TORRANCE

24404 S. VERMONT AVE, SUITE 400
HARBOR CITY, CA 90710
(AWS/SS LTE CAPACITY)

DIGALERT
1-800-227-2600
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

CODE COMPLIANCE

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

1. 2013 CALIFORNIA ADMINISTRATIVE CODE
2. 2013 CALIFORNIA BUILDING CODE
3. 2013 CALIFORNIA ELECTRIC CODE
4. 2013 CALIFORNIA MECHANICAL CODE
5. 2013 CALIFORNIA PLUMBING CODE
6. 2013 CALIFORNIA FIRE CODE
7. ANY LOCAL BUILDING CODE AMENDMENTS TO THE ABOVE
8. CITY/COUNTY ORDINANCES

HANDICAP REQUIREMENTS: FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS NOT REQUIRED IN ACCORDANCE WITH CALIFORNIA ADMINISTRATIVE STATE CODE PART 2, TITLE 24, CHAPTER 11B, DIVISION 4.

PROJECT DESCRIPTION

VERIZON WIRELESS (VzW) IS PROPOSING THE FOLLOWING:

- PROPOSED THREE (3) KATHREIN 80010766V01 ANTENNAS TO REPLACE (3) EXISTING ANTENNAS
- PROPOSED THREE (3) ERICSSON AIR-21 ANTENNA TO REPLACE (3) EXISTING ANTENNAS
- PROPOSED 8-8" HIGH FRP SCREEN TO REPLACE (E) 54' HIGH SCREEN
- PROPOSED ONE (1) RAYCAP RVZDC-2260-RM-48
- PROPOSED FOUR (4) RAYCAP RCMDC 3315V-PF-48
- PROPOSED HYBRID 6x12 FIBER/POWER CABLE
- PROPOSED THREE (3) TMAs FOR 700
- PROPOSED THREE (3) DIPLEXERS FOR LOW-SIDE
- PROPOSED ONE (1) RBS 6601 MU, RACK MOUNT
- PROPOSED TWO (2) DUS41 TO 6601 BASEBAND UNIT

DRIVING DIRECTIONS

FROM VERIZON WIRELESS OFFICE, IRVINE, CA

1. HEAD SOUTHWEST ON SAND CANYON AVE TOWARD BARRANCA PKWY
2. SLIGHT RIGHT TO MERGE ONTO I-405 N
3. TAKE THE WILMINGTON AVE EXIT
4. TURN LEFT ONTO WILMINGTON AVE
5. TURN RIGHT ONTO E LOMITA BLVD
6. TURN RIGHT ONTO S VERMONT AVE. DESTINATION WILL BE ON THE RIGHT 24404 S VERMONT AVE #400, LOS ANGELES, CA 90044.

STATEMENT OF COMPLIANCE

THE WIRELESS COMMUNICATION FACILITY COMPLIES WITH FEDERAL STANDARDS FOR RADIO FREQUENCY IN ACCORDANCE WITH THE TELECOMMUNICATION ACT OF 1996 AND SUBSEQUENT AMENDMENTS AND ANY OTHER REQUIREMENTS IMPOSED BY STATE OR FEDERAL REGULATORY AGENCIES.

GENERAL CONTRACTOR NOTES

DO NOT SCALE DRAWING:

CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

PROJECT TEAM

ENGINEER:
PDC CORPORATION
13225 DANIELSON ST., SUITE 200
POWAY, CA 92064
CONTACT: SOHAIL SHAH, PE
TEL: (858) 668-2828
FAX: (858) 668-2827
EMAIL: sohail@pdccorp.net

APPLICANT/LESSEE:
VERIZON WIRELESS
15505 SAND CANYON BLVD.
BUILDING "D"
IRVINE, CA 92618

RF ENGINEER:
VERIZON WIRELESS
15505 SAND CANYON BLVD.
BUILDING "D"
IRVINE, CA 92618
CONTACT: ENIKO BARTHA
EMAIL: Eniko.Bartha@VerizonWireless.com

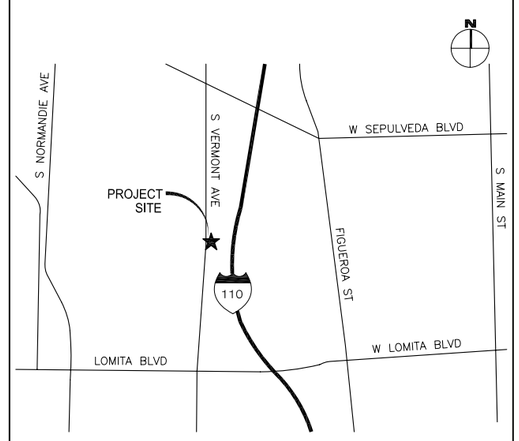
SITE ACQUISITION:
MILESTONE WIRELESS
CONTACT: STEVEN RAKHSHANI
MOBILE: (714) 606-7625
EMAIL: steven@milestonewireless.com

ZONING:
MILESTONE WIRELESS
CONTACT: AL GAMBOA
MOBILE: (562) 631-8370
EMAIL: al@milestonewireless.com

PROJECT INFORMATION

SITE ADDRESS:	24404 S. VERMONT AVE, SUITE 400 HARBOR CITY, CA 90710
APN:	7409-020-011
CURRENT USE:	TELECOMMUNICATIONS FACILITY
GROUND ELEVATION:	56' AMSL
ZONING:	M-2 (HEAVY MANUFACTURING)
JURISDICTION:	COUNTY OF LOS ANGELES

VICINITY MAP



SHEET INDEX

SHEET	DESCRIPTION	REV
T-1	TITLE SHEET	0
A-1	SITE PLAN	0
A-2	ROOF PLAN	0
A-3	EQUIPMENT LAYOUT AND ANTENNA PLAN	0
A-4	ELEVATION	0
A-5	ELEVATION	0
A-6	DETAILS	0

APPROVALS

LANDLORD: _____
CONSTRUCTION MANAGER: _____
RF ENGINEER: _____
SITE ACQUISITION MANAGER: _____
ZONING MANAGER: _____
UTILITY COORDINATOR: _____
PROGRAM REGIONAL MANAGER: _____
NETWORK OPERATIONS MANAGER: _____

APPLICANT:

verizonwireless
15505 SAND CANYON AVE.
BUILDING "D", FIRST FLOOR
IRVINE, CA 92618

PROJECT INFORMATION:

TORRANCE
24404 S. VERMONT AVE, SUITE 400
HARBOR CITY, CA 90710

REVISIONS:

REV.	DATE	DESCRIPTION	BY
A	03/25/14	90% ZONING DRAWING	JCC
0	04/11/14	100% ZONING DRAWING	BRW

CONSULTANT:

ENGINEER:
PDC CORPORATION
13225 DANIELSON ST, SUITE 200
POWAY, CA 92064
TEL: (858) 668-2828
FAX: (858) 668-2827

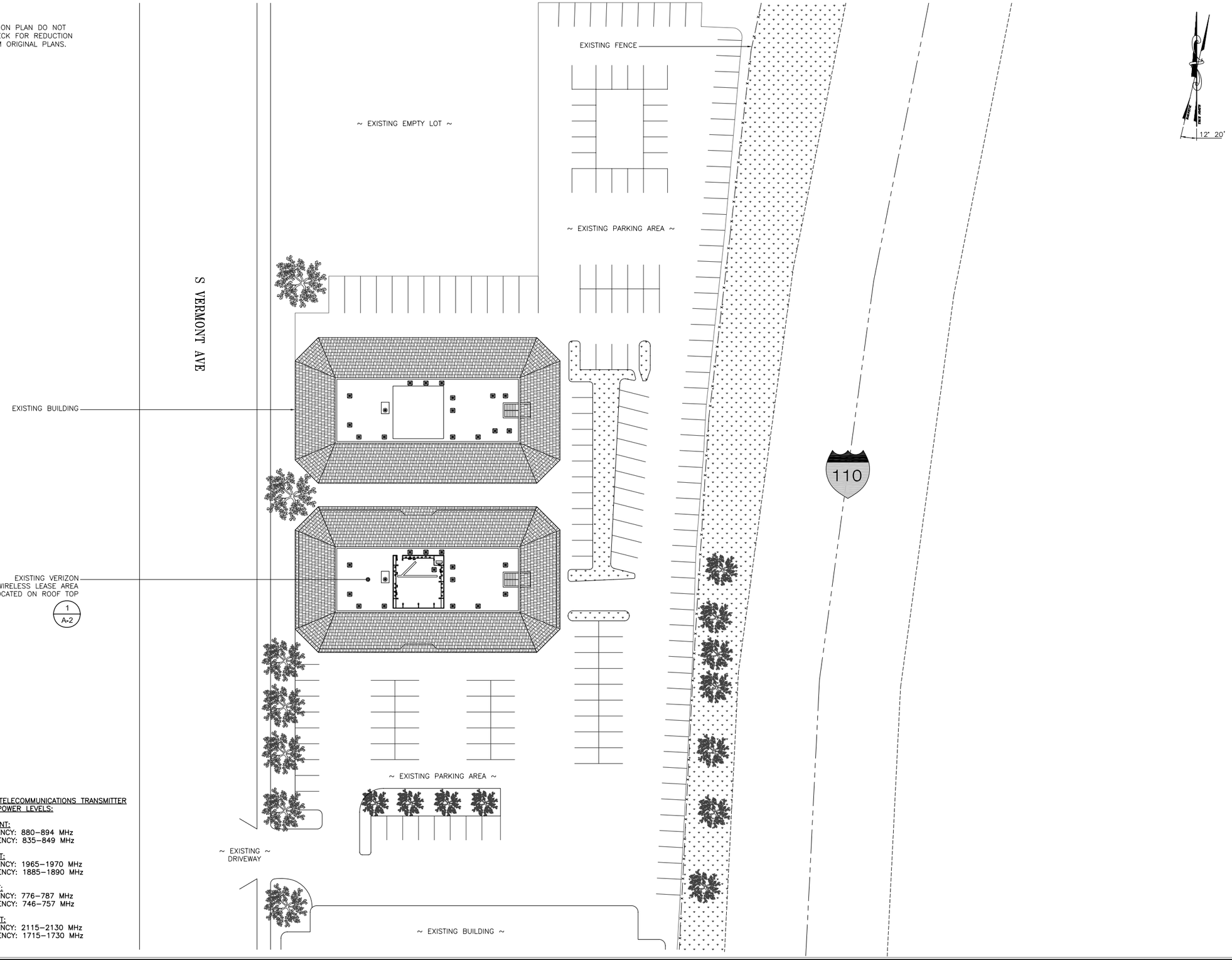
LICENSER:

SHEET TITLE:
TITLE SHEET

SHEET NUMBER:
T-1

SCALE NOTE:

IF DIMENSIONS SHOWN ON PLAN DO NOT SCALE CORRECTLY, CHECK FOR REDUCTION OR ENLARGEMENT FROM ORIGINAL PLANS.



VERIZON WIRELESS TELECOMMUNICATIONS TRANSMITTER FREQUENCIES AND POWER LEVELS:

CDMA EQUIPMENT:
TX FREQUENCY: 880–894 MHz
RX FREQUENCY: 835–849 MHz

PCS EQUIPMENT:
TX FREQUENCY: 1965–1970 MHz
RX FREQUENCY: 1885–1890 MHz

LTE EQUIPMENT:
TX FREQUENCY: 776–787 MHz
RX FREQUENCY: 746–757 MHz

AWS EQUIPMENT:
TX FREQUENCY: 2115–2130 MHz
RX FREQUENCY: 1715–1730 MHz

SITE PLAN

30' 0' 30'

SCALE 11X17: 1" = 60'–0" 24X36: 1" = 30'–0"

1

APPLICANT:

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SITE PLAN

SHEET NUMBER:

A-1

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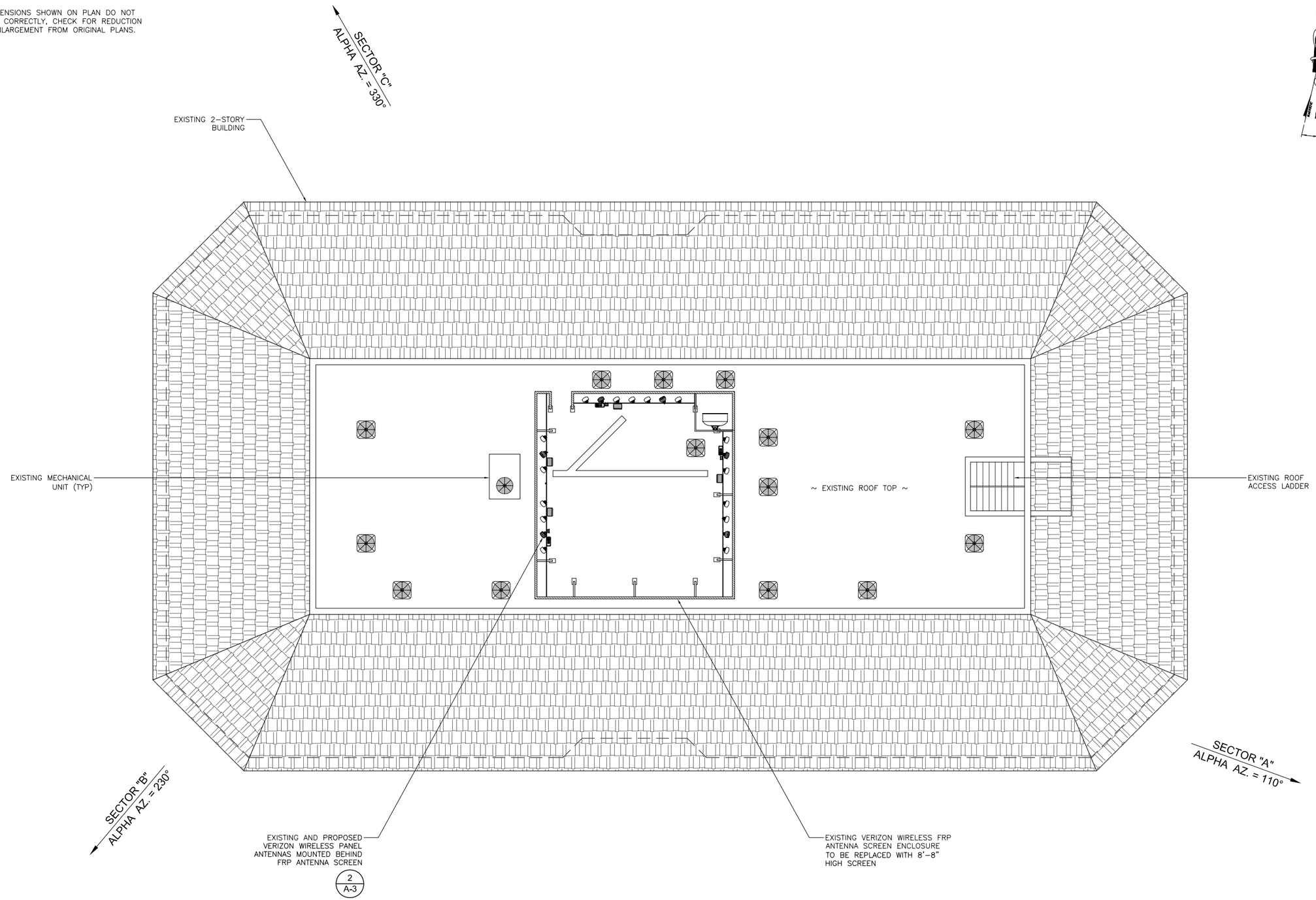

STRUCTURAL NOTE:

STRUCTURAL ANALYSIS IS REQUIRED TO DETERMINE THE FEASIBILITY OF THE PROPOSED DESIGN. THE EXACT SIZE AND LOCATION OF THE PROPOSED ANTENNA SCREENING IS SUBJECT TO CHANGE AFTER THE COMPLETION OF STRUCTURAL ANALYSIS.

ROOF PLAN

8' 0' 8'

SCALE 11X17: 1/16" = 1'-0" 24X36: 1/8" = 1'-0"

1

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LICENSER:

SHEET TITLE:

ROOF PLAN

SHEET NUMBER:

A-2

SCALE NOTE:

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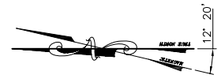
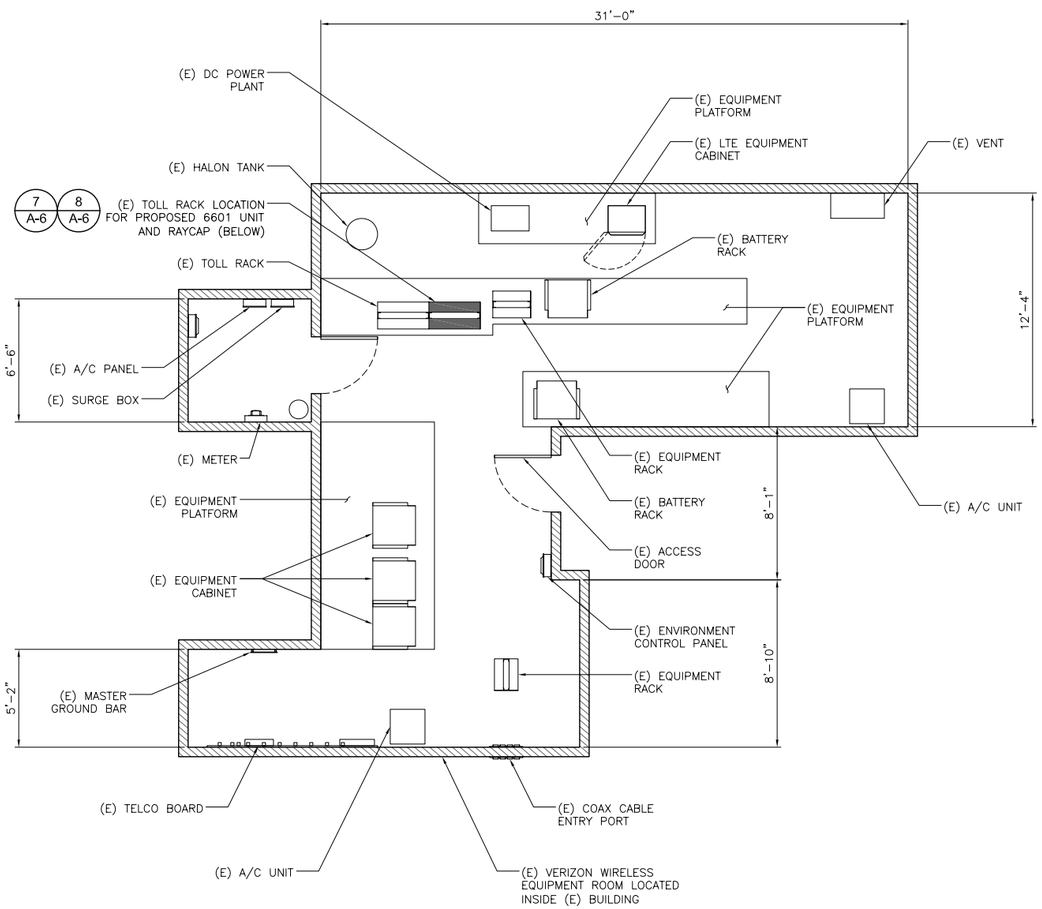
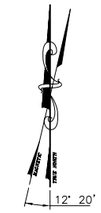
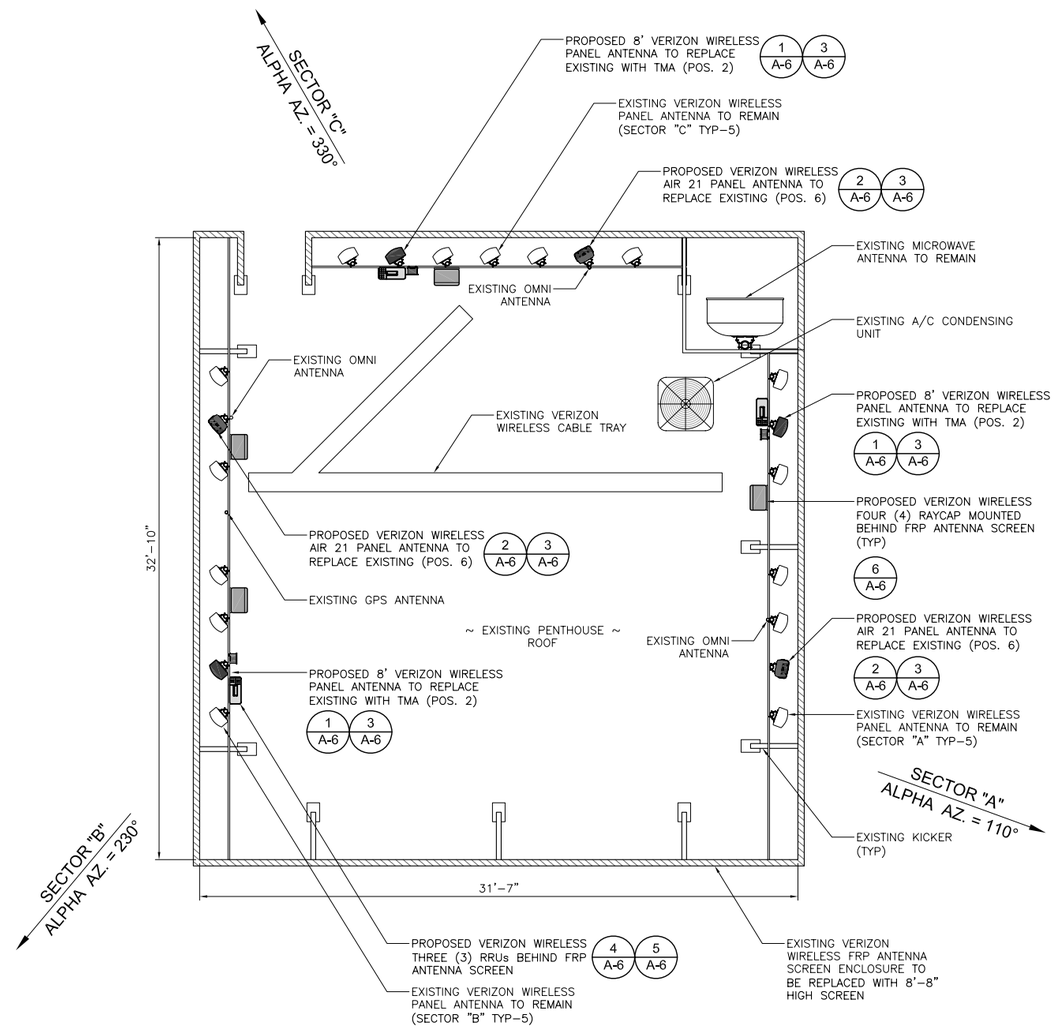




ANTENNA NOTE:

EXISTING MICROWAVE ANTENNAS AND PANEL ANTENNAS BY OTHER CARRIER ARE NOT SHOWN FOR CLARITY.





EQUIPMENT LAYOUT | 4' 0' 4' | SCALE 11X17: 1/8" = 1'-0" 24X36: 1/4" = 1'-0" | 1

PROPOSED ANTENNA PLAN | 4' 0' 4' | SCALE 11X17: 1/8" = 1'-0" 24X36: 1/4" = 1'-0" | 2

APPLICANT:

verizonwireless

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ENGINEER:

PDC CORPORATION

13225 DANIELSON ST, SUITE 200
POWAY, CA 92064
TEL: (858) 668-2828
FAX: (858) 668-2827

LICENSER:

SHEET TITLE:

EQUIPMENT LAYOUT AND ANTENNA PLAN

SHEET NUMBER:

A-3

SCALE NOTE:

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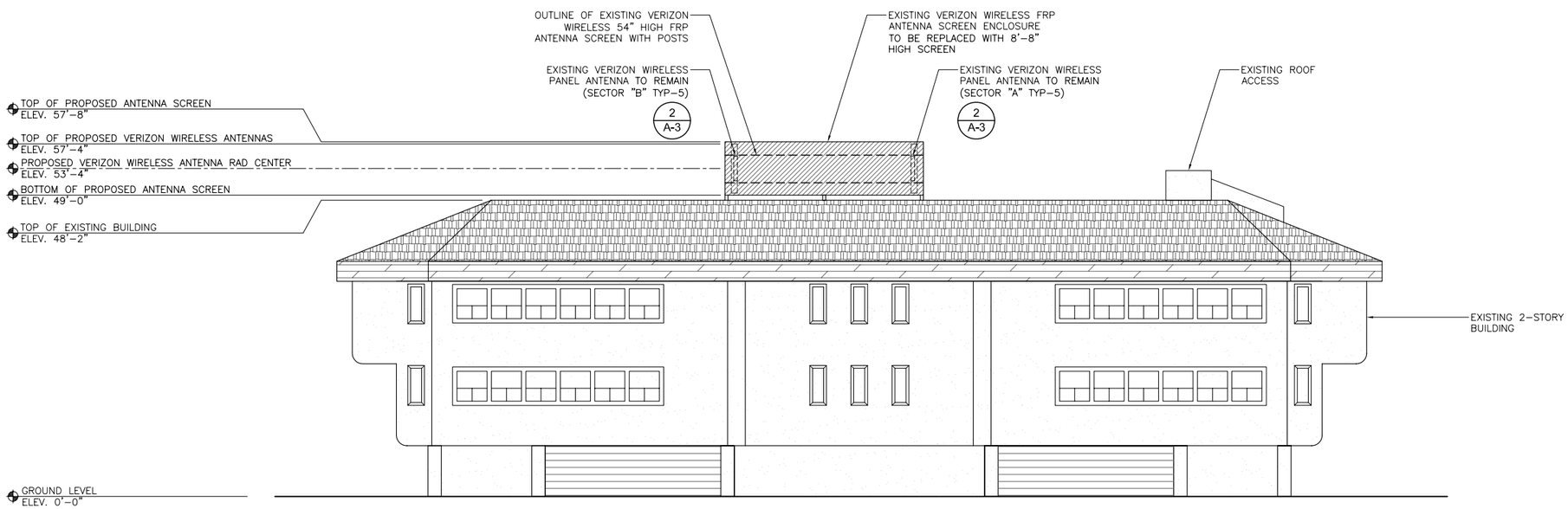
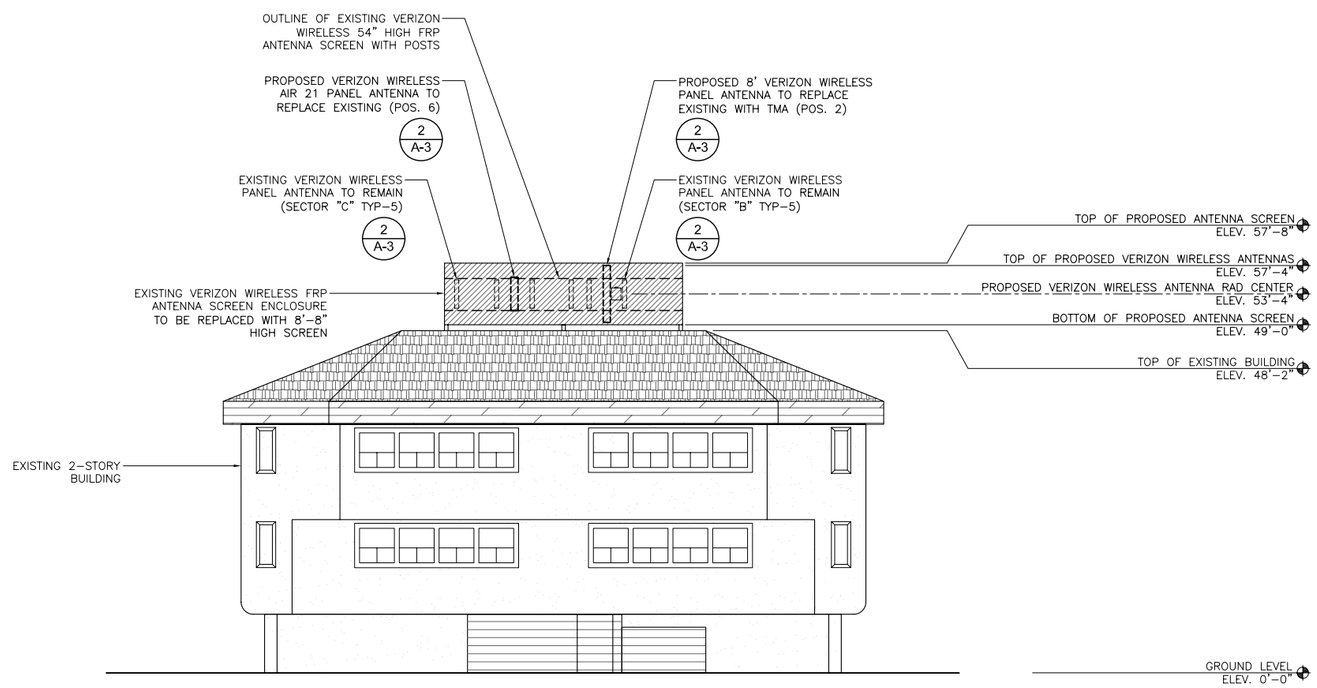


SOUTH ELEVATION

4' 0' 4' 8' SCALE 11X17: 3/32" = 1'-0" 24X36: 3/16" = 1'-0" **1**



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WEST ELEVATION

4' 0' 4' 8' SCALE 11X17: 3/32" = 1'-0" 24X36: 3/16" = 1'-0" **2**

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LICENSER:

SHEET TITLE:

ELEVATION

SHEET NUMBER:

A-4

SCALE NOTE:

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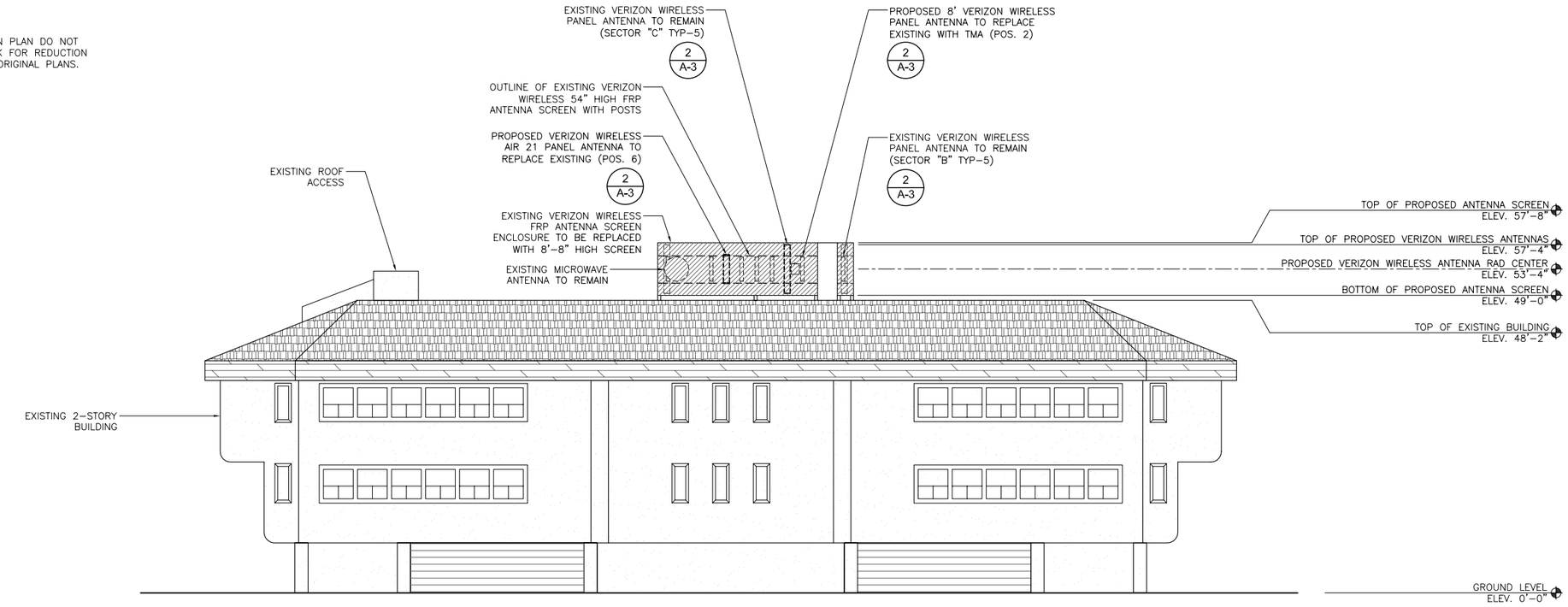
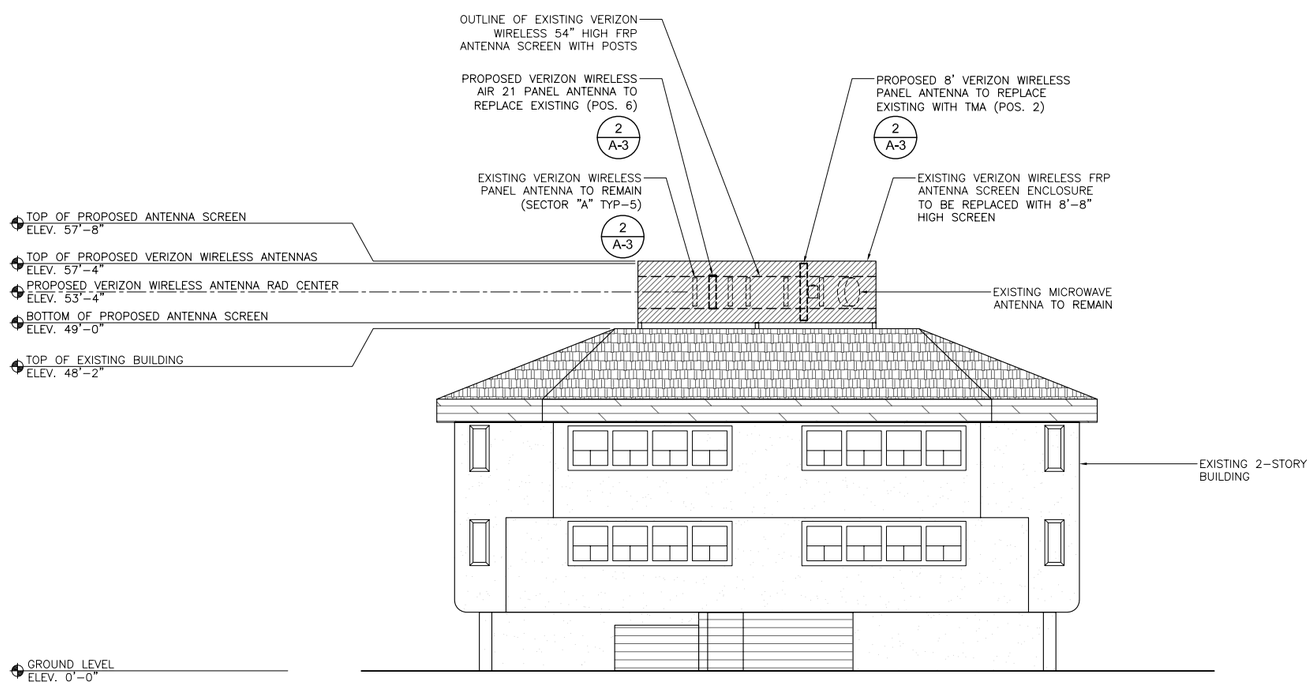


NORTH ELEVATION

4' 0' 4' 8' SCALE 11X17: 3/32" = 1'-0" 24X36: 3/16" = 1'-0" **1**



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EAST ELEVATION

4' 0' 4' 8' SCALE 11X17: 3/32" = 1'-0" 24X36: 3/16" = 1'-0" **2**

APPLICANT:

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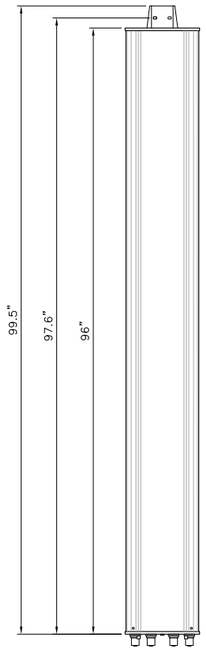
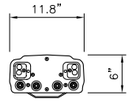
ELEVATIONS

SHEET NUMBER:

A-5





BOTTOM VIEW

WEIGHT: 61.7 LBS
WIND SURVIVAL RATING: 150 MPH
WIND LOAD: @93 MPH
FRONT/SIDE/READ: (1270N/270N/1490N)

STANDARD MOUNTING HARDWARE:
INCLUDED FOR
2" TO 4.6" O.D. MAST

CONNECTORS: 4–7/16 DIN FEMALE
(LONG NECK)

ANTENNA DETAIL 1

RADIO:

- FREQUENCY BANDS: 1900 MHZ (B2) & 1700/2100 MHZ (B4)
- ONE ACTIVE ANTENNA/RADIO, SUPPORTING e.g. 2x2 MIMO, 2 Tx + 4 Rx
- 8 CARRIERS (4 CARRIERS PER RADIO)
- IBW = 20 MHZ PER RADIO

ANTENNA:

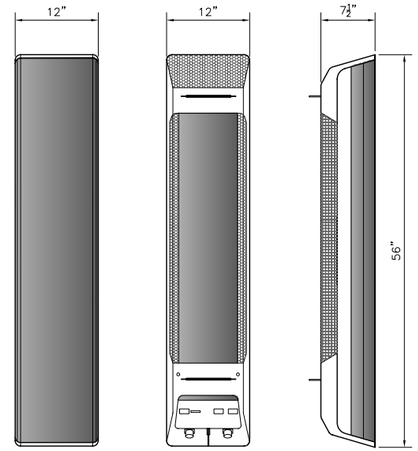
- ONE BEST IN CLASS 65° PASSIVE ANTENNA: 17.2 TO 17.8 DBI GAIN
- TWO INTEGRATED RET's ONE PER FREQUENCY BAND, –2° – 12° TILT
- VERTICAL BEAM WIDTH: 65° – 7.1°
- FUAL COLUMNS FOR UL BEAM FORMING / 4–WAY RX DIVERSITY

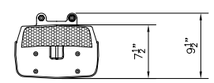
INTERFACES:

- TWO OPTICAL FIBER PORTS (CPRI) FOR ACTIVE ANTENNA/RADIO
- ONE POWER CONNECTOR, –48 V DC
- TWO 7/16 FEMALE CONNECTOR FOR PASSIVE ANTENNA, WITH RET SUPPORT
- TWO N FEMALE CONNECTORS FOR LMU (RX SHARING PORTS) ON 1900 MHZ VARIANT

PHYSICAL CHARACTERISTICS & ENVIRONMENT:

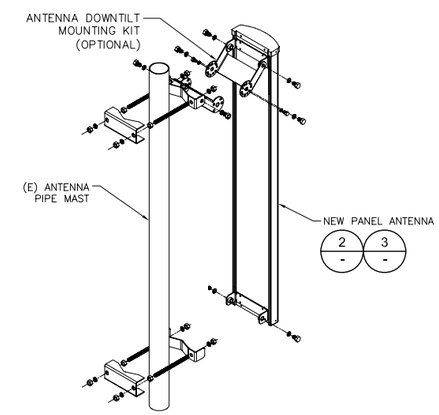
- H x W x D = 1429 x 307 x 200 mm (56" x 12" x 7.9")
- 411.5 KG (91 LBS) TWO MOUNTING BRACKETS – ADD'L. 2.1 KG (5 LBS)
- <750 N WIND LOAD (WORST DIRECTION, STATIC @ 150 KM/H)
- OPERATING TEMPERATURE RANGE: –40%DC TO +55°C (–40°F TO +131°F)
- HEAT DISSIPATION 300 W





TOP

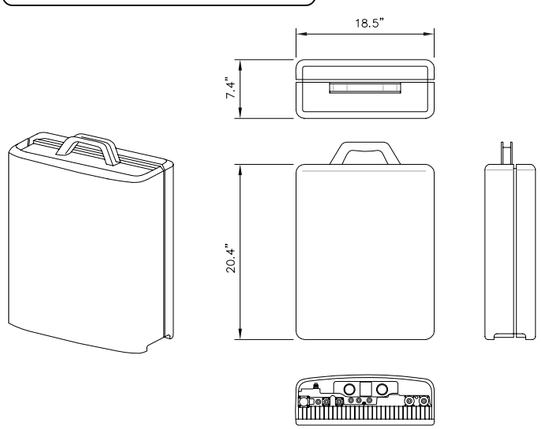
ANTENNA DETAIL 2



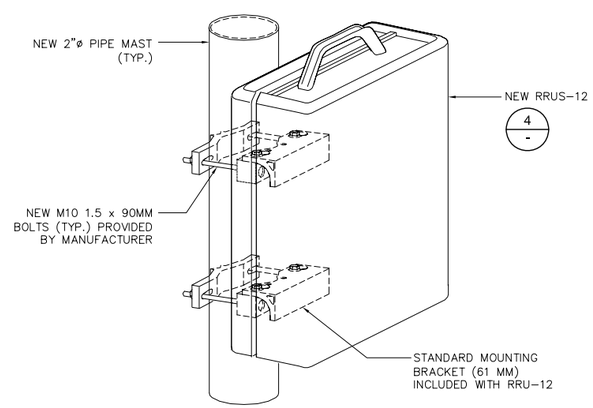
ANTENNA MOUNTING DETAIL 3

ERICSSON RRUS-12

DIMENSIONS, WxDxH:	470x187x518 mm (18.5"x7.4"x20.4")
POWER CONSUMPTION:	2 x 60 W
TOTAL WEIGHT:	58 LBS.
TEMPERATURE:	–40° TO 55° C

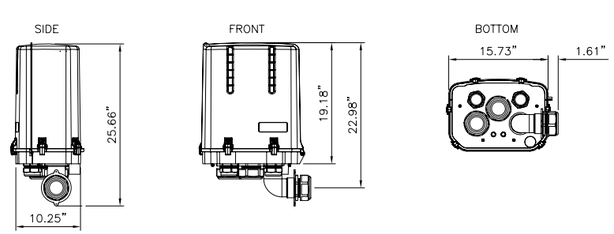


RRUS-12 SPECIFICATIONS 4



RRUS-12 MOUNTING DETAIL 5

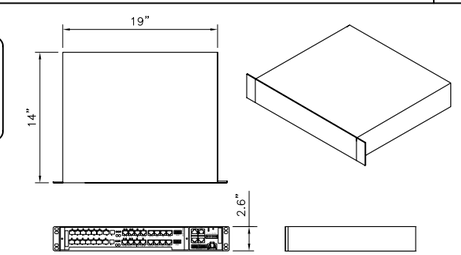
MODEL #: RCMDC–4750–PF–48
RCMDC–3315–PF–48



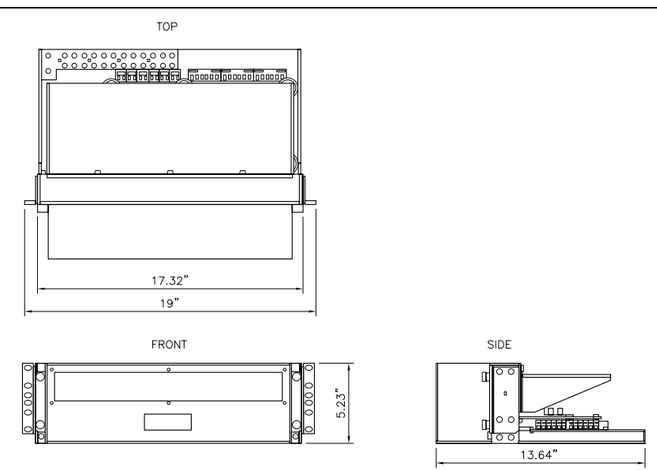
FIBER/POWER DEMARCATION BOX 6

ERICSSON RBS 6601

DIMENSIONS, WxDxH:	66x483x350 mm (2.6"x19"x14")
TEMPERATURE:	+41°F TO +122°F
HUMIDITY:	5% – 85%
POWER SUPPLY:	–48 VDC
TOTAL WEIGHT:	16 LBS.



RBS 6601 DETAIL 7



MODEL #: RVZDC–2260–RM–48

RAYCAP FIBER/POWER RACK MOUNT 8

APPLICANT:

verizonwireless

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DETAILS

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