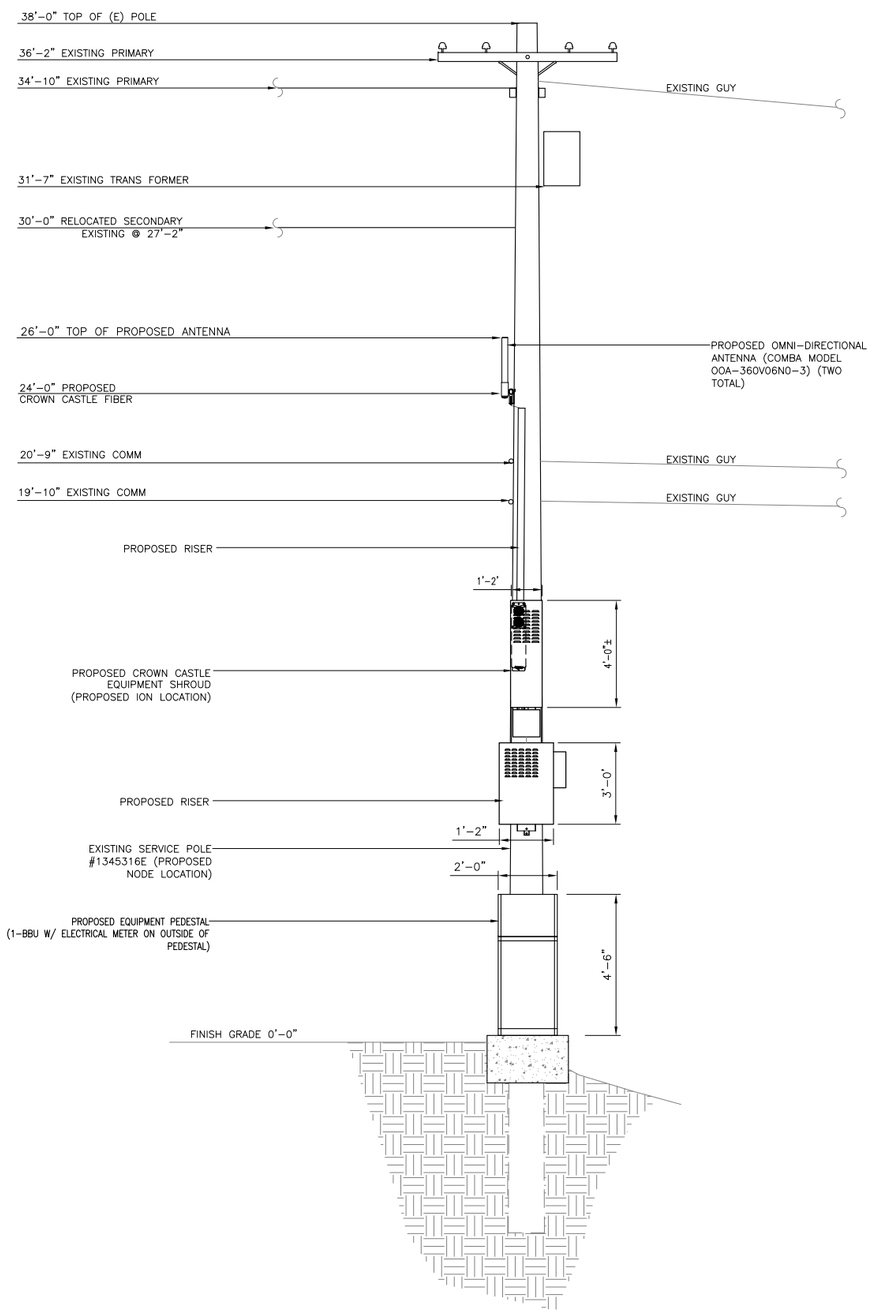
SHEET NUMBER:

A-1

NOTE:

1. ANTENNA TO BE PAINTED LIGHT-GREY (BEHR ULTRA BASE #4854)

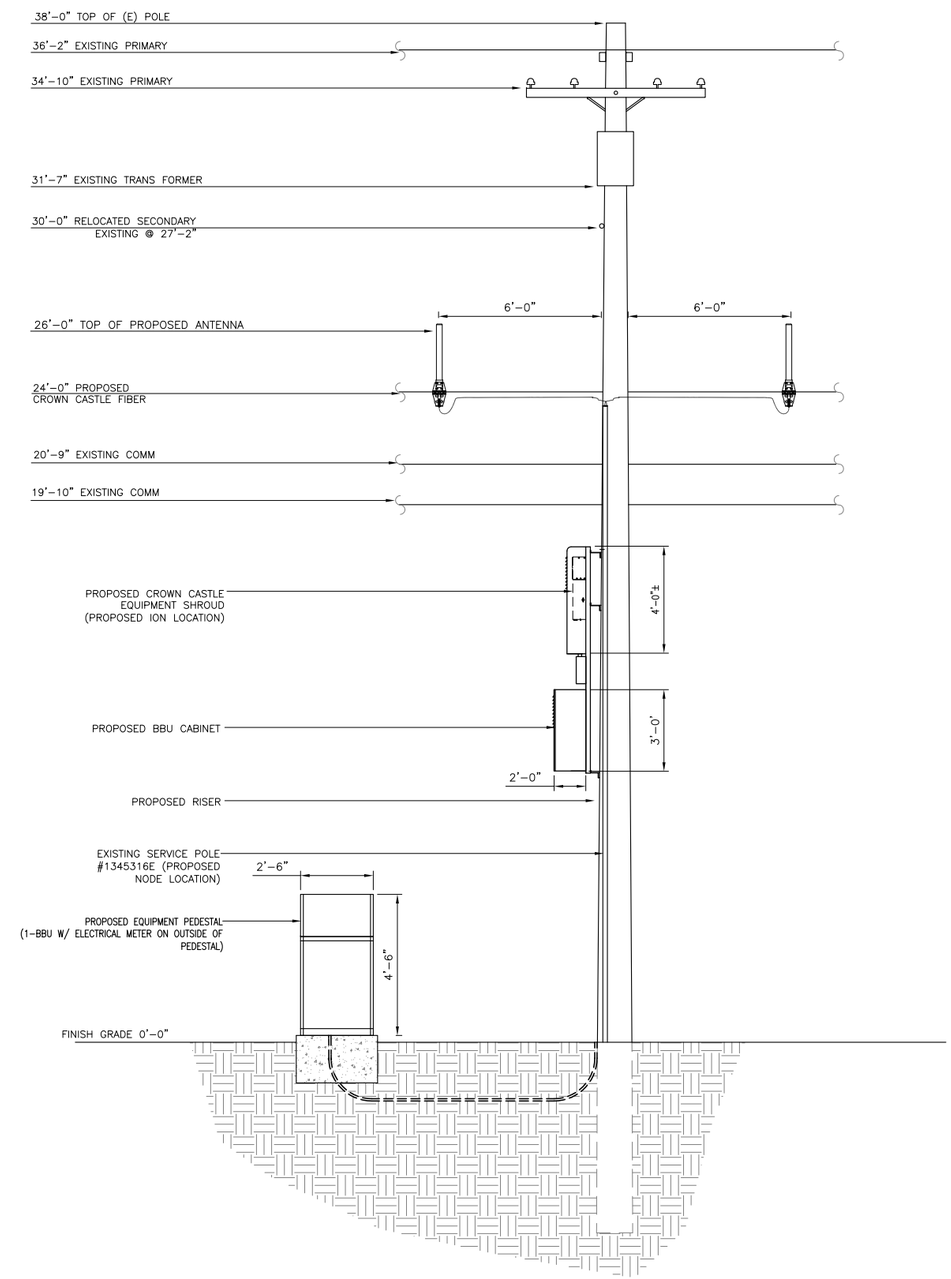
2. ALL EQUIPMENT TO BE PAINTED A MATTE BROWN (ULTRA-HIDE #3537-0500)



PROPOSED ELEVATION LOOKING SOUTH

SCALE: 3/8"=1'-0" 0 1' 2' 3'

1



PROPOSED ELEVATION LOOKING EAST

SCALE: 3/8"=1'-0" 0 1' 2' 3'

2

REV:	DATE/BY:	REVISION DESCRIPTION:
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SHEET TITLE:

ELEVATION

DRAWING INFO:

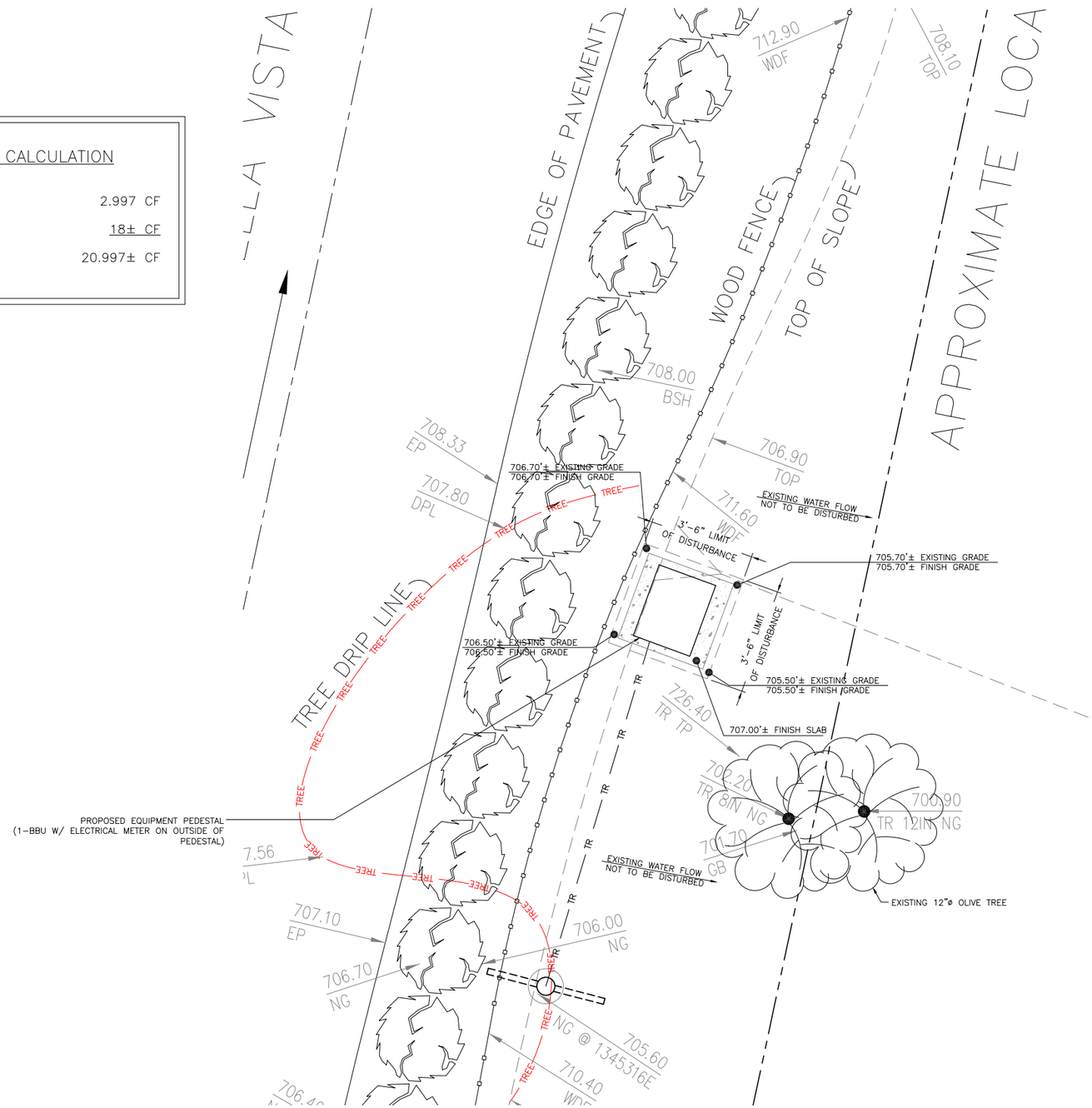
DRAWN BY:
FC

SHEET NUMBER:

A-2

GRADING CALCULATION

CONCRETE PAD:	2.997 CF
12'Lx3'Dx.5'W TRENCH:	18± CF
TOTAL:	20.997± CF



NOTE:
NO CUT AND FILL REQUIRED

LEGEND

TREE DRIP LINE	TREE
CAL OAK DRIP LINE	OAK
TRENCH	TR
CAL OAK	

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LAT: 34.44892
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SHEET TITLE:

GRADING PLAN

DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:

A-3

Outdoor Omni-directional Antenna

COMBA

OOA-360V06N0-3 VPol, 696-960/1710-2170MHz, 360°, 4.0/6.0 dBi

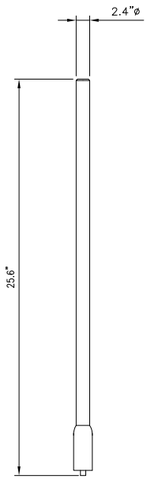
Technical Specifications

Electrical

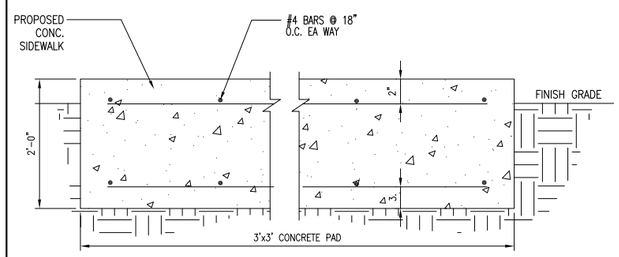
Frequency Range	MHz	696–960	1710–2170
Polarization		Vertical	
Gain	dBi	4.0±1	6.0±1
Horizontal Beamwidth	deg	360	
Vertical Beamwidth	deg	22–53	20–26
Electrical Downtilt–Fixed	deg	0	
VSWR		1.8	
Maximum Power	W	200	
Impedance		50	
Lightning Protection		Direct Ground	

Mechanical

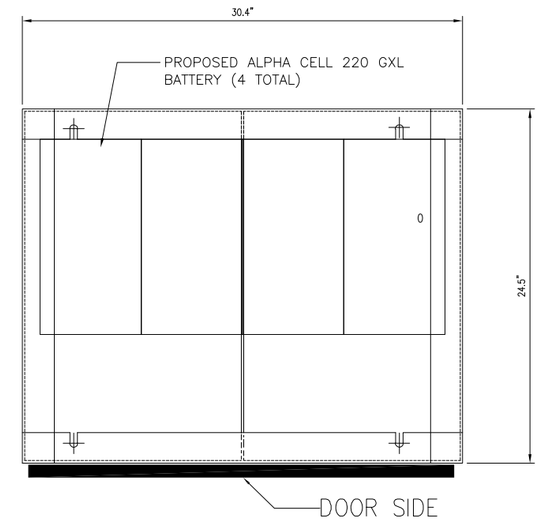
Dimensions, HxDia	mm(in)	650x60 (25.6x2.4)
Weight, with Mounting kit	kg (lb)	1 (2.2)
Radome Material and Color		Fiberglass, Light Grey
Radiating Element Material		Copper
Connector Type and Location		N–Female, Bottom
Operational Temperature		–55 to +70
Operational Humidity	%	95
Operational Wind Speed	km/h (mph)	200 (124)
Shipping Dimensions, HxWxD	mm (in)	670x100x100 (26.4x3.9x3.9)
Shipping Weight	kg (lb)	1.2 (2.65)

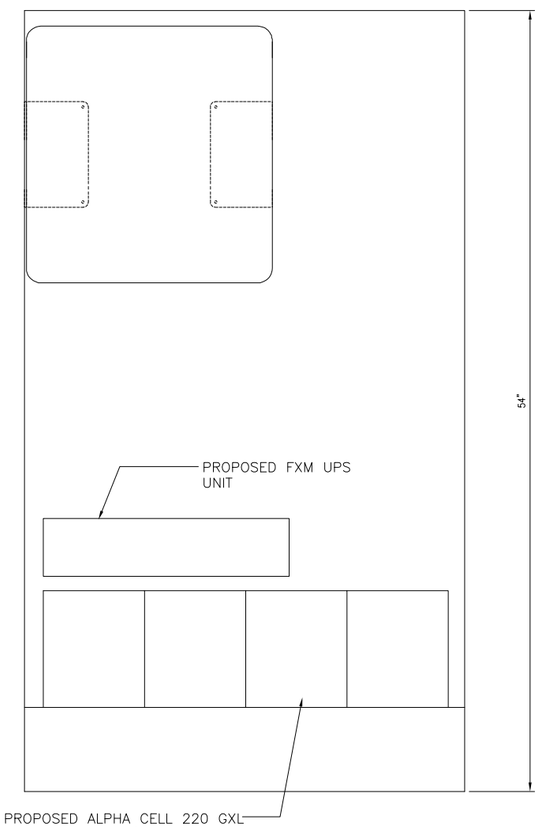


ANTENNA SPECIFICATIONS N.T.S. 1



CONCRETE PAD N.T.S. 3





EQUIPMENT PEDESTAL N.T.S. 5

Electrical

Power Supply
Mains power, Vac ..... 115 or 230

Power consumption, Watts ..... 1100 max. < 750 @ normal operation

700 MHz SISO/MIMO

Frequency range, MHz
Uplink ..... 698 to 716/776 to 787
Downlink ..... 728 to 757

Output power per carrier*, dBm

Number of Carriers	1	2	4	8
LTE	43	40**	37	34

850 MHz

Frequency range, MHz
Uplink ..... 824 to 849
Downlink ..... 869 to 894

Output power per carrier*, dBm

Number of Carriers	1	2	4	8
Analog	43	40	37	34
GSM	43	40	37	34
CDMA	43	40	37	34
LTE	43	40 **	37	34
UMTS	42	39	36	33

20W for Cell, PCS bands and 700MHz MIMO

1900 MHz

Frequency range, MHz
Uplink ..... 1850 to 1915
Downlink ..... 1930 to 1995

Output power per carrier*, dBm

Number of Carriers	1	2	4	8
GSM	43	40	37	34
CDMA	43	40	37	34
LTE	43	40 **	37	34
UMTS	42	39	36	33

CommScope®

ION-M7P/7P/85P/19P

Noise figure, dB
IIP3 optimized ..... +10 max.
Noise figure optimized ..... +6 max. 4.5 typical

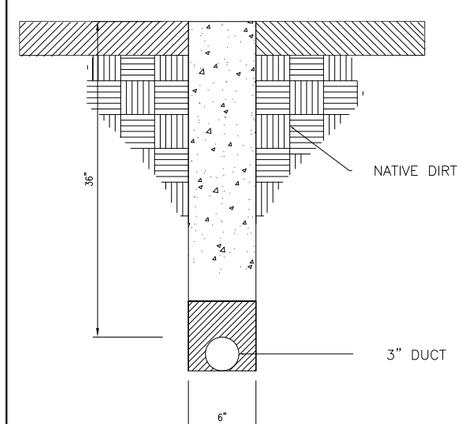
Mechanical**

Height, width, depth, mm (in) ..... 817 x 245 x 218 (32.2 x 9.6 x 8.6)

Weight, kg (lb) 40 (88.2)

Page 1, February 27, 2013 Company Confidential

ION-M7P/7P/85P/19P N.T.S. 2



* TRENCH TO BE BACK FILL WITH NATIVE MATERIAL & COMPACTED TO 90% OR BETTER & REPLACE LANDSCAPING IN KIND.

TRENCH N.T.S. 4

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3	FXC 03/08/2014	ISSUED FOR FINAL

ENGINEER/CONSULTANT:

Civil Engineer
CDG
CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630
(949) 753-8807 OFFICE - (949) 753-8833 FAX

CLIENT:

CROWN CASTLE
NG WEST, INC.

STAMP:

SITE INFO:

SITE NAME:
MON23
VERIZON MONTECITO–MON23

SITE ADDRESS: THOMAS BROS PAGE 987 GRID E7
R.O.W. EAST SIDE OF ROMERO CANYON RD.
(ADJACENT TO 1000 ROMERO CANYON RD)
SANTA BARBARA, CA 93108
LAT: 34.44892
LONG: –119.59215

SHEET TITLE:

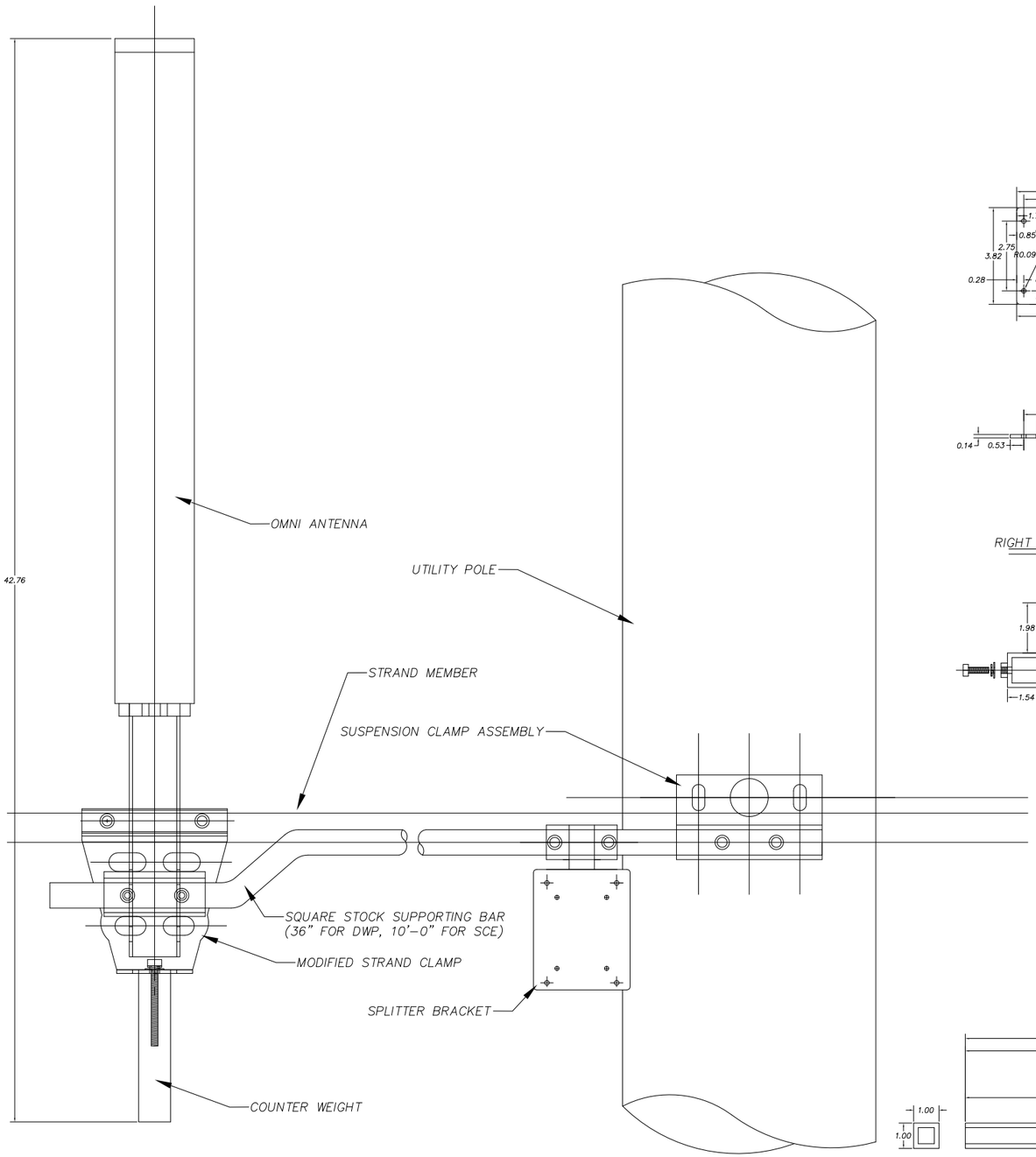
DETAILS

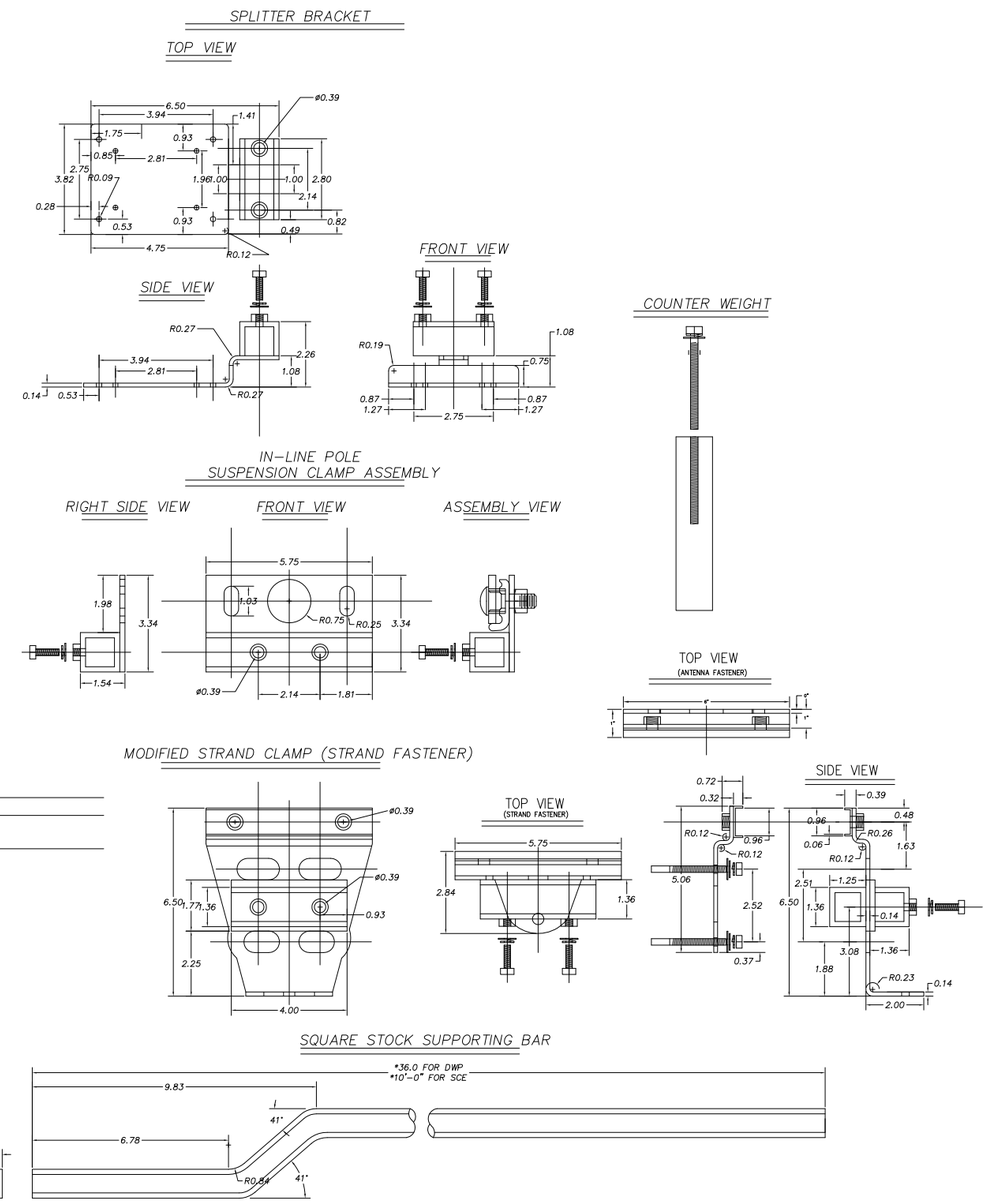
DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:

D–1





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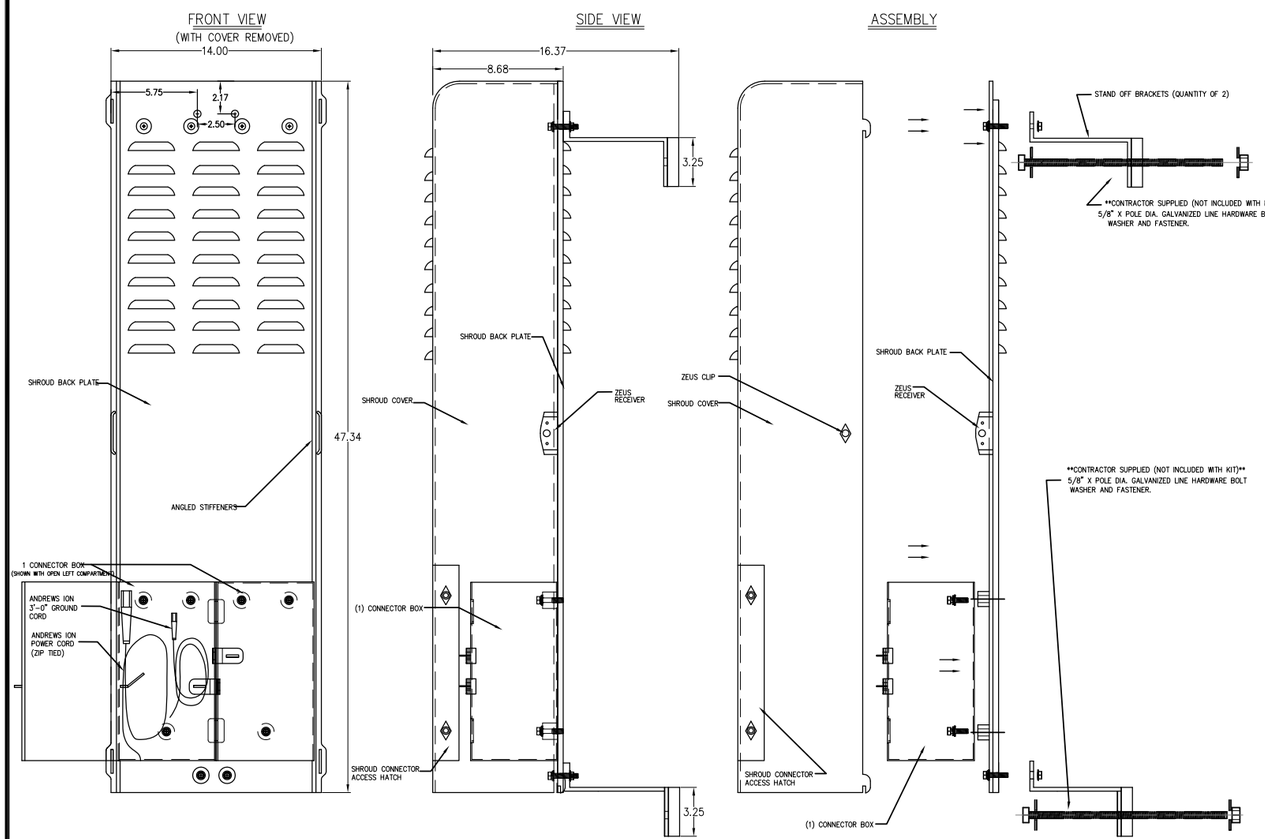
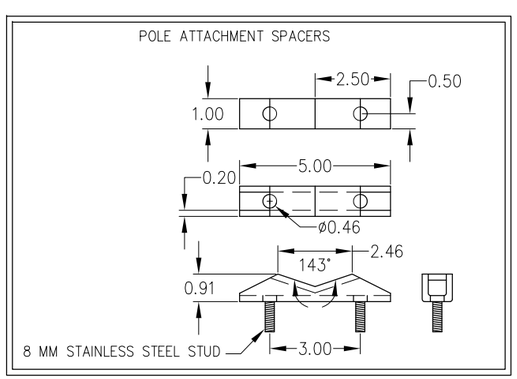
FC

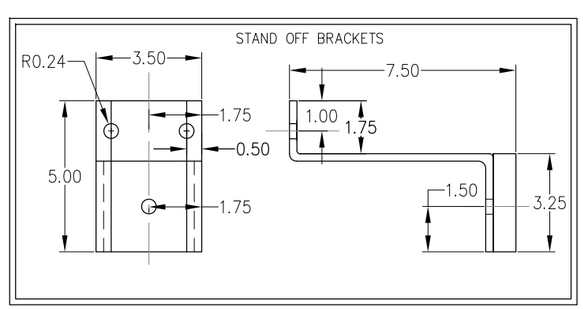
SHEET NUMBER:

D-2

ANTENNA MOUNT | N.T.S. | 1







SHROUD DETAIL | N.T.S. | 1

AlphaCell
General Specifications

Model:	220 GXL	195 GXL	165 GXL
Warranty[1]:	4 to 5 year full replacement	4 to 5 year full replacement	4 to 5 year full replacement
Service Life:	Extended	Extended	Extended
Runtime (minutes)[2]:	220	195	165
Sealed VRLA:	Valve regulated lead acid	Valve regulated lead acid	Valve regulated lead acid
Heat Resistant:	Extreme	Extreme	Extreme
Hydrogen Emission:	Low	Low	Low
Terminals:	Threaded insert 1/4" - 20 UNC	Threaded insert 1/4" - 20 UNC	Threaded insert 1/4" - 20 UNC

Specifications[4]

Model:	220 GXL	195 GXL	165 GXL
Typical Runtime (minutes)[2]:	220	195	165
Cells Per Unit:	6	6	6
Voltage Per Unit:	12.8	12.8	12.8
Conductance Value:	1175	1100	1000
Max. Discharge Current (A):	900	900	800
Short Circuit Current (A):	2800	2600	2500
10 Second Volts @ 100A:	11.4	11.3	11.2
Ohms Impedance 60Hz:	0.0050	0.0050	0.0055
Nominal Capacity at 20hrs: (to 1.75VPC)	109Ah	100Ah	86
Nominal Capacity at 20hrs: (to 1.70VPC)	110Ah	102Ah	87
BCI Group Size:	31	31	27
Weight (lb/kg):	73/33.2	67/30.5	63/28.6
Height w/ Terminals (in/mm):	8.48/215.4	8.48/215.4	8.05/204.5
Width (in/mm)[3]:	13.42/340.9	13.42/340.9	12.5/317.8
Depth (in/mm)[3]:	6.80/172.7	6.80/172.7	6.83/173.4
Operating Temperature Range Discharge:	-40 to 71°C (-40 to 160°F)	-40 to 71°C (-40 to 160°F)	-40 to 71°C (-40 to 160°F)
Charge (with temp compensation):	-23 to 60°C (-9.4 to 140°F)	-23 to 60°C (-9.4 to 140°F)	-23 to 60°C (-9.4 to 140°F)
Float Charging Voltage (Vdc):	13.5 to 13.8	13.5 to 13.8	13.5 to 13.8
AC Ripple Charger:	0.5% RMS or 1.5% of float charge voltage recommended for best results. Max. allowed = 4% P-P		

Notes:
[1] Warranty varies by country and region. Warranty valid only when used with Alpha approved Power Supplies, Chargers and Enclosures. Consult your sales person for details.
[2] Runtimes calculated using a 25A DC constant current load.
[3] Dimensions at top of battery.
[4] See AlphaCell Users Guide for Additional Details.

Typical Standby Time in Minutes @ 25°C/77°F

XM2S0Mx(2)	4A			6A			8A			10A		
Battery/Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	508	453	396	329	285	249	236	209	183	188	165	144
4 batteries:	701	625	546	444	396	346	329	293	256	261	232	203
6 batteries:	1101	978	853	701	625	546	523	465	407	418	372	325
8 batteries:	1497	1338	1165	959	859	750	730	653	592	577	515	450
9 batteries:	1696	1519	1322	1101	978	853	830	733	640	659	587	514

XM2S0Mx(3)	12A			14A			16A			18A		
Battery/Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	149	132	115	119	106	92	101	89	77	87	78	68
4 batteries:	210	187	163	169	151	132	144	128	112	124	111	96
6 batteries:	339	301	264	275	245	214	236	209	183	204	182	159
8 batteries:	478	419	367	385	341	299	329	293	256	288	255	223
9 batteries:	538	479	419	440	391	342	377	335	294	329	293	256

XM2S0Mx(2)	4A			6A			8A			10A		
Battery/Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	708	712	622	590	453	396	377	335	294	300	267	233
4 batteries:	1101	978	853	701	625	546	523	465	407	418	372	325
6 batteries:	1696	1519	1322	1101	978	853	830	733	640	659	587	514
8 batteries:	2288	2097	1728	1497	1338	1165	1122	1005	877	904	809	706
9 batteries:	2590	2345	2037	1696	1519	1322	1273	1143	997	1027	921	803

XM2S0Mx(2)	12A			14A			16A			18A		
Battery/Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	242	215	188	196	174	151	166	148	125	144	128	107
4 batteries:	339	301	264	275	245	214	236	209	182	204	182	155
6 batteries:	538	479	419	440	391	340	377	335	290	329	293	252
8 batteries:	741	660	577	607	541	470	525	465	402	458	407	351
9 batteries:	843	750	658	692	617	538	597	531	462	523	465	402

*Above calculations based on an ACload with a .90 cable plant power factor.

For contact information visit www.alpha.com

The Alpha Group >

North America	Europe, Middle East & Africa			Asia Pacific	Latin & South America
Canada Tel: +1 604 430 1476 Fax: +1 604 430 8908 Toll Free: +1 800 667 8043 USA Tel: +1 360 647 2360 Fax: +1 360 671 4936	Cyprus Tel: +357 25 375 675 Fax: +357 52 369 595 Russia Tel: +7 495 925 9944 Fax: +7 495 916 1345	Germany Tel: +49 9122 79889 0 Fax: +49 9122 79889 21 United Kingdom Tel: +44 1229 601110 Fax: +44 1229 659070	Lithuania Tel: +370 5 210 5091 Fax: +370 5 210 5092	P.R. China Tel: +852 2756 6963 Fax: +852 2199 7988	Contact USA office

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049-297-10-B002 (06/09)

BATTERY SPECIFICATIONS | N.T.S. | 2

REV:	DATE/BY:	REVISION DESCRIPTION:
0	FXC 03/15/2013	ISSUED FOR REVIEW
1	FXC 03/25/2013	ISSUED FOR FINAL
2	FXC 11/05/2013	ISSUED FOR FINAL
3	FXC 03/08/2014	ISSUED FOR FINAL

ENGINEER/CONSULTANT:

Civil Engineer
CDG
CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630
(949) 753-8807 OFFICE - (949) 753-8833 FAX

CLIENT:

CROWN CASTLE
NG WEST, INC.

STAMP:

SITE INFO:

SITE NAME:
MON23
VERIZON MONTECITO-MON23

SITE ADDRESS: THOMAS BROS PAGE 987 GRID E7
R.O.W. EAST SIDE OF ROMERO CANYON RD.
(ADJACENT TO 1000 ROMERO CANYON RD)
SANTA BARBARA, CA 93108
LAT: 34.44892
LONG: -119.59215

SHEET TITLE:

DETAILS

DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:

D-3

CROWN CASTLE NG WEST, INC

VERIZON MONTECITO-MON24

R.O.W. EAST SIDE OF SHEFFIELD DR
(ADJACENT TO 260 SHEFFIELD DR)
SANTA BARBARA, CA 93108

GENERAL NOTES

1. APPROVAL OF THESE PLANS BY THE CITY ENGINEER DOES NOT AUTHORIZE ANY WORK TO BE PERFORMED UNTIL A PERMIT HAS BEEN ISSUED.
2. UPON ISSUANCE OF A PERMIT, NO WORK WILL BE PERMITTED ON WEEKENDS OR HOLIDAYS WITHOUT PERMISSION FROM THE ENGINEERING DEPARTMENT.
3. THE APPROVAL OF THIS PLAN OR ISSUANCE OF A PERMIT BY THE LOCAL JURISDICTION DOES NOT AUTHORIZE THE SUBDIVIDER AND OWNER TO VIOLATE ANY FEDERAL, STATE OR CITY LAWS, ORDINANCES, REGULATIONS, OR POLICIES, INCLUDING, BUT NOT LIMITED TO, THE FEDERAL ENDANGERED SPECIES ACT OF 1973 AND AMENDMENTS THERETO (16 USC SECTION 1531 ET.SEQ.).
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SURVEY MONUMENTS AND/OR VERTICAL CONTROL BENCHMARKS WHICH ARE DISTURBED OR DESTROYED BY CONSTRUCTION. A LAND SURVEYOR MUST FIELD LOCATE, REFERENCE, AND/OR PRESERVE ALL HISTORICAL OR CONTROLLING MONUMENTS PRIOR TO ANY EARTHWORK. IF DESTROYED, SUCH MONUMENTS SHALL BE REPLACED WITH APPROPRIATE MONUMENTS BY A LAND SURVEYOR, A CORNER RECORD OR RECORD OF SURVEY, AS APPROPRIATE, SHALL BE FIELD AS REQUIRED BY THE PROFESSIONAL LAND SURVEYORS ACT. IF ANY VERTICAL CONTROL IS TO BE DISTURBED OR DESTROYED, THE LOCAL JURISDICTION FIELD SURVEY SECTION MUST BE NOTIFIED, IN WRITING, AT LEAST 3 DAYS PRIOR TO THE CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE COST OF REPLACING ANY VERTICAL CONTROL BENCHMARKS DESTROYED BY THE CONSTRUCTION.
5. IMPORTANT NOTICE: SECTION 4216 OF THE GOVERNMENT CODE REQUIRES A DIG ALERT IDENTIFICATION NUMBER BE ISSUED BEFORE A "PERMIT TO EXCAVATE" WILL BE VALID. FOR YOUR DIG ALERT I.D. NUMBER, CALL UNDERGROUND SERVICE ALERT, TWO DAYS BEFORE YOU DIG.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR THE POTHOLE AND LOCATING OF ALL EXISTING UTILITIES THAT CROSS THE PROPOSED TRENCH LINE AND MUST MAINTAIN 1' MINIMUM VERTICAL CLEARANCE.
7. CONTRACTOR SHALL SUBMIT TO THE LOCAL JURISDICTION, A CONSTRUCTION PLAN TO PROTECT WATER MAINS PRIOR TO COMMENCING CONSTRUCTION.
8. CONTRACTOR SHALL REPLACE OR REPAIR ALL TRAFFIC SIGNAL LOOPS, CONDUIT, AND LANE STRIPING DAMAGED DURING CONSTRUCTION.
9. CONTRACTOR SHALL NOTIFY THE LOCAL JURISDICTION. A MINIMUM OF 48 HOURS PRIOR TO COMMENCING WORK WITHIN 10' OF ALL SEWER, WATER, AND STORMDRAIN MAIN INCLUDING ALL CROSSINGS.
10. THIS PROJECT WILL BE INSPECTED BY ENGINEERING AND CAPITAL PROJECTS DEPARTMENT, FIELD ENGINEERING DIVISION.
11. AS-BUILT DRAWINGS MUST BE SUBMITTED TO THE CITY RESIDENT ENGINEER PRIOR TO THE ACCEPTANCE OF THIS PROJECT.
12. PUBLIC IMPROVEMENT SUBJECT TO DESUETUDE OR DAMAGE." IF REPAIR OR REPLACEMENT OF SUCH PUBLIC IMPROVEMENTS IS REQUIRED, THE OWNER SHALL OBTAIN THE REQUIRED PERMITS FOR WORK IN THE PUBLIC RIGHT-OFWAY, SATISFACTORY TO THE PERMIT - ISSUING AUTHORITY.
13. PRIOR TO ANY DISTURBANCE TO THE SITE, EXCLUDING UTILITY MARKS-OUTS AND SURVEYING, THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR A PRE-CONSTRUCTION MEETING WITH THE LOCAL JURISDICTION FIELD ENGINEERING DIVISION.
14. PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION SHOWN ON THESE PLANS. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE. THE CONTRACTOR IS RESPONSIBLE TO ATTEND THE LOCAL JURISDICTIONS MONTHLY UTILITY COORDINATION COMMITTEE THE CONSTRUCTION ACTIVITIES WITH THE CITY AND ALL OTHER CONTRACTORS SO THAT NO TRENCH IS CUT WITHIN ANY OF THE CITY STREETS THAT HAVE BEEN CONSTRUCTED, REPAIRED, OR SLURRY SEALED WITHIN THREE YEARS OF THE STREET CONSTRCTUION/RESURFACING DATE.
15. MANHOLES OR COVERS SHALL BE LABELED "CROWN CASTLE" OR "CROWN CASTLE NG WEST".
16. CONTRACTOR SHALL IMPLEMENT AN EROSION AND SEDIMENT CONTROL PROGRAM DURING THE PROJECT CONSTRUCTION ACTIVITIES. THE PROGRAM SHALL MEET THE APPLICABLE REQUIREMENTS OF THE STATE WATER RESOURCE CONTROL BOARD.
17. THE CONTRACTOR SHALL HAVE EMERGENCY MATERIALS AND EQUIPMENT ON HAND FOR UNFORESEEN SITUATIONS, SUCH AS DAMAGE TO UNDERGROUND WATER, SEWER, AND STORM DRAIN FACILITIES WHEREBY FLOWS MAY GENERATE EROSION AND SEDIMENT POLLUTION.

SPECIAL NOTES

THE FOLLOWING NOTES ARE PROVIDED TO GIVE DIRECTIONS TO THE CONTRACTOR BY THE ENGINEER OF WORK. THE CITY ENGINEER'S SIGNATURE ON THESE PLANS DOES NOT CONSTITUTE APPROVAL OF THESE NOTES AND THE CITY WILL NOT BE RESPONSIBLE FOR THEIR ENFORCEMENT.

1. THE CONTRACTOR SHALL VERIFY THE LOCATION EXISTING UNDERGROUND UTILITIES INCLUDING SEWER LATERALS AND WATER SERVICES TO INDIVIDUAL LOTS BOTH VERTICAL AND HORIZONTAL PRIOR TO COMMENCING IMPROVEMENT OPERATIONS.
2. CONTRACTOR SHALL MAKE EXPLORATION EXCAVATIONS AND LOCATE EXISTING FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS OF PLANS IF REVISION IS NECESSARY BECAUSE OF LOCATION OF EXISTING UTILITIES.
3. LOCATION AND ELEVATIONS OF IMPROVEMENTS, TO BE MET BY WORK, SHALL BE CONFIRMED BY FIELD MEASUREMENT PRIOR TO CONSTRUCTION OF NEW WORK.
4. GRADES SHOWN ARE FINISH GRADES, CONTRACTOR SHALL DETERMINE NECESSARY SUB GRADE ELEVATIONS AND SHALL CONSTRUCT SMOOTH TRANSITION BETWEEN FINISH GRADES SHOWN.
5. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE RESPONSIBILITY FOR JOB SITE CONDITION DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS PROVISION SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXPECTING FOR LIABILITY ARISING FROM SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
6. THE CONTRACTOR SHALL BE TOTALLY RESPONSIBLE FOR COMPLIANCE WITH THE PROVISIONS OF THE STATE OF CALIFORNIA SAFETY ORDERS.
7. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE FROM EXISTING RECORDS AND CORROBORATED, WHERE POSSIBLE WITH FIELD TIES. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING THE LOCATIONS SHOWN, BOTH HORIZONTALLY AND VERTICALLY, PRIOR TO CONSTRUCTION. IF EXISTING LOCATIONS VARY SUBSTANTIALLY FROM THE PLANS, THE ENGINEER SHOULD BE NOTIFIED TO MAKE ANY CONSTRUCTION CHANGES REQUIRED.
8. THE CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT FOR ALL SEWER AND WATER MAIN UNDER CROSSING IN ACCORDANCE WITH PART 1 SECTION 5-2 OF THE STANDARD SPECIFICATION.
9. THE CONTRACTOR SHALL REPLACE OR REPAIR ALL TRAFFIC SIGNAL LOOPS, CONDUITS, AND LANE STRIPING DAMAGED DURING CONSTRUCTION.
10. THE CONTRACTOR SHALL SUBMIT WORK PLANS FOR ALL BORE OPERATIONS TWO WEEKS PRIOR TO COMMENCING WORK.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR THE POTHOLE AND LOCATING OF ALL EXISTING UTILITIES THAT CROSS THE PROPOSED TRENCH LINE AND MUST MAINTAIN 1' MINIMUM VERTICAL CLEARANCE.
12. AS-BUILT DRAWINGS MUST BE SUBMITTED TO THE CITY ENGINEER PRIOR TO ACCEPTANCE OF THIS PROJECT.

VICINITY MAP - N.T.S.

EROSION AND SEDIMENT CONTROL NOTES

TEMPORARY EROSION/SEDIMENT CONTROL, PRIOR TO COMPLETION OF FINAL IMPROVEMENTS, SHALL BE PERFORMED BY THE CONTRACTOR OR QUALIFIED PERSON AS INDICATED BELOW:

1. ALL REQUIREMENTS OF THE LOCAL JURISDICTION "LAND DEVELOPMENT MANUAL, STORM WATER STANDARDS" MUST BE INCORPORATED INTO THE DESIGN AND CONSTRUCTION OF THE PROPOSED GRADING/IMPROVEMENTS CONSISTENT WITH THE APPROVED STORM WATER AND/OR WATER POLLUTION CONTROL PLAN (WPCP).
2. FOR STORM DRAIN INLETS, PROVIDE A GRAVEL BAG SILT BASIN IMMEDIATELY UPSTREAM OF INLET AS INDICATED ON DETAILS.
3. FOR INLETS LOCATED AT SUMPS ADJACENT TO TOP OF SLOPES, THE CONTRACTOR SHALL ENSURE THAT WATER DRAINING TO THE SUMP IS DIRECTED INTO THE INLET AND THAT A MINIMUM OF 1.00" FREEBOARD EXISTS AND IS MAINTAINED ABOVE THE TOP OF THE INLET. IF FREEBOARD IS NOT PROVIDED BY GRADING SHOWN ON THESE PLANS, THE CONTRACTOR SHALL PROVIDE IT VIA TEMPORARY MEASURES, I.E. GRAVEL BAGS OR DIKES.
4. THE CONTRACTOR OR QUALIFIED PERSON SHALL BE RESPONSIBLE FOR CLEANUP OF SILT AND MUD ON ADJACENT STREET(S) AND STORM DRAIN SYSTEM DUE TO CONSTRUCTION ACTIVITY.
5. THE CONTRACTOR OR QUALIFIED PERSON SHALL CHECK AND MAINTAIN ALL LINED AND UNLINED DITCHES AFTER EACH RAINFALL.
6. THE CONTRACTOR SHALL REMOVE SILT AND DEBRIS AFTER EACH MAJOR RAINFALL.
7. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON, ALL NECESSARY MATERIALS SHALL BE STOCKPILED ON SITE AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
8. THE CONTRACTOR SHALL RESTORE ALL EROSION/SEDIMENT CONTROL MEASURES TO WORKING ORDER TO THE SATISFACTION OF THE CITY ENGINEER OR RESIDENT ENGINEER AFTER EACH RAIN-OFF PRODUCING RAINFALL.
9. THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION CONTROL MEASURES AS MAY BE REQUIRED BY THE RESIDENT ENGINEER DUE TO UNCOMPLETED GRADING OPERATIONS OR UNFORESEEN CIRCUMSTANCES, WHICH MAY ARISE.
10. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATERS CREATE A HAZARDOUS CONDITION.
11. ALL EROSION/SEDIMENT CONTROL MEASURES PROVIDED PER THE APPROVED GRADING PLAN SHALL BE INCORPORATED HEREON. ALL EROSION/SEDIMENT CONTROL FOR INTERIM CONDITIONS SHALL BE DONE TO THE SATISFACTION OF THE RESIDENT ENGINEER.
12. GRADED AREAS AROUND THE PROJECT PERIMETER MUST DRAIN AWAY FROM THE FACE OF THE SLOPE AT THE CONCLUSION OF EACH WORKING DAY.
13. ALL REMOVABLE PROTECTIVE DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN RAIN IS IMMINENT.
14. THE CONTRACTOR SHALL ONLY GRADE, INCLUDING CLEARING AND GRUBBING FOR THE AREAS FOR WHICH THE CONTRACTOR OR QUALIFIED PERSON CAN PROVIDE EROSION/SEDIMENT CONTROL MEASURES.
15. THE CONTRACTOR SHALL ARRANGE FOR WEEKLY MEETINGS DURING OCTOBER 1ST TO APRIL 30TH FOR PROJECT TEAM (GENERAL CONTRACTOR, QUALIFIED PERSON, EROSION CONTROL SUBCONTRACTOR IF ANY, ENGINEER OF WORK, OWNER AND THE RESIDENT ENGINEER) TO EVALUATE THE ADEQUACY OF THE EROSION/SEDIMENT CONTROL MEASURES AND OTHER RELATED CONSTRUCTION ACTIVITIES.

TRAFFIC CONTROL NOTES

THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN (11" X 17") FOR APPROVAL PRIOR TO STARTING WORK. THE PLAN SHOULD BE SUBMITTED TO THE TRAFFIC CONTROL PERMIT COUNTER. CONTRACTOR SHALL OBTAIN A TRAFFIC CONTROL PERMIT A MINIMUM OF TWO (2) WORKING DAYS PRIOR TO STARTING WORK, AND A MINIMUM FIVE (5) DAYS IF WORK WILL AFFECT A BUS STOP OR AN EXISTING TRAFFIC SIGNAL, OR IF WORK WILL REQUIRE A ROAD OR ALLEY CLOSURE.

FOOTAGE TOTALS	
ASPHALT CUT	-
DIRT TRENCH	-
PUNCH THRU	-
BORE	-
TOTAL	-
R&R SWF TOTAL	-

GROUND BUS BAR
MECH. GRND. CONN.
CADWELD
ELECTRIC BOX
TELEPHONE BOX
EXISTING SERVICE POLE
SIDEWALK FLAG
EX. MANHOLE
LIGHT POLE
FOUNDATION
SPOT ELEV.
SET POINT
REVISION
DETAIL REF.
ELEVATION REF.
SECTION REF.
PROP./LEASE LINE
MATCH LINE
WORK POINT
TELE. CONDUIT
CENTERLINE
ELECT. CONDUIT
COAXIAL CABLE
MYERS PEDESTAL
VAULT STANDARD 2'X3'
STEEL POLE

SYMBOLS, LINETYPES AND HATCH PATTERNS

PROJECT DICTIONARY

SITE ADDRESS: R.O.W. EAST SIDE OF SHEFFIELD DR (ADJACENT TO 290 SHEFFIELD DR) SANTA BARBARA, CA 93108

APPLICANT: CROWN CASTLE NG WEST, INC
2125 WRIGHT AVE, SUITE #C9
LA VERNE, CA 91750
CONTACT: HEIDI PAYNE
PHONE: (949) 300-9493

CIVIL ENGINEER: CONNELL DESIGN GROUP, LLC
26455 RANCHO PARKWAY SOUTH
LAKE FOREST, CA 92630
CONTACT: FRANK CARTER
(949) 310-8233 PHONE
(949) 753-8833 FAX

CONSTRUCTION CHANGE TABLE

CHANGE	DATE	EFFECTED OR ADDED SHEET NUMBERS

APPLICABLE CODES

ALL WORK SHALL COMPLY WITH THE FOLLOWING APPLICABLE CODES:

*2010 CALIFORNIA BUILDING CODE
*2010 CALIFORNIA MECHANICAL CODE
*2010 CALIFORNIA PLUMBING CODE
*2010 CALIFORNIA ELECTRICAL CODE

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

PROJECT DESCRIPTION

PROJECT CONSISTS OF INSTALLATION OF:

1. (2) OMNI ANTENNA ON EXISTING UTILITY POLE
2. EQUIPMENT PEDESTAL W/ BBU, ION AND ELECTRICAL METER AT BASE OF POLE

SHEET INDEX:

TITLE SHEET	T-1 - SHEET 1 OF 8
TOPOGRAPHIC SURVEY	C-1 - SHEET 2 OF 8
SITE PLAN	A-1 - SHEET 3 OF 8
PROPOSED ELEVATIONS	A-2 - SHEET 4 OF 8
GRADING PLAN	A-3 - SHEET 5 OF 8
DETAILS	D-1 - SHEET 6 OF 8
DETAILS	D-2 - SHEET 7 OF 8
DETAILS	D-3 - SHEET 8 OF 8

REV:	DATE/BY:	REVISION DESCRIPTION:
0	FXC 03/15/2013	ISSUED FOR REVIEW
1	FXC 03/25/2013	ISSUED FOR FINAL
2	FXC 11/05/2013	ISSUED FOR FINAL
3	FXC 01/08/2014	ISSUED FOR FINAL
4	FXC 01/08/2014	ISSUED FOR FINAL

ENGINEER/CONSULTANT:

Civil Engineer
CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630
(949) 753-8807 OFFICE - (949) 753-8833 FAX

CLIENT:

CROWN CASTLE NG WEST, INC.

STAMP:

SITE INFO:

SITE NAME:
MON24
VERIZON MONTECITO-MON24

SITE ADDRESS: THOMAS BROS PAGE 997 GRID C3
R.O.W. EAST SIDE OF SHEFFIELD DR
(ADJACENT TO 260 SHEFFIELD DR)
SANTA BARBARA, CA 93108
LAT: 34.42594
LONG: -119.61168

SHEET TITLE:

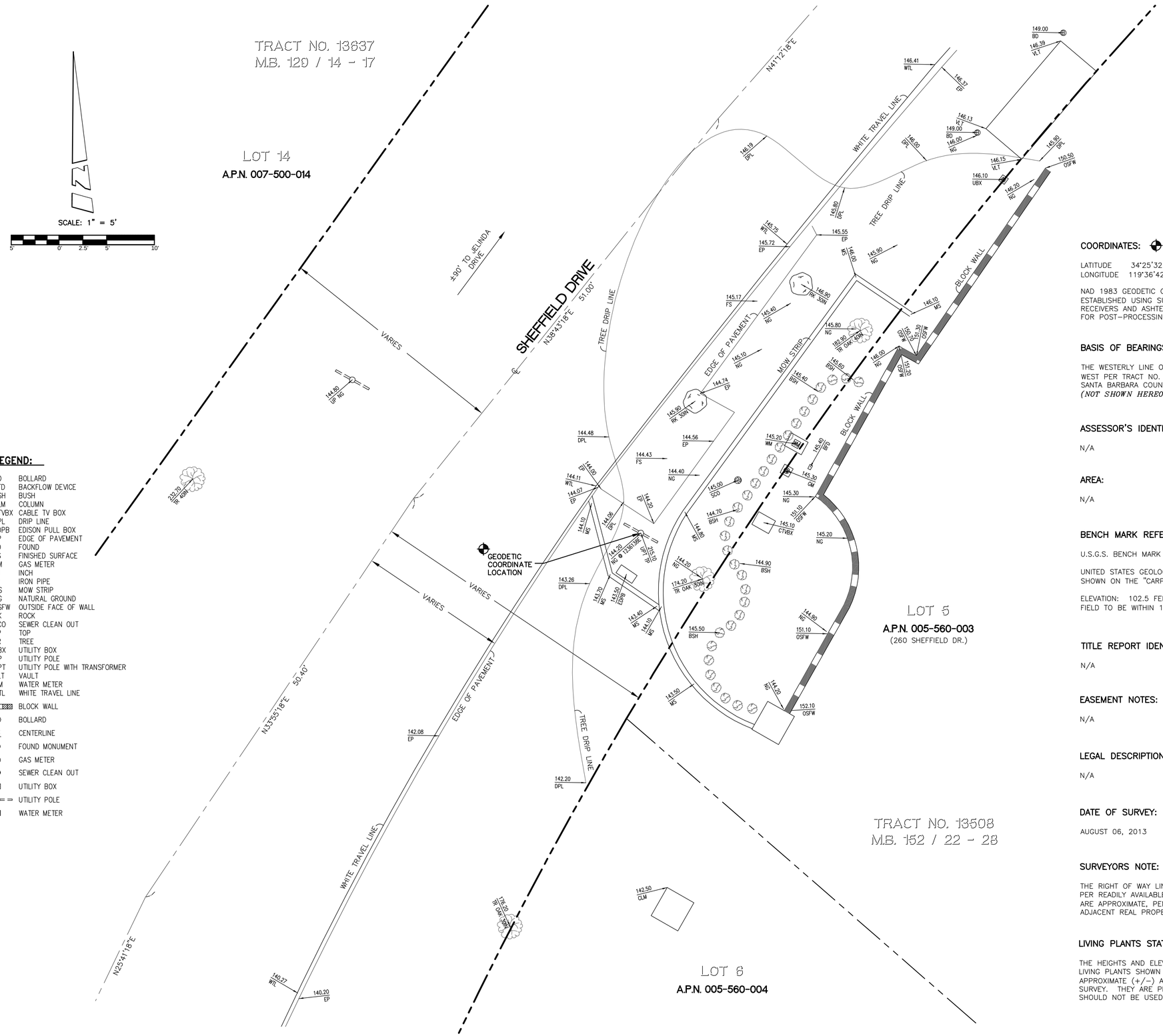
TITLE SHEET

DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:

T-1



LEGEND:

BD	BOLLARD
BFD	BACKFLOW DEVICE
BSH	BUSH
CLM	COLUMN
CTVBX	CABLE TV BOX
DPL	DRIP LINE
EDPB	EDISON PULL BOX
EP	EDGE OF PAVEMENT
FD	FOUND
FS	FINISHED SURFACE
GM	GAS METER
IN	INCH
IP	IRON PIPE
MS	MOW STRIP
NG	NATURAL GROUND
OSFW	OUTSIDE FACE OF WALL
RK	ROCK
SCO	SEWER CLEAN OUT
TP	TOP
TR	TREE
UBX	UTILITY BOX
UP	UTILITY POLE
UPT	UTILITY POLE WITH TRANSFORMER
VLT	VAULT
WM	WATER METER
WTL	WHITE TRAVEL LINE
	BLOCK WALL
	BOLLARD
	CENTERLINE
	FOUND MONUMENT
	GAS METER
	SEWER CLEAN OUT
	UTILITY BOX
	UTILITY POLE
	WATER METER

COORDINATES:

LATITUDE 34°25'32.47" N
LONGITUDE 119°36'42.48" W

NAD 1983 GEODETIC COORDINATES AND ELEVATIONS WERE ESTABLISHED USING SURVEY GRADE "ASHTECH" G.P.S. RECEIVERS AND ASHTECH SURVEY GRADE PRECISION SOFTWARE FOR POST-PROCESSING.

BASIS OF BEARINGS:

THE WESTERLY LINE OF SHEFFIELD DR. BEING SOUTH 41°12'18" WEST PER TRACT NO. 13637, M.B. 129/14-17, RECORDS OF SANTA BARBARA COUNTY.
(NOT SHOWN HEREON)

ASSESSOR'S IDENTIFICATION:

N/A

AREA:

N/A

BENCH MARK REFERENCE:

U.S.G.S. BENCH MARK "BM 100"

UNITED STATES GEOLOGICAL SURVEY BENCH MARK "BM 100" AS SHOWN ON THE "CARPINTERIA" 7.5 MINUTE QUADRANGLE MAP.

ELEVATION: 102.5 FEET A.M.S.L. (NAVD88) (DATUM VERIFIED IN FIELD TO BE WITHIN 1-A ACCURACY STANDARDS)

TITLE REPORT IDENTIFICATION:

N/A

EASEMENT NOTES:

N/A

LEGAL DESCRIPTION:

N/A

DATE OF SURVEY:

AUGUST 06, 2013

SURVEYORS NOTE:

THE RIGHT OF WAY LINES AND THEIR DIMENSIONS SHOWN HEREON ARE PER READILY AVAILABLE RECORDED INFORMATION AND THEIR LOCATIONS ARE APPROXIMATE, PENDING RECEIPT OF TITLE REPORT(S) FOR THE ADJACENT REAL PROPERTY.

LIVING PLANTS STATEMENT:

THE HEIGHTS AND ELEVATIONS FOR THE TREES, BUSHES AND OTHER LIVING PLANTS SHOWN HEREON, SHOULD BE CONSIDERED APPROXIMATE (+/-) AND ONLY VALID FOR THE DATE OF THIS SURVEY. THEY ARE PROVIDED AS A GENERAL REFERENCE AND SHOULD NOT BE USED FOR DESIGN PURPOSES.

REV:	DATE/BY:	REVISION DESCRIPTION:
1	08/09/13 MDL	ISSUED FOR REVIEW

ENGINEER/CONSULTANT:

CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PKWY. SOUTH
LAKE FOREST, CA 92630-8326
(949) 753-8807 OFFICE - (949) 753-8833 FAX

SITE BUILDER:

CROWN CASTLE
NG WEST, INC.

SURVEYOR:

BERT HAZE
AND ASSOCIATES, INC.
LAND SURVEYING & MAPPING
3188 AIRWAY AVENUE, SUITE K1
COSTA MESA, CALIFORNIA 92626
714 557-1567 OFFICE
714 557-1568 FAX

JN. 706.237

STAMP:

PROFESSIONAL LAND SURVEYOR
BERT HAZE
No. 7211
Exp. 3-31-14
STATE OF CALIFORNIA

SITE INFO:

SITE NAME:

MON24
VERIZON MONTECITO-MON24

SITE ADDRESS:

R.O.W. EAST SIDE OF SHEFFIELD DR.
(ADJACENT TO 260 SHEFFIELD DR.)
SANTA BARBARA, CA 93108

SHEET TITLE:

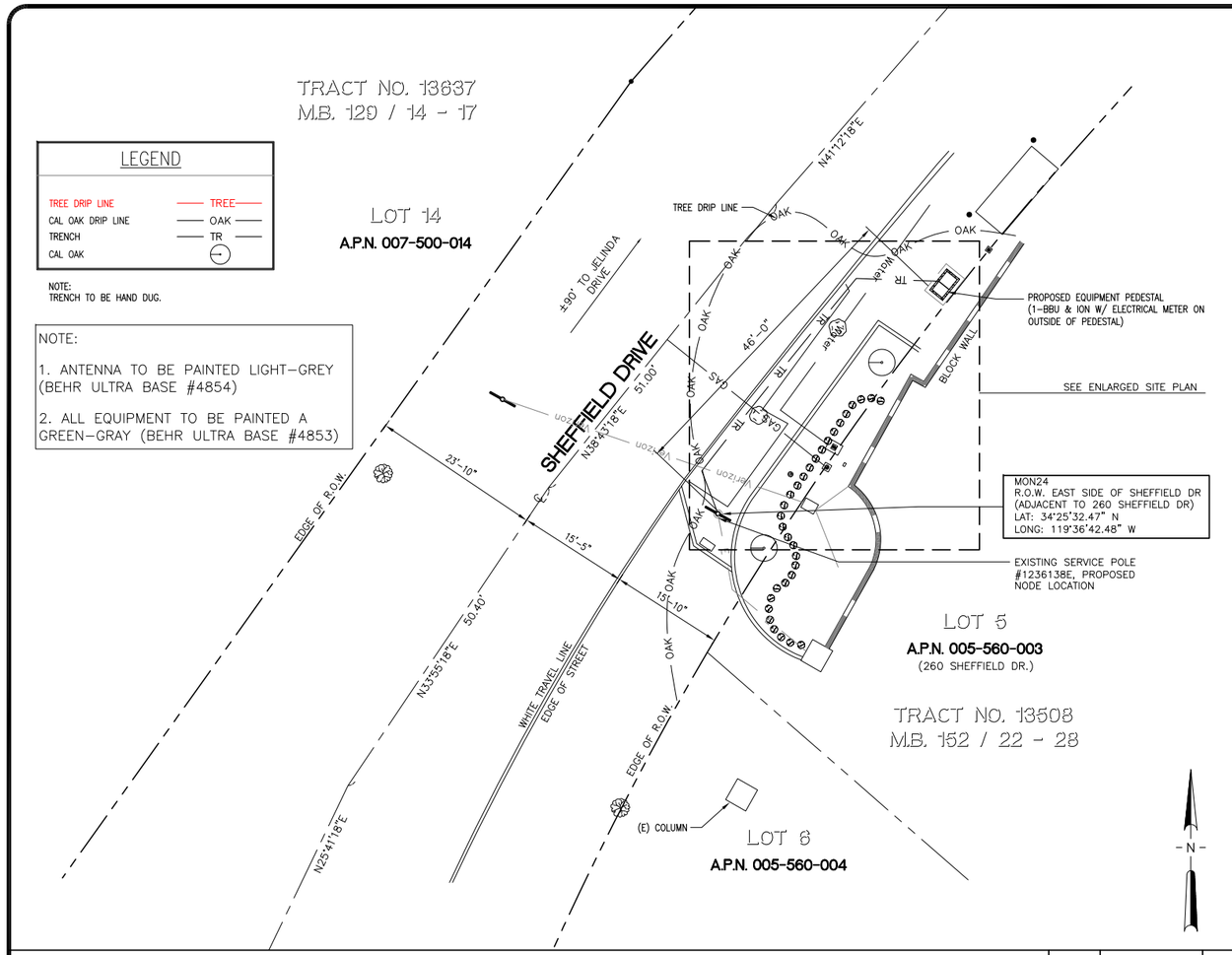
TOPOGRAPHIC SURVEY

DRAWING INFO:

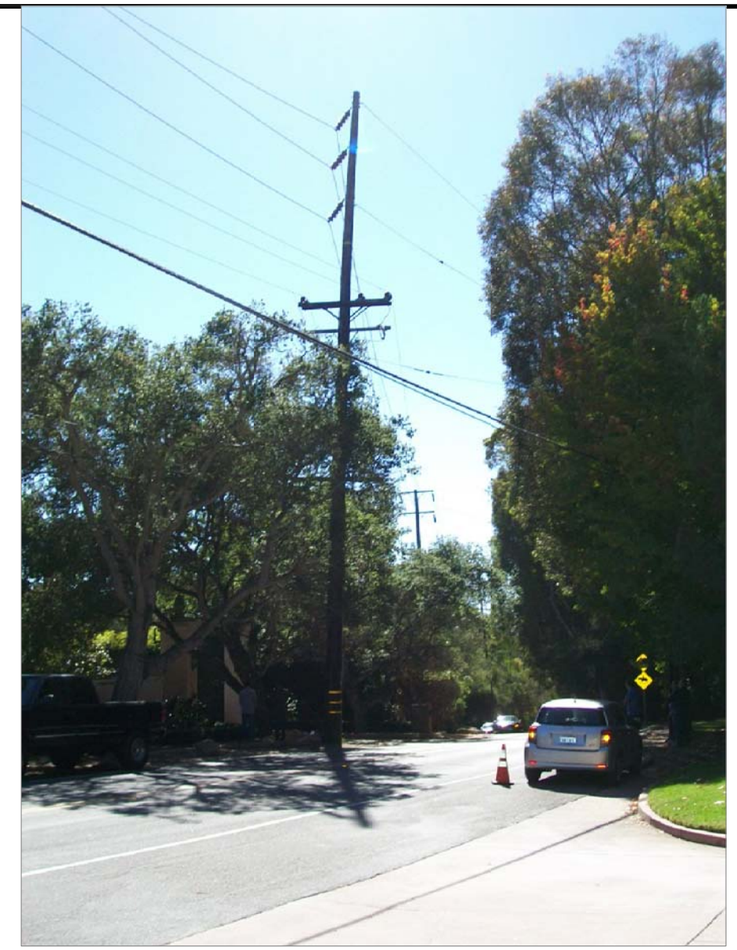
DWG. NAME:	DRAWN BY:	DATE:
MON24	MDL	08/09/13

SHEET NUMBER:

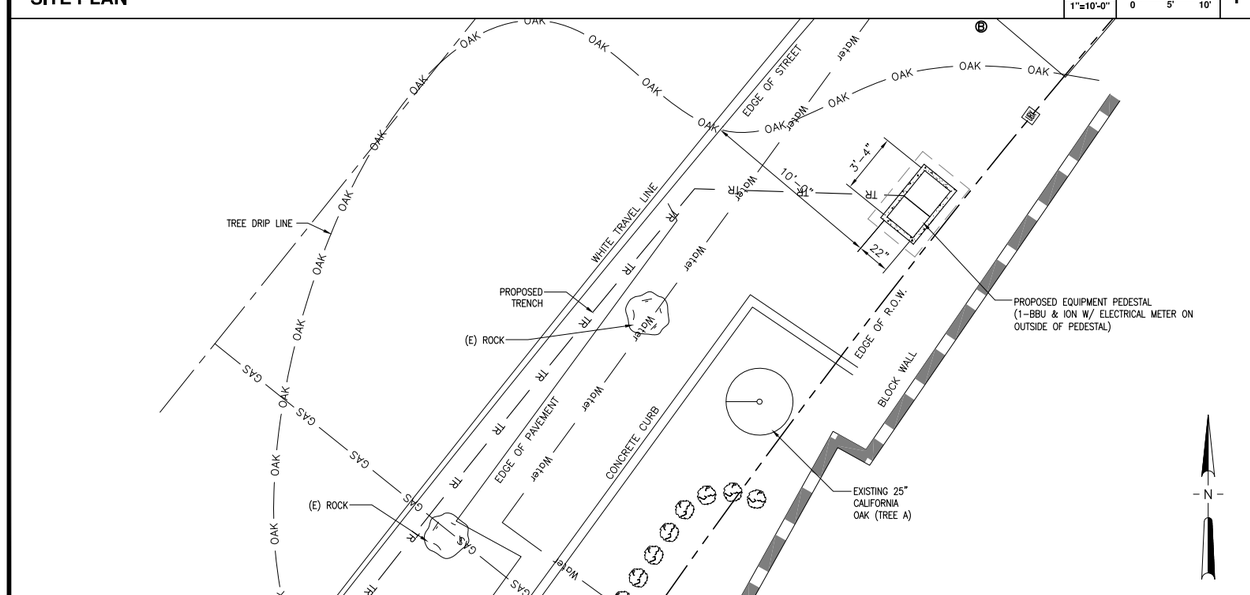
1 OF 1 | C-1



SITE PLAN SCALE: 1"=10'-0" 0 5' 10' 1



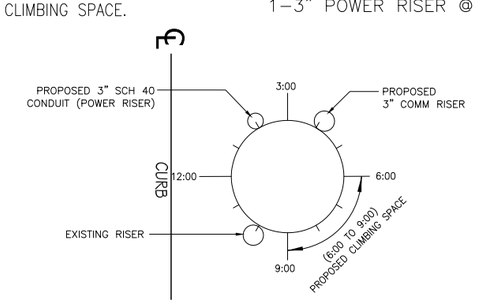
EXISTING PHOTO SCALE: N.T.S. 3



ENLARGED SITE PLAN SCALE: 1/4"=1'-0" 0 2' 4' 2

POLE WILL BE STEPPED IN ACCORDANCE TO G095 STANDARDS IN RESPECT TO CLIMBING SPACE.

1-3" CROWN CASTLE RISER @ 4:00
1-3" POWER RISER @ 2:00



RISER PROFILE SCALE: N.T.S. 4

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4	FXC 01/08/2014	ISSUED FOR FINAL

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26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630
(949) 753-8807 OFFICE - (949) 753-8833 FAX

CLIENT:

CROWN CASTLE
NG WEST, INC.

STAMP:

SITE INFO:

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MON24
VERIZON MONTECITO-MON24

SITE ADDRESS: THOMAS BROS PAGE 997 GRID C3
R.O.W. EAST SIDE OF SHEFFIELD DR
(ADJACENT TO 260 SHEFFIELD DR)
SANTA BARBARA, CA 93108
LAT: 34.42594
LONG: -119.61168

SHEET TITLE:

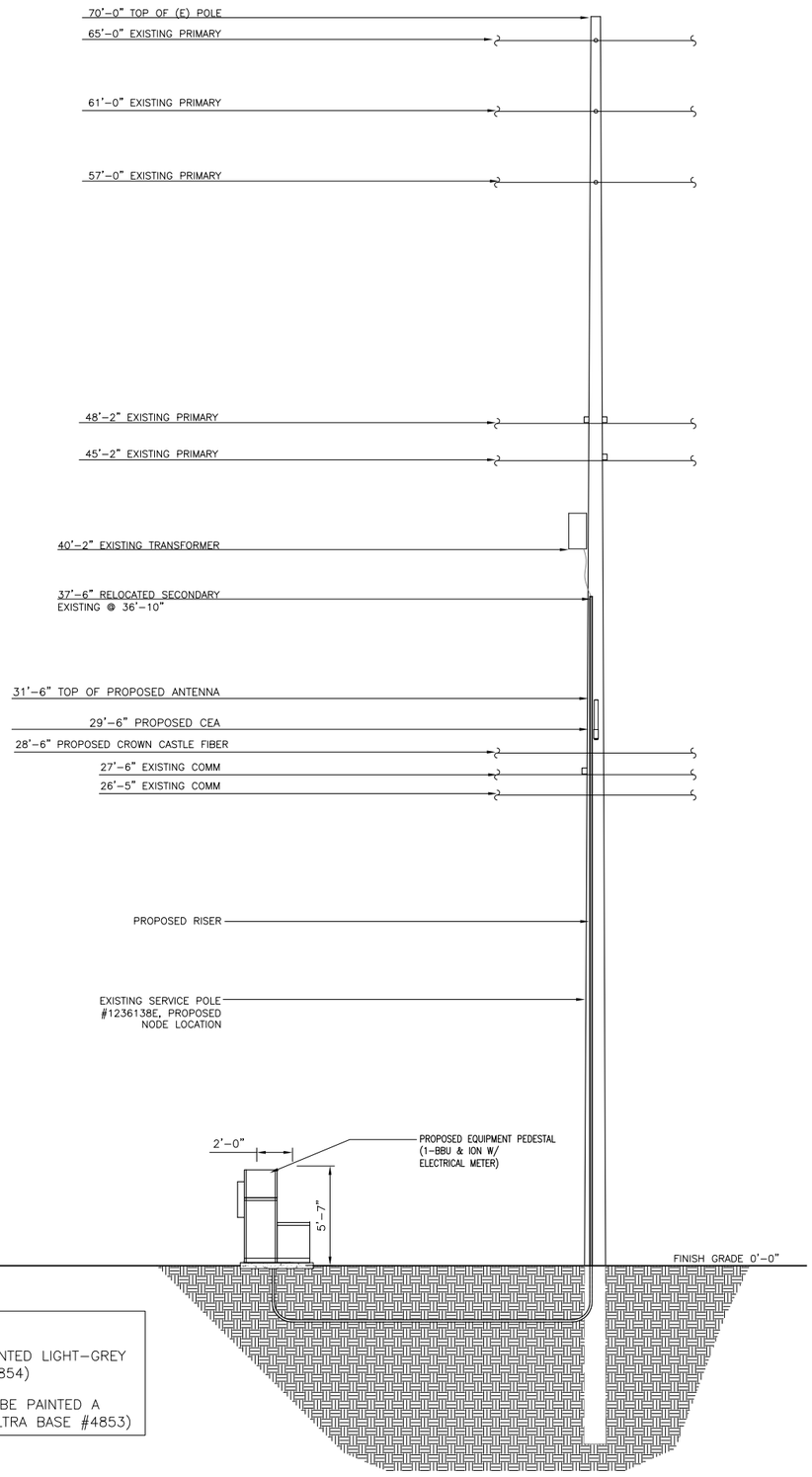
SITE PLAN, ENLARGED SITE PLAN, EXISTING PHOTO AND RISER PROFILE

DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:

A-1



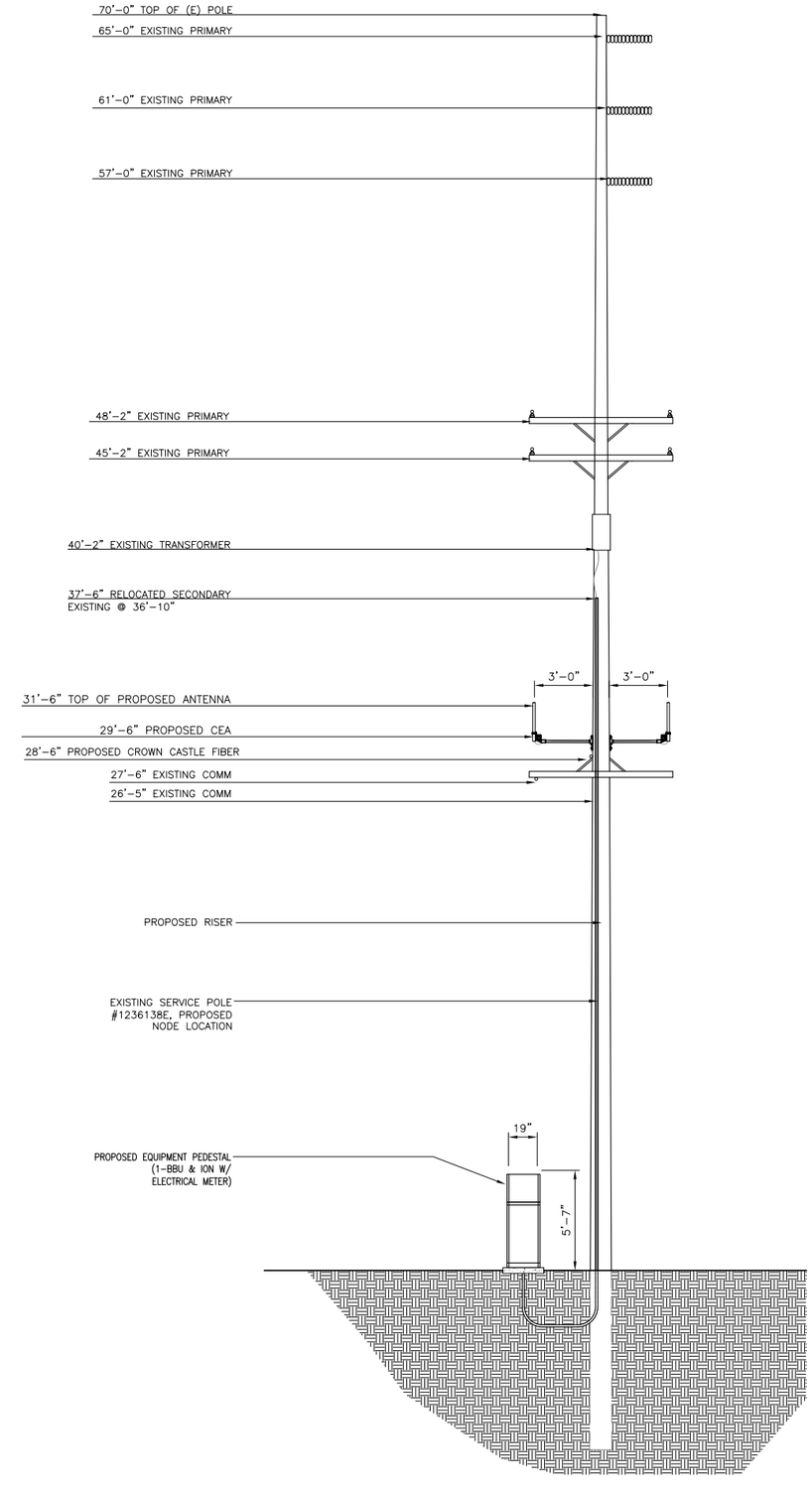
NOTE:

1. ANTENNA TO BE PAINTED LIGHT-GREY (BEHR ULTRA BASE #4854)

2. ALL EQUIPMENT TO BE PAINTED A GREEN-GRAY (BEHR ULTRA BASE #4853)

PROPOSED ELEVATION LOOKING EAST

SCALE: 1/4"=1'-0" 0 2' 4' | 1



PROPOSED ELEVATION LOOKING NORTH

SCALE: 1/4"=1'-0" 0 2' 4' | 2

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SHEET TITLE:

ELEVATIONS

DRAWING INFO:

DRAWN BY:
FC

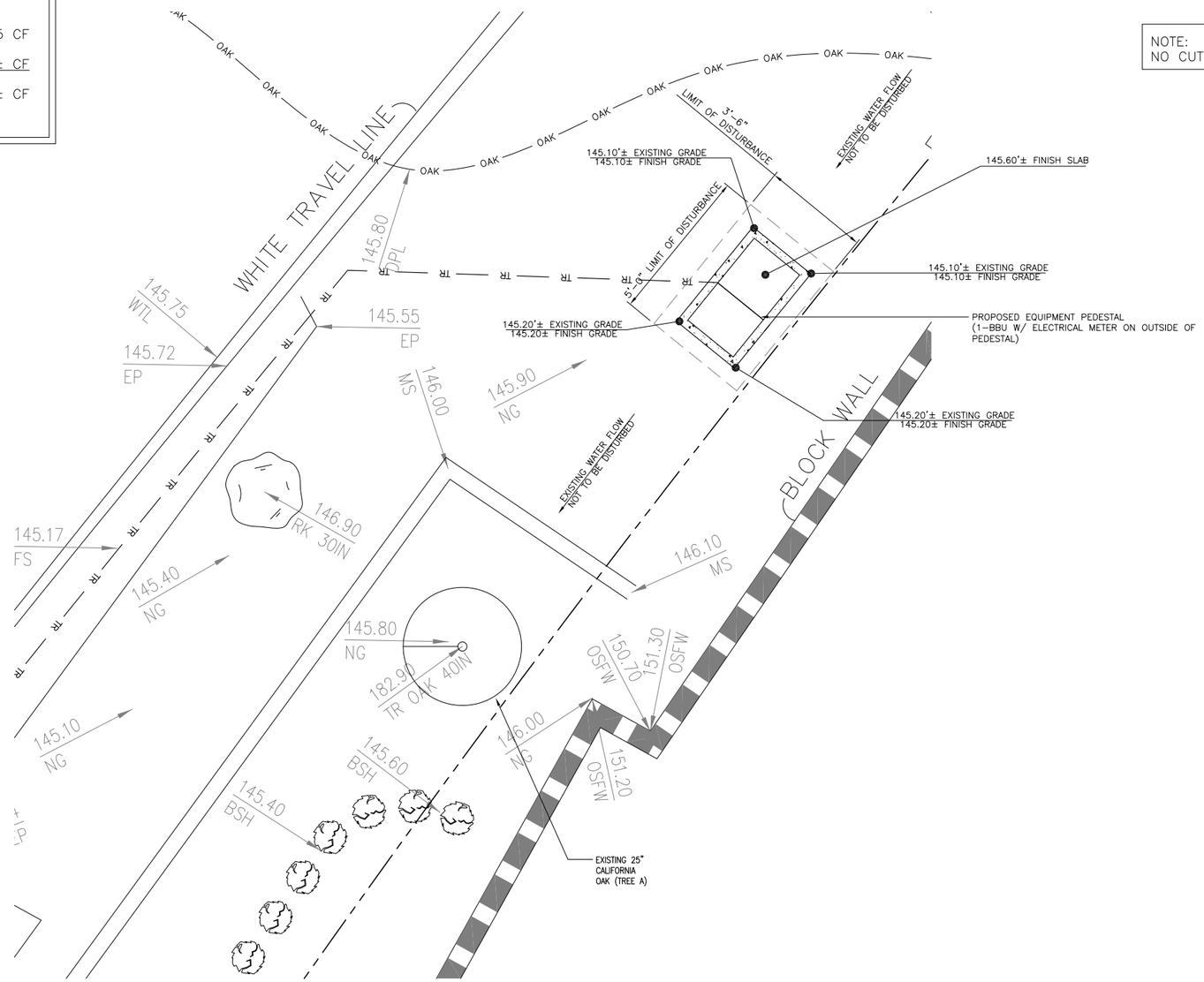
SHEET NUMBER:

A-2

GRADING CALCULATION

CONCRETE PAD:	5 CF
TRENCH:	70± CF
TOTAL:	75.00± CF

NOTE:
NO CUT AND FILL REQUIRED



LEGEND

TREE DRIP LINE	TREE
CAL OAK DRIP LINE	OAK
TRENCH	TR
CAL OAK	

NOTE:
TRENCH TO BE HAND DUG.

N

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SHEET TITLE:

GRADING PLAN

DRAWING INFO:

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FC

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A-3

Outdoor Omni-directional Antenna

COMBA

OOA-360V06N0-3 VPol, 696-960/1710-2170MHz, 360°, 4.0/6.0 dBi

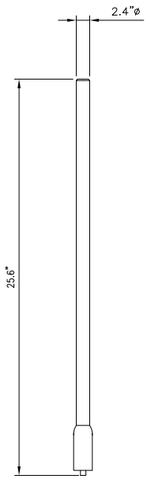
Technical Specifications

Electrical

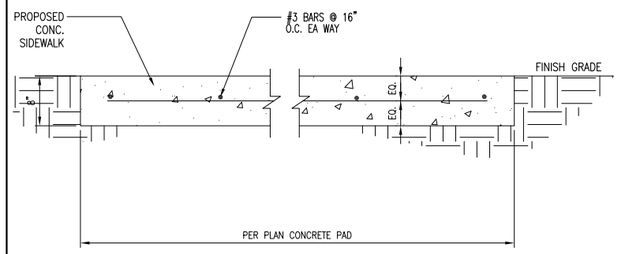
Frequency Range	MHz	696–960	1710–2170
Polarization		Vertical	
Gain	dBi	4.0±1	6.0±1
Horizontal Beamwidth	deg	360	
Vertical Beamwidth	deg	22–53	20–26
Electrical Downtilt–Fixed	deg	0	
VSWR		1.8	
Maximum Power	W	200	
Impedance		50	
Lightning Protection		Direct Ground	

Mechanical

Dimensions, HxDia	mm(in)	650x60 (25.6x2.4)
Weight, with Mounting kit	kg (lb)	1 (2.2)
Radome Material and Color		Fiberglass, Light Grey
Radiating Element Material		Copper
Connector Type and Location		N–Female, Bottom
Operational Temperature		–55 to +70
Operational Humidity	%	95
Operational Wind Speed	km/h (mph)	200 (124)
Shipping Dimensions,HxWxD	mm (in)	670x100x100 (26.4x3.9x3.9)
Shipping Weight	kg (lb)	1.2 (2.65)



ANTENNA SPECIFICATIONS N.T.S. 1



CONCRETE PAD N.T.S. 3

Electrical

Power Supply
Mains power, Vac ..... 115 or 230

Power consumption, Watts ..... 1100 max. < 750 @ normal operation

700 MHz SISO/MIMO

Frequency range, MHz
Uplink ..... 698 to 716/776 to 787
Downlink ..... 728 to 757

Output power per carrier*, dBm

Number of Carriers	1	2	4	8
LTE	43	40**	37	34

850 MHz

Frequency range, MHz
Uplink ..... 824 to 849
Downlink ..... 869 to 894

Output power per carrier*, dBm

Number of Carriers	1	2	4	8
Analog	43	40	37	34
GSM	43	40	37	34
CDMA	43	40	37	34
LTE	43	40**	37	34
UMTS	42	39	36	33

20W for Cell, PCS bands and 700MHz MIMO

1900 MHz

Frequency range, MHz
Uplink ..... 1850 to 1915
Downlink ..... 1930 to 1995

Output power per carrier*, dBm

Number of Carriers	1	2	4	8
GSM	43	40	37	34
CDMA	43	40	37	34
LTE	43	40**	37	34
UMTS	42	39	36	33

CommScope

ION-M7P/7P/85P/19P

Noise figure, dB
ICP3 optimized ..... +10 max.
Noise figure optimized ..... +6 max. 4.5 typical

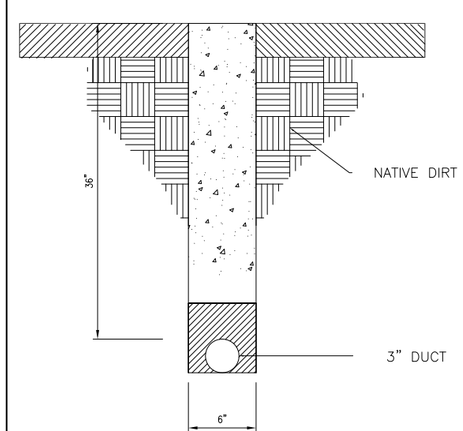
Mechanical****

Height, width, depth, mm (in) ..... 817 x 245 x 218 (32.2 x 9.6 x 8.6)

Weight, kg (lb) 40 (88.2)

Page 1, February 27, 2013 Company Confidential

ION-M7P/7P/85P/19P N.T.S. 2



* TRENCH TO BE BACK FILL WITH NATIVE MATERIAL & COMPACTED TO 90% OR BETTER & REPLACE LANDSCAPING IN KIND.

TRENCH N.T.S. 4

MMOE - Telecom

Multi Mount Outdoor Enclosure

- Compact enclosure design provides ideal fit for locations where aesthetics are important
- Light-weight powder coated aluminum construction offers superior corrosion resistant properties
- Large sun shield, reduces solar heat loading inside the cabinet
- 180° stainless steel piano-hinged door (with two locking open positions) make installation and mantenance easy and convenient
- Thermostat controlled filtered fan cooling and louvered vents ensure reliable operation in high temperature environments
- Various mounting options (including pole mount) make this highly versatile in space constrained mobile broadband applications

Alpha's Multi Mount Outdoor Enclosure (MMOE) - Telecom, is a cost-effective and versatile enclosure ideal for space constrained locations. The Multi Mount can be pole, host, wall or pedestal mounted and can accommodate Alpha's FXM UPS and up to four AlphaCell™ 85GXL or 195 GXL front terminal batteries. With a small form factor, the Multi Mount is the perfect choice for locations where confined space necessitates creative installation options.

Alpha Multi Mount Outdoor Enclosure - Telecom

Consult your Alpha representative for P/N configurations

Mechanical

Dimensions:
mm: ..... 687H x 559W x 457D
inches: ..... 27H x 22W x 18D
Weight: 27.2kg (60lbs)
Construction: ..... High strength corrosion resistant aluminum
Finish: ..... Powder coated white color
Equipment space: ..... 8U standard 19", 6RU space with one battery shelf
Cable entrance: ..... Bottom of enclosure: 1 x 3" diameter knock-out (2¼" trade size) 4 x 1.125" diameter knock-out (¾" trade size)
Hinge type: ..... Stainless steel piano hinge
Door prop: ..... Aluminum rod, 2 locking open positions
Door latch: ..... Bellcore 216 compression lock with padlock bracket

HVAC Specifications

Cooling: ..... Thermostat controlled 48vdc fan, 100 cfm or better. On at 49°C (120°F) Off at 32°C (89°F)
Door installed louvers: ..... Equipped with splash baffle

Enclosure options

Mounting: ..... Pole, host, wall, or pedestal (please specify if pole used is concrete at time of order)

System Specifications

› System Options
- Alpha AC distribution panel
- Alpha universal automatic transfer switch
- Alpha universal generator transfer switch
- AlphaGuard battery balancer
- Battery heater mats
- Transient voltage surge suppression device

Agency Compliance

Telcordia: ..... GR-13 CORE
NEMA rating: 3R

PEDESTAL SPECIFICATIONS N.T.S. 5

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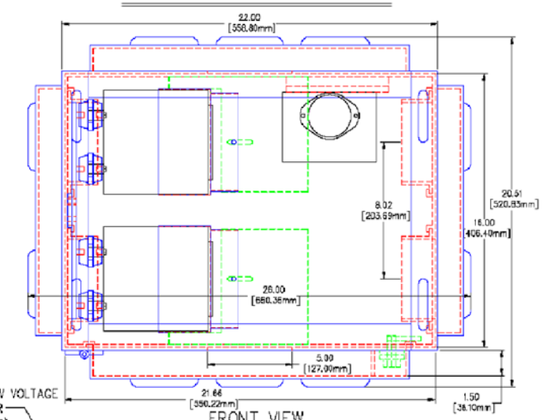
D–1

RED HIDDEN LINES — Represents any line of an object that is hidden from view.
BLUE SOLID LINES — Represents any line of an object that is visible in a particular view.
BLACK HIDDEN LINES — Represents items that are "not" included in KIT.

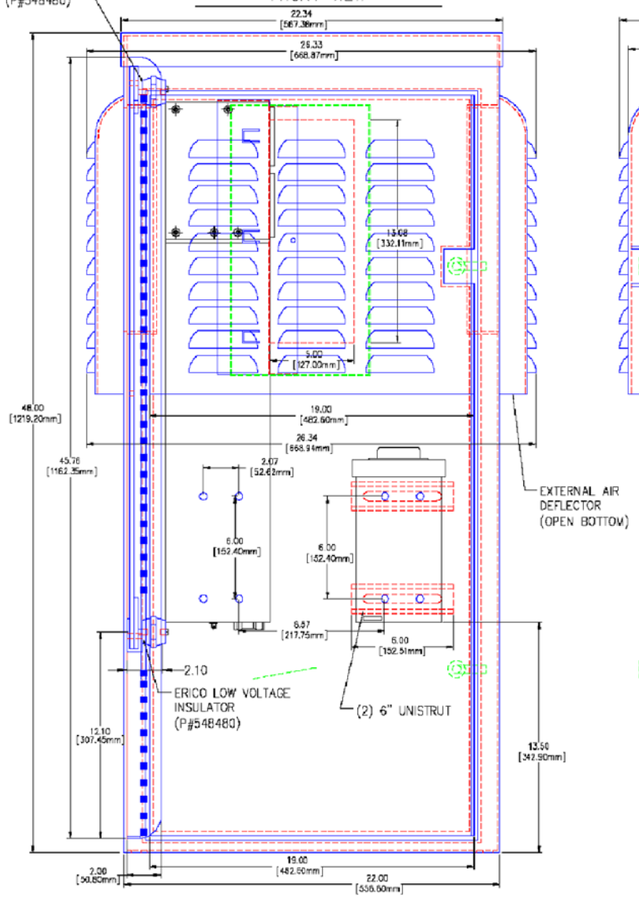
NOTE: DISCONNECT BOX DOES NOT HAVE TO BE LOCATED INSIDE CABINET IT MAY BE INSTALLED ON POLE ALONG WITH METER OR WTR BOX (WIRELESS TARIFF RATE) IF DESIRED.

TOP VIEW

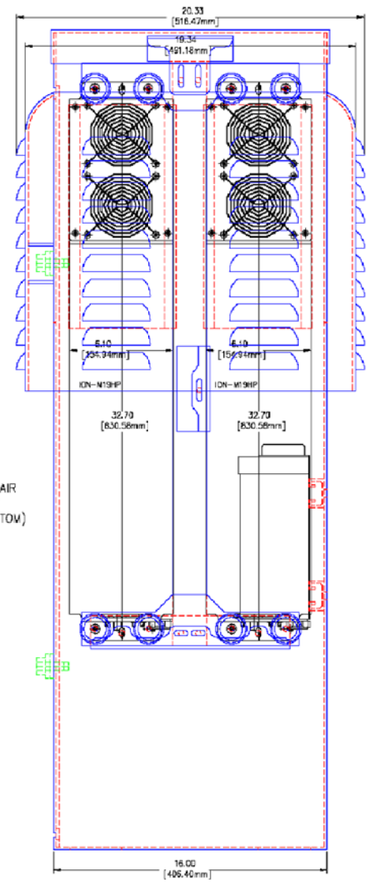


ERICO LOW VOLTAGE INSULATOR (P#548480)

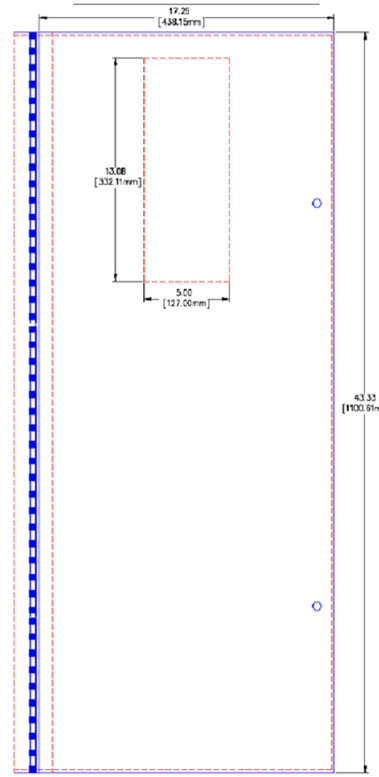
FRONT VIEW



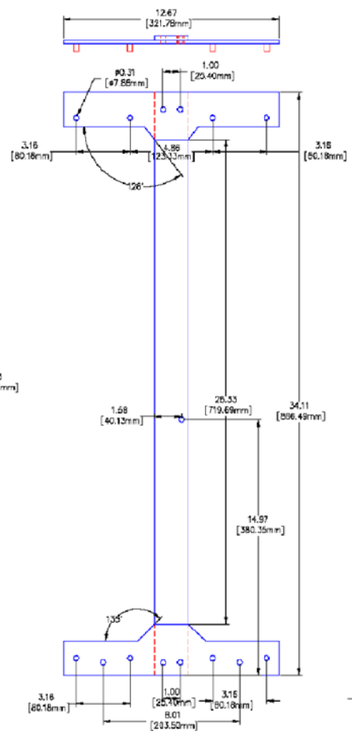
RIGHT VIEW



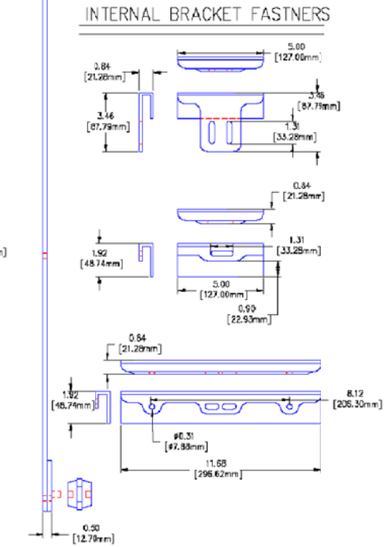
ACCESS DOOR FRONT VIEW



ION MOUNTING BACKPLATE



INTERNAL BRACKET FASTNERS



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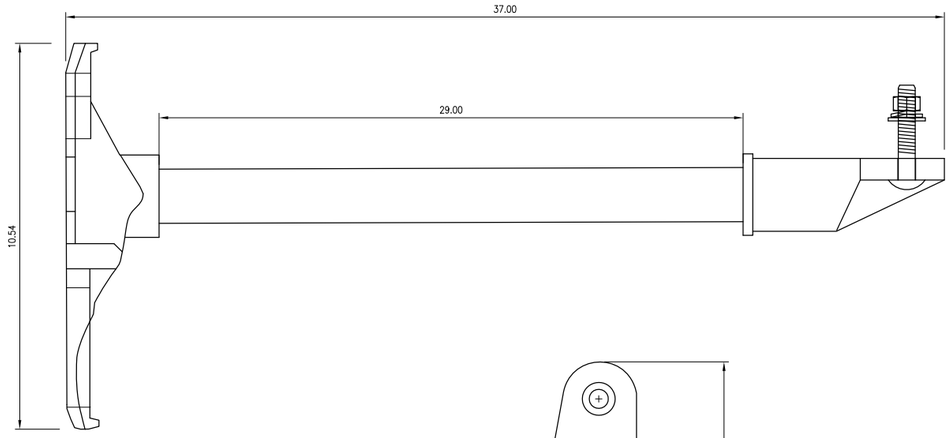
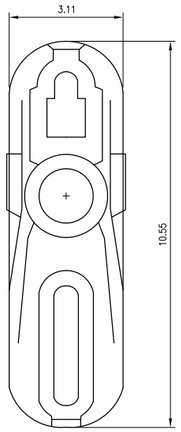
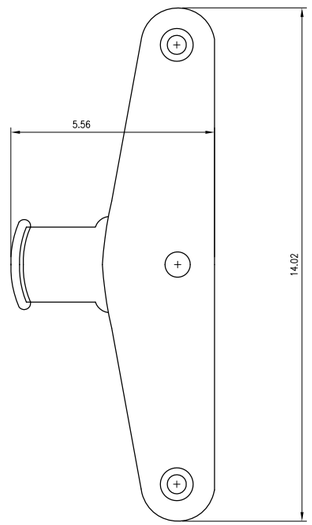
PEDESTAL DETAIL | N.T.S. | 1

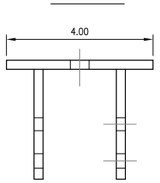


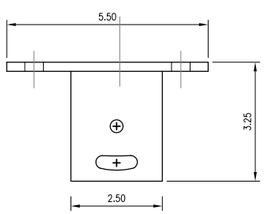




COMM SPACE BRACKET

FRONT VIEW





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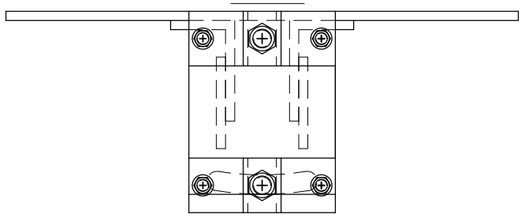

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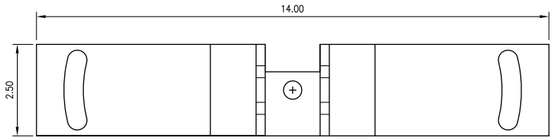
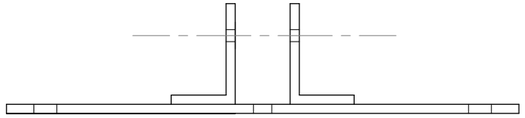
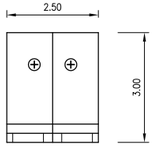


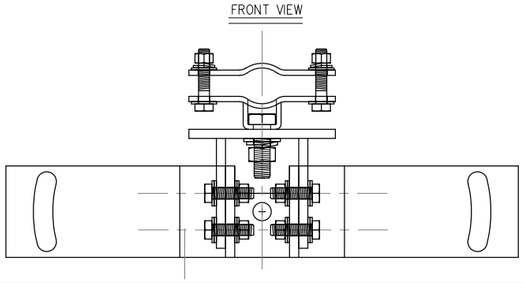
FRONT VIEW



SIDE VIEW



FRONT VIEW



ANTENNA MOUNT | N.T.S. | 1

AlphaCell
General Specifications

Model:	220 GXL	195 GXL	165 GXL
Warranty[1]:	4 to 5 year full replacement	4 to 5 year full replacement	4 to 5 year full replacement
Service Life:	Extended	Extended	Extended
Runtime (minutes)[2]:	220	195	165
Sealed VRLA:	Valve regulated lead acid	Valve regulated lead acid	Valve regulated lead acid
Heat Resistant:	Extreme	Extreme	Extreme
Hydrogen Emission:	Low	Low	Low
Terminals:	Threaded insert 1/4" - 20 UNC	Threaded insert 1/4" - 20 UNC	Threaded insert 1/4"- 20 UNC

Specifications[4]

Model:	220 GXL	195 GXL	165 GXL
Typical Runtime (minutes)[2]:	220	195	165
Cells Per Unit:	6	6	6
Voltage Per Unit:	12.8	12.8	12.8
Conductance Value:	1175	1100	1000
Max. Discharge Current (A):	900	900	800
Short Circuit Current (A):	2800	2600	2500
10 Second Volts @ 100A:	11.4	11.3	11.2
Ohms Impedance 60Hz:	0.0050	0.0050	0.0055
Nominal Capacity at 20hrs: (to 1.75VPC)	109Ah	100Ah	86
Nominal Capacity at 20hrs: (to 1.70VPC)	110Ah	102Ah	87
BCI Group Size:	31	31	27
Weight (lb/kg):	73/33.2	67/30.5	63/28.6
Height w/ Terminals (in/mm):	8.48/215.4	8.48/215.4	8.05/204.5
Width (in/mm)[3]:	13.42/340.9	13.42/340.9	12.5/317.8
Depth (in/mm)[3]:	6.80/172.7	6.80/172.7	6.83/173.4
Operating Temperature Range Discharge:	-40 to 71°C (-40 to 160°F)	-40 to 71°C (-40 to 160°F)	-40 to 71°C (-40 to 160°F)
Charge (with temp compensation):	-23 to 60°C (-9.4 to 140°F)	-23 to 60°C (-9.4 to 140°F)	-23 to 60°C (-9.4 to 140°F)
Float Charging Voltage (Vdc):	13.5 to 13.8	13.5 to 13.8	13.5 to 13.8
AC Ripple Charger:	0.5% RMS or 1.5% of float charge voltage recommended for best results. Max. allowed = 4% P-P		

Notes:
[1] Warranty varies by country and region. Warranty valid only when used with Alpha approved Power Supplies, Chargers and Enclosures. Consult your sales person for details.
[2] Runtimes calculated using a 25A DC constant current load.
[3] Dimensions at top of battery.
[4] See AlphaCell Users Guide for Additional Details.

Typical Standby Time in Minutes @ 25°C/77°F

XM2S0Max®	4A			6A			8A			10A		
Battery/Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	508	453	396	320	285	249	236	209	183	188	165	144
4 batteries:	701	625	546	444	396	346	329	293	256	261	232	203
6 batteries:	1091	973	853	701	625	546	523	465	407	418	372	325
8 batteries:	1457	1298	1165	969	859	750	720	643	562	577	515	450
9 batteries:	1636	1459	1322	1091	973	853	820	733	640	650	587	514
XM2S0Max®	12A			14A			16A			18A		
Battery/Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	149	132	115	119	106	92	101	89	77	87	78	68
4 batteries:	210	187	163	169	151	132	144	128	112	124	111	99
6 batteries:	339	301	264	275	245	214	236	209	183	204	182	159
8 batteries:	478	419	367	385	341	299	329	293	256	288	255	223
9 batteries:	538	479	419	440	391	342	377	335	294	329	293	256
XM2S0Max®	4A			6A			8A			10A		
Battery/Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	798	712	622	508	453	396	377	335	294	300	267	233
4 batteries:	1091	973	853	701	625	546	523	465	407	418	372	325
6 batteries:	1636	1459	1322	1091	973	853	820	733	640	650	587	514
8 batteries:	2288	2097	1728	1457	1298	1165	1122	1005	877	904	809	706
9 batteries:	2590	2345	2037	1636	1459	1322	1273	1143	997	1029	921	803
XM2S0Max®	12A			14A			16A			18A		
Battery/Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	242	215	188	190	174	151	168	148	125	144	128	107
4 batteries:	339	301	264	275	245	214	236	209	182	204	182	155
6 batteries:	538	479	419	440	391	340	377	335	293	329	293	252
8 batteries:	761	680	577	607	541	479	525	465	402	458	407	351
9 batteries:	843	753	658	692	617	538	597	531	462	523	465	402

*Above calculations based on an AC load with a .96 cable plant power factor.

For contact information visit www.alpha.com

The Alpha Group >

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049-297-10-B002 (06/09)

BATTERY SPECIFICATIONS | N.T.S. | 2

REV:	DATE/BY:	REVISION DESCRIPTION:
0	FXC 03/15/2013	ISSUED FOR REVIEW
1	FXC 03/25/2013	ISSUED FOR FINAL
2	FXC 11/05/2013	ISSUED FOR FINAL
3	FXC 01/08/2014	ISSUED FOR FINAL
4	FXC 01/08/2014	ISSUED FOR FINAL

ENGINEER/CONSULTANT:

Civil Engineer

CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630
(949) 753-8807 OFFICE - (949) 753-8833 FAX

CLIENT:

CROWN CASTLE
NG WEST, INC.

STAMP:

SITE INFO:

SITE NAME:
MON24
VERIZON MONTECITO–MON24

SITE ADDRESS: THOMAS BROS PAGE 997 GRID C3
R.O.W. EAST SIDE OF SHEFFIELD DR
(ADJACENT TO 260 SHEFFIELD DR)
SANTA BARBARA, CA 93108
LAT: 34.42594
LONG: –119.61168

SHEET TITLE:

DETAILS

DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:

D–3

CROWN CASTLE NG WEST, INC

VERIZON MONTECITO-MON25

R.O.W. SOUTH SIDE OF SAN LEANDRO LN.
(ADJACENT TO 1885 SAN LEANDRO LN)
SANTA BARBARA, CA 93108

GENERAL NOTES

1. APPROVAL OF THESE PLANS BY THE CITY ENGINEER DOES NOT AUTHORIZE ANY WORK TO BE PERFORMED UNTIL A PERMIT HAS BEEN ISSUED.
2. UPON ISSUANCE OF A PERMIT, NO WORK WILL BE PERMITTED ON WEEKENDS OR HOLIDAYS WITHOUT PERMISSION FROM THE ENGINEERING DEPARTMENT.
3. THE APPROVAL OF THIS PLAN OR ISSUANCE OF A PERMIT BY THE LOCAL JURISDICTION DOES NOT AUTHORIZE THE SUBDIVIDER AND OWNER TO VIOLATE ANY FEDERAL, STATE OR CITY LAWS, ORDINANCES, REGULATIONS, OR POLICIES, INCLUDING, BUT NOT LIMITED TO, THE FEDERAL ENDANGERED SPECIES ACT OF 1973 AND AMENDMENTS THERETO (16 USC SECTION 1531 ET.SEQ.).
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SURVEY MONUMENTS AND/OR VERTICAL CONTROL BENCHMARKS WHICH ARE DISTURBED OR DESTROYED BY CONSTRUCTION. A LAND SURVEYOR MUST FIELD LOCATE, REFERENCE, AND/OR PRESERVE ALL HISTORICAL OR CONTROLLING MONUMENTS PRIOR TO ANY EARTHWORK. IF DESTROYED, SUCH MONUMENTS SHALL BE REPLACED WITH APPROPRIATE MONUMENTS BY A LAND SURVEYOR, A CORNER RECORD OR RECORD OF SURVEY, AS APPROPRIATE, SHALL BE FIELD AS REQUIRED BY THE PROFESSIONAL LAND SURVEYORS ACT. IF ANY VERTICAL CONTROL IS TO BE DISTURBED OR DESTROYED, THE LOCAL JURISDICTION FIELD SURVEY SECTION MUST BE NOTIFIED, IN WRITING, AT LEAST 3 DAYS PRIOR TO THE CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE COST OF REPLACING ANY VERTICAL CONTROL BENCHMARKS DESTROYED BY THE CONSTRUCTION.
5. IMPORTANT NOTICE: SECTION 4216 OF THE GOVERNMENT CODE REQUIRES A DIG ALERT IDENTIFICATION NUMBER BE ISSUED BEFORE A "PERMIT TO EXCAVATE" WILL BE VALID. FOR YOUR DIG ALERT I.D. NUMBER, CALL UNDERGROUND SERVICE ALERT, TWO DAYS BEFORE YOU DIG.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR THE POTHOLE AND LOCATING OF ALL EXISTING UTILITIES THAT CROSS THE PROPOSED TRENCH LINE AND MUST MAINTAIN 1' MINIMUM VERTICAL CLEARANCE.
7. CONTRACTOR SHALL SUBMIT TO THE LOCAL JURISDICTION, A CONSTRUCTION PLAN TO PROTECT WATER MAINS PRIOR TO COMMENCING CONSTRUCTION.
8. CONTRACTOR SHALL REPLACE OR REPAIR ALL TRAFFIC SIGNAL LOOPS, CONDUIT, AND LANE STRIPING DAMAGED DURING CONSTRUCTION.
9. CONTRACTOR SHALL NOTIFY THE LOCAL JURISDICTION. A MINIMUM OF 48 HOURS PRIOR TO COMMENCING WORK WITHIN 10' OF ALL SEWER, WATER, AND STORMDRAIN MAIN INCLUDING ALL CROSSINGS.
10. THIS PROJECT WILL BE INSPECTED BY ENGINEERING AND CAPITAL PROJECTS DEPARTMENT, FIELD ENGINEERING DIVISION.
11. AS-BUILT DRAWINGS MUST BE SUBMITTED TO THE CITY RESIDENT ENGINEER PRIOR TO THE ACCEPTANCE OF THIS PROJECT.
12. PUBLIC IMPROVEMENT SUBJECT TO DESUETUDE OR DAMAGE." IF REPAIR OR REPLACEMENT OF SUCH PUBLIC IMPROVEMENTS IS REQUIRED, THE OWNER SHALL OBTAIN THE REQUIRED PERMITS FOR WORK IN THE PUBLIC RIGHT-OFWAY, SATISFACTORY TO THE PERMIT - ISSUING AUTHORITY.
13. PRIOR TO ANY DISTURBANCE TO THE SITE, EXCLUDING UTILITY MARKS-OUTS AND SURVEYING, THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR A PRE-CONSTRUCTION MEETING WITH THE LOCAL JURISDICTION FIELD ENGINEERING DIVISION.
14. PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION SHOWN ON THESE PLANS. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE. THE CONTRACTOR IS RESPONSIBLE TO ATTEND THE LOCAL JURISDICTIONS MONTHLY UTILITY COORDINATION COMMITTEE THE CONSTRUCTION ACTIVITIES WITH THE CITY AND ALL OTHER CONTRACTORS SO THAT NO TRENCH IS CUT WITHIN ANY OF THE CITY STREETS THAT HAVE BEEN CONSTRUCTED, REPAIRED, OR SLURRY SEALED WITHIN THREE YEARS OF THE STREET CONSTRCTUION/RESURFACING DATE.
15. MANHOLES OR COVERS SHALL BE LABELED "CROWN CASTLE" OR "CROWN CASTLE NG WEST".
16. CONTRACTOR SHALL IMPLEMENT AN EROSION AND SEDIMENT CONTROL PROGRAM DURING THE PROJECT CONSTRUCTION ACTIVITIES. THE PROGRAM SHALL MEET THE APPLICABLE REQUIREMENTS OF THE STATE WATER RESOURCE CONTROL BOARD.
17. THE CONTRACTOR SHALL HAVE EMERGENCY MATERIALS AND EQUIPMENT ON HAND FOR UNFORESEEN SITUATIONS, SUCH AS DAMAGE TO UNDERGROUND WATER, SEWER, AND STORM DRAIN FACILITIES WHEREBY FLOWS MAY GENERATE EROSION AND SEDIMENT POLLUTION.

SPECIAL NOTES

THE FOLLOWING NOTES ARE PROVIDED TO GIVE DIRECTIONS TO THE CONTRACTOR BY THE ENGINEER OF WORK. THE CITY ENGINEER'S SIGNATURE ON THESE PLANS DOES NOT CONSTITUTE APPROVAL OF THESE NOTES AND THE CITY WILL NOT BE RESPONSIBLE FOR THEIR ENFORCEMENT.

1. THE CONTRACTOR SHALL VERIFY THE LOCATION EXISTING UNDERGROUND UTILITIES INCLUDING SEWER LATERALS AND WATER SERVICES TO INDIVIDUAL LOTS BOTH VERTICAL AND HORIZONTAL PRIOR TO COMMENCING IMPROVEMENT OPERATIONS.
2. CONTRACTOR SHALL MAKE EXPLORATION EXCAVATIONS AND LOCATE EXISTING FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS OF PLANS IF REVISION IS NECESSARY BECAUSE OF LOCATION OF EXISTING UTILITIES.
3. LOCATION AND ELEVATIONS OF IMPROVEMENTS, TO BE MET BY WORK, SHALL BE CONFIRMED BY FIELD MEASUREMENT PRIOR TO CONSTRUCTION OF NEW WORK.
4. GRADES SHOWN ARE FINISH GRADES, CONTRACTOR SHALL DETERMINE NECESSARY SUB GRADE ELEVATIONS AND SHALL CONSTRUCT SMOOTH TRANSITION BETWEEN FINISH GRADES SHOWN.
5. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE RESPONSIBILITY FOR JOB SITE CONDITION DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS PROVISION SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXPECTING FOR LIABILITY ARISING FROM SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
6. THE CONTRACTOR SHALL BE TOTALLY RESPONSIBLE FOR COMPLIANCE WITH THE PROVISIONS OF THE STATE OF CALIFORNIA SAFETY ORDERS.
7. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE FROM EXISTING RECORDS AND CORROBORATED, WHERE POSSIBLE WITH FIELD TIES. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING THE LOCATIONS SHOWN, BOTH HORIZONTALLY AND VERTICALLY, PRIOR TO CONSTRUCTION. IF EXISTING LOCATIONS VARY SUBSTANTIALLY FROM THE PLANS, THE ENGINEER SHOULD BE NOTIFIED TO MAKE ANY CONSTRUCTION CHANGES REQUIRED.
8. THE CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT FOR ALL SEWER AND WATER MAIN UNDER CROSSING IN ACCORDANCE WITH PART 1 SECTION 5-2 OF THE STANDARD SPECIFICATION.
9. THE CONTRACTOR SHALL REPLACE OR REPAIR ALL TRAFFIC SIGNAL LOOPS, CONDUITS, AND LANE STRIPING DAMAGED DURING CONSTRUCTION.
10. THE CONTRACTOR SHALL SUBMIT WORK PLANS FOR ALL BORE OPERATIONS TWO WEEKS PRIOR TO COMMENCING WORK.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR THE POTHOLE AND LOCATING OF ALL EXISTING UTILITIES THAT CROSS THE PROPOSED TRENCH LINE AND MUST MAINTAIN 1' MINIMUM VERTICAL CLEARANCE.
12. AS-BUILT DRAWINGS MUST BE SUBMITTED TO THE CITY ENGINEER PRIOR TO ACCEPTANCE OF THIS PROJECT.

VICINITY MAP - N.T.S.

GROUND BUS BAR
MECH. GRND. CONN.
CADWELD
ELECTRIC BOX
TELEPHONE BOX
EXISTING SERVICE POLE
SIDEWALK FLAG
EX. MANHOLE
LIGHT POLE
FOUNDATION
SPOT ELEV.
SET POINT
REVISION
DETAIL REF.
ELEVATION REF.
SECTION REF.
PROP./LEASE LINE
MATCH LINE
WORK POINT
TELE. CONDUIT
CENTERLINE
ELECT. CONDUIT
COAXIAL CABLE
MYERS PEDESTAL
VAULT STANDARD 2'X3'
STEEL POLE

SYMBOLS, LINETYPES AND HATCH PATTERNS

EROSION AND SEDIMENT CONTROL NOTES

TEMPORARY EROSION/SEDIMENT CONTROL, PRIOR TO COMPLETION OF FINAL IMPROVEMENTS, SHALL BE PERFORMED BY THE CONTRACTOR OR QUALIFIED PERSON AS INDICATED BELOW:

1. ALL REQUIREMENTS OF THE LOCAL JURISDICTION "LAND DEVELOPMENT MANUAL, STORM WATER STANDARDS" MUST BE INCORPORATED INTO THE DESIGN AND CONSTRUCTION OF THE PROPOSED GRADING/IMPROVEMENTS CONSISTENT WITH THE APPROVED STORM WATER AND/OR WATER POLLUTION CONTROL PLAN (WPCP).
2. FOR STORM DRAIN INLETS, PROVIDE A GRAVEL BAG SILT BASIN IMMEDIATELY UPSTREAM OF INLET AS INDICATED ON DETAILS.
3. FOR INLETS LOCATED AT SUMPS ADJACENT TO TOP OF SLOPES, THE CONTRACTOR SHALL ENSURE THAT WATER DRAINING TO THE SUMP IS DIRECTED INTO THE INLET AND THAT A MINIMUM OF 1.00" FREEBOARD EXISTS AND IS MAINTAINED ABOVE THE TOP OF THE INLET. IF FREEBOARD IS NOT PROVIDED BY GRADING SHOWN ON THESE PLANS, THE CONTRACTOR SHALL PROVIDE IT VIA TEMPORARY MEASURES, I.E. GRAVEL BAGS OR DIKES.
4. THE CONTRACTOR OR QUALIFIED PERSON SHALL BE RESPONSIBLE FOR CLEANUP OF SILT AND MUD ON ADJACENT STREET(S) AND STORM DRAIN SYSTEM DUE TO CONSTRUCTION ACTIVITY.
5. THE CONTRACTOR OR QUALIFIED PERSON SHALL CHECK AND MAINTAIN ALL LINED AND UNLINED DITCHES AFTER EACH RAINFALL.
6. THE CONTRACTOR SHALL REMOVE SILT AND DEBRIS AFTER EACH MAJOR RAINFALL.
7. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON, ALL NECESSARY MATERIALS SHALL BE STOCKPILED ON SITE AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
8. THE CONTRACTOR SHALL RESTORE ALL EROSION/SEDIMENT CONTROL MEASURES TO WORKING ORDER TO THE SATISFACTION OF THE CITY ENGINEER OR RESIDENT ENGINEER AFTER EACH RUN-OFF PRODUCING RAINFALL.
9. THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION CONTROL MEASURES AS MAY BE REQUIRED BY THE RESIDENT ENGINEER DUE TO UNCOMPLETED GRADING OPERATIONS OR UNFORESEEN CIRCUMSTANCES, WHICH MAY ARISE.
10. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATERS CREATE A HAZARDOUS CONDITION.
11. ALL EROSION/SEDIMENT CONTROL MEASURES PROVIDED PER THE APPROVED GRADING PLAN SHALL BE INCORPORATED HEREON. ALL EROSION/SEDIMENT CONTROL FOR INTERIM CONDITIONS SHALL BE DONE TO THE SATISFACTION OF THE RESIDENT ENGINEER.
12. GRADED AREAS AROUND THE PROJECT PERIMETER MUST DRAIN AWAY FROM THE FACE OF THE SLOPE AT THE CONCLUSION OF EACH WORKING DAY.
13. ALL REMOVABLE PROTECTIVE DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN RAIN IS IMMINENT.
14. THE CONTRACTOR SHALL ONLY GRADE, INCLUDING CLEARING AND GRUBBING FOR THE AREAS FOR WHICH THE CONTRACTOR OR QUALIFIED PERSON CAN PROVIDE EROSION/SEDIMENT CONTROL MEASURES.
15. THE CONTRACTOR SHALL ARRANGE FOR WEEKLY MEETINGS DURING OCTOBER 1ST TO APRIL 30TH FOR PROJECT TEAM (GENERAL CONTRACTOR, QUALIFIED PERSON, EROSION CONTROL SUBCONTRACTOR IF ANY, ENGINEER OF WORK, OWNER AND THE RESIDENT ENGINEER) TO EVALUATE THE ADEQUACY OF THE EROSION/SEDIMENT CONTROL MEASURES AND OTHER RELATED CONSTRUCTION ACTIVITIES.

TRAFFIC CONTROL NOTES

THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN (11" X 17") FOR APPROVAL PRIOR TO STARTING WORK. THE PLAN SHOULD BE SUBMITTED TO THE TRAFFIC CONTROL PERMIT COUNTER. CONTRACTOR SHALL OBTAIN A TRAFFIC CONTROL PERMIT A MINIMUM OF TWO (2) WORKING DAYS PRIOR TO STARTING WORK, AND A MINIMUM FIVE (5) DAYS IF WORK WILL AFFECT A BUS STOP OR AN EXISTING TRAFFIC SIGNAL, OR IF WORK WILL REQUIRE A ROAD OR ALLEY CLOSURE.

FOOTAGE TOTALS	
ASPHALT CUT	-
DIRT TRENCH	-
PUNCH THRU	-
BORE	-
TOTAL	-
R&R SWF TOTAL	-

PROJECT DICTIONARY

SITE ADDRESS: R.O.W. SOUTH SIDE OF SAN LEANDRO LN. (ADJACENT TO 1885 SAN LEANDRO LN) SANTA BARBARA, CA 93108

APPLICANT: CROWN CASTLE NG WEST, INC
2125 WRIGHT AVE, SUITE #C9
LA VERNE, CA 91750
CONTACT: HEIDI PAYNE
PHONE: (949) 300-9493

CIVIL ENGINEER: CONNELL DESIGN GROUP, LLC
26455 RANCHO PARKWAY SOUTH
LAKE FOREST, CA 92630
CONTACT: FRANK CARTER
(949) 310-8233 PHONE
(949) 753-8833 FAX

CONSTRUCTION CHANGE TABLE

CHANGE	DATE	EFFECTED OR ADDED SHEET NUMBERS

APPLICABLE CODES

ALL WORK SHALL COMPLY WITH THE FOLLOWING APPLICABLE CODES:

*2010 CALIFORNIA BUILDING CODE
*2010 CALIFORNIA MECHANICAL CODE
*2010 CALIFORNIA PLUMBING CODE
*2010 CALIFORNIA ELECTRICAL CODE

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

PROJECT DESCRIPTION

PROJECT CONSISTS OF INSTALLATION OF:

1. (2) OMNI DIRECTIONAL ANTENNAS ON EXISTING UTILITY POLE
2. EQUIPMENT PEDESTAL W/ BBU, ion AND ELECTRICAL METER AT BASE OF POLE

SHEET INDEX:

TITLE SHEET	T-1 - SHEET 1 OF 7
SITE PLAN	A-1 - SHEET 2 OF 7
PROPOSED ELEVATIONS	A-2 - SHEET 3 OF 7
GRADING PLAN	A-3 - SHEET 4 OF 7
DETAILS	D-1 - SHEET 5 OF 7
DETAILS	D-2 - SHEET 6 OF 7
DETAILS	D-3 - SHEET 7 OF 7

REV:	DATE/BY:	REVISION DESCRIPTION:
0	FXC 03/19/2013	ISSUED FOR REVIEW
1	FXC 03/25/2013	ISSUED FOR FINAL
2	FXC 11/05/2013	ISSUED FOR FINAL
3	FXC 01/08/2014	ISSUED FOR FINAL
4	FXC 03/08/2014	ISSUED FOR FINAL

ENGINEER/CONSULTANT:

Civil Engineer

CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630
(949) 753-8807 OFFICE - (949) 753-8833 FAX

CLIENT:

CROWN CASTLE NG WEST, INC.

STAMP:

SITE INFO:

SITE NAME:
MON25
VERIZON MONTECITO-MON25

SITE ADDRESS: THOMAS BROS PAGE 997 GRID B3
R.O.W. SOUTH SIDE OF SAN LEANDRO LN.
(ADJACENT TO 1885 SAN LEANDRO LN)
SANTA BARBARA, CA 93108
LAT: 34.42476
LONG: -119.61687

SHEET TITLE:

TITLE SHEET

DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:

T-1

SCALE: 1" = 5'

5' 0' 2.5' 5' 10'

COORDINATES:

LATITUDE 34°25'28.85" N
LONGITUDE 119°37'00.74" W

NAD 1983 GEODETIC COORDINATES AND ELEVATIONS WERE ESTABLISHED USING SURVEY GRADE "ASHTECH" G.P.S. RECEIVERS AND ASHTECH SURVEY GRADE PRECISION SOFTWARE FOR POST-PROCESSING.

BASIS OF BEARINGS:

THE CENTERLINE OF SAN LEANDRO LANE BEING SOUTH 81°00'00" EAST PER SUBDIVISION MAP, TRACT 13271, R.M. 125/75-80, RECORDS OF SANTA BARBARA COUNTY.

ASSESSOR'S IDENTIFICATION:

N/A

AREA:

N/A

BENCH MARK REFERENCE:

U.S.G.S. BENCH MARK "BM 56"

UNITED STATES GEOLOGICAL SURVEY BENCH MARK "BM 56" AS SHOWN ON THE "CARPINTERIA" 7.5 MINUTE QUADRANGLE MAP.

ELEVATION: 58.5 FEET A.M.S.L. (NAVD88) (DATUM VERIFIED IN FIELD TO BE WITHIN 1-A ACCURACY STANDARDS)

TITLE REPORT IDENTIFICATION:

N/A

EASEMENT NOTES:

N/A

LEGAL DESCRIPTION:

N/A

DATE OF SURVEY:

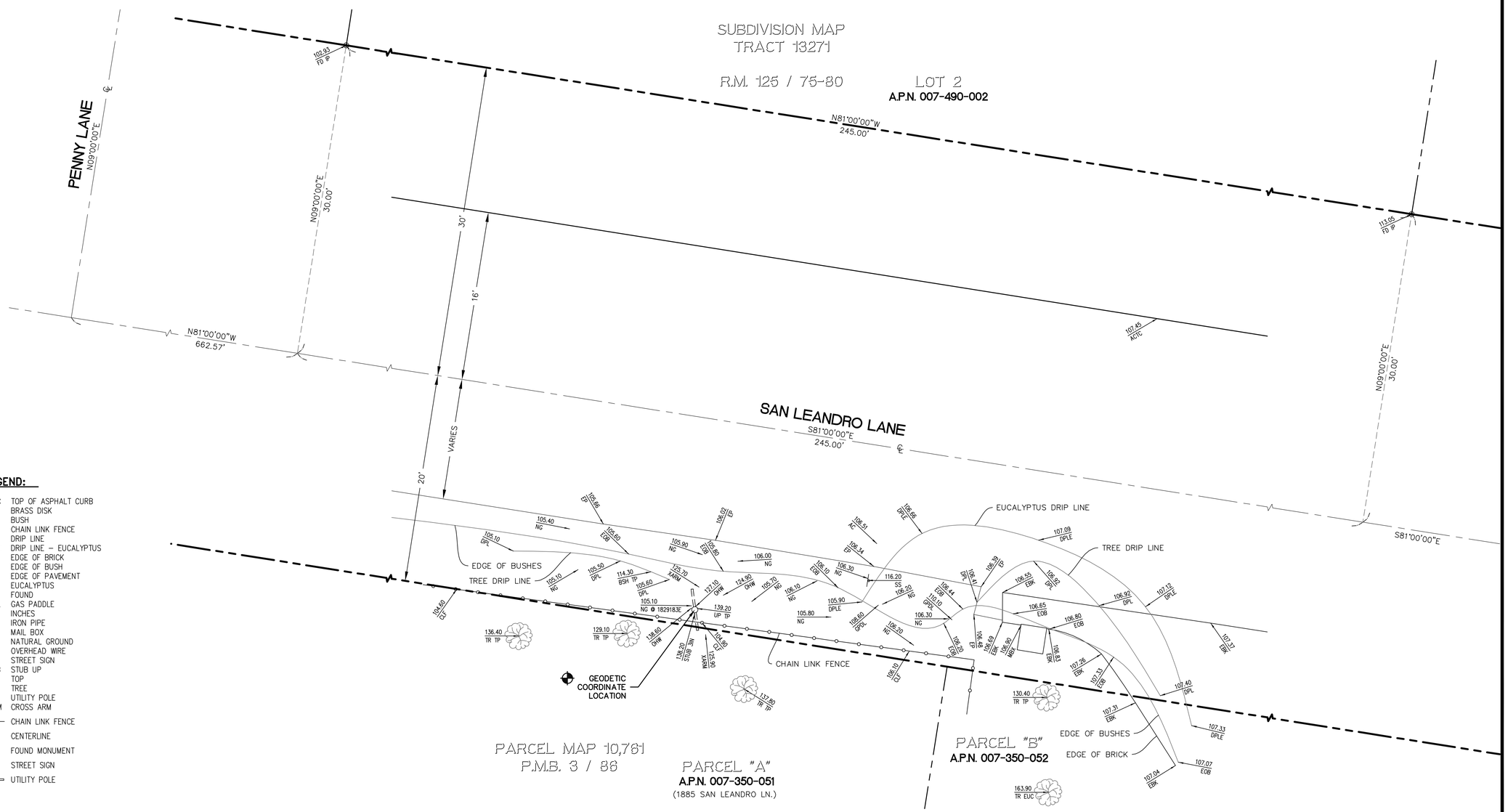
JULY 10, 2013

SURVEYORS NOTE:

THE RIGHT OF WAY LINES AND THEIR DIMENSIONS SHOWN HEREON ARE PER READILY AVAILABLE RECORDED INFORMATION AND THEIR LOCATIONS ARE APPROXIMATE, PENDING RECEIPT OF TITLE REPORT(S) FOR THE ADJACENT REAL PROPERTY.

LIVING PLANTS STATEMENT:

THE HEIGHTS AND ELEVATIONS FOR THE TREES, BUSHES AND OTHER LIVING PLANTS SHOWN HEREON, SHOULD BE CONSIDERED APPROXIMATE (+/-) AND ONLY VALID FOR THE DATE OF THIS SURVEY. THEY ARE PROVIDED AS A GENERAL REFERENCE AND SHOULD NOT BE USED FOR DESIGN PURPOSES.



LEGEND:

ACTC	TOP OF ASPHALT CURB
BDK	BRASS DISK
BSH	BUSH
CLF	CHAIN LINK FENCE
DPL	DRIP LINE
DPLE	DRIP LINE - EUCALYPTUS
EBK	EDGE OF BRICK
EOB	EDGE OF BUSH
EP	EDGE OF PAVEMENT
EUC	EUCALYPTUS
FD	FOUND
GPDL	GAS PADDLE
IN	INCHES
IP	IRON PIPE
MBX	MAIL BOX
NG	NATURAL GROUND
OHW	OVERHEAD WIRE
SS	STREET SIGN
STUB	STUB UP
TP	TOP
TR	TREE
UP	UTILITY POLE
XARM	CROSS ARM
—o—	CHAIN LINK FENCE
℄	CENTERLINE
◉	FOUND MONUMENT
—▫—	STREET SIGN
=o=	UTILITY POLE

REV:	DATE/BY:	REVISION DESCRIPTION:
1	07/19/13 MDL	ISSUED FOR REVIEW

ENGINEER/CONSULTANT:

CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PKWY. SOUTH
LAKE FOREST, CA 92630-8326
(949) 753-8807 OFFICE - (949) 753-8833 FAX

SITE BUILDER:

CROWN CASTLE
NG WEST, INC.

SURVEYOR:

BERT HAZE
AND ASSOCIATES, INC.
LAND SURVEYING & MAPPING
3188 AIRWAY AVENUE, SUITE K1
COSTA MESA, CALIFORNIA 92626
714 557-1567 OFFICE
714 557-1568 FAX

JN. 706.238

STAMP:

PROFESSIONAL LAND SURVEYOR
BERT HAZE
No. 7211
Exp. 3-31-14
STATE OF CALIFORNIA

SITE INFO:

SITE NAME:

MON25
VERIZON MONTECITO-MON25

SITE ADDRESS:

R.O.W. SOUTH SIDE OF SAN LEANDRO LN
(ADJACENT TO 1885 SAN LEANDRO LN.)
SANTA BARBARA, CA 93108

SHEET TITLE:

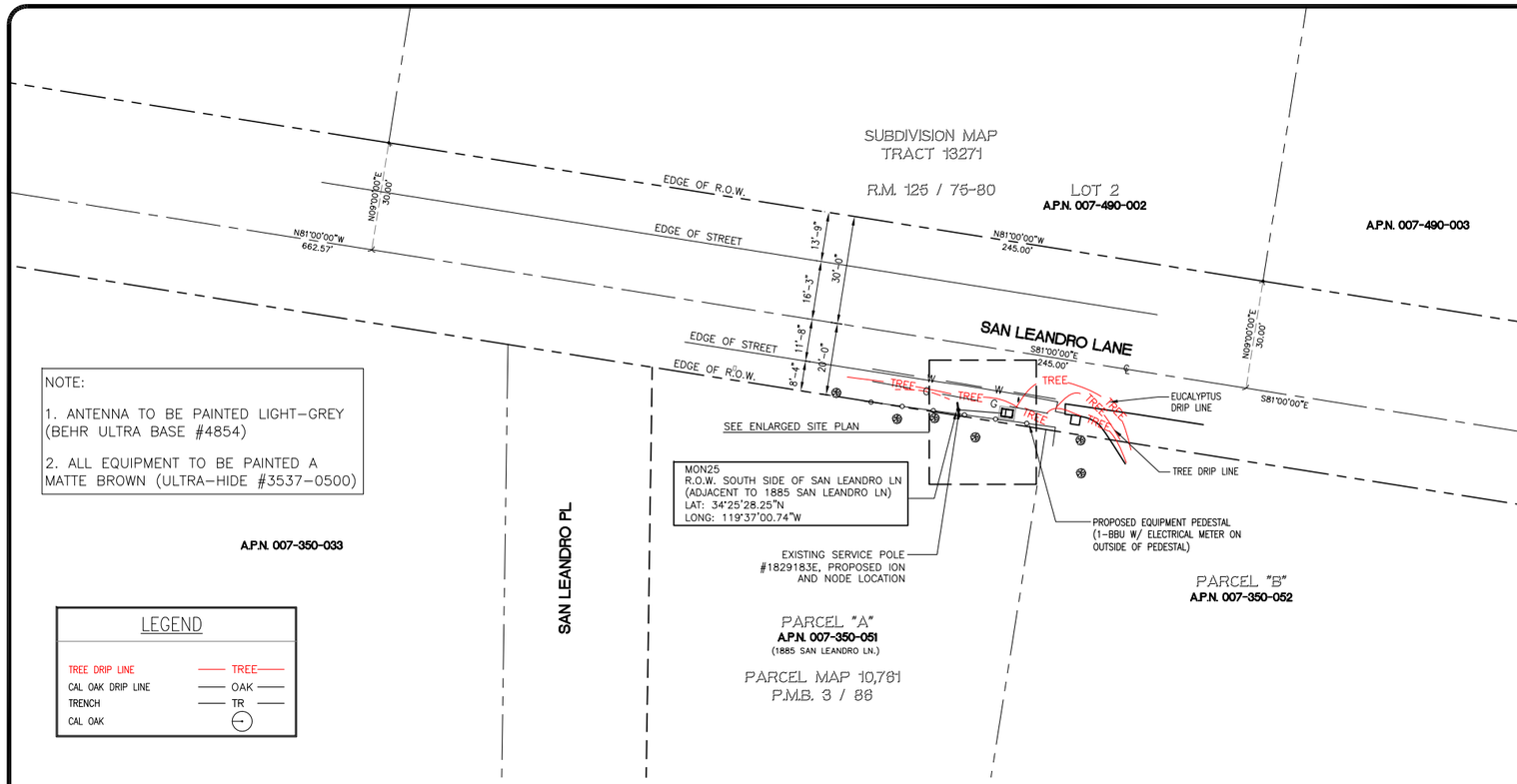
TOPOGRAPHIC SURVEY

DRAWING INFO:

DWG. NAME:	DRAWN BY:	DATE:
MON25	MDL	07/19/13

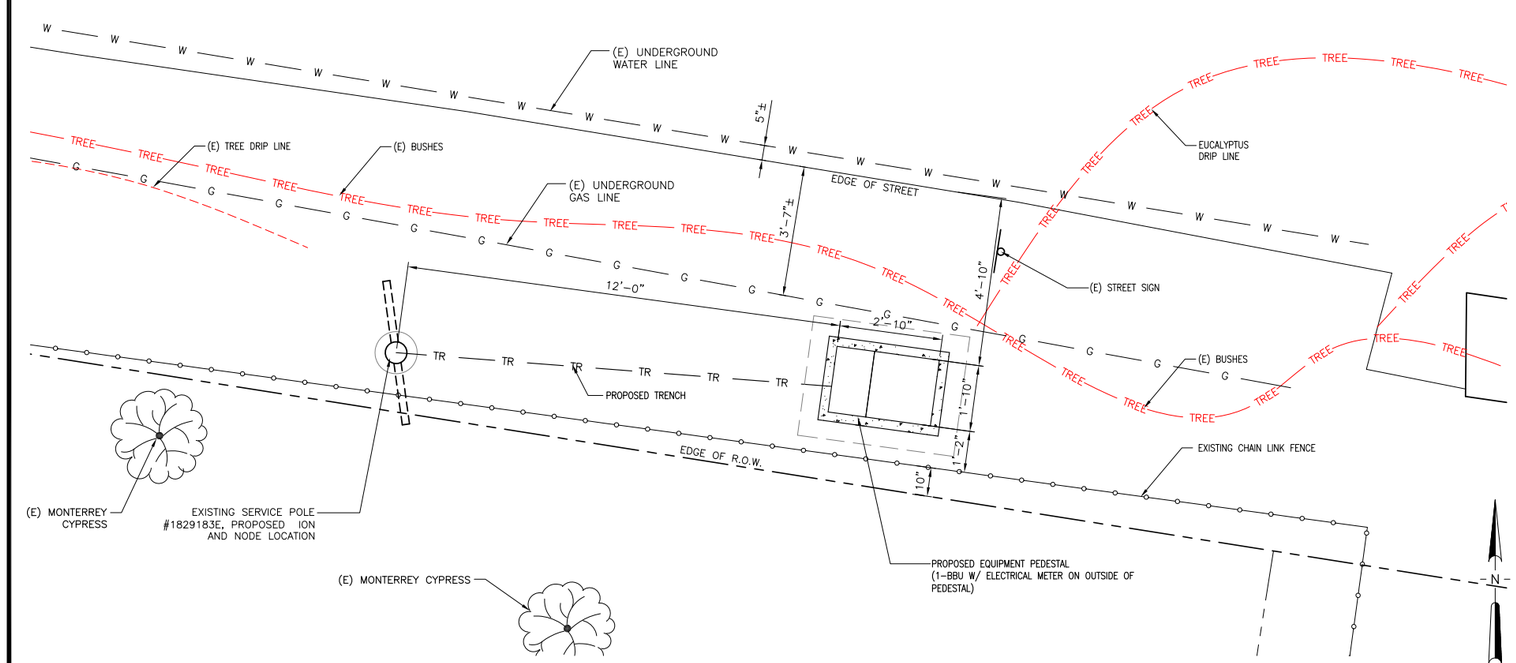
SHEET NUMBER:

1 OF 1 | C-1



SITE PLAN — SCALE: 1"=20'-0" (0 10' 20') — 1

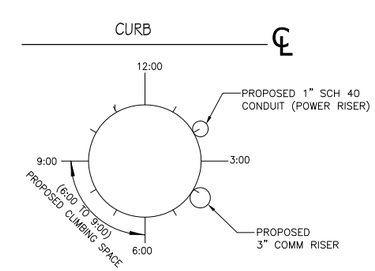
EXISTING PHOTO — SCALE: N.T.S. — 3



ENLARGED SITE PLAN — SCALE: 1/2"=1'-0" (0 1' 2') — 2

POLE WILL BE STEPPED IN ACCORDANCE TO G095 STANDARDS IN RESPECT TO CLIMBING SPACE.

1-3" CROWN CASTLE RISER @ 4:00
1-1" POWER RISER @ 2:00



RISER PROFILE — SCALE: N.T.S. — 4

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ENGINEER/CONSULTANT:

Civil Engineer
CDG
CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630
(949) 753-8807 OFFICE - (949) 753-8833 FAX

CLIENT:

CROWN CASTLE
NG WEST, INC.

STAMP:

SITE INFO:

SITE NAME:
MON25
VERIZON MONTECITO-MON25

SITE ADDRESS: THOMAS BROS PAGE 997 GRID B3
R.O.W. SOUTH SIDE OF SAN LEANDRO LN.
(ADJACENT TO 1885 SAN LEANDRO LN)
SANTA BARBARA, CA 93108
LAT: 34.42476
LONG: -119.61687

SHEET TITLE:

SITE PLAN, ENLARGED SITE PLAN, EXISTING PHOTO AND RISER PROFILE

DRAWING INFO:

DRAWN BY:
FC

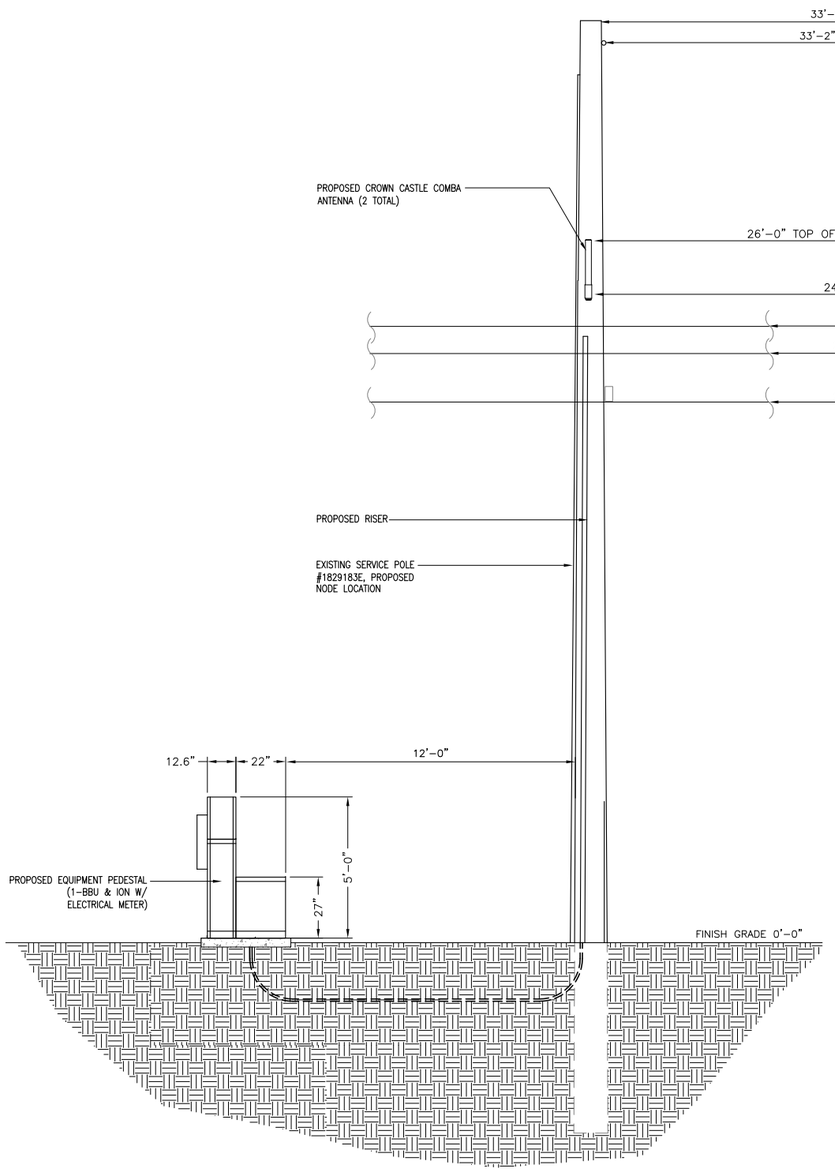
SHEET NUMBER:

A-1

NOTE:

1. ANTENNA TO BE PAINTED LIGHT-GREY (BEHR ULTRA BASE #4854)

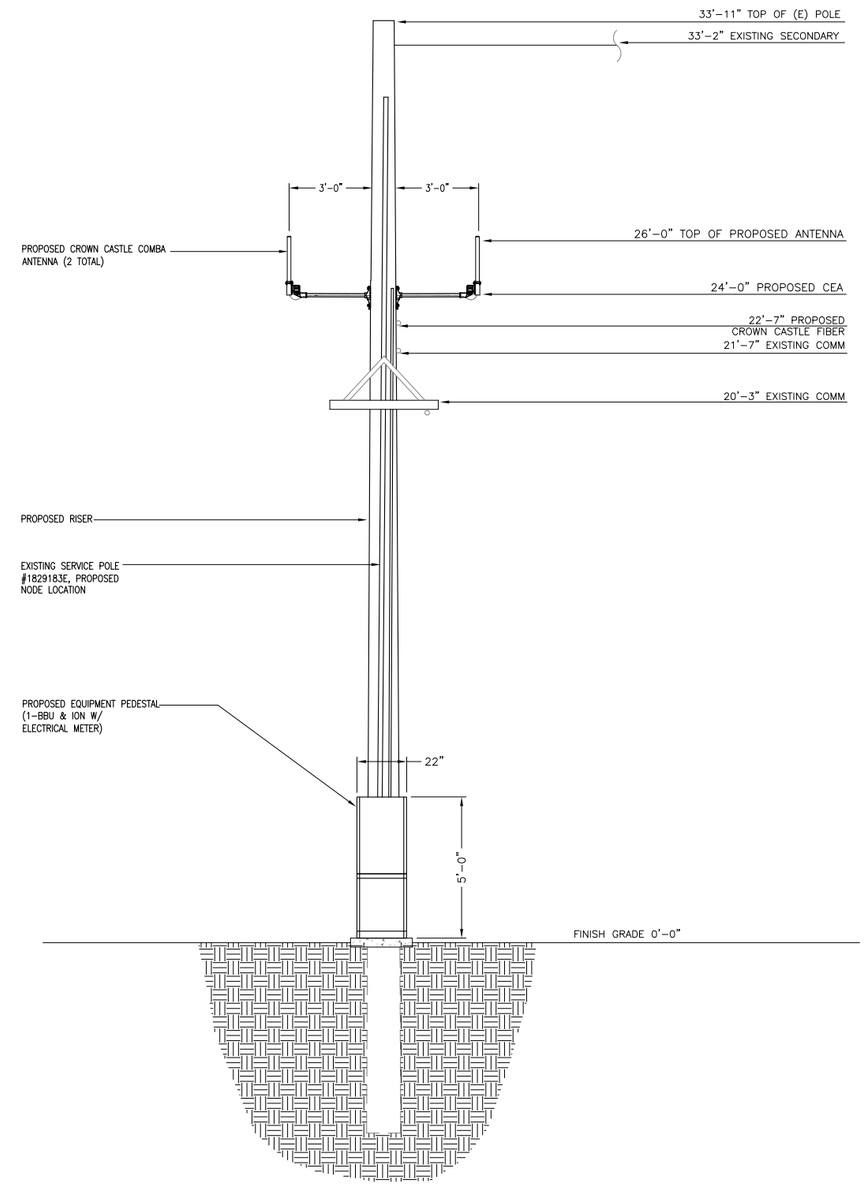
2. ALL EQUIPMENT TO BE PAINTED A MATTE BROWN (ULTRA-HIDE #3537-0500)



PROPOSED ELEVATION LOOKING SOUTH

SCALE: 3/8"=1'-0" 0 1' 2' 3'

1



PROPOSED ELEVATION LOOKING WEST

SCALE: 3/8"=1'-0" 0 1' 2' 3'

2

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SHEET TITLE:

ELEVATION

DRAWING INFO:

DRAWN BY:
FC

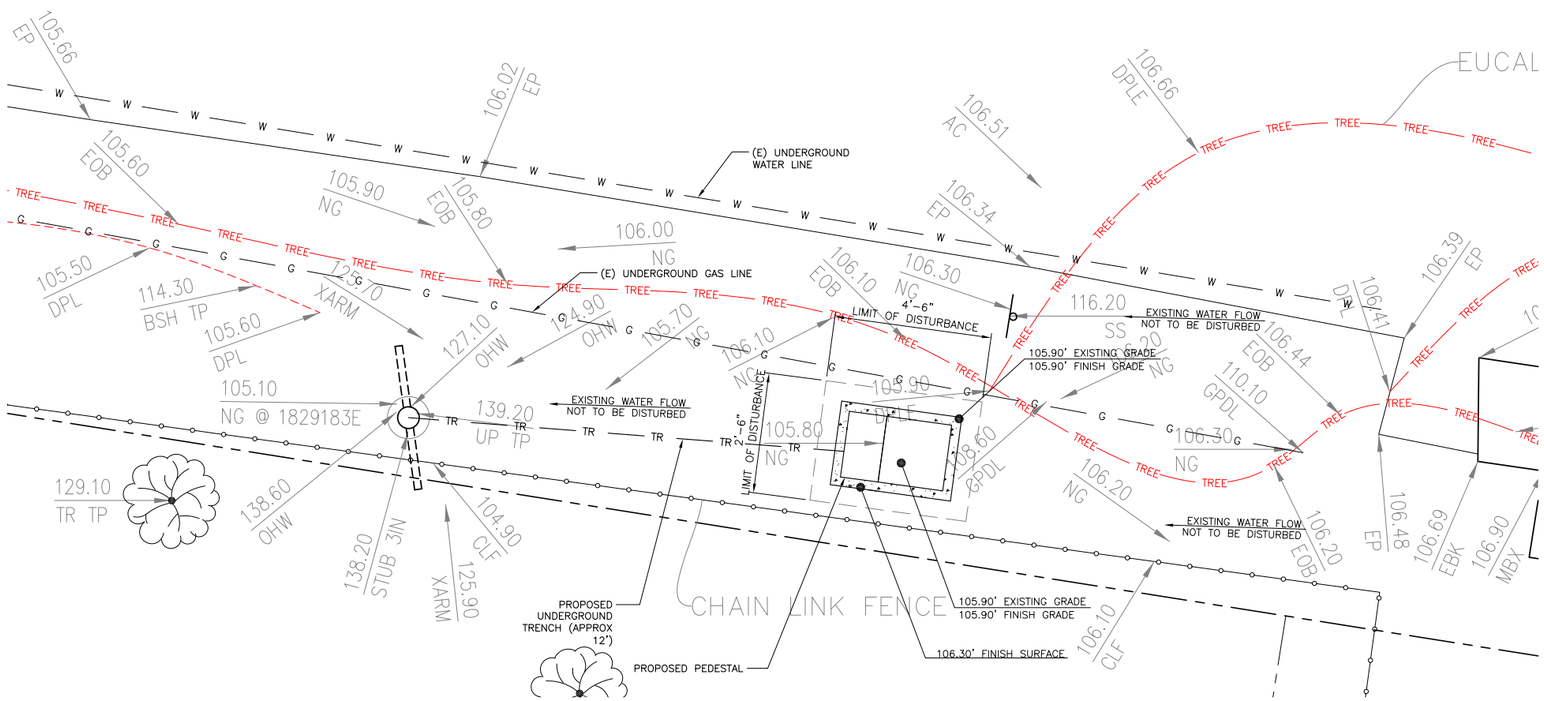
SHEET NUMBER:

A-2

GRADING CALCULATION

CONCRETE PAD:	4.375 CF
12'Lx3'Dx.5'W TRENCH:	18.00 CF
TOTAL:	22.375 CF

NOTE:
NO CUT AND FILL REQUIRED



LEGEND

TREE DRIP LINE	TREE
CAL OAK DRIP LINE	OAK
TRENCH	TR
CAL OAK	

LEGEND:

ACTC	TOP OF ASPHALT CURB
BDK	BRASS DISK
BSH	BUSH
CLF	CHAIN LINK FENCE
DPL	DRIP LINE
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LONG: –119.61687

SHEET TITLE:

GRADING PLAN

DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:

A–3

Outdoor Omni-directional Antenna

COMBA

OOA-360V06N0-3 VPol, 696-960/1710-2170MHz, 360°, 4.0/6.0 dBi

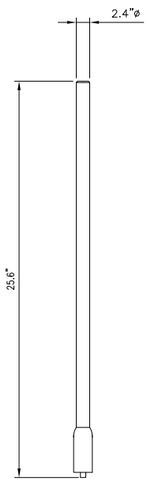
Technical Specifications

Electrical

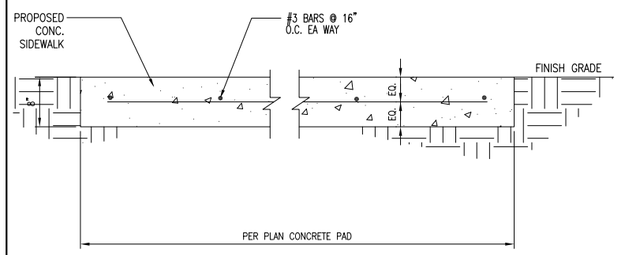
Frequency Range	MHz	696–960	1710–2170
Polarization		Vertical	
Gain	dBi	4.0±1	6.0±1
Horizontal Beamwidth	deg	360	
Vertical Beamwidth	deg	22–53	20–26
Electrical Downtilt–Fixed	deg	0	
VSWR		1.8	
Maximum Power	W	200	
Impedance		50	
Lightning Protection		Direct Ground	

Mechanical

Dimensions, HxDia	mm(in)	650x60 (25.6x2.4)
Weight, with Mounting kit	kg (lb)	1 (2.2)
Radome Material and Color		Fiberglass, Light Grey
Radiating Element Material		Copper
Connector Type and Location		N–Female, Bottom
Operational Temperature		–55 to +70
Operational Humidity	%	95
Operational Wind Speed	km/h (mph)	200 (124)
Shipping Dimensions,HxWxD	mm (in)	670x100x100 (26.4x3.9x3.9)
Shipping Weight	kg (lb)	1.2 (2.65)



ANTENNA SPECIFICATIONS N.T.S. 1



CONCRETE PAD N.T.S. 3

Electrical

Power Supply
Mains power, Vac ..... 115 or 230

Power consumption, Watts ..... 1100 max. < 750 @ normal operation

700 MHz SISO/MIMO

Frequency range, MHz
Uplink ..... 698 to 716/776 to 787
Downlink ..... 728 to 757

Output power per carrier*, dBm

Number of Carriers	1	2	4	8
LTE	43	40**	37	34

850 MHz

Frequency range, MHz
Uplink ..... 824 to 849
Downlink ..... 869 to 894

Output power per carrier*, dBm

Number of Carriers	1	2	4	8
Analog	43	40	37	34
GSM	43	40	37	34
CDMA	43	40	37	34
LTE	43	40 **	37	34
UMTS	42	39	36	33

20W for Cell, PCS bands and 700MHz MIMO

1900 MHz

Frequency range, MHz
Uplink ..... 1850 to 1915
Downlink ..... 1930 to 1995

Output power per carrier*, dBm

Number of Carriers	1	2	4	8
GSM	43	40	37	34
CDMA	43	40	37	34
LTE	43	40 **	37	34
UMTS	42	39	36	33

CommScope

ION-M7P/7P/85P/19P

Noise figure, dB
ICP3 optimized ..... +10 max.
Noise figure optimized ..... +6 max. 4.5 typical

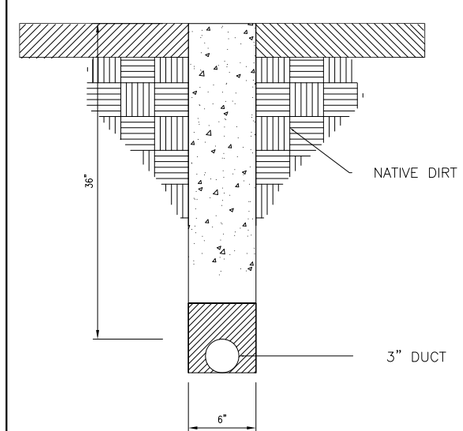
Mechanical****

Height, width, depth, mm (in) ..... 817 x 245 x 218 (32.2 x 9.6 x 8.6)

Weight, kg (lb) 40 (88.2)

Page 1, February 27, 2013 Company Confidential

ION-M7P/7P/85P/19P N.T.S. 2



* TRENCH TO BE BACK FILL WITH NATIVE MATERIAL & COMPACTED TO 90% OR BETTER & REPLACE LANDSCAPING IN KIND.

TRENCH N.T.S. 4

MMOE - Telecom

Multi Mount Outdoor Enclosure

- Compact enclosure design provides ideal fit for locations where aesthetics are important
- Light-weight powder coated aluminum construction offers superior corrosion resistant properties
- Large sun shield, reduces solar heat loading inside the cabinet
- 180° stainless steel piano-hinged door (with two locking open positions) make installation and maintenance easy and convenient
- Thermostat controlled filtered fan cooling and louvered vents ensure reliable operation in high temperature environments
- Various mounting options (including pole mount) make this highly versatile in space constrained mobile broadband applications

Alpha's Multi Mount Outdoor Enclosure (MMOE) - Telecom, is a cost-effective and versatile enclosure ideal for space constrained locations. The Multi Mount can be pole, host, wall or pedestal mounted and can accommodate Alpha's FXM UPS and up to four AlphaCell™ 85GXL or 195 GXL front terminal batteries. With a small form factor, the Multi Mount is the perfect choice for locations where confined space necessitates creative installation options.

Alpha Multi Mount Outdoor Enclosure - Telecom

Consult your Alpha representative for P/N configurations

Mechanical

Dimensions:
mm: ..... 687H x 559W x 457D
inches: ..... 27H x 22W x 18D
Weight: 27.2kg (60lbs)
Construction: ..... High strength corrosion resistant aluminum
Finish: ..... Powder coated white color
Equipment space: ..... 8x standard 19", 6RU space with one battery shelf
Cable entrance: ..... Bottom of enclosure: 1 x 3" diameter knock-out (2W" trade size) 4 x 1.125" diameter knock-out (1W" trade size)
Hinge type: ..... Stainless steel piano hinge
Door prop: ..... Aluminum rod, 2 locking open positions
Door latch: ..... Bellcore 216 compression lock with padlock bracket

HVAC Specifications

Cooling: ..... Thermostat controlled 48vdc fan, 100 cfm or better. On at 49°C (120°F) Off at 32°C (89°F)
Door installed louvers: ..... Equipped with splash baffle

Enclosure options

Mounting: ..... Pole, host, wall, or pedestal (please specify if pole used is concrete at time of order)

System Specifications

› System Options
- Alpha AC distribution panel
- Alpha universal automatic transfer switch
- Alpha universal generator transfer switch
- AlphaGuard battery balancer
- Battery heater mats
- Transient voltage surge suppression device

Agency Compliance

Telcordia: GR-63-CORE
NEMA rating: 3R

PEDESTAL SPECIFICATIONS N.T.S. 5

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ENGINEER/CONSULTANT:

Civil Engineer

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26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630
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CLIENT:

CROWN CASTLE
NG WEST, INC.

STAMP:

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SHEET TITLE:

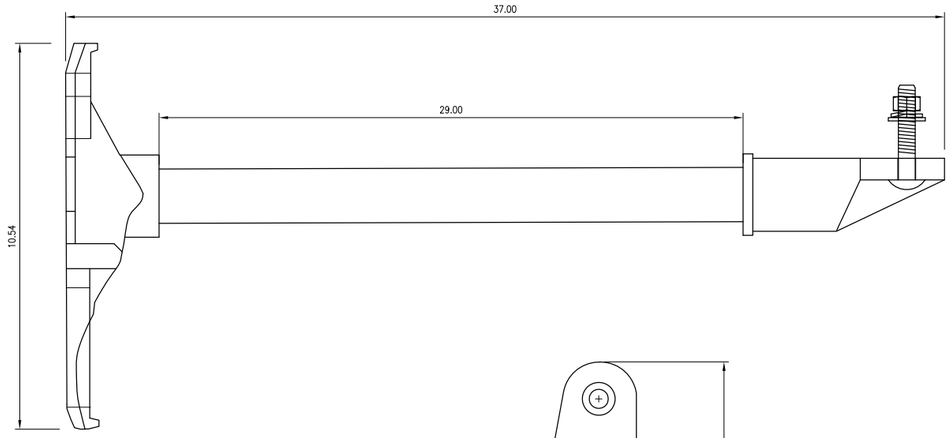
DETAILS

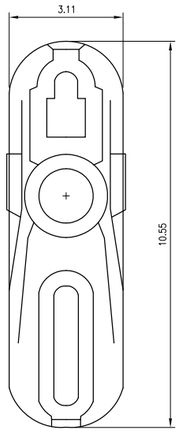
DRAWING INFO:

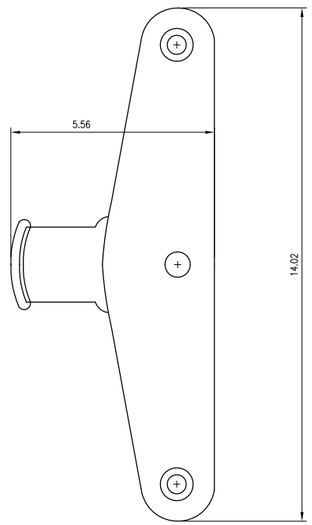
DRAWN BY:
FC

SHEET NUMBER:

D–1

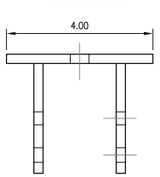


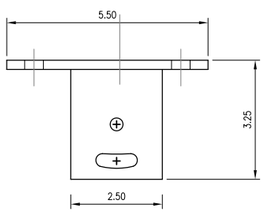




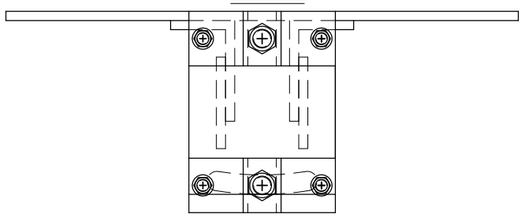
COMM SPACE BRACKET

FRONT VIEW





TOP VIEW



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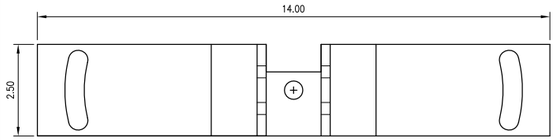
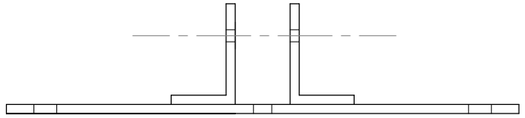
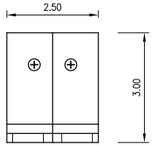


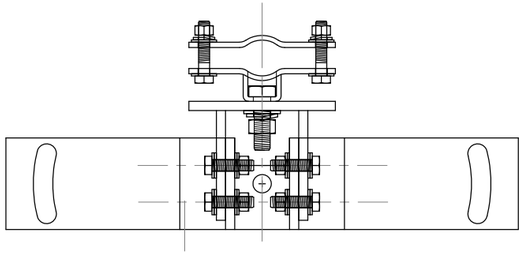
FRONT VIEW



SIDE VIEW



FRONT VIEW



ANTENNA MOUNT | N.T.S. | 1

AlphaCell
General Specifications

Model:	220 GXL	195 GXL	165 GXL
Warranty[1]:	4 to 5 year full replacement	4 to 5 year full replacement	4 to 5 year full replacement
Service Life:	Extended	Extended	Extended
Runtime (minutes)[2]:	220	195	165
Sealed VRLA:	Valve regulated lead acid	Valve regulated lead acid	Valve regulated lead acid
Heat Resistant:	Extreme	Extreme	Extreme
Hydrogen Emission:	Low	Low	Low
Terminals:	Threaded insert 1/4" - 20 UNC	Threaded insert 1/4" - 20 UNC	Threaded insert 1/4"- 20 UNC

Specifications[4]

Model:	220 GXL	195 GXL	165 GXL
Typical Runtime (minutes)[2]:	220	195	165
Cells Per Unit:	6	6	6
Voltage Per Unit:	12.8	12.8	12.8
Conductance Value:	1175	1100	1000
Max. Discharge Current (A):	900	900	860
Short Circuit Current (A):	2800	2600	2500
10 Second Volts @ 100A:	11.4	11.3	11.2
Ohms Impedance 60Hz:	0.0050	0.0050	0.0056
Nominal Capacity at 20hrs: (to 1.75VPC)	109Ah	100Ah	84
Nominal Capacity at 20hrs: (to 1.70VPC)	110Ah	102Ah	87
BCI Group Size:	31	31	27
Weight (lb/kg):	73/33.2	67/30.5	63/28.6
Height w/ Terminals (in/mm):	8.48/215.4	8.48/215.4	8.05/204.5
Width (in/mm)[3]:	13.42/340.9	13.42/340.9	12.5/317.8
Depth (in/mm)[3]:	6.80/172.7	6.80/172.7	6.83/173.4
Operating Temperature Range Discharge:	-40 to 71°C (-40 to 160°F)	-40 to 71°C (-40 to 160°F)	-40 to 71°C (-40 to 160°F)
Charge (with temp compensation):	-23 to 60°C (-9.4 to 140°F)	-23 to 60°C (-9.4 to 140°F)	-23 to 60°C (-9.4 to 140°F)
Float Charging Voltage (Vdc):	13.5 to 13.8	13.5 to 13.8	13.5 to 13.8
AC Ripple Charger:	0.5% RMS or 1.5% of float charge voltage recommended for best results. Max. allowed = 4% P-P		

Notes:
[1] Warranty varies by country and region. Warranty valid only when used with Alpha approved Power Supplies, Chargers and Enclosures. Consult your sales person for details.
[2] Runtimes calculated using a 25A DC constant current load.
[3] Dimensions at top of battery.
[4] See AlphaCell Users Guide for Additional Details.

Typical Standby Time in Minutes @ 25°C/77°F

XM25(Max)[3]	4A			6A			8A			10A		
Battery/Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	508	453	396	329	295	249	236	209	183	188	165	144
4 batteries:	701	625	546	444	396	346	329	293	256	261	232	203
6 batteries:	1091	973	853	701	625	546	523	465	407	418	372	325
8 batteries:	1497	1338	1165	969	859	750	720	643	562	577	515	450
9 batteries:	1696	1519	1322	1091	978	853	820	733	640	659	587	514
XM25(Max)[3]	12A			14A			16A			18A		
Battery/Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	149	132	115	119	106	92	101	89	77	87	78	68
4 batteries:	210	187	163	169	151	132	144	128	112	124	111	96
6 batteries:	339	301	264	275	245	214	236	209	183	204	182	159
8 batteries:	478	419	367	385	341	299	329	293	256	288	255	223
9 batteries:	538	479	419	440	391	342	377	335	294	329	293	256
XM28(Max)[3]	4A			6A			8A			10A		
Battery/Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	798	712	622	508	453	396	377	335	294	300	267	233
4 batteries:	1091	973	853	701	625	546	523	465	407	418	372	325
6 batteries:	1696	1519	1322	1091	973	853	820	733	640	659	587	514
8 batteries:	2288	2097	1708	1497	1338	1165	1122	1005	877	904	809	706
9 batteries:	2590	2345	2037	1696	1519	1322	1273	1143	997	1029	921	803
XM28(Max)[3]	12A			14A			16A			18A		
Battery/Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	242	215	188	190	174	151	168	148	125	144	128	107
4 batteries:	339	301	264	275	245	214	236	209	182	204	182	155
6 batteries:	538	479	419	440	391	340	377	335	290	329	290	252
8 batteries:	761	680	577	607	541	479	525	465	402	458	407	351
9 batteries:	843	753	658	692	617	538	597	531	462	523	465	402

*Above calculations based on an AC load with a .96 cable plant power factor.

For contact information visit www.alpha.com

The Alpha Group >

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049-297-10-B002 (06/09)

BATTERY SPECIFICATIONS | N.T.S. | 2

REV:	DATE/BY:	REVISION DESCRIPTION:
0	FXC 03/19/2013	ISSUED FOR REVIEW
1	FXC 03/25/2013	ISSUED FOR FINAL
2	FXC 11/05/2013	ISSUED FOR FINAL
3	FXC 01/08/2014	ISSUED FOR FINAL
4	FXC 03/08/2014	ISSUED FOR FINAL

ENGINEER/CONSULTANT:

Civil Engineer
CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630
(949) 753-8807 OFFICE - (949) 753-8833 FAX

CLIENT:

CROWN CASTLE
NG WEST, INC.

STAMP:

SITE INFO:

SITE NAME:
MON25
VERIZON MONTECITO–MON25

SITE ADDRESS: THOMAS BROS PAGE 997 GRID B3
R.O.W. SOUTH SIDE OF SAN LEANDRO LN.
(ADJACENT TO 1885 SAN LEANDRO LN)
SANTA BARBARA, CA 93108
LAT: 34.42476
LONG: –119.61687

SHEET TITLE:

DETAILS

DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:

D–2

REV:	DATE/BY:	REVISION DESCRIPTION:
0	FXC 03/19/2013	ISSUED FOR REVIEW
1	FXC 03/25/2013	ISSUED FOR FINAL
2	FXC 11/05/2013	ISSUED FOR FINAL
3	FXC 01/08/2014	ISSUED FOR FINAL
4	FXC 03/08/2014	ISSUED FOR FINAL

ENGINEER/CONSULTANT:

Civil Engineer

CDG

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CLIENT:

CROWN CASTLE

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MON25

VERIZON MONTECITO–MON25

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(ADJACENT TO 1885 SAN LEANDRO LN)
SANTA BARBARA, CA 93108
LAT: 34.42476
LONG: –119.61687

SHEET TITLE:

DETAILS

DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:

D–3

PEDESTAL DETAIL

N.T.S.

CROWN CASTLE NG WEST, INC

VERIZON MONTECITO-MON26

R.O.W. NORTH SIDE OF JAMESON LN
(ADJACENT TO 1424 LA VERDA LN)
SANTA BARBARA, CA 93108

GENERAL NOTES

1. APPROVAL OF THESE PLANS BY THE CITY ENGINEER DOES NOT AUTHORIZE ANY WORK TO BE PERFORMED UNTIL A PERMIT HAS BEEN ISSUED.
2. UPON ISSUANCE OF A PERMIT, NO WORK WILL BE PERMITTED ON WEEKENDS OR HOLIDAYS WITHOUT PERMISSION FROM THE ENGINEERING DEPARTMENT.
3. THE APPROVAL OF THIS PLAN OR ISSUANCE OF A PERMIT BY THE LOCAL JURISDICTION DOES NOT AUTHORIZE THE SUBDIVIDER AND OWNER TO VIOLATE ANY FEDERAL, STATE OR CITY LAWS, ORDINANCES, REGULATIONS, OR POLICIES, INCLUDING, BUT NOT LIMITED TO, THE FEDERAL ENDANGERED SPECIES ACT OF 1973 AND AMENDMENTS THERETO (16 USC SECTION 1531 ET.SEQ.).
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SURVEY MONUMENTS AND/OR VERTICAL CONTROL BENCHMARKS WHICH ARE DISTURBED OR DESTROYED BY CONSTRUCTION. A LAND SURVEYOR MUST FIELD LOCATE, REFERENCE, AND/OR PRESERVE ALL HISTORICAL OR CONTROLLING MONUMENTS PRIOR TO ANY EARTHWORK. IF DESTROYED, SUCH MONUMENTS SHALL BE REPLACED WITH APPROPRIATE MONUMENTS BY A LAND SURVEYOR, A CORNER RECORD OR RECORD OF SURVEY, AS APPROPRIATE, SHALL BE FIELD AS REQUIRED BY THE PROFESSIONAL LAND SURVEYORS ACT. IF ANY VERTICAL CONTROL IS TO BE DISTURBED OR DESTROYED, THE LOCAL JURISDICTION FIELD SURVEY SECTION MUST BE NOTIFIED, IN WRITING, AT LEAST 3 DAYS PRIOR TO THE CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE COST OF REPLACING ANY VERTICAL CONTROL BENCHMARKS DESTROYED BY THE CONSTRUCTION.
5. IMPORTANT NOTICE: SECTION 4216 OF THE GOVERNMENT CODE REQUIRES A DIG ALERT IDENTIFICATION NUMBER BE ISSUED BEFORE A "PERMIT TO EXCAVATE" WILL BE VALID. FOR YOUR DIG ALERT I.D. NUMBER, CALL UNDERGROUND SERVICE ALERT, TWO DAYS BEFORE YOU DIG.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR THE POTHOLE AND LOCATING OF ALL EXISTING UTILITIES THAT CROSS THE PROPOSED TRENCH LINE AND MUST MAINTAIN 1' MINIMUM VERTICAL CLEARANCE.
7. CONTRACTOR SHALL SUBMIT TO THE LOCAL JURISDICTION, A CONSTRUCTION PLAN TO PROTECT WATER MAINS PRIOR TO COMMENCING CONSTRUCTION.
8. CONTRACTOR SHALL REPLACE OR REPAIR ALL TRAFFIC SIGNAL LOOPS, CONDUIT, AND LANE STRIPING DAMAGED DURING CONSTRUCTION.
9. CONTRACTOR SHALL NOTIFY THE LOCAL JURISDICTION. A MINIMUM OF 48 HOURS PRIOR TO COMMENCING WORK WITHIN 10' OF ALL SEWER, WATER, AND STORMDRAIN MAIN INCLUDING ALL CROSSINGS.
10. THIS PROJECT WILL BE INSPECTED BY ENGINEERING AND CAPITAL PROJECTS DEPARTMENT, FIELD ENGINEERING DIVISION.
11. AS-BUILT DRAWINGS MUST BE SUBMITTED TO THE CITY RESIDENT ENGINEER PRIOR TO THE ACCEPTANCE OF THIS PROJECT.
12. PUBLIC IMPROVEMENT SUBJECT TO DESUETUDE OR DAMAGE." IF REPAIR OR REPLACEMENT OF SUCH PUBLIC IMPROVEMENTS IS REQUIRED, THE OWNER SHALL OBTAIN THE REQUIRED PERMITS FOR WORK IN THE PUBLIC RIGHT-OFWAY, SATISFACTORY TO THE PERMIT - ISSUING AUTHORITY.
13. PRIOR TO ANY DISTURBANCE TO THE SITE, EXCLUDING UTILITY MARKS-OUTS AND SURVEYING, THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR A PRE-CONSTRUCTION MEETING WITH THE LOCAL JURISDICTION FIELD ENGINEERING DIVISION.
14. PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION SHOWN ON THESE PLANS. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE. THE CONTRACTOR IS RESPONSIBLE TO ATTEND THE LOCAL JURISDICTIONS MONTHLY UTILITY COORDINATION COMMITTEE THE CONSTRUCTION ACTIVITIES WITH THE CITY AND ALL OTHER CONTRACTORS SO THAT NO TRENCH IS CUT WITHIN ANY OF THE CITY STREETS THAT HAVE BEEN CONSTRUCTED, REPAIRED, OR SLURRY SEALED WITHIN THREE YEARS OF THE STREET CONSTRCTUION/RESURFACING DATE.
15. MANHOLES OR COVERS SHALL BE LABELED "CROWN CASTLE" OR "CROWN CASTLE NG WEST".
16. CONTRACTOR SHALL IMPLEMENT AN EROSION AND SEDIMENT CONTROL PROGRAM DURING THE PROJECT CONSTRUCTION ACTIVITIES. THE PROGRAM SHALL MEET THE APPLICABLE REQUIREMENTS OF THE STATE WATER RESOURCE CONTROL BOARD.
17. THE CONTRACTOR SHALL HAVE EMERGENCY MATERIALS AND EQUIPMENT ON HAND FOR UNFORESEEN SITUATIONS, SUCH AS DAMAGE TO UNDERGROUND WATER, SEWER, AND STORM DRAIN FACILITIES WHEREBY FLOWS MAY GENERATE EROSION AND SEDIMENT POLLUTION.

SPECIAL NOTES

THE FOLLOWING NOTES ARE PROVIDED TO GIVE DIRECTIONS TO THE CONTRACTOR BY THE ENGINEER OF WORK. THE CITY ENGINEER'S SIGNATURE ON THESE PLANS DOES NOT CONSTITUTE APPROVAL OF THESE NOTES AND THE CITY WILL NOT BE RESPONSIBLE FOR THEIR ENFORCEMENT.

1. THE CONTRACTOR SHALL VERIFY THE LOCATION EXISTING UNDERGROUND UTILITIES INCLUDING SEWER LATERALS AND WATER SERVICES TO INDIVIDUAL LOTS BOTH VERTICAL AND HORIZONTAL PRIOR TO COMMENCING IMPROVEMENT OPERATIONS.
2. CONTRACTOR SHALL MAKE EXPLORATION EXCAVATIONS AND LOCATE EXISTING FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS OF PLANS IF REVISION IS NECESSARY BECAUSE OF LOCATION OF EXISTING UTILITIES.
3. LOCATION AND ELEVATIONS OF IMPROVEMENTS, TO BE MET BY WORK, SHALL BE CONFIRMED BY FIELD MEASUREMENT PRIOR TO CONSTRUCTION OF NEW WORK.
4. GRADES SHOWN ARE FINISH GRADES, CONTRACTOR SHALL DETERMINE NECESSARY SUB GRADE ELEVATIONS AND SHALL CONSTRUCT SMOOTH TRANSITION BETWEEN FINISH GRADES SHOWN.
5. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE RESPONSIBILITY FOR JOB SITE CONDITION DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY: THAT THIS PROVISION SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXPECTING FOR LIABILITY ARISING FROM SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
6. THE CONTRACTOR SHALL BE TOTALLY RESPONSIBLE FOR COMPLIANCE WITH THE PROVISIONS OF THE STATE OF CALIFORNIA SAFETY ORDERS.
7. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE FROM EXISTING RECORDS AND CORROBORATED, WHERE POSSIBLE WITH FIELD TIES. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING THE LOCATIONS SHOWN, BOTH HORIZONTALLY AND VERTICALLY, PRIOR TO CONSTRUCTION. IF EXISTING LOCATIONS VARY SUBSTANTIALLY FROM THE PLANS, THE ENGINEER SHOULD BE NOTIFIED TO MAKE ANY CONSTRUCTION CHANGES REQUIRED.
8. THE CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT FOR ALL SEWER AND WATER MAIN UNDER CROSSING IN ACCORDANCE WITH PART 1 SECTION 5-2 OF THE STANDARD SPECIFICATION.
9. THE CONTRACTOR SHALL REPLACE OR REPAIR ALL TRAFFIC SIGNAL LOOPS, CONDUITS, AND LANE STRIPING DAMAGED DURING CONSTRUCTION.
10. THE CONTRACTOR SHALL SUBMIT WORK PLANS FOR ALL BORE OPERATIONS TWO WEEKS PRIOR TO COMMENCING WORK.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR THE POTHOLE AND LOCATING OF ALL EXISTING UTILITIES THAT CROSS THE PROPOSED TRENCH LINE AND MUST MAINTAIN 1' MINIMUM VERTICAL CLEARANCE.
12. AS-BUILT DRAWINGS MUST BE SUBMITTED TO THE CITY ENGINEER PRIOR TO ACCEPTANCE OF THIS PROJECT.

VICINITY MAP - N.T.S.

GROUND BUS BAR
MECH. GRND. CONN.
CADWELD
ELECTRIC BOX
TELEPHONE BOX
EXISTING SERVICE POLE
SIDEWALK FLAG
EX. MANHOLE
LIGHT POLE
FOUNDATION
SPOT ELEV.
SET POINT
REVISION
DETAIL REF.
ELEVATION REF.
SECTION REF.
PROP./LEASE LINE
MATCH LINE
WORK POINT
TELE. CONDUIT
CENTERLINE
ELECT. CONDUIT
COAXIAL CABLE
MYERS PEDESTAL
VAULT STANDARD 2'X3'
STEEL POLE

SYMBOLS, LINETYPES AND HATCH PATTERNS

EROSION AND SEDIMENT CONTROL NOTES

TEMPORARY EROSION/SEDIMENT CONTROL, PRIOR TO COMPLETION OF FINAL IMPROVEMENTS, SHALL BE PERFORMED BY THE CONTRACTOR OR QUALIFIED PERSON AS INDICATED BELOW:

1. ALL REQUIREMENTS OF THE LOCAL JURISDICTION "LAND DEVELOPMENT MANUAL, STORM WATER STANDARDS" MUST BE INCORPORATED INTO THE DESIGN AND CONSTRUCTION OF THE PROPOSED GRADING/IMPROVEMENTS CONSISTENT WITH THE APPROVED STORM WATER AND/OR WATER POLLUTION CONTROL PLAN (WPCP).
2. FOR STORM DRAIN INLETS, PROVIDE A GRAVEL BAG SILT BASIN IMMEDIATELY UPSTREAM OF INLET AS INDICATED ON DETAILS.
3. FOR INLETS LOCATED AT SUMPS ADJACENT TO TOP OF SLOPES, THE CONTRACTOR SHALL ENSURE THAT WATER DRAINING TO THE SUMP IS DIRECTED INTO THE INLET AND THAT A MINIMUM OF 1.00" FREEBOARD EXISTS AND IS MAINTAINED ABOVE THE TOP OF THE INLET. IF FREEBOARD IS NOT PROVIDED BY GRADING SHOWN ON THESE PLANS, THE CONTRACTOR SHALL PROVIDE IT VIA TEMPORARY MEASURES, I.E. GRAVEL BAGS OR DIKES.
4. THE CONTRACTOR OR QUALIFIED PERSON SHALL BE RESPONSIBLE FOR CLEANUP OF SILT AND MUD ON ADJACENT STREET(S) AND STORM DRAIN SYSTEM DUE TO CONSTRUCTION ACTIVITY.
5. THE CONTRACTOR OR QUALIFIED PERSON SHALL CHECK AND MAINTAIN ALL LINED AND UNLINED DITCHES AFTER EACH RAINFALL.
6. THE CONTRACTOR SHALL REMOVE SILT AND DEBRIS AFTER EACH MAJOR RAINFALL.
7. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON, ALL NECESSARY MATERIALS SHALL BE STOCKPILED ON SITE AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
8. THE CONTRACTOR SHALL RESTORE ALL EROSION/SEDIMENT CONTROL MEASURES TO WORKING ORDER TO THE SATISFACTION OF THE CITY ENGINEER OR RESIDENT ENGINEER AFTER EACH RUN-OFF PRODUCING RAINFALL.
9. THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION CONTROL MEASURES AS MAY BE REQUIRED BY THE RESIDENT ENGINEER DUE TO UNCOMPLETED GRADING OPERATIONS OR UNFORESEEN CIRCUMSTANCES, WHICH MAY ARISE.
10. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATERS CREATE A HAZARDOUS CONDITION.
11. ALL EROSION/SEDIMENT CONTROL MEASURES PROVIDED PER THE APPROVED GRADING PLAN SHALL BE INCORPORATED HEREON. ALL EROSION/SEDIMENT CONTROL FOR INTERIM CONDITIONS SHALL BE DONE TO THE SATISFACTION OF THE RESIDENT ENGINEER.
12. GRADED AREAS AROUND THE PROJECT PERIMETER MUST DRAIN AWAY FROM THE FACE OF THE SLOPE AT THE CONCLUSION OF EACH WORKING DAY.
13. ALL REMOVABLE PROTECTIVE DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN RAIN IS IMMINENT.
14. THE CONTRACTOR SHALL ONLY GRADE, INCLUDING CLEARING AND GRUBBING FOR THE AREAS FOR WHICH THE CONTRACTOR OR QUALIFIED PERSON CAN PROVIDE EROSION/SEDIMENT CONTROL MEASURES.
15. THE CONTRACTOR SHALL ARRANGE FOR WEEKLY MEETINGS DURING OCTOBER 1ST TO APRIL 30TH FOR PROJECT TEAM (GENERAL CONTRACTOR, QUALIFIED PERSON, EROSION CONTROL SUBCONTRACTOR IF ANY, ENGINEER OF WORK, OWNER AND THE RESIDENT ENGINEER) TO EVALUATE THE ADEQUACY OF THE EROSION/SEDIMENT CONTROL MEASURES AND OTHER RELATED CONSTRUCTION ACTIVITIES.

TRAFFIC CONTROL NOTES

THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN (11" X 17") FOR APPROVAL PRIOR TO STARTING WORK. THE PLAN SHOULD BE SUBMITTED TO THE TRAFFIC CONTROL PERMIT COUNTER. CONTRACTOR SHALL OBTAIN A TRAFFIC CONTROL PERMIT A MINIMUM OF TWO (2) WORKING DAYS PRIOR TO STARTING WORK, AND A MINIMUM FIVE (5) DAYS IF WORK WILL AFFECT A BUS STOP OR AN EXISTING TRAFFIC SIGNAL, OR IF WORK WILL REQUIRE A ROAD OR ALLEY CLOSURE.

FOOTAGE TOTALS	
ASPHALT CUT	-
DIRT TRENCH	-
PUNCH THRU	-
BORE	-
TOTAL	-
R&R SWF TOTAL	-

PROJECT DICTIONARY

SITE ADDRESS: R.O.W. NORTH SIDE OF JAMESON LN (ADJACENT TO 1424 LA VERDA LN) SANTA BARBARA, CA 93108

APPLICANT: CROWN CASTLE NG WEST, INC
2125 WRIGHT AVE, SUITE #C9
LA VERNE, CA 91750
CONTACT: HEIDI PAYNE
PHONE: (949) 300-9493

CIVIL ENGINEER: CONNELL DESIGN GROUP, LLC
26455 RANCHO PARKWAY SOUTH
LAKE FOREST, CA 92630
CONTACT: FRANK CARTER
(949) 310-8233 PHONE
(949) 753-8833 FAX

CONSTRUCTION CHANGE TABLE

CHANGE	DATE	EFFECTED OR ADDED SHEET NUMBERS

APPLICABLE CODES

ALL WORK SHALL COMPLY WITH THE FOLLOWING APPLICABLE CODES:

*2010 CALIFORNIA BUILDING CODE
*2010 CALIFORNIA MECHANICAL CODE
*2010 CALIFORNIA PLUMBING CODE
*2010 CALIFORNIA ELECTRICAL CODE

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

PROJECT DESCRIPTION

PROJECT CONSISTS OF INSTALLATION OF:

1. (2) OMNI DIRECTIONAL ANTENNAS ON EXISTING UTILITY POLE
2. EQUIPMENT VAULT AT BASE OF EXISTING POLE
3. EQUIPMENT PEDESTAL W/ BBU AND ELECTRICAL METER AT BASE OF POLE

SHEET INDEX:

TITLE SHEET	T-1 - SHEET 1 OF 7
SITE PLAN	A-1 - SHEET 2 OF 7
PROPOSED ELEVATIONS	A-2 - SHEET 3 OF 7
GRADING PLAN	A-3 - SHEET 4 OF 7
DETAILS	D-1 - SHEET 5 OF 7
DETAILS	D-2 - SHEET 6 OF 7
DETAILS	D-3 - SHEET 7 OF 7

REV:	DATE/BY:	REVISION DESCRIPTION:
0	FXC 03/19/2013	ISSUED FOR REVIEW
1	FXC 03/25/2013	ISSUED FOR FINAL
2	JPC 09/09/2013	ISSUED FOR FINAL
3	FXC 11/06/2013	ISSUED FOR FINAL
4	FXC 03/08/2014	ISSUED FOR FINAL

ENGINEER/CONSULTANT:

Civil Engineer
CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630
(949) 753-8807 OFFICE - (949) 753-8833 FAX

CLIENT:

CROWN CASTLE NG WEST, INC.

STAMP:

SITE INFO:

SITE NAME:
MON26
VERIZON MONTECITO-MON26

SITE ADDRESS: THOMAS BROS PAGE 997 GRID A4
R.O.W. NORTH SIDE OF JAMESON LN
(ADJACENT TO 1424 LA VERDA LN)
SANTA BARBARA, CA 93108
LAT: 34.42296
LONG: -119.63371

SHEET TITLE:

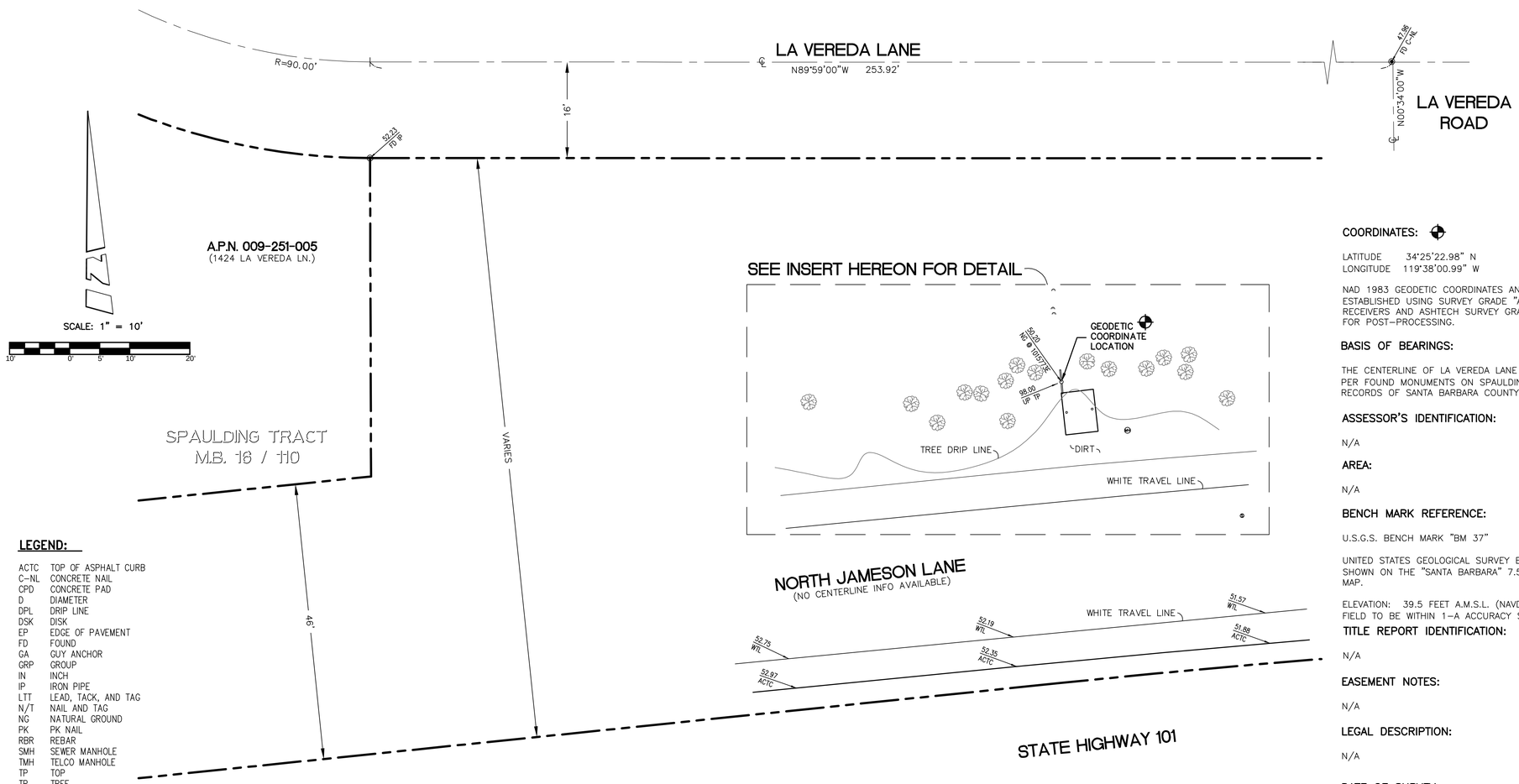
TITLE SHEET

DRAWING INFO:

DRAWN BY:
FC

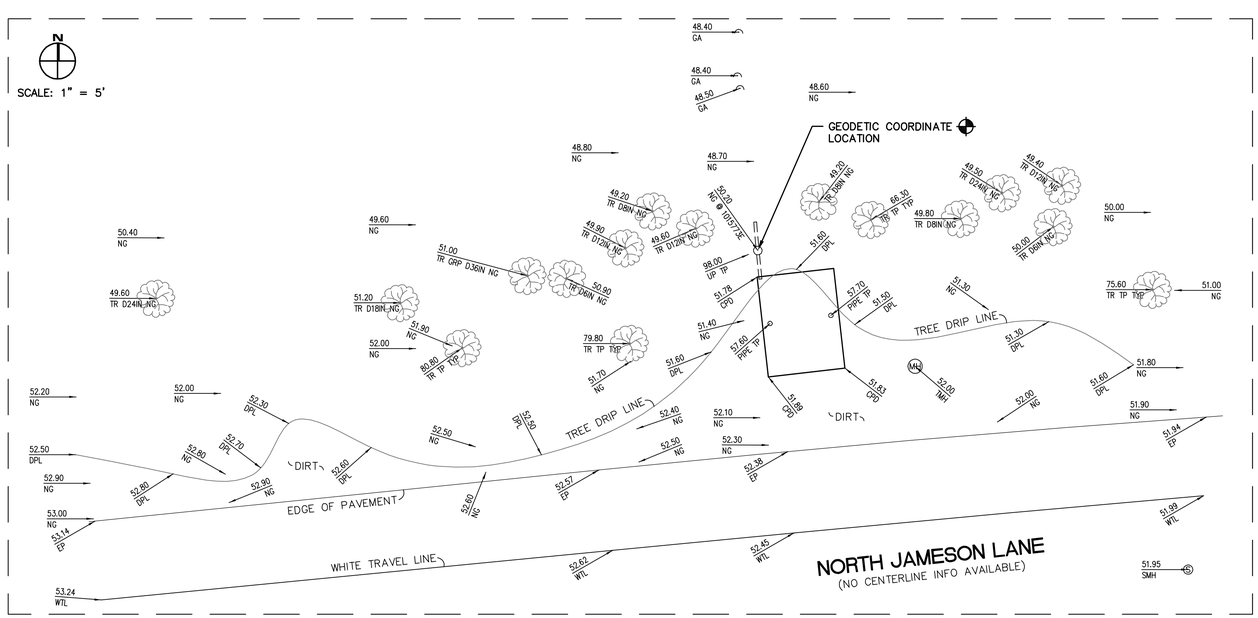
SHEET NUMBER:

T-1



LEGEND:

ACTC	TOP OF ASPHALT CURB
C-NL	CONCRETE NAIL
CPD	CONCRETE PAD
D	DIAMETER
DPL	DRIP LINE
DSK	DISK
EP	EDGE OF PAVEMENT
FD	FOUND
GA	GUY ANCHOR
GRP	GROUP
IN	INCH
IP	IRON PIPE
LTT	LEAD, TACK, AND TAG
N/T	NAIL AND TAG
NG	NATURAL GROUND
PK	PK NAIL
RBR	REBAR
SMH	SEWER MANHOLE
TMH	TELCO MANHOLE
TP	TOP
TR	TREE
UP	UTILITY POLE
WTL	WHITE TRAVEL LINE
℄	CENTERLINE
◉	FOUND MONUMENT
⌒	GUY ANCHOR
(MH)	MANHOLE
(S)	SEWER MANHOLE
= =O= =	UTILITY POLE



COORDINATES:

LATITUDE 34°25'22.98" N
LONGITUDE 119°38'00.99" W

NAD 1983 GEODETIC COORDINATES AND ELEVATIONS WERE ESTABLISHED USING SURVEY GRADE "ASHTECH" G.P.S. RECEIVERS AND ASHTECH SURVEY GRADE PRECISION SOFTWARE FOR POST-PROCESSING.

BASIS OF BEARINGS:

THE CENTERLINE OF LA VEREDA LANE BEING NORTH 89°59'00" WEST PER FOUND MONUMENTS ON SPAULDING TRACT, M.B. 16/110, RECORDS OF SANTA BARBARA COUNTY.

ASSESSOR'S IDENTIFICATION:

N/A

AREA:

N/A

BENCH MARK REFERENCE:

U.S.G.S. BENCH MARK "BM 37"

UNITED STATES GEOLOGICAL SURVEY BENCH MARK "BM 37" AS SHOWN ON THE "SANTA BARBARA" 7.5 MINUTE QUADRANGLE MAP.

ELEVATION: 39.5 FEET A.M.S.L. (NAVD88) (DATUM VERIFIED IN FIELD TO BE WITHIN 1-A ACCURACY STANDARDS)

TITLE REPORT IDENTIFICATION:

N/A

EASEMENT NOTES:

N/A

LEGAL DESCRIPTION:

N/A

DATE OF SURVEY:

JULY 24, 2013

SURVEYORS NOTE:

THE RIGHT OF WAY LINES AND THEIR DIMENSIONS SHOWN HEREON ARE PER READILY AVAILABLE RECORDED INFORMATION AND THEIR LOCATIONS ARE APPROXIMATE, PENDING RECEIPT OF TITLE REPORT(S) FOR THE ADJACENT REAL PROPERTY.

LIVING PLANTS STATEMENT:

THE HEIGHTS AND ELEVATIONS FOR THE TREES, BUSHES AND OTHER LIVING PLANTS SHOWN HEREON, SHOULD BE CONSIDERED APPROXIMATE (+/-) AND ONLY VALID FOR THE DATE OF THIS SURVEY. THEY ARE PROVIDED AS A GENERAL REFERENCE AND SHOULD NOT BE USED FOR DESIGN PURPOSES.

REV:	DATE/BY:	REVISION DESCRIPTION:
1	08/02/13 MDL	ISSUED FOR REVIEW

ENGINEER/CONSULTANT:

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CONSULTING CIVIL ENGINEERS
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LAKE FOREST, CA 92630-8326
(949) 753-8807 OFFICE - (949) 753-8833 FAX

SITE BUILDER:

CROWN CASTLE NG WEST, INC.

SURVEYOR:

BERT HAZE AND ASSOCIATES, INC.
LAND SURVEYING & MAPPING
3188 AIRWAY AVENUE, SUITE K1
COSTA MESA, CALIFORNIA 92626
714 557-1567 OFFICE
714 557-1568 FAX

JN. 706.239

STAMP:

PROFESSIONAL LAND SURVEYOR
BERT HAZE
No. 7211
Exp. 3-31-14
STATE OF CALIFORNIA

SITE INFO:

SITE NAME:

MON26
VERIZON MONTECITO-MON 26

SITE ADDRESS:

R.O.W. NORTH SIDE OF N. JAMESON LN
(ADJACENT TO 1424 LA VEREDA LN)
SANTA BARBARA, CA 93108

SHEET TITLE:

TOPOGRAPHIC SURVEY

DRAWING INFO:

DWG. NAME:	DRAWN BY:	DATE:
MON 26	MDL	08/02/13

SHEET NUMBER:

1 OF 1 | C-1

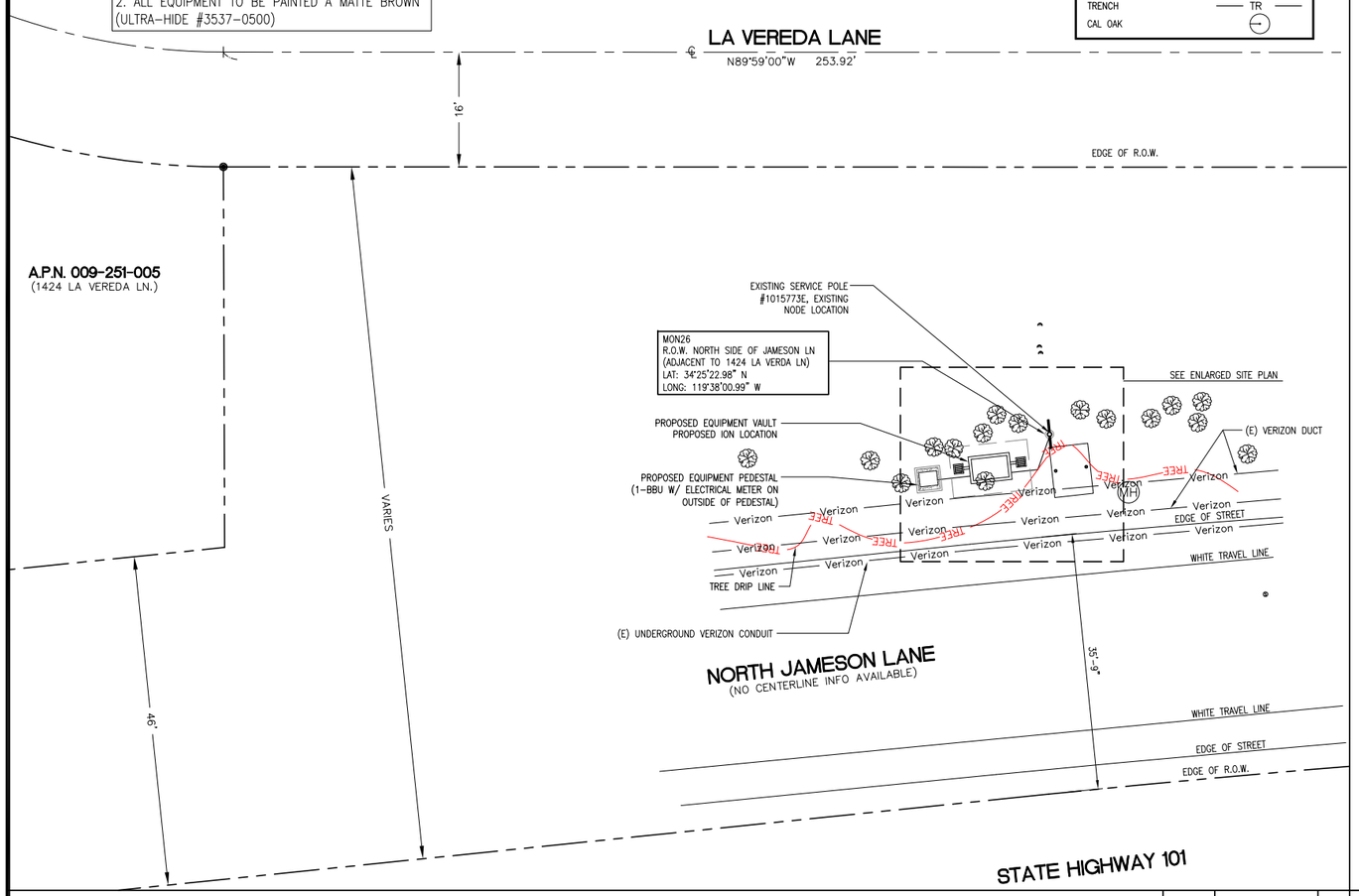
NOTE:

1. ANTENNA TO BE PAINTED LIGHT-GREY (BEHR ULTRA BASE #4854)

2. ALL EQUIPMENT TO BE PAINTED A MATTE BROWN (ULTRA-HIDE #3537-0500)

LEGEND

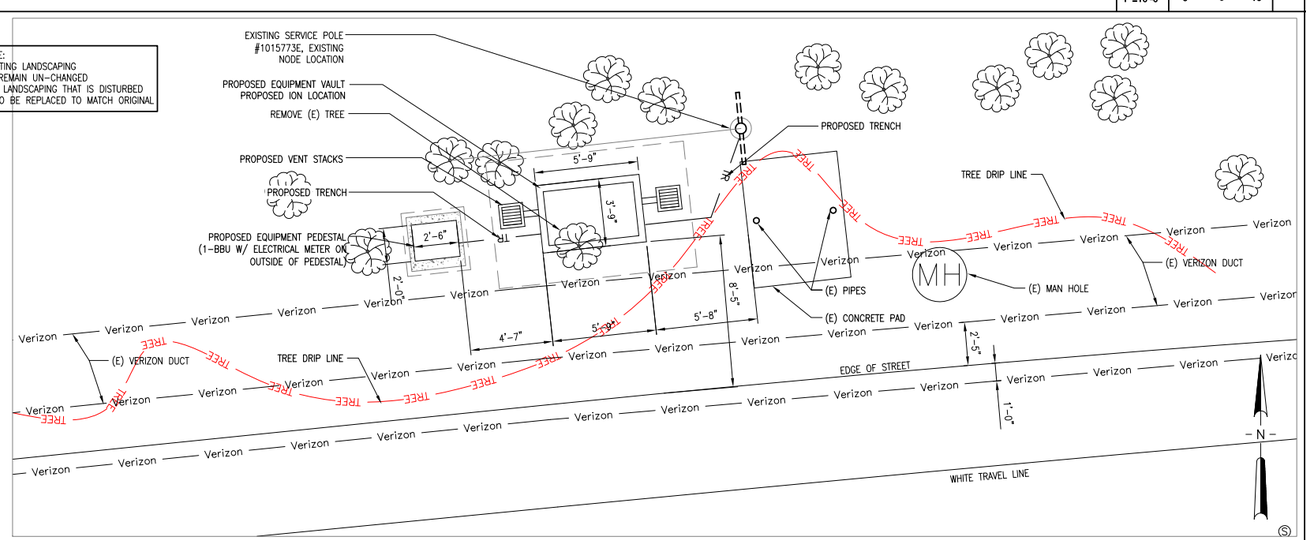
TREE DRIP LINE	TREE
CAL OAK DRIP LINE	OAK
TRENCH	TR
CAL OAK	



SITE PLAN SCALE: 1"=10'-0" 0 5' 10' 1

EXISTING PHOTO SCALE: N.T.S. 3

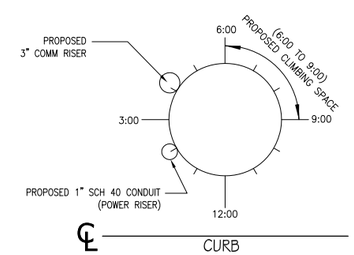
NOTE:
EXISTING LANDSCAPING TO REMAIN UN-CHANGED
ANY LANDSCAPING THAT IS DISTURBED IS TO BE REPLACED TO MATCH ORIGINAL



ENLARGED SITE PLAN SCALE: 1/4"=1'-0" 0 2' 4' 2

POLE WILL BE STEPPED IN ACCORDANCE TO G095 STANDARDS IN RESPECT TO CLIMBING SPACE.

1-3" CROWN CASTLE RISER @ 4:00
1-1" POWER RISER @ 2:00



RISER PROFILE SCALE: N.T.S. 4

REV:	DATE/BY:	REVISION DESCRIPTION:
0	FXC 03/19/2013	ISSUED FOR REVIEW
1	FXC 03/25/2013	ISSUED FOR FINAL
2	JPC 09/09/2013	ISSUED FOR FINAL
3	FXC 11/06/2013	ISSUED FOR FINAL
4	FXC 03/08/2014	ISSUED FOR FINAL

ENGINEER/CONSULTANT:

Civil Engineer

CDG

CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630
(949) 753-8807 OFFICE - (949) 753-8833 FAX

CLIENT:

CROWN CASTLE NG WEST, INC.

STAMP:

SITE INFO:

SITE NAME:
MON26
VERIZON MONTECITO-MON26

SITE ADDRESS: THOMAS BROS PAGE 997 GRID A4
R.O.W. NORTH SIDE OF JAMESON LN
(ADJACENT TO 1424 LA VERDA LN)
SANTA BARBARA, CA 93108
LAT: 34.42296
LONG: -119.63371

SHEET TITLE:

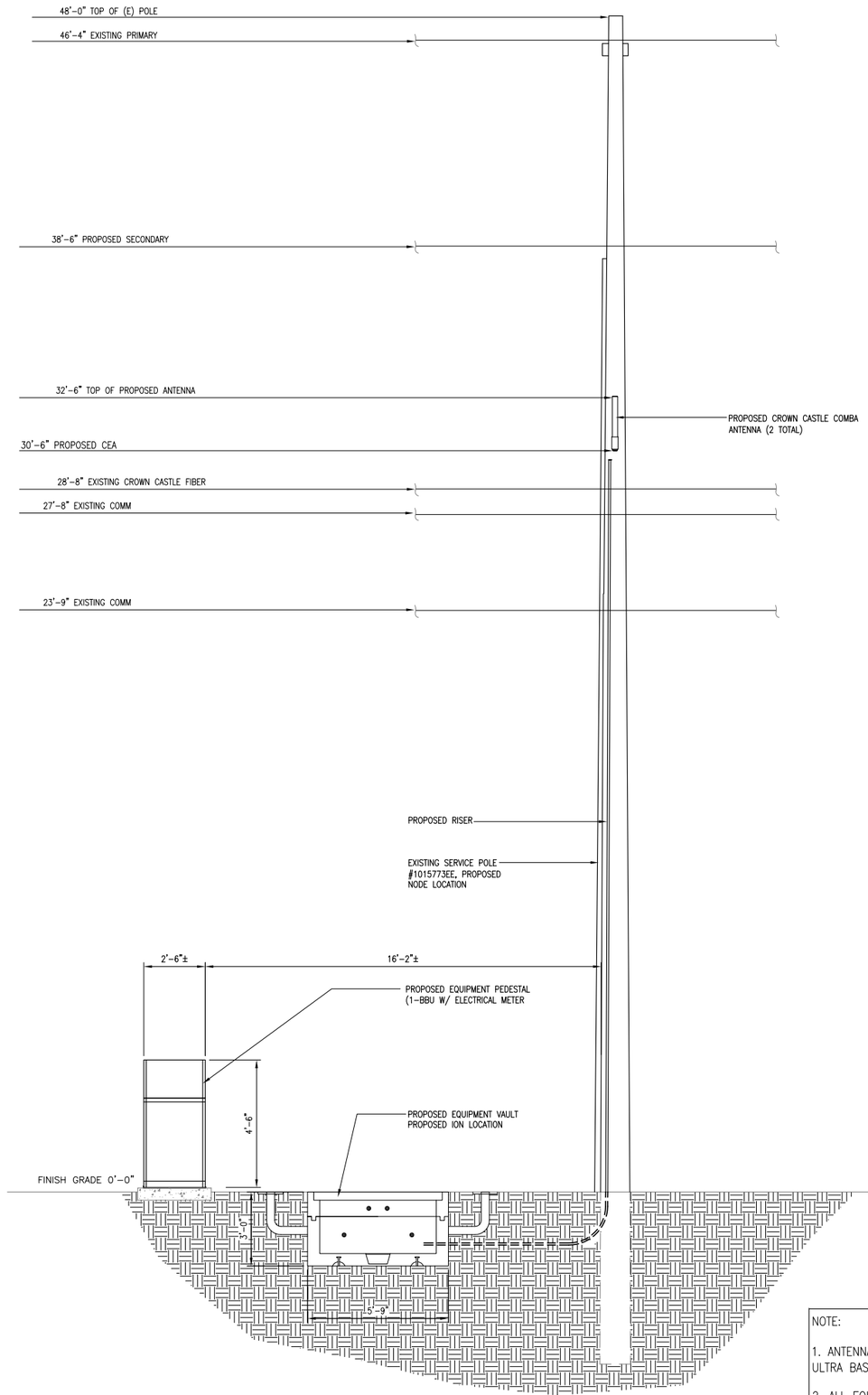
SITE PLAN, ENLARGED SITE PLAN, EXISTING PHOTO AND RISER PROFILE

DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:

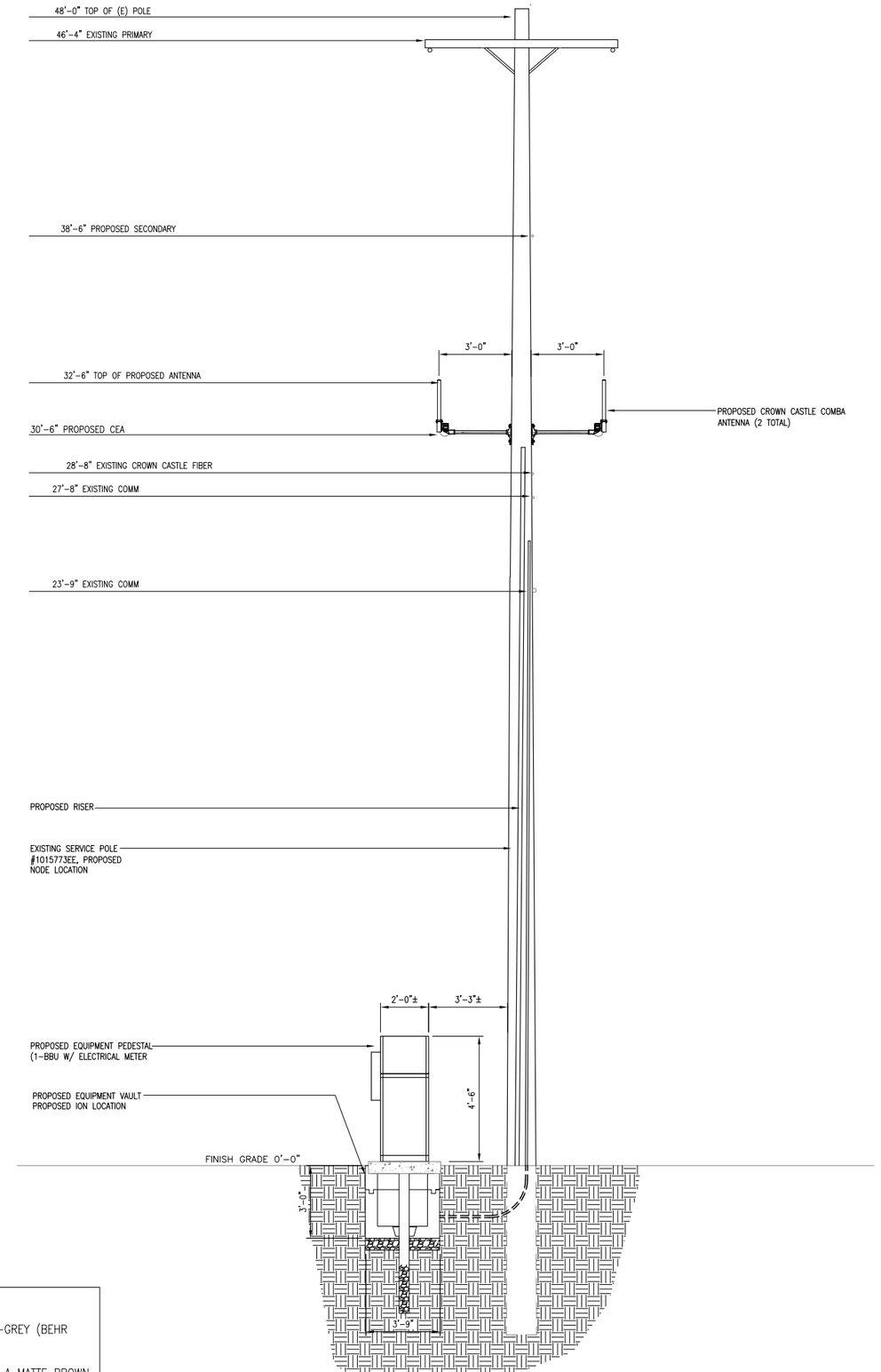
A-1



EXISTING ELEVATION LOOKING NORTH

SCALE: 3/8"=1'-0" 0 1' 2' 3'

1



NOTE:

1. ANTENNA TO BE PAINTED LIGHT-GREY (BEHR ULTRA BASE #4854)

2. ALL EQUIPMENT TO BE PAINTED A MATTE BROWN (ULTRA-HIDE #3537-0500)

EXISTING ELEVATION LOOKING WEST

SCALE: 3/8"=1'-0" 0 1' 2' 3'

2

REV:	DATE/BY:	REVISION DESCRIPTION:
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3	FXC 11/06/2013	ISSUED FOR FINAL
4	FXC 03/08/2014	ISSUED FOR FINAL

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CROWN CASTLE
NG WEST, INC.

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SANTA BARBARA, CA 93108
LAT: 34.42296
LONG: -119.63371

SHEET TITLE:

ELEVATION

DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:

A-2

REV:	DATE/BY:	REVISION DESCRIPTION:
0	FXC 03/19/2013	ISSUED FOR REVIEW
1	FXC 03/25/2013	ISSUED FOR FINAL
2	JPC 09/09/2013	ISSUED FOR FINAL
3	FXC 11/06/2013	ISSUED FOR FINAL
4	FXC 03/08/2014	ISSUED FOR FINAL

NOTE:
NO CUT AND FILL REQUIRED

GRADING CALCULATION

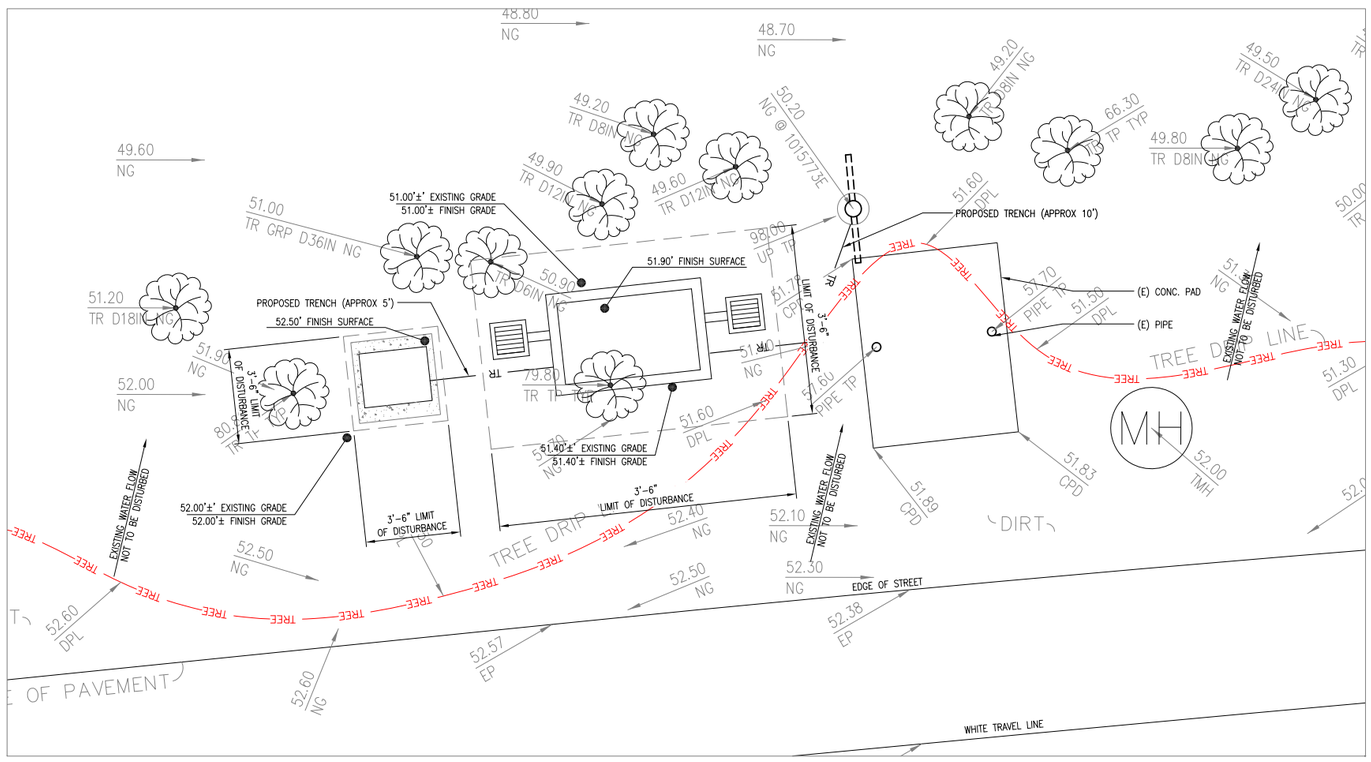
CONCRETE PAD:	2.997 CF
VAULT:	66.9375 CF
15'Lx3'Dx.5'W TRENCH:	22.5 CF
TOTAL:	92.4345 CF

LEGEND

TREE DRIP LINE	TREE
CAL OAK DRIP LINE	OAK
TRENCH	TR
CAL OAK	

LEGEND:

ACTC	TOP OF ASPHALT CURB
C-NL	CONCRETE NAIL
CPD	CONCRETE PAD
D	DIAMETER
DPL	DRIP LINE
DSK	DISK
EP	EDGE OF PAVEMENT
FD	FOUND
GA	GUY ANCHOR
GRP	GROUP
IN	INCH
IP	IRON PIPE
LTT	LEAD, TACK, AND TAG
N/T	NAIL AND TAG
NG	NATURAL GROUND
PK	PK NAIL
RBR	REBAR
SMH	SEWER MANHOLE
TMH	TELCO MANHOLE
TP	TOP
TR	TREE
UP	UTILITY POLE
WTL	WHITE TRAVEL LINE
℄	CENTERLINE
◉	FOUND MONUMENT
⌒	GUY ANCHOR
MH	MANHOLE
Ⓢ	SEWER MANHOLE
= =O= =	UTILITY POLE



N

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SHEET TITLE:

GRADING PLAN

DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:

A-3

Outdoor Omni-directional Antenna

COMBA

OOA-360V06N0-3 VPol, 696-960/1710-2170MHz, 360°, 4.0/6.0dBi

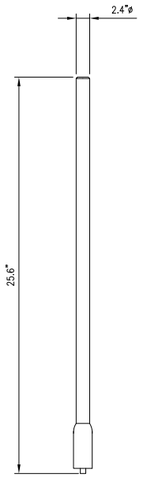
Technical Specifications

Electrical

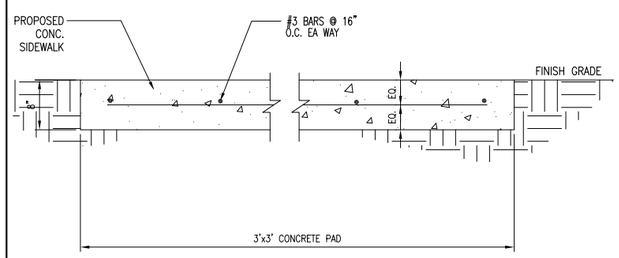
Frequency Range	MHz	696–960	1710–2170
Polarization		Vertical	
Gain	dBi	4.0±1	6.0±1
Horizontal Beamwidth	deg	360	
Vertical Beamwidth	deg	22–53	20–26
Electrical Downtilt–Fixed	deg	0	
VSWR		1.8	
Maximum Power	W	200	
Impedance		50	
Lightning Protection		Direct Ground	

Mechanical

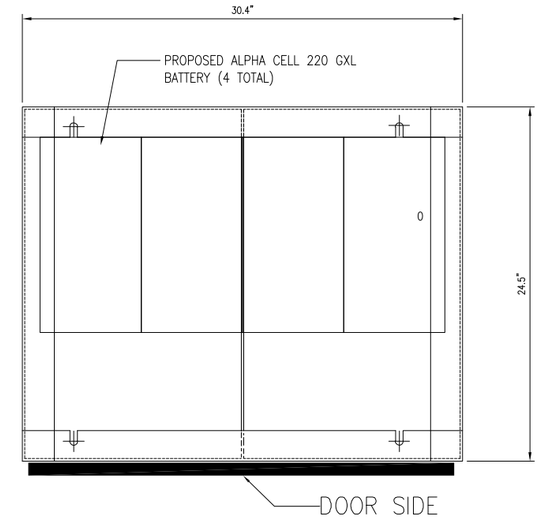
Dimensions, HxDia	mm(in)	650x60 (25.6x2.4)
Weight, with Mounting kit	kg (lb)	1 (2.2)
Radome Material and Color		Fiberglass, Light Grey
Radiating Element Material		Copper
Connector Type and Location		N–Female, Bottom
Operational Temperature		–55 to +70
Operational Humidity	%	95
Operational Wind Speed	km/h (mph)	200 (124)
Shipping Dimensions,HxWxD	mm (in)	670x100x100 (26.4x3.9x3.9)
Shipping Weight	kg (lb)	1.2 (2.65)

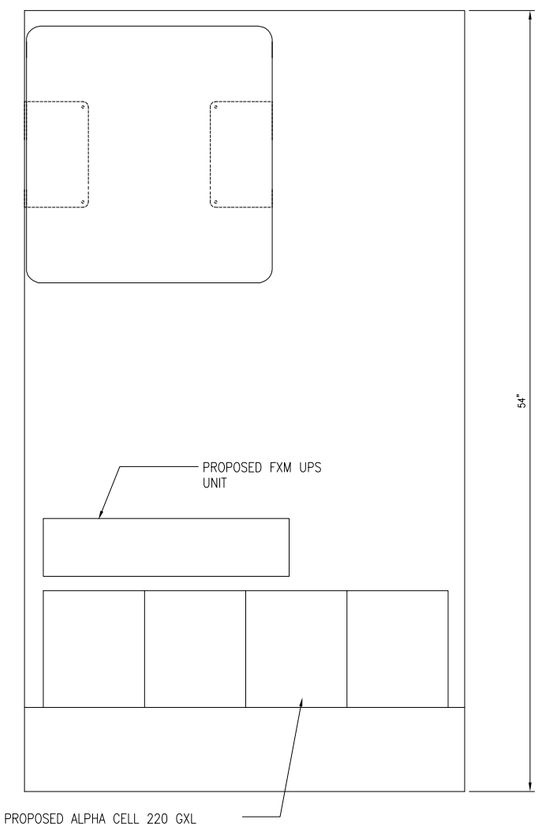


ANTENNA SPECIFICATIONS N.T.S. 1



CONCRETE PAD N.T.S. 3





EQUIPMENT PEDESTAL N.T.S. 5

Electrical

Power Supply
Mains power, Vac ..... 115 or 230

Power consumption, Watts ..... 1100 max. < 750 @ normal operation

700 MHz SISO/MIMO

Frequency range, MHz
Uplink ..... 698 to 716/776 to 787
Downlink ..... 728 to 757

Output power per carrier*, dBm

Number of Carriers	1	2	4	8
LTE	43	40**	37	34

850 MHz

Frequency range, MHz
Uplink ..... 824 to 849
Downlink ..... 869 to 894

Output power per carrier*, dBm

Number of Carriers	1	2	4	8
Analog	43	40	37	34
GSM	43	40	37	34
CDMA	43	40	37	34
LTE	43	40 **	37	34
UMTS	42	39	36	33

20W for Cell, PCS bands and 700MHz MIMO

1900 MHz

Frequency range, MHz
Uplink ..... 1850 to 1915
Downlink ..... 1930 to 1995

Output power per carrier*, dBm

Number of Carriers	1	2	4	8
GSM	43	40	37	34
CDMA	43	40	37	34
LTE	43	40 **	37	34
UMTS	42	39	36	33

CommScope®

ION-M7P/7P/85P/19P

Noise figure, dB
IIP3 optimized ..... +10 max.
Noise figure optimized ..... +6 max. 4.5 typical

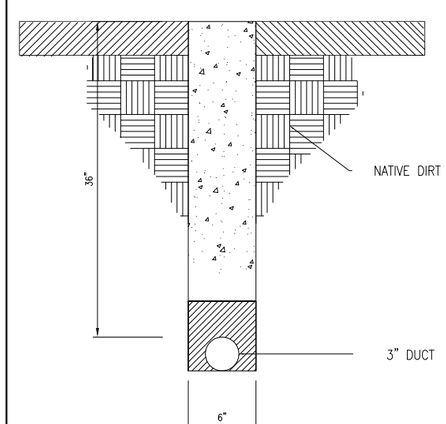
Mechanical****

Height, width, depth, mm (in) ..... 817 x 245 x 218 (32.2 x 9.6 x 8.6)

Weight, kg (lb) 40 (88.2)

Page 1, February 27, 2013 Company Confidential

ION-M7P/7P/85P/19P N.T.S. 2



* TRENCH TO BE BACK FILL WITH NATIVE MATERIAL & COMPACTED TO 90% OR BETTER & REPLACE LANDSCAPING IN KIND.

TRENCH N.T.S. 4

REV:	DATE/BY:	REVISION DESCRIPTION:
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SHEET TITLE:

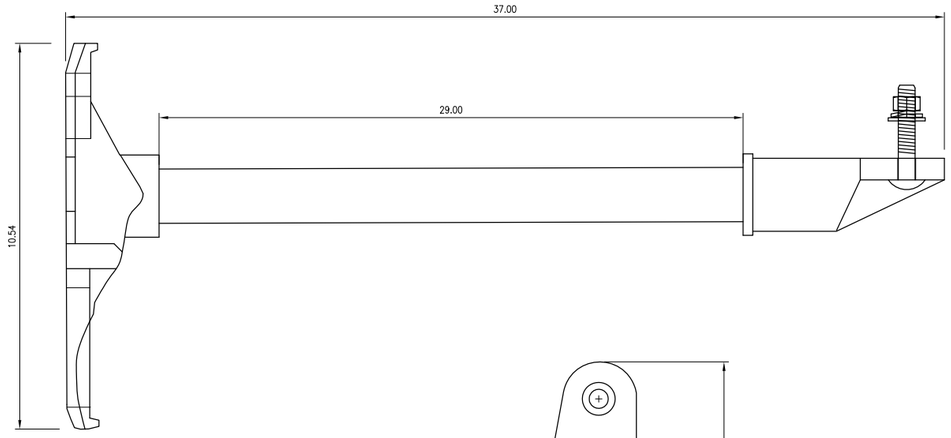
DETAILS

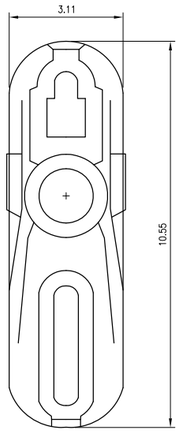
DRAWING INFO:

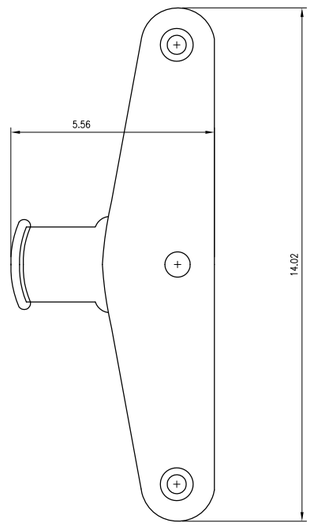
DRAWN BY:
FC

SHEET NUMBER:

D–1

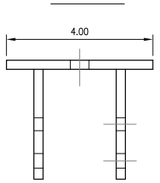


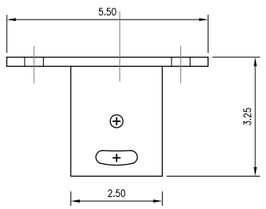




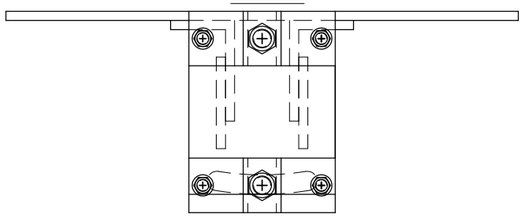
COMM SPACE BRACKET

FRONT VIEW

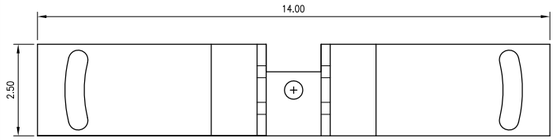




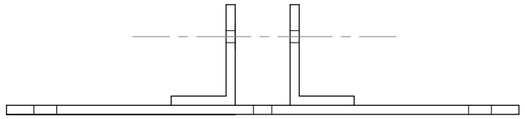
TOP VIEW



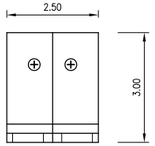
TOP VIEW



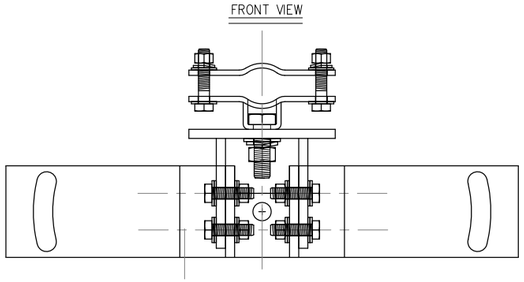
FRONT VIEW



SIDE VIEW



FRONT VIEW



ANTENNA MOUNT | N.T.S. | 1

AlphaCell
General Specifications

Model:	220 GXL	195 GXL	165 GXL
Warranty[1]:	4 to 5 year full replacement	4 to 5 year full replacement	4 to 5 year full replacement
Service Life:	Extended	Extended	Extended
Runtime (minutes)[2]:	220	195	165
Sealed VRLA:	Valve regulated lead acid	Valve regulated lead acid	Valve regulated lead acid
Heat Resistant:	Extreme	Extreme	Extreme
Hydrogen Emission:	Low	Low	Low
Terminals:	Threaded insert 1/4" - 20 UNC	Threaded insert 1/4" - 20 UNC	Threaded insert 1/4"- 20 UNC

Specifications[4]

Model:	220 GXL	195 GXL	165 GXL
Typical Runtime (minutes)[2]:	220	195	165
Cells Per Unit:	6	6	6
Voltage Per Unit:	12.8	12.8	12.8
Conductance Value:	1175	1100	1000
Max. Discharge Current (A):	900	900	800
Short Circuit Current (A):	2800	2600	2500
10 Second Volts @ 100A:	11.4	11.3	11.2
Ohms Impedance 60Hz:	0.0050	0.0050	0.0055
Nominal Capacity at 20hrs: (to 1.75VPC)	109Ah	100Ah	86
Nominal Capacity at 20hrs: (to 1.70VPC)	110Ah	102Ah	87
BCI Group Size:	31	31	27
Weight (lb/kg):	73/33.2	67/30.5	63/28.6
Height w/ Terminals (in/mm):	8.48/215.4	8.48/215.4	8.05/204.5
Width (in/mm)[3]:	13.42/340.9	13.42/340.9	12.5/317.8
Depth (in/mm)[3]:	6.80/172.7	6.80/172.7	6.83/173.4
Operating Temperature Range Discharge:	-40 to 71°C (-40 to 160°F)	-40 to 71°C (-40 to 160°F)	-40 to 71°C (-40 to 160°F)
Charge (with temp compensation):	-23 to 60°C (-9.4 to 140°F)	-23 to 60°C (-9.4 to 140°F)	-23 to 60°C (-9.4 to 140°F)
Float Charging Voltage (Vdc):	13.5 to 13.8	13.5 to 13.8	13.5 to 13.8
AC Ripple Charger:	0.5% RMS or 1.5% of float charge voltage recommended for best results. Max. allowed = 4% P-P		

Notes:
[1] Warranty varies by country and region. Warranty valid only when used with Alpha approved Power Supplies, Chargers and Enclosures. Consult your sales person for details.
[2] Runtimes calculated using a 25A DC constant current load.
[3] Dimensions at top of battery.
[4] See AlphaCell Users Guide for Additional Details.

Typical Standby Time in Minutes @ 25°C/77°F

XM2S0Max②	4A			6A			8A			10A		
Battery/Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	508	453	396	320	285	249	236	209	183	188	165	144
4 batteries:	701	625	546	444	396	346	329	293	256	261	232	203
6 batteries:	1091	973	853	701	625	546	523	465	407	418	372	325
8 batteries:	1497	1338	1165	969	859	750	720	643	562	577	515	450
9 batteries:	1696	1519	1322	1101	978	853	820	733	640	659	587	514

XM2S0Max③	12A			14A			16A			18A		
Battery/Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	149	132	115	119	106	92	101	89	77	87	78	68
4 batteries:	210	187	163	169	151	132	144	128	112	124	111	99
6 batteries:	339	301	264	275	245	214	236	209	183	204	182	159
8 batteries:	478	419	367	385	341	299	329	293	256	288	255	223
9 batteries:	538	479	419	440	391	342	377	335	294	329	293	256

XM2S0Max②	4A			6A			8A			10A		
Battery/Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	798	712	622	508	453	396	377	335	294	300	267	233
4 batteries:	1091	973	853	701	625	546	523	465	407	418	372	325
6 batteries:	1696	1519	1322	1101	978	853	820	733	640	659	587	514
8 batteries:	2288	2097	1708	1497	1338	1165	1122	1005	877	904	809	706
9 batteries:	2590	2345	2037	1696	1519	1322	1273	1143	997	1029	921	803

XM2S0Max③	12A			14A			16A			18A		
Battery/Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	242	215	188	190	174	151	168	148	125	144	128	107
4 batteries:	339	301	264	275	245	214	236	209	182	204	182	155
6 batteries:	538	479	419	440	391	340	377	335	290	329	293	252
8 batteries:	741	660	577	607	541	470	525	465	402	458	407	351
9 batteries:	843	753	658	692	617	538	597	531	462	523	465	402

*Above calculations based on an AC load with a .96 cable plant power factor.

For contact information visit www.alpha.com

The Alpha Group >

North America	Europe, Middle East & Africa			Asia Pacific	Latin & South America
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049-297-10-B002 (06/09)

BATTERY SPECIFICATIONS | N.T.S. | 2

REV:	DATE/BY:	REVISION DESCRIPTION:
0	FXC 03/19/2013	ISSUED FOR REVIEW
1	FXC 03/25/2013	ISSUED FOR FINAL
2	JPC 09/09/2013	ISSUED FOR FINAL
3	FXC 11/06/2013	ISSUED FOR FINAL
4	FXC 03/08/2014	ISSUED FOR FINAL

ENGINEER/CONSULTANT:

Civil Engineer

CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630
(949) 753-8807 OFFICE - (949) 753-8833 FAX

CLIENT:

CROWN CASTLE
NG WEST, INC.

STAMP:

SITE INFO:

SITE NAME:
MON26
VERIZON MONTECITO–MON26

SITE ADDRESS: THOMAS BROS PAGE 997 GRID A4
R.O.W. NORTH SIDE OF JAMESON LN
(ADJACENT TO 1424 LA VERDA LN)
SANTA BARBARA, CA 93108
LAT: 34.42296
LONG: –119.63371

SHEET TITLE:

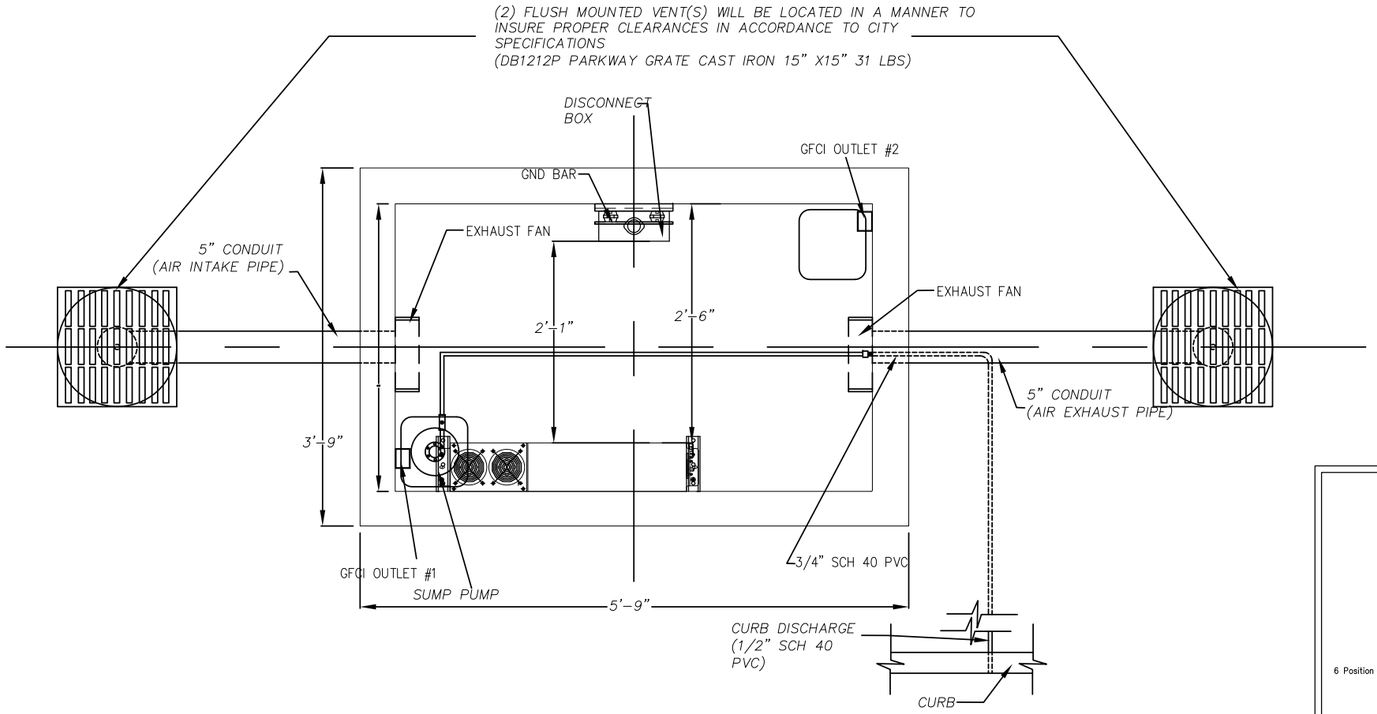
DETAILS

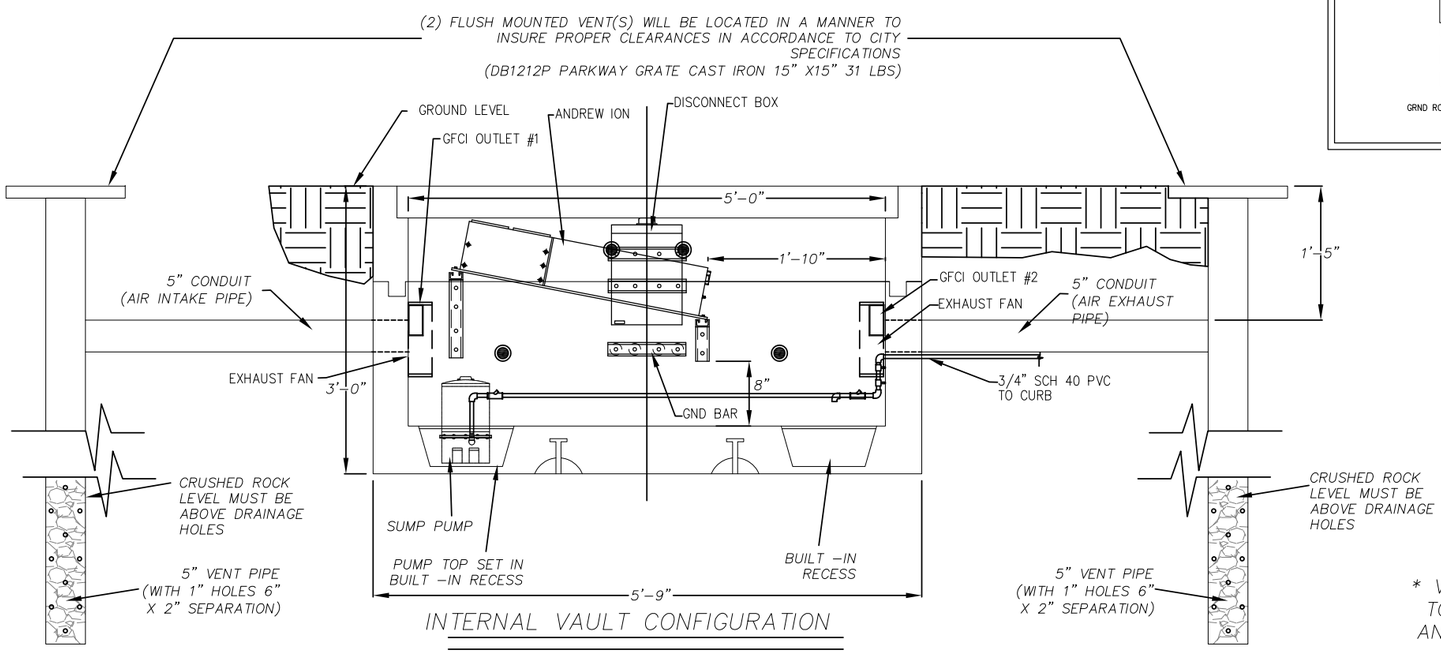
DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:

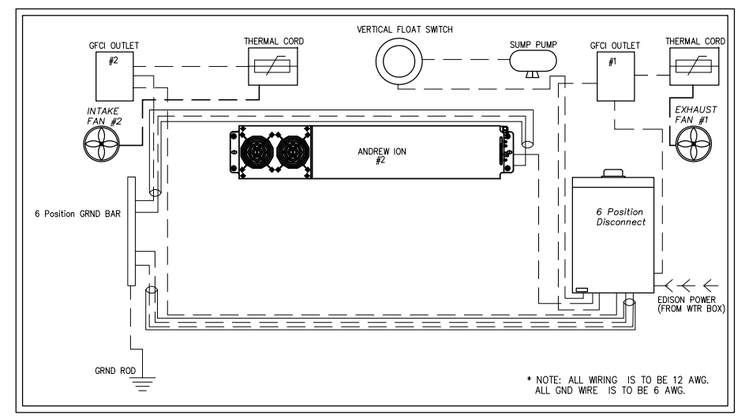
D–2





INTERNAL VAULT CONFIGURATION

WIRING SCHEMATIC



— — — GROUND WIRE (6 AWG)
— — — POWER WIRE (12 AWG)
1/2" LIQUIDTIGHT FLEX

* VENTS CAN BE FIELD CONFIGURED TO REDUCE OVER ALL FOOT PRINT AND AID REDUCING THE IMPACT ON THE SURROUNDING ENVIRONMENT.

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4	FXC 03/08/2014	ISSUED FOR FINAL

ENGINEER/CONSULTANT:

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CDG
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26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630
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CLIENT:

CROWN CASTLE
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STAMP:

SITE INFO:

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MON26
VERIZON MONTECITO-MON26

SITE ADDRESS: THOMAS BROS PAGE 997 GRID A4
R.O.W. NORTH SIDE OF JAMESON LN
(ADJACENT TO 1424 LA VERDA LN)
SANTA BARBARA, CA 93108
LAT: 34.42296
LONG: -119.63371

SHEET TITLE:

DETAILS

DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:

D-3

CROWN CASTLE NG WEST, INC

VERIZON MONTECITO-MON27

R.O.W. NORTH SIDE OF JAMESON LN
(ADJACENT TO 1333 SANTA CLARA WAY)
SANTA BARBARA, CA 93103

GENERAL NOTES

1. APPROVAL OF THESE PLANS BY THE CITY ENGINEER DOES NOT AUTHORIZE ANY WORK TO BE PERFORMED UNTIL A PERMIT HAS BEEN ISSUED.
2. UPON ISSUANCE OF A PERMIT, NO WORK WILL BE PERMITTED ON WEEKENDS OR HOLIDAYS WITHOUT PERMISSION FROM THE ENGINEERING DEPARTMENT.
3. THE APPROVAL OF THIS PLAN OR ISSUANCE OF A PERMIT BY THE LOCAL JURISDICTION DOES NOT AUTHORIZE THE SUBDIVIDER AND OWNER TO VIOLATE ANY FEDERAL, STATE OR CITY LAWS, ORDINANCES, REGULATIONS, OR POLICIES, INCLUDING, BUT NOT LIMITED TO, THE FEDERAL ENDANGERED SPECIES ACT OF 1973 AND AMENDMENTS THERETO (16 USC SECTION 1531 ET.SEQ.).
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SURVEY MONUMENTS AND/OR VERTICAL CONTROL BENCHMARKS WHICH ARE DISTURBED OR DESTROYED BY CONSTRUCTION. A LAND SURVEYOR MUST FIELD LOCATE, REFERENCE, AND/OR PRESERVE ALL HISTORICAL OR CONTROLLING MONUMENTS PRIOR TO ANY EARTHWORK. IF DESTROYED, SUCH MONUMENTS SHALL BE REPLACED WITH APPROPRIATE MONUMENTS BY A LAND SURVEYOR, A CORNER RECORD OR RECORD OF SURVEY, AS APPROPRIATE, SHALL BE FIELD AS REQUIRED BY THE PROFESSIONAL LAND SURVEYORS ACT. IF ANY VERTICAL CONTROL IS TO BE DISTURBED OR DESTROYED, THE LOCAL JURISDICTION FIELD SURVEY SECTION MUST BE NOTIFIED, IN WRITING, AT LEAST 3 DAYS PRIOR TO THE CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE COST OF REPLACING ANY VERTICAL CONTROL BENCHMARKS DESTROYED BY THE CONSTRUCTION.
5. IMPORTANT NOTICE: SECTION 4216 OF THE GOVERNMENT CODE REQUIRES A DIG ALERT IDENTIFICATION NUMBER BE ISSUED BEFORE A "PERMIT TO EXCAVATE" WILL BE VALID. FOR YOUR DIG ALERT I.D. NUMBER, CALL UNDERGROUND SERVICE ALERT, TWO DAYS BEFORE YOU DIG.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR THE POTHOLE AND LOCATING OF ALL EXISTING UTILITIES THAT CROSS THE PROPOSED TRENCH LINE AND MUST MAINTAIN 1' MINIMUM VERTICAL CLEARANCE.
7. CONTRACTOR SHALL SUBMIT TO THE LOCAL JURISDICTION, A CONSTRUCTION PLAN TO PROTECT WATER MAINS PRIOR TO COMMENCING CONSTRUCTION.
8. CONTRACTOR SHALL REPLACE OR REPAIR ALL TRAFFIC SIGNAL LOOPS, CONDUIT, AND LANE STRIPING DAMAGED DURING CONSTRUCTION.
9. CONTRACTOR SHALL NOTIFY THE LOCAL JURISDICTION. A MINIMUM OF 48 HOURS PRIOR TO COMMENCING WORK WITHIN 10' OF ALL SEWER, WATER, AND STORMDRAIN MAIN INCLUDING ALL CROSSINGS.
10. THIS PROJECT WILL BE INSPECTED BY ENGINEERING AND CAPITAL PROJECTS DEPARTMENT, FIELD ENGINEERING DIVISION.
11. AS-BUILT DRAWINGS MUST BE SUBMITTED TO THE CITY RESIDENT ENGINEER PRIOR TO THE ACCEPTANCE OF THIS PROJECT.
12. PUBLIC IMPROVEMENT SUBJECT TO DESUETUDE OR DAMAGE." IF REPAIR OR REPLACEMENT OF SUCH PUBLIC IMPROVEMENTS IS REQUIRED, THE OWNER SHALL OBTAIN THE REQUIRED PERMITS FOR WORK IN THE PUBLIC RIGHT-OFWAY, SATISFACTORY TO THE PERMIT - ISSUING AUTHORITY.
13. PRIOR TO ANY DISTURBANCE TO THE SITE, EXCLUDING UTILITY MARKS-OUTS AND SURVEYING, THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR A PRE-CONSTRUCTION MEETING WITH THE LOCAL JURISDICTION FIELD ENGINEERING DIVISION.
14. PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION SHOWN ON THESE PLANS. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE. THE CONTRACTOR IS RESPONSIBLE TO ATTEND THE LOCAL JURISDICTIONS MONTHLY UTILITY COORDINATION COMMITTEE THE CONSTRUCTION ACTIVITIES WITH THE CITY AND ALL OTHER CONTRACTORS SO THAT NO TRENCH IS CUT WITHIN ANY OF THE CITY STREETS THAT HAVE BEEN CONSTRUCTED, REPAIRED, OR SLURRY SEALED WITHIN THREE YEARS OF THE STREET CONSTRCTUION/RESURFACING DATE.
15. MANHOLES OR COVERS SHALL BE LABELED "CROWN CASTLE" OR "CROWN CASTLE NG WEST".
16. CONTRACTOR SHALL IMPLEMENT AN EROSION AND SEDIMENT CONTROL PROGRAM DURING THE PROJECT CONSTRUCTION ACTIVITIES. THE PROGRAM SHALL MEET THE APPLICABLE REQUIREMENTS OF THE STATE WATER RESOURCE CONTROL BOARD.
17. THE CONTRACTOR SHALL HAVE EMERGENCY MATERIALS AND EQUIPMENT ON HAND FOR UNFORESEEN SITUATIONS, SUCH AS DAMAGE TO UNDERGROUND WATER, SEWER, AND STORM DRAIN FACILITIES WHEREBY FLOWS MAY GENERATE EROSION AND SEDIMENT POLLUTION.

SPECIAL NOTES

THE FOLLOWING NOTES ARE PROVIDED TO GIVE DIRECTIONS TO THE CONTRACTOR BY THE ENGINEER OF WORK. THE CITY ENGINEER'S SIGNATURE ON THESE PLANS DOES NOT CONSTITUTE APPROVAL OF THESE NOTES AND THE CITY WILL NOT BE RESPONSIBLE FOR THEIR ENFORCEMENT.

1. THE CONTRACTOR SHALL VERIFY THE LOCATION EXISTING UNDERGROUND UTILITIES INCLUDING SEWER LATERALS AND WATER SERVICES TO INDIVIDUAL LOTS BOTH VERTICAL AND HORIZONTAL PRIOR TO COMMENCING IMPROVEMENT OPERATIONS.
2. CONTRACTOR SHALL MAKE EXPLORATION EXCAVATIONS AND LOCATE EXISTING FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS OF PLANS IF REVISION IS NECESSARY BECAUSE OF LOCATION OF EXISTING UTILITIES.
3. LOCATION AND ELEVATIONS OF IMPROVEMENTS, TO BE MET BY WORK, SHALL BE CONFIRMED BY FIELD MEASUREMENT PRIOR TO CONSTRUCTION OF NEW WORK.
4. GRADES SHOWN ARE FINISH GRADES, CONTRACTOR SHALL DETERMINE NECESSARY SUB GRADE ELEVATIONS AND SHALL CONSTRUCT SMOOTH TRANSITION BETWEEN FINISH GRADES SHOWN.
5. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE RESPONSIBILITY FOR JOB SITE CONDITION DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY: THAT THIS PROVISION SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXPECTING FOR LIABILITY ARISING FROM SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
6. THE CONTRACTOR SHALL BE TOTALLY RESPONSIBLE FOR COMPLIANCE WITH THE PROVISIONS OF THE STATE OF CALIFORNIA SAFETY ORDERS.
7. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE FROM EXISTING RECORDS AND CORROBORATED, WHERE POSSIBLE WITH FIELD TIES. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING THE LOCATIONS SHOWN, BOTH HORIZONTALLY AND VERTICALLY, PRIOR TO CONSTRUCTION. IF EXISTING LOCATIONS VARY SUBSTANTIALLY FROM THE PLANS, THE ENGINEER SHOULD BE NOTIFIED TO MAKE ANY CONSTRUCTION CHANGES REQUIRED.
8. THE CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT FOR ALL SEWER AND WATER MAIN UNDER CROSSING IN ACCORDANCE WITH PART 1 SECTION 5-2 OF THE STANDARD SPECIFICATION.
9. THE CONTRACTOR SHALL REPLACE OR REPAIR ALL TRAFFIC SIGNAL LOOPS, CONDUITS, AND LANE STRIPING DAMAGED DURING CONSTRUCTION.
10. THE CONTRACTOR SHALL SUBMIT WORK PLANS FOR ALL BORE OPERATIONS TWO WEEKS PRIOR TO COMMENCING WORK.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR THE POTHOLE AND LOCATING OF ALL EXISTING UTILITIES THAT CROSS THE PROPOSED TRENCH LINE AND MUST MAINTAIN 1' MINIMUM VERTICAL CLEARANCE.
12. AS-BUILT DRAWINGS MUST BE SUBMITTED TO THE CITY ENGINEER PRIOR TO ACCEPTANCE OF THIS PROJECT.

VICINITY MAP - N.T.S.

GROUND BUS BAR
MECH. GRND. CONN.
CADWELD
ELECTRIC BOX
TELEPHONE BOX
EXISTING SERVICE POLE
SIDEWALK FLAG
EX. MANHOLE
LIGHT POLE
FOUNDATION
SPOT ELEV.
SET POINT
REVISION
DETAIL REF.
ELEVATION REF.
SECTION REF.
PROP./LEASE LINE
MATCH LINE
WORK POINT
TELE. CONDUIT
CENTERLINE
ELECT. CONDUIT
COAXIAL CABLE
MYERS PEDESTAL
VAULT STANDARD 2'X3'
STEEL POLE

SYMBOLS, LINETYPES AND HATCH PATTERNS

EROSION AND SEDIMENT CONTROL NOTES

TEMPORARY EROSION/SEDIMENT CONTROL, PRIOR TO COMPLETION OF FINAL IMPROVEMENTS, SHALL BE PERFORMED BY THE CONTRACTOR OR QUALIFIED PERSON AS INDICATED BELOW:

1. ALL REQUIREMENTS OF THE LOCAL JURISDICTION "LAND DEVELOPMENT MANUAL, STORM WATER STANDARDS" MUST BE INCORPORATED INTO THE DESIGN AND CONSTRUCTION OF THE PROPOSED GRADING/IMPROVEMENTS CONSISTENT WITH THE APPROVED STORM WATER AND/OR WATER POLLUTION CONTROL PLAN (WPCP).
2. FOR STORM DRAIN INLETS, PROVIDE A GRAVEL BAG SILT BASIN IMMEDIATELY UPSTREAM OF INLET AS INDICATED ON DETAILS.
3. FOR INLETS LOCATED AT SUMPS ADJACENT TO TOP OF SLOPES, THE CONTRACTOR SHALL ENSURE THAT WATER DRAINING TO THE SUMP IS DIRECTED INTO THE INLET AND THAT A MINIMUM OF 1.00" FREEBOARD EXISTS AND IS MAINTAINED ABOVE THE TOP OF THE INLET. IF FREEBOARD IS NOT PROVIDED BY GRADING SHOWN ON THESE PLANS, THE CONTRACTOR SHALL PROVIDE IT VIA TEMPORARY MEASURES, I.E. GRAVEL BAGS OR DIKES.
4. THE CONTRACTOR OR QUALIFIED PERSON SHALL BE RESPONSIBLE FOR CLEANUP OF SILT AND MUD ON ADJACENT STREET(S) AND STORM DRAIN SYSTEM DUE TO CONSTRUCTION ACTIVITY.
5. THE CONTRACTOR OR QUALIFIED PERSON SHALL CHECK AND MAINTAIN ALL LINED AND UNLINED DITCHES AFTER EACH RAINFALL.
6. THE CONTRACTOR SHALL REMOVE SILT AND DEBRIS AFTER EACH MAJOR RAINFALL.
7. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON, ALL NECESSARY MATERIALS SHALL BE STOCKPILED ON SITE AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
8. THE CONTRACTOR SHALL RESTORE ALL EROSION/SEDIMENT CONTROL MEASURES TO WORKING ORDER TO THE SATISFACTION OF THE CITY ENGINEER OR RESIDENT ENGINEER AFTER EACH RUN-OFF PRODUCING RAINFALL.
9. THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION CONTROL MEASURES AS MAY BE REQUIRED BY THE RESIDENT ENGINEER DUE TO UNCOMPLETED GRADING OPERATIONS OR UNFORESEEN CIRCUMSTANCES, WHICH MAY ARISE.
10. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATERS CREATE A HAZARDOUS CONDITION.
11. ALL EROSION/SEDIMENT CONTROL MEASURES PROVIDED PER THE APPROVED GRADING PLAN SHALL BE INCORPORATED HEREON. ALL EROSION/SEDIMENT CONTROL FOR INTERIM CONDITIONS SHALL BE DONE TO THE SATISFACTION OF THE RESIDENT ENGINEER.
12. GRADED AREAS AROUND THE PROJECT PERIMETER MUST DRAIN AWAY FROM THE FACE OF THE SLOPE AT THE CONCLUSION OF EACH WORKING DAY.
13. ALL REMOVABLE PROTECTIVE DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN RAIN IS IMMINENT.
14. THE CONTRACTOR SHALL ONLY GRADE, INCLUDING CLEARING AND GRUBBING FOR THE AREAS FOR WHICH THE CONTRACTOR OR QUALIFIED PERSON CAN PROVIDE EROSION/SEDIMENT CONTROL MEASURES.
15. THE CONTRACTOR SHALL ARRANGE FOR WEEKLY MEETINGS DURING OCTOBER 1ST TO APRIL 30TH FOR PROJECT TEAM (GENERAL CONTRACTOR, QUALIFIED PERSON, EROSION CONTROL SUBCONTRACTOR IF ANY, ENGINEER OF WORK, OWNER AND THE RESIDENT ENGINEER) TO EVALUATE THE ADEQUACY OF THE EROSION/SEDIMENT CONTROL MEASURES AND OTHER RELATED CONSTRUCTION ACTIVITIES.

TRAFFIC CONTROL NOTES

THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN (11" X 17") FOR APPROVAL PRIOR TO STARTING WORK. THE PLAN SHOULD BE SUBMITTED TO THE TRAFFIC CONTROL PERMIT COUNTER. CONTRACTOR SHALL OBTAIN A TRAFFIC CONTROL PERMIT A MINIMUM OF TWO (2) WORKING DAYS PRIOR TO STARTING WORK, AND A MINIMUM FIVE (5) DAYS IF WORK WILL AFFECT A BUS STOP OR AN EXISTING TRAFFIC SIGNAL, OR IF WORK WILL REQUIRE A ROAD OR ALLEY CLOSURE.

FOOTAGE TOTALS	
ASPHALT CUT	-
DIRT TRENCH	-
PUNCH THRU	-
BORE	-
TOTAL	-
R&R SMF TOTAL	-

PROJECT DICTIONARY

SITE ADDRESS: R.O.W. NORTH SIDE OF JAMESON LN (ADJACENT TO 1333 SANTA CLARA WAY) SANTA BARBARA, CA 93103

APPLICANT: CROWN CASTLE NG WEST, INC
2125 WRIGHT AVE, SUITE #C9
LA VERNE, CA 91750
CONTACT: HEIDI PAYNE
PHONE: (949) 300-9493

CIVIL ENGINEER: CONNELL DESIGN GROUP, LLC
26455 RANCHO PARKWAY SOUTH
LAKE FOREST, CA 92630
CONTACT: FRANK CARTER
(949) 310-8233 PHONE
(949) 753-8833 FAX

CONSTRUCTION CHANGE TABLE

CHANGE	DATE	EFFECTED OR ADDED SHEET NUMBERS

APPLICABLE CODES

ALL WORK SHALL COMPLY WITH THE FOLLOWING APPLICABLE CODES:

*2010 CALIFORNIA BUILDING CODE
*2010 CALIFORNIA MECHANICAL CODE
*2010 CALIFORNIA PLUMBING CODE
*2010 CALIFORNIA ELECTRICAL CODE

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

PROJECT DESCRIPTION

PROJECT CONSISTS OF INSTALLATION OF:

1. (2) OMNI DIRECTIONAL ANTENNAS ON EXISTING UTILITY POLE
2. EQUIPMENT VAULT AT BASE OF EXISTING POLE
3. EQUIPMENT PEDESTAL W/ BBU AND ELECTRICAL METER AT BASE OF POLE

SHEET INDEX:

TITLE SHEET	T-1 - SHEET 1 OF 8
TOPOGRAPHIC SURVEY	C-1 - SHEET 2 OF 8
SITE PLAN	A-1 - SHEET 3 OF 8
PROPOSED ELEVATIONS	A-2 - SHEET 4 OF 8
GRADING PLAN	A-3 - SHEET 5 OF 8
DETAILS	D-1 - SHEET 6 OF 8
DETAILS	D-2 - SHEET 7 OF 8
DETAILS	D-3 - SHEET 8 OF 8

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ENGINEER/CONSULTANT:

Civil Engineer

CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630
(949) 753-8807 OFFICE - (949) 753-8833 FAX

CLIENT:

CROWN CASTLE NG WEST, INC.

STAMP:

SITE INFO:

SITE NAME:
MON27
VERIZON MONTECITO-MON27

SITE ADDRESS: THOMAS BROS PAGE 996 GRID h3
R.O.W. NORTH SIDE OF JAMESON LN
(ADJACENT TO 1333 SANTA CLARA WAY)
SANTA BARBARA, CA 93103
LAT: 34.42211
LONG: -119.63857

SHEET TITLE:

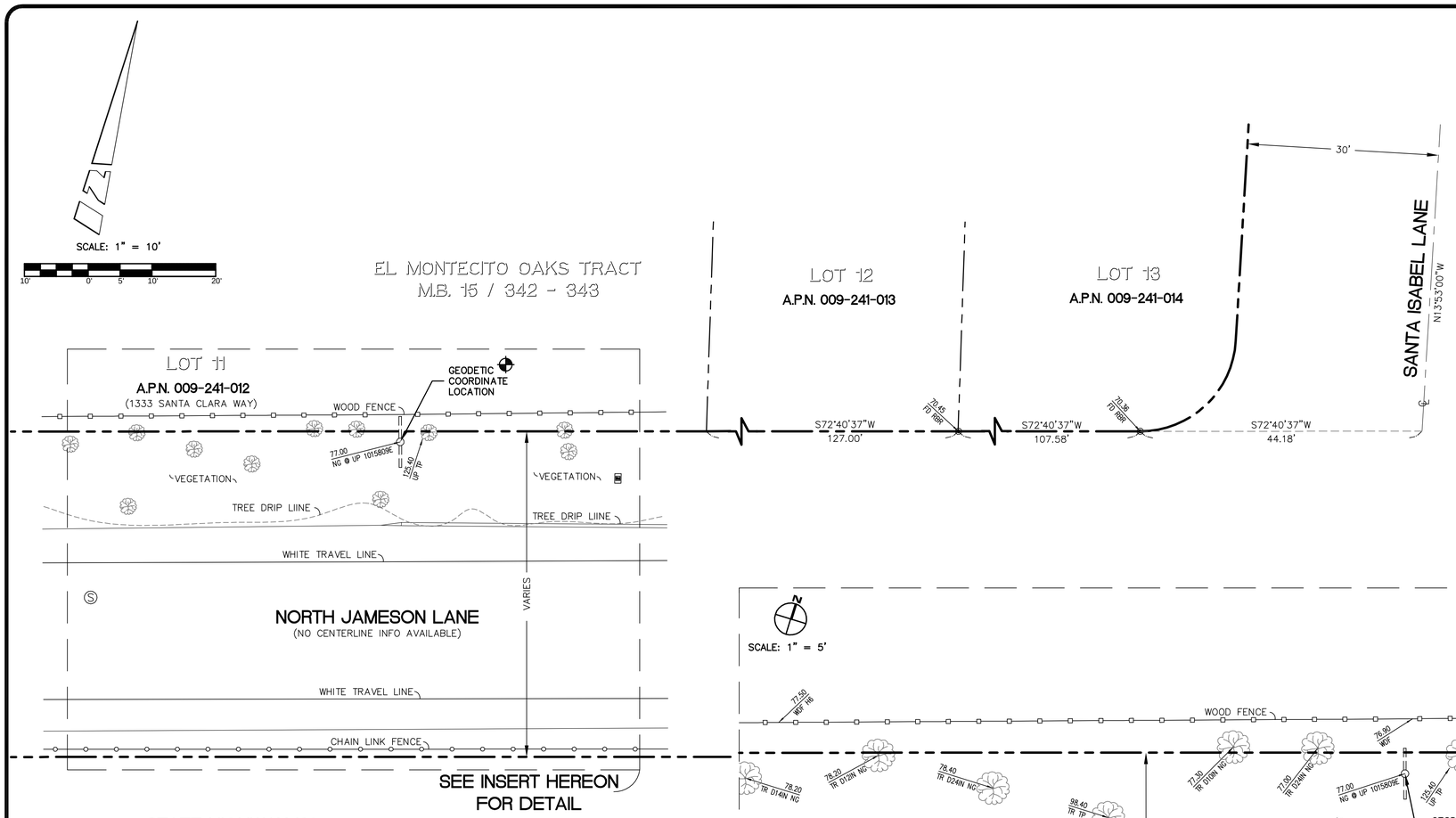
TITLE SHEET

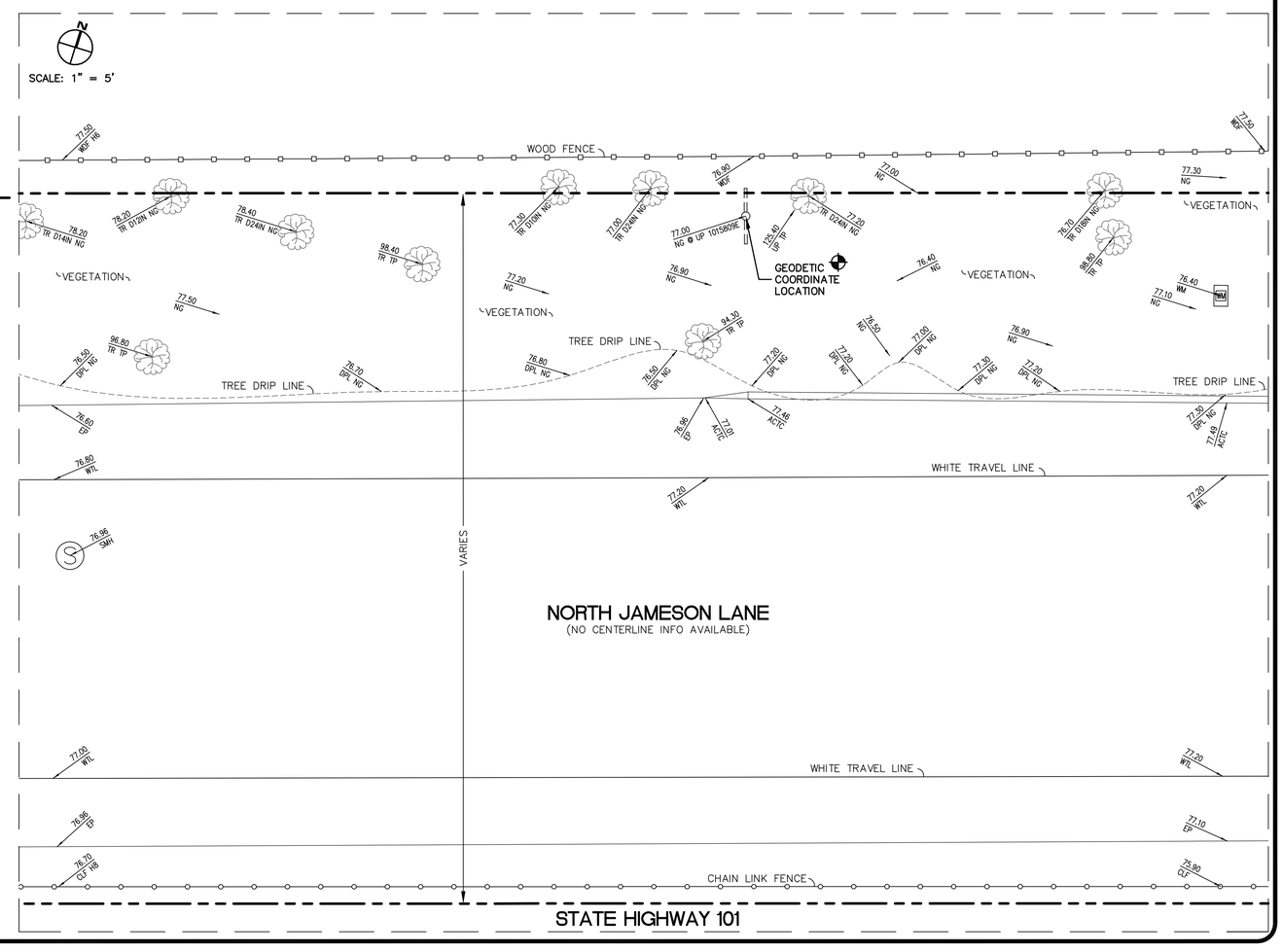
DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:

T-1





LEGEND:

ACTC	TOP OF ASPHALT CURB
CLF	CHAIN LINK FENCE
D	DIAMETER
DPL	DRIP LINE
EP	EDGE OF PAVEMENT
FD	FOUND
H	HEIGHT
IN	INCHES
NG	NATURAL GROUND
RBR	REBAR
SMH	SEWER MANHOLE
TP	TOP
TR	TREE
UP	UTILITY POLE
WDF	WOOD FENCE
WM	WATER METER
WTL	WHITE TRAVEL LINE
—○—	CHAIN LINK FENCE
℄	CENTERLINE
◉	FOUND MONUMENT
Ⓢ	SEWER MANHOLE
⇐=○=⇒	UTILITY POLE
WM	WATER METER
—□—	WOOD FENCE

TITLE REPORT IDENTIFICATION:

N/A

EASEMENT NOTES:

N/A

LEGAL DESCRIPTION:

N/A

DATE OF SURVEY:

JULY 24, 2013

SURVEYORS NOTE:

THE RIGHT OF WAY LINES AND THEIR DIMENSIONS SHOWN HEREON ARE PER READILY AVAILABLE RECORDED INFORMATION AND THEIR LOCATIONS ARE APPROXIMATE, PENDING RECEIPT OF TITLE REPORT(S) FOR THE ADJACENT REAL PROPERTY.

LIVING PLANTS STATEMENT:

THE HEIGHTS AND ELEVATIONS FOR THE TREES, BUSHES AND OTHER LIVING PLANTS SHOWN HEREON, SHOULD BE CONSIDERED APPROXIMATE (+/−) AND ONLY VALID FOR THE DATE OF THIS SURVEY. THEY ARE PROVIDED AS A GENERAL REFERENCE AND SHOULD NOT BE USED FOR DESIGN PURPOSES.

COORDINATES:

LATITUDE 34°25'19.63" N
LONGITUDE 119°38'18.94" W

NAD 1983 GEODETIC COORDINATES AND ELEVATIONS WERE ESTABLISHED USING SURVEY GRADE "ASHTECH" G.P.S. RECEIVERS AND ASHTECH SURVEY GRADE PRECISION SOFTWARE FOR POST-PROCESSING.

BASIS OF BEARINGS:

THE SOUTHERLY LINE OF LOT 13 BEING SOUTH 72°40'37" WEST PER EL MONTECITO OAKS TRACT, M.B. 15/342-343, RECORDS OF SANTA BARBARA COUNTY.

ASSESSOR'S IDENTIFICATION:

N/A

AREA:

N/A

BENCH MARK REFERENCE:

U.S.G.S. BENCH MARK "BM 37"

UNITED STATES GEOLOGICAL SURVEY BENCH MARK "BM 37" AS SHOWN ON THE "SANTA BARBARA" 7.5 MINUTE QUADRANGLE MAP.

ELEVATION: 39.5 FEET A.M.S.L. (NAVD88) (DATUM VERIFIED IN FIELD TO BE WITHIN 1-A ACCURACY STANDARDS)

REV:	DATE/BY:	REVISION DESCRIPTION:
1	07/31/13 RF	ISSUED FOR REVIEW

ENGINEER/CONSULTANT:

CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PKWY. SOUTH
LAKE FOREST, CA 92630-8326
(949) 753-8807 OFFICE - (949) 753-8833 FAX

SITE BUILDER:

CROWN CASTLE
NG WEST, INC.

SURVEYOR:

BERT HAZE AND ASSOCIATES, INC.
LAND SURVEYING & MAPPING
3188 AIRWAY AVENUE, SUITE K1
COSTA MESA, CALIFORNIA 92626
714 557-1567 OFFICE
714 557-1568 FAX

JN. 706.216

STAMP:

PROFESSIONAL LAND SURVEYOR
BERT HAZE
No. 7211
Exp. 3-31-14
STATE OF CALIFORNIA

SITE INFO:

SITE NAME:

MON27
VERIZON MONTECITO-MON27

SITE ADDRESS:

R.O.W. NORTH SIDE OF N. JAMESON LN.
(ADJACENT TO 1333 SANTA CLARA WAY)
SANTA BARBARA, CA 93108

SHEET TITLE:

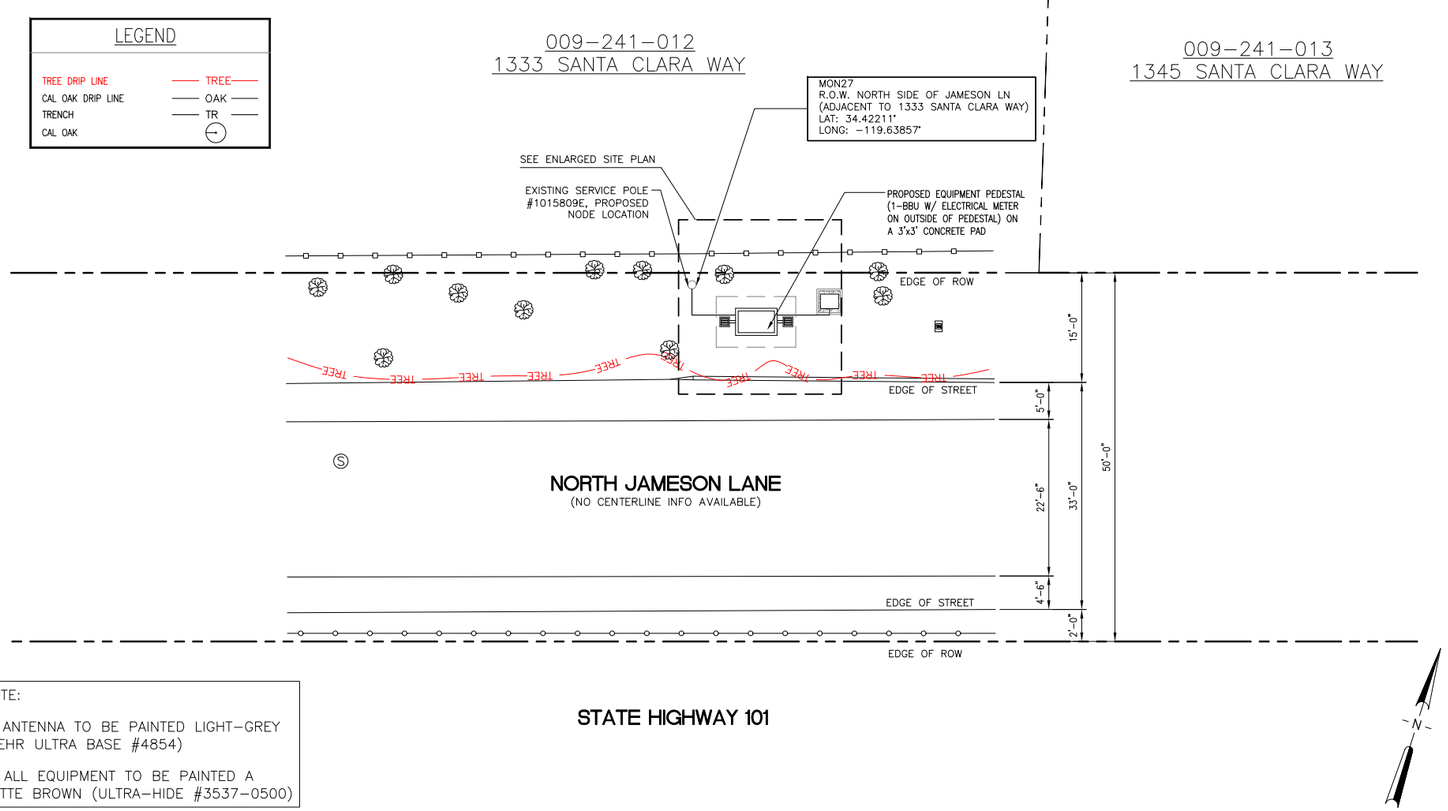
TOPOGRAPHIC SURVEY

DRAWING INFO:

DWG. NAME:	DRAWN BY:	DATE:
MON27	RF	07/31/13

SHEET NUMBER:

1 OF 1 | C-1

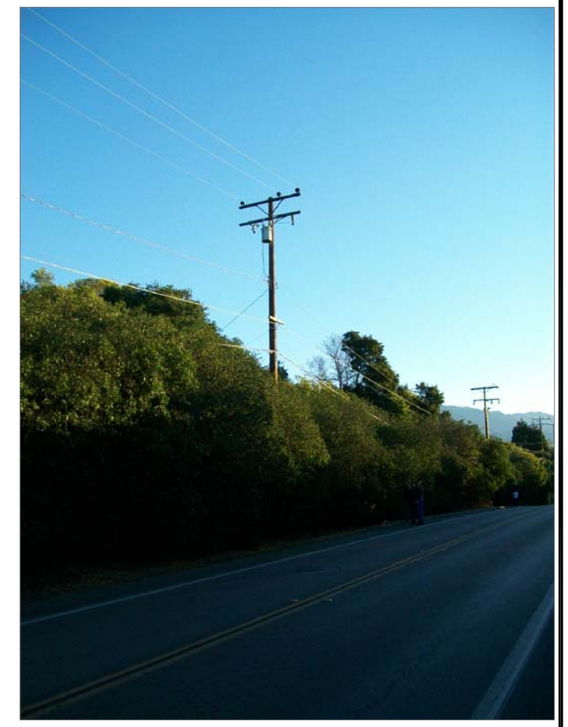


NOTE:

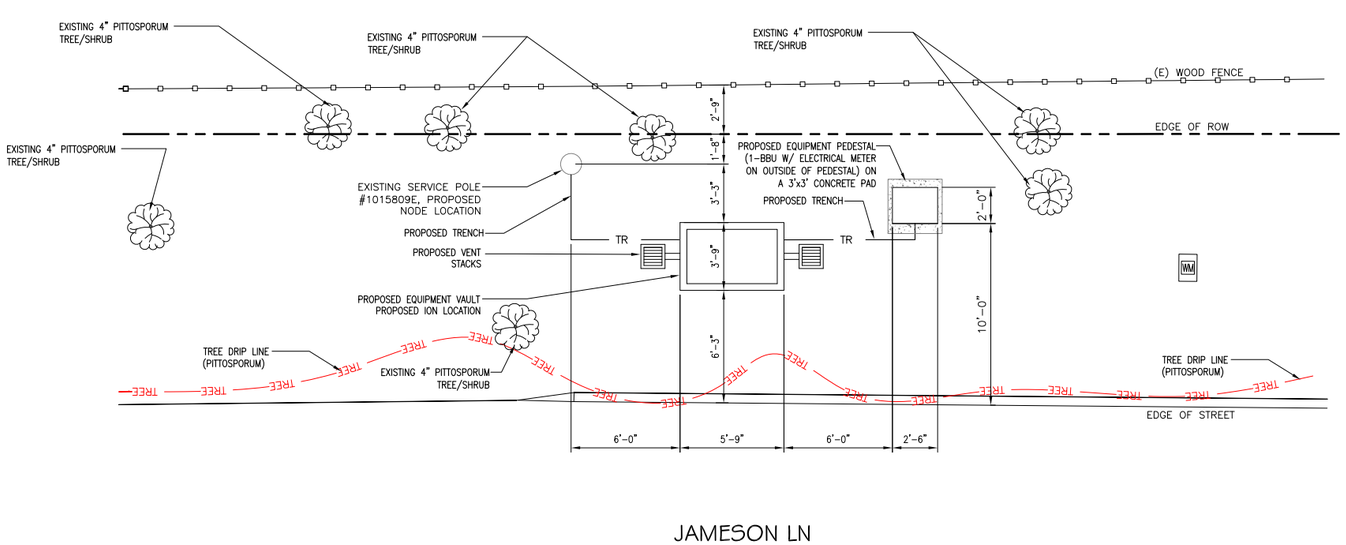
1. ANTENNA TO BE PAINTED LIGHT-GREY (BEHR ULTRA BASE #4854)

2. ALL EQUIPMENT TO BE PAINTED A MATTE BROWN (ULTRA-HIDE #3537-0500)

SITE PLAN | SCALE: 1"=10'-0" (0 5' 10') | 1



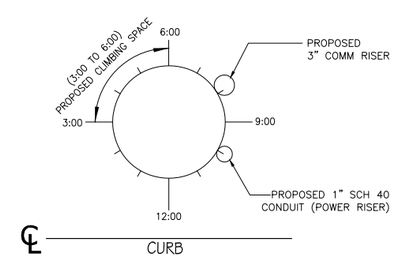
EXISTING PHOTO | SCALE: N.T.S. | 3



ENLARGED SITE PLAN | SCALE: 1/4"=1'-0" (0 2' 4') | 2

POLE WILL BE STEPPED IN ACCORDANCE TO G095 STANDARDS IN RESPECT TO CLIMBING SPACE.

1-3" CROWN CASTLE RISER @ 8:00
1-1" POWER RISER @ 10:00



RISER PROFILE | SCALE: N.T.S. | 3

REV:	DATE/BY:	REVISION DESCRIPTION:
0	FXC 01/15/2013	ISSUED FOR REVIEW
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4	FXC 03/08/2014	ISSUED FOR FINAL

ENGINEER/CONSULTANT:

Civil Engineer

CDG

CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630
(949) 753-8807 OFFICE - (949) 753-8833 FAX

CLIENT:

CROWN CASTLE
NG WEST, INC.

STAMP:

SITE INFO:

SITE NAME:
MON27
VERIZON MONTECITO-MON27

SITE ADDRESS: THOMAS BROS PAGE 996 GRID h3
R.O.W. NORTH SIDE OF JAMESON LN
(ADJACENT TO 1333 SANTA CLARA WAY)
SANTA BARBARA, CA 93103
LAT: 34.42211
LONG: -119.63857

SHEET TITLE:

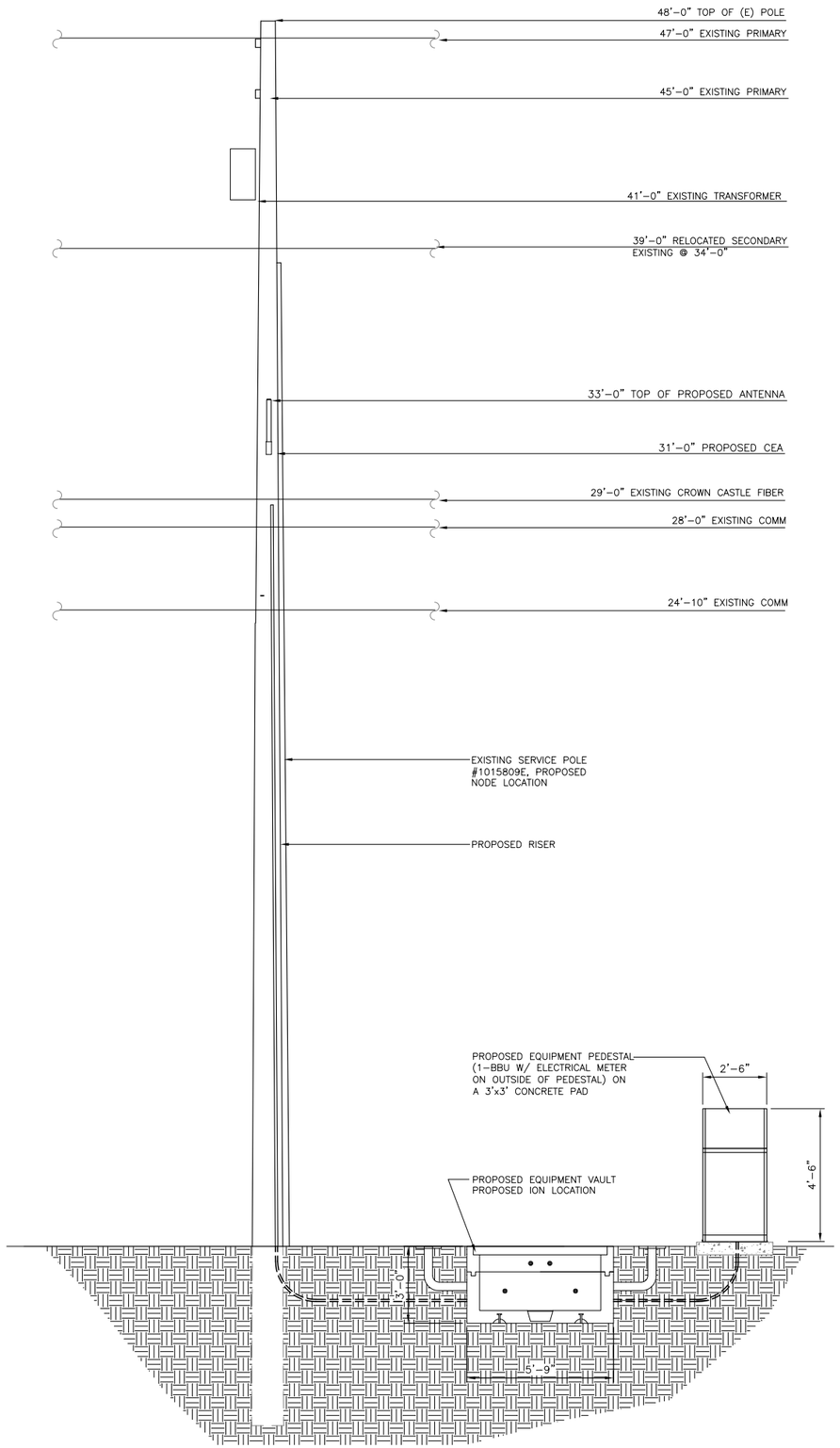
SITE PLAN, ENLARGED SITE PLAN, EXISTING PHOTO AND RISER PROFILE

DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:

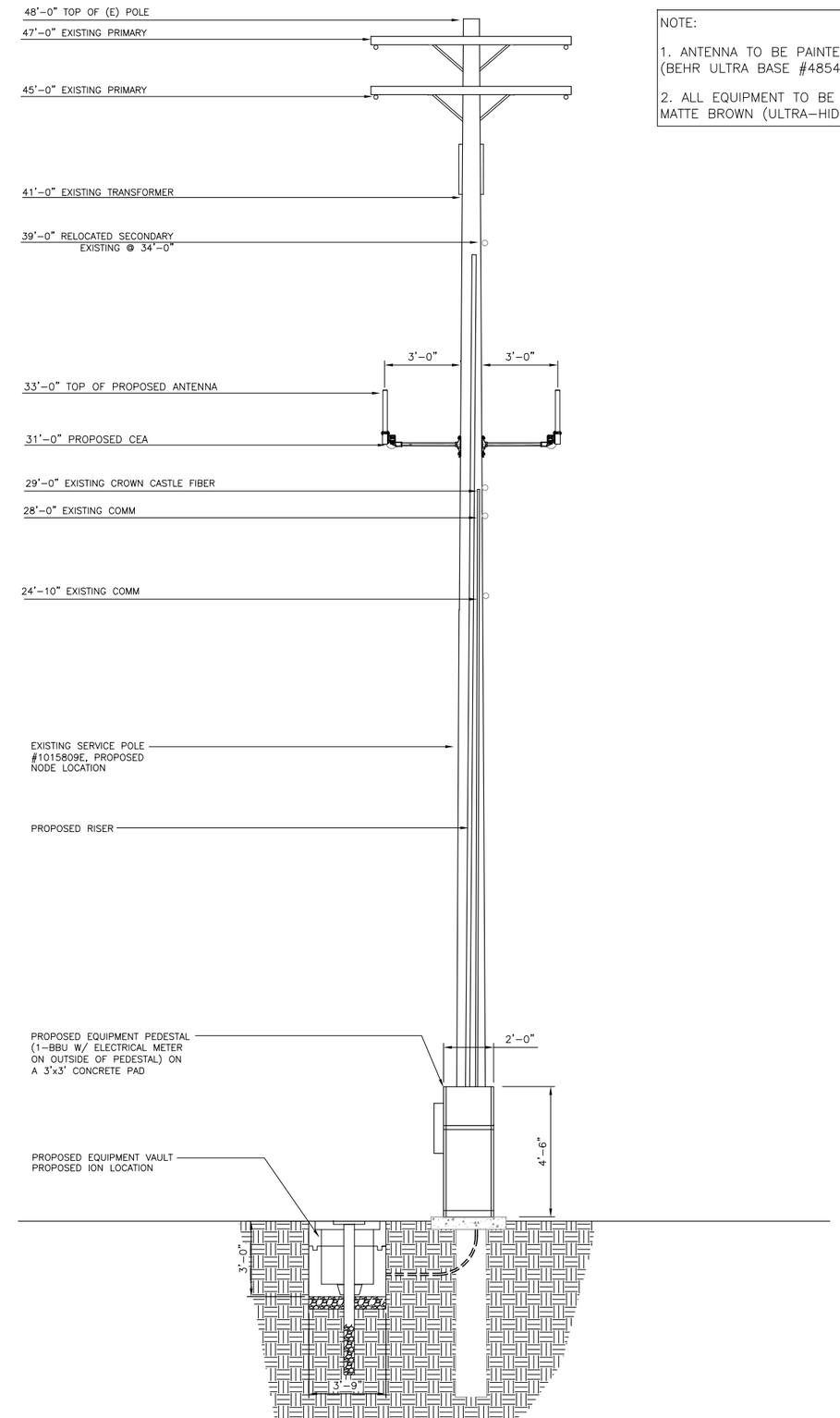
A-1



PROPOSED ELEVATION LOOKING NORTH

SCALE: 3/8"=1'-0" (0 1' 2' 3')

1



PROPOSED ELEVATION LOOKING WEST

SCALE: 3/8"=1'-0" (0 1' 2' 3')

2

NOTE:

1. ANTENNA TO BE PAINTED LIGHT-GREY (BEHR ULTRA BASE #4854)

2. ALL EQUIPMENT TO BE PAINTED A MATTE BROWN (ULTRA-HIDE #3537-0500)

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SANTA BARBARA, CA 93103

LAT: 34.42211
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SHEET TITLE:

ELEVATION

DRAWING INFO:

DRAWN BY:
FC

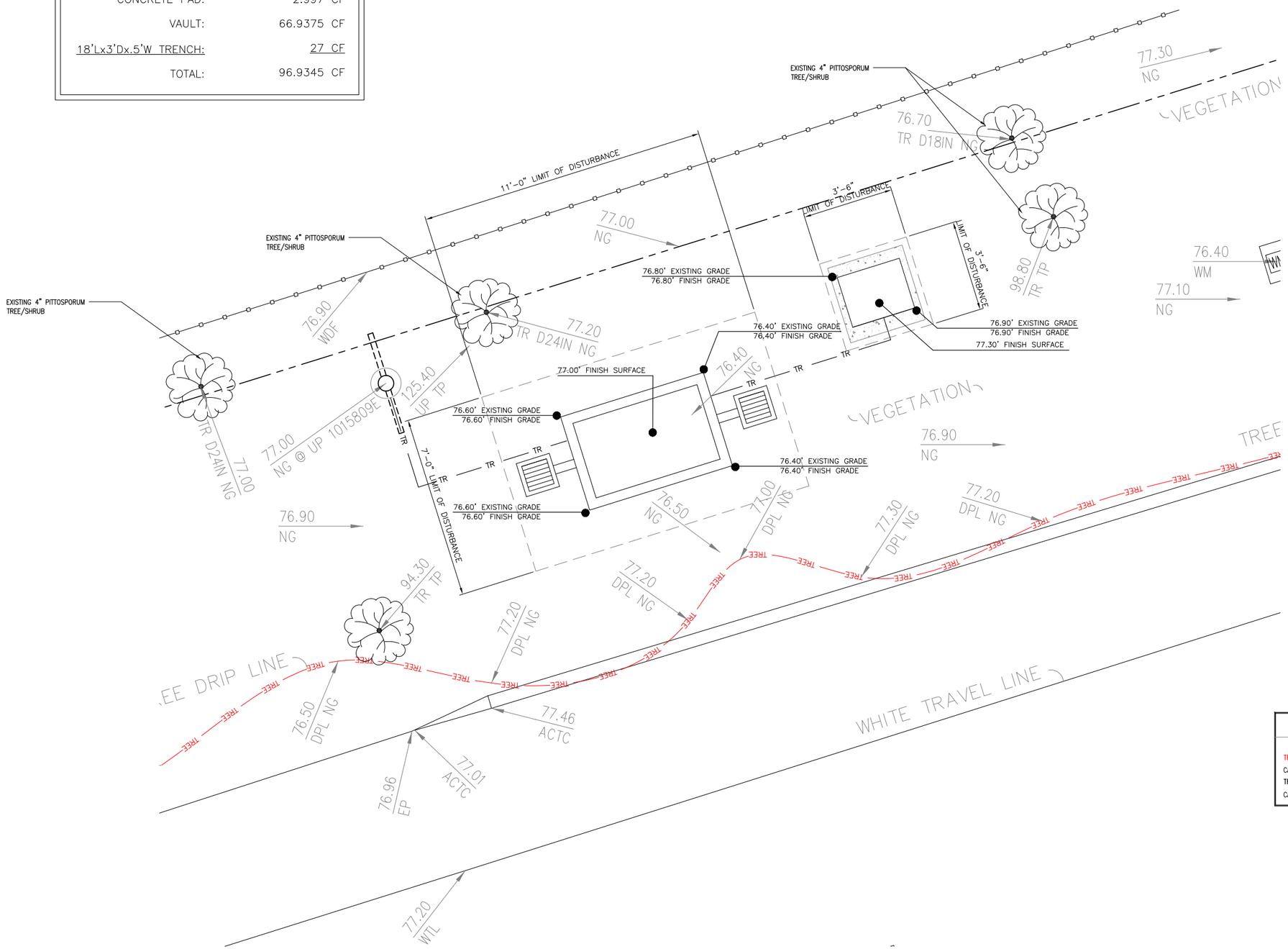
SHEET NUMBER:

A-2

GRADING CALCULATION

CONCRETE PAD:	2.997 CF
VAULT:	66.9375 CF
18'Lx3'Dx.5'W TRENCH:	27 CF
TOTAL:	96.9345 CF

NOTE:
NO CUT AND FILL REQUIRED



LEGEND

TREE DRIP LINE	TREE
CAL OAK DRIP LINE	OAK
TRENCH	TR
CAL OAK	

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LAT: 34.42211
LONG: -119.63857

SHEET TITLE:

GRADING PLAN

DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:

A-3

Outdoor Omni-directional Antenna

COMBA

OOA-360V06N0-3 VPol, 696-960/1710-2170MHz, 360°, 4.0/6.0 dBi

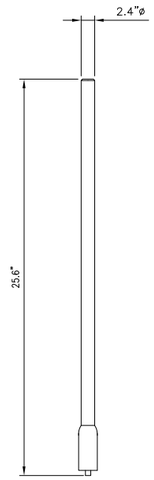
Technical Specifications

Electrical

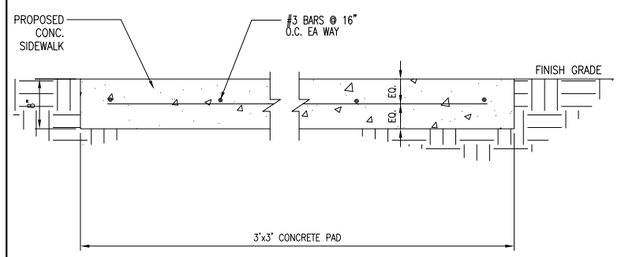
Frequency Range	MHz	696–960	1710–2170
Polarization		Vertical	
Gain	dBi	4.0±1	6.0±1
Horizontal Beamwidth	deg	360	
Vertical Beamwidth	deg	22–53	20–26
Electrical Downtilt–Fixed	deg	0	
VSWR		1.8	
Maximum Power	W	200	
Impedance		50	
Lightning Protection		Direct Ground	

Mechanical

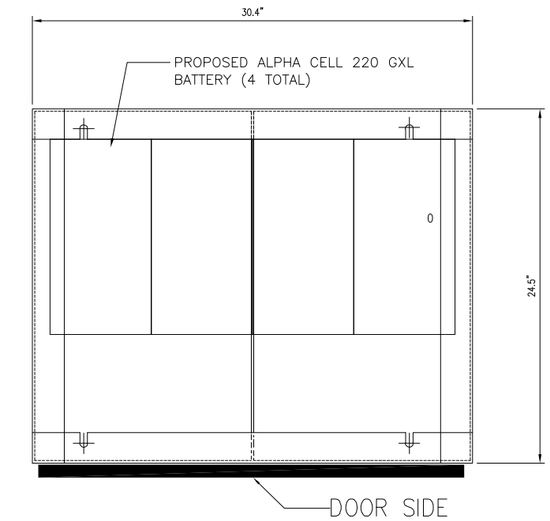
Dimensions, HxDia	mm(in)	650x60 (25.6x2.4)
Weight, with Mounting kit	kg (lb)	1 (2.2)
Radome Material and Color		Fiberglass, Light Grey
Radiating Element Material		Copper
Connector Type and Location		N–Female, Bottom
Operational Temperature		–55 to +70
Operational Humidity	%	95
Operational Wind Speed	km/h (mph)	200 (124)
Shipping Dimensions, HxWxD	mm (in)	670x100x100 (26.4x3.9x3.9)
Shipping Weight	kg (lb)	1.2 (2.65)

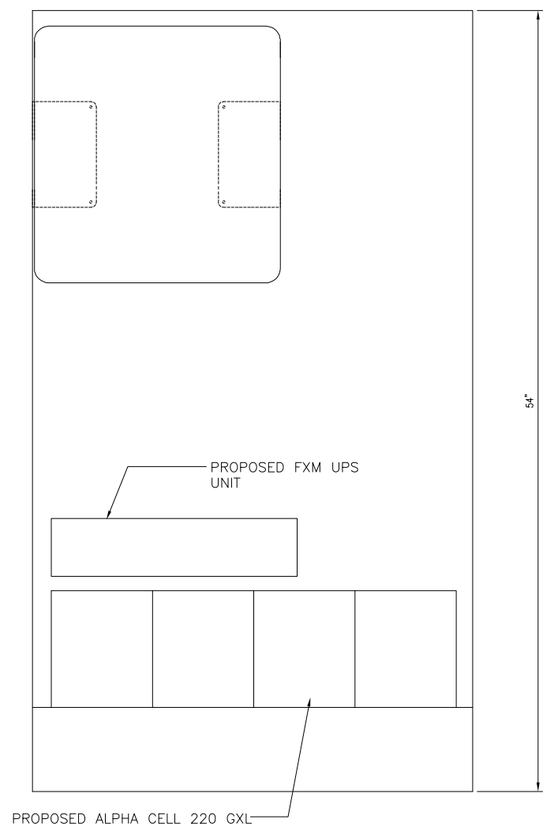


ANTENNA SPECIFICATIONS N.T.S. 1



CONCRETE PAD N.T.S. 3





EQUIPMENT PEDESTAL N.T.S. 5

Electrical

Power Supply
Mains power, Vac ..... 115 or 230

Power consumption, Watts ..... 1100 max. < 750 @ normal operation

700 MHz SISO/MIMO

Frequency range, MHz
Uplink ..... 698 to 716/776 to 787
Downlink ..... 728 to 757

Output power per carrier*, dBm

Number of Carriers	1	2	4	8
LTE	43	40**	37	34

850 MHz

Frequency range, MHz
Uplink ..... 824 to 849
Downlink ..... 869 to 894

Output power per carrier*, dBm

Number of Carriers	1	2	4	8
Analog	43	40	37	34
GSM	43	40	37	34
CDMA	43	40	37	34
LTE	43	40 **	37	34
UMTS	42	39	36	33

20W for Cell, PCS bands and 700MHz MIMO

1900 MHz

Frequency range, MHz
Uplink ..... 1850 to 1915
Downlink ..... 1930 to 1995

Output power per carrier*, dBm

Number of Carriers	1	2	4	8
GSM	43	40	37	34
CDMA	43	40	37	34
LTE	43	40 **	37	34
UMTS	42	39	36	33

CommScope

ION-M7P/7P/85P/19P

Noise figure, dB
IIP3 optimized ..... +10 max.
Noise figure optimized ..... +6 max. 4.5 typical

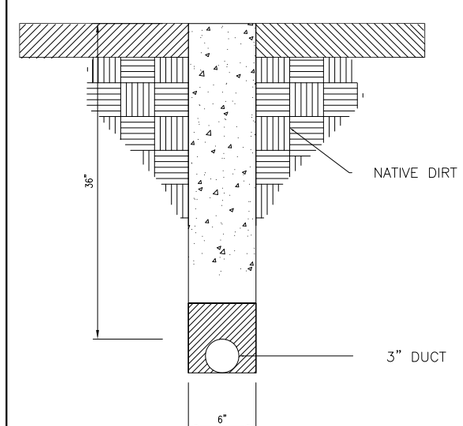
Mechanical****

Height, width, depth, mm (in) ..... 817 x 245 x 218 (32.2 x 9.6 x 8.6)

Weight, kg (lb) 40 (88.2)

Page 1, February 27, 2013 Company Confidential

ION-M7P/7P/85P/19P N.T.S. 2



* TRENCH TO BE BACK FILL WITH NATIVE MATERIAL & COMPACTED TO 90% OR BETTER & REPLACE LANDSCAPING IN KIND.

TRENCH N.T.S. 4

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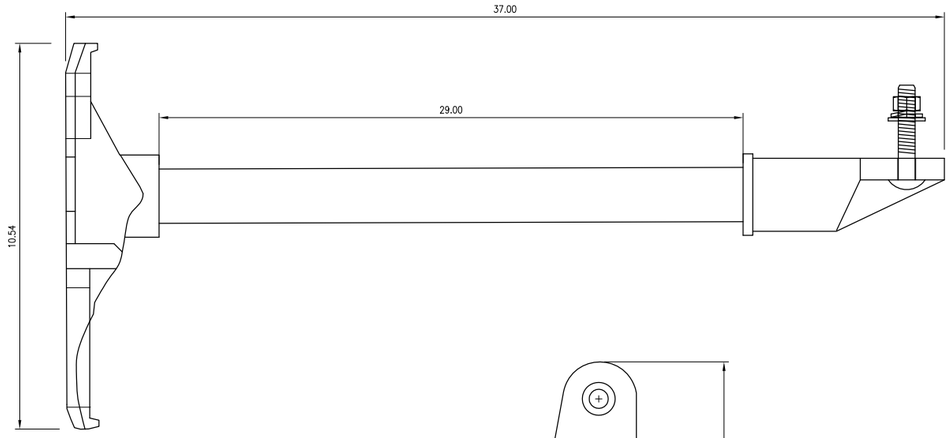
DETAILS

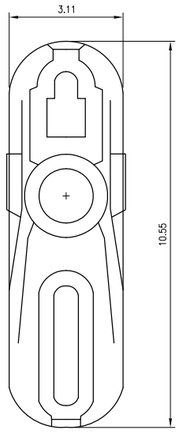
DRAWING INFO:

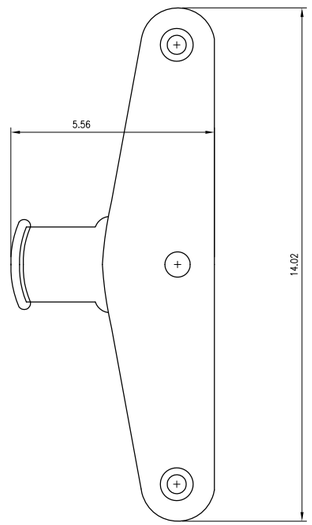
DRAWN BY:
FC

SHEET NUMBER:

D–1

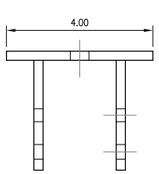


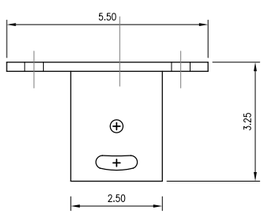




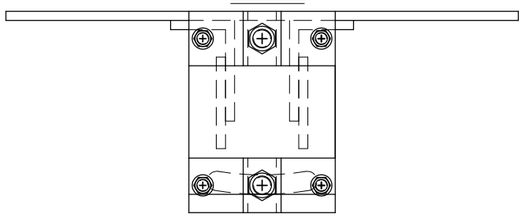
COMM SPACE BRACKET

FRONT VIEW





TOP VIEW



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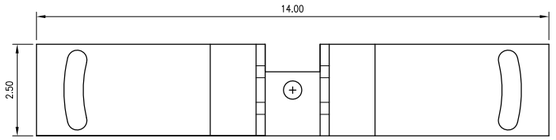
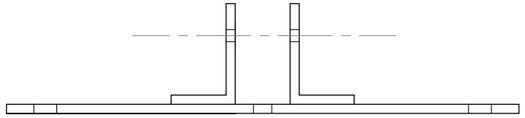
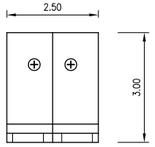


FRONT VIEW



SIDE VIEW



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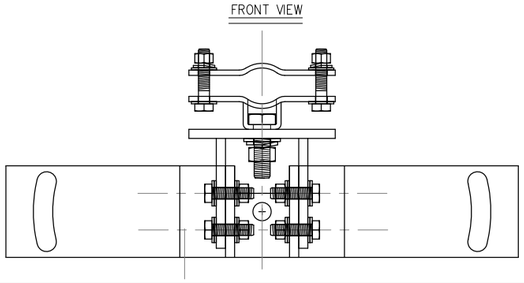

ANTENNA MOUNT | N.T.S. | 1

AlphaCell
General Specifications

Model:	220 GXL	195 GXL	165 GXL
Warranty[1]:	4 to 5 year full replacement	4 to 5 year full replacement	4 to 5 year full replacement
Service Life:	Extended	Extended	Extended
Runtime (minutes)[2]:	220	195	165
Sealed VRLA:	Valve regulated lead acid	Valve regulated lead acid	Valve regulated lead acid
Heat Resistant:	Extreme	Extreme	Extreme
Hydrogen Emission:	Low	Low	Low
Terminals:	Threaded insert 1/4" - 20 UNC	Threaded insert 1/4" - 20 UNC	Threaded insert 1/4"- 20 UNC

Specifications[4]

Model:	220 GXL	195 GXL	165 GXL
Typical Runtime (minutes)[2]:	220	195	165
Cells Per Unit:	6	6	6
Voltage Per Unit:	12.8	12.8	12.8
Conductance Value:	1175	1100	1000
Max. Discharge Current (A):	900	900	800
Short Circuit Current (A):	2800	2600	2500
10 Second Volts @ 100A:	11.4	11.3	11.2
Ohms Impedance 60Hz:	0.0050	0.0050	0.0055
Nominal Capacity at 20hrs: (to 1.75VPC)	109Ah	100Ah	86
Nominal Capacity at 20hrs: (to 1.70VPC)	110Ah	102Ah	87
BCI Group Size:	31	31	27
Weight (lb/kg):	73/33.2	67/30.5	63/28.6
Height w/ Terminals (in/mm):	8.48/215.4	8.48/215.4	8.05/204.5
Width (in/mm)[3]:	13.42/340.9	13.42/340.9	12.5/317.8
Depth (in/mm)[3]:	6.80/172.7	6.80/172.7	6.83/173.4
Operating Temperature Range Discharge:	-40 to 71°C (-40 to 160°F)	-40 to 71°C (-40 to 160°F)	-40 to 71°C (-40 to 160°F)
Charge (with temp compensation):	-23 to 60°C (-9.4 to 140°F)	-23 to 60°C (-9.4 to 140°F)	-23 to 60°C (-9.4 to 140°F)
Float Charging Voltage (Vdc):	13.5 to 13.8	13.5 to 13.8	13.5 to 13.8
AC Ripple Charger:	0.5% RMS or 1.5% of float charge voltage recommended for best results. Max. allowed = 4% P-P		

Notes:
[1] Warranty varies by country and region. Warranty valid only when used with Alpha approved Power Supplies, Chargers and Enclosures. Consult your sales person for details.
[2] Runtimes calculated using a 25A DC constant current load.
[3] Dimensions at top of battery.
[4] See AlphaCell Users Guide for Additional Details.

Typical Standby Time in Minutes @ 25°C/77°F

XM2S0Max②	4A			6A			8A			10A		
Battery/Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	508	453	396	320	285	249	236	209	183	198	185	144
4 batteries:	701	625	546	444	396	346	329	293	256	261	232	203
6 batteries:	1091	978	853	701	625	546	523	465	407	418	372	325
8 batteries:	1497	1338	1165	959	859	750	720	643	562	577	515	450
9 batteries:	1696	1519	1322	1091	978	853	820	733	640	659	587	514

XM2S0Max③	12A			14A			16A			18A		
Battery/Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	149	132	115	119	106	92	101	89	77	87	78	68
4 batteries:	210	187	163	169	151	132	144	128	112	124	111	99
6 batteries:	339	301	264	275	245	214	236	209	183	204	182	159
8 batteries:	478	419	367	385	341	299	329	293	256	288	255	223
9 batteries:	538	479	419	440	391	342	377	335	294	329	293	256

XM2S0Max②	4A			6A			8A			10A		
Battery/Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	798	712	622	508	453	396	377	335	294	300	267	233
4 batteries:	1091	978	853	701	625	546	523	465	407	418	372	325
6 batteries:	1696	1519	1322	1091	978	853	820	733	640	659	587	514
8 batteries:	2288	2097	1708	1497	1338	1165	1122	1005	877	904	809	706
9 batteries:	2590	2345	2037	1696	1519	1322	1273	1143	997	1029	921	803

XM2S0Max③	12A			14A			16A			18A		
Battery/Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	242	215	188	190	174	151	168	148	125	144	128	107
4 batteries:	339	301	264	275	245	214	236	209	182	204	182	155
6 batteries:	538	479	419	440	391	340	377	335	290	329	290	252
8 batteries:	761	680	577	607	541	479	525	465	402	458	407	351
9 batteries:	843	753	658	692	617	538	597	531	462	523	465	402

*Above calculations based on an AC load with a .90 cable plant power factor.

For contact information visit www.alpha.com

The Alpha Group >

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Canada Tel: +1 604 430 1476 Fax: +1 604 430 8908 Toll Free: +1 800 667 8043 USA Tel: +1 360 647 2360 Fax: +1 360 671 4936	Cyprus Tel: +357 25 375 675 Fax: +357 25 359 595 Russia Tel: +7 495 925 9944 Fax: +7 495 916 1349	Germany Tel: +49 9122 79889 0 Fax: +49 9122 79889 21 United Kingdom Tel: +44 1279 501110 Fax: +44 1279 659076	Lithuania Tel: +370 5 210 5091 Fax: +370 5 210 5290	P.R. China Tel: +852 2736 8863 Fax: +852 2189 7988	Contact USA office

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049-297-10-B002 (06/09)

BATTERY SPECIFICATIONS | N.T.S. | 2

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(ADJACENT TO 1333 SANTA CLARA WAY)
SANTA BARBARA, CA 93103
LAT: 34.42211
LONG: –119.63857

SHEET TITLE:

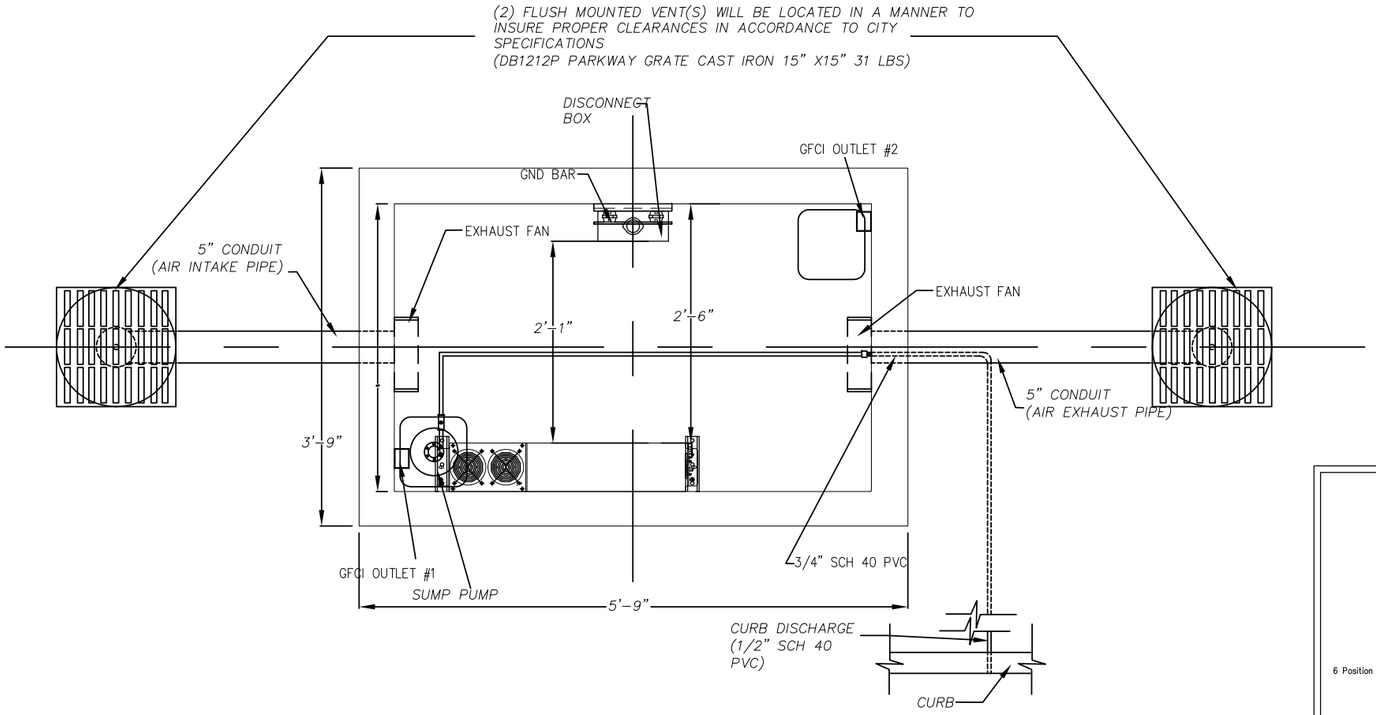
DETAILS

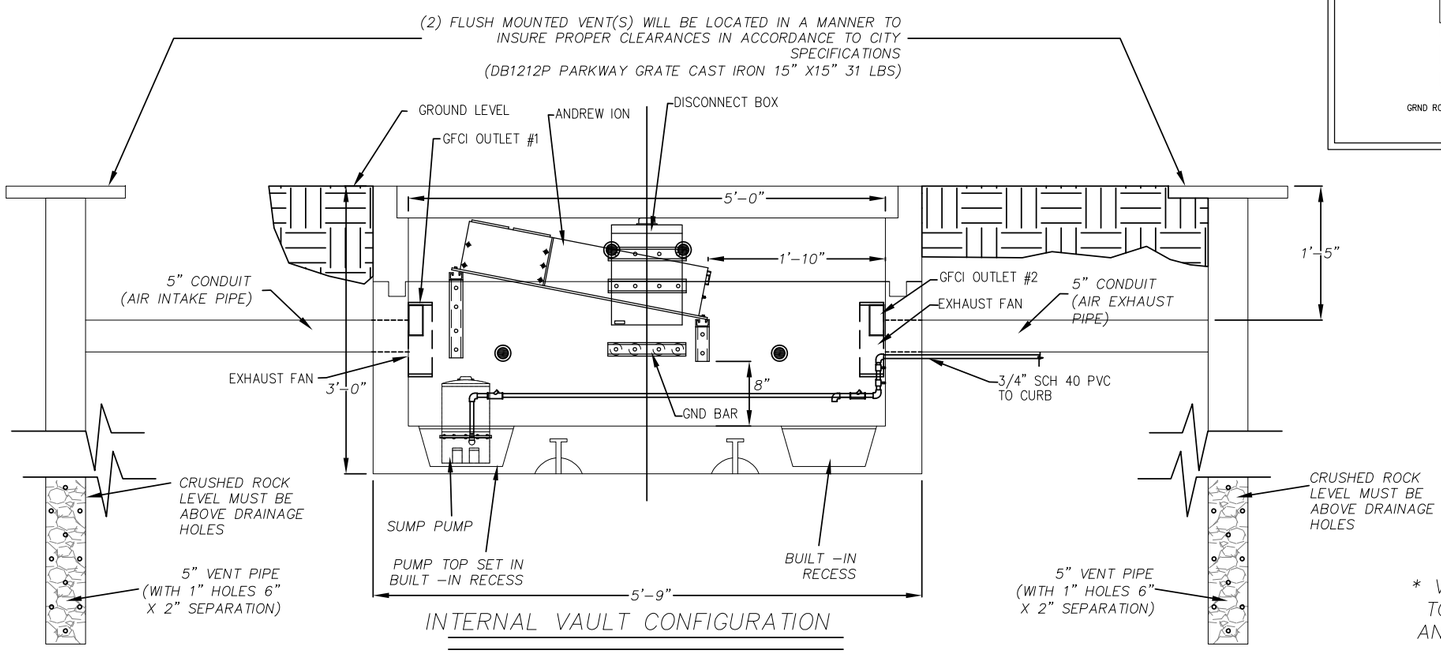
DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:

D–2

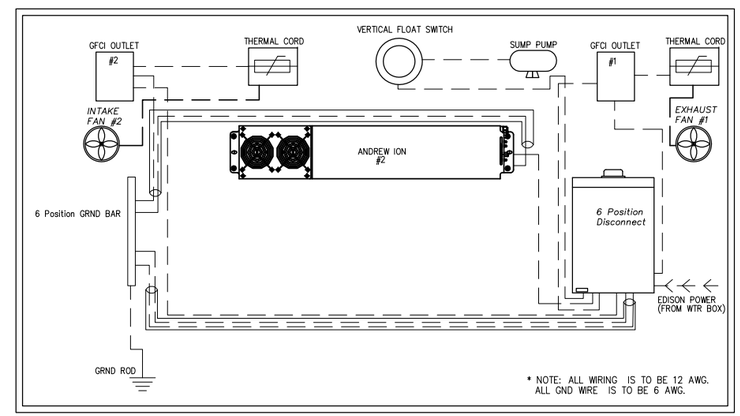




INTERNAL VAULT CONFIGURATION

* VENTS CAN BE FIELD CONFIGURED TO REDUCE OVER ALL FOOT PRINT AND AID REDUCING THE IMPACT ON THE SURROUNDING ENVIRONMENT.

WIRING SCHEMATIC



— — — GROUND WIRE (6 AWG)
— — — POWER WIRE (12 AWG)
1/2" LIQUIDTIGHT FLEX

REV:	DATE/BY:	REVISION DESCRIPTION:
0	FXC 01/15/2013	ISSUED FOR REVIEW
1	FXC 03/25/2013	ISSUED FOR FINAL
2	FXC 08/02/2013	ISSUED FOR FINAL
3	FXC 11/06/2013	ISSUED FOR FINAL
4	FXC 03/08/2014	ISSUED FOR FINAL

ENGINEER/CONSULTANT:

Civil Engineer
CDG
CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630
(949) 753-8807 OFFICE - (949) 753-8833 FAX

CLIENT:

CROWN CASTLE
NG WEST, INC.

STAMP:

SITE INFO:

SITE NAME:
MON27
VERIZON MONTECITO-MON27

SITE ADDRESS: THOMAS BROS PAGE 996 GRID h3
R.O.W. NORTH SIDE OF JAMESON LN
(ADJACENT TO 1333 SANTA CLARA WAY)
SANTA BARBARA, CA 93103
LAT: 34.42211
LONG: -119.63857

SHEET TITLE:

DETAILS

DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:

D-3

CROWN CASTLE NG WEST, INC

VERIZON MONTECITO-MON28

R.O.W. NORTH SIDE OF JAMESON LN
(ADJACENT TO 1566 JAMESON LN)
SANTA BARBARA, CA 93108

GENERAL NOTES

1. APPROVAL OF THESE PLANS BY THE CITY ENGINEER DOES NOT AUTHORIZE ANY WORK TO BE PERFORMED UNTIL A PERMIT HAS BEEN ISSUED.
2. UPON ISSUANCE OF A PERMIT, NO WORK WILL BE PERMITTED ON WEEKENDS OR HOLIDAYS WITHOUT PERMISSION FROM THE ENGINEERING DEPARTMENT.
3. THE APPROVAL OF THIS PLAN OR ISSUANCE OF A PERMIT BY THE LOCAL JURISDICTION DOES NOT AUTHORIZE THE SUBDIVIDER AND OWNER TO VIOLATE ANY FEDERAL, STATE OR CITY LAWS, ORDINANCES, REGULATIONS, OR POLICIES, INCLUDING, BUT NOT LIMITED TO, THE FEDERAL ENDANGERED SPECIES ACT OF 1973 AND AMENDMENTS THERETO (16 USC SECTION 1531 ET.SEQ.).
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SURVEY MONUMENTS AND/OR VERTICAL CONTROL BENCHMARKS WHICH ARE DISTURBED OR DESTROYED BY CONSTRUCTION. A LAND SURVEYOR MUST FIELD LOCATE, REFERENCE, AND/OR PRESERVE ALL HISTORICAL OR CONTROLLING MONUMENTS PRIOR TO ANY EARTHWORK. IF DESTROYED, SUCH MONUMENTS SHALL BE REPLACED WITH APPROPRIATE MONUMENTS BY A LAND SURVEYOR, A CORNER RECORD OR RECORD OF SURVEY, AS APPROPRIATE, SHALL BE FIELD AS REQUIRED BY THE PROFESSIONAL LAND SURVEYORS ACT. IF ANY VERTICAL CONTROL IS TO BE DISTURBED OR DESTROYED, THE LOCAL JURISDICTION FIELD SURVEY SECTION MUST BE NOTIFIED, IN WRITING, AT LEAST 3 DAYS PRIOR TO THE CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE COST OF REPLACING ANY VERTICAL CONTROL BENCHMARKS DESTROYED BY THE CONSTRUCTION.
5. IMPORTANT NOTICE: SECTION 4216 OF THE GOVERNMENT CODE REQUIRES A DIG ALERT IDENTIFICATION NUMBER BE ISSUED BEFORE A "PERMIT TO EXCAVATE" WILL BE VALID. FOR YOUR DIG ALERT I.D. NUMBER, CALL UNDERGROUND SERVICE ALERT, TWO DAYS BEFORE YOU DIG.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR THE POTHOLE AND LOCATING OF ALL EXISTING UTILITIES THAT CROSS THE PROPOSED TRENCH LINE AND MUST MAINTAIN 1' MINIMUM VERTICAL CLEARANCE.
7. CONTRACTOR SHALL SUBMIT TO THE LOCAL JURISDICTION, A CONSTRUCTION PLAN TO PROTECT WATER MAINS PRIOR TO COMMENCING CONSTRUCTION.
8. CONTRACTOR SHALL REPLACE OR REPAIR ALL TRAFFIC SIGNAL LOOPS, CONDUIT, AND LANE STRIPING DAMAGED DURING CONSTRUCTION.
9. CONTRACTOR SHALL NOTIFY THE LOCAL JURISDICTION. A MINIMUM OF 48 HOURS PRIOR TO COMMENCING WORK WITHIN 10' OF ALL SEWER, WATER, AND STORMDRAIN MAIN INCLUDING ALL CROSSINGS.
10. THIS PROJECT WILL BE INSPECTED BY ENGINEERING AND CAPITAL PROJECTS DEPARTMENT, FIELD ENGINEERING DIVISION.
11. AS-BUILT DRAWINGS MUST BE SUBMITTED TO THE CITY RESIDENT ENGINEER PRIOR TO THE ACCEPTANCE OF THIS PROJECT.
12. PUBLIC IMPROVEMENT SUBJECT TO DESUETUDE OR DAMAGE." IF REPAIR OR REPLACEMENT OF SUCH PUBLIC IMPROVEMENTS IS REQUIRED, THE OWNER SHALL OBTAIN THE REQUIRED PERMITS FOR WORK IN THE PUBLIC RIGHT-OFWAY, SATISFACTORY TO THE PERMIT - ISSUING AUTHORITY.
13. PRIOR TO ANY DISTURBANCE TO THE SITE, EXCLUDING UTILITY MARKS-OUTS AND SURVEYING, THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR A PRE-CONSTRUCTION MEETING WITH THE LOCAL JURISDICTION FIELD ENGINEERING DIVISION.
14. PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION SHOWN ON THESE PLANS. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE. THE CONTRACTOR IS RESPONSIBLE TO ATTEND THE LOCAL JURISDICTIONS MONTHLY UTILITY COORDINATION COMMITTEE THE CONSTRUCTION ACTIVITIES WITH THE CITY AND ALL OTHER CONTRACTORS SO THAT NO TRENCH IS CUT WITHIN ANY OF THE CITY STREETS THAT HAVE BEEN CONSTRUCTED, REPAIRED, OR SLURRY SEALED WITHIN THREE YEARS OF THE STREET CONSTRCTUION/RESURFACING DATE.
15. MANHOLES OR COVERS SHALL BE LABELED "CROWN CASTLE" OR "CROWN CASTLE NG WEST".
16. CONTRACTOR SHALL IMPLEMENT AN EROSION AND SEDIMENT CONTROL PROGRAM DURING THE PROJECT CONSTRUCTION ACTIVITIES. THE PROGRAM SHALL MEET THE APPLICABLE REQUIREMENTS OF THE STATE WATER RESOURCE CONTROL BOARD.
17. THE CONTRACTOR SHALL HAVE EMERGENCY MATERIALS AND EQUIPMENT ON HAND FOR UNFORESEEN SITUATIONS, SUCH AS DAMAGE TO UNDERGROUND WATER, SEWER, AND STORM DRAIN FACILITIES WHEREBY FLOWS MAY GENERATE EROSION AND SEDIMENT POLLUTION.

SPECIAL NOTES

THE FOLLOWING NOTES ARE PROVIDED TO GIVE DIRECTIONS TO THE CONTRACTOR BY THE ENGINEER OF WORK. THE CITY ENGINEER'S SIGNATURE ON THESE PLANS DOES NOT CONSTITUTE APPROVAL OF THESE NOTES AND THE CITY WILL NOT BE RESPONSIBLE FOR THEIR ENFORCEMENT.

1. THE CONTRACTOR SHALL VERIFY THE LOCATION EXISTING UNDERGROUND UTILITIES INCLUDING SEWER LATERALS AND WATER SERVICES TO INDIVIDUAL LOTS BOTH VERTICAL AND HORIZONTAL PRIOR TO COMMENCING IMPROVEMENT OPERATIONS.
2. CONTRACTOR SHALL MAKE EXPLORATION EXCAVATIONS AND LOCATE EXISTING FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS OF PLANS IF REVISION IS NECESSARY BECAUSE OF LOCATION OF EXISTING UTILITIES.
3. LOCATION AND ELEVATIONS OF IMPROVEMENTS, TO BE MET BY WORK, SHALL BE CONFIRMED BY FIELD MEASUREMENT PRIOR TO CONSTRUCTION OF NEW WORK.
4. GRADES SHOWN ARE FINISH GRADES, CONTRACTOR SHALL DETERMINE NECESSARY SUB GRADE ELEVATIONS AND SHALL CONSTRUCT SMOOTH TRANSITION BETWEEN FINISH GRADES SHOWN.
5. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE RESPONSIBILITY FOR JOB SITE CONDITION DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS PROVISION SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXPECTING FOR LIABILITY ARISING FROM SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
6. THE CONTRACTOR SHALL BE TOTALLY RESPONSIBLE FOR COMPLIANCE WITH THE PROVISIONS OF THE STATE OF CALIFORNIA SAFETY ORDERS.
7. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE FROM EXISTING RECORDS AND CORROBORATED, WHERE POSSIBLE WITH FIELD TIES. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING THE LOCATIONS SHOWN, BOTH HORIZONTALLY AND VERTICALLY, PRIOR TO CONSTRUCTION. IF EXISTING LOCATIONS VARY SUBSTANTIALLY FROM THE PLANS, THE ENGINEER SHOULD BE NOTIFIED TO MAKE ANY CONSTRUCTION CHANGES REQUIRED.
8. THE CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT FOR ALL SEWER AND WATER MAIN UNDER CROSSING IN ACCORDANCE WITH PART 1 SECTION 5-2 OF THE STANDARD SPECIFICATION.
9. THE CONTRACTOR SHALL REPLACE OR REPAIR ALL TRAFFIC SIGNAL LOOPS, CONDUITS, AND LANE STRIPING DAMAGED DURING CONSTRUCTION.
10. THE CONTRACTOR SHALL SUBMIT WORK PLANS FOR ALL BORE OPERATIONS TWO WEEKS PRIOR TO COMMENCING WORK.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR THE POTHOLE AND LOCATING OF ALL EXISTING UTILITIES THAT CROSS THE PROPOSED TRENCH LINE AND MUST MAINTAIN 1' MINIMUM VERTICAL CLEARANCE.
12. AS-BUILT DRAWINGS MUST BE SUBMITTED TO THE CITY ENGINEER PRIOR TO ACCEPTANCE OF THIS PROJECT.

VICINITY MAP - N.T.S.

GROUND BUS BAR
MECH. GRND. CONN.
CADWELD
ELECTRIC BOX
TELEPHONE BOX
EXISTING SERVICE POLE
SIDEWALK FLAG
EX. MANHOLE
LIGHT POLE
FOUNDATION
SPOT ELEV.
SET POINT
REVISION
DETAIL REF.
ELEVATION REF.
SECTION REF.
PROP./LEASE LINE
MATCH LINE
WORK POINT
TELE. CONDUIT
CENTERLINE
ELECT. CONDUIT
COAXIAL CABLE
MYERS PEDESTAL
VAULT STANDARD 2'X3'
STEEL POLE

SYMBOLS, LINETYPES AND HATCH PATTERNS

EROSION AND SEDIMENT CONTROL NOTES

TEMPORARY EROSION/SEDIMENT CONTROL, PRIOR TO COMPLETION OF FINAL IMPROVEMENTS, SHALL BE PERFORMED BY THE CONTRACTOR OR QUALIFIED PERSON AS INDICATED BELOW:

1. ALL REQUIREMENTS OF THE LOCAL JURISDICTION "LAND DEVELOPMENT MANUAL, STORM WATER STANDARDS" MUST BE INCORPORATED INTO THE DESIGN AND CONSTRUCTION OF THE PROPOSED GRADING/IMPROVEMENTS CONSISTENT WITH THE APPROVED STORM WATER AND/OR WATER POLLUTION CONTROL PLAN (WPCP).
2. FOR STORM DRAIN INLETS, PROVIDE A GRAVEL BAG SILT BASIN IMMEDIATELY UPSTREAM OF INLET AS INDICATED ON DETAILS.
3. FOR INLETS LOCATED AT SUMPS ADJACENT TO TOP OF SLOPES, THE CONTRACTOR SHALL ENSURE THAT WATER DRAINING TO THE SUMP IS DIRECTED INTO THE INLET AND THAT A MINIMUM OF 1.00" FREEBOARD EXISTS AND IS MAINTAINED ABOVE THE TOP OF THE INLET. IF FREEBOARD IS NOT PROVIDED BY GRADING SHOWN ON THESE PLANS, THE CONTRACTOR SHALL PROVIDE IT VIA TEMPORARY MEASURES, I.E. GRAVEL BAGS OR DIKES.
4. THE CONTRACTOR OR QUALIFIED PERSON SHALL BE RESPONSIBLE FOR CLEANUP OF SILT AND MUD ON ADJACENT STREET(S) AND STORM DRAIN SYSTEM DUE TO CONSTRUCTION ACTIVITY.
5. THE CONTRACTOR OR QUALIFIED PERSON SHALL CHECK AND MAINTAIN ALL LINED AND UNLINED DITCHES AFTER EACH RAINFALL.
6. THE CONTRACTOR SHALL REMOVE SILT AND DEBRIS AFTER EACH MAJOR RAINFALL.
7. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON, ALL NECESSARY MATERIALS SHALL BE STOCKPILED ON SITE AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
8. THE CONTRACTOR SHALL RESTORE ALL EROSION/SEDIMENT CONTROL MEASURES TO WORKING ORDER TO THE SATISFACTION OF THE CITY ENGINEER OR RESIDENT ENGINEER AFTER EACH RUN-OFF PRODUCING RAINFALL.
9. THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION CONTROL MEASURES AS MAY BE REQUIRED BY THE RESIDENT ENGINEER DUE TO UNCOMPLETED GRADING OPERATIONS OR UNFORESEEN CIRCUMSTANCES, WHICH MAY ARISE.
10. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATERS CREATE A HAZARDOUS CONDITION.
11. ALL EROSION/SEDIMENT CONTROL MEASURES PROVIDED PER THE APPROVED GRADING PLAN SHALL BE INCORPORATED HEREON. ALL EROSION/SEDIMENT CONTROL FOR INTERIM CONDITIONS SHALL BE DONE TO THE SATISFACTION OF THE RESIDENT ENGINEER.
12. GRADED AREAS AROUND THE PROJECT PERIMETER MUST DRAIN AWAY FROM THE FACE OF THE SLOPE AT THE CONCLUSION OF EACH WORKING DAY.
13. ALL REMOVABLE PROTECTIVE DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN RAIN IS IMMINENT.
14. THE CONTRACTOR SHALL ONLY GRADE, INCLUDING CLEARING AND GRUBBING FOR THE AREAS FOR WHICH THE CONTRACTOR OR QUALIFIED PERSON CAN PROVIDE EROSION/SEDIMENT CONTROL MEASURES.
15. THE CONTRACTOR SHALL ARRANGE FOR WEEKLY MEETINGS DURING OCTOBER 1ST TO APRIL 30TH FOR PROJECT TEAM (GENERAL CONTRACTOR, QUALIFIED PERSON, EROSION CONTROL SUBCONTRACTOR IF ANY, ENGINEER OF WORK, OWNER AND THE RESIDENT ENGINEER) TO EVALUATE THE ADEQUACY OF THE EROSION/SEDIMENT CONTROL MEASURES AND OTHER RELATED CONSTRUCTION ACTIVITIES.

TRAFFIC CONTROL NOTES

THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN (11" X 17") FOR APPROVAL PRIOR TO STARTING WORK. THE PLAN SHOULD BE SUBMITTED TO THE TRAFFIC CONTROL PERMIT COUNTER. CONTRACTOR SHALL OBTAIN A TRAFFIC CONTROL PERMIT A MINIMUM OF TWO (2) WORKING DAYS PRIOR TO STARTING WORK, AND A MINIMUM FIVE (5) DAYS IF WORK WILL AFFECT A BUS STOP OR AN EXISTING TRAFFIC SIGNAL, OR IF WORK WILL REQUIRE A ROAD OR ALLEY CLOSURE.

FOOTAGE TOTALS	
ASPHALT CUT	-
DIRT TRENCH	-
PUNCH THRU	-
BORE	-
TOTAL	-
R&R SWF TOTAL	-

PROJECT DICTIONARY

SITE ADDRESS: R.O.W. NORTH SIDE OF JAMESON LN (ADJACENT TO 1566 JAMESON LN) SANTA BARBARA, CA 93108

APPLICANT: CROWN CASTLE NG WEST, INC
2125 WRIGHT AVE, SUITE #C9
LA VERNE, CA 91750
CONTACT: HEIDI PAYNE
PHONE: (949) 300-9493

CIVIL ENGINEER: CONNELL DESIGN GROUP, LLC
26455 RANCHO PARKWAY SOUTH
LAKE FOREST, CA 92630
CONTACT: FRANK CARTER
(949) 310-8233 PHONE
(949) 753-8833 FAX

CONSTRUCTION CHANGE TABLE

CHANGE	DATE	EFFECTED OR ADDED SHEET NUMBERS

APPLICABLE CODES

ALL WORK SHALL COMPLY WITH THE FOLLOWING APPLICABLE CODES:

*2010 CALIFORNIA BUILDING CODE
*2010 CALIFORNIA MECHANICAL CODE
*2010 CALIFORNIA PLUMBING CODE
*2010 CALIFORNIA ELECTRICAL CODE

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

PROJECT DESCRIPTION

PROJECT CONSISTS OF INSTALLATION OF:

1. (2) OMNI ANTENNA ON EXISTING UTILITY POLE
2. EQUIPMENT SHROUD ON EXISTING POLE
3. EQUIPMENT PEDESTAL W/ BBU AND ELECTRICAL METER AT BASE OF POLE

SHEET INDEX:

TITLE SHEET	T-1 - SHEET 1 OF 8
TOPOGRAPHIC SURVEY	C-1 - SHEET 2 OF 8
SITE PLAN	A-1 - SHEET 3 OF 8
PROPOSED ELEVATIONS	A-2 - SHEET 4 OF 8
GRADING PLAN	A-3 - SHEET 5 OF 8
DETAILS	D-1 - SHEET 6 OF 8
DETAILS	D-2 - SHEET 7 OF 8
DETAILS	D-3 - SHEET 8 OF 8

REV:	DATE/BY:	REVISION DESCRIPTION:
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ENGINEER/CONSULTANT:

Civil Engineer
CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630
(949) 753-8807 OFFICE - (949) 753-8833 FAX

CLIENT:

CROWN CASTLE NG WEST, INC.

STAMP:

SITE INFO:

SITE NAME: MON28
VERIZON MONTECITO-MON28

SITE ADDRESS: THOMAS BROS PAGE 997 GRID A3
R.O.W. NORTH SIDE OF JAMESON LN
(ADJACENT TO 1566 JAMESON LN)
SANTA BARBARA, CA 93108
LAT: 34.42170
LONG: -119.62838

SHEET TITLE:

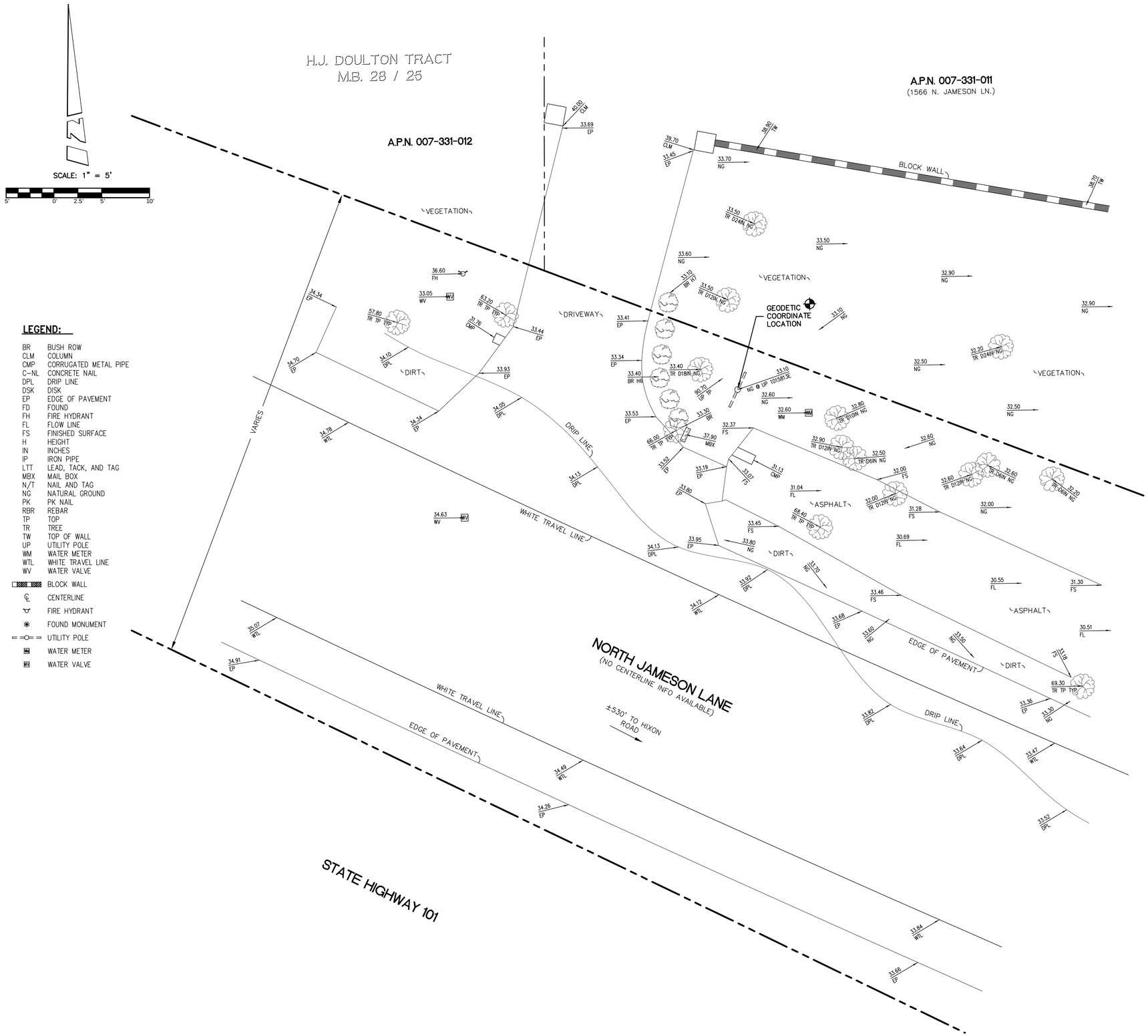
TITLE SHEET

DRAWING INFO:

DRAWN BY: FC

SHEET NUMBER:

T-1



LEGEND:

BR	BUSH ROW
CLM	COLUMN
CMP	CORRUGATED METAL PIPE
C-NL	CONCRETE NAIL
DPL	DRIP LINE
DSK	DISK
EP	EDGE OF PAVEMENT
FD	FOUND
FH	FIRE HYDRANT
FL	FLOW LINE
FS	FINISHED SURFACE
H	HEIGHT
IN	INCHES
IP	IRON PIPE
LTT	LEAD, TACK, AND TAG
MBX	MAIL BOX
N/T	NAIL AND TAG
NG	NATURAL GROUND
PK	PK NAIL
RBR	REBAR
TP	TOP
TR	TREE
TW	TOP OF WALL
UP	UTILITY POLE
WM	WATER METER
WTL	WHITE TRAVEL LINE
WV	WATER VALVE
	BLOCK WALL
℄	CENTERLINE
	FIRE HYDRANT
	FOUND MONUMENT
	UTILITY POLE
WM	WATER METER
WV	WATER VALVE

COORDINATES:

LATITUDE 34°25'18.64" N
LONGITUDE 119°37'42.61" W

NAD 1983 GEODETIC COORDINATES AND ELEVATIONS WERE ESTABLISHED USING SURVEY GRADE "ASHTECH" G.P.S. RECEIVERS AND ASHTECH SURVEY GRADE PRECISION SOFTWARE FOR POST-PROCESSING.

BASIS OF BEARINGS:

THE SOUTHWESTERLY LINE OF PARCEL 1 BEING NORTH 86°39'11" WEST PER PARCEL MAP NO. 14,688, P.M.B. 62/45-52, RECORDS OF SANTA BARBARA COUNTY. *(NOT SHOWN HEREON)*

ASSESSOR'S IDENTIFICATION:

N/A

AREA:

N/A

BENCH MARK REFERENCE:

U.S.G.S. BENCH MARK "BM 37"

UNITED STATES GEOLOGICAL SURVEY BENCH MARK "BM 37" AS SHOWN ON THE "SANTA BARBARA" 7.5 MINUTE QUADRANGLE MAP.

ELEVATION: 39.5 FEET A.M.S.L. (NAVD88) (DATUM VERIFIED IN FIELD TO BE WITHIN 1-A ACCURACY STANDARDS)

TITLE REPORT IDENTIFICATION:

N/A

EASEMENT NOTES:

N/A

LEGAL DESCRIPTION:

N/A

DATE OF SURVEY:

JULY 24, 2013

SURVEYORS NOTE:

THE RIGHT OF WAY LINES AND THEIR DIMENSIONS SHOWN HEREON ARE PER READILY AVAILABLE RECORDED INFORMATION AND THEIR LOCATIONS ARE APPROXIMATE, PENDING RECEIPT OF TITLE REPORT(S) FOR THE ADJACENT REAL PROPERTY.

LIVING PLANTS STATEMENT:

THE HEIGHTS AND ELEVATIONS FOR THE TREES, BUSHES AND OTHER LIVING PLANTS SHOWN HEREON, SHOULD BE CONSIDERED APPROXIMATE (+/-) AND ONLY VALID FOR THE DATE OF THIS SURVEY. THEY ARE PROVIDED AS A GENERAL REFERENCE AND SHOULD NOT BE USED FOR DESIGN PURPOSES.

REV:	DATE/BY:	REVISION DESCRIPTION:
1	08/02/13 MDL	ISSUED FOR REVIEW

ENGINEER/CONSULTANT:

CDG
CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PKWY. SOUTH
LAKE FOREST, CA 92630-8326
(949) 753-8807 OFFICE - (949) 753-8833 FAX

SITE BUILDER:

CROWN CASTLE
NG WEST, INC.

SURVEYOR:

BERT HAZE
AND ASSOCIATES, INC.
LAND SURVEYING & MAPPING
3188 AIRWAY AVENUE, SUITE K1
COSTA MESA, CALIFORNIA 92626
714 557-1567 OFFICE
714 557-1568 FAX

JN. 706.240

STAMP:

PROFESSIONAL LAND SURVEYOR
BERT HAZE
No. 7211
Exp. 3-31-14
STATE OF CALIFORNIA

SITE INFO:

SITE NAME:

MON28
VERIZON MONTECITO-MON28

SITE ADDRESS:

R.O.W. NORTH SIDE OF N. JAMESON LN
(ADJACENT TO 1566 N. JAMESON LN)
SANTA BARBARA, CA 93108

SHEET TITLE:

TOPOGRAPHIC SURVEY

DRAWING INFO:

DWG. NAME:	DRAWN BY:	DATE:
MON28	MDL	08/02/13

SHEET NUMBER:

1 OF 1 | C-1

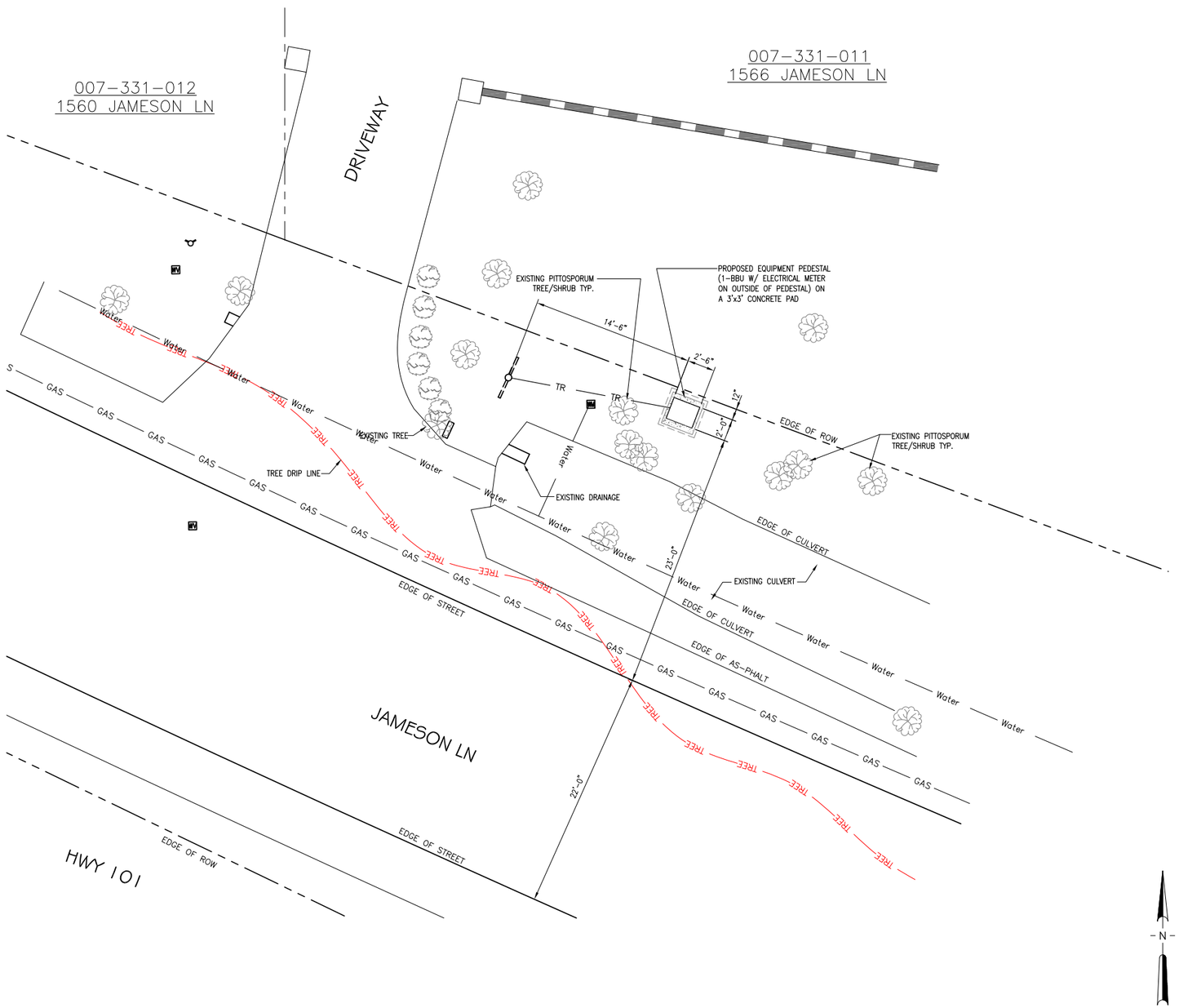
NOTE:

1. ANTENNA TO BE PAINTED LIGHT-GREY (BEHR ULTRA BASE #4854)

2. ALL EQUIPMENT TO BE PAINTED A MATTE BROWN (ULTRA-HIDE #3537-0500)

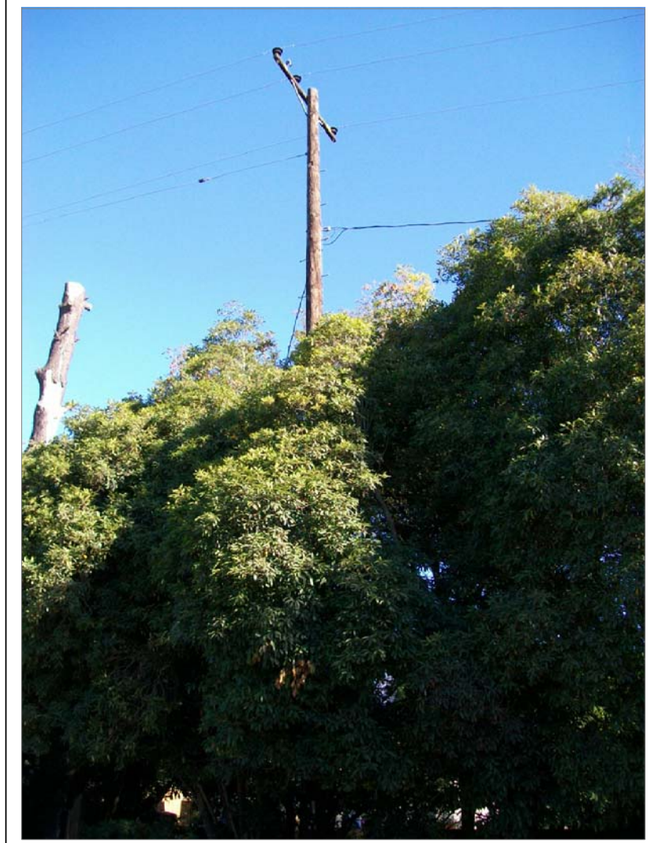
LEGEND

TREE DRIP LINE	—— TREE ——
CAL OAK DRIP LINE	—— OAK ——
TRENCH	—— TR ——
CAL OAK	(→)



SITE PLAN

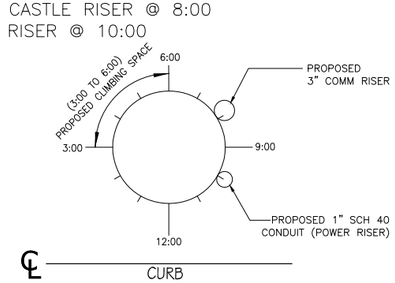
SCALE: 3/16"=1'-0" | 0 16' 32' | 1



EXISTING PHOTO | SCALE: N.T.S. | 3

POLE WILL BE STEPPED IN ACCORDANCE TO G095 STANDARDS IN RESPECT TO CLIMBING SPACE.

1-3" CROWN CASTLE RISER @ 8:00
1-1" POWER RISER @ 10:00



RISER PROFILE | SCALE: N.T.S. | 2

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(ADJACENT TO 1566 JAMESON LN)
SANTA BARBARA, CA 93108
LAT: 34.42170
LONG: -119.62838

SHEET TITLE:

SITE PLAN AND ELEVATION

DRAWING INFO:

DRAWN BY:
FC

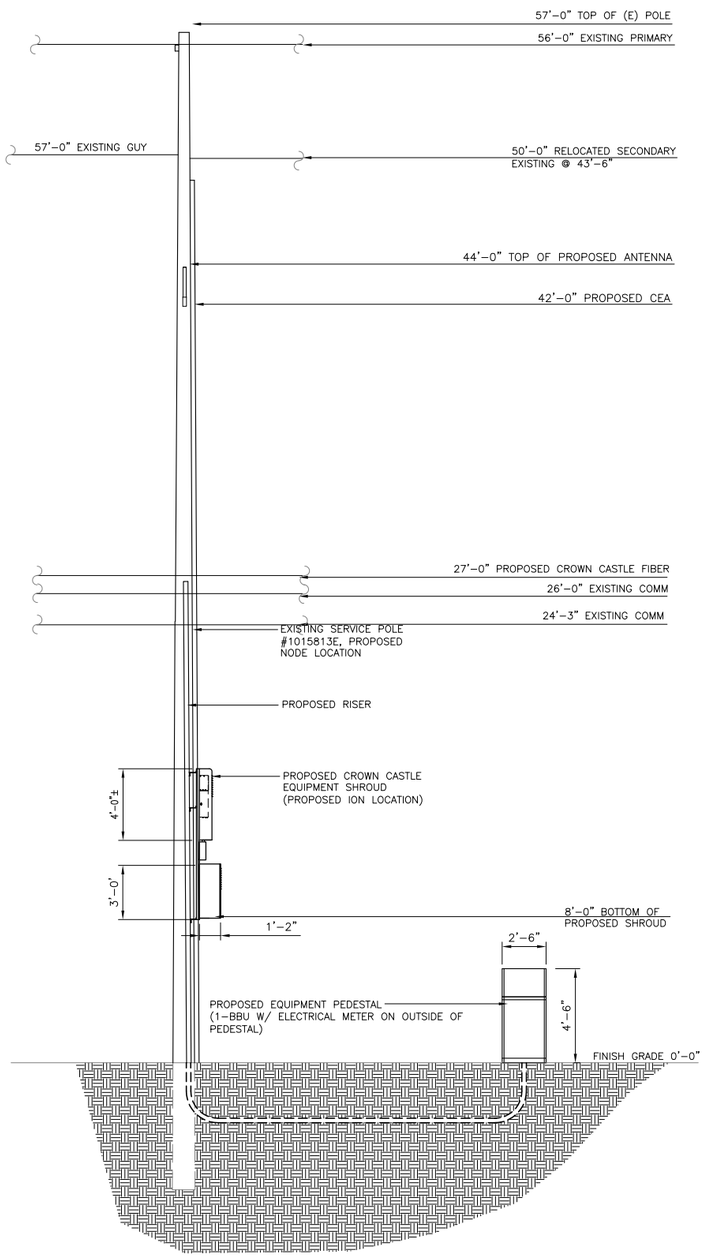
SHEET NUMBER:

A-1

NOTE:

1. ANTENNA TO BE PAINTED LIGHT-GREY (BEHR ULTRA BASE #4854)

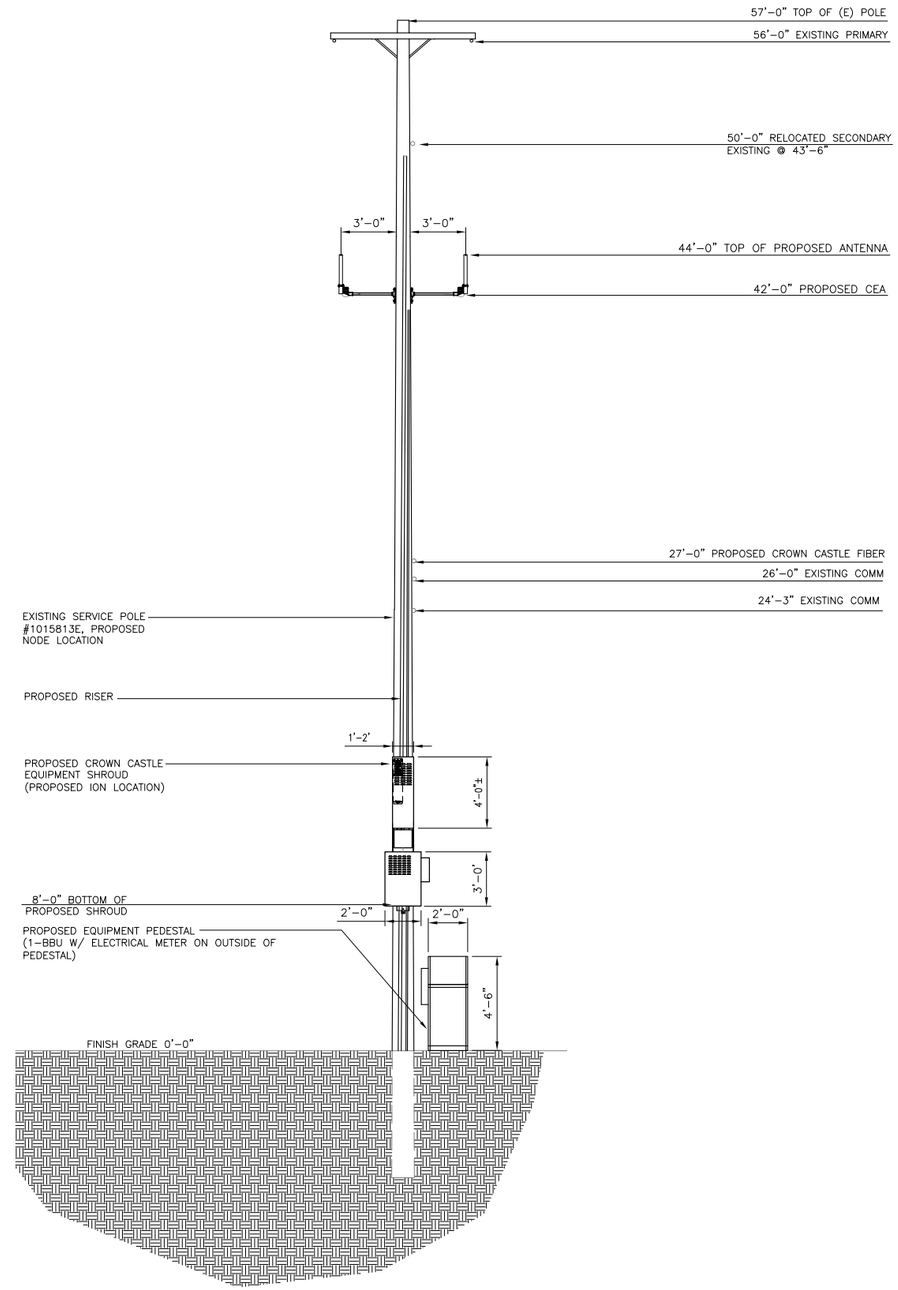
2. ALL EQUIPMENT TO BE PAINTED A MATTE BROWN (ULTRA-HIDE #3537-0500)



PROPOSED ELEVATION LOOKING NORTH

SCALE: 1/4"=1'-0" 0 2' 4'

1



PROPOSED ELEVATION LOOKING WEST

SCALE: 1/4"=1'-0" 0 2' 4'

2

REV:	DATE/BY:	REVISION DESCRIPTION:
0	FXC 01/15/2013	ISSUED FOR REVIEW
1	FXC 03/25/2013	ISSUED FOR FINAL
2	FXC 11/06/2013	ISSUED FOR FINAL
3	FXC 03/08/2013	ISSUED FOR FINAL

ENGINEER/CONSULTANT:

Civil Engineer

CDG

CONNELL DESIGN GROUP, LLC

CONSULTING CIVIL ENGINEERS

26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630

(949) 753-8807 OFFICE - (949) 753-8833 FAX

CLIENT:

CROWN CASTLE

NG WEST, INC.

STAMP:

SITE INFO:

SITE NAME:

MON28

VERIZON MONTECITO-MON28

SITE ADDRESS: THOMAS BROS PAGE 997 GRID A3
R.O.W. NORTH SIDE OF JAMESON LN
(ADJACENT TO 1566 JAMESON LN)
SANTA BARBARA, CA 93108
LAT: 34.42170
LONG: -119.62838

SHEET TITLE:

ELEVATION

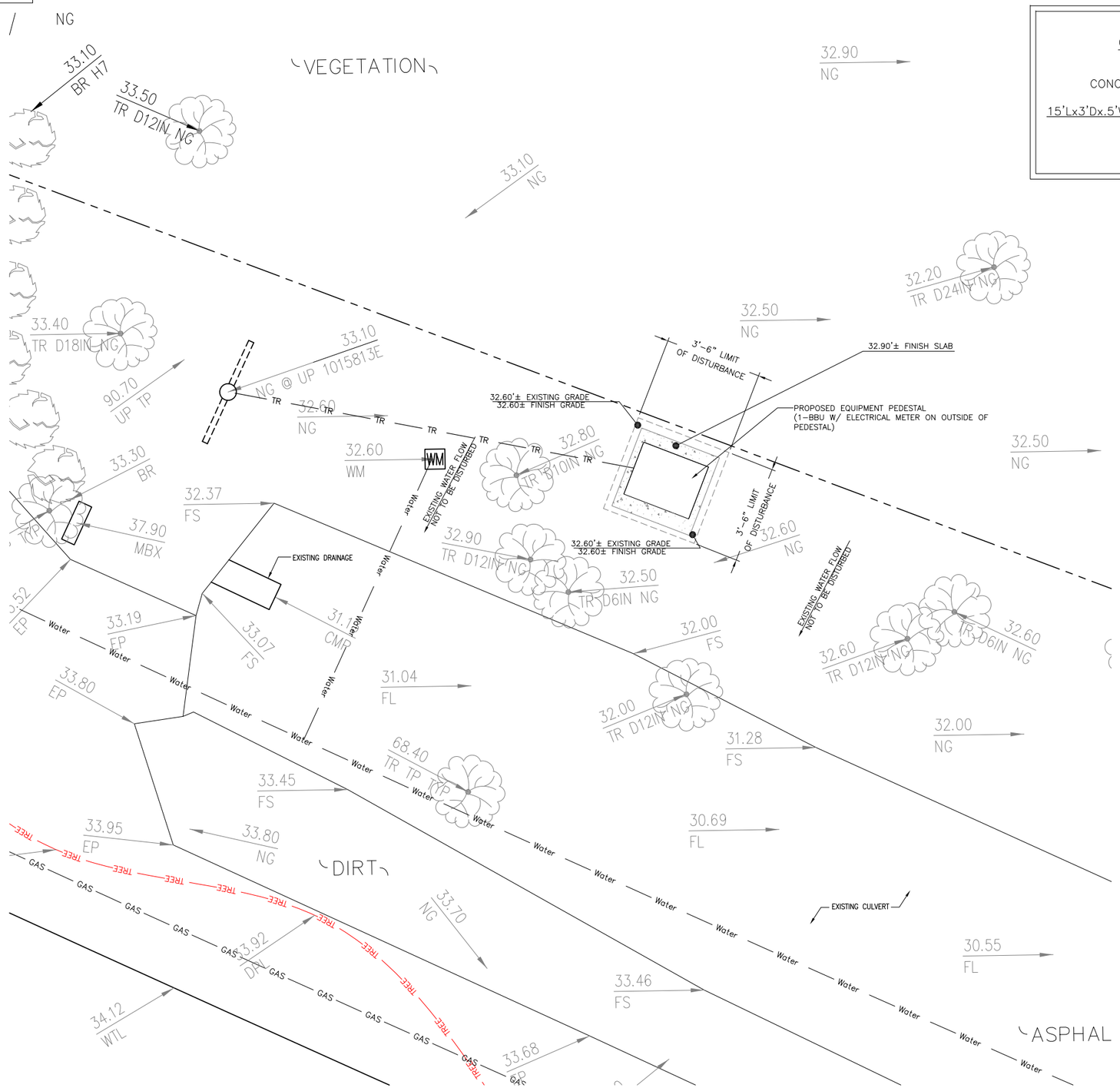
DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:

A-3

NOTE:
NO CUT AND FILL REQUIRED



GRADING CALCULATION

CONCRETE PAD:	2.997 CF
15'Lx3'Dx.5'W TRENCH:	22.5± CF
TOTAL:	25.497± CF

LEGEND

TREE DRIP LINE	TREE
CAL OAK DRIP LINE	OAK
TRENCH	TR
CAL OAK	

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GRADING PLAN

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A-3

Outdoor Omni-directional Antenna

COMBA

OOA-360V06N0-3 VPol, 696-960/1710-2170MHz, 360°, 4.0/6.0 dBi

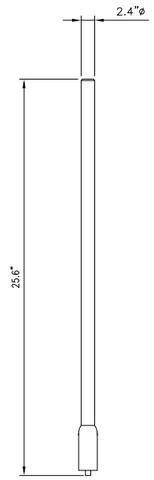
Technical Specifications

Electrical

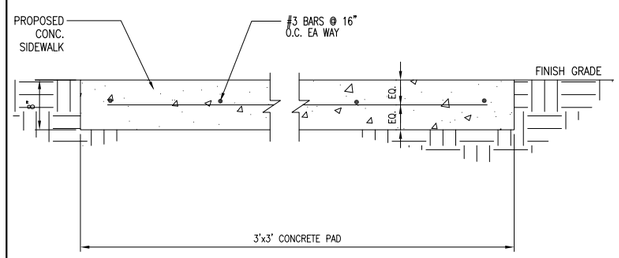
Frequency Range	MHz	696–960	1710–2170
Polarization		Vertical	
Gain	dBi	4.0±1	6.0±1
Horizontal Beamwidth	deg	360	
Vertical Beamwidth	deg	22–53	20–26
Electrical Downtilt–Fixed	deg	0	
VSWR		1.8	
Maximum Power	W	200	
Impedance		50	
Lightning Protection		Direct Ground	

Mechanical

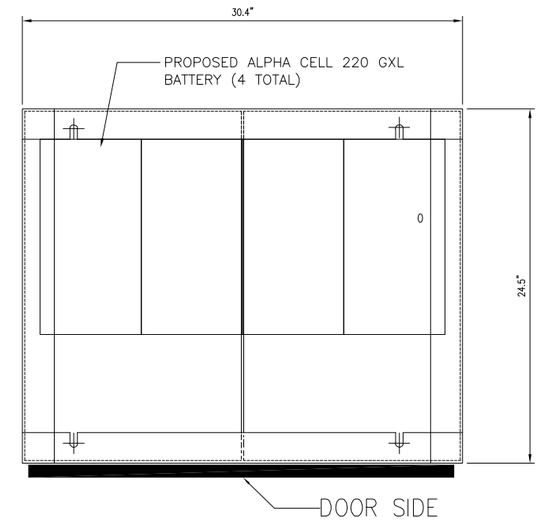
Dimensions, HxDia	mm(in)	650x60 (25.6x2.4)
Weight, with Mounting kit	kg (lb)	1 (2.2)
Radome Material and Color		Fiberglass, Light Grey
Radiating Element Material		Copper
Connector Type and Location		N–Female, Bottom
Operational Temperature		–55 to +70
Operational Humidity	%	95
Operational Wind Speed	km/h (mph)	200 (124)
Shipping Dimensions, HxWxD	mm (in)	670x100x100 (26.4x3.9x3.9)
Shipping Weight	kg (lb)	1.2 (2.65)

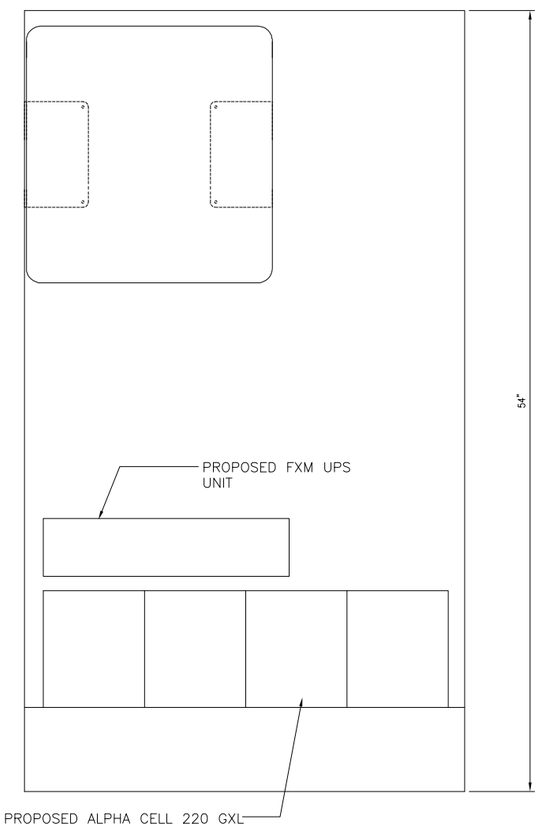


ANTENNA SPECIFICATIONS N.T.S. 1



CONCRETE PAD N.T.S. 3





EQUIPMENT PEDESTAL N.T.S. 5

Electrical

Power Supply
Mains power, Vac ..... 115 or 230

Power consumption, Watts ..... 1100 max. < 750 @ normal operation

700 MHz SISO/MIMO

Frequency range, MHz
Uplink ..... 698 to 716/776 to 787
Downlink ..... 728 to 757

Output power per carrier*, dBm

Number of Carriers	1	2	4	8
LTE	43	40**	37	34

850 MHz

Frequency range, MHz
Uplink ..... 824 to 849
Downlink ..... 869 to 894

Output power per carrier*, dBm

Number of Carriers	1	2	4	8
Analog	43	40	37	34
GSM	43	40	37	34
CDMA	43	40	37	34
LTE	43	40 **	37	34
UMTS	42	39	36	33

20W for Cell, PCS bands and 700MHz MIMO

1900 MHz

Frequency range, MHz
Uplink ..... 1850 to 1915
Downlink ..... 1930 to 1995

Output power per carrier*, dBm

Number of Carriers	1	2	4	8
GSM	43	40	37	34
CDMA	43	40	37	34
LTE	43	40 **	37	34
UMTS	42	39	36	33

CommScope

ION-M7P/7P/85P/19P

Noise figure, dB
IIP3 optimized ..... +10 max.
Noise figure optimized ..... +6 max. 4.5 typical

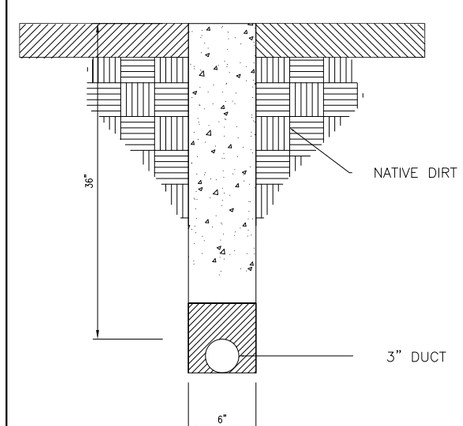
Mechanical****

Height, width, depth, mm (in) ..... 817 x 245 x 218 (32.2 x 9.6 x 8.6)

Weight, kg (lb) 40 (88.2)

Page 1, February 27, 2013 Company Confidential

ION-M7P/7P/85P/19P N.T.S. 2



* TRENCH TO BE BACK FILL WITH NATIVE MATERIAL & COMPACTED TO 90% OR BETTER & REPLACE LANDSCAPING IN KIND.

TRENCH N.T.S. 4

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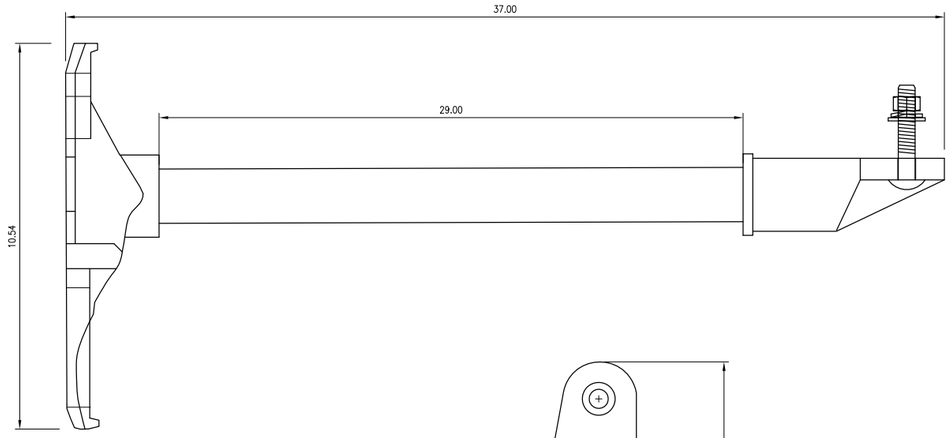
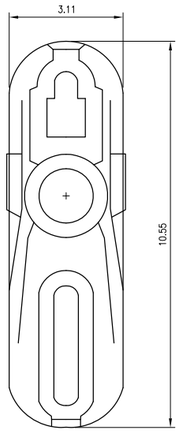
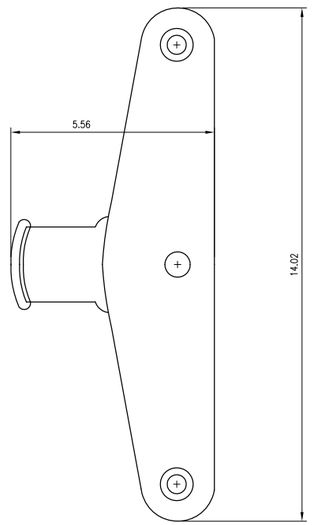
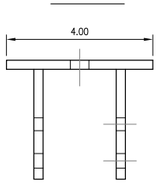


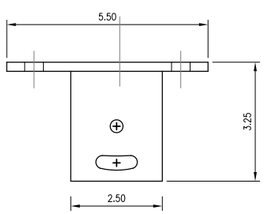




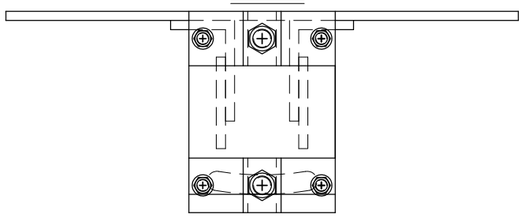
COMM SPACE BRACKET

FRONT VIEW

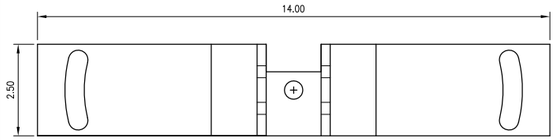




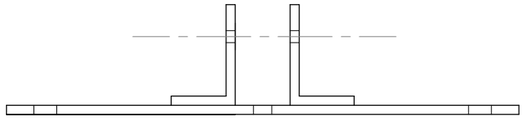
TOP VIEW



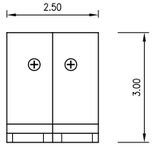
TOP VIEW



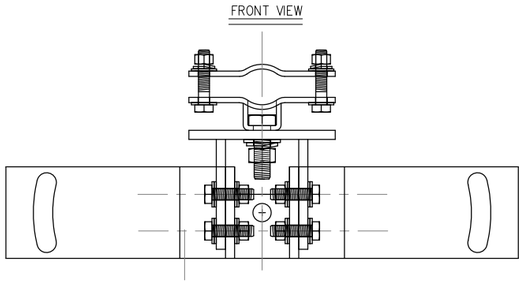
FRONT VIEW



SIDE VIEW



FRONT VIEW



ANTENNA MOUNT | N.T.S. | 1

AlphaCell
General Specifications

Model:	220 GXL	195 GXL	165 GXL
Warranty[1]:	4 to 5 year full replacement	4 to 5 year full replacement	4 to 5 year full replacement
Service Life:	Extended	Extended	Extended
Runtime (minutes)[2]:	220	195	165
Sealed VRLA:	Valve regulated lead acid	Valve regulated lead acid	Valve regulated lead acid
Heat Resistant:	Extreme	Extreme	Extreme
Hydrogen Emission:	Low	Low	Low
Terminals:	Threaded insert 1/4" - 20 UNC	Threaded insert 1/4" - 20 UNC	Threaded insert 1/4"- 20 UNC

Specifications[4]

Model:	220 GXL	195 GXL	165 GXL
Typical Runtime (minutes)[2]:	220	195	165
Cells Per Unit:	6	6	6
Voltage Per Unit:	12.8	12.8	12.8
Conductance Value:	1175	1100	1000
Max. Discharge Current (A):	900	900	800
Short Circuit Current (A):	2800	2600	2500
10 Second Volts @ 100A:	11.4	11.3	11.2
Ohms Impedance 60Hz:	0.0050	0.0050	0.0055
Nominal Capacity at 20hrs: (to 1.75VPC)	109Ah	100Ah	86
Nominal Capacity at 20hrs: (to 1.70VPC)	110Ah	102Ah	87
BCI Group Size:	31	31	27
Weight (lb/kg):	73/33.2	67/30.5	63/28.6
Height w/ Terminals (in/mm):	8.48/215.4	8.48/215.4	8.05/204.5
Width (in/mm)[3]:	13.42/340.9	13.42/340.9	12.5/317.8
Depth (in/mm)[3]:	6.80/172.7	6.80/172.7	6.83/173.4
Operating Temperature Range Discharge:	-40 to 71°C (-40 to 160°F)	-40 to 71°C (-40 to 160°F)	-40 to 71°C (-40 to 160°F)
Charge (with temp compensation):	-23 to 60°C (-9.4 to 140°F)	-23 to 60°C (-9.4 to 140°F)	-23 to 60°C (-9.4 to 140°F)
Float Charging Voltage (Vdc):	13.5 to 13.8	13.5 to 13.8	13.5 to 13.8
AC Ripple Charger:	0.5% RMS or 1.5% of float charge voltage recommended for best results. Max. allowed = 4% P-P		

Notes:
[1] Warranty varies by country and region. Warranty valid only when used with Alpha approved Power Supplies, Chargers and Enclosures. Consult your sales person for details.
[2] Runtimes calculated using a 25A DC constant current load.
[3] Dimensions at top of battery.
[4] See AlphaCell Users Guide for Additional Details.

Typical Standby Time in Minutes @ 25°C/77°F

XM2S0Vac②	4A			6A			8A			10A		
Battery/Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	508	453	396	320	285	249	236	209	183	188	165	144
4 batteries:	701	625	546	444	396	346	329	293	256	261	232	203
6 batteries:	1091	973	853	701	625	546	523	465	407	418	372	325
8 batteries:	1497	1338	1165	969	859	750	720	643	562	577	515	450
9 batteries:	1696	1519	1322	1101	978	853	820	733	640	659	587	514
XM2S0Vac③	12A			14A			16A			18A		
Battery/Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	149	132	115	119	106	92	101	89	77	87	78	68
4 batteries:	210	187	163	169	151	132	144	128	112	124	111	99
6 batteries:	339	301	264	275	245	214	236	209	183	204	182	159
8 batteries:	478	419	367	385	341	299	329	293	256	288	255	223
9 batteries:	538	479	419	440	391	342	377	335	294	329	293	256
XM2S0Vac②	4A			6A			8A			10A		
Battery/Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	798	712	622	508	453	396	377	335	294	300	267	233
4 batteries:	1091	973	853	701	625	546	523	465	407	418	372	325
6 batteries:	1696	1519	1322	1101	978	853	820	733	640	659	587	514
8 batteries:	2288	2097	1708	1497	1338	1165	1122	1005	877	904	809	706
9 batteries:	2590	2345	2037	1696	1519	1322	1273	1143	997	1029	921	803
XM2S0Vac②	12A			14A			16A			18A		
Battery/Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	242	215	188	190	174	151	168	148	125	144	128	107
4 batteries:	339	301	264	275	245	214	236	209	182	204	182	155
6 batteries:	538	479	419	440	391	340	377	335	290	329	293	252
8 batteries:	741	660	577	607	541	470	525	465	402	458	407	351
9 batteries:	843	753	658	692	617	538	597	531	462	523	465	402

*Above calculations based on an AC load with a .96 cable plant power factor.

For contact information visit www.alpha.com

The Alpha Group >

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049-297-10-B002 (06/09)

BATTERY SPECIFICATIONS | N.T.S. | 2

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DETAILS

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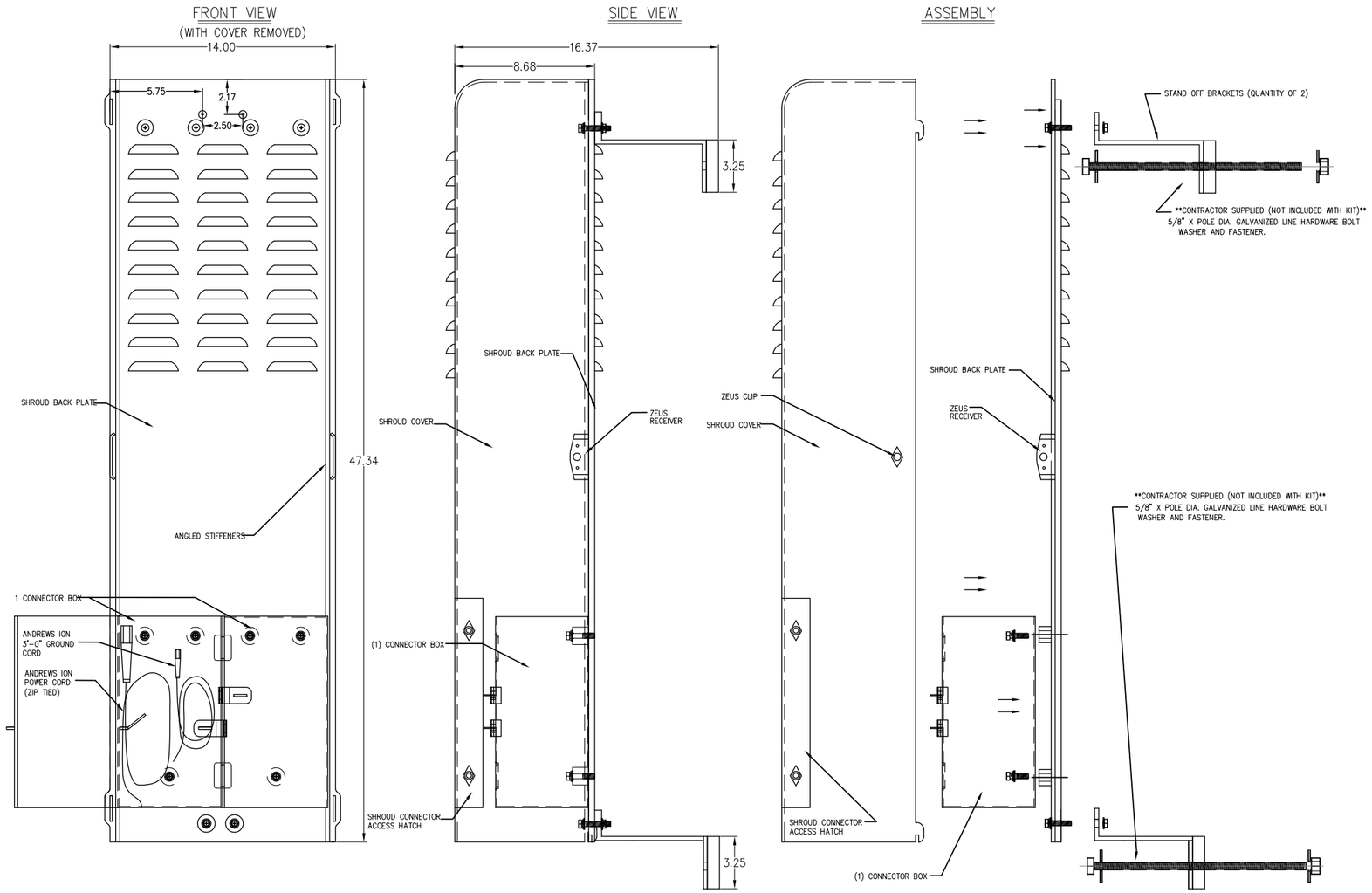
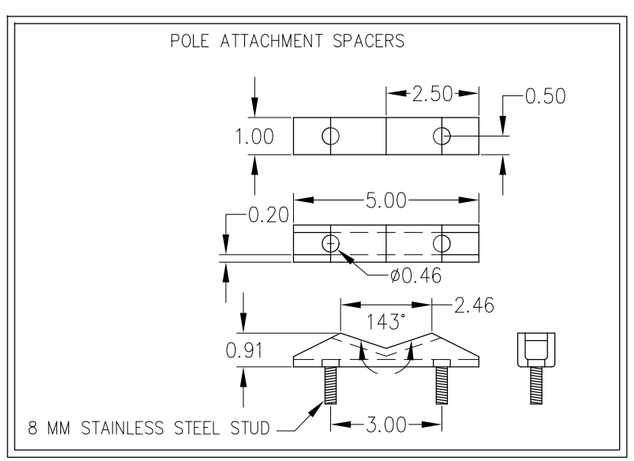
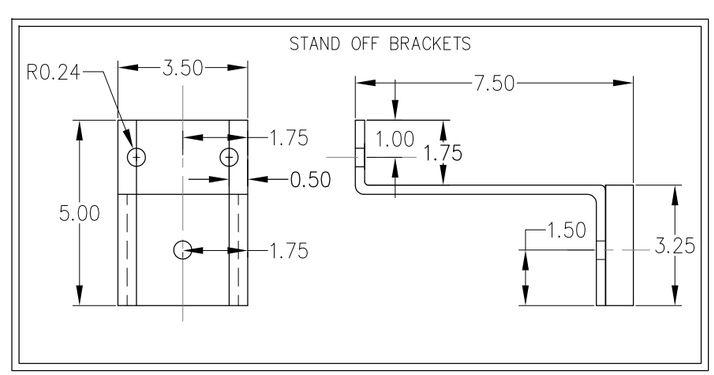
DRAWN BY:
FC

SHEET NUMBER:

D–2







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SHROUD DETAIL

N.T.S.

CROWN CASTLE NG WEST, INC

VERIZON MONTECITO-MON29m1

R.O.W. WEST SIDE OF LILAC DR
(ADJACENT TO 663 LILAC DR)
SANTA BARBARA, CA 93108

GENERAL NOTES

1. APPROVAL OF THESE PLANS BY THE CITY ENGINEER DOES NOT AUTHORIZE ANY WORK TO BE PERFORMED UNTIL A PERMIT HAS BEEN ISSUED.
2. UPON ISSUANCE OF A PERMIT, NO WORK WILL BE PERMITTED ON WEEKENDS OR HOLIDAYS WITHOUT PERMISSION FROM THE ENGINEERING DEPARTMENT.
3. THE APPROVAL OF THIS PLAN OR ISSUANCE OF A PERMIT BY THE LOCAL JURISDICTION DOES NOT AUTHORIZE THE SUBDIVIDER AND OWNER TO VIOLATE ANY FEDERAL, STATE OR CITY LAWS, ORDINANCES, REGULATIONS, OR POLICIES, INCLUDING, BUT NOT LIMITED TO, THE FEDERAL ENDANGERED SPECIES ACT OF 1973 AND AMENDMENTS THERETO (16 USC SECTION 1531 ET.SEQ.).
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SURVEY MONUMENTS AND/OR VERTICAL CONTROL BENCHMARKS WHICH ARE DISTURBED OR DESTROYED BY CONSTRUCTION. A LAND SURVEYOR MUST FIELD LOCATE, REFERENCE, AND/OR PRESERVE ALL HISTORICAL OR CONTROLLING MONUMENTS PRIOR TO ANY EARTHWORK. IF DESTROYED, SUCH MONUMENTS SHALL BE REPLACED WITH APPROPRIATE MONUMENTS BY A LAND SURVEYOR, A CORNER RECORD OR RECORD OF SURVEY, AS APPROPRIATE, SHALL BE FIELD AS REQUIRED BY THE PROFESSIONAL LAND SURVEYORS ACT. IF ANY VERTICAL CONTROL IS TO BE DISTURBED OR DESTROYED, THE LOCAL JURISDICTION FIELD SURVEY SECTION MUST BE NOTIFIED, IN WRITING, AT LEAST 3 DAYS PRIOR TO THE CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE COST OF REPLACING ANY VERTICAL CONTROL BENCHMARKS DESTROYED BY THE CONSTRUCTION.
5. IMPORTANT NOTICE: SECTION 4216 OF THE GOVERNMENT CODE REQUIRES A DIG ALERT IDENTIFICATION NUMBER BE ISSUED BEFORE A "PERMIT TO EXCAVATE" WILL BE VALID. FOR YOUR DIG ALERT I.D. NUMBER, CALL UNDERGROUND SERVICE ALERT, TWO DAYS BEFORE YOU DIG.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR THE POTHOLE AND LOCATING OF ALL EXISTING UTILITIES THAT CROSS THE PROPOSED TRENCH LINE AND MUST MAINTAIN 1' MINIMUM VERTICAL CLEARANCE.
7. CONTRACTOR SHALL SUBMIT TO THE LOCAL JURISDICTION, A CONSTRUCTION PLAN TO PROTECT WATER MAINS PRIOR TO COMMENCING CONSTRUCTION.
8. CONTRACTOR SHALL REPLACE OR REPAIR ALL TRAFFIC SIGNAL LOOPS, CONDUIT, AND LANE STRIPING DAMAGED DURING CONSTRUCTION.
9. CONTRACTOR SHALL NOTIFY THE LOCAL JURISDICTION. A MINIMUM OF 48 HOURS PRIOR TO COMMENCING WORK WITHIN 10' OF ALL SEWER, WATER, AND STORMDRAIN MAIN INCLUDING ALL CROSSINGS.
10. THIS PROJECT WILL BE INSPECTED BY ENGINEERING AND CAPITAL PROJECTS DEPARTMENT, FIELD ENGINEERING DIVISION.
11. AS-BUILT DRAWINGS MUST BE SUBMITTED TO THE CITY RESIDENT ENGINEER PRIOR TO THE ACCEPTANCE OF THIS PROJECT.
12. PUBLIC IMPROVEMENT SUBJECT TO DESUETUDE OR DAMAGE." IF REPAIR OR REPLACEMENT OF SUCH PUBLIC IMPROVEMENTS IS REQUIRED, THE OWNER SHALL OBTAIN THE REQUIRED PERMITS FOR WORK IN THE PUBLIC RIGHT-OFWAY, SATISFACTORY TO THE PERMIT - ISSUING AUTHORITY.
13. PRIOR TO ANY DISTURBANCE TO THE SITE, EXCLUDING UTILITY MARKS-OUTS AND SURVEYING, THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR A PRE-CONSTRUCTION MEETING WITH THE LOCAL JURISDICTION FIELD ENGINEERING DIVISION.
14. PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION SHOWN ON THESE PLANS. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE. THE CONTRACTOR IS RESPONSIBLE TO ATTEND THE LOCAL JURISDICTIONS MONTHLY UTILITY COORDINATION COMMITTEE THE CONSTRUCTION ACTIVITIES WITH THE CITY AND ALL OTHER CONTRACTORS SO THAT NO TRENCH IS CUT WITHIN ANY OF THE CITY STREETS THAT HAVE BEEN CONSTRUCTED, REPAIRED, OR SLURRY SEALED WITHIN THREE YEARS OF THE STREET CONSTRCTUION/RESURFACING DATE.
15. MANHOLES OR COVERS SHALL BE LABELED "CROWN CASTLE" OR "CROWN CASTLE NG WEST".
16. CONTRACTOR SHALL IMPLEMENT AN EROSION AND SEDIMENT CONTROL PROGRAM DURING THE PROJECT CONSTRUCTION ACTIVITIES. THE PROGRAM SHALL MEET THE APPLICABLE REQUIREMENTS OF THE STATE WATER RESOURCE CONTROL BOARD.
17. THE CONTRACTOR SHALL HAVE EMERGENCY MATERIALS AND EQUIPMENT ON HAND FOR UNFORESEEN SITUATIONS, SUCH AS DAMAGE TO UNDERGROUND WATER, SEWER, AND STORM DRAIN FACILITIES WHEREBY FLOWS MAY GENERATE EROSION AND SEDIMENT POLLUTION.

SPECIAL NOTES

THE FOLLOWING NOTES ARE PROVIDED TO GIVE DIRECTIONS TO THE CONTRACTOR BY THE ENGINEER OF WORK. THE CITY ENGINEER'S SIGNATURE ON THESE PLANS DOES NOT CONSTITUTE APPROVAL OF THESE NOTES AND THE CITY WILL NOT BE RESPONSIBLE FOR THEIR ENFORCEMENT.

1. THE CONTRACTOR SHALL VERIFY THE LOCATION EXISTING UNDERGROUND UTILITIES INCLUDING SEWER LATERALS AND WATER SERVICES TO INDIVIDUAL LOTS BOTH VERTICAL AND HORIZONTAL PRIOR TO COMMENCING IMPROVEMENT OPERATIONS.
2. CONTRACTOR SHALL MAKE EXPLORATION EXCAVATIONS AND LOCATE EXISTING FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS OF PLANS IF REVISION IS NECESSARY BECAUSE OF LOCATION OF EXISTING UTILITIES.
3. LOCATION AND ELEVATIONS OF IMPROVEMENTS, TO BE MET BY WORK, SHALL BE CONFIRMED BY FIELD MEASUREMENT PRIOR TO CONSTRUCTION OF NEW WORK.
4. GRADES SHOWN ARE FINISH GRADES, CONTRACTOR SHALL DETERMINE NECESSARY SUB GRADE ELEVATIONS AND SHALL CONSTRUCT SMOOTH TRANSITION BETWEEN FINISH GRADES SHOWN.
5. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE RESPONSIBILITY FOR JOB SITE CONDITION DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS PROVISION SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXPECTING FOR LIABILITY ARISING FROM SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
6. THE CONTRACTOR SHALL BE TOTALLY RESPONSIBLE FOR COMPLIANCE WITH THE PROVISIONS OF THE STATE OF CALIFORNIA SAFETY ORDERS.
7. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE FROM EXISTING RECORDS AND CORROBORATED, WHERE POSSIBLE WITH FIELD TIES. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING THE LOCATIONS SHOWN, BOTH HORIZONTALLY AND VERTICALLY, PRIOR TO CONSTRUCTION. IF EXISTING LOCATIONS VARY SUBSTANTIALLY FROM THE PLANS, THE ENGINEER SHOULD BE NOTIFIED TO MAKE ANY CONSTRUCTION CHANGES REQUIRED.
8. THE CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT FOR ALL SEWER AND WATER MAIN UNDER CROSSING IN ACCORDANCE WITH PART 1 SECTION 5-2 OF THE STANDARD SPECIFICATION.
9. THE CONTRACTOR SHALL REPLACE OR REPAIR ALL TRAFFIC SIGNAL LOOPS, CONDUITS, AND LANE STRIPING DAMAGED DURING CONSTRUCTION.
10. THE CONTRACTOR SHALL SUBMIT WORK PLANS FOR ALL BORE OPERATIONS TWO WEEKS PRIOR TO COMMENCING WORK.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR THE POTHOLE AND LOCATING OF ALL EXISTING UTILITIES THAT CROSS THE PROPOSED TRENCH LINE AND MUST MAINTAIN 1' MINIMUM VERTICAL CLEARANCE.
12. AS-BUILT DRAWINGS MUST BE SUBMITTED TO THE CITY ENGINEER PRIOR TO ACCEPTANCE OF THIS PROJECT.

VICINITY MAP - N.T.S.

EROSION AND SEDIMENT CONTROL NOTES

TEMPORARY EROSION/SEDIMENT CONTROL, PRIOR TO COMPLETION OF FINAL IMPROVEMENTS, SHALL BE PERFORMED BY THE CONTRACTOR OR QUALIFIED PERSON AS INDICATED BELOW:

1. ALL REQUIREMENTS OF THE LOCAL JURISDICTION "LAND DEVELOPMENT MANUAL, STORM WATER STANDARDS" MUST BE INCORPORATED INTO THE DESIGN AND CONSTRUCTION OF THE PROPOSED GRADING/IMPROVEMENTS CONSISTENT WITH THE APPROVED STORM WATER AND/OR WATER POLLUTION CONTROL PLAN (WPCP).
2. FOR STORM DRAIN INLETS, PROVIDE A GRAVEL BAG SILT BASIN IMMEDIATELY UPSTREAM OF INLET AS INDICATED ON DETAILS.
3. FOR INLETS LOCATED AT SUMPS ADJACENT TO TOP OF SLOPES, THE CONTRACTOR SHALL ENSURE THAT WATER DRAINING TO THE SUMP IS DIRECTED INTO THE INLET AND THAT A MINIMUM OF 1.00" FREEBOARD EXISTS AND IS MAINTAINED ABOVE THE TOP OF THE INLET. IF FREEBOARD IS NOT PROVIDED BY GRADING SHOWN ON THESE PLANS, THE CONTRACTOR SHALL PROVIDE IT VIA TEMPORARY MEASURES, I.E. GRAVEL BAGS OR DIKES.
4. THE CONTRACTOR OR QUALIFIED PERSON SHALL BE RESPONSIBLE FOR CLEANUP OF SILT AND MUD ON ADJACENT STREET(S) AND STORM DRAIN SYSTEM DUE TO CONSTRUCTION ACTIVITY.
5. THE CONTRACTOR OR QUALIFIED PERSON SHALL CHECK AND MAINTAIN ALL LINED AND UNLINED DITCHES AFTER EACH RAINFALL.
6. THE CONTRACTOR SHALL REMOVE SILT AND DEBRIS AFTER EACH MAJOR RAINFALL.
7. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON, ALL NECESSARY MATERIALS SHALL BE STOCKPILED ON SITE AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
8. THE CONTRACTOR SHALL RESTORE ALL EROSION/SEDIMENT CONTROL MEASURES TO WORKING ORDER TO THE SATISFACTION OF THE CITY ENGINEER OR RESIDENT ENGINEER AFTER EACH RUN-OFF PRODUCING RAINFALL.
9. THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION CONTROL MEASURES AS MAY BE REQUIRED BY THE RESIDENT ENGINEER DUE TO UNCOMPLETED GRADING OPERATIONS OR UNFORESEEN CIRCUMSTANCES, WHICH MAY ARISE.
10. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATERS CREATE A HAZARDOUS CONDITION.
11. ALL EROSION/SEDIMENT CONTROL MEASURES PROVIDED PER THE APPROVED GRADING PLAN SHALL BE INCORPORATED HEREON. ALL EROSION/SEDIMENT CONTROL FOR INTERIM CONDITIONS SHALL BE DONE TO THE SATISFACTION OF THE RESIDENT ENGINEER.
12. GRADED AREAS AROUND THE PROJECT PERIMETER MUST DRAIN AWAY FROM THE FACE OF THE SLOPE AT THE CONCLUSION OF EACH WORKING DAY.
13. ALL REMOVABLE PROTECTIVE DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN RAIN IS IMMINENT.
14. THE CONTRACTOR SHALL ONLY GRADE, INCLUDING CLEARING AND GRUBBING FOR THE AREAS FOR WHICH THE CONTRACTOR OR QUALIFIED PERSON CAN PROVIDE EROSION/SEDIMENT CONTROL MEASURES.
15. THE CONTRACTOR SHALL ARRANGE FOR WEEKLY MEETINGS DURING OCTOBER 1ST TO APRIL 30TH FOR PROJECT TEAM (GENERAL CONTRACTOR, QUALIFIED PERSON, EROSION CONTROL SUBCONTRACTOR IF ANY, ENGINEER OF WORK, OWNER AND THE RESIDENT ENGINEER) TO EVALUATE THE ADEQUACY OF THE EROSION/SEDIMENT CONTROL MEASURES AND OTHER RELATED CONSTRUCTION ACTIVITIES.

TRAFFIC CONTROL NOTES

THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN (11" X 17") FOR APPROVAL PRIOR TO STARTING WORK. THE PLAN SHOULD BE SUBMITTED TO THE TRAFFIC CONTROL PERMIT COUNTER. CONTRACTOR SHALL OBTAIN A TRAFFIC CONTROL PERMIT A MINIMUM OF TWO (2) WORKING DAYS PRIOR TO STARTING WORK, AND A MINIMUM FIVE (5) DAYS IF WORK WILL AFFECT A BUS STOP OR AN EXISTING TRAFFIC SIGNAL, OR IF WORK WILL REQUIRE A ROAD OR ALLEY CLOSURE.

FOOTAGE TOTALS	
ASPHALT CUT	-
DIRT TRENCH	-
PUNCH THRU	-
BORE	-
TOTAL	-
R&R SWF TOTAL	-

GROUND BUS BAR
MECH. GRND. CONN.
CADWELD
ELECTRIC BOX
TELEPHONE BOX
EXISTING SERVICE POLE
SIDEWALK FLAG
EX. MANHOLE
LIGHT POLE
FOUNDATION
SPOT ELEV.
SET POINT
REVISION
DETAIL REF.
ELEVATION REF.
SECTION REF.
PROP./LEASE LINE
MATCH LINE
WORK POINT
TELE. CONDUIT
CENTERLINE
ELECT. CONDUIT
COAXIAL CABLE
MYERS PEDESTAL
VAULT STANDARD 2'X3'
STEEL POLE

SYMBOLS, LINETYPES AND HATCH PATTERNS

PROJECT DICTIONARY

SITE ADDRESS: R.O.W. SOUTH SIDE OF ALISOS DR (ADJACENT TO 2091 ALISOS DR) SANTA BARBARA, CA 93108

APPLICANT: CROWN CASTLE NG WEST, INC
2125 WRIGHT AVE, SUITE #C9
LA VERNE, CA 91750
CONTACT: HEIDI PAYNE
PHONE: (949) 300-9493

CIVIL ENGINEER: CONNELL DESIGN GROUP, LLC
26455 RANCHO PARKWAY SOUTH
LAKE FOREST, CA 92630
CONTACT: FRANK CARTER
(949) 310-8233 PHONE
(949) 753-8833 FAX

CONSTRUCTION CHANGE TABLE

CHANGE	DATE	EFFECTED OR ADDED SHEET NUMBERS

APPLICABLE CODES

ALL WORK SHALL COMPLY WITH THE FOLLOWING APPLICABLE CODES:

*2010 CALIFORNIA BUILDING CODE
*2010 CALIFORNIA MECHANICAL CODE
*2010 CALIFORNIA PLUMBING CODE
*2010 CALIFORNIA ELECTRICAL CODE

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

PROJECT DESCRIPTION

PROJECT CONSISTS OF INSTALLATION OF:

1. (2) OMNI DIRECTIONAL ANTENNAS ON EXISTING UTILITY POLE
2. EQUIPMENT VAULT AT BASE OF EXISTING POLE
3. EQUIPMENT PEDESTAL W/ BBU AND ELECTRICAL METER AT BASE OF POLE

SHEET INDEX:

TITLE SHEET	T-1 - SHEET 1 OF 8
TOPOGRAPHIC SURVEY	C-1 - SHEET 2 OF 8
SITE PLAN	A-1 - SHEET 3 OF 8
PROPOSED ELEVATIONS	A-2 - SHEET 4 OF 8
GRADING PLAN	A-3 - SHEET 5 OF 8
DETAILS	D-1 - SHEET 6 OF 8
DETAILS	D-2 - SHEET 7 OF 8
DETAILS	D-3 - SHEET 8 OF 8

REV:	DATE/BY:	REVISION DESCRIPTION:
0	FXC 09/02/2013	ISSUED FOR REVIEW
1	FXC 11/06/2013	ISSUED FOR REVIEW
2	FXC 03/08/2013	ISSUED FOR FINAL

ENGINEER/CONSULTANT:

Civil Engineer

CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630
(949) 753-8807 OFFICE - (949) 753-8833 FAX

CLIENT:

CROWN CASTLE NG WEST, INC.

STAMP:

SITE INFO:

SITE NAME:
MON29m1
VERIZON MONTECITO-MON29m1

SITE ADDRESS: THOMAS BROS PAGE 997 GRID C1
R.O.W. WEST SIDE OF LILAC DR
(ADJACENT TO 663 LILAC DR)
SANTA BARBARA, CA 93108
LAT: 34.439831
LONG: -119.608297

SHEET TITLE:

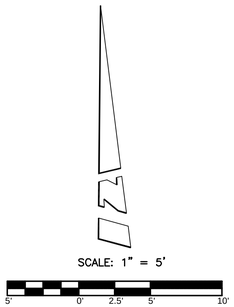
TITLE SHEET

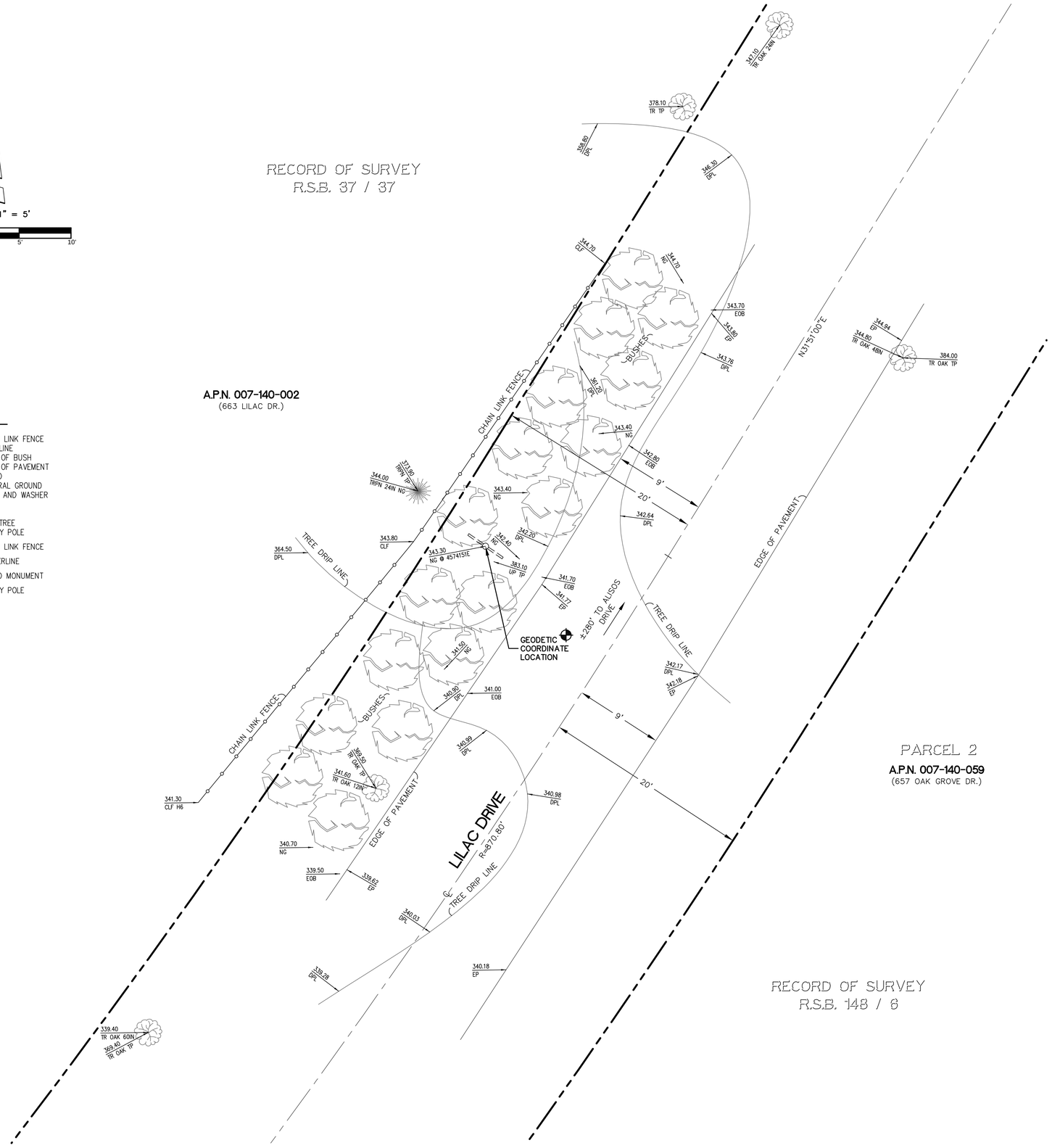
DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:

T-1





LEGEND:

CLF	CHAIN LINK FENCE
DPL	DRIP LINE
EOB	EDGE OF BUSH
EP	EDGE OF PAVEMENT
FD	FOUND
NG	NATURAL GROUND
S/W	SPIKE AND WASHER
TP	TOP
TR	TREE
TRPN	PINE TREE
UP	UTILITY POLE
—o—	CHAIN LINK FENCE
℄	CENTERLINE
◉	FOUND MONUMENT
=o=	UTILITY POLE

COORDINATES:

LATITUDE 34°26'23.39" N
LONGITUDE 119°36'29.87" W

NAD 1983 GEODETIC COORDINATES AND ELEVATIONS WERE ESTABLISHED USING SURVEY GRADE "ASHTECH" G.P.S. RECEIVERS AND ASHTECH SURVEY GRADE PRECISION SOFTWARE FOR POST-PROCESSING.

BASIS OF BEARINGS:

THE CENTERLINE OF LILAC DRIVE BEING NORTH 31°51'00" EAST PER FOUND MONUMENTS ON RECORD OF SURVEY, R.S.B. 148/6, RECORDS OF SANTA BARBARA COUNTY.

ASSESSOR'S IDENTIFICATION:

N/A

AREA:

N/A

BENCH MARK REFERENCE:

U.S.G.S. BENCH MARK "BM 269"

UNITED STATES GEOLOGICAL SURVEY BENCH MARK "BM 269" AS SHOWN ON THE "CARPINTERIA" 7.5 MINUTE QUADRANGLE MAP.

ELEVATION: 271.5 FEET A.M.S.L. (NAVD88) (DATUM VERIFIED IN FIELD TO BE WITHIN 1-A ACCURACY STANDARDS)

TITLE REPORT IDENTIFICATION:

N/A

EASEMENT NOTES:

N/A

LEGAL DESCRIPTION:

N/A

DATE OF SURVEY:

AUGUST 01, 2013

SURVEYORS NOTE:

THE RIGHT OF WAY LINES AND THEIR DIMENSIONS SHOWN HEREON ARE PER READILY AVAILABLE RECORDED INFORMATION AND THEIR LOCATIONS ARE APPROXIMATE, PENDING RECEIPT OF TITLE REPORT(S) FOR THE ADJACENT REAL PROPERTY.

LIVING PLANTS STATEMENT:

THE HEIGHTS AND ELEVATIONS FOR THE TREES, BUSHES AND OTHER LIVING PLANTS SHOWN HEREON, SHOULD BE CONSIDERED APPROXIMATE (+/-) AND ONLY VALID FOR THE DATE OF THIS SURVEY. THEY ARE PROVIDED AS A GENERAL REFERENCE AND SHOULD NOT BE USED FOR DESIGN PURPOSES.

REV:	DATE/BY:	REVISION DESCRIPTION:
1	08/08/13 MDL	ISSUED FOR REVIEW

ENGINEER/CONSULTANT:

CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PKWY. SOUTH
LAKE FOREST, CA 92630-8326
(949) 753-8807 OFFICE - (949) 753-8833 FAX

SITE BUILDER:

CROWN CASTLE
NG WEST, INC.

SURVEYOR:

BERT HAZE
AND ASSOCIATES, INC.
LAND SURVEYING & MAPPING
3188 AIRWAY AVENUE, SUITE K1
COSTA MESA, CALIFORNIA 92626
714 557-1567 OFFICE
714 557-1568 FAX

JN. 706.241

STAMP:

PROFESSIONAL LAND SURVEYOR
BERT HAZE
No. 7211
Exp. 3-31-14
STATE OF CALIFORNIA

SITE INFO:

SITE NAME:

MON29
VERIZON MONTECITO-MON29

SITE ADDRESS:

R.O.W. WEST SIDE OF LILAC DR
(ADJACENT TO 663 LILAC DR)
SANTA BARBARA, CA 93108

SHEET TITLE:

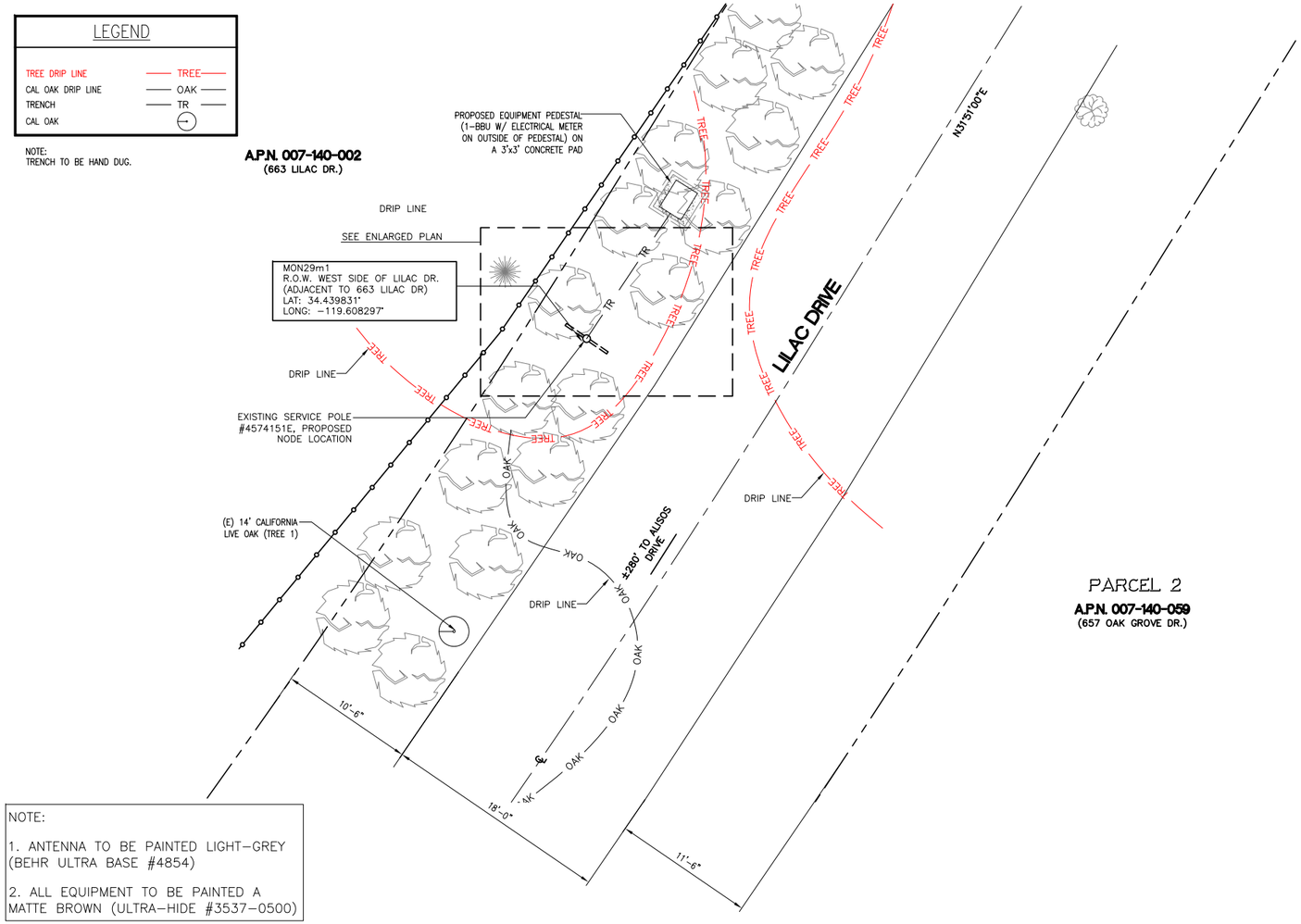
TOPOGRAPHIC SURVEY

DRAWING INFO:

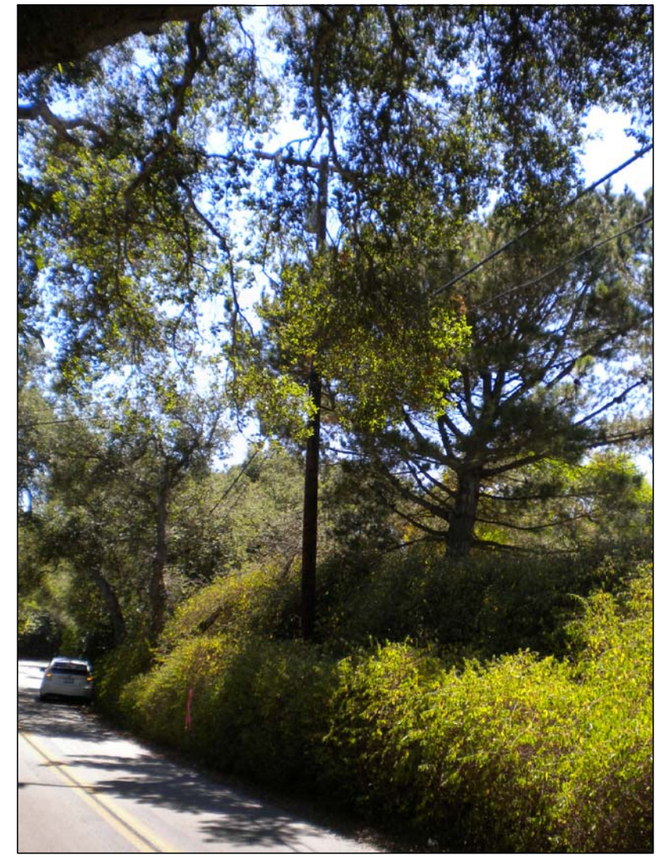
DWG. NAME:	DRAWN BY:	DATE:
MON29	MDL	08/08/13

SHEET NUMBER:

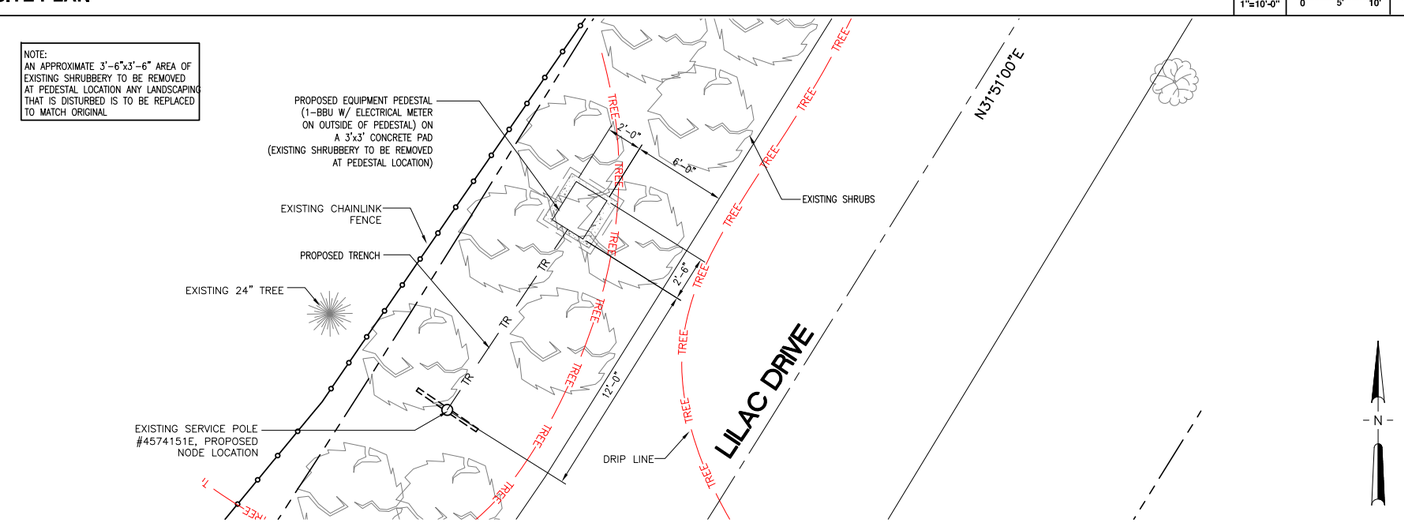
1 OF 1 | C-1



SITE PLAN — SCALE: 1"=10'-0" (0 5' 10') — 1



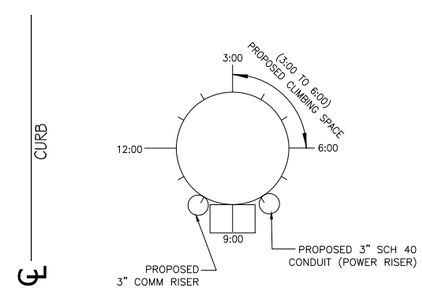
EXISTING PHOTO — SCALE: N.T.S. — 3



ENLARGED SITE PLAN — SCALE: 1/4"=1'-0" (0 2' 4') — 2

POLE WILL BE STEPPED IN ACCORDANCE TO G095 STANDARDS IN RESPECT TO CLIMBING SPACE.

1-3" CROWN CASTLE RISER @ 8:00
1-3" POWER RISER @ 10:00



RISER PROFILE — SCALE: N.T.S. — 4

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Civil Engineer

CDG

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CONSULTING CIVIL ENGINEERS
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(949) 753-8807 OFFICE - (949) 753-8833 FAX

CLIENT:

CROWN CASTLE
NG WEST, INC.

STAMP:

SITE INFO:

SITE NAME:
MON29m1
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SITE ADDRESS: THOMAS BROS PAGE 997 GRID C1
R.O.W. WEST SIDE OF LILAC DR
(ADJACENT TO 663 LILAC DR)
SANTA BARBARA, CA 93108
LAT: 34.439831
LONG: -119.608297

SHEET TITLE:

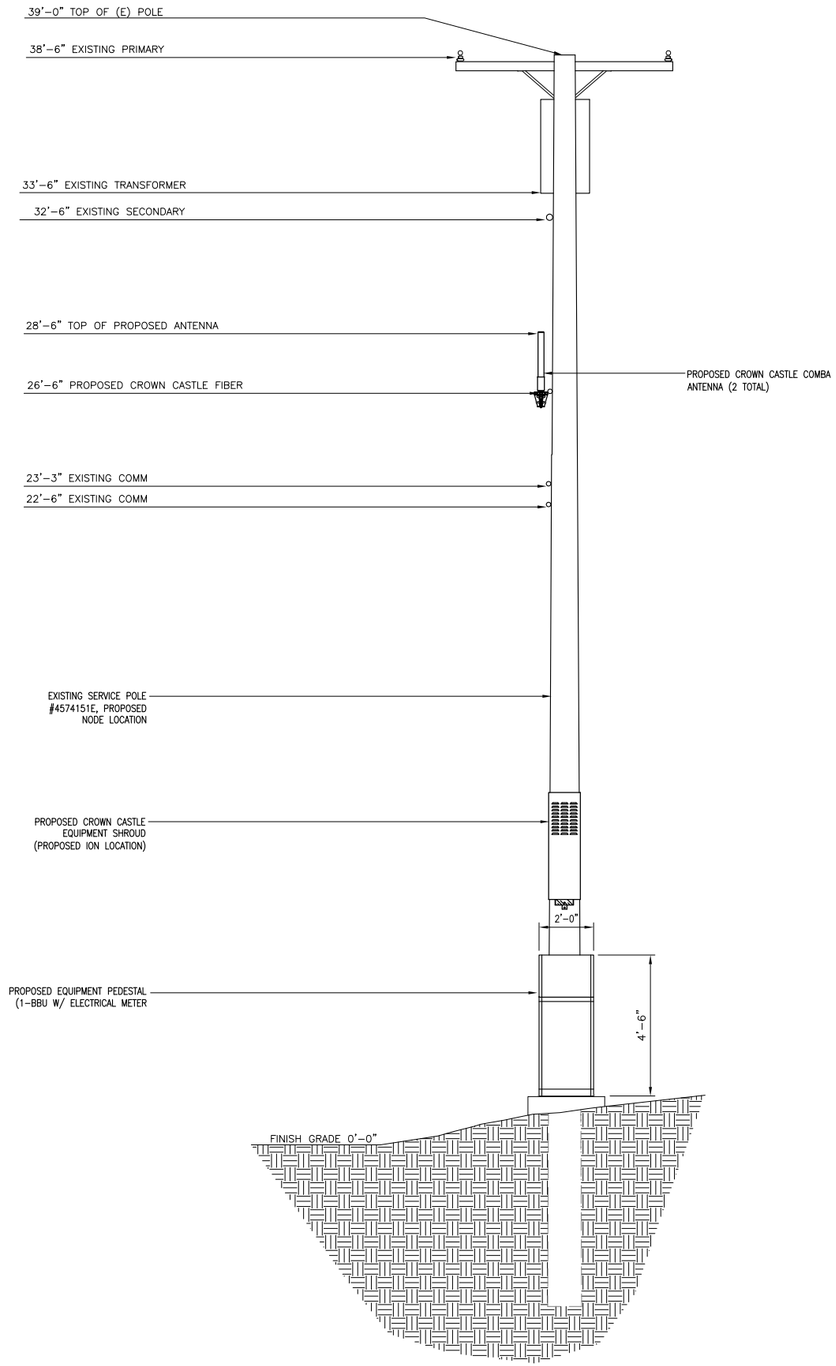
SITE PLAN AND ELEVATION

DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:

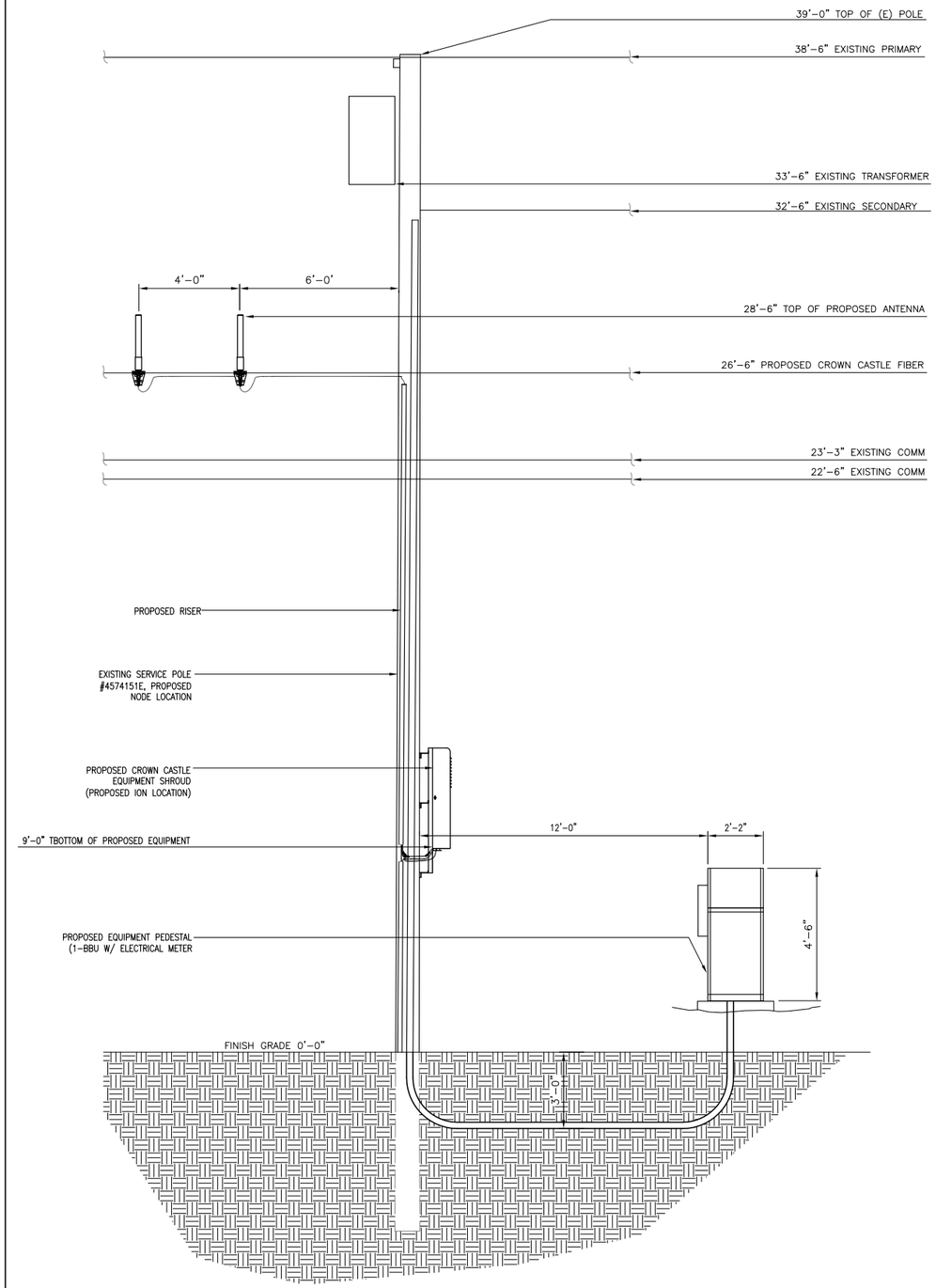
A-1



PROPOSED ELEVATION LOOKING SOUTH

SCALE: 3/8"=1'-0" 0 1' 2' 3'

1



PROPOSED ELEVATION LOOKING WEST

SCALE: 3/8"=1'-0" 0 1' 2' 3'

2

NOTE:

1. ANTENNA TO BE PAINTED LIGHT-GREY (BEHR ULTRA BASE #4854)

2. ALL EQUIPMENT TO BE PAINTED A MATTE BROWN (ULTRA-HIDE #3537-0500)

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ENGINEER/CONSULTANT:

Civil Engineer

CDG

CONNELL DESIGN GROUP, LLC

CONSULTING CIVIL ENGINEERS

26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630

(949) 753-8807 OFFICE - (949) 753-8833 FAX

CLIENT:

CROWN CASTLE NG WEST, INC.

STAMP:

SITE INFO:

SITE NAME:

MON29m1

VERIZON MONTECITO-MON29m1

SITE ADDRESS: THOMAS BROS PAGE 997 GRID C1
R.O.W. WEST SIDE OF LILAC DR
(ADJACENT TO 663 LILAC DR)
SANTA BARBARA, CA 93108
LAT: 34.439831
LONG: -119.608297

SHEET TITLE:

ELEVATION

DRAWING INFO:

DRAWN BY:
FC

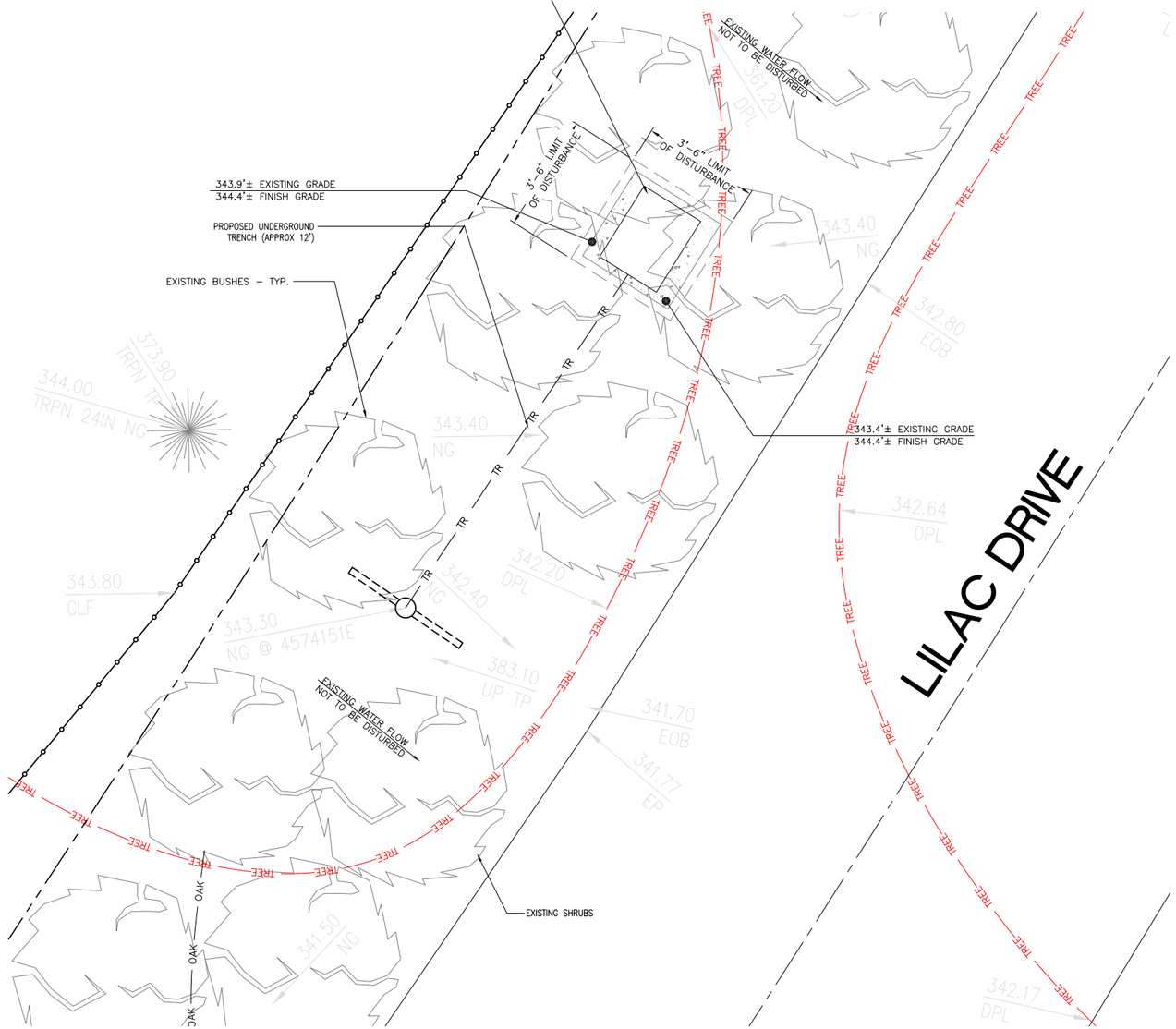
SHEET NUMBER:

A-2

NOTE:
NO CUT AND FILL REQUIRED

GRADING CALCULATION

CONCRETE PAD:	2.997 CF
12'Lx3'Dx.5'W TRENCH:	18 CF
TOTAL:	20.997 CF



LEGEND

TREE DRIP LINE	TREE
CAL OAK DRIP LINE	OAK
TRENCH	TR
CAL OAK	

NOTE:
TRENCH TO BE HAND DUG.

REV:	DATE/BY:	REVISION DESCRIPTION:
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ENGINEER/CONSULTANT:

Civil Engineer

CDG

CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630
(949) 753-8807 OFFICE - (949) 753-8833 FAX

CLIENT:

CROWN CASTLE
NG WEST, INC.

STAMP:

SITE INFO:

SITE NAME:
MON29m1
VERIZON MONTECITO–MON29m1

SITE ADDRESS: THOMAS BROS PAGE 997 GRID C1
R.O.W. WEST SIDE OF LILAC DR
(ADJACENT TO 663 LILAC DR)
SANTA BARBARA, CA 93108
LAT: 34.439831
LONG: –119.608297

SHEET TITLE:

GRADING PLAN

DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:

A–3

Outdoor Omni-directional Antenna

COMBA

OOA-360V06N0-3 VPol, 696-960/1710-2170MHz, 360°, 4.0/6.0 dBi

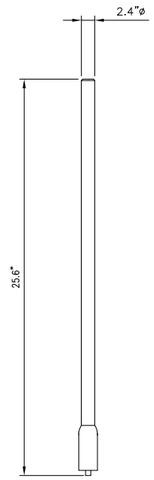
Technical Specifications

Electrical

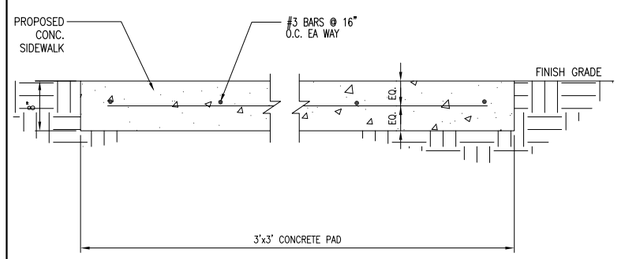
Frequency Range	MHz	696–960	1710–2170
Polarization		Vertical	
Gain	dBi	4.0±1	6.0±1
Horizontal Beamwidth	deg	360	
Vertical Beamwidth	deg	22–53	20–26
Electrical Downtilt–Fixed	deg	0	
VSWR		1.8	
Maximum Power	W	200	
Impedance		50	
Lightning Protection		Direct Ground	

Mechanical

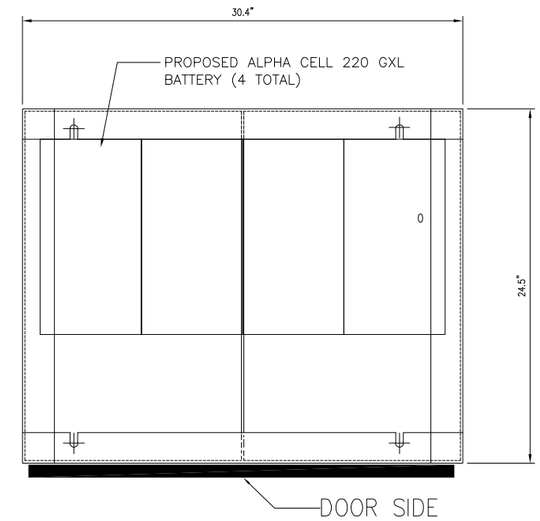
Dimensions, HxDia	mm(in)	650x60 (25.6x2.4)
Weight, with Mounting kit	kg (lb)	1 (2.2)
Radome Material and Color		Fiberglass, Light Grey
Radiating Element Material		Copper
Connector Type and Location		N–Female, Bottom
Operational Temperature		–55 to +70
Operational Humidity	%	95
Operational Wind Speed	km/h (mph)	200 (124)
Shipping Dimensions,HxWxD	mm (in)	670x100x100 (26.4x3.9x3.9)
Shipping Weight	kg (lb)	1.2 (2.65)

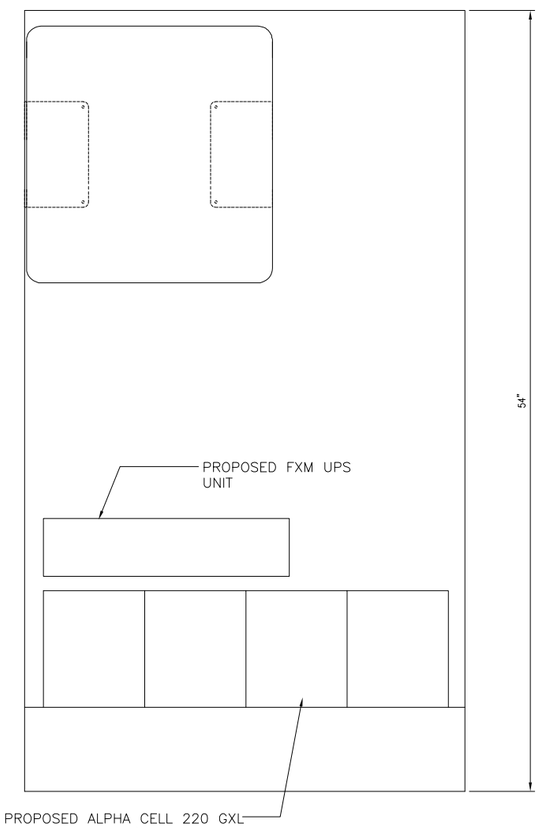


ANTENNA SPECIFICATIONS N.T.S. 1



CONCRETE PAD N.T.S. 3





EQUIPMENT PEDESTAL N.T.S. 5

Electrical

Power Supply
Mains power, Vac ..... 115 or 230

Power consumption, Watts ..... 1100 max. < 750 @ normal operation

700 MHz SISO/MIMO

Frequency range, MHz
Uplink ..... 698 to 716/776 to 787
Downlink ..... 728 to 757

Output power per carrier*, dBm

Number of Carriers	1	2	4	8
LTE	43	40**	37	34

850 MHz

Frequency range, MHz
Uplink ..... 824 to 849
Downlink ..... 869 to 894

Output power per carrier*, dBm

Number of Carriers	1	2	4	8
Analog	43	40	37	34
GSM	43	40	37	34
CDMA	43	40	37	34
LTE	43	40 **	37	34
UMTS	42	39	36	33

20W for Cell, PCS bands and 700MHz MIMO

1900 MHz

Frequency range, MHz
Uplink ..... 1850 to 1915
Downlink ..... 1930 to 1995

Output power per carrier*, dBm

Number of Carriers	1	2	4	8
GSM	43	40	37	34
CDMA	43	40	37	34
LTE	43	40 **	37	34
UMTS	42	39	36	33

CommScope®

ION-M7P/7P/85P/19P

Noise figure, dB
ICP3 optimized ..... +10 max.
Noise figure optimized ..... +6 max. 4.5 typical

Mechanical****

Height, width, depth, mm (in) ..... 817 x 245 x 218 (32.2 x 9.6 x 8.6)

Weight, kg (lb) 40 (88.2)

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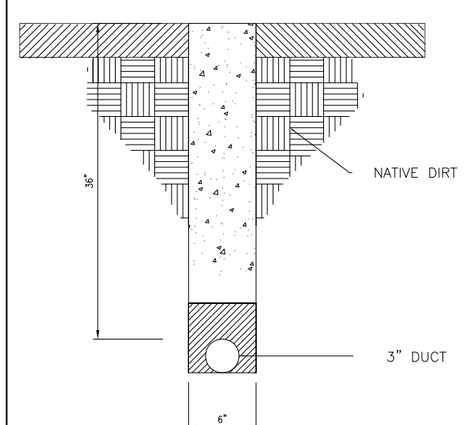
ION-M7P/7P/85P/19P N.T.S. 2



* TRENCH TO BE BACK FILL WITH NATIVE MATERIAL & COMPACTED TO 90% OR BETTER & REPLACE LANDSCAPING IN KIND.

TRENCH N.T.S. 4

REV:	DATE/BY:	REVISION DESCRIPTION:
0	FXC 09/02/2013	ISSUED FOR REVIEW
1	FXC 11/06/2013	ISSUED FOR REVIEW
2	FXC 03/08/2013	ISSUED FOR FINAL

ENGINEER/CONSULTANT:

Civil Engineer
CDG
CONNELL DESIGN GROUP, LLC
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DETAILS

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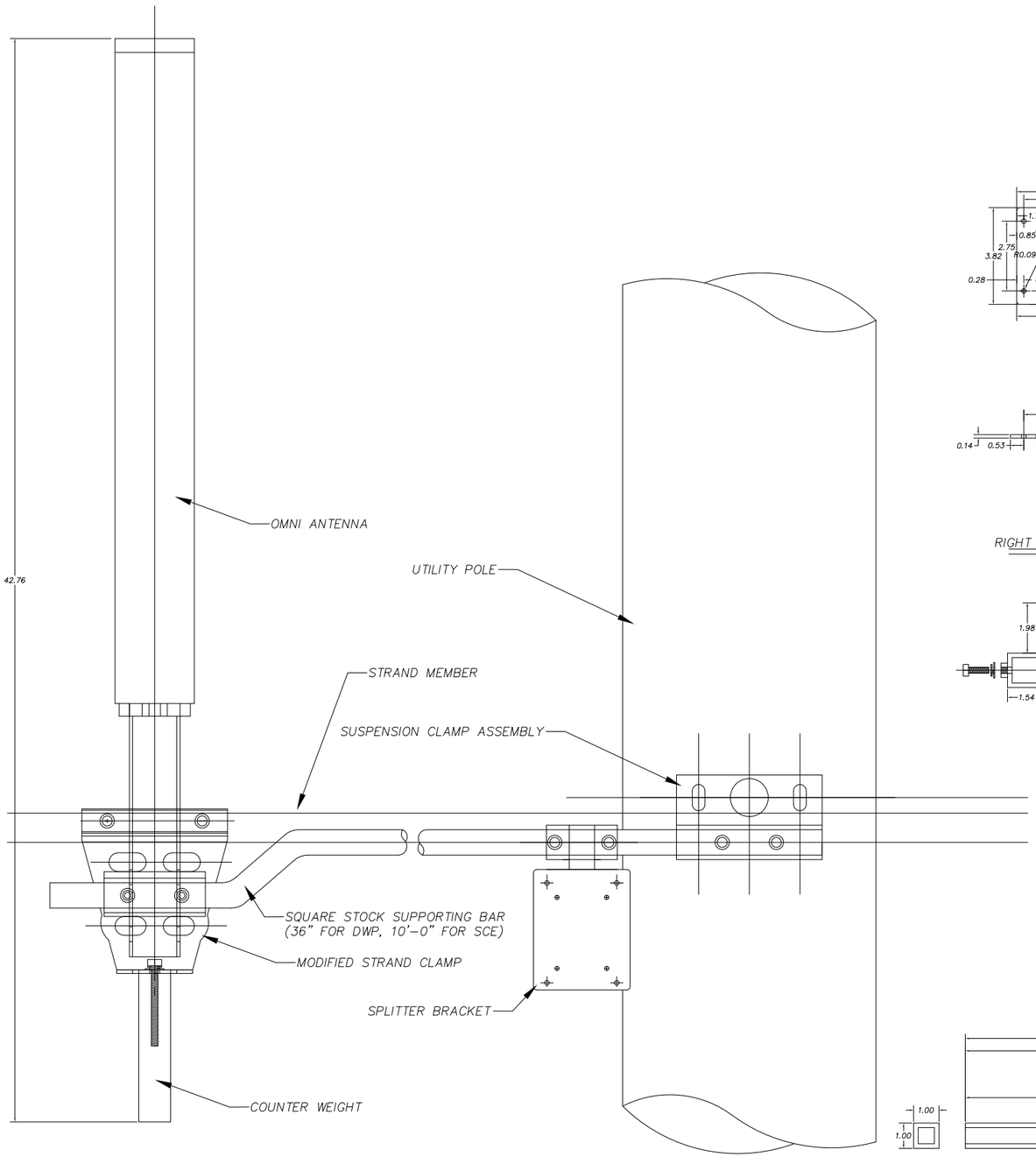
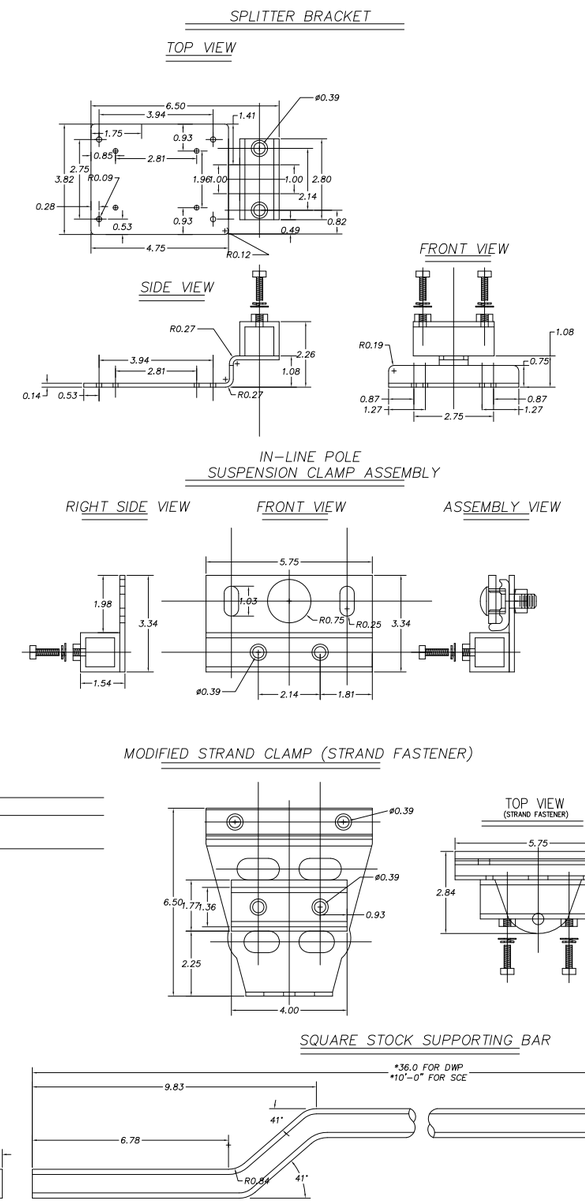
DRAWN BY:
FC

SHEET NUMBER:

D–1





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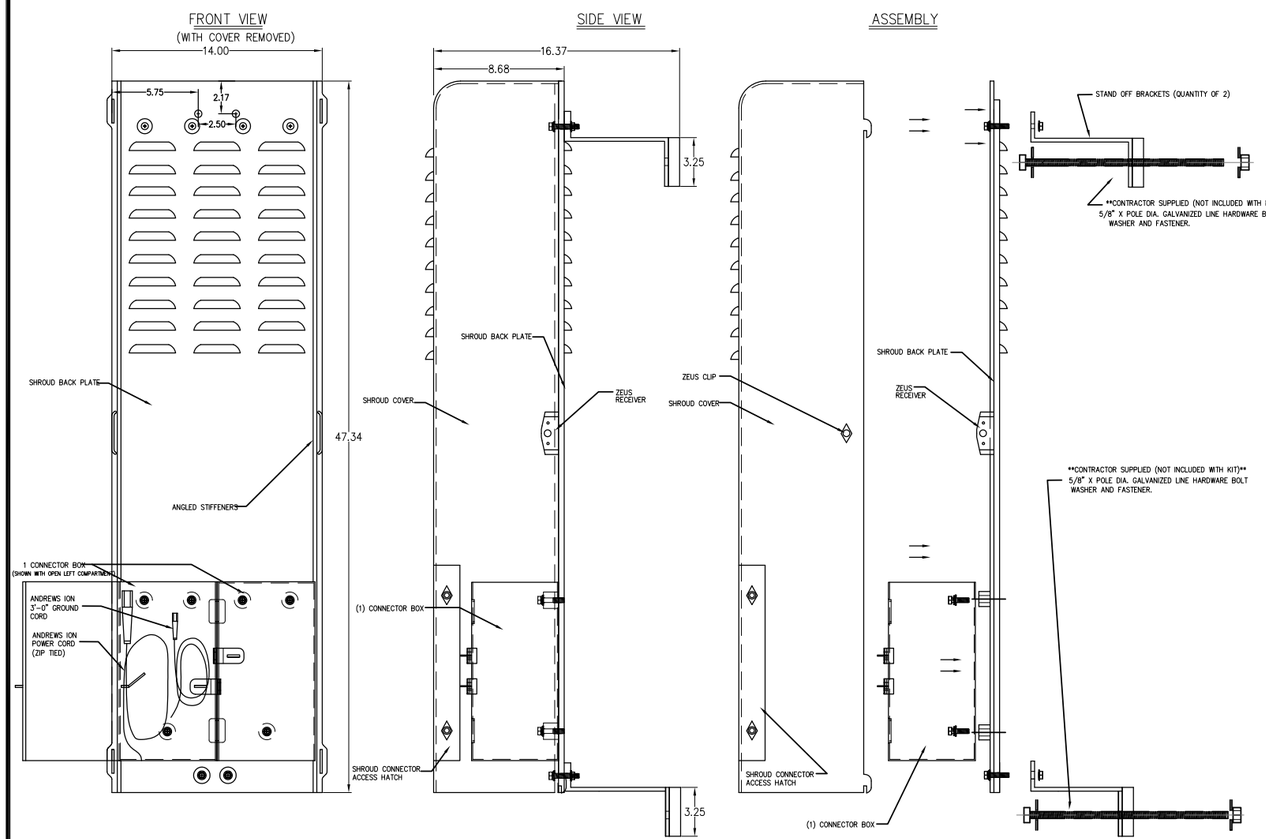
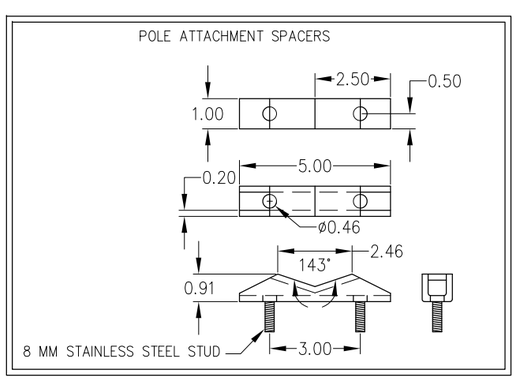
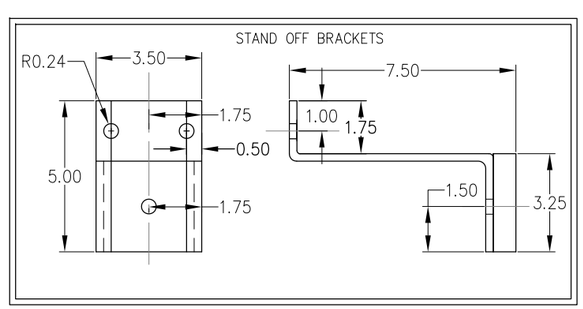
SHEET NUMBER:

D-2

ANTENNA MOUNT | N.T.S. | 1







SHROUD DETAIL N.T.S. 1

AlphaCell
General Specifications

Model:	220 GXL	195 GXL	165 GXL
Warranty[1]:	4 to 5 year full replacement	4 to 5 year full replacement	4 to 5 year full replacement
Service Life:	Extended	Extended	Extended
Runtime (minutes)[2]:	220	195	165
Sealed VRLA:	Valve regulated lead acid	Valve regulated lead acid	Valve regulated lead acid
Heat Resistant:	Extreme	Extreme	Extreme
Hydrogen Emission:	Low	Low	Low
Terminals:	Threaded insert 1/4" - 20 UNC	Threaded insert 1/4" - 20 UNC	Threaded insert 1/4"- 20 UNC

Specifications[4]

Model:	220 GXL	195 GXL	165 GXL
Typical Runtime (minutes)[2]:	220	195	165
Cells Per Unit:	6	6	6
Voltage Per Unit:	12.8	12.8	12.8
Conductance Value:	1175	1100	1000
Max. Discharge Current (A):	900	900	860
Short Circuit Current (A):	2800	2600	2500
10 Second Volts @ 100A:	11.4	11.3	11.2
Ohms Impedance 60Hz:	0.0050	0.0050	0.0056
Nominal Capacity at 20hrs: (to 1.75VPC)	109Ah	100Ah	84
Nominal Capacity at 20hrs: (to 1.70VPC)	110Ah	102Ah	87
BCI Group Size:	31	31	27
Weight (lb/kg):	73/33.2	67/30.5	63/28.6
Height w/ Terminals (in/mm):	8.48/215.4	8.48/215.4	8.05/204.5
Width (in/mm)[3]:	13.42/340.9	13.42/340.9	12.5/317.8
Depth (in/mm)[3]:	6.80/172.7	6.80/172.7	6.83/173.4
Operating Temperature Range Discharge:	-40 to 71°C (-40 to 160°F)	-40 to 71°C (-40 to 160°F)	-40 to 71°C (-40 to 160°F)
Charge (with temp compensation):	-23 to 60°C (-9.4 to 140°F)	-23 to 60°C (-9.4 to 140°F)	-23 to 60°C (-9.4 to 140°F)
Float Charging Voltage (Vdc):	13.5 to 13.8	13.5 to 13.8	13.5 to 13.8
AC Ripple Charger:	0.5% RMS or 1.5% of float charge voltage recommended for best results. Max. allowed = 4% P-P		

Notes:
[1] Warranty varies by country and region. Warranty valid only when used with Alpha approved Power Supplies, Chargers and Enclosures. Consult your sales person for details.
[2] Runtimes calculated using a 25A DC constant current load.
[3] Dimensions at top of battery.
[4] See AlphaCell Users Guide for Additional Details.

Typical Standby Time in Minutes @ 25°C/77°F

XM2S0Mx(2)	4A			6A			8A			10A		
Battery/Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	508	453	396	329	285	249	236	209	183	198	165	144
4 batteries:	701	625	546	444	396	346	329	293	256	261	232	203
6 batteries:	1001	878	853	701	625	546	523	465	407	418	372	325
8 batteries:	1487	1338	1165	980	859	750	720	643	562	577	515	450
9 batteries:	1696	1519	1322	1001	878	853	820	733	640	659	587	514

XM2S0Mx(3)	12A			14A			16A			18A		
Battery/Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	149	132	115	119	106	92	101	89	77	87	78	68
4 batteries:	210	187	163	169	151	132	144	128	112	124	111	96
6 batteries:	339	301	264	275	245	214	236	209	182	204	182	159
8 batteries:	478	419	367	385	341	299	329	293	256	288	255	223
9 batteries:	538	479	419	440	391	342	377	335	294	329	293	256

XM2S0Mx(2)	4A			6A			8A			10A		
Battery/Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	708	712	622	508	453	396	377	335	294	300	267	233
4 batteries:	1001	878	853	701	625	546	523	465	407	418	372	325
6 batteries:	1696	1519	1322	1001	878	853	820	733	640	659	587	514
8 batteries:	2388	2097	1728	1487	1338	1165	1122	1005	877	904	809	706
9 batteries:	2590	2345	2037	1696	1519	1322	1273	1143	997	1027	921	803

XM2S0Mx(2)	12A			14A			16A			18A		
Battery/Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	242	215	188	196	174	151	166	148	125	144	128	107
4 batteries:	339	301	264	275	245	214	236	209	182	204	182	155
6 batteries:	538	479	419	440	391	346	377	335	290	329	293	252
8 batteries:	741	660	577	607	541	429	523	465	402	456	407	351
9 batteries:	843	750	658	692	617	538	597	531	462	523	465	402

*Above calculations based on an AC load with a .90 cable plant power factor.

For contact information visit www.alpha.com

The Alpha Group >

North America	Europe, Middle East & Africa			Asia Pacific	Latin & South America
Canada Tel: +1 604 430 1476 Fax: +1 604 430 8908 Toll Free: +1 800 667 8043 USA Tel: +1 360 647 2360 Fax: +1 360 671 4936	Cyprus Tel: +357 25 375 675 Fax: +357 52 369 595 Russia Tel: +7 495 925 9944 Fax: +7 495 916 1349	Germany Tel: +49 9122 79889-0 Fax: +49 9122 79889-21 United Kingdom Tel: +44 1279 501110 Fax: +44 1279 659879	Lithuania Tel: +370 5 210 5091 Fax: +370 5 210 5290	P.R. China Tel: +852 2756 6863 Fax: +852 2199 7988	Contact USA office

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049-297-10-B002 (06/09)

BATTERY SPECIFICATIONS N.T.S. 2

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FC

SHEET NUMBER:

D–3

CROWN CASTLE NG WEST, INC

VERIZON MONTECITO-MON30
R.O.W. SOUTH SIDE OF SAN LEANDRON LN
(ADJACENT TO 198 N TIBURON LN)
SANTA BARBARA, CA 93108

GENERAL NOTES

1. APPROVAL OF THESE PLANS BY THE CITY ENGINEER DOES NOT AUTHORIZE ANY WORK TO BE PERFORMED UNTIL A PERMIT HAS BEEN ISSUED.
2. UPON ISSUANCE OF A PERMIT, NO WORK WILL BE PERMITTED ON WEEKENDS OR HOLIDAYS WITHOUT PERMISSION FROM THE ENGINEERING DEPARTMENT.
3. THE APPROVAL OF THIS PLAN OR ISSUANCE OF A PERMIT BY THE LOCAL JURISDICTION DOES NOT AUTHORIZE THE SUBDIVIDER AND OWNER TO VIOLATE ANY FEDERAL, STATE OR CITY LAWS, ORDINANCES, REGULATIONS, OR POLICIES, INCLUDING, BUT NOT LIMITED TO, THE FEDERAL ENDANGERED SPECIES ACT OF 1973 AND AMENDMENTS THERETO (16 USC SECTION 1531 ET.SEQ.).
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SURVEY MONUMENTS AND/OR VERTICAL CONTROL BENCHMARKS WHICH ARE DISTURBED OR DESTROYED BY CONSTRUCTION. A LAND SURVEYOR MUST FIELD LOCATE, REFERENCE, AND/OR PRESERVE ALL HISTORICAL OR CONTROLLING MONUMENTS PRIOR TO ANY EARTHWORK. IF DESTROYED, SUCH MONUMENTS SHALL BE REPLACED WITH APPROPRIATE MONUMENTS BY A LAND SURVEYOR, A CORNER RECORD OR RECORD OF SURVEY, AS APPROPRIATE, SHALL BE FIELD AS REQUIRED BY THE PROFESSIONAL LAND SURVEYORS ACT. IF ANY VERTICAL CONTROL IS TO BE DISTURBED OR DESTROYED, THE LOCAL JURISDICTION FIELD SURVEY SECTION MUST BE NOTIFIED, IN WRITING, AT LEAST 3 DAYS PRIOR TO THE CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE COST OF REPLACING ANY VERTICAL CONTROL BENCHMARKS DESTROYED BY THE CONSTRUCTION.
5. IMPORTANT NOTICE: SECTION 4216 OF THE GOVERNMENT CODE REQUIRES A DIG ALERT IDENTIFICATION NUMBER BE ISSUED BEFORE A "PERMIT TO EXCAVATE" WILL BE VALID. FOR YOUR DIG ALERT I.D. NUMBER, CALL UNDERGROUND SERVICE ALERT, TWO DAYS BEFORE YOU DIG.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR THE POTHOLE AND LOCATING OF ALL EXISTING UTILITIES THAT CROSS THE PROPOSED TRENCH LINE AND MUST MAINTAIN 1' MINIMUM VERTICAL CLEARANCE.
7. CONTRACTOR SHALL SUBMIT TO THE LOCAL JURISDICTION, A CONSTRUCTION PLAN TO PROTECT WATER MAINS PRIOR TO COMMENCING CONSTRUCTION.
8. CONTRACTOR SHALL REPLACE OR REPAIR ALL TRAFFIC SIGNAL LOOPS, CONDUIT, AND LANE STRIPING DAMAGED DURING CONSTRUCTION.
9. CONTRACTOR SHALL NOTIFY THE LOCAL JURISDICTION. A MINIMUM OF 48 HOURS PRIOR TO COMMENCING WORK WITHIN 10' OF ALL SEWER, WATER, AND STORMDRAIN MAIN INCLUDING ALL CROSSINGS.
10. THIS PROJECT WILL BE INSPECTED BY ENGINEERING AND CAPITAL PROJECTS DEPARTMENT, FIELD ENGINEERING DIVISION.
11. AS-BUILT DRAWINGS MUST BE SUBMITTED TO THE CITY RESIDENT ENGINEER PRIOR TO THE ACCEPTANCE OF THIS PROJECT.
12. PUBLIC IMPROVEMENT SUBJECT TO DESUETUDE OR DAMAGE." IF REPAIR OR REPLACEMENT OF SUCH PUBLIC IMPROVEMENTS IS REQUIRED, THE OWNER SHALL OBTAIN THE REQUIRED PERMITS FOR WORK IN THE PUBLIC RIGHT-OFWAY, SATISFACTORY TO THE PERMIT – ISSUING AUTHORITY.
13. PRIOR TO ANY DISTURBANCE TO THE SITE, EXCLUDING UTILITY MARKS-OUTS AND SURVEYING, THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR A PRE-CONSTRUCTION MEETING WITH THE LOCAL JURISDICTION FIELD ENGINEERING DIVISION.
14. PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION SHOWN ON THESE PLANS. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE. THE CONTRACTOR IS RESPONSIBLE TO ATTEND THE LOCAL JURISDICTIONS MONTHLY UTILITY COORDINATION COMMITTEE THE CONSTRUCTION ACTIVITIES WITH THE CITY AND ALL OTHER CONTRACTORS SO THAT NO TRENCH IS CUT WITHIN ANY OF THE CITY STREETS THAT HAVE BEEN CONSTRUCTED, REPAIRED, OR SLURRY SEALED WITHIN THREE YEARS OF THE STREET CONSTRCTUION/RESURFACING DATE.
15. MANHOLES OR COVERS SHALL BE LABELED "CROWN CASTLE" OR "CROWN CASTLE NG WEST".
16. CONTRACTOR SHALL IMPLEMENT AN EROSION AND SEDIMENT CONTROL PROGRAM DURING THE PROJECT CONSTRUCTION ACTIVITIES. THE PROGRAM SHALL MEET THE APPLICABLE REQUIREMENTS OF THE STATE WATER RESOURCE CONTROL BOARD.
17. THE CONTRACTOR SHALL HAVE EMERGENCY MATERIALS AND EQUIPMENT ON HAND FOR UNFORESEEN SITUATIONS, SUCH AS DAMAGE TO UNDERGROUND WATER, SEWER, AND STORM DRAIN FACILITIES WHEREBY FLOWS MAY GENERATE EROSION AND SEDIMENT POLLUTION.

SPECIAL NOTES

THE FOLLOWING NOTES ARE PROVIDED TO GIVE DIRECTIONS TO THE CONTRACTOR BY THE ENGINEER OF WORK. THE CITY ENGINEER'S SIGNATURE ON THESE PLANS DOES NOT CONSTITUTE APPROVAL OF THESE NOTES AND THE CITY WILL NOT BE RESPONSIBLE FOR THEIR ENFORCEMENT.

1. THE CONTRACTOR SHALL VERIFY THE LOCATION EXISTING UNDERGROUND UTILITIES INCLUDING SEWER LATERALS AND WATER SERVICES TO INDIVIDUAL LOTS BOTH VERTICAL AND HORIZONTAL PRIOR TO COMMENCING IMPROVEMENT OPERATIONS.
2. CONTRACTOR SHALL MAKE EXPLORATION EXCAVATIONS AND LOCATE EXISTING FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS OF PLANS IF REVISION IS NECESSARY BECAUSE OF LOCATION OF EXISTING UTILITIES.
3. LOCATION AND ELEVATIONS OF IMPROVEMENTS, TO BE MET BY WORK, SHALL BE CONFIRMED BY FIELD MEASUREMENT PRIOR TO CONSTRUCTION OF NEW WORK.
4. GRADES SHOWN ARE FINISH GRADES, CONTRACTOR SHALL DETERMINE NECESSARY SUB GRADE ELEVATIONS AND SHALL CONSTRUCT SMOOTH TRANSITION BETWEEN FINISH GRADES SHOWN.
5. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE RESPONSIBILITY FOR JOB SITE CONDITION DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY: THAT THIS PROVISION SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXPECTING FOR LIABILITY ARISING FROM SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
6. THE CONTRACTOR SHALL BE TOTALLY RESPONSIBLE FOR COMPLIANCE WITH THE PROVISIONS OF THE STATE OF CALIFORNIA SAFETY ORDERS.
7. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE FROM EXISTING RECORDS AND CORROBORATED, WHERE POSSIBLE WITH FIELD TIES. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING THE LOCATIONS SHOWN, BOTH HORIZONTALLY AND VERTICALLY, PRIOR TO CONSTRUCTION. IF EXISTING LOCATIONS VARY SUBSTANTIALLY FROM THE PLANS, THE ENGINEER SHOULD BE NOTIFIED TO MAKE ANY CONSTRUCTION CHANGES REQUIRED.
8. THE CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT FOR ALL SEWER AND WATER MAIN UNDER CROSSING IN ACCORDANCE WITH PART 1 SECTION 5-2 OF THE STANDARD SPECIFICATION.
9. THE CONTRACTOR SHALL REPLACE OR REPAIR ALL TRAFFIC SIGNAL LOOPS, CONDUITS, AND LANE STRIPING DAMAGED DURING CONSTRUCTION.
10. THE CONTRACTOR SHALL SUBMIT WORK PLANS FOR ALL BORE OPERATIONS TWO WEEKS PRIOR TO COMMENCING WORK.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR THE POTHOLE AND LOCATING OF ALL EXISTING UTILITIES THAT CROSS THE PROPOSED TRENCH LINE AND MUST MAINTAIN 1' MINIMUM VERTICAL CLEARANCE.
12. AS-BUILT DRAWINGS MUST BE SUBMITTED TO THE CITY ENGINEER PRIOR TO ACCEPTANCE OF THIS PROJECT.

VICINITY MAP – N.T.S.

GROUND BUS BAR	LIGHT POLE	ELEVATION REF.	ELECT. CONDUIT
MECH. GRND. CONN.	FOUNDATION	SECTION REF.	COAXIAL CABLE
CADWELD	SPOT ELEV.	PROP./LEASE LINE	MYERS PEDESTAL
ELECTRIC BOX	SET POINT	MATCH LINE	VAULT STANDARD 2'X3'
TELEPHONE BOX	REVISION	WORK POINT	STEEL POLE
EXISTING SERVICE POLE		TELE. CONDUIT	
SIDEWALK FLAG		CENTERLINE	
EX. MANHOLE	DETAIL REF.		

SYMBOLS, LINETYPES AND HATCH PATTERNS

EROSION AND SEDIMENT CONTROL NOTES

TEMPORARY EROSION/SEDIMENT CONTROL, PRIOR TO COMPLETION OF FINAL IMPROVEMENTS, SHALL BE PERFORMED BY THE CONTRACTOR OR QUALIFIED PERSON AS INDICATED BELOW:

1. ALL REQUIREMENTS OF THE LOCAL JURISDICTION "LAND DEVELOPMENT MANUAL, STORM WATER STANDARDS" MUST BE INCORPORATED INTO THE DESIGN AND CONSTRUCTION OF THE PROPOSED GRADING/IMPROVEMENTS CONSISTENT WITH THE APPROVED STORM WATER AND/OR WATER POLLUTION CONTROL PLAN (WPCP).
2. FOR STORM DRAIN INLETS, PROVIDE A GRAVEL BAG SILT BASIN IMMEDIATELY UPSTREAM OF INLET AS INDICATED ON DETAILS.
3. FOR INLETS LOCATED AT SUMPS ADJACENT TO TOP OF SLOPES, THE CONTRACTOR SHALL ENSURE THAT WATER DRAINING TO THE SUMP IS DIRECTED INTO THE INLET AND THAT A MINIMUM OF 1.00" FREEBOARD EXISTS AND IS MAINTAINED ABOVE THE TOP OF THE INLET. IF FREEBOARD IS NOT PROVIDED BY GRADING SHOWN ON THESE PLANS, THE CONTRACTOR SHALL PROVIDE IT VIA TEMPORARY MEASURES, I.E. GRAVEL BAGS OR DIKES.
4. THE CONTRACTOR OR QUALIFIED PERSON SHALL BE RESPONSIBLE FOR CLEANUP OF SILT AND MUD ON ADJACENT STREET(S) AND STORM DRAIN SYSTEM DUE TO CONSTRUCTION ACTIVITY.
5. THE CONTRACTOR OR QUALIFIED PERSON SHALL CHECK AND MAINTAIN ALL LINED AND UNLINED DITCHES AFTER EACH RAINFALL.
6. THE CONTRACTOR SHALL REMOVE SILT AND DEBRIS AFTER EACH MAJOR RAINFALL.
7. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON, ALL NECESSARY MATERIALS SHALL BE STOCKPILED ON SITE AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
8. THE CONTRACTOR SHALL RESTORE ALL EROSION/SEDIMENT CONTROL MEASURES TO WORKING ORDER TO THE SATISFACTION OF THE CITY ENGINEER OR RESIDENT ENGINEER AFTER EACH RUN-OFF PRODUCING RAINFALL.
9. THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION CONTROL MEASURES AS MAY BE REQUIRED BY THE RESIDENT ENGINEER DUE TO UNCOMPLETED GRADING OPERATIONS OR UNFORESEEN CIRCUMSTANCES, WHICH MAY ARISE.
10. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATERS CREATE A HAZARDOUS CONDITION.
11. ALL EROSION/SEDIMENT CONTROL MEASURES PROVIDED PER THE APPROVED GRADING PLAN SHALL BE INCORPORATED HEREON. ALL EROSION/SEDIMENT CONTROL FOR INTERIM CONDITIONS SHALL BE DONE TO THE SATISFACTION OF THE RESIDENT ENGINEER.
12. GRADED AREAS AROUND THE PROJECT PERIMETER MUST DRAIN AWAY FROM THE FACE OF THE SLOPE AT THE CONCLUSION OF EACH WORKING DAY.
13. ALL REMOVABLE PROTECTIVE DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN RAIN IS IMMINENT.
14. THE CONTRACTOR SHALL ONLY GRADE, INCLUDING CLEARING AND GRUBBING FOR THE AREAS FOR WHICH THE CONTRACTOR OR QUALIFIED PERSON CAN PROVIDE EROSION/SEDIMENT CONTROL MEASURES.
15. THE CONTRACTOR SHALL ARRANGE FOR WEEKLY MEETINGS DURING OCTOBER 1ST TO APRIL 30TH FOR PROJECT TEAM (GENERAL CONTRACTOR, QUALIFIED PERSON, EROSION CONTROL SUBCONTRACTOR IF ANY, ENGINEER OF WORK, OWNER AND THE RESIDENT ENGINEER) TO EVALUATE THE ADEQUACY OF THE EROSION/SEDIMENT CONTROL MEASURES AND OTHER RELATED CONSTRUCTION ACTIVITIES.

TRAFFIC CONTROL NOTES

THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN (11" X 17") FOR APPROVAL PRIOR TO STARTING WORK. THE PLAN SHOULD BE SUBMITTED TO THE TRAFFIC CONTROL PERMIT COUNTER. CONTRACTOR SHALL OBTAIN A TRAFFIC CONTROL PERMIT A MINIMUM OF TWO (2) WORKING DAYS PRIOR TO STARTING WORK, AND A MINIMUM FIVE (5) DAYS IF WORK WILL AFFECT A BUS STOP OR AN EXISTING TRAFFIC SIGNAL, OR IF WORK WILL REQUIRE A ROAD OR ALLEY CLOSURE.

FOOTAGE TOTALS	
ASPHALT CUT	–
DIRT TRENCH	–
PUNCH THRU	–
BORE	–
TOTAL	–
R&R SWF TOTAL	–

PROJECT DICTIONARY

SITE ADDRESS: R.O.W. SOUTH SIDE OF SAN LEANDRON LN (ADJACENT TO 198 N TIBURON LN) SANTA BARBARA, CA 93108

APPLICANT: CROWN CASTLE NG WEST, INC
2125 WRIGHT AVE, SUITE #C9
LA VERNE, CA 91750
CONTACT: HEIDI PAYNE
PHONE: (949) 300-9493

CIVIL ENGINEER: CONNELL DESIGN GROUP, LLC
26455 RANCHO PARKWAY SOUTH
LAKE FOREST, CA 92630
CONTACT: FRANK CARTER
(949) 310-8233 PHONE
(949) 753-8833 FAX

CONSTRUCTION CHANGE TABLE

CHANGE	DATE	EFFECTED OR ADDED SHEET NUMBERS

APPLICABLE CODES

ALL WORK SHALL COMPLY WITH THE FOLLOWING APPLICABLE CODES:

*2010 CALIFORNIA BUILDING CODE
*2010 CALIFORNIA MECHANICAL CODE
*2010 CALIFORNIA PLUMBING CODE
*2010 CALIFORNIA ELECTRICAL CODE

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

PROJECT DESCRIPTION

PROJECT CONSISTS OF INSTALLATION OF:

1. (2) OMNI DIRECTIONAL ANTENNA ON EXISTING UTILITY POLE
2. ION, BBU ON EXISTING UTILITY POLE

SHEET INDEX:

TITLE SHEET	T-1 – SHEET 1 OF 7
SITE PLAN	A-1 – SHEET 2 OF 7
PROPOSED ELEVATIONS	A-2 – SHEET 3 OF 7
ESH AREA PLAN	A-4 – SHEET 4 OF 7
DETAILS	D-1 – SHEET 5 OF 7
DETAILS	D-2 – SHEET 6 OF 7
DETAILS	D-3 – SHEET 7 OF 7

REV:	DATE/BY:	REVISION DESCRIPTION:
1	FXC 09/02/2013	ISSUED FOR FINAL
2	FXC 11/06/2013	ISSUED FOR FINAL
3	FXC 01/08/2014	ISSUED FOR FINAL
4	FXC 02/25/2014	ISSUED FOR FINAL
5	FXC 05/13/2014	ISSUED FOR FINAL

ENGINEER/CONSULTANT:

Civil Engineer

CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630
(949) 753-8807 OFFICE - (949) 753-8833 FAX

CLIENT:

CROWN CASTLE NG WEST, INC.

STAMP:

SITE INFO:

SITE NAME:
MON30
VERIZON MONTECITO-MON30

SITE ADDRESS: THOMAS BROS PAGE 997 GRID A3
R.O.W. SOUTH SIDE OF SAN LEANDRON LN
(ADJACENT TO 198 N TIBURON LN)
SANTA BARBARA, CA 93108
LAT: 34.42542°
LONG: -119.62164°

SHEET TITLE:

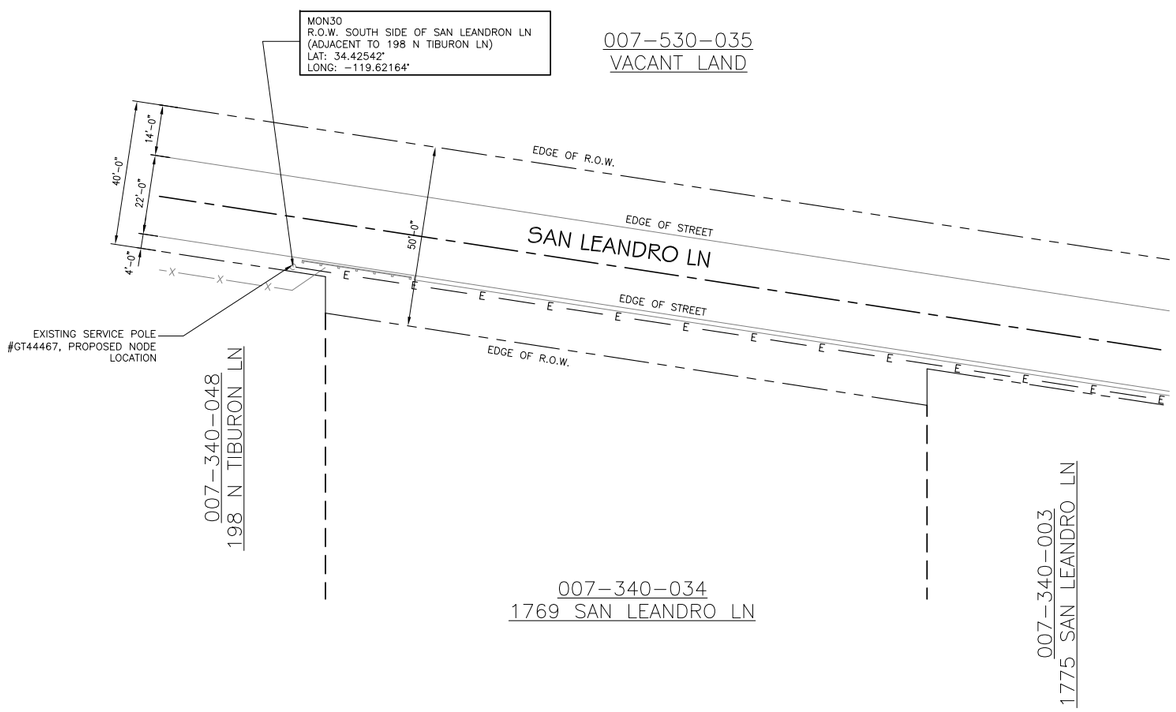
TITLE SHEET

DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:

T-1

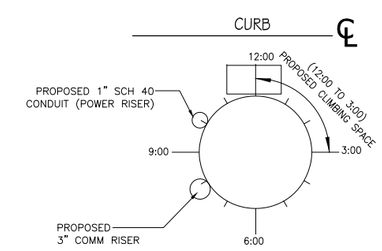


SITE PLAN SCALE: 1"=20'-0" (0 10' 20') 1

EXISTING PHOTO SCALE: N.T.S. 3

POLE WILL BE STEPPED IN ACCORDANCE TO G095 STANDARDS IN RESPECT TO CLIMBING SPACE.

1-3" CROWN CASTLE RISER @ 8:00
1-1" POWER RISER @ 10:00



RISER PROFILE SCALE: N.T.S. 2

REV:	DATE/BY:	REVISION DESCRIPTION:
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2	FXC 11/06/2013	ISSUED FOR FINAL
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4	FXC 02/25/2014	ISSUED FOR FINAL
5	FXC 05/13/2014	ISSUED FOR FINAL

ENGINEER/CONSULTANT:

Civil Engineer

CDG

CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630
(949) 753-8807 OFFICE - (949) 753-8833 FAX

CLIENT:

CROWN CASTLE
NG WEST, INC.

STAMP:

SITE INFO:

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VERIZON MONTECITO-MON30

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SANTA BARBARA, CA 93108
LAT: 34.42542°
LONG: -119.62164°

SHEET TITLE:

SITE PLAN AND ELEVATION

DRAWING INFO:

DRAWN BY:
FC

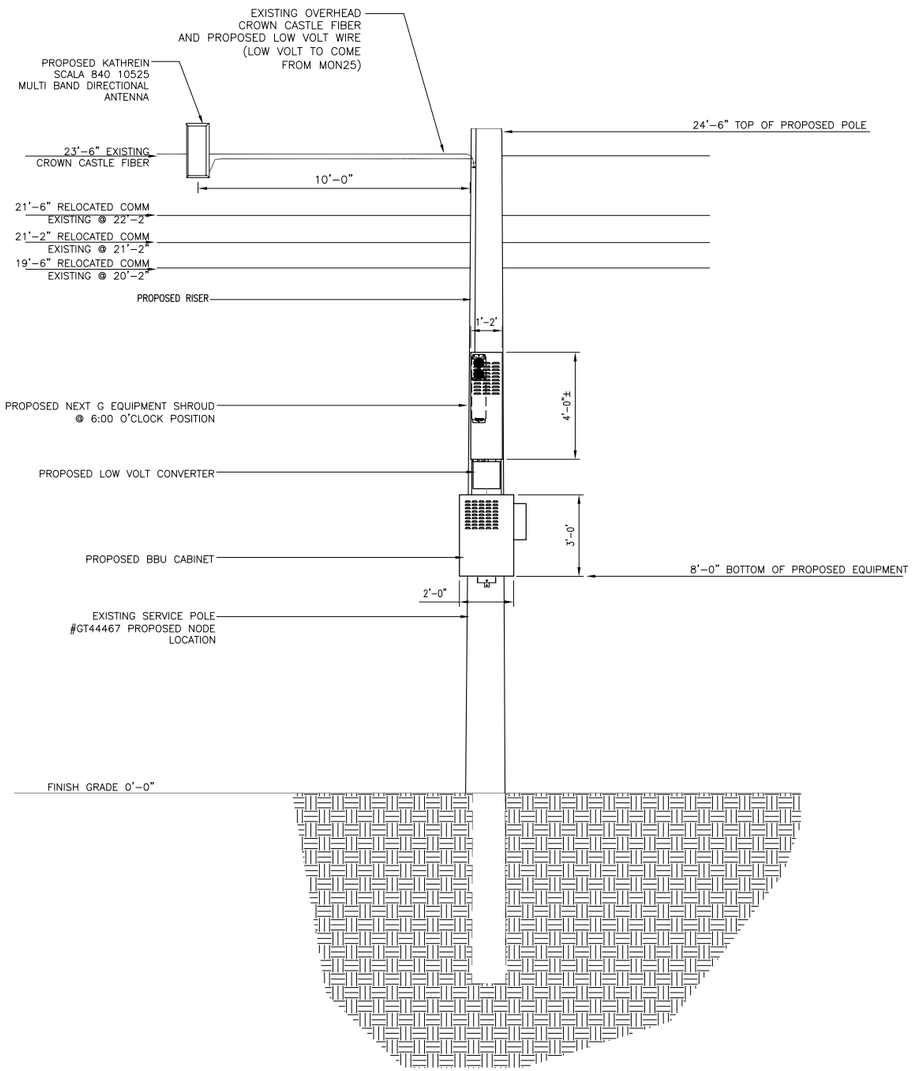
SHEET NUMBER:

A-1

NOTE:

1. ANTENNA TO BE PAINTED LIGHT–GREY (BEHR ULTRA BASE #4854)

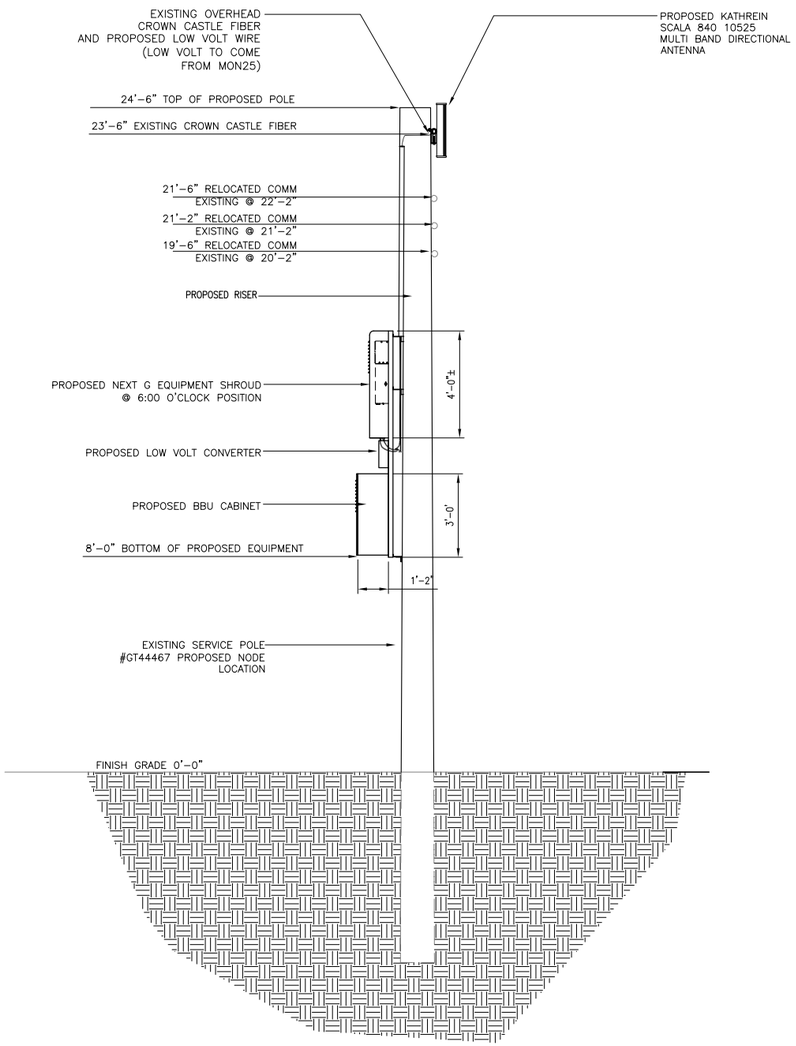
2. ALL EQUIPMENT TO BE PAINTED A MATTE BROWN (ULTRA–HIDE #3537–0500)



PROPOSED NODE POLE ELEVATION LOOKING NORTH

SCALE: 3/8"=1'-0" 0 1' 2' 3'

1



PROPOSED NODE POLE ELEVATION LOOKING EAST

SCALE: 3/8"=1'-0" 0 1' 2' 3'

2

REV:	DATE/BY:	REVISION DESCRIPTION:
1	FXC 09/02/2013	ISSUED FOR FINAL
2	FXC 11/06/2013	ISSUED FOR FINAL
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CLIENT:

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SITE INFO:

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(ADJACENT TO 198 N TIBURON LN)
SANTA BARBARA, CA 93108
LAT: 34.42542°
LONG: –119.62164°

SHEET TITLE:

ELEVATION

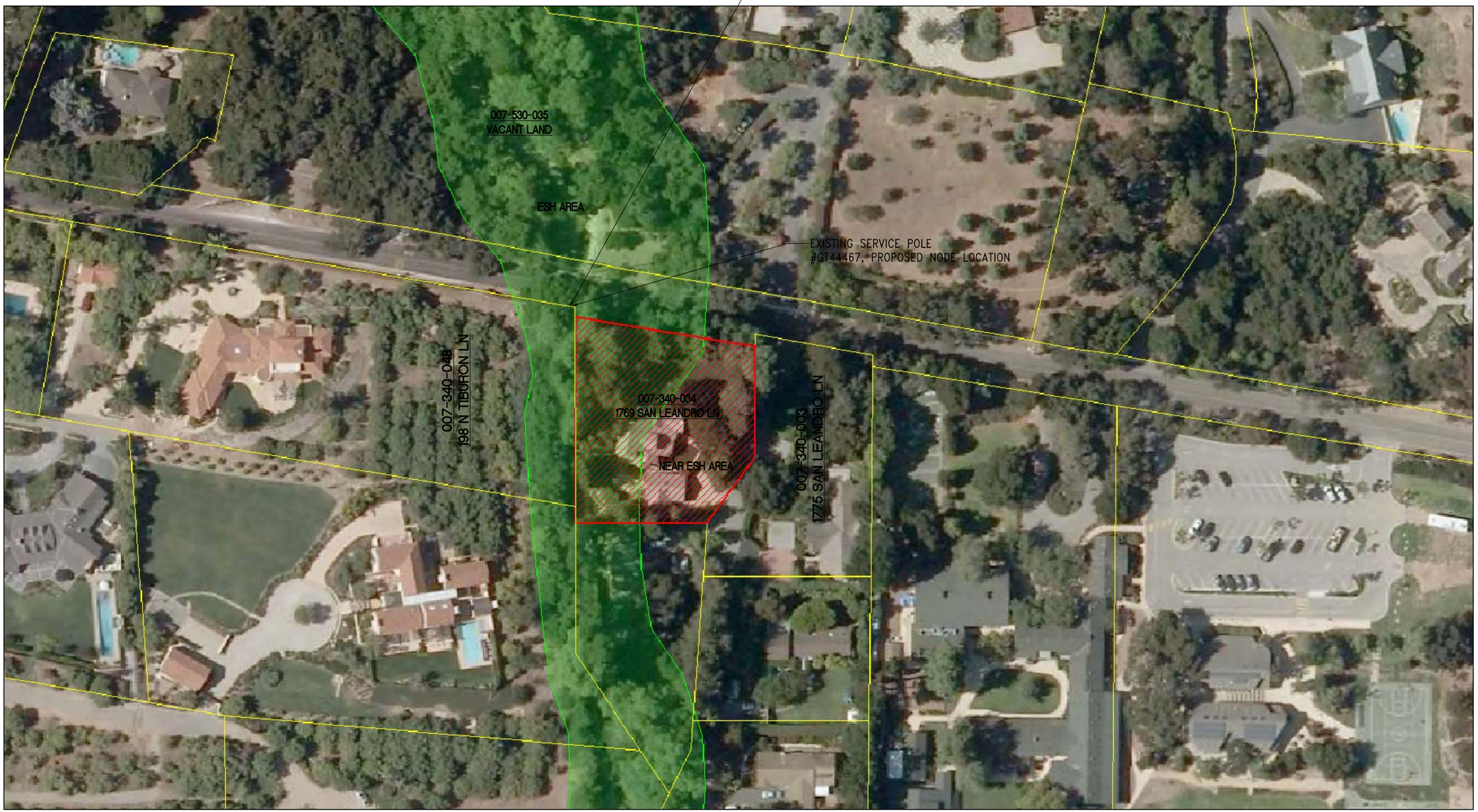
DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:

A–2

MON30
R.O.W. SOUTH SIDE OF SAN LEANDRON LN
(ADJACENT TO 198 N TIBURON LN)
LAT: 34.42542°
LONG: −119.62164°



REV:	DATE/BY:	REVISION DESCRIPTION:
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4	FXC 02/25/2014	ISSUED FOR FINAL
5	FXC 05/13/2014	ISSUED FOR FINAL

ENGINEER/CONSULTANT:

Civil Engineer

CDG

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SANTA BARBARA, CA 93108
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LONG: −119.62164°

SHEET TITLE:

ESH AREA PLAN

DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:

A-3

KATHREIN
SCALA DIVISION

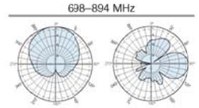
840 10525

65° Dualband Directional Antenna

Kathrein's multi-band antennas are ready for 4G applications, covering all existing wireless bands for AMPS, PCS and 3G/UMTS as well as all spectrum under consideration for future systems. These cross-polarized antennas offer diversity operation in the same space as a conventional 800 MHz antenna, and are mountable on our compact sector brackets.

- Wide band operation.
- Exceptional intermodulation characteristics.
- High strength pultruded fiberglass radome.

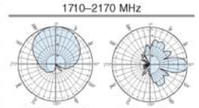
698–894 MHz



Horizontal pattern ±45°-polarizaton (typical pattern)

Vertical pattern ±45°-polarization (typical pattern)

1710–2170 MHz



Horizontal pattern ±45°-polarization (typical pattern)

Vertical pattern ±45°-polarization (typical pattern)

General specifications:

Frequency range	698–894 MHz 1710–2170 MHz
Impedance	50 ohms
VSWR	<1.5:1
Intermodulation (2x20w)	IM3: <-150 dBc
Polarization	+45° and -45°
Connector	4 x 7-16 DIN female
Isolation intra.system	>30 dB
Weight	15.9 lb (7.2 kg) 20.3 lb (9.2 kg) clamps included
Dimensions	23.3 x 10.6 x 6.2 inches (593 x 270 x 157 mm)
Wind load Front/Side/Rear	at 93 mph (150kph) 37 lbf / 21 lbf / 56 lbf (163 N) / (92 N) / (245 N))
Wind survival rating*	120 mph (200 kph)
Shipping dimensions	29 x 11.9 x 7.6 inches (736 x 302 x 192 mm)
Shipping weight	23.6 lb (10.7 kg)
Mounting	Fixed mounts for 2 to 4.6 inch (50 to 115 mm) OD masts are included. Tilt mount options are available.

See reverse for order information.

Specifications:

	698–806 MHz	806–894 MHz	1710–1755 MHz	1850–1990 MHz	2110–2170 MHz
Gain	10.5 dBi	11 dBi	13.3 dBi	13.5 dBi	12.8 dBi
Front-to-back ratio	>25 dB (co-polar)	>25 dB (co-polar)	>30 dB (co-polar)	>30 dB (co-polar)	>30 dB (co-polar)
Maximum input power	250 watts (at 50°C)	250 watts (at 50°C)	200 watts (at 50°C)	200 watts (at 50°C)	200 watts (at 50°C)
+45° and -45° polarization horizontal beamwidth	71° (half-power)	68° (half-power)	61° (half-power)	63° (half-power)	70° (half-power)
+45° and -45° polarization vertical beamwidth	37° (half-power)	31° (half-power)	19° (half-power)	18° (half-power)	18.5° (half-power)
Cross polar ratio (typical) Main direction 0°	30 dB	30 dB	25 dB	25 dB	25 dB
Sector ±60°	>8 dB	>8 dB	>8 dB	>8 dB	>8 dB

* Mechanical design is based on environmental conditions as stipulated in TIA-222-G-2 (December 2009) and/or ETS 300 019-1-4 which include the static mechanical load imposed on an antenna by wind at maximum velocity. See the Engineering Section of the cataloq for further details.

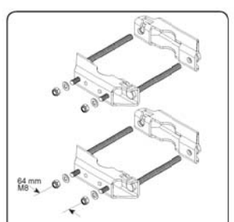
11241-D

Kathrein Inc., Scala Division Post Office Box 4580 Medford, OR 97501 (USA) Phone: (541) 779-6500 Fax: (541) 779-3991
Email: communications@kathrein.com Internet: www.kathrein-scala.com

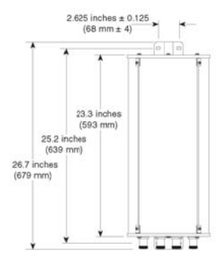
KATHREIN
SCALA DIVISION

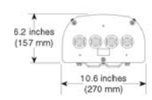
840 10525

65° Dualband Directional Antenna



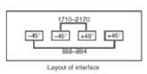
2 x 738 546 Mounting Kit (included)





Mounting Options:

Model	Description
2 x 738 546 (included)	Mounting Kit for 2 to 4.6 inch (50 to 115 mm) OD mast.
850 10013	Tilt Kit for use with the 2 x 738 546 mounting kit 0–34 degrees downtilt angle.



Layout of interface

Profile PA3

Order Information:

Model	Description
840 10525	Antenna with 7-16 DIN connectors

All specifications are subject to change without notice. The latest specifications are available at www.kathrein-scala.com.

Kathrein Inc., Scala Division Post Office Box 4580 Medford, OR 97501 (USA) Phone: (541) 779-6500 Fax: (541) 779-3991
Email: communications@kathrein.com Internet: www.kathrein-scala.com

ANTENNA SPECIFICATIONS N.T.S. 1

AlphaCell
General Specifications

Model:	220 GXL	195 GXL	165 GXL
Warranty[1]:	4 to 5 year full replacement	4 to 5 year full replacement	4 to 5 year full replacement
Service Life:	Extended	Extended	Extended
Runtime (minutes)[2]:	220	195	165
Sealed VRLA:	Valve regulated lead acid	Valve regulated lead acid	Valve regulated lead acid
Heat Resistant:	Extreme	Extreme	Extreme
Hydrogen Emission:	Low	Low	Low
Terminals:	Threaded insert 1/4"- 20 UNC	Threaded insert 1/4" - 20 UNC	Threaded insert 1/4"- 20 UNC

Specifications[4]

Model:	220 GXL	195 GXL	165 GXL
Typical Runtime (minutes)[2]:	220	195	165
Cells Per Unit:	6	6	6
Voltage Per Unit:	12.8	12.8	12.8
Conductance Value:	1175	1100	1000
Max. Discharge Current (A):	900	900	800
Short Circuit Current (A):	2800	2600	2500
10 Second Volts @ 100A:	11.4	11.3	11.2
Ohms Impedance 60Hz:	0.0050	0.0050	0.0055
Nominal Capacity at 20hrs: (to 1.75VPC)	109Ah	100Ah	86
Nominal Capacity at 20hrs: (to 1.70VPC)	110Ah	102Ah	87
BCI Group Size:	31	31	27
Weight (lb/kg):	73/33.2	67/30.5	63/28.6
Height w/ Terminals (in/mm):	8.48/215.4	8.48/215.4	8.05/204.5
Width (in/mm)[3]:	13.42/340.9	13.42/340.9	12.5/317.8
Depth (in/mm)[3]:	6.80/172.7	6.80/172.7	6.83/173.4
Operating Temperature Range Discharge:	-40 to 71°C (-40 to 160°F)	-40 to 71°C (-40 to 160°F)	-40 to 71°C (-40 to 160°F)
Charge (with temp compensation):	-23 to 60°C (-9.4 to 140°F)	-23 to 60°C (-9.4 to 140°F)	-23 to 60°C (-9.4 to 140°F)
Float Charging Voltage (Vdc):	13.5 to 13.8	13.5 to 13.8	13.5 to 13.8
AC Ripple Charger:	0.5% RMS or 1.5% of float charge voltage recommended for best results. Max. allowed = 4% P-P		

Notes:
[1] Warranty varies by country and region. Warranty valid only when used with Alpha approved Power Supplies, Chargers and Enclosures. Consult your sales person for details.
[2] Runtimes calculated using a 25A DC constant current load
[3] Dimensions at top of battery
[4] See AlphaCell Users Guide for Additional Details

Typical Standby Time in Minutes @ 25°C/77°F

2M2100Vac@	4A			6A			8A			10A		
Battery/Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries	508	453	386	330	285	249	236	209	183	186	165	144
4 batteries	701	625	540	444	396	346	326	295	256	261	232	203
6 batteries	1081	976	853	791	625	546	533	465	407	418	372	325
8 batteries	1457	1338	1165	960	850	750	730	645	562	577	515	450
9 batteries	1646	1519	1322	1091	978	853	830	733	640	659	587	514

2M2100Vac@	12A			16A			18A			19A		
Battery/Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries	140	132	115	119	106	92	101	89	77	87	76	66
4 batteries	210	197	163	169	150	132	144	128	112	124	111	96
6 batteries	339	301	264	275	245	214	236	209	183	204	182	159
8 batteries	478	419	367	385	341	299	329	293	256	283	255	223
9 batteries	538	479	419	440	391	342	377	335	294	329	293	256

3M2100Vac@	4A			6A			8A			10A		
Battery/Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries	798	712	622	508	453	396	377	335	294	300	267	233
4 batteries	1081	976	853	791	625	546	533	465	407	418	372	325
6 batteries	1681	1516	1322	1341	1191	853	829	733	640	659	587	514
8 batteries	2288	2067	1786	1827	1638	1195	1122	1000	877	904	809	706
9 batteries	2590	2345	2037	1986	1789	1322	1273	1143	997	1027	921	803

3M2100Vac@	12A			16A			18A			19A		
Battery/Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries	242	215	189	196	174	151	166	148	125	144	128	107
4 batteries	339	301	264	275	245	214	236	209	182	204	182	156
6 batteries	538	479	419	440	391	340	377	335	290	329	293	252
8 batteries	741	660	577	607	541	470	523	465	402	458	407	351
9 batteries	843	753	658	692	617	538	597	531	462	523	465	402

*Above calculations based on an AC load with a .90 cable plant power factor.

For contact information visit www.alpha.com

The Alpha Group >

North America	Europe, Middle East & Africa			Asia Pacific	Latin & South America
Canada Tel: +1 604 439 1476 Fax: +1 604 430 6908 Toll Free: +1 800 667 8743 USA Tel: +1 360 647 2360 Fax: +1 360 671 4936	Cyprus Tel: +357 25 375 675 Fax: +357 52 359 595 Russia Tel: +7 495 925 9564 Fax: +7 495 916 1369	Germany Tel: +49 9122 79089 0 Fax: +49 9122 79089 21 United Kingdom Tel: +44 1279 501110 Fax: +44 1279 456870	Lithuania Tel: +370 5 219 6291 Fax: +370 5 216 5292	P.R. China Tel: +852 2736 9663 Fax: +852 2199 7988	Contact USA office

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040-297-10-D002 (06/09)

BATTERY SPECIFICATIONS N.T.S. 2

Electrical

Power Supply
Mains power, Vac ..... 115 or 230

Power consumption, Watts ..... 1100 max. < 750 @ normal operation

700 MHz SISO/MIMO

Frequency range, MHz
Uplink ..... 698 to 716/771 to 787
Downlink ..... 728 to 757

Output power per carrier*, dBm

Number of Carriers	1	2	4	8
LTE	43	40**	37	34

850 MHz

Frequency range, MHz
Uplink ..... 824 to 849
Downlink ..... 869 to 894

Output power per carrier*, dBm

Number of Carriers	1	2	4	8
Analog	43	40	37	34
GSM	43	40	37	34
CDMA	43	40	37	34
LTE	43	40 **	37	34
UMTS	42	39	36	33

20W for Cell, PCS bands and 700MHz MIMO

1900 MHz

Frequency range, MHz
Uplink ..... 1850 to 1915
Downlink ..... 1930 to 1995

Output power per carrier*, dBm

Number of Carriers	1	2	4	8
GSM	43	40	37	34
CDMA	43	40	37	34
LTE	43	40 **	37	34
UMTS	42	39	36	33

CommScope®

ION-M7P/7P/85P/19P

Noise figure, dB
ICP3 optimized ..... +10 max.
Noise figure optimized ..... +6 max. 4.5 typical

Mechanical****

Height, width, depth, mm (in) ..... 817 x 245 x 218 (32.2 x 9.6 x 8.6)

Weight, kg (lb) 40 (88.2)

Page 1, February 27, 2013 Company Confidential

ION-M7P/7P/85P/19P N.T.S. 2

REV:	DATE/BY:	REVISION DESCRIPTION:
1	FXC 09/02/2013	ISSUED FOR FINAL
2	FXC 11/06/2013	ISSUED FOR FINAL
3	FXC 01/08/2014	ISSUED FOR FINAL
4	FXC 02/25/2014	ISSUED FOR FINAL
5	FXC 05/13/2014	ISSUED FOR FINAL

ENGINEER/CONSULTANT:

Civil Engineer

CDG
CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630
(949) 753-8807 OFFICE - (949) 753-8833 FAX

CLIENT:

CROWN CASTLE
NG WEST, INC.

STAMP:

SITE INFO:

SITE NAME:
MON30
VERIZON MONTECITO–MON30

SITE ADDRESS: THOMAS BROS PAGE 997 GRID A3
R.O.W. SOUTH SIDE OF SAN LEANDRON LN
(ADJACENT TO 198 N TIBURON LN)
SANTA BARBARA, CA 93108
LAT: 34.42542°
LONG: –119.62164°

SHEET TITLE:

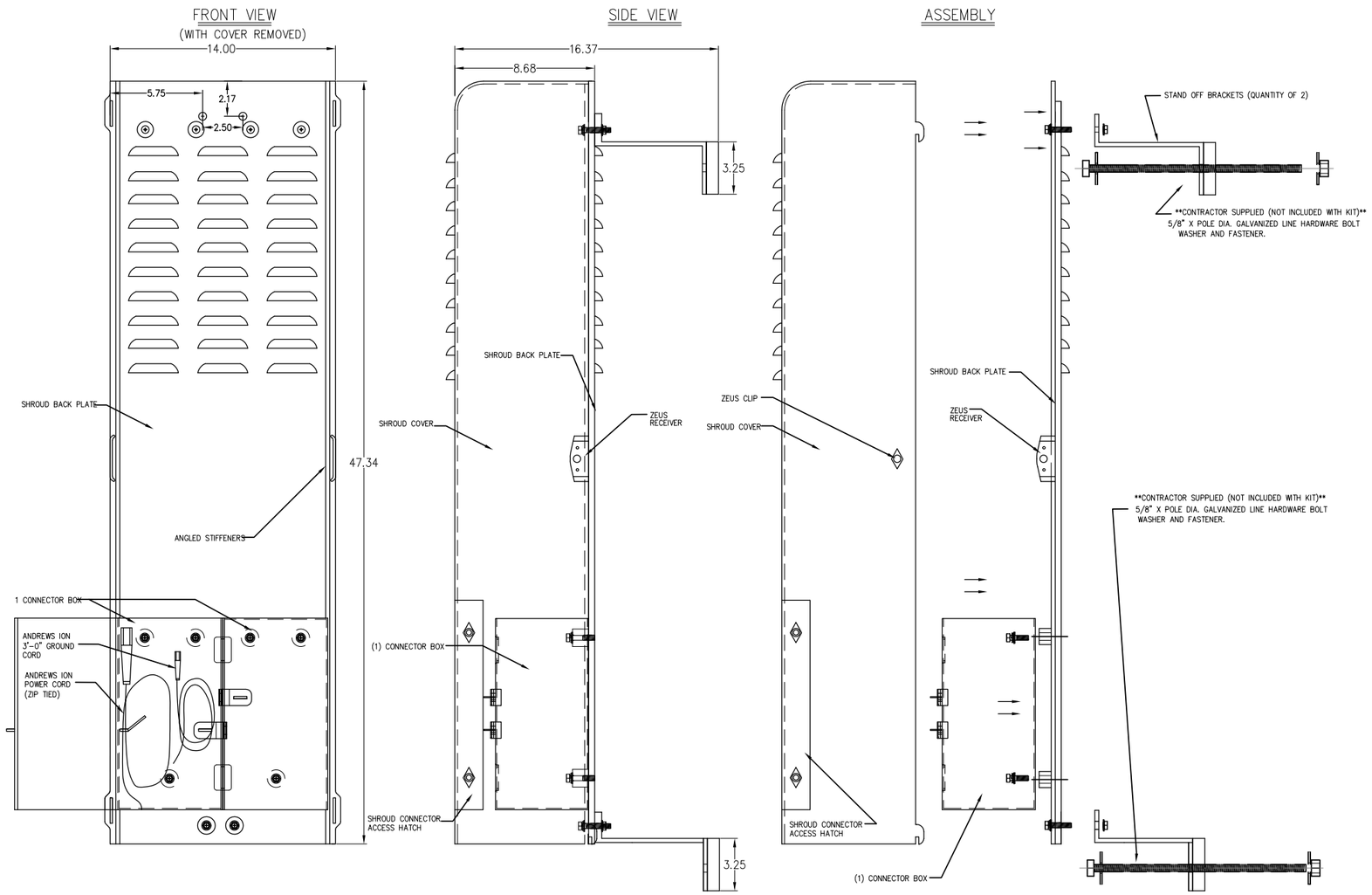
DETAILS

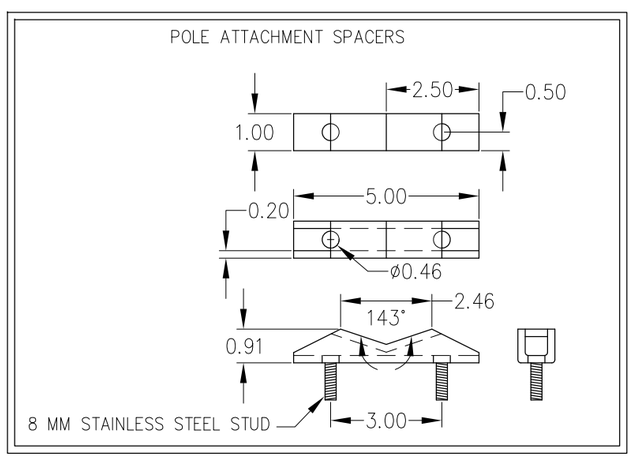
DRAWING INFO:

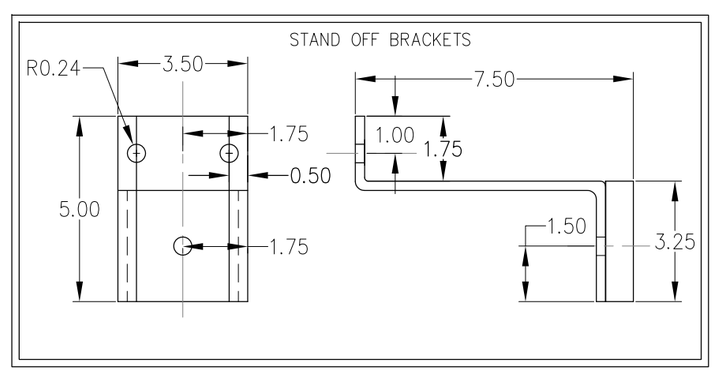
DRAWN BY:
FC

SHEET NUMBER:

D–1







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DETAILS

DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:

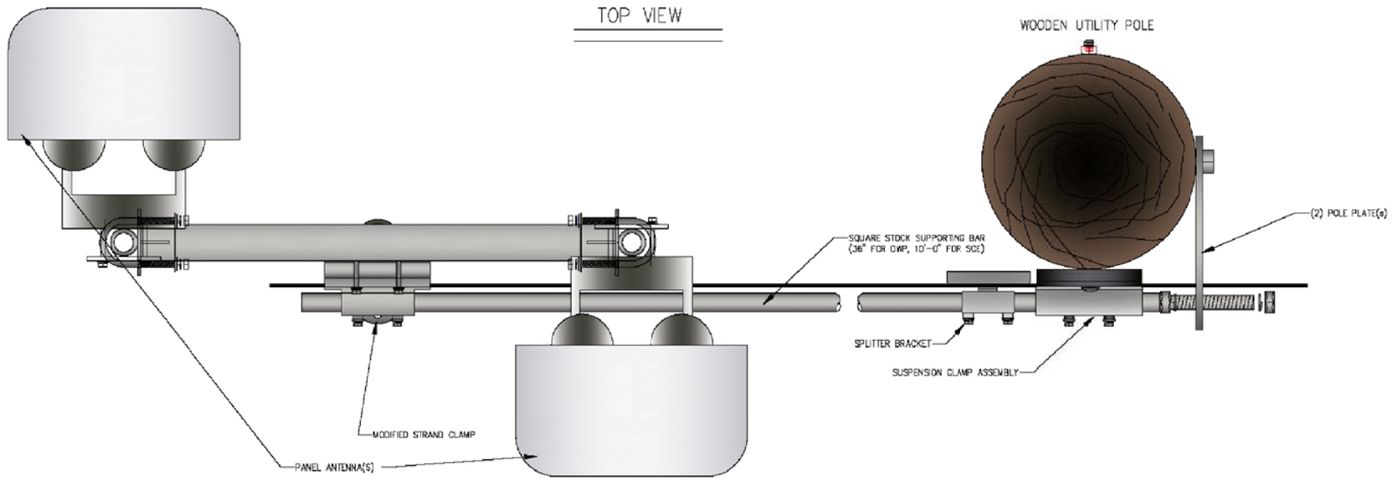
D-2

SHROUD DETAIL

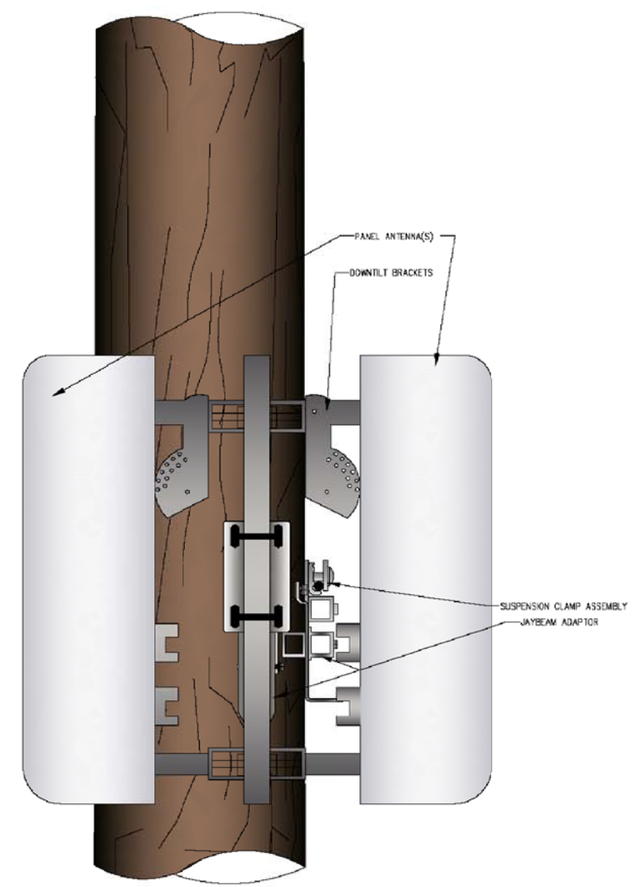
N.T.S.

RED HIDDEN LINES — — — — Represents any line of an object that is hidden from view.
BLUE SOLID LINES ——— Represents any line of an object that is visible in a particular view.

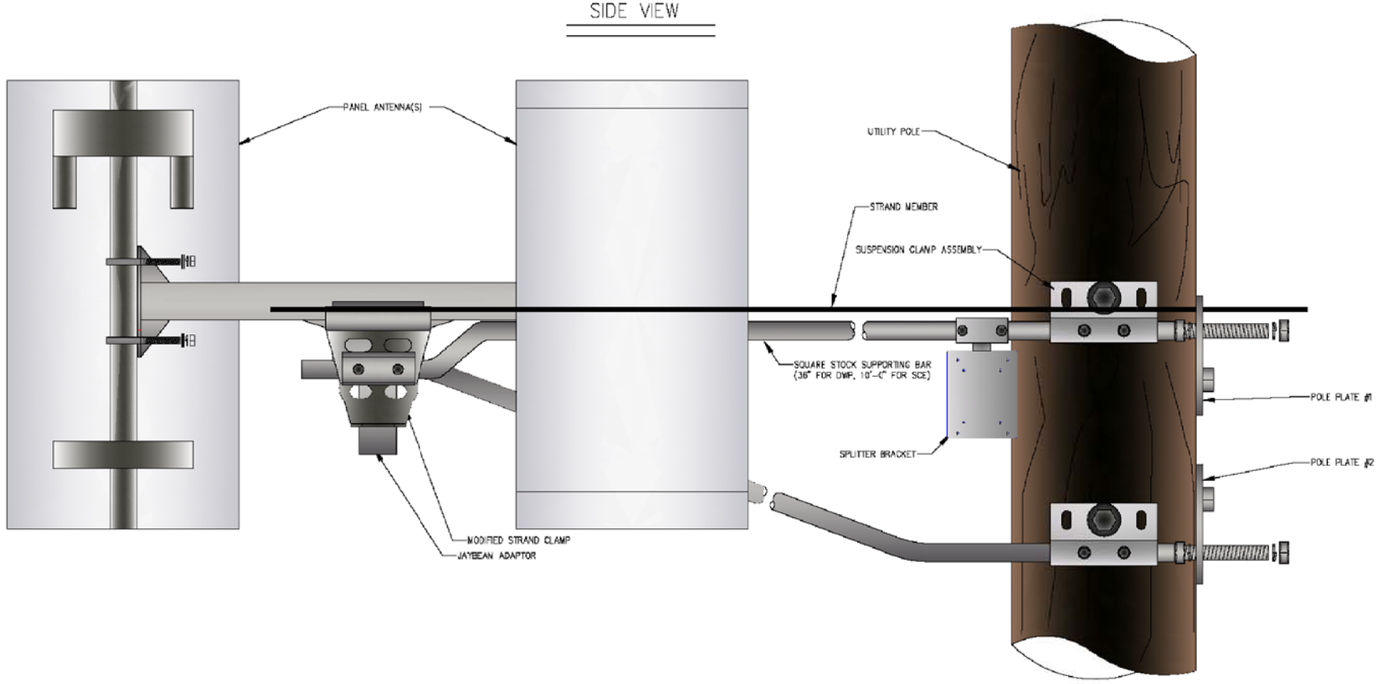
TOP VIEW



FRONT VIEW



SIDE VIEW



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DETAILS

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FC

SHEET NUMBER:

D-3

CROWN CASTLE NG WEST, LLC

VERIZON MONTECITO-MON31m1

R.O.W. SOUTH SIDE OF TOLLIS AVE.
(ADJACENT TO 395 OLIVE RD)
SANTA BARBARA, CA 93108

GENERAL NOTES

1. APPROVAL OF THESE PLANS BY THE CITY ENGINEER DOES NOT AUTHORIZE ANY WORK TO BE PERFORMED UNTIL A PERMIT HAS BEEN ISSUED.
2. UPON ISSUANCE OF A PERMIT, NO WORK WILL BE PERMITTED ON WEEKENDS OR HOLIDAYS WITHOUT PERMISSION FROM THE ENGINEERING DEPARTMENT.
3. THE APPROVAL OF THIS PLAN OR ISSUANCE OF A PERMIT BY THE LOCAL JURISDICTION DOES NOT AUTHORIZE THE SUBDIVIDER AND OWNER TO VIOLATE ANY FEDERAL, STATE OR CITY LAWS, ORDINANCES, REGULATIONS, OR POLICIES, INCLUDING, BUT NOT LIMITED TO, THE FEDERAL ENDANGERED SPECIES ACT OF 1973 AND AMENDMENTS THERETO (16 USC SECTION 1531 ET.SEQ.).
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SURVEY MONUMENTS AND/OR VERTICAL CONTROL BENCHMARKS WHICH ARE DISTURBED OR DESTROYED BY CONSTRUCTION. A LAND SURVEYOR MUST FIELD LOCATE, REFERENCE, AND/OR PRESERVE ALL HISTORICAL OR CONTROLLING MONUMENTS PRIOR TO ANY EARTHWORK. IF DESTROYED, SUCH MONUMENTS SHALL BE REPLACED WITH APPROPRIATE MONUMENTS BY A LAND SURVEYOR, A CORNER RECORD OR RECORD OF SURVEY, AS APPROPRIATE, SHALL BE FIELD AS REQUIRED BY THE PROFESSIONAL LAND SURVEYORS ACT. IF ANY VERTICAL CONTROL IS TO BE DISTURBED OR DESTROYED, THE LOCAL JURISDICTION FIELD SURVEY SECTION MUST BE NOTIFIED, IN WRITING, AT LEAST 3 DAYS PRIOR TO THE CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE COST OF REPLACING ANY VERTICAL CONTROL BENCHMARKS DESTROYED BY THE CONSTRUCTION.
5. IMPORTANT NOTICE: SECTION 4216 OF THE GOVERNMENT CODE REQUIRES A DIG ALERT IDENTIFICATION NUMBER BE ISSUED BEFORE A "PERMIT TO EXCAVATE" WILL BE VALID. FOR YOUR DIG ALERT I.D. NUMBER, CALL UNDERGROUND SERVICE ALERT, TWO DAYS BEFORE YOU DIG.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR THE POTHOLE AND LOCATING OF ALL EXISTING UTILITIES THAT CROSS THE PROPOSED TRENCH LINE AND MUST MAINTAIN 1' MINIMUM VERTICAL CLEARANCE.
7. CONTRACTOR SHALL SUBMIT TO THE LOCAL JURISDICTION, A CONSTRUCTION PLAN TO PROTECT WATER MAINS PRIOR TO COMMENCING CONSTRUCTION.
8. CONTRACTOR SHALL REPLACE OR REPAIR ALL TRAFFIC SIGNAL LOOPS, CONDUIT, AND LANE STRIPING DAMAGED DURING CONSTRUCTION.
9. CONTRACTOR SHALL NOTIFY THE LOCAL JURISDICTION. A MINIMUM OF 48 HOURS PRIOR TO COMMENCING WORK WITHIN 10' OF ALL SEWER, WATER, AND STORMDRAIN MAIN INCLUDING ALL CROSSINGS.
10. THIS PROJECT WILL BE INSPECTED BY ENGINEERING AND CAPITAL PROJECTS DEPARTMENT, FIELD ENGINEERING DIVISION.
11. AS-BUILT DRAWINGS MUST BE SUBMITTED TO THE CITY RESIDENT ENGINEER PRIOR TO THE ACCEPTANCE OF THIS PROJECT.
12. PUBLIC IMPROVEMENT SUBJECT TO DESUETUDE OR DAMAGE." IF REPAIR OR REPLACEMENT OF SUCH PUBLIC IMPROVEMENTS IS REQUIRED, THE OWNER SHALL OBTAIN THE REQUIRED PERMITS FOR WORK IN THE PUBLIC RIGHT-OFWAY, SATISFACTORY TO THE PERMIT - ISSUING AUTHORITY.
13. PRIOR TO ANY DISTURBANCE TO THE SITE, EXCLUDING UTILITY MARKS-OUTS AND SURVEYING, THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR A PRE-CONSTRUCTION MEETING WITH THE LOCAL JURISDICTION FIELD ENGINEERING DIVISION.
14. PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION SHOWN ON THESE PLANS. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE. THE CONTRACTOR IS RESPONSIBLE TO ATTEND THE LOCAL JURISDICTIONS MONTHLY UTILITY COORDINATION COMMITTEE THE CONSTRUCTION ACTIVITIES WITH THE CITY AND ALL OTHER CONTRACTORS SO THAT NO TRENCH IS CUT WITHIN ANY OF THE CITY STREETS THAT HAVE BEEN CONSTRUCTED, REPAIRED, OR SLURRY SEALED WITHIN THREE YEARS OF THE STREET CONSTRCTUION/RESURFACING DATE.
15. MANHOLES OR COVERS SHALL BE LABELED "CROWN CASTLE" OR "CROWN CASTLE NG WEST".
16. CONTRACTOR SHALL IMPLEMENT AN EROSION AND SEDIMENT CONTROL PROGRAM DURING THE PROJECT CONSTRUCTION ACTIVITIES. THE PROGRAM SHALL MEET THE APPLICABLE REQUIREMENTS OF THE STATE WATER RESOURCE CONTROL BOARD.
17. THE CONTRACTOR SHALL HAVE EMERGENCY MATERIALS AND EQUIPMENT ON HAND FOR UNFORESEEN SITUATIONS, SUCH AS DAMAGE TO UNDERGROUND WATER, SEWER, AND STORM DRAIN FACILITIES WHEREBY FLOWS MAY GENERATE EROSION AND SEDIMENT POLLUTION.

SPECIAL NOTES

THE FOLLOWING NOTES ARE PROVIDED TO GIVE DIRECTIONS TO THE CONTRACTOR BY THE ENGINEER OF WORK. THE CITY ENGINEER'S SIGNATURE ON THESE PLANS DOES NOT CONSTITUTE APPROVAL OF THESE NOTES AND THE CITY WILL NOT BE RESPONSIBLE FOR THEIR ENFORCEMENT.

1. THE CONTRACTOR SHALL VERIFY THE LOCATION EXISTING UNDERGROUND UTILITIES INCLUDING SEWER LATERALS AND WATER SERVICES TO INDIVIDUAL LOTS BOTH VERTICAL AND HORIZONTAL PRIOR TO COMMENCING IMPROVEMENT OPERATIONS.
2. CONTRACTOR SHALL MAKE EXPLORATION EXCAVATIONS AND LOCATE EXISTING FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS OF PLANS IF REVISION IS NECESSARY BECAUSE OF LOCATION OF EXISTING UTILITIES.
3. LOCATION AND ELEVATIONS OF IMPROVEMENTS, TO BE MET BY WORK, SHALL BE CONFIRMED BY FIELD MEASUREMENT PRIOR TO CONSTRUCTION OF NEW WORK.
4. GRADES SHOWN ARE FINISH GRADES, CONTRACTOR SHALL DETERMINE NECESSARY SUB GRADE ELEVATIONS AND SHALL CONSTRUCT SMOOTH TRANSITION BETWEEN FINISH GRADES SHOWN.
5. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE RESPONSIBILITY FOR JOB SITE CONDITION DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY: THAT THIS PROVISION SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXPECTING FOR LIABILITY ARISING FROM SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
6. THE CONTRACTOR SHALL BE TOTALLY RESPONSIBLE FOR COMPLIANCE WITH THE PROVISIONS OF THE STATE OF CALIFORNIA SAFETY ORDERS.
7. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE FROM EXISTING RECORDS AND CORROBORATED, WHERE POSSIBLE WITH FIELD TIES. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING THE LOCATIONS SHOWN, BOTH HORIZONTALLY AND VERTICALLY, PRIOR TO CONSTRUCTION. IF EXISTING LOCATIONS VARY SUBSTANTIALLY FROM THE PLANS, THE ENGINEER SHOULD BE NOTIFIED TO MAKE ANY CONSTRUCTION CHANGES REQUIRED.
8. THE CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT FOR ALL SEWER AND WATER MAIN UNDER CROSSING IN ACCORDANCE WITH PART 1 SECTION 5-2 OF THE STANDARD SPECIFICATION.
9. THE CONTRACTOR SHALL REPLACE OR REPAIR ALL TRAFFIC SIGNAL LOOPS, CONDUITS, AND LANE STRIPING DAMAGED DURING CONSTRUCTION.
10. THE CONTRACTOR SHALL SUBMIT WORK PLANS FOR ALL BORE OPERATIONS TWO WEEKS PRIOR TO COMMENCING WORK.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR THE POTHOLE AND LOCATING OF ALL EXISTING UTILITIES THAT CROSS THE PROPOSED TRENCH LINE AND MUST MAINTAIN 1' MINIMUM VERTICAL CLEARANCE.
12. AS-BUILT DRAWINGS MUST BE SUBMITTED TO THE CITY ENGINEER PRIOR TO ACCEPTANCE OF THIS PROJECT.

VICINITY MAP - N.T.S.

GROUND BUS BAR	LIGHT POLE	ELEVATION REF.	ELECT. CONDUIT
MECH. GRND. CONN.	FOUNDATION	SECTION REF.	COAXIAL CABLE
CADWELD	SPOT ELEV.	PROP./LEASE LINE	MYERS PEDESTAL
ELECTRIC BOX	SET POINT	MATCH LINE	VAULT STANDARD 2'X3'
TELEPHONE BOX	REVISION	WORK POINT	STEEL POLE
EXISTING SERVICE POLE		TELE. CONDUIT	
SIDEWALK FLAG		CENTERLINE	
EX. MANHOLE	DETAIL REF.		

SYMBOLS, LINETYPES AND HATCH PATTERNS

EROSION AND SEDIMENT CONTROL NOTES

TEMPORARY EROSION/SEDIMENT CONTROL, PRIOR TO COMPLETION OF FINAL IMPROVEMENTS, SHALL BE PERFORMED BY THE CONTRACTOR OR QUALIFIED PERSON AS INDICATED BELOW:

1. ALL REQUIREMENTS OF THE LOCAL JURISDICTION "LAND DEVELOPMENT MANUAL, STORM WATER STANDARDS" MUST BE INCORPORATED INTO THE DESIGN AND CONSTRUCTION OF THE PROPOSED GRADING/IMPROVEMENTS CONSISTENT WITH THE APPROVED STORM WATER AND/OR WATER POLLUTION CONTROL PLAN (WPCP).
2. FOR STORM DRAIN INLETS, PROVIDE A GRAVEL BAG SILT BASIN IMMEDIATELY UPSTREAM OF INLET AS INDICATED ON DETAILS.
3. FOR INLETS LOCATED AT SUMPS ADJACENT TO TOP OF SLOPES, THE CONTRACTOR SHALL ENSURE THAT WATER DRAINING TO THE SUMP IS DIRECTED INTO THE INLET AND THAT A MINIMUM OF 1.00" FREEBOARD EXISTS AND IS MAINTAINED ABOVE THE TOP OF THE INLET. IF FREEBOARD IS NOT PROVIDED BY GRADING SHOWN ON THESE PLANS, THE CONTRACTOR SHALL PROVIDE IT VIA TEMPORARY MEASURES, I.E. GRAVEL BAGS OR DIKES.
4. THE CONTRACTOR OR QUALIFIED PERSON SHALL BE RESPONSIBLE FOR CLEANUP OF SILT AND MUD ON ADJACENT STREET(S) AND STORM DRAIN SYSTEM DUE TO CONSTRUCTION ACTIVITY.
5. THE CONTRACTOR OR QUALIFIED PERSON SHALL CHECK AND MAINTAIN ALL LINED AND UNLINED DITCHES AFTER EACH RAINFALL.
6. THE CONTRACTOR SHALL REMOVE SILT AND DEBRIS AFTER EACH MAJOR RAINFALL.
7. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON, ALL NECESSARY MATERIALS SHALL BE STOCKPILED ON SITE AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
8. THE CONTRACTOR SHALL RESTORE ALL EROSION/SEDIMENT CONTROL MEASURES TO WORKING ORDER TO THE SATISFACTION OF THE CITY ENGINEER OR RESIDENT ENGINEER AFTER EACH RUN-OFF PRODUCING RAINFALL.
9. THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION CONTROL MEASURES AS MAY BE REQUIRED BY THE RESIDENT ENGINEER DUE TO UNCOMPLETED GRADING OPERATIONS OR UNFORESEEN CIRCUMSTANCES, WHICH MAY ARISE.
10. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATERS CREATE A HAZARDOUS CONDITION.
11. ALL EROSION/SEDIMENT CONTROL MEASURES PROVIDED PER THE APPROVED GRADING PLAN SHALL BE INCORPORATED HEREON. ALL EROSION/SEDIMENT CONTROL FOR INTERIM CONDITIONS SHALL BE DONE TO THE SATISFACTION OF THE RESIDENT ENGINEER.
12. GRADED AREAS AROUND THE PROJECT PERIMETER MUST DRAIN AWAY FROM THE FACE OF THE SLOPE AT THE CONCLUSION OF EACH WORKING DAY.
13. ALL REMOVABLE PROTECTIVE DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN RAIN IS IMMINENT.
14. THE CONTRACTOR SHALL ONLY GRADE, INCLUDING CLEARING AND GRUBBING FOR THE AREAS FOR WHICH THE CONTRACTOR OR QUALIFIED PERSON CAN PROVIDE EROSION/SEDIMENT CONTROL MEASURES.
15. THE CONTRACTOR SHALL ARRANGE FOR WEEKLY MEETINGS DURING OCTOBER 1ST TO APRIL 30TH FOR PROJECT TEAM (GENERAL CONTRACTOR, QUALIFIED PERSON, EROSION CONTROL SUBCONTRACTOR IF ANY, ENGINEER OF WORK, OWNER AND THE RESIDENT ENGINEER) TO EVALUATE THE ADEQUACY OF THE EROSION/SEDIMENT CONTROL MEASURES AND OTHER RELATED CONSTRUCTION ACTIVITIES.

TRAFFIC CONTROL NOTES

THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN (11" X 17") FOR APPROVAL PRIOR TO STARTING WORK. THE PLAN SHOULD BE SUBMITTED TO THE TRAFFIC CONTROL PERMIT COUNTER. CONTRACTOR SHALL OBTAIN A TRAFFIC CONTROL PERMIT A MINIMUM OF TWO (2) WORKING DAYS PRIOR TO STARTING WORK, AND A MINIMUM FIVE (5) DAYS IF WORK WILL AFFECT A BUS STOP OR AN EXISTING TRAFFIC SIGNAL, OR IF WORK WILL REQUIRE A ROAD OR ALLEY CLOSURE.

FOOTAGE TOTALS	
ASPHALT CUT	-
DIRT TRENCH	-
PUNCH THRU	-
BORE	-
TOTAL	-
R&R SWF TOTAL	-

PROJECT DICTIONARY

SITE ADDRESS: R.O.W. SOUTH SIDE OF TOLLIS AVE.
(ADJACENT TO 395 OLIVE RD)
SANTA BARBARA, CA 93108

APPLICANT: CROWN CASTLE NG WEST, LLC
2125 WRIGHT AVE, SUITE #C9
LA VERNE, CA 91750
CONTACT: HEIDI PAYNE
PHONE: (949) 300-9493

CIVIL ENGINEER: CONNELL DESIGN GROUP, LLC
26455 RANCHO PARKWAY SOUTH
LAKE FOREST, CA 92630
CONTACT: FRANK CARTER
(949) 310-8233 PHONE
(949) 753-8833 FAX

CONSTRUCTION CHANGE TABLE

CHANGE	DATE	EFFECTED OR ADDED SHEET NUMBERS

APPLICABLE CODES

ALL WORK SHALL COMPLY WITH THE FOLLOWING APPLICABLE CODES:

*2010 CALIFORNIA BUILDING CODE
*2010 CALIFORNIA MECHANICAL CODE
*2010 CALIFORNIA PLUMBING CODE
*2010 CALIFORNIA ELECTRICAL CODE

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

PROJECT DESCRIPTION

PROJECT CONSISTS OF INSTALLATION OF:

1. (2) OMNI ANTENNA ON EXISTING UTILITY POLE
2. EQUIPMENT SHROUD ON EXISTING POLE
3. EQUIPMENT PEDESTAL W/ BBU AND ELECTRICAL METER AT BASE OF POLE

SHEET INDEX:

TITLE SHEET	T-1 - SHEET 1 OF 7
SITE PLAN	A-1 - SHEET 2 OF 7
PROPOSED ELEVATIONS	A-2 - SHEET 3 OF 7
DETAILS	D-1 - SHEET 4 OF 7
DETAILS	D-2 - SHEET 5 OF 7
DETAILS	D-3 - SHEET 6 OF 7
DETAILS	D-4 - SHEET 7 OF 7

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0	FXC 02/10/2013	ISSUED FOR REVIEW

ENGINEER/CONSULTANT:

Civil Engineer

CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630
(949) 753-8807 OFFICE - (949) 753-8833 FAX

CLIENT:

CROWN CASTLE NG WEST, INC.

STAMP:

SITE INFO:

SITE NAME: MON31m1
VERIZON MONTECITO-MON31m1

SITE ADDRESS: THOMAS BROS PAGE 993 GRID B1
R.O.W. SOUTH SIDE OF TOLLIS AVE.
(ADJACENT TO 395 OLIVE RD)
SANTA BARBARA, CA 93108
LAT: 34.4424144°
LONG: -119.6105036°

SHEET TITLE:

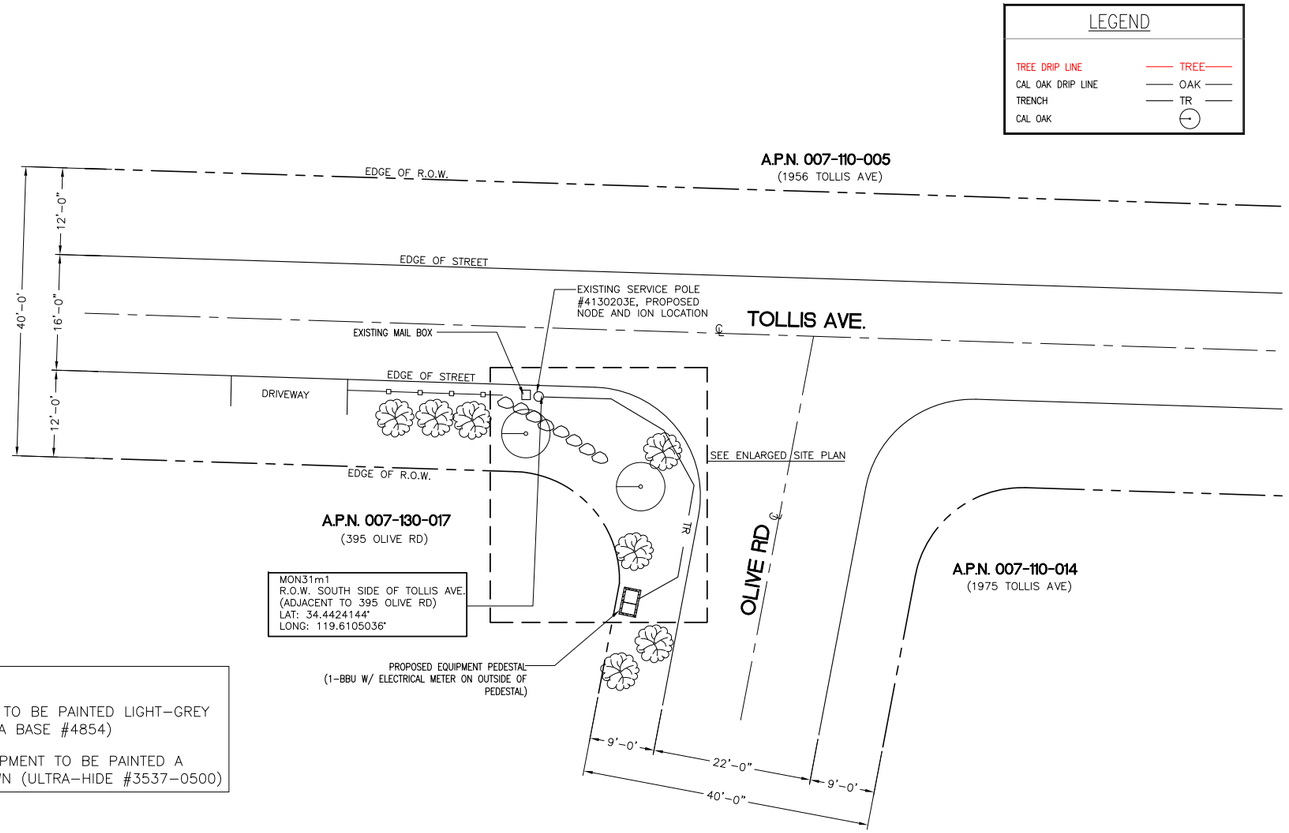
TITLE SHEET

DRAWING INFO:

DRAWN BY: FC

SHEET NUMBER:

T-1

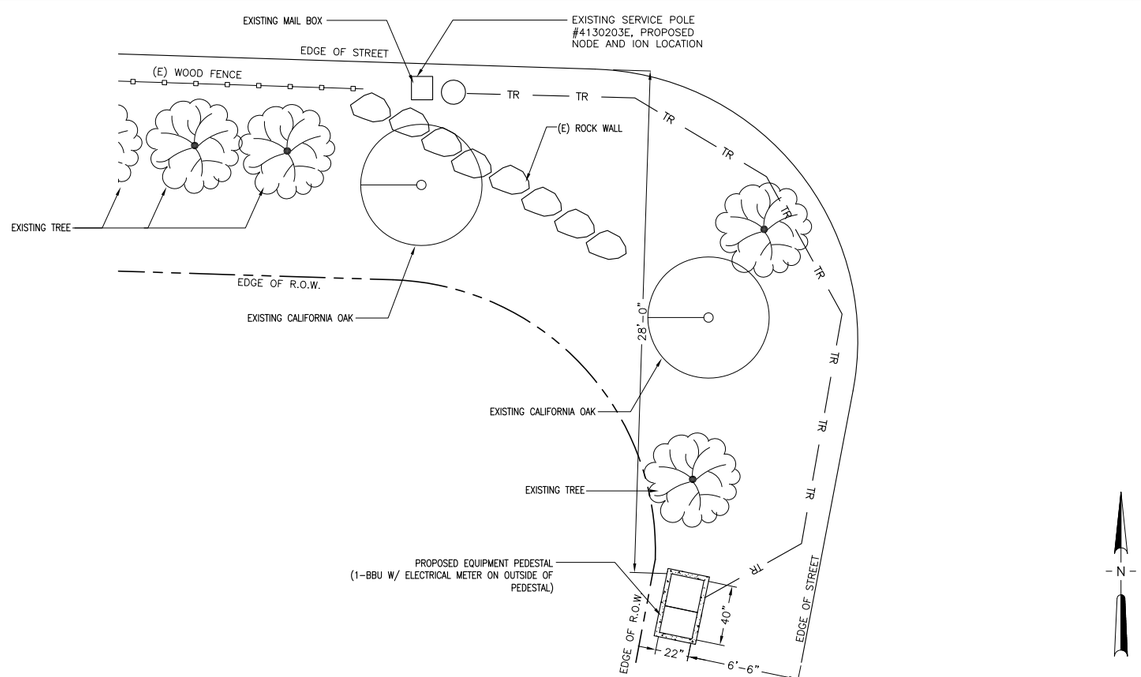


NOTE:

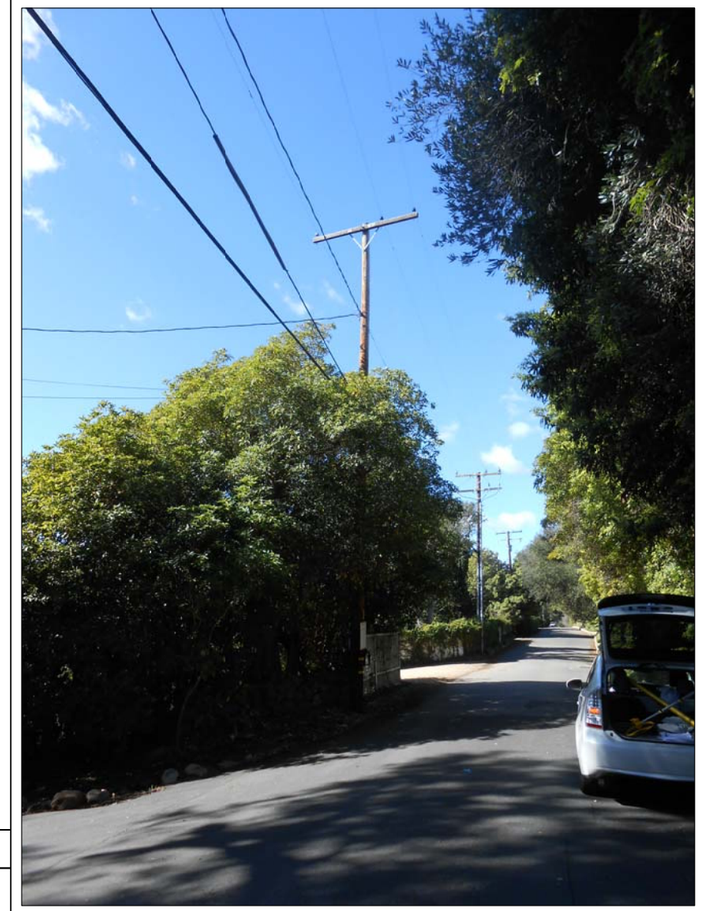
1. ANTENNA TO BE PAINTED LIGHT-GREY (BEHR ULTRA BASE #4854)

2. ALL EQUIPMENT TO BE PAINTED A MATTE BROWN (ULTRA-HIDE #3537-0500)

SITE PLAN SCALE: 1"=10'-0" 0 5' 10' 1



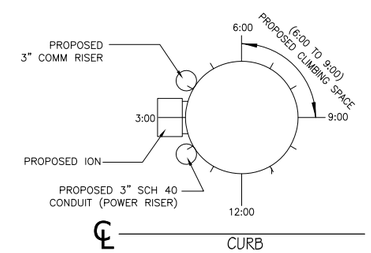
ENLARGED SITE PLAN SCALE: 1/4"=1'-0" 0 2' 4' 2



EXISTING PHOTO SCALE: N.T.S. 3

POLE WILL BE STEPPED IN ACCORDANCE TO G095 STANDARDS IN RESPECT TO CLIMBING SPACE.

1-3" CROWN CASTLE RISER @ 4:00
1-3" POWER RISER @ 2:00



RISER PROFILE SCALE: N.T.S. 2

REV:	DATE/BY:	REVISION DESCRIPTION:
0	FXC 02/10/2013	ISSUED FOR REVIEW

ENGINEER/CONSULTANT:

Civil Engineer

CDG

CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630
(949) 753-8807 OFFICE - (949) 753-8833 FAX

CLIENT:

CROWN CASTLE
NG WEST, INC.

STAMP:

SITE INFO:

SITE NAME:
MON31m1
VERIZON MONTECITO-MON31m1

SITE ADDRESS: THOMAS BROS PAGE 993 GRID B1
R.O.W. SOUTH SIDE OF TOLLIS AVE.
(ADJACENT TO 395 OLIVE RD)
SANTA BARBARA, CA 93108
LAT: 34.4424144°
LONG: -119.6105036°

SHEET TITLE:

SITE PLAN, ENLARGED SITE PLAN, EXISTING PHOTO AND RISER PROFILE

DRAWING INFO:

DRAWN BY:
FC

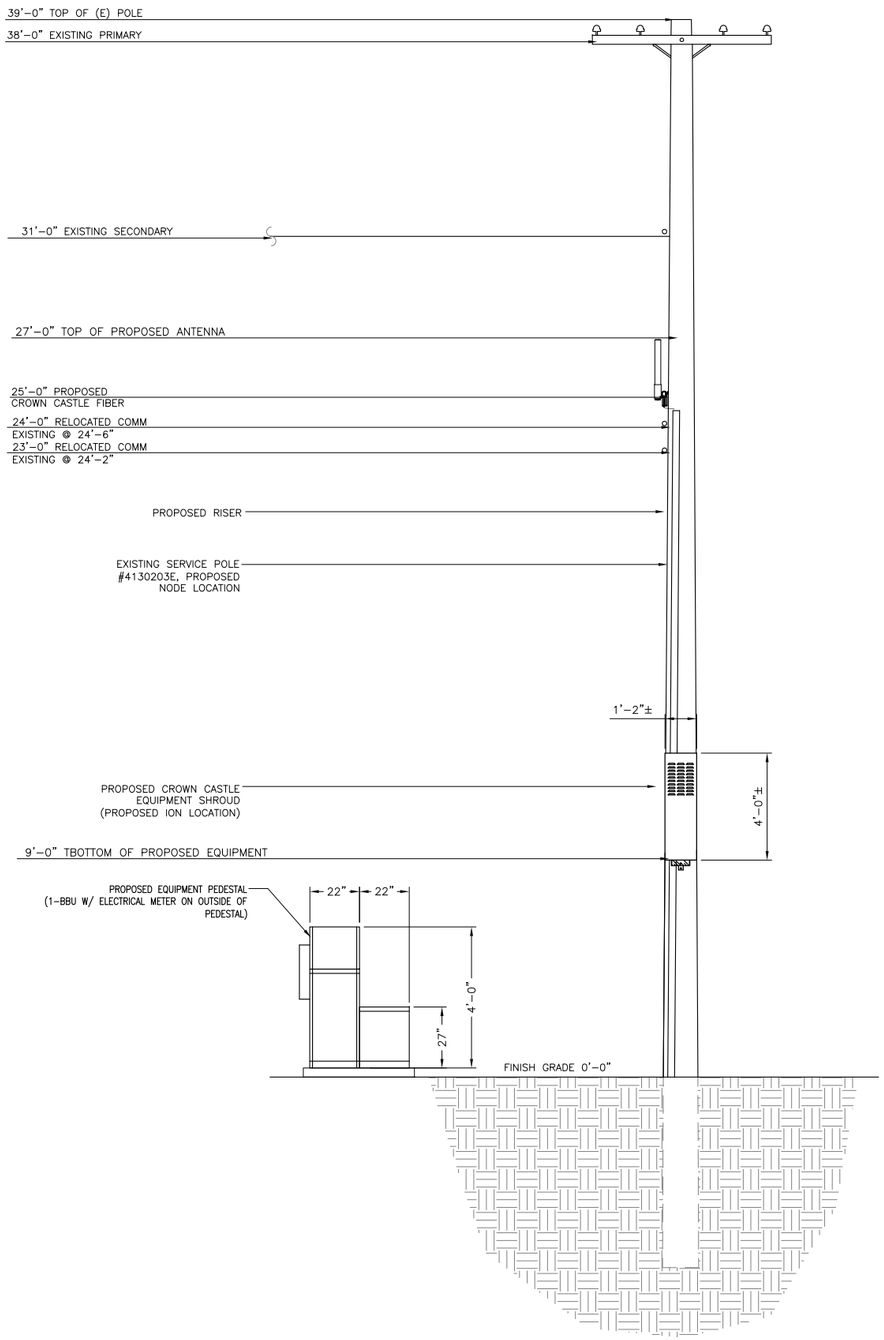
SHEET NUMBER:

A-1

NOTE:

1. ANTENNA TO BE PAINTED LIGHT-GREY (BEHR ULTRA BASE #4854)

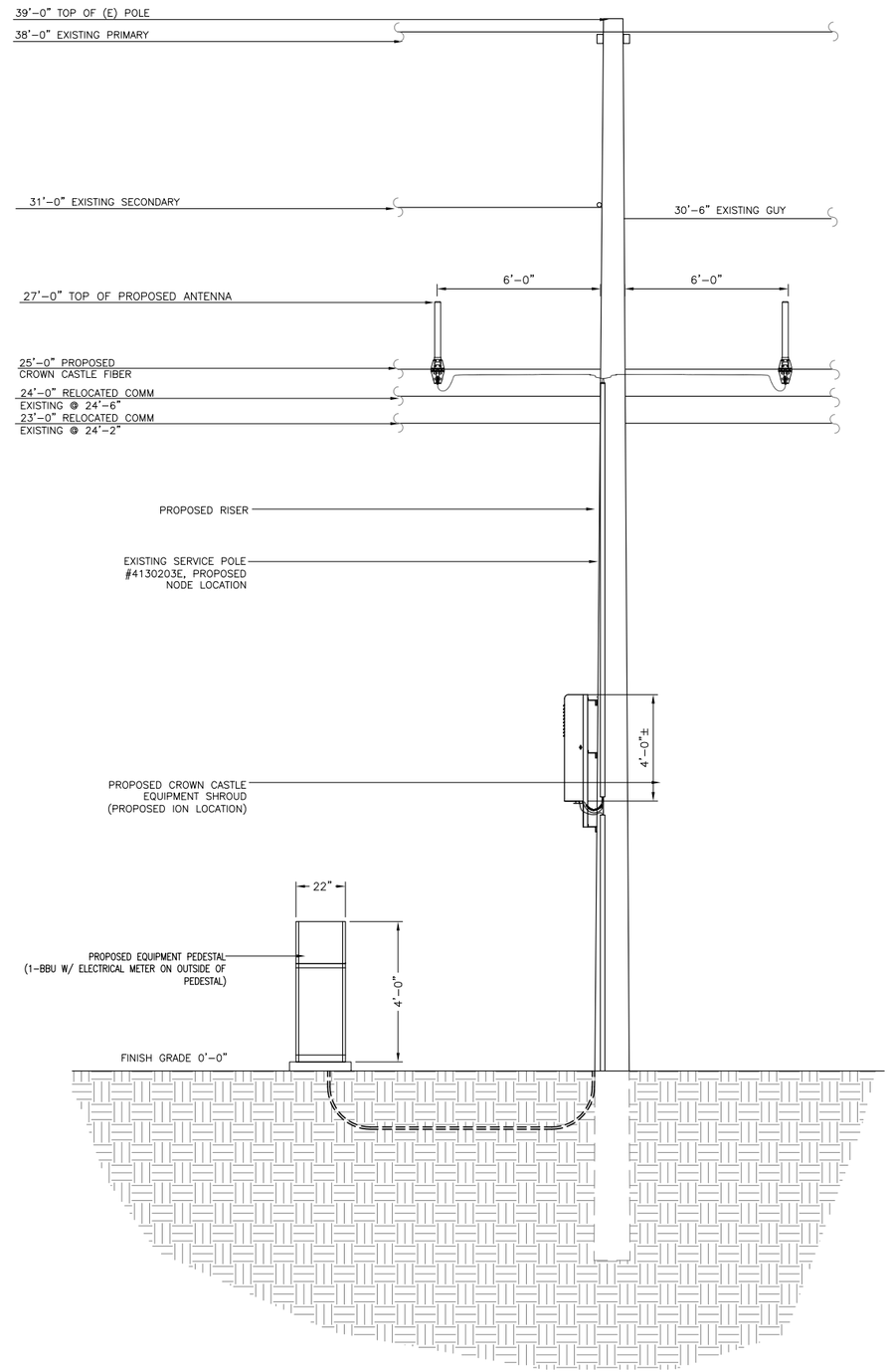
2. ALL EQUIPMENT TO BE PAINTED A MATTE BROWN (ULTRA-HIDE #3537-0500)



PROPOSED ELEVATION LOOKING WEST

SCALE: 3/8"=1'-0" 0 1' 2' 3'

1



PROPOSED ELEVATION LOOKING SOUTH

SCALE: 3/8"=1'-0" 0 1' 2' 3'

2

REV:	DATE/BY:	REVISION DESCRIPTION:
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SHEET TITLE:

ELEVATION

DRAWING INFO:

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FC

SHEET NUMBER:

A-2

Outdoor Omni-directional Antenna

COMBA

OOA-360V06N0-3 VPol, 696-960/1710-2170MHz, 360°, 4.0/6.0 dBi

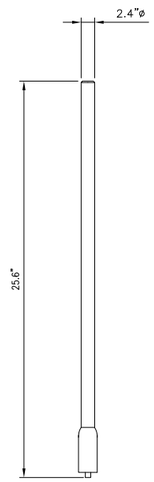
Technical Specifications

Electrical

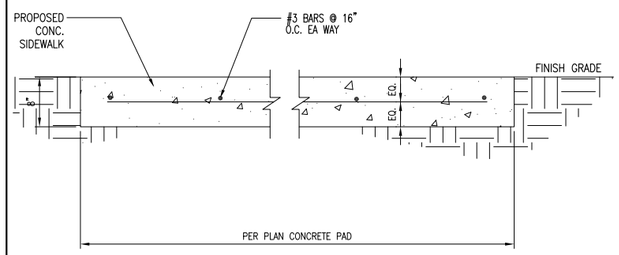
Frequency Range	MHz	696–960	1710–2170
Polarization		Vertical	
Gain	dBi	4.0±1	6.0±1
Horizontal Beamwidth	deg	360	
Vertical Beamwidth	deg	22–53	20–26
Electrical Downtilt–Fixed	deg	0	
VSWR		1.8	
Maximum Power	W	200	
Impedance		50	
Lightning Protection		Direct Ground	

Mechanical

Dimensions, HxDia	mm(in)	650x60 (25.6x2.4)
Weight, with Mounting kit	kg (lb)	1 (2.2)
Radome Material and Color		Fiberglass, Light Grey
Radiating Element Material		Copper
Connector Type and Location		N–Female, Bottom
Operational Temperature		–55 to +70
Operational Humidity	%	95
Operational Wind Speed	km/h (mph)	200 (124)
Shipping Dimensions, HxWxD	mm (in)	670x100x100 (26.4x3.9x3.9)
Shipping Weight	kg (lb)	1.2 (2.65)



ANTENNA SPECIFICATIONS N.T.S. 1



CONCRETE PAD N.T.S. 3

Electrical

Power Supply
Mains power, Vac ..... 115 or 230

Power consumption, Watts ..... 1100 max. < 750 @ normal operation

700 MHz SISO/MIMO

Frequency range, MHz
Uplink ..... 698 to 716/776 to 787
Downlink ..... 728 to 757

Output power per carrier*, dBm

Number of Carriers	1	2	4	8
LTE	43	40**	37	34

850 MHz

Frequency range, MHz
Uplink ..... 824 to 849
Downlink ..... 869 to 894

Output power per carrier*, dBm

Number of Carriers	1	2	4	8
Analog	43	40	37	34
GSM	43	40	37	34
CDMA	43	40	37	34
LTE	43	40**	37	34
UMTS	42	39	36	33

20W for Cell, PCS bands and 700MHz MIMO

1900 MHz

Frequency range, MHz
Uplink ..... 1850 to 1915
Downlink ..... 1930 to 1995

Output power per carrier*, dBm

Number of Carriers	1	2	4	8
GSM	43	40	37	34
CDMA	43	40	37	34
LTE	43	40**	37	34
UMTS	42	39	36	33

CommScope

ION-M7P/7P/85P/19P

Noise figure, dB
IC P3 optimized ..... +10 max.
Noise figure optimized ..... +6 max. 4.5 typical

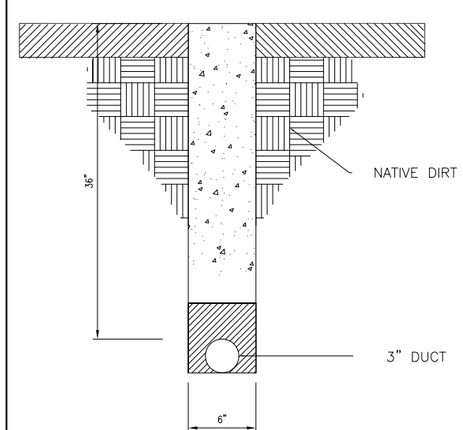
Mechanical****

Height, width, depth, mm (in) ..... 817 x 245 x 218 (32.2 x 9.6 x 8.6)

Weight, kg (lb) 40 (88.2)

Page 1, February 27, 2013 Company Confidential

ION-M7P/7P/85P/19P N.T.S. 2



* TRENCH TO BE BACK FILL WITH NATIVE MATERIAL & COMPACTED TO 90% OR BETTER & REPLACE LANDSCAPING IN KIND.

TRENCH N.T.S. 4

MMOE - Telecom

Multi Mount Outdoor Enclosure

- Compact enclosure design provides ideal fit for locations where aesthetics are important
- Light-weight powder coated aluminum construction offers superior corrosion resistant properties
- Large sun shield, reduces solar heat loading inside the cabinet
- 180° stainless steel piano-hinged door (with two locking open positions) make installation and maintenance easy and convenient
- Thermostat controlled filtered fan cooling and louvered vents ensure reliable operation in high temperature environments
- Various mounting options (including pole mount) make this highly versatile in space constrained mobile broadband applications

Alpha's Multi Mount Outdoor Enclosure (MMOE) - Telecom, is a cost-effective and versatile enclosure ideal for space constrained locations. The Multi Mount can be pole, host, wall or pedestal mounted and can accommodate Alpha's FXM UPS and up to four AlphaCell™ 853XL or 195 GXL front terminal batteries. With a small form factor, the Multi Mount is the perfect choice for locations where confined space necessitates creative installation options.

alpha TECHNOLOGIES™

Alpha Multi Mount Outdoor Enclosure - Telecom

Consult your Alpha representative for P/N configurations

Mechanical

Dimensions:
mm: 687H x 559W x 457D
inches: 27H x 22W x 18D
Weight: 27.2kg (60lbs)
Construction: High strength corrosion resistant aluminum
Finish: Powder coated white color
Equipment space: 8H standard 19", 8RU space with one battery shelf
Cable entrance: Bottom of enclosure: 1 x 3" diameter knock-out (2¼" trade size) 4 x 1.125" diameter knock-out (¾" trade size)
Hinge type: Stainless steel piano hinge
Door prop: Aluminum rod, 2 locking open positions
Door latch: Ballcone 216 compression lock with padlock provisions

HVAC Specifications

Cooling: Thermostat controlled 48VDC fan, 100 cfm or better. On at 49°C (120°F) Off at 32°C (89°F)
Door installed louvers: Equipped with splash baffle

Enclosure options

Mounting: Pole, host, wall, or pedestal (please specify if pole used is concrete at time of order)

System Specifications

› System Options
- Alpha AC distribution panel
- Alpha universal automatic transfer switch
- Alpha universal generator transfer switch
- AlphaGuard battery balancer
- Battery heater mats
- Transient voltage surge suppression device

Agency Compliance

Telcordia: GR-63-CORE
NEMA rating: 3R

PEDESTAL SPECIFICATIONS N.T.S. 5

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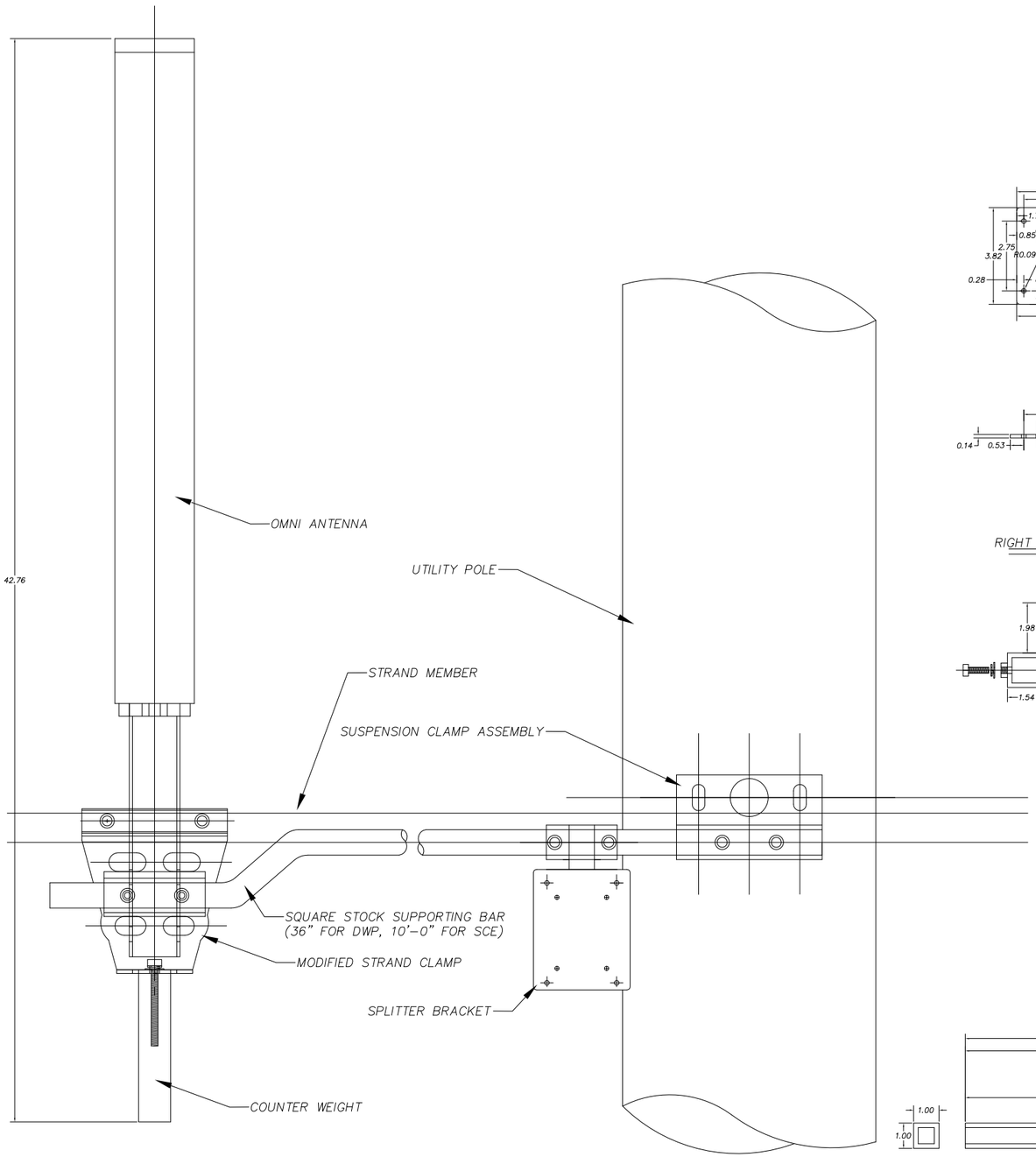
DETAILS

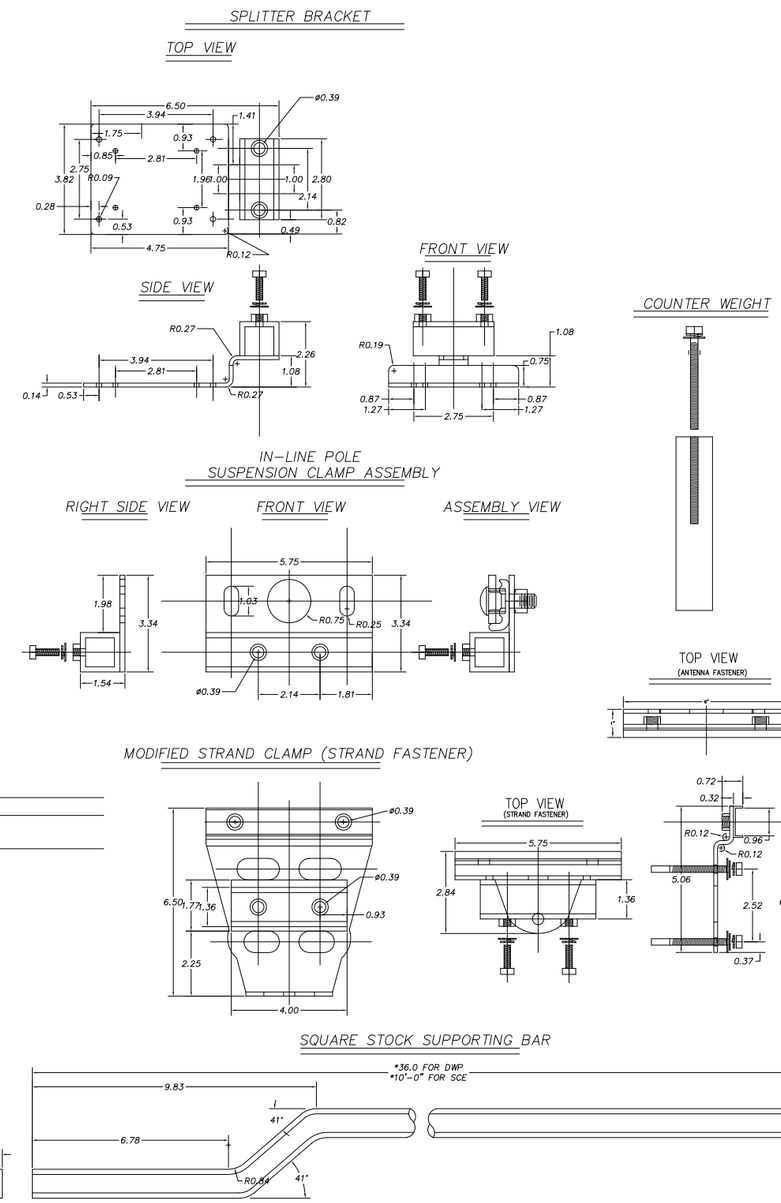
DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:

D–1





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DETAILS

DRAWING INFO:

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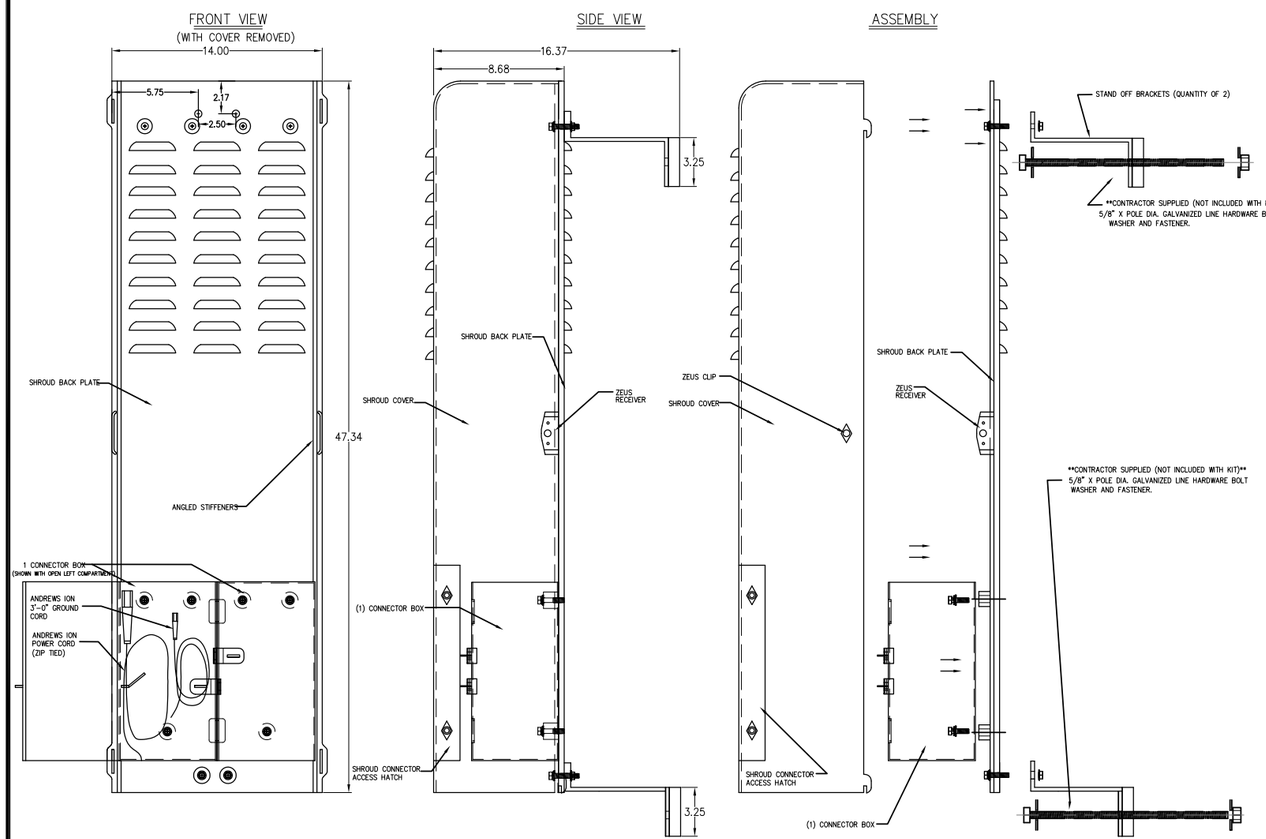
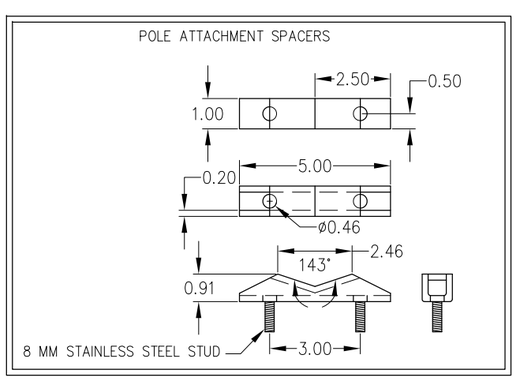
SHEET NUMBER:

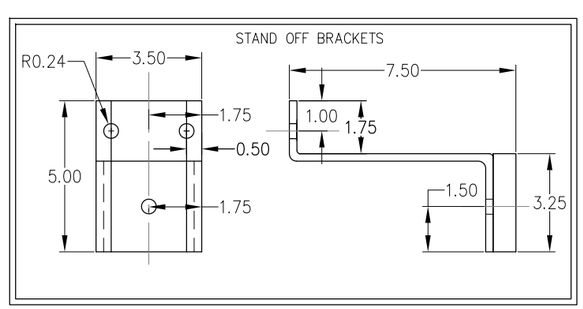
D-2

ANTENNA MOUNT

N.T.S.







SHROUD DETAIL N.T.S. 1

AlphaCell
General Specifications

Model:	220 GXL	195 GXL	165 GXL
Warranty[1]:	4 to 5 year full replacement	4 to 5 year full replacement	4 to 5 year full replacement
Service Life:	Extended	Extended	Extended
Runtime (minutes)[2]:	220	195	165
Sealed VRLA:	Valve regulated lead acid	Valve regulated lead acid	Valve regulated lead acid
Heat Resistant:	Extreme	Extreme	Extreme
Hydrogen Emission:	Low	Low	Low
Terminals:	Threaded insert 1/4" - 20 UNC	Threaded insert 1/4" - 20 UNC	Threaded insert 1/4"- 20 UNC

Specifications[4]

Model:	220 GXL	195 GXL	165 GXL
Typical Runtime (minutes)[2]:	220	195	165
Cells Per Unit:	6	6	6
Voltage Per Unit:	12.8	12.8	12.8
Conductance Value:	1175	1100	1000
Max. Discharge Current (A):	900	900	800
Short Circuit Current (A):	2800	2600	2500
10 Second Volts @ 100A:	11.4	11.3	11.2
Ohms Impedance 60Hz:	0.0050	0.0050	0.0056
Nominal Capacity at 20hrs: (to 1.75VPC)	109Ah	100Ah	86
Nominal Capacity at 20hrs: (to 1.70VPC)	110Ah	102Ah	87
BCI Group Size:	31	31	27
Weight (lb/kg):	73/33.2	67/30.5	63/28.6
Height w/ Terminals (in/mm):	8.48/215.4	8.48/215.4	8.05/204.5
Width (in/mm)[3]:	13.42/340.9	13.42/340.9	12.5/317.8
Depth (in/mm)[3]:	6.80/172.7	6.80/172.7	6.83/173.4
Operating Temperature Range Discharge:	-40 to 71°C (-40 to 160°F)	-40 to 71°C (-40 to 160°F)	-40 to 71°C (-40 to 160°F)
Charge (with temp compensation):	-23 to 60°C (-9.4 to 140°F)	-23 to 60°C (-9.4 to 140°F)	-23 to 60°C (-9.4 to 140°F)
Float Charging Voltage (Vdc):	13.5 to 13.8	13.5 to 13.8	13.5 to 13.8
AC Ripple Charger:	0.5% RMS or 1.5% of float charge voltage recommended for best results. Max. allowed = 4% P-P		

Notes:
[1] Warranty varies by country and region. Warranty valid only when used with Alpha approved Power Supplies, Chargers and Enclosures. Consult your sales person for details.
[2] Runtimes calculated using a 25A DC constant current load.
[3] Dimensions at top of battery.
[4] See AlphaCell Users Guide for Additional Details.

Typical Standby Time in Minutes @ 25°C/77°F

XM2S0Mx(2)	4A			6A			8A			10A		
Battery/Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	508	453	396	329	285	249	236	209	183	168	165	144
4 batteries:	701	625	546	444	396	346	329	293	256	261	232	203
6 batteries:	1001	978	853	701	625	546	523	465	407	418	372	325
8 batteries:	1497	1338	1165	999	859	750	730	643	562	577	515	450
9 batteries:	1696	1519	1322	1001	978	853	830	733	640	659	587	514

XM2S0Mx(3)	12A			14A			16A			18A		
Battery/Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	149	132	115	119	106	92	101	89	77	87	78	68
4 batteries:	210	187	163	169	151	132	144	128	112	124	111	96
6 batteries:	339	301	264	275	245	214	236	209	183	204	182	159
8 batteries:	478	419	367	385	341	299	329	293	256	288	255	223
9 batteries:	538	479	419	440	391	342	377	335	294	329	293	256

XM2S0Mx(2)	4A			6A			8A			10A		
Battery/Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	708	712	622	590	453	396	377	335	294	300	267	233
4 batteries:	1001	978	853	701	625	546	523	465	407	418	372	325
6 batteries:	1696	1519	1322	1001	978	853	830	733	640	659	587	514
8 batteries:	2288	2097	1728	1497	1338	1165	1122	1005	877	904	809	706
9 batteries:	2590	2345	2037	1999	1519	1322	1273	1143	997	1037	921	803

XM2S0Mx(3)	12A			14A			16A			18A		
Battery/Runtime	220	195	165	220	195	165	220	195	165	220	195	165
3 batteries:	242	215	188	196	174	151	166	148	125	144	128	107
4 batteries:	339	301	264	275	245	214	236	209	182	204	182	155
6 batteries:	538	479	419	440	391	340	377	335	290	329	293	252
8 batteries:	741	660	577	607	541	470	525	465	402	456	407	351
9 batteries:	843	755	658	692	617	538	597	531	462	523	465	402

*Above calculations based on an AC load with a .90 cable plant power factor.

For contact information visit www.alpha.com

The Alpha Group >

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049-297-10-B002 (06/09)

BATTERY SPECIFICATIONS N.T.S. 2

REV:	DATE/BY:	REVISION DESCRIPTION:
0	FXC 02/10/2013	ISSUED FOR REVIEW

ENGINEER/CONSULTANT:

Civil Engineer

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LAT: 34.4424144°
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SHEET TITLE:

DETAILS

DRAWING INFO:

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FC

SHEET NUMBER:

D–3

REV:	DATE/BY:	REVISION DESCRIPTION:
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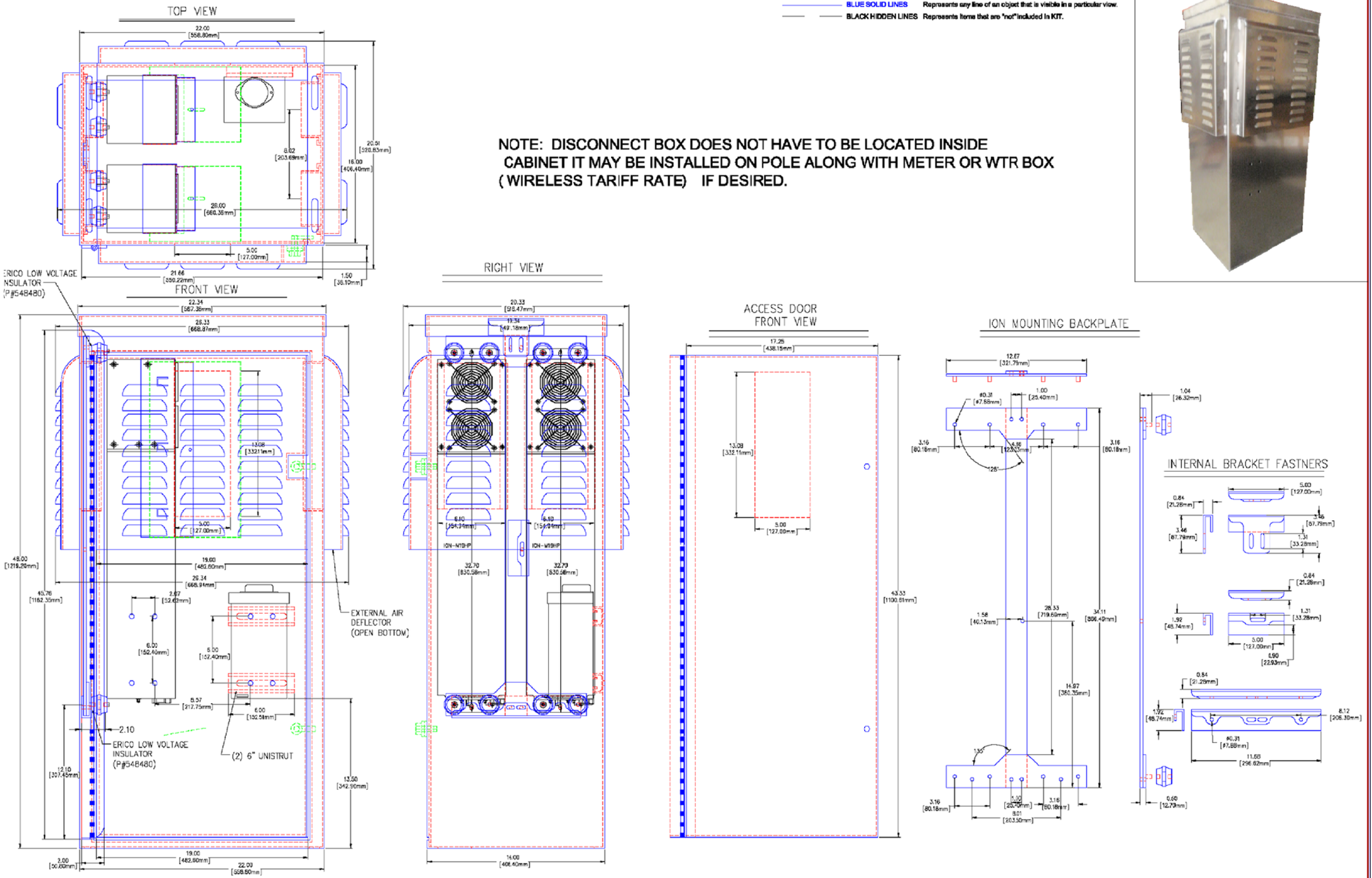
RED HIDDEN LINES — Represents any line of an object that is hidden from view.
BLUE SOLID LINES — Represents any line of an object that is visible in a particular view.
BLACK HIDDEN LINES — Represents items that are "not" included in KIT.

NOTE: DISCONNECT BOX DOES NOT HAVE TO BE LOCATED INSIDE CABINET IT MAY BE INSTALLED ON POLE ALONG WITH METER OR WTR BOX (WIRELESS TARIFF RATE) IF DESIRED.



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DETAILS

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SHEET NUMBER:

D-4

CROWN CASTLE NG WEST, INC

VERIZON MONTECITO-MON32

R.O.W. EAST SIDE OF SAN LEANDRO LN.
(ADJACENT TO 1564 RAMONA LN)
SANTA BARBARA, CA 93108

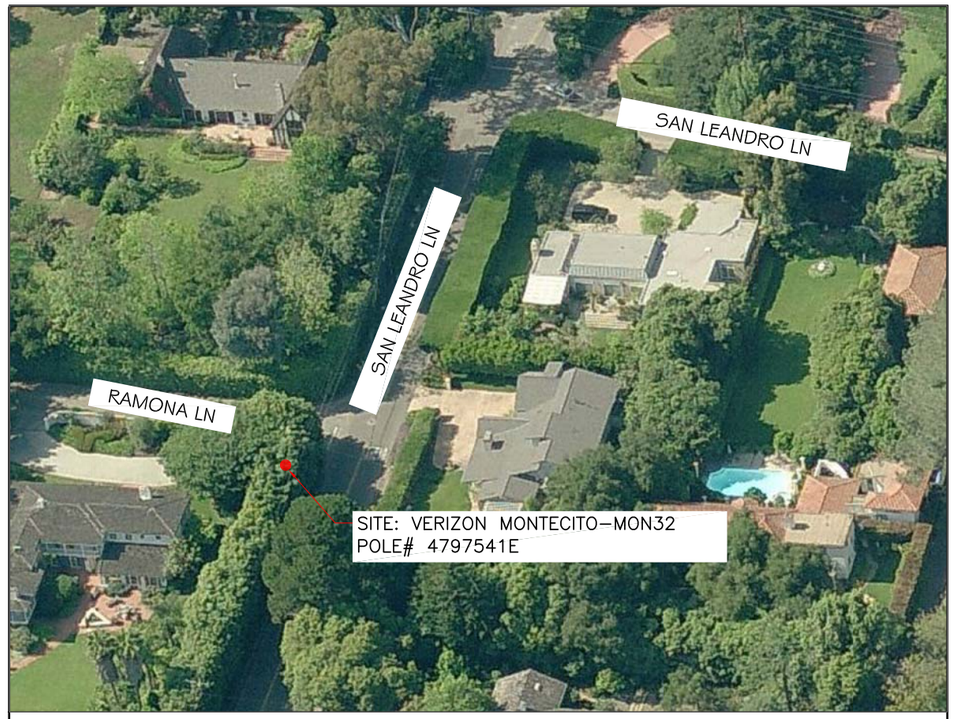
GENERAL NOTES

1. APPROVAL OF THESE PLANS BY THE CITY ENGINEER DOES NOT AUTHORIZE ANY WORK TO BE PERFORMED UNTIL A PERMIT HAS BEEN ISSUED.
2. UPON ISSUANCE OF A PERMIT, NO WORK WILL BE PERMITTED ON WEEKENDS OR HOLIDAYS WITHOUT PERMISSION FROM THE ENGINEERING DEPARTMENT.
3. THE APPROVAL OF THIS PLAN OR ISSUANCE OF A PERMIT BY THE LOCAL JURISDICTION DOES NOT AUTHORIZE THE SUBDIVIDER AND OWNER TO VIOLATE ANY FEDERAL, STATE OR CITY LAWS, ORDINANCES, REGULATIONS, OR POLICIES, INCLUDING, BUT NOT LIMITED TO, THE FEDERAL ENDANGERED SPECIES ACT OF 1973 AND AMENDMENTS THERETO (16 USC SECTION 1531 ET.SEQ.).
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SURVEY MONUMENTS AND/OR VERTICAL CONTROL BENCHMARKS WHICH ARE DISTURBED OR DESTROYED BY CONSTRUCTION. A LAND SURVEYOR MUST FIELD LOCATE, REFERENCE, AND/OR PRESERVE ALL HISTORICAL OR CONTROLLING MONUMENTS PRIOR TO ANY EARTHWORK. IF DESTROYED, SUCH MONUMENTS SHALL BE REPLACED WITH APPROPRIATE MONUMENTS BY A LAND SURVEYOR, A CORNER RECORD OR RECORD OF SURVEY, AS APPROPRIATE, SHALL BE FIELD AS REQUIRED BY THE PROFESSIONAL LAND SURVEYORS ACT. IF ANY VERTICAL CONTROL IS TO BE DISTURBED OR DESTROYED, THE LOCAL JURISDICTION FIELD SURVEY SECTION MUST BE NOTIFIED, IN WRITING, AT LEAST 3 DAYS PRIOR TO THE CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE COST OF REPLACING ANY VERTICAL CONTROL BENCHMARKS DESTROYED BY THE CONSTRUCTION.
5. IMPORTANT NOTICE: SECTION 4216 OF THE GOVERNMENT CODE REQUIRES A DIG ALERT IDENTIFICATION NUMBER BE ISSUED BEFORE A "PERMIT TO EXCAVATE" WILL BE VALID. FOR YOUR DIG ALERT I.D. NUMBER, CALL UNDERGROUND SERVICE ALERT, TWO DAYS BEFORE YOU DIG.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR THE POTHOLE AND LOCATING OF ALL EXISTING UTILITIES THAT CROSS THE PROPOSED TRENCH LINE AND MUST MAINTAIN 1' MINIMUM VERTICAL CLEARANCE.
7. CONTRACTOR SHALL SUBMIT TO THE LOCAL JURISDICTION, A CONSTRUCTION PLAN TO PROTECT WATER MAINS PRIOR TO COMMENCING CONSTRUCTION.
8. CONTRACTOR SHALL REPLACE OR REPAIR ALL TRAFFIC SIGNAL LOOPS, CONDUIT, AND LANE STRIPING DAMAGED DURING CONSTRUCTION.
9. CONTRACTOR SHALL NOTIFY THE LOCAL JURISDICTION. A MINIMUM OF 48 HOURS PRIOR TO COMMENCING WORK WITHIN 10' OF ALL SEWER, WATER, AND STORMDRAIN MAIN INCLUDING ALL CROSSINGS.
10. THIS PROJECT WILL BE INSPECTED BY ENGINEERING AND CAPITAL PROJECTS DEPARTMENT, FIELD ENGINEERING DIVISION.
11. AS-BUILT DRAWINGS MUST BE SUBMITTED TO THE CITY RESIDENT ENGINEER PRIOR TO THE ACCEPTANCE OF THIS PROJECT.
12. PUBLIC IMPROVEMENT SUBJECT TO DESUETUDE OR DAMAGE." IF REPAIR OR REPLACEMENT OF SUCH PUBLIC IMPROVEMENTS IS REQUIRED, THE OWNER SHALL OBTAIN THE REQUIRED PERMITS FOR WORK IN THE PUBLIC RIGHT-OFWAY, SATISFACTORY TO THE PERMIT – ISSUING AUTHORITY.
13. PRIOR TO ANY DISTURBANCE TO THE SITE, EXCLUDING UTILITY MARKS-OUTS AND SURVEYING, THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR A PRE-CONSTRUCTION MEETING WITH THE LOCAL JURISDICTION FIELD ENGINEERING DIVISION.
14. PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION SHOWN ON THESE PLANS. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE. THE CONTRACTOR IS RESPONSIBLE TO ATTEND THE LOCAL JURISDICTIONS MONTHLY UTILITY COORDINATION COMMITTEE THE CONSTRUCTION ACTIVITIES WITH THE CITY AND ALL OTHER CONTRACTORS SO THAT NO TRENCH IS CUT WITHIN ANY OF THE CITY STREETS THAT HAVE BEEN CONSTRUCTED, REPAIRED, OR SLURRY SEALED WITHIN THREE YEARS OF THE STREET CONSTRCTUION/RESURFACING DATE.
15. MANHOLES OR COVERS SHALL BE LABELED "CROWN CASTLE" OR "CROWN CASTLE NG WEST".
16. CONTRACTOR SHALL IMPLEMENT AN EROSION AND SEDIMENT CONTROL PROGRAM DURING THE PROJECT CONSTRUCTION ACTIVITIES. THE PROGRAM SHALL MEET THE APPLICABLE REQUIREMENTS OF THE STATE WATER RESOURCE CONTROL BOARD.
17. THE CONTRACTOR SHALL HAVE EMERGENCY MATERIALS AND EQUIPMENT ON HAND FOR UNFORESEEN SITUATIONS, SUCH AS DAMAGE TO UNDERGROUND WATER, SEWER, AND STORM DRAIN FACILITIES WHEREBY FLOWS MAY GENERATE EROSION AND SEDIMENT POLLUTION.

SPECIAL NOTES

THE FOLLOWING NOTES ARE PROVIDED TO GIVE DIRECTIONS TO THE CONTRACTOR BY THE ENGINEER OF WORK. THE CITY ENGINEER'S SIGNATURE ON THESE PLANS DOES NOT CONSTITUTE APPROVAL OF THESE NOTES AND THE CITY WILL NOT BE RESPONSIBLE FOR THEIR ENFORCEMENT.

1. THE CONTRACTOR SHALL VERIFY THE LOCATION EXISTING UNDERGROUND UTILITIES INCLUDING SEWER LATERALS AND WATER SERVICES TO INDIVIDUAL LOTS BOTH VERTICAL AND HORIZONTAL PRIOR TO COMMENCING IMPROVEMENT OPERATIONS.
2. CONTRACTOR SHALL MAKE EXPLORATION EXCAVATIONS AND LOCATE EXISTING FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS OF PLANS IF REVISION IS NECESSARY BECAUSE OF LOCATION OF EXISTING UTILITIES.
3. LOCATION AND ELEVATIONS OF IMPROVEMENTS, TO BE MET BY WORK, SHALL BE CONFIRMED BY FIELD MEASUREMENT PRIOR TO CONSTRUCTION OF NEW WORK.
4. GRADES SHOWN ARE FINISH GRADES, CONTRACTOR SHALL DETERMINE NECESSARY SUB GRADE ELEVATIONS AND SHALL CONSTRUCT SMOOTH TRANSITION BETWEEN FINISH GRADES SHOWN.
5. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE RESPONSIBILITY FOR JOB SITE CONDITION DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS PROVISION SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXPECTING FOR LIABILITY ARISING FROM SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
6. THE CONTRACTOR SHALL BE TOTALLY RESPONSIBLE FOR COMPLIANCE WITH THE PROVISIONS OF THE STATE OF CALIFORNIA SAFETY ORDERS.
7. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE FROM EXISTING RECORDS AND CORROBORATED, WHERE POSSIBLE WITH FIELD TIES. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING THE LOCATIONS SHOWN, BOTH HORIZONTALLY AND VERTICALLY, PRIOR TO CONSTRUCTION. IF EXISTING LOCATIONS VARY SUBSTANTIALLY FROM THE PLANS, THE ENGINEER SHOULD BE NOTIFIED TO MAKE ANY CONSTRUCTION CHANGES REQUIRED.
8. THE CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT FOR ALL SEWER AND WATER MAIN UNDER CROSSING IN ACCORDANCE WITH PART 1 SECTION 5-2 OF THE STANDARD SPECIFICATION.
9. THE CONTRACTOR SHALL REPLACE OR REPAIR ALL TRAFFIC SIGNAL LOOPS, CONDUITS, AND LANE STRIPING DAMAGED DURING CONSTRUCTION.
10. THE CONTRACTOR SHALL SUBMIT WORK PLANS FOR ALL BORE OPERATIONS TWO WEEKS PRIOR TO COMMENCING WORK.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR THE POTHOLE AND LOCATING OF ALL EXISTING UTILITIES THAT CROSS THE PROPOSED TRENCH LINE AND MUST MAINTAIN 1' MINIMUM VERTICAL CLEARANCE.
12. AS-BUILT DRAWINGS MUST BE SUBMITTED TO THE CITY ENGINEER PRIOR TO ACCEPTANCE OF THIS PROJECT.



VICINITY MAP – N.T.S.

EROSION AND SEDIMENT CONTROL NOTES

TEMPORARY EROSION/SEDIMENT CONTROL, PRIOR TO COMPLETION OF FINAL IMPROVEMENTS, SHALL BE PERFORMED BY THE CONTRACTOR OR QUALIFIED PERSON AS INDICATED BELOW:

1. ALL REQUIREMENTS OF THE LOCAL JURISDICTION "LAND DEVELOPMENT MANUAL, STORM WATER STANDARDS" MUST BE INCORPORATED INTO THE DESIGN AND CONSTRUCTION OF THE PROPOSED GRADING/IMPROVEMENTS CONSISTENT WITH THE APPROVED STORM WATER AND/OR WATER POLLUTION CONTROL PLAN (WPCP).
2. FOR STORM DRAIN INLETS, PROVIDE A GRAVEL BAG SILT BASIN IMMEDIATELY UPSTREAM OF INLET AS INDICATED ON DETAILS.
3. FOR INLETS LOCATED AT SUMPS ADJACENT TO TOP OF SLOPES, THE CONTRACTOR SHALL ENSURE THAT WATER DRAINING TO THE SUMP IS DIRECTED INTO THE INLET AND THAT A MINIMUM OF 1.00" FREEBOARD EXISTS AND IS MAINTAINED ABOVE THE TOP OF THE INLET. IF FREEBOARD IS NOT PROVIDED BY GRADING SHOWN ON THESE PLANS, THE CONTRACTOR SHALL PROVIDE IT VIA TEMPORARY MEASURES, I.E. GRAVEL BAGS OR DIKES.
4. THE CONTRACTOR OR QUALIFIED PERSON SHALL BE RESPONSIBLE FOR CLEANUP OF SILT AND MUD ON ADJACENT STREET(S) AND STORM DRAIN SYSTEM DUE TO CONSTRUCTION ACTIVITY.
5. THE CONTRACTOR OR QUALIFIED PERSON SHALL CHECK AND MAINTAIN ALL LINED AND UNLINED DITCHES AFTER EACH RAINFALL.
6. THE CONTRACTOR SHALL REMOVE SILT AND DEBRIS AFTER EACH MAJOR RAINFALL.
7. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON, ALL NECESSARY MATERIALS SHALL BE STOCKPILED ON SITE AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
8. THE CONTRACTOR SHALL RESTORE ALL EROSION/SEDIMENT CONTROL MEASURES TO WORKING ORDER TO THE SATISFACTION OF THE CITY ENGINEER OR RESIDENT ENGINEER AFTER EACH RUN-OFF PRODUCING RAINFALL.
9. THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION CONTROL MEASURES AS MAY BE REQUIRED BY THE RESIDENT ENGINEER DUE TO UNCOMPLETED GRADING OPERATIONS OR UNFORESEEN CIRCUMSTANCES, WHICH MAY ARISE.
10. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATERS CREATE A HAZARDOUS CONDITION.
11. ALL EROSION/SEDIMENT CONTROL MEASURES PROVIDED PER THE APPROVED GRADING PLAN SHALL BE INCORPORATED HEREON. ALL EROSION/SEDIMENT CONTROL FOR INTERIM CONDITIONS SHALL BE DONE TO THE SATISFACTION OF THE RESIDENT ENGINEER.
12. GRADED AREAS AROUND THE PROJECT PERIMETER MUST DRAIN AWAY FROM THE FACE OF THE SLOPE AT THE CONCLUSION OF EACH WORKING DAY.
13. ALL REMOVABLE PROTECTIVE DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN RAIN IS IMMINENT.
14. THE CONTRACTOR SHALL ONLY GRADE, INCLUDING CLEARING AND GRUBBING FOR THE AREAS FOR WHICH THE CONTRACTOR OR QUALIFIED PERSON CAN PROVIDE EROSION/SEDIMENT CONTROL MEASURES.
15. THE CONTRACTOR SHALL ARRANGE FOR WEEKLY MEETINGS DURING OCTOBER 1ST TO APRIL 30TH FOR PROJECT TEAM (GENERAL CONTRACTOR, QUALIFIED PERSON, EROSION CONTROL SUBCONTRACTOR IF ANY, ENGINEER OF WORK, OWNER AND THE RESIDENT ENGINEER) TO EVALUATE THE ADEQUACY OF THE EROSION/SEDIMENT CONTROL MEASURES AND OTHER RELATED CONSTRUCTION ACTIVITIES.

TRAFFIC CONTROL NOTES

THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN (11" X 17") FOR APPROVAL PRIOR TO STARTING WORK. THE PLAN SHOULD BE SUBMITTED TO THE TRAFFIC CONTROL PERMIT COUNTER. CONTRACTOR SHALL OBTAIN A TRAFFIC CONTROL PERMIT A MINIMUM OF TWO (2) WORKING DAYS PRIOR TO STARTING WORK, AND A MINIMUM FIVE (5) DAYS IF WORK WILL AFFECT A BUS STOP OR AN EXISTING TRAFFIC SIGNAL, OR IF WORK WILL REQUIRE A ROAD OR ALLEY CLOSURE.

FOOTAGE TOTALS	
ASPHALT CUT	–
DIRT TRENCH	–
PUNCH THRU	–
BORE	–
TOTAL	–
R&R SWF TOTAL	–

GROUND BUS BAR
MECH. GRND. CONN.
CADWELD
ELECTRIC BOX
TELEPHONE BOX
EXISTING SERVICE POLE
SIDEWALK FLAG
EX. MANHOLE
LIGHT POLE
FOUNDATION
SPOT ELEV.
SET POINT
REVISION
DETAIL REF.
ELEVATION REF.
SECTION REF.
PROP./LEASE LINE
MATCH LINE
WORK POINT
TELE. CONDUIT
CENTERLINE
ELECT. CONDUIT
COAXIAL CABLE
MYERS PEDESTAL
VAULT STANDARD 2'X3'
STEEL POLE

SYMBOLS, LINETYPES AND HATCH PATTERNS

PROJECT DICTIONARY

SITE ADDRESS: R.O.W. EAST SIDE OF SAN LEANDRO LN.
(ADJACENT TO 1564 RAMONA LN)
SANTA BARBARA, CA 93108

APPLICANT: CROWN CASTLE NG WEST, INC
2125 WRIGHT AVE, SUITE #C9
LA VERNE, CA 91750
CONTACT: HEIDI PAYNE
PHONE: (949) 300-9493

CIVIL ENGINEER: CONNELL DESIGN GROUP, LLC
26455 RANCHO PARKWAY SOUTH
LAKE FOREST, CA 92630
CONTACT: FRANK CARTER
(949) 310-8233 PHONE
(949) 753-8833 FAX

CONSTRUCTION CHANGE TABLE

CHANGE	DATE	EFFECTED OR ADDED SHEET NUMBERS

APPLICABLE CODES

ALL WORK SHALL COMPLY WITH THE FOLLOWING APPLICABLE CODES:

*2010 CALIFORNIA BUILDING CODE
*2010 CALIFORNIA MECHANICAL CODE
*2010 CALIFORNIA PLUMBING CODE
*2010 CALIFORNIA ELECTRICAL CODE

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

PROJECT DESCRIPTION

PROJECT CONSISTS OF INSTALLATION OF:

1. (2) OMNI DIRECTIONAL ANTENNAS ON EXISTING UTILITY POLE
2. EQUIPMENT VAULT AT BASE OF EXISTING POLE
3. EQUIPMENT PEDESTAL W/ BBU AND ELECTRICAL METER AT BASE OF POLE

SHEET INDEX:

TITLE SHEET	T-1 – SHEET 1 OF 9
TOPOGRAPHIC SURVEY	C-1 – SHEET 2 OF 9
SITE PLAN	A-1 – SHEET 3 OF 9
PROPOSED ELEVATIONS	A-2 – SHEET 4 OF 9
GRADING PLAN	A-3 – SHEET 5 OF 9
DETAILS	D-1 – SHEET 6 OF 9
DETAILS	D-2 – SHEET 7 OF 9
DETAILS	D-3 – SHEET 8 OF 9
DETAILS	D-4 – SHEET 9 OF 9

REV:	DATE/BY:	REVISION DESCRIPTION:
0	FXC 03/20/2013	ISSUED FOR REVIEW
1	FXC 03/24/2013	ISSUED FOR FINAL
2	FXC 08/02/2013	ISSUED FOR FINAL
3	FXC 11/06/2013	ISSUED FOR FINAL
4	FXC 03/08/2013	ISSUED FOR FINAL

ENGINEER/CONSULTANT:

Civil Engineer

CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PARKWAY SOUTH, LAKE FOREST, CA 92630
(949) 753-8807 OFFICE - (949) 753-8833 FAX

CLIENT:

CROWN CASTLE NG WEST, INC.

STAMP:

SITE INFO:

SITE NAME:
MON32
VERIZON MONTECITO-MON32

SITE ADDRESS: THOMAS BROS PAGE 997 GRID A3
R.O.W. EAST SIDE OF SAN LEANDRO LN.
(ADJACENT TO 1564 RAMONA LN)
SANTA BARBARA, CA 93108
LAT: 34.42538
LONG: -119.62675

SHEET TITLE:

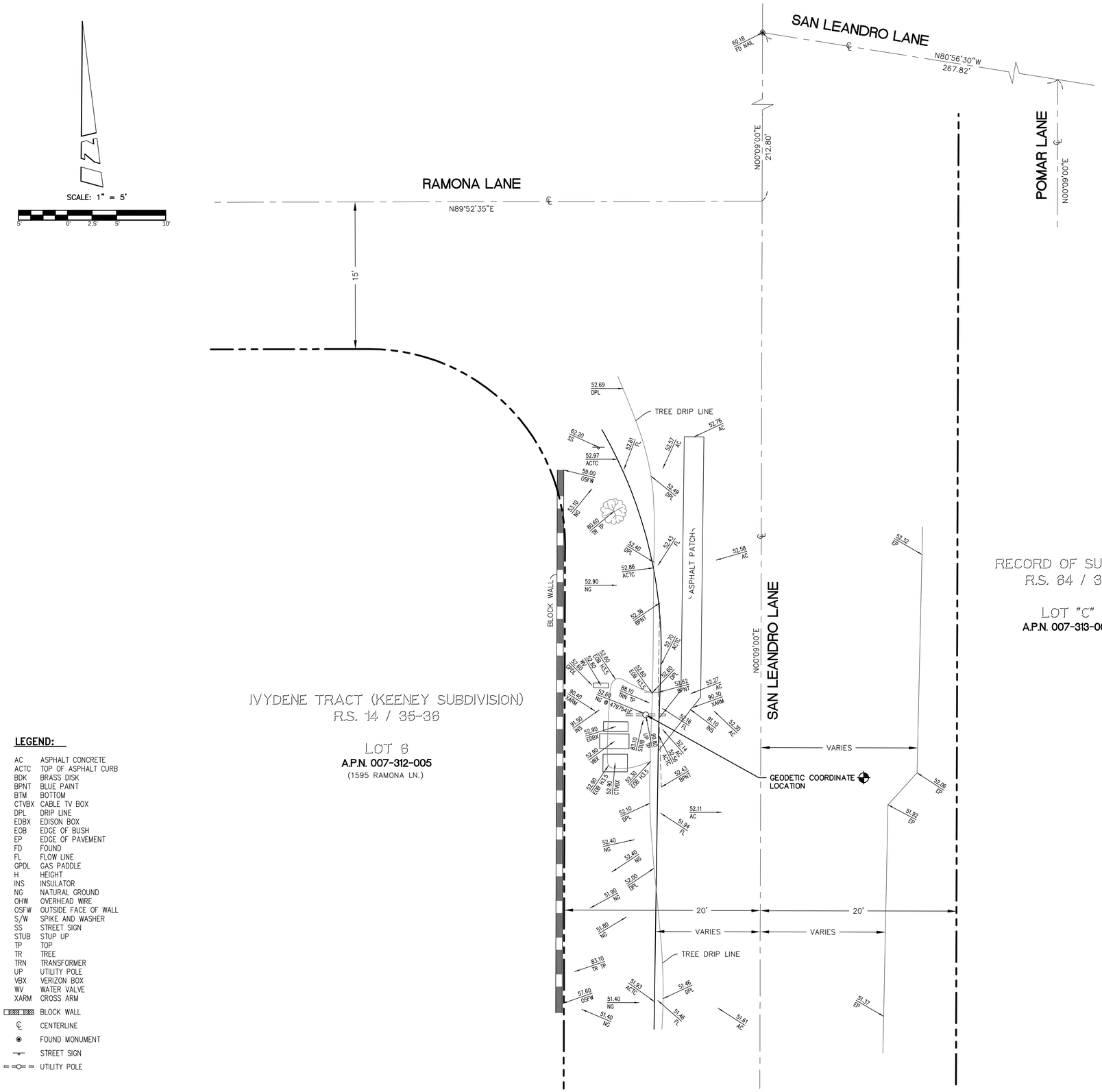
TITLE SHEET

DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:

T-1



LEGEND:

AC	ASPHALT CONCRETE
ACTC	TOP OF ASPHALT CURB
BDK	BRASS DISK
BPNT	BLUE PAINT
BTM	BOTTOM
CTVBX	CABLE TV BOX
DPL	DRIP LINE
EDBX	EDISON BOX
EOB	EDGE OF BUSH
EP	EDGE OF PAVEMENT
FD	FOUND
FL	FLOW LINE
GPDL	GAS PADDLE
H	HEIGHT
INS	INSULATOR
NG	NATURAL GROUND
OHW	OVERHEAD WIRE
OSFW	OUTSIDE FACE OF WALL
S/W	SPIKE AND WASHER
SS	STREET SIGN
STUB	STUP UP
TP	TOP
TR	TREE
TRN	TRANSFORMER
UP	UTILITY POLE
VBX	VERIZON BOX
WV	WATER VALVE
XARM	CROSS ARM
	BLOCK WALL
℄	CENTERLINE
	FOUND MONUMENT
	STREET SIGN
	UTILITY POLE

COORDINATES:

LATITUDE 34°25'31.07" N
LONGITUDE 119°37'36.56" W

NAD 1983 GEODETIC COORDINATES AND ELEVATIONS WERE ESTABLISHED USING SURVEY GRADE "ASHTECH" G.P.S. RECEIVERS AND ASHTECH SURVEY GRADE PRECISION SOFTWARE FOR POST-PROCESSING.

BASIS OF BEARINGS:

THE CENTERLINE OF SAN LEANDRO LANE BEING NORTH 80°56'30" WEST PER RECORD OF SURVEY, R.S. 64/32, RECORDS OF SANTA BARBARA COUNTY.

ASSESSOR'S IDENTIFICATION:

N/A

AREA:

N/A

TITLE REPORT IDENTIFICATION:

N/A

EASEMENT NOTES:

N/A

LEGAL DESCRIPTION:

N/A

BENCH MARK REFERENCE:

U.S.G.S. BENCH MARK "BM 37"

UNITED STATES GEOLOGICAL SURVEY BENCH MARK "BM 37" AS SHOWN ON THE "SANTA BARBARA" 7.5 MINUTE QUADRANGLE MAP.

ELEVATION: 39.5 FEET A.M.S.L. (NAVD88) (DATUM VERIFIED IN FIELD TO BE WITHIN 1-A ACCURACY STANDARDS)

DATE OF SURVEY:

JULY 10, 2013

SURVEYORS NOTE:

THE RIGHT OF WAY LINES AND THEIR DIMENSIONS SHOWN HEREON ARE PER READILY AVAILABLE RECORDED INFORMATION AND THEIR LOCATIONS ARE APPROXIMATE, PENDING RECEIPT OF TITLE REPORT(S) FOR THE ADJACENT REAL PROPERTY.

LIVING PLANTS STATEMENT:

THE HEIGHTS AND ELEVATIONS FOR THE TREES, BUSHES AND OTHER LIVING PLANTS SHOWN HEREON, SHOULD BE CONSIDERED APPROXIMATE (+/-) AND ONLY VALID FOR THE DATE OF THIS SURVEY. THEY ARE PROVIDED AS A GENERAL REFERENCE AND SHOULD NOT BE USED FOR DESIGN PURPOSES.

REV:	DATE/BY:	REVISION DESCRIPTION:
1	07/19/13 MDL	ISSUED FOR REVIEW

ENGINEER/CONSULTANT:

CONNELL DESIGN GROUP, LLC
CONSULTING CIVIL ENGINEERS
26455 RANCHO PKWY. SOUTH
LAKE FOREST, CA 92630-8326
(949) 753-8807 OFFICE - (949) 753-8833 FAX

SITE BUILDER:

CROWN CASTLE
NG WEST, INC.

SURVEYOR:

BERT HAZE
AND ASSOCIATES, INC.
LAND SURVEYING & MAPPING
3188 AIRWAY AVENUE, SUITE K1
COSTA MESA, CALIFORNIA 92626
714 557-1567 OFFICE
714 557-1568 FAX

JN. 706.244

STAMP:

PROFESSIONAL LAND SURVEYOR
BERT HAZE
No. 7211
Exp. 3-31-14
STATE OF CALIFORNIA

SITE INFO:

SITE NAME:

MON32
VERIZON MONTECITO-MON32

SITE ADDRESS:

R.O.W. WEST SIDE OF SAN LEANDRO LN
(ADJACENT TO 1595 RAMONA LN)
SANTA BARBARA, CA 93108

SHEET TITLE:

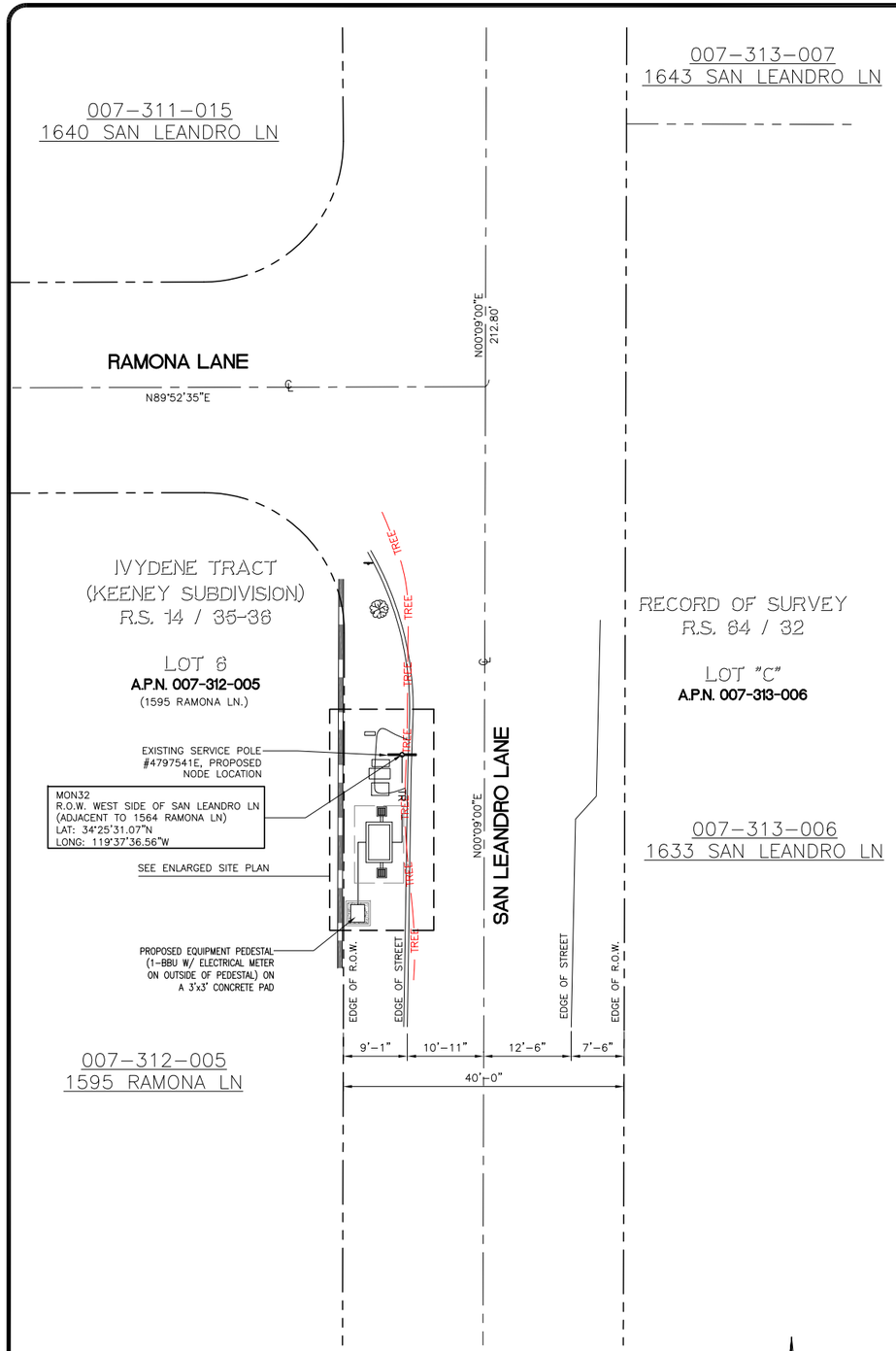
TOPOGRAPHIC SURVEY

DRAWING INFO:

DWG. NAME:	DRAWN BY:	DATE:
MON32	MDL	07/19/13

SHEET NUMBER:

1 OF 1 | C-1



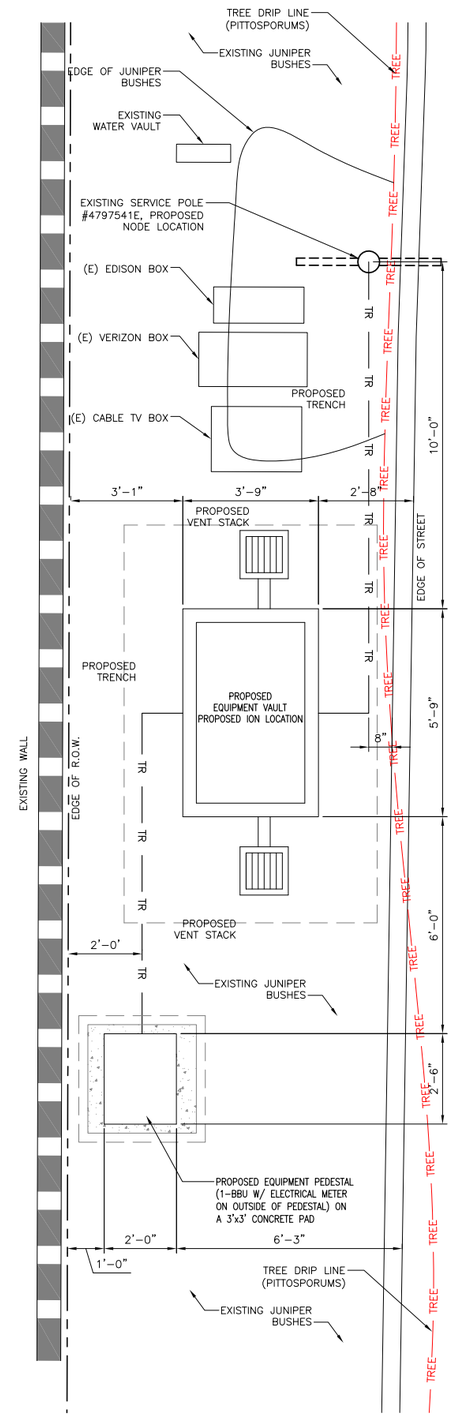
LEGEND

TREE DRIP LINE	TREE
CAL OAK DRIP LINE	OAK
TRENCH	TR
CAL OAK	

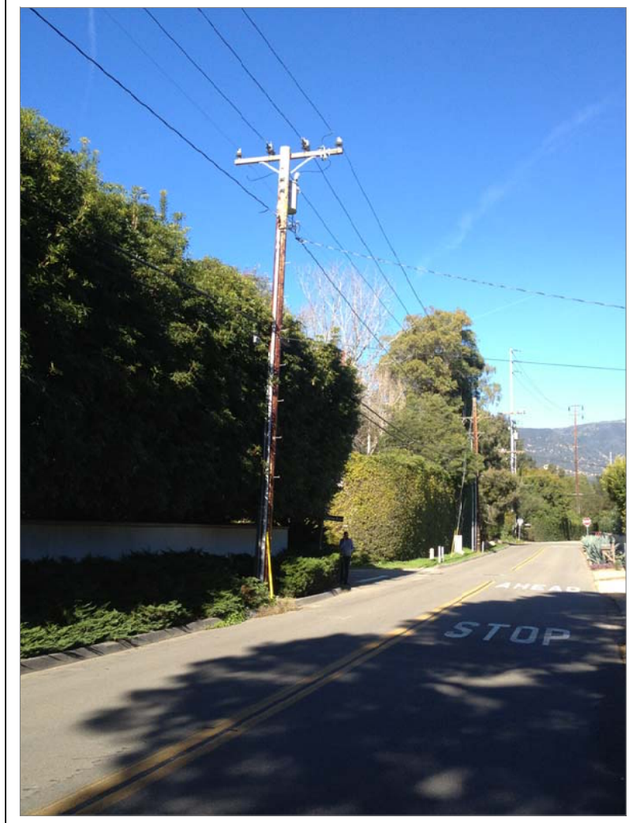
NOTE:

1. ANTENNA TO BE PAINTED LIGHT-GREY (BEHR ULTRA BASE #4854)
2. ALL EQUIPMENT TO BE PAINTED A MATTE BROWN (ULTRA-HIDE #3537-0500)

SITE PLAN | SCALE: 1"=10'-0" (0 5' 10') | 1



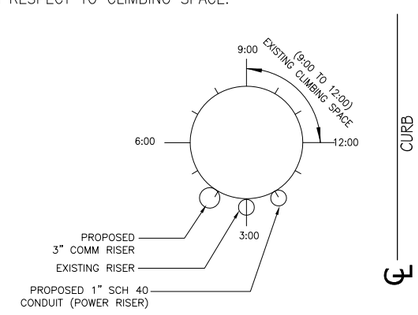
ENLARGED SITE PLAN | SCALE: 1/2"=1'-0" (0 1' 2') | 2



EXISTING PHOTO | SCALE: N.T.S. | 3

POLE WILL BE STEPPED IN ACCORDANCE TO G095 STANDARDS IN RESPECT TO CLIMBING SPACE.

1-3" CROWN CASTLE RISER @ 4:00
1-1" POWER RISER @ 2:00



RISER PROFILE | SCALE: N.T.S. | 4

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CLIENT:

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LONG: -119.62675

SHEET TITLE:

SITE PLAN, ENLARGED SITE PLAN, EXISTING PHOTO AND RISER PROFILE

DRAWING INFO:

DRAWN BY:
FC

SHEET NUMBER:

A-1