

**COUNTY OF SAN MATEO  
PLANNING AND BUILDING DEPARTMENT**

**DATE:** February 1, 2024

**TO:** Zoning Hearing Officer

**FROM:** Planning Staff

**SUBJECT:** Consideration of a Use Permit Renewal, pursuant to Sections 6500 and 6512.6 of the San Mateo County Zoning Regulations, to allow the continued operation of an existing telecommunications facility operated by Verizon. The project is located at 723 Marsh Road in the unincorporated North Fair Oaks area of San Mateo County.

County File Number: PLN2009-00280 (Verizon)

**PROPOSAL**

The project applicant, Christopher Fowler on behalf of Verizon, is proposing to renew an existing Use Permit (PLN2009-00280) to allow the continued operation of a wireless communications facility located at 723 Marsh Road in the unincorporated area of North Fair Oaks in San Mateo County. The existing facility consists of two (2) roof mounted monopoles with three (3) panel antennas on each one for a total of six (6) panel antennas, roof mounted cable tray, two (2) wireless GPS antennas, and a “doghouse” atop an existing apartment building. The antennas are concealed beneath a 3 feet by 13 feet cylinder (also known as a radome). No changes are proposed to the existing approved facility under this renewal.

**RECOMMENDATION**

That the Zoning Hearing Officer approve the Use Permit Renewal, County File No. PLN2009-00280, by making the required findings and adopting the conditions of approval listed in Attachment A.

**BACKGROUND**

Report Prepared By: Tiffany Gee, Project Planner; [TGee@smcgov.org](mailto:TGee@smcgov.org)

Applicant: Christopher Fowler, on behalf of Verizon Wireless

Owner: Mario Alfredo Despres and Maly T. Despres, Trustees of The Despres Family 2007 Living Trust

Public Notification: Ten (10) day advanced notification for the hearing was mailed to property owners within 300 feet of the project parcel and a notice for the hearing posted in the San Mateo County Times on January 20, 2024.

Location: 723 Marsh Road, North Fair Oaks

APN: 060-143-320

Size: 9,800 square feet

Existing Zoning: C-1/S-1 (Neighborhood Business/5,000-sq.-ft. minimum parcel size)

General Plan Designation: Neighborhood Mixed-Use

Sphere-of-Influence: Redwood City

Existing Land Use: Multi-family residential apartments and wireless telecommunication facility

Water Supply: California Water Service Company – Bear Gulch

Sewage Disposal: West Bay Sanitary District

Flood Zone: FEMA Flood Zone X (Area of Minimal Flood Hazard), Community Panel No. 06081C0302E, dated October 16, 2012.

Environmental Evaluation: The project is categorically exempt pursuant to Section 15301, Class 1, of the California Environmental Quality Act (CEQA) Guidelines for the continued operation of existing public or private facilities involving little or no physical changes or expansion of use.

Setting: The subject parcel is located on Marsh Road just north of the intersection with Fair Oaks Avenue within a neighborhood business zoned district. The property is improved with an existing multiple residential unit apartment building and a wireless telecommunications facility that also serves T-Mobile and AT&T. The facility is largely located on the roof with the associated lease areas either in an apartment located on the second floor or on the ground floor within fenced lease areas. The development along Marsh Road consists of a mix of commercial and multiple-family residential uses. The properties to the rear consist of single-family residential development.

Chronology:

<u>Date</u>	<u>Action</u>
December 16, 2010	- Use Permit approved by the Zoning Hearing Officer for the telecommunications facility (PLN2009-00280).
July 12, 2011	- Final Approval of Use Permit as applicant paid outstanding Fish and Game fees this day.
July 13, 2011	- Minor modification for addition of “doghouse” to shield cables coming from lower floors to the roof approved.
January 30, 2014	- Minor modification to replace three (3) antennas within existing radome approved under BLD2014-00185.
June 30, 2023	- Minor modification to remove and replace 3-foot radome with 5.5-foot radome, install three (3) antennas, one (1) new surge suppressor, and one (1) new hybrid cable approved.
July 10, 2023	- Subject application for a Use Permit Renewal initiated.
September 1, 2023	- Application deemed complete.
February 1, 2024	- Zoning Hearing Officer public hearing.

**DISCUSSION**

A. KEY ISSUES

1. Conformance with the San Mateo County General Plan

Staff has determined that the project complies with all applicable General Plan policies, with specific discussion of the following:

a. Chapter 4 – Visual Quality

The project is consistent with Policy 4.21 (*Utility Structures*), minimization of visual impacts, because it will have a negligible visual impact. The equipment in the apartment is not visible to the adjacent community since it is located within a previously converted apartment. The two roof mounted poles are housed within a radome cover, which matches the height and design of the other existing carrier, AT&T’s, pole and radome cover. While these are visible, the design is existing and is effective in reducing the visual impact to adjacent properties. The height of the existing structure and the placement of the

equipment towards the center of the structure further minimizes their visibility from Marsh Road. The radomes are also visible from the properties along 18<sup>th</sup> Avenue to the rear of the site, however, there is some tree cover to buffer some of the visibility. Condition of Approval No.5 from the original approval requires that the poles, radomes, and antennas be painted a light beige color to match the other equipment. The equipment color has been maintained in this way and continues to minimize visibility. The existing facility has not resulted in significant visual impacts and no changes are proposed under the subject renewal.

Furthermore, a modification approved on June 30, 2023, will not be considered an impact as the minor modification was approved under the Middle Class Tax Relief and Job Creation Act of 2012 preemption. Changes described and reflected in the submitted renewal plans were approved on June 30, 2023, but have not yet been installed.

b. Chapter 7 – General Land Use

The project is consistent with Policy 7.16 (*Land Use Objectives for Urban Areas*), maximization of efficiency of public facilities, services, and utilities, because it is utilizing an already developed site to continue filling in coverage gaps that existed previous to its inception as an essential service. Additionally, by continuing the use on this site, the applicant eliminates the need to introduce this use to a location where it does not currently exist.

2. Conformance with the Zoning Regulations

The project site is located within the C-1/S-1 (Neighborhood Business/5,000-sq.-ft. lot minimum) Zoning District. Wireless Telecommunications Facilities are allowed in any zoning district pursuant to a Use Permit per Section 6500(b) of the San Mateo County Zoning Regulations, when found to be necessary for the public health, safety, convenience, or welfare. The Federal Communications Commission (FCC) has established that cellular transmitting facilities serve national interests and directly and indirectly benefit the public. No changes are proposed as part of this renewal for this facility. Therefore, this facility's continued use qualifies as a public service and the proposed renewal to continue operating may be granted for this location in the C-1/S-1 Zoning District.

While the C-1 District does not have specific development standards, the S-1 Combining District does. However, as the equipment is already existing, and the proposed equipment from the minor modification, approved on June 30, 2023, will be located within or atop the existing building, it does not contribute to any new lot coverage, floor area, or impact required setbacks.

The project would be required to be in compliance with the height limitation of the S-1 Zoning District of 36 feet. The maximum height will not increase and would be maintained at its current height of 41 feet, 6 inches. Section 6512.2.(1)(3) of the San Mateo County Zoning Regulations allow an increased height for roof mounted equipment so long as the equipment will not exceed 16 feet above the building roofline.

3. Conformance with Wireless Telecommunications Facilities Regulations

Staff has determined that the project complies with the applicable standards of the Wireless Telecommunication Facilities (WTF) Ordinance, as discussed below:

a. Development and Design Standards.

**Section 6512.2.A** generally prohibits new facilities in areas with sensitive habitats. The project site lease area does not contain any rare or endangered animal or plant species identified on the California Natural Diversity Database (CNDDDB). Additionally, the project does not include a new facility. The project is for the renewal of an existing facility.

**Section 6512.2.B** discourages locating telecommunications facilities in residential zones unless no other locations provide feasible service or adequate capacity or coverage. The site is located in an area zoned C-1/S-1 (Neighborhood Commercial), a non-residential designation.

**Section 6512.2.C** requires that co-locations be investigated as an alternative to a new facility if it can provide equivalent coverage with less environmental impact. **Section 6512.2.D** states that, except in cases where aesthetically inappropriate, new facilities should be constructed to support co-location. The project conforms to these standards because it does not involve any new construction and is not considered a new facility. Removing this facility and locating the antennas onto another facility would be an inferior option because this facility already exists and has a negligible visual impact. An alternative facility could increase the visual impact to adjacent areas.

**Section 6512.2.E – G** seeks to minimize and mitigate visual impacts from public views by designing facilities to blend in with the surrounding environment, maintaining exterior equipment to blend with the surrounding environment and/or buildings and requiring facilities to be constructed of non-reflective materials.

The existing facility blends in with the surrounding environment as it is on an existing apartment building in an urban setting, and with equipment being painted a light beige color to match other equipment. The 2023 minor modification replacing a radome, installing new antennas, a surge suppressor, and a new hybrid cable will not change the visual impacts. Additionally, no physical changes to the facility are proposed with the renewal.

**Section 6512.2.H – K** discusses wireless telecommunication facilities complying with the zoning, allowed height, and accessory buildings related to the facility. The project complies with the zoning district standards for setbacks, height, lot coverage, and no physical changes are proposed with the renewal.

a. Performance Standards

The project meets the required performance standards of Section 6512.3 for lighting, licensing, provision of a permanent power source, timely removal of the facilities, and visual resource protection. No physical changes to the facility are proposed with this renewal, the facility operates under licenses issued from both the Federal Communications Commission (FCC) and the California Public Utilities Commission (CPUC), power for the facilities will continue to be provided by PG&E, visual impacts will continue to be minimal, and conditions of approval will require maintenance and/or removal of the facility when no longer in operation.

The facility is required to obtain and maintain all necessary licenses and registrations from the Federal Communications Commission (FCC), California Public Utilities Commission (CPUC), and any other applicable regulatory bodies. Verizon is also required to supply the Planning and Building Department with evidence of these licenses and registrations. If any license is ever revoked, Verizon is obligated to inform the Planning and Building Department of the revocation within 10 days of receiving such notice.

4. Conformance with Use Permit Findings

In order to approve this use permit renewal to allow the continued operation of this facility, the Zoning Hearing Officer must make the following findings:

- a. **That the establishment, maintenance and/or conducting of the proposed use will not, under the circumstances of this particular case, result in a significant adverse impact to coastal resources,**

**or be detrimental to the public welfare or injurious to property or improvements in said neighborhood.**

The project site is not located in the coastal zone and no physical changes are proposed to the existing facility with this renewal. Staff has reviewed the project file, reviewed previous conditions of approval, and found no letters in the project file concerning non-compliance with Planning Department requirements or issues from neighboring parcels in the vicinity. The cell facility has been in place for a significant period and, therefore, there will be no increase in visual impact or other impacts caused by the continuance of this facility. The radio frequency analysis from October 25, 2021, indicates that the FCC General Population limit of this facility is considered to be at a level that is safe for continuous exposure time. The proposed operation will not expose members of the General Public to hazardous levels of RF energy at ground level or in adjacent buildings. This analysis considered the June 2023 minor modification additions. The report recommends posting contact information and RF Guidelines signage that informs personnel entering the site of basic precautions to be followed when working around antennas. For areas on the roof near the antennas that are predicted to exceed the General Population limits, barriers and RF alerting signs (Notice and RF Guidelines) should be posted to be visible upon approach to provide notification of potential conditions at these areas.

- b. **That the approval of this use permit renewal for this cellular telecommunication facility is necessary for the public health, safety, convenience, or welfare of the community.**

This project will continue to provide the clarity, range, and capacity for the existing cellular network in the area and will continue to provide service for the public in general. A cellular facility in this location is necessary for the convenience of cellular users and will not be detrimental to the public welfare.

5. Conformance with Conditions of Last Use Permit Approvals

Staff has reviewed the previous use permit conditions of approval for Verizon (PLN2009-00280), last approved December 16, 2010, and has determined that the commercial carrier is in compliance with all previous conditions (see Attachment E). No physical changes are proposed as part of the renewal. Previous conditions that remain relevant, along with new conditions, are included in Attachment A of this staff report.

B. ENVIRONMENTAL REVIEW

The proposed telecommunications facility is categorically exempt from the California Environmental Quality Act (CEQA) under the provision of Section 15301, Class 1, for the continued operation of existing public or private facilities involving no physical changes or expansion in use.

C. REVIEWING AGENCIES

Building Inspection Section  
Menlo Park Fire Protection District

**ATTACHMENTS**

- A. Recommended Findings and Conditions of Approval
- B. Location Map
- C. Site Plan
- D. Site Photos
- E. PLN2009-00280 Conditions from the 2010 Use Permit Approval
- F. RF Report

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County of San Mateo  
Planning and Building Department

**RECOMMENDED FINDINGS AND CONDITIONS OF APPROVAL**

Permit or Project File Number: PLN2009-00280      Hearing Date: February 1, 2024

Prepared By: Tiffany Gee, Project Planner      For Adoption By: Zoning Hearing Officer

**RECOMMENDED FINDINGS**

For the Environmental Review, Find:

1. That the project is categorically exempt from the California Environmental Quality Act (CEQA) under the provisions of Section 15301, Class 1, for the continued operation of existing public or private facilities involving no additional physical changes and no expansion of use.

For the Use Permit Renewal, Find:

2. That the establishment, maintenance and/or conducting of the proposed use will not, under the circumstances of this particular case, result in a significant adverse impact to coastal resources, or be detrimental to the public welfare or injurious to property or improvements in said neighborhood as a search of County records has shown that the site has operated in full compliance with the previous conditions of approval, is in compliance with the Federal Communications Commission (FCC)'s current prevailing standards for limiting human exposure to RF energy, and is compliant with the County's Wireless Telecommunication Facilities Ordinance due to the design, location, and available opportunities for future co-locations.
3. That the approval of this use permit renewal for an existing cellular telecommunication facility is necessary for the public health, safety, convenience, or welfare of the community as the site provides telecommunications coverage to the surrounding community, which serves as a benefit to both private and public users.

## **RECOMMENDED CONDITIONS OF APPROVAL**

### **Current Planning Section**

1. This approval applies only to the proposal, documents, and plans described in this report, and submitted to and approved by the Zoning Hearing Officer on February 1, 2024. Modifications beyond those approved by the Zoning Hearing Officer will be subject to review and approval by the Director of Planning and Building and may require review at a public hearing. Minor modifications that are largely consistent with this approval may be approved at the discretion of the Director of Planning and Building.
2. This permit shall be valid for ten (10) years from the date of this approval and shall expire on February 1, 2034. If continuation of this use is desired, the applicant shall file a use permit renewal application six (6) months prior to its expiration with the Planning and Building Department, by submitting the applicable application forms and paying the application fees.
3. Any modification to this facility or changes in use or intensity will require a use permit amendment. If an amendment is requested, the applicant shall submit necessary documents and fees for consideration at a public hearing.
4. The applicant shall maintain the monopole, radome, and antennas associated with the facility a light beige color to match the existing equipment. In the event that the equipment needs to be repainted, they shall be repainted a light beige color. The facility's light beige finish shall be maintained to the satisfaction of the Director of Planning and Building.
5. The applicant shall not enter into a contract with the landowner or lessee that reserves for one company exclusive use of structures on this site for telecommunication facilities.
6. This installation shall be removed in its entirety at that time when this technology becomes obsolete, when the facility is no longer needed to achieve coverage objectives, or if the facility remains inactive for six consecutive months. If any of these circumstances occur, the entire facility, including all antennas and associated equipment, etc., shall be removed and the site shall be returned to its pre-construction state to the extent practicable.
7. Noise sources associated with demolition, construction, repair, remodeling, or grading of any real property shall be limited to the hours from 7:00 a.m. to 6:00 p.m. weekdays, and 9:00 a.m. to 5:00 p.m. on Saturdays. Said activities are prohibited on Sundays, Thanksgiving, and Christmas (San Mateo County Ordinance Code Section 4.88.360).

8. The applicant shall maintain all necessary licenses and registrations from the Federal Communications Commission (FCC) and any other applicable regulatory bodies for the operation of the subject facility at this site. The applicant shall supply the Planning Department with evidence of such licenses and registrations. If any required license is ever revoked, the applicant shall inform the Planning Department of the revocation within ten (10) days of receiving notice of such revocation.
9. The facility shall maintain compliance with the performance standards contained with the County's Wireless Telecommunication Facilities Ordinance.

#### Building Inspection Section

10. The applicant shall apply for and obtain a building permit from the Building Inspection Section prior to the commencement of any physical changes to the facility.

#### Menlo Park Fire Protection District

11. Building plans shall be submitted to the Building Inspection Section for review by the fire district prior to issuance of a Building permit for any physical changes to the facility.
12. Maintain the minimum threshold of hazardous materials, otherwise, if the threshold exceeds what is stated in the Fire Code, an Operational Permit is required.
13. The site shall have a current Hazardous Material Inventory Sheet and all applicable HMBP and MSDS sheets on-site and on file with the San Mateo County and Menlo Park Fire Department Hazardous Material Divisions.
14. The applicant shall provide signage on the door of the equipment areas and doors to equipment structures. The signs shall state the type of battery system, voltage of electrical circuits and if batteries have electrolyte solution with corrosive liquids (704 label). The signs shall also have the 24-hour a day emergency contact numbers and the name of the lessee company (i.e., Verizon). Provide a detail of the sign for approval.
15. The applicant shall state if the building has more than or could have more than 1.0% of hydrogen concentration from a charging system, and if so, what kind of ventilation and rate of ventilation is being installed. CFC2007 608.6.1
16. As the equipment room is part of residential structure, a smoke detection system (a smoke detector(s)) shall be installed and supervised by a central station monitoring company. Local audible alarms are also required for notification of occupants. CFC 2007 608.9

17. If non-recombinant (lead acid/free flowing liquid) batteries are used, the applicant shall provide spill control and a neutralization spill kit. CFC 2007 608.5
18. Batteries shall be seismically braced in accordance with the California Building Code.

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**COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT**

# **ATTACHMENT B**



0.04 0 0.02 0.04 Miles

WGS\_1984\_Web\_Mercator\_Auxiliary\_Sphere  
© Latitude Geographics Group Ltd.

1 : 1,128 

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

**THIS MAP IS NOT TO BE USED FOR NAVIGATION**



**COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT**

# **ATTACHMENT C**



# BAY & 11TH (ANTENNA MOD)

723 MARSH ROAD, MENLO PARK, CA 94025

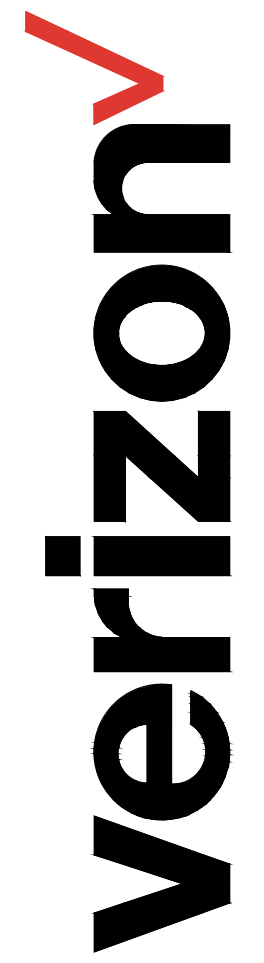
LOCATION NUMBER: 184673

PROJECT ID#: 20202185031

VERIZON WIRELESS EQUIPMENT ENGINEER:	VERIZON WIRELESS REAL ESTATE:
SIGNATURE _____ DATE _____	SIGNATURE _____ DATE _____
VERIZON WIRELESS CONSTRUCTION:	VERIZON WIRELESS RF ENGINEER:
SIGNATURE _____ DATE _____	SIGNATURE _____ DATE _____
PROPERTY OWNER:	ON AIR LLC - LEASING
SIGNATURE _____ DATE _____	SIGNATURE _____ DATE _____
ON AIR LLC - CONSTRUCTION	ON AIR LLC - ZONING
SIGNATURE _____ DATE _____	SIGNATURE _____ DATE _____

BAY & 11TH

184673  
723 MARSH ROAD  
MENLO PARK, CA 94025



2785 MITCHELL DRIVE, BLDG 9  
WALNUT CREEK, CA 94598

**Streamline Engineering**  
and design, inc.

8445 Sierra College Blvd, Suite E Granite Bay, CA 95746  
Contact: Kevin Sorensen Phone: 916-660-1930  
E-Mail: kevin@streamlineeng.com Fax: 916-660-1941

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ISSUE STATUS			
Δ	DATE	DESCRIPTION	REV.
	01/25/21	CD 90%	C.C.
	07/02/21	CD 100%	C.C.
	-	-	-
	-	-	-
	-	-	-
	-	-	-

DRAWN BY: C. CODY  
CHECKED BY: J. GRAY  
APPROVED BY: J. SPORE  
DATE: 07/02/21

SHEET TITLE:
TITLE SHEET
SHEET NUMBER:
T-1

## PROJECT DESCRIPTION

A MODIFICATION TO AN (E) VERIZON WIRELESS UNMANNED TELECOMMUNICATION FACILITY CONSISTING OF:

- REMOVING & REPLACING (1) (E) #3'-0" FRP RADOME W/ (1) (N) #5'-6" FRP RADOME
- INSTALLING (1) (N) LOW UNISTRUT FRAME ON ROOF @ ANTENNAS
- RELOCATING (3) (E) ANTENNAS & INSTALLING (3) (N) ANTENNAS
- RELOCATING (3) (E) RRU-4449 UNITS FROM (E) EQUIPMENT ROOM TO ROOF @ ANTENNAS
- REMOVING & REPLACING (3) (E) RRU-32 B66A UNITS W/ (3) (N) RRU-8843 UNITS @ ANTENNAS
- INSTALLING (3) (N) TWIN DIPLEXERS @ ANTENNAS
- INSTALLING (1) (N) RACK MOUNTED RAYCAP 4520 SURGE SUPPRESSOR INSIDE (E) EQUIPMENT RACK INSIDE (E) EQUIPMENT ROOM
- INSTALLING (1) (N) RAYCAP-6627 SURGE SUPPRESSOR @ ANTENNAS
- INSTALLING (1) (N) 12X24 HYBRID CABLE
- REMOVING (3) (E) TWIN DIPLEXERS @ EQUIPMENT
- REMOVING (E) RBS 6201 LTE CABINET (NOT USED) @ EQUIPMENT
- REMOVING ALL UNUSED COAX CABLES

### ANTENNA COUNT:

(E) NUMBER OF ANTENNAS: (6)  
FINAL NUMBER OF ANTENNAS: (9)

### RRU COUNT:

(E) NUMBER OF RRU: (6)  
FINAL NUMBER OF RRU: (6)

## VICINITY MAP



## CODE COMPLIANCE

ALL WORK & MATERIALS SHALL BE PERFORMED & 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 CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES:

- 2019 CALIFORNIA ADMINISTRATIVE CODE, PART 1, TITLE 24 C.C.R.
- 2019 CALIFORNIA BUILDING CODE (CBC), PART 2, VOLUME 1&2, TITLE 24 C.C.R. (2018 INTERNATIONAL BUILDING CODE AND 2019 CALIFORNIA AMENDMENTS)
- 2019 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R. (2017 NATIONAL ELECTRICAL CODE AND 2019 CALIFORNIA AMENDMENTS)
- 2019 CALIFORNIA MECHANICAL CODE (CMC) PART 4, TITLE 24 C.C.R. (2018 UNIFORM MECHANICAL CODE AND 2019 CALIFORNIA AMENDMENTS)
- 2019 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R. (2018 UNIFORM PLUMBING CODE AND 2019 CALIFORNIA AMENDMENTS)
- 2019 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 C.C.R.
- 2019 CALIFORNIA FIRE CODE, PART 9, TITLE 24 C.C.R. (2018 INTERNATIONAL FIRE CODE AND 2019 CALIFORNIA AMENDMENTS)
- 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE, PART 11, TITLE 24 C.C.R.
- 2019 CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24 C.C.R.

ALONG WITH ANY OTHER APPLICABLE LOCAL & STATE LAWS AND REGULATIONS

### DISABLED ACCESS REQUIREMENTS

THIS FACILITY IS UNMANNED & NOT FOR HUMAN HABITATION. DISABLED ACCESS & REQUIREMENTS ARE NOT REQUIRED IN ACCORDANCE WITH CALIFORNIA STATE BUILDING CODE, TITLE 24 PART 2, SECTION 11B-203.5

## PROJECT INFORMATION

SITE NAME:	BAY & 11TH	SITE #:	184673
COUNTY:	SAN MATEO	JURISDICTION:	SAN MATEO COUNTY
APN:	060-143-320	POWER:	PG&E
SITE ADDRESS:	723 MARSH ROAD MENLO PARK, CA 94025		
CURRENT ZONING:	MIX-USE (R-2 & B)		
CONSTRUCTION TYPE:	I-B		
OCCUPANCY TYPE:	U, (UNMANNED COMMUNICATIONS FACILITY)		
PROPERTY OWNER:	MARIO ALFREDO DESPRES AND MALY T. DESPRES 1365 HILLVIEW DRIVE MENLO PARK, CA 94025 ATTN: MICHELLE DESPRES (415) 601-2287 MDJAEGER@ME.COM	LEASING CONTACT:	ATTN: CHRIS FOWLER (650) 888-0809 CSFOWLER@ATT.NET
APPLICANT:	VERIZON WIRELESS 2785 MITCHELL DRIVE, BLDG 9 WALNUT CREEK, CA 94598	ZONING CONTACT:	ATTN: CHRIS FOWLER (650) 888-0809 CSFOWLER@ATT.NET
SITE ACQUISITION COMPANY:	ON AIR LLC 465 FIRST STREET WEST, STE 101 SONOMA, CA 95476	CONSTRUCTION CONTACT:	ATTN: MOHAMMAD BASEER (510) 414-7075 MBASEER@ONAIRLLC.COM

## DRIVING DIRECTIONS

FROM: 2785 MITCHELL DRIVE, BLDG 9, WALNUT CREEK, CA 94598  
TO: 723 MARSH ROAD, MENLO PARK, CA 94025

1. HEAD SOUTHWEST ON MITCHELL DR 0.3 MI
2. TURN LEFT ONTO N WIGET LN 0.3 MI
3. TURN RIGHT ONTO YCNACIO VALLEY RD 2.9 MI
4. CONTINUE ONTO HILLSIDE AVE 0.2 MI
5. USE THE RIGHT LANE TO TAKE THE CA-24 W RAMP TO OAKLAND 1.2 MI
6. CONTINUE ONTO CA-24 W 8.1 MI
7. KEEP LEFT TO STAY ON CA-24 W 5.3 MI
8. CONTINUE ONTO I-980 W 1.8 MI
9. MERGE WITH I-880 S 2.2 MI
10. KEEP LEFT TO STAY ON I-880 S 12.9 MI
11. CONTINUE ONTO I-880 S 5.8 MI
12. TAKE EXIT 21 TO MERGE WITH CA-84 W TOWARD DUMBARTON BR 10.3 MI
13. USE THE LEFT 3 LANES TO TURN LEFT ONTO MARSH RD
14. DESTINATION WILL BE ON THE RIGHT 1.0 MI

END AT: 723 MARSH ROAD, MENLO PARK, CA 94025

ESTIMATED TIME: 0 HOUR 57 MINUTES ESTIMATED DISTANCE: 52.3 MILES

## SHEET INDEX

SHEET	DESCRIPTION	REV
T-1	TITLE SHEET	-
A-1	OVERALL SITE PLAN	-
A-2	ENLARGED SITE PLAN	-
A-3	ANTENNA PLANS	-
A-4	ELEVATIONS	-
A-5	ELEVATIONS	-
A-6	DETAILS	-
S-1	STRUCTURAL NOTES	-
S-2	STRUCTURAL DETAILS	-

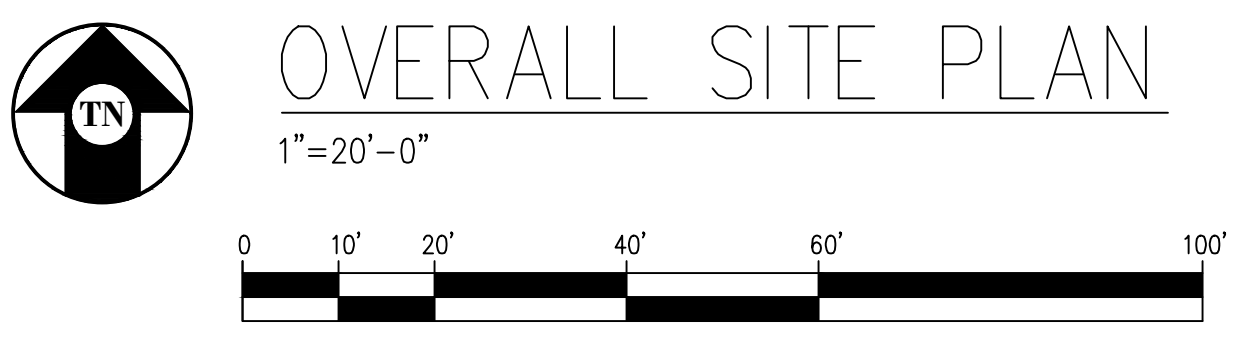
## DESIGN CRITERIA

RISK CATEGORY: II	ROOF LIVE LOAD: N/A	FLOOR LIVE LOAD: N/A	ALLOW SOIL BEARING: N/A
WIND EXPOSURE: B	DESIGN WIND SPEED: 92 MPH	GROUND ELEVATION: 29'	TOPOGRAPHIC CATEGORY: I
SEISMIC SITE CLASS: D	SEISMIC DESIGN CATEGORY: D	SEISMIC COMPONENT I <sub>p</sub> : 1.0	q <sub>p</sub> : 1.0 R <sub>p</sub> : 2.5
S <sub>Ds</sub> : 1.246	S <sub>Dp</sub> : N/A	S <sub>g</sub> : 1.557	S <sub>f</sub> : 0.629



**PROJECT GENERAL NOTES**

1. THIS FACILITY IS AN UNOCCUPIED WIRELESS TELECOMMUNICATION FACILITY.
2. PLANS ARE NOT TO BE SCALED AND ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY, UNLESS NOTED OTHERWISE.
3. THE SCOPE OF WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
4. PRIOR TO THE SUBMISSION OF BIDS, THE CONTRACTORS SHALL VISIT THE JOB SITE AND BE RESPONSIBLE FOR ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS, AND CONFIRM THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE CONSTRUCTION MANAGER AND ENGINEER PRIOR TO PROCEEDING WITH THE WORK.
5. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PAY FOR PERMIT FEES, AND TO OBTAIN SAID PERMITS AND TO COORDINATE INSPECTIONS.
6. THE CONTRACTOR SHALL RECEIVE, IN WRITING, AUTHORIZATION TO PROCEED BEFORE STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED OR IDENTIFIED BY THE CONTRACT DOCUMENTS.
7. CALL BEFORE YOU DIG. CONTRACTOR IS REQUIRED TO CALL 811 (NATIONWIDE "CALL BEFORE YOU DIG" HOTLINE) AT LEAST 72 HOURS BEFORE DIGGING.
8. ALL WORK PERFORMED AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK.
9. THE GENERAL CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING THE BEST SKILLS AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES. CONTRACTOR SHALL ALSO COORDINATE ALL PORTIONS OF THE WORK UNDER THE CONTRACT, INCLUDING CONTACT AND COORDINATION WITH THE CONSTRUCTION MANAGER AND WITH THE LANDLORD'S AUTHORIZED REPRESENTATIVE.
10. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, PAVING, CURBS, GALVANIZED SURFACES, ETC., AND UPON COMPLETION OF WORK, REPAIR ANY DAMAGE THAT OCCURRED DURING CONSTRUCTION TO THE SATISFACTION OF THE PROJECT MANAGER.
11. KEEP GENERAL AREA CLEAN, HAZARD FREE, AND DISPOSE OF ALL DIRT, DEBRIS AND RUBBISH. REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY. LEAVE PREMISES IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.
12. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED, OR OTHERWISE DISCONNECTED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, AS DIRECTED BY THE RESPONSIBLE ENGINEER, AND SUBJECT TO THE APPROVAL OF THE OWNER AND/OR LOCAL UTILITIES.
13. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC AND ALL OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK SHALL BE PROTECTED AT ALL TIMES.
14. DETAILS ARE INTENDED TO SHOW END RESULT OF DESIGN. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS, AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE WORK.
15. THE CONTRACTOR SHALL PROVIDE A TOILET FACILITY DURING ALL PHASES OF CONSTRUCTION.
16. SUFFICIENT MONUMENTATION WAS NOT RECOVERED TO ESTABLISH THE POSITION OF THE BOUNDARY LINES SHOWN HEREON. THE BOUNDARY REPRESENTED ON THIS MAP IS BASED ON COMPILED RECORD DATA AND BEST FIT ONTO EXISTING IMPROVEMENTS. IT IS POSSIBLE FOR THE LOCATION OF THE SUBJECT PROPERTY TO SHIFT FROM THE PLACEMENT SHOWN HEREON WITH ADDITIONAL FIELD WORK AND RESEARCH. THEREFORE ANY SPATIAL REFERENCE MADE OR SHOWN BETWEEN THE RELATIONSHIP OF THE BOUNDARY LINES SHOWN HEREON AND EXISTING GROUND FEATURES, EASEMENTS OR LEASE AREA IS INTENDED TO BE APPROXIMATE AND IS SUBJECT TO VERIFICATION BY RESOLVING THE POSITION OF THE BOUNDARY LINES.
17. THE CONTRACTOR TO VERIFY THE LATEST/CURRENT RF DESIGN.
18. WHERE APPLICABLE, CONTRACTOR SHALL PROVIDE SEPARATE PLANS, SPECIFICATIONS, FEES AND PERMITS FOR ANY REVISION TO ANY FIRE SPRINKLER AND/OR ALARM SYSTEM ON THE PREMISES AS MAY BE NEEDED TO COMPLETE THE WORK DEPICTED HEREIN, USING A C-10 LICENSED SUBCONTRACTOR FOR ALL SUCH WORK.



**BAY & 11TH**

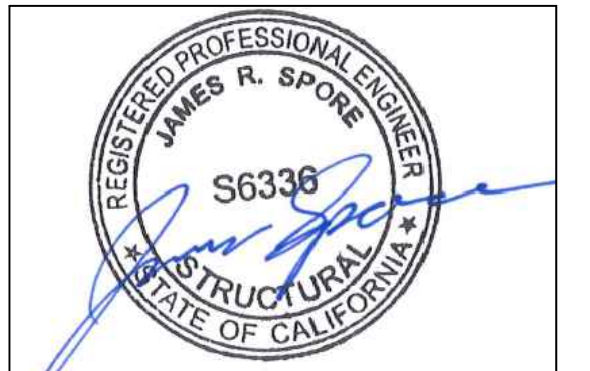
184673  
723 MARSH ROAD  
MENLO PARK, CA 94025

2785 MITCHELL DRIVE, BLDG 9  
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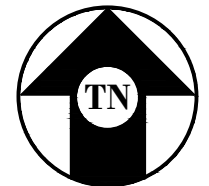
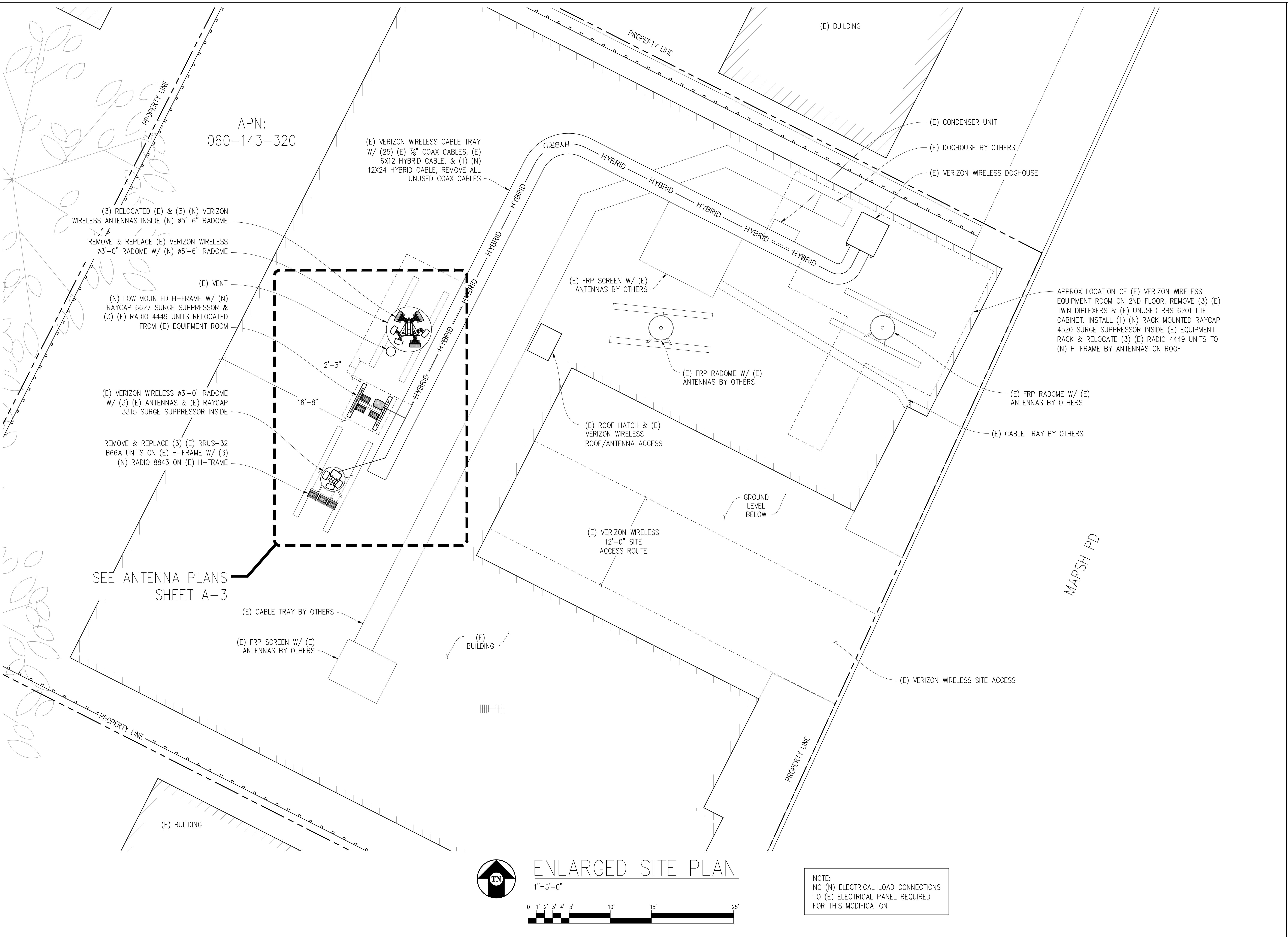
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CHECKED BY: J. GRAY  
APPROVED BY: J. SPORE  
DATE: 07/02/21

SHEET TITLE:  
**OVERALL SITE PLAN**

SHEET NUMBER:  
**A-1**



**ENLARGED SITE PLAN**

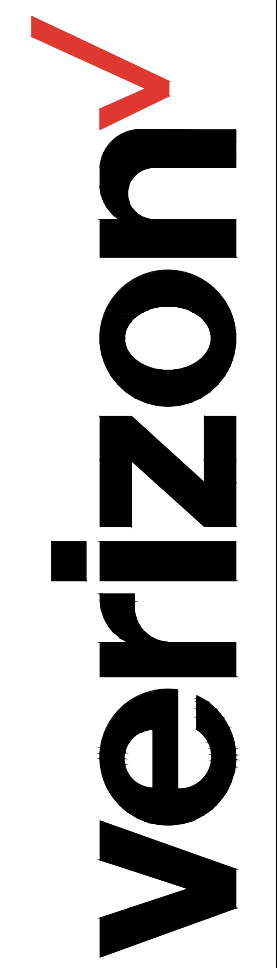
1"=5'-0"



NOTE:  
NO (N) ELECTRICAL LOAD CONNECTIONS TO (E) ELECTRICAL PANEL REQUIRED FOR THIS MODIFICATION

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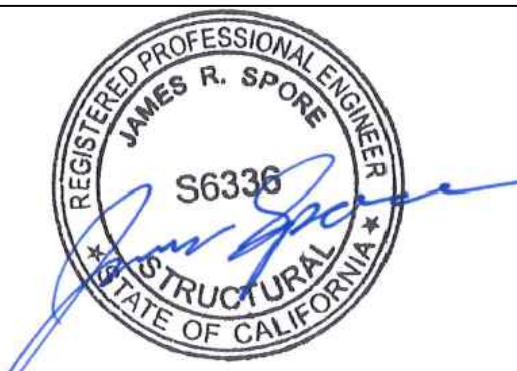


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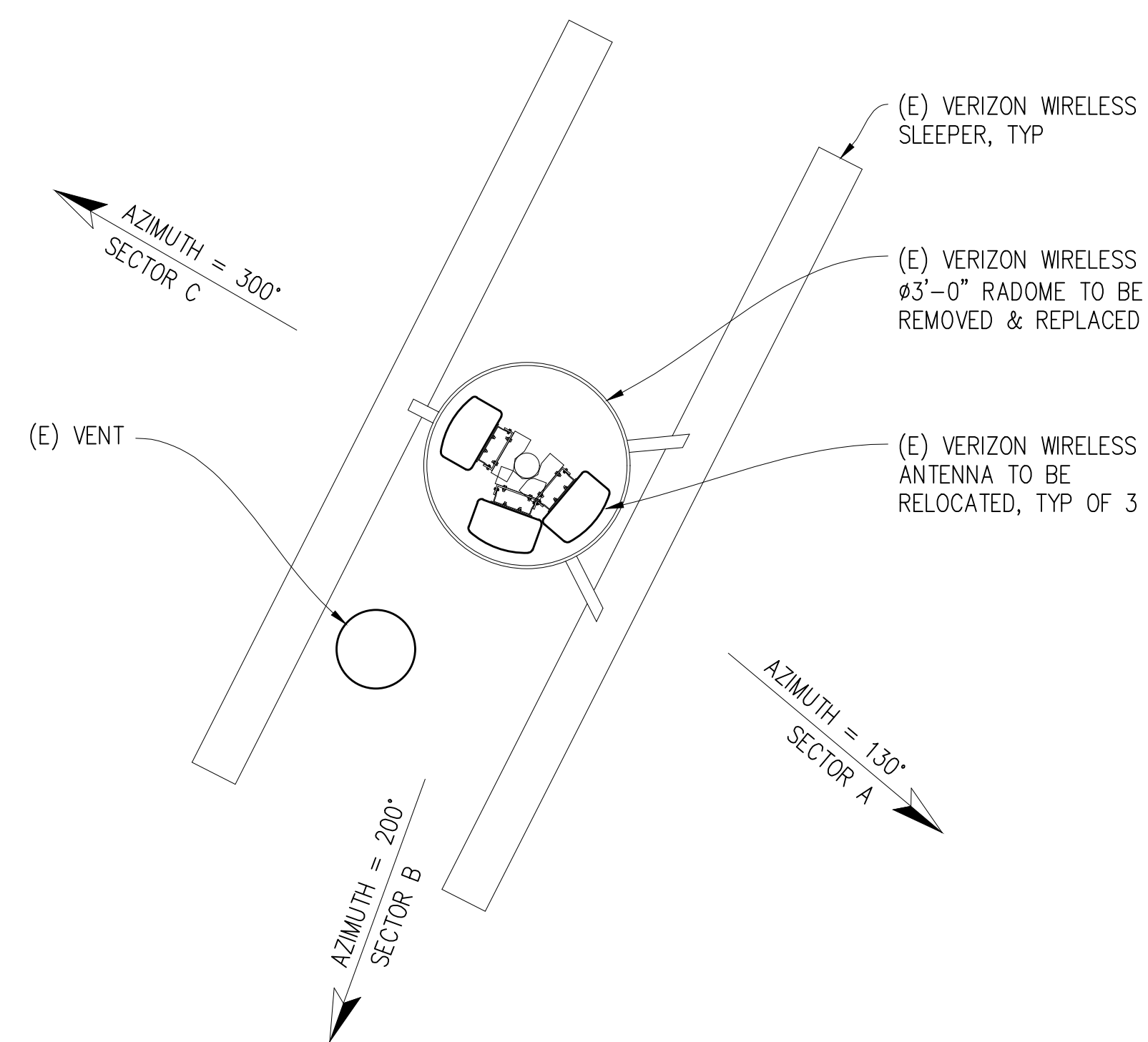
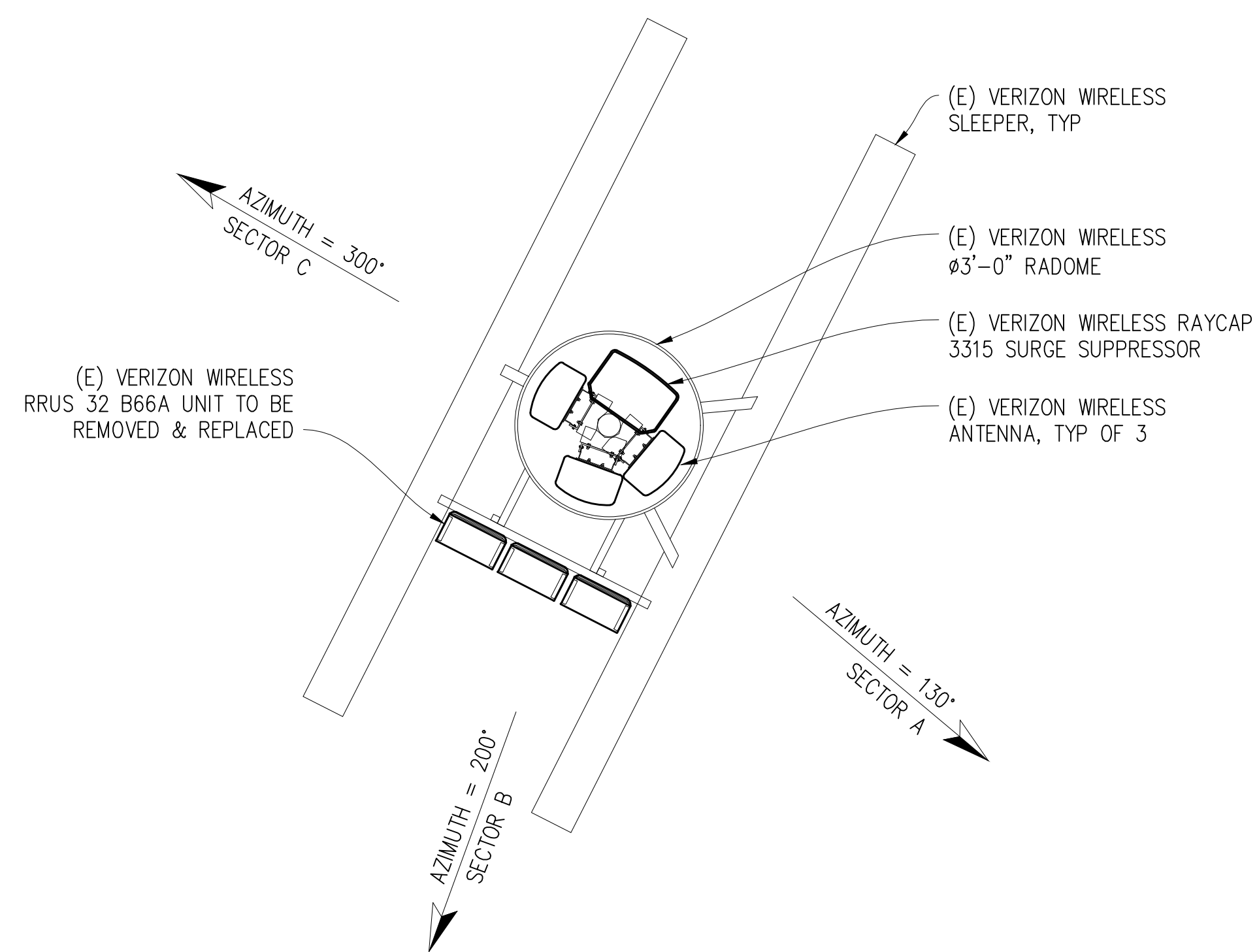


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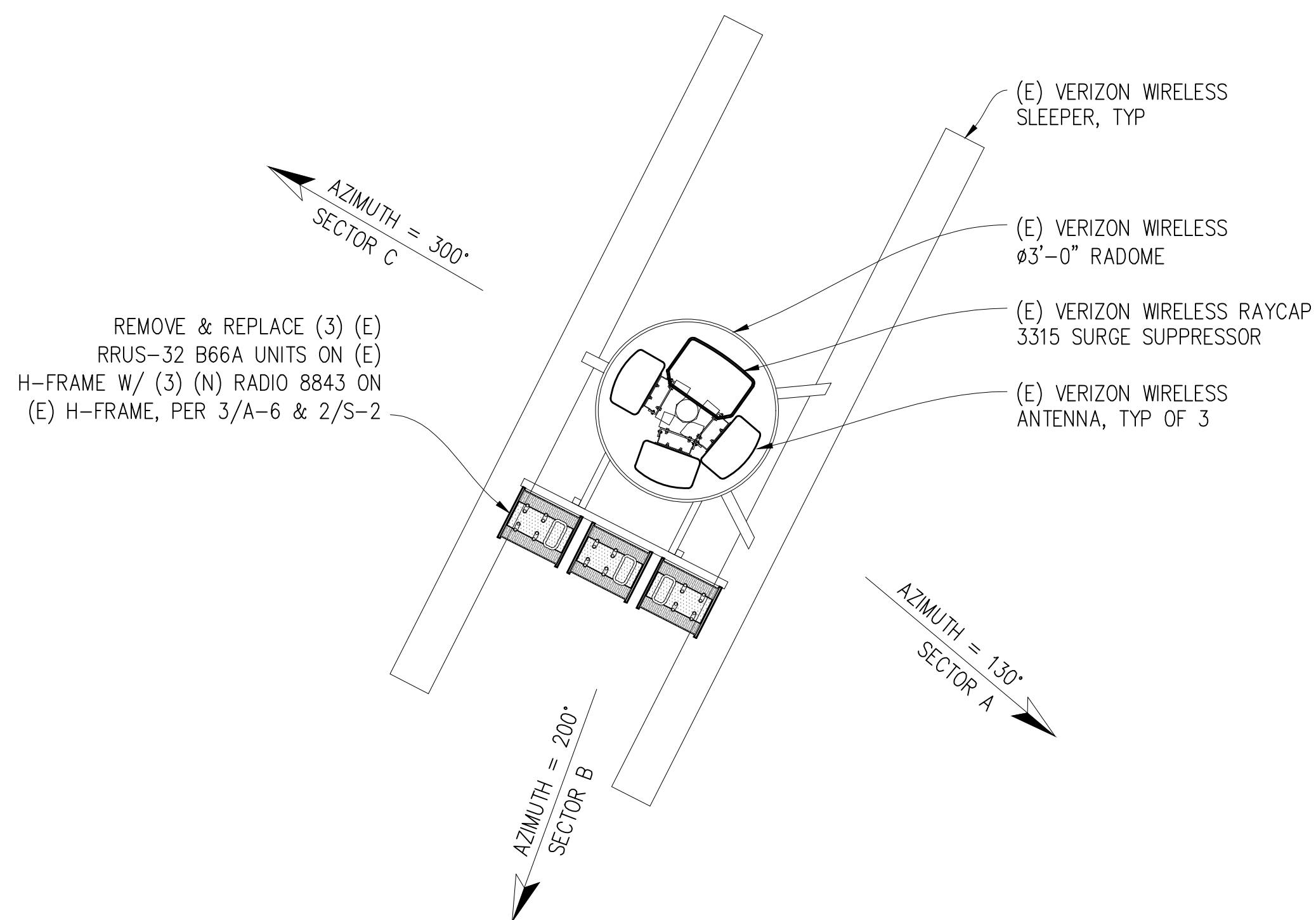
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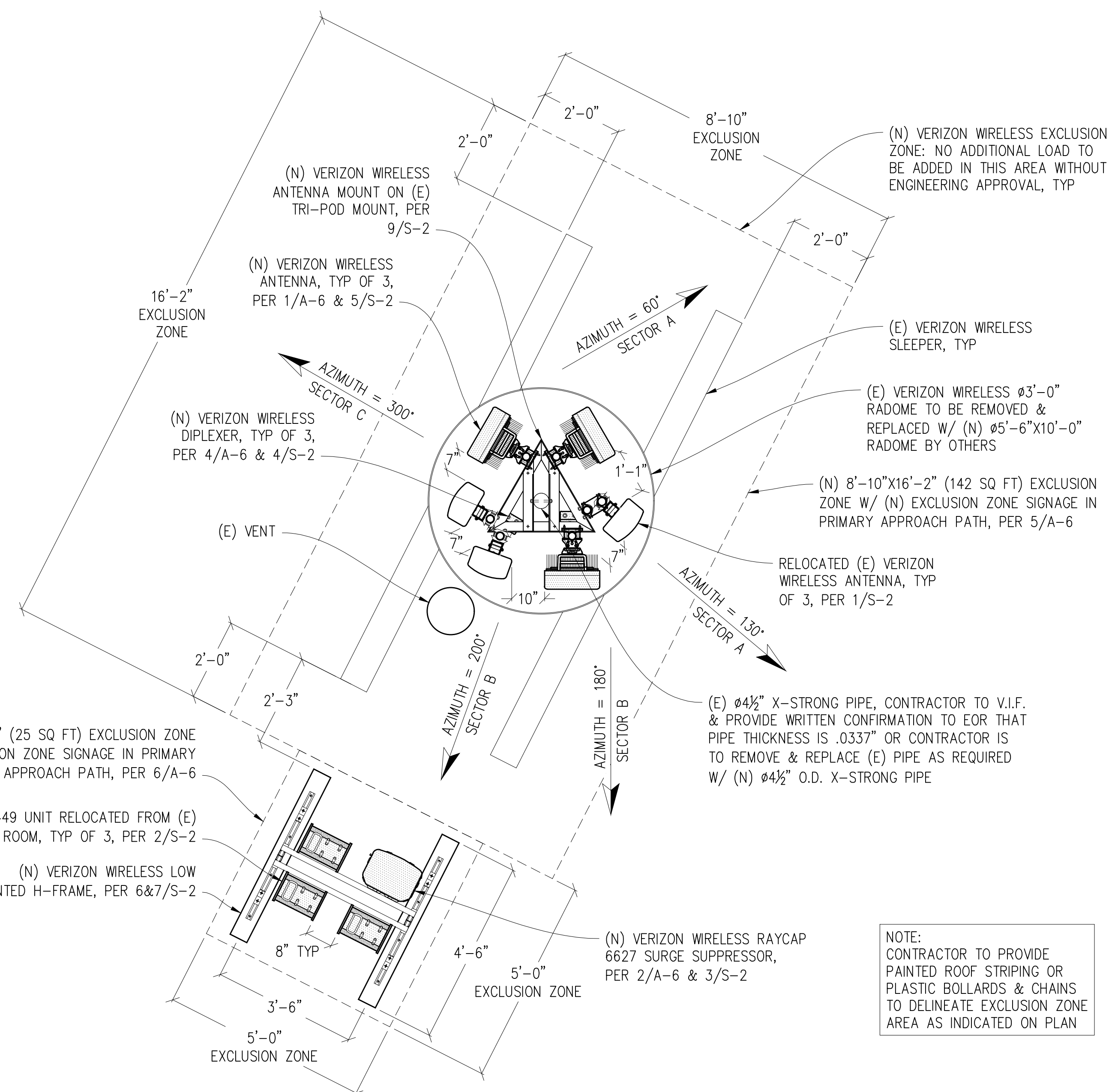
SHEET TITLE:  
**ENLARGED SITE PLAN**  
SHEET NUMBER:  
**A-2**



(E) ANTENNA PLAN  
 1/2" = 1'-0"



(N) ANTENNA PLAN  
 1/2" = 1'-0"



NOTE:  
 CONTRACTOR TO PROVIDE PAINTED ROOF STRIPING OR PLASTIC BOLLARDS & CHAINS TO DELINEATE EXCLUSION ZONE AREA AS INDICATED ON PLAN



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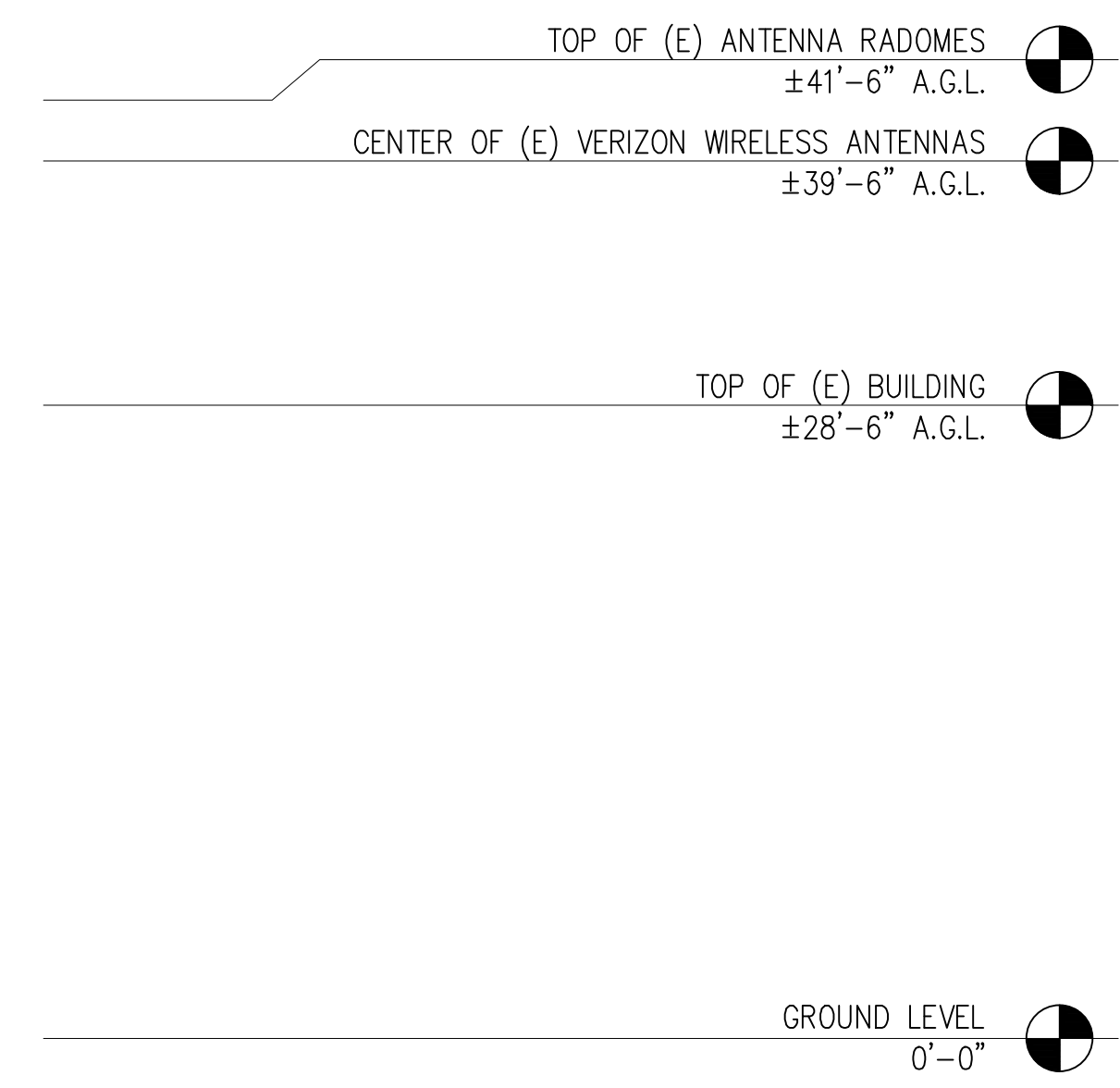
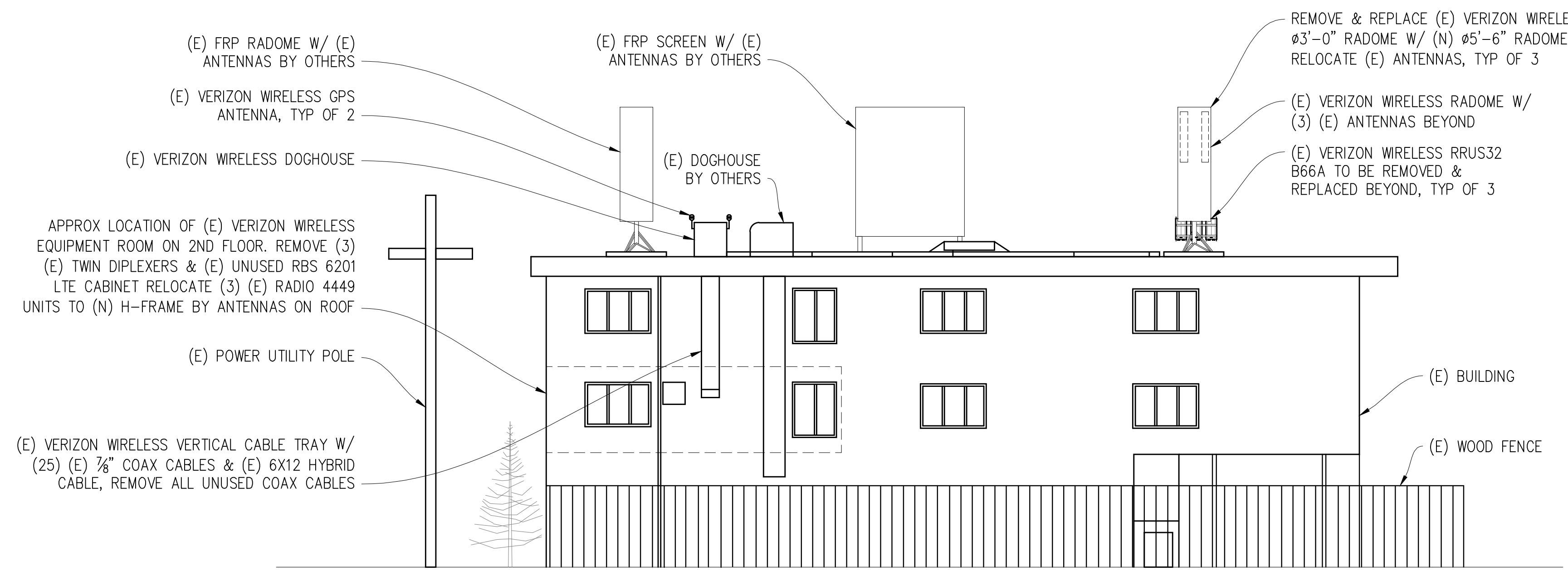
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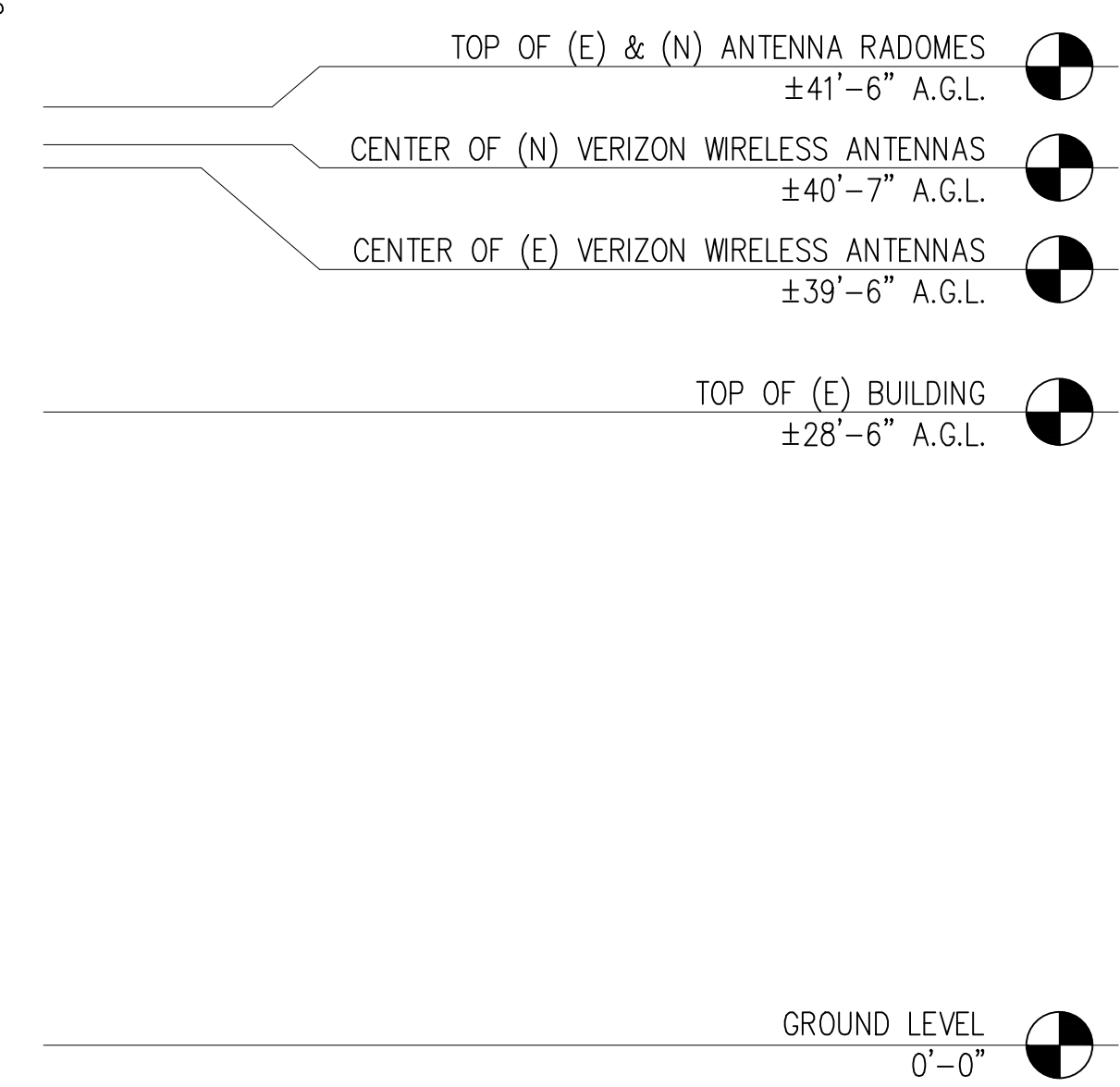
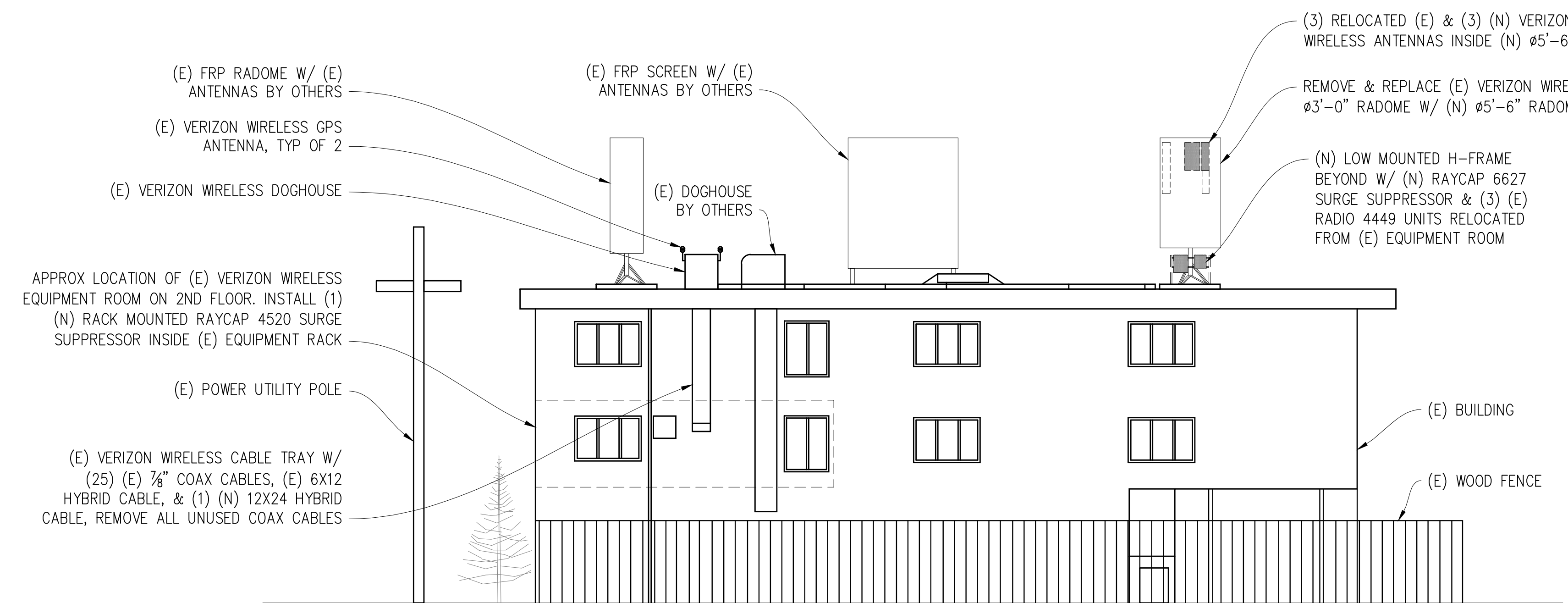


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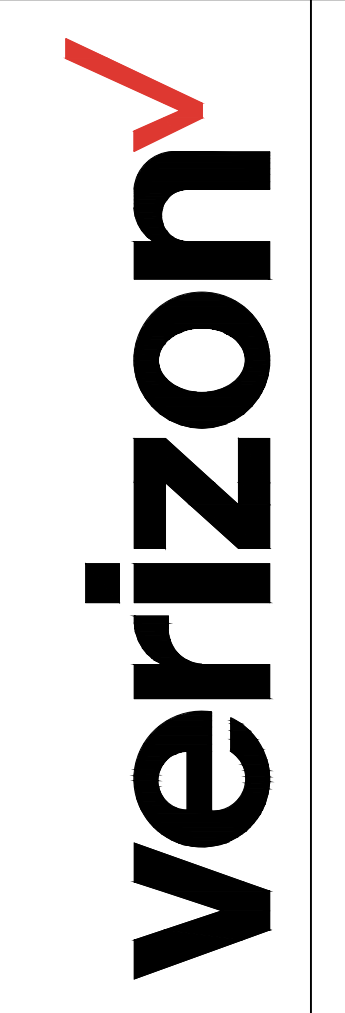
(E) NORTHEAST ELEVATION  
1/8" = 1'-0"



(N) NORTHEAST ELEVATION  
1/8" = 1'-0"

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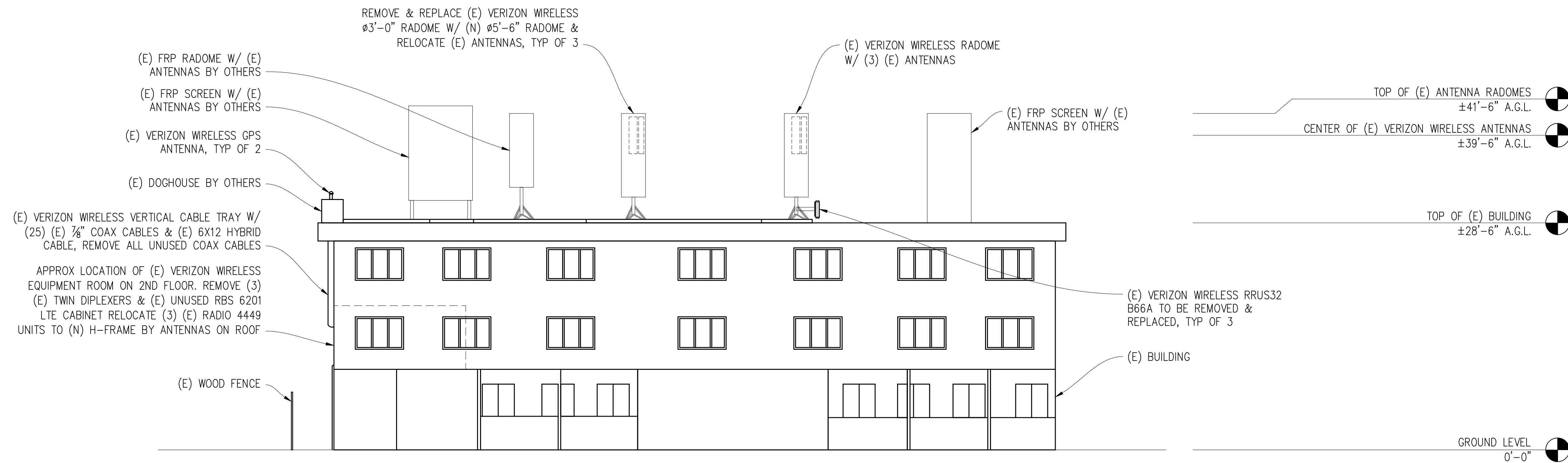
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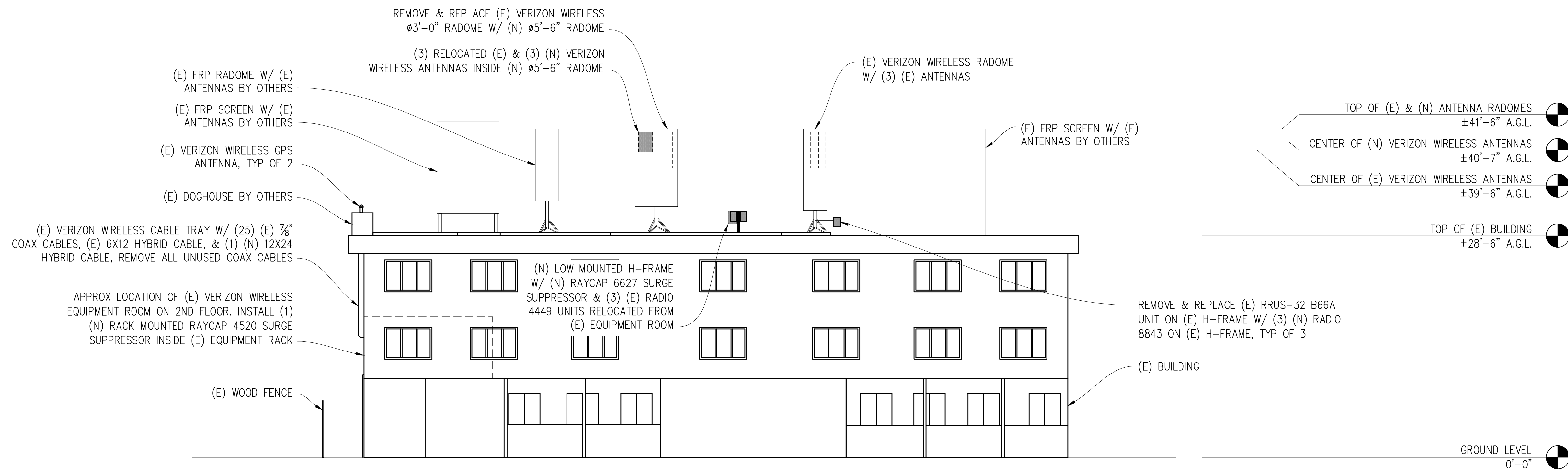
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DATE: 07/02/21

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ELEVATIONS  
SHEET NUMBER:  
A-4



(E) NORTHWEST ELEVATION

1/8"=1'-0"

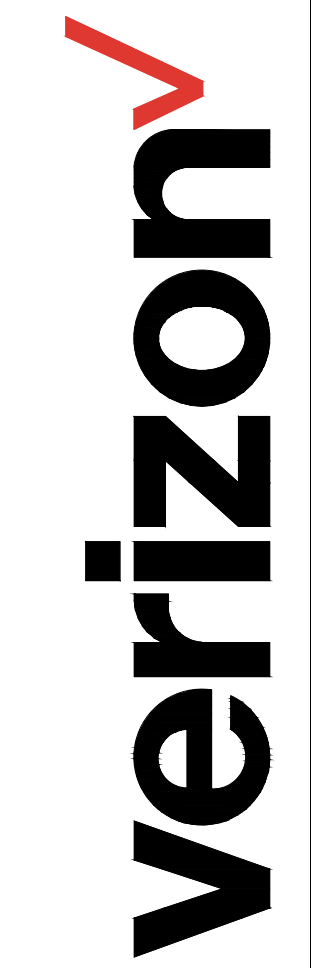


(N) NORTHWESTEAST ELEVATION

1/8"=1'-0"

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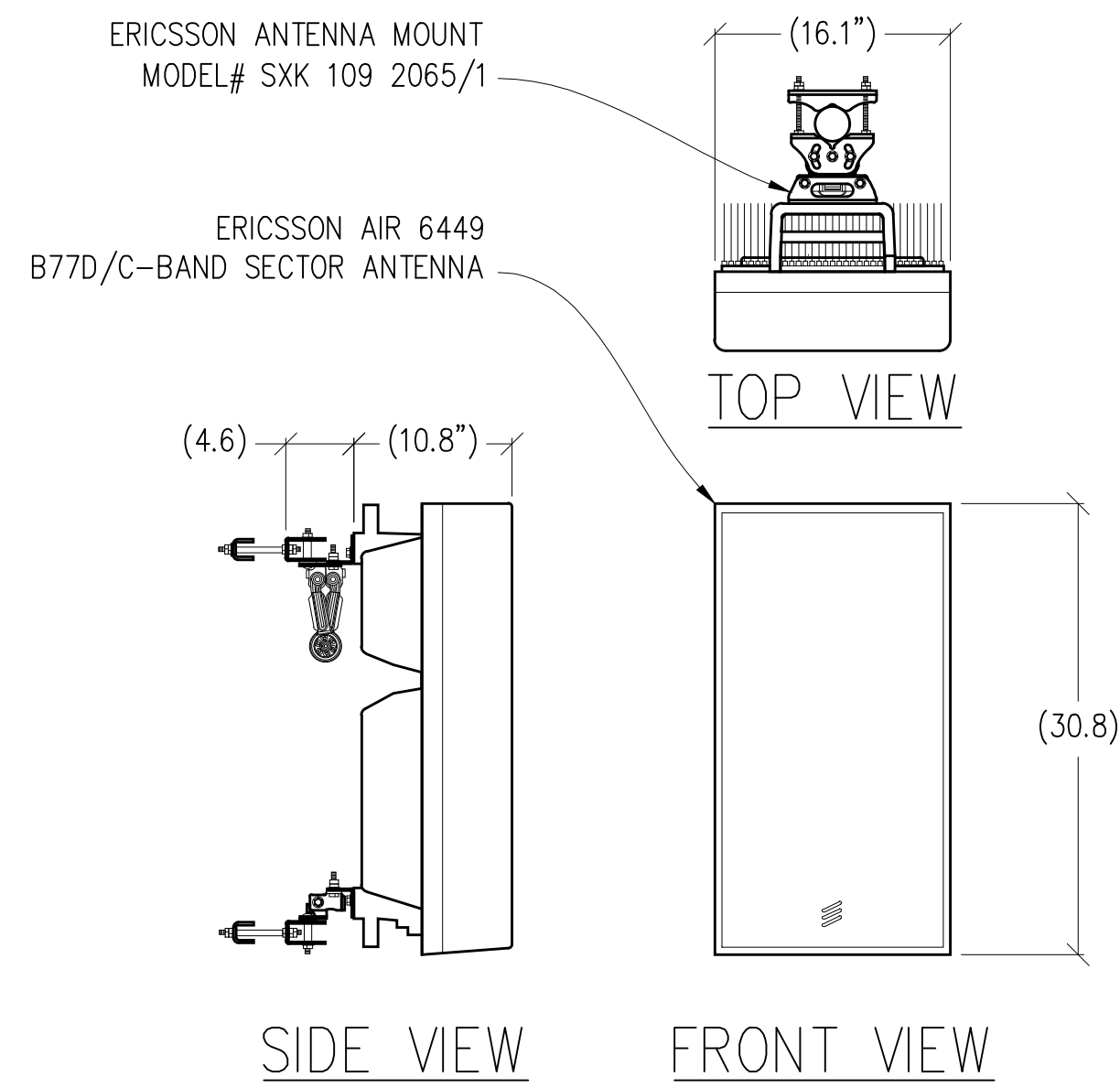
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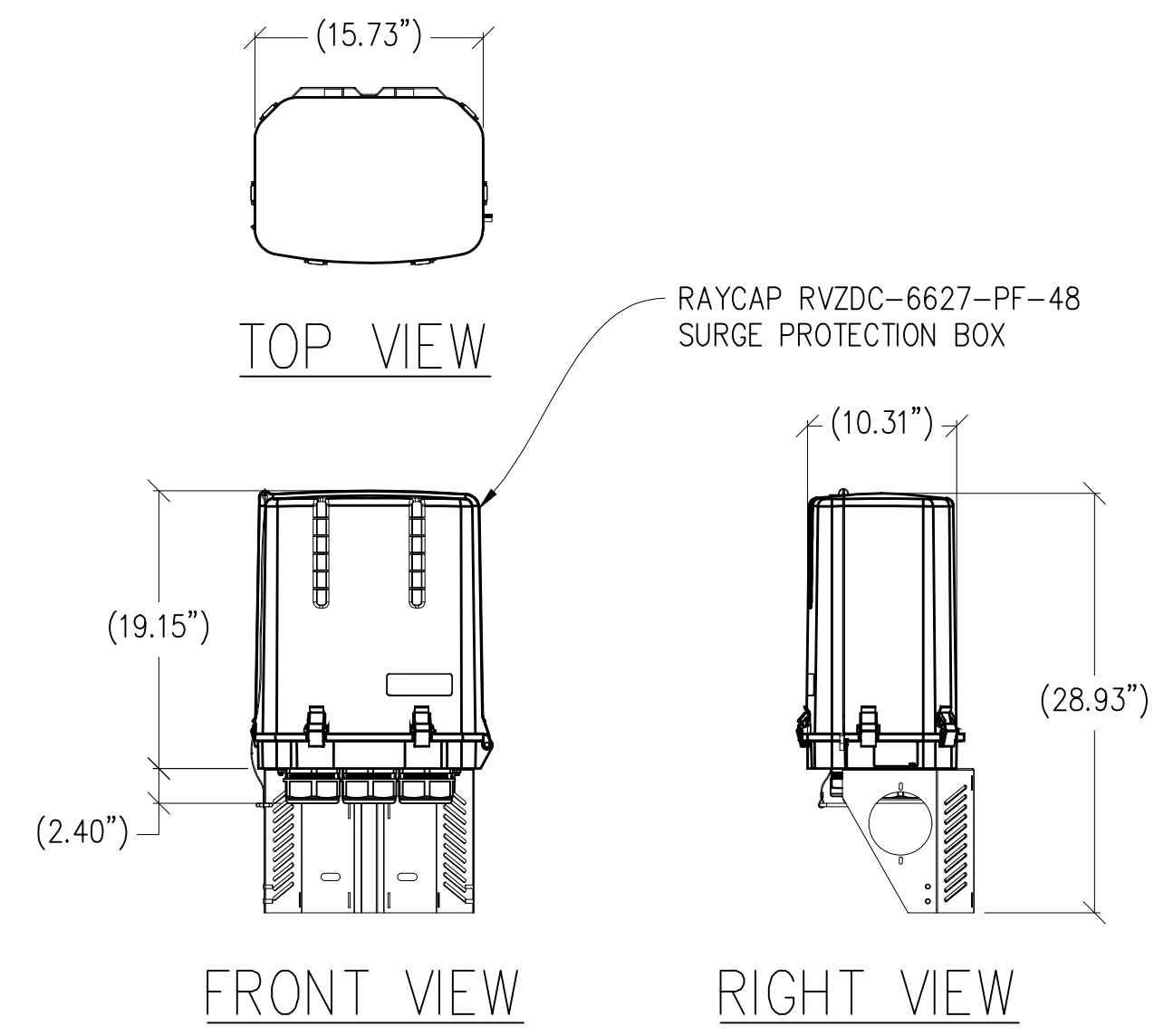
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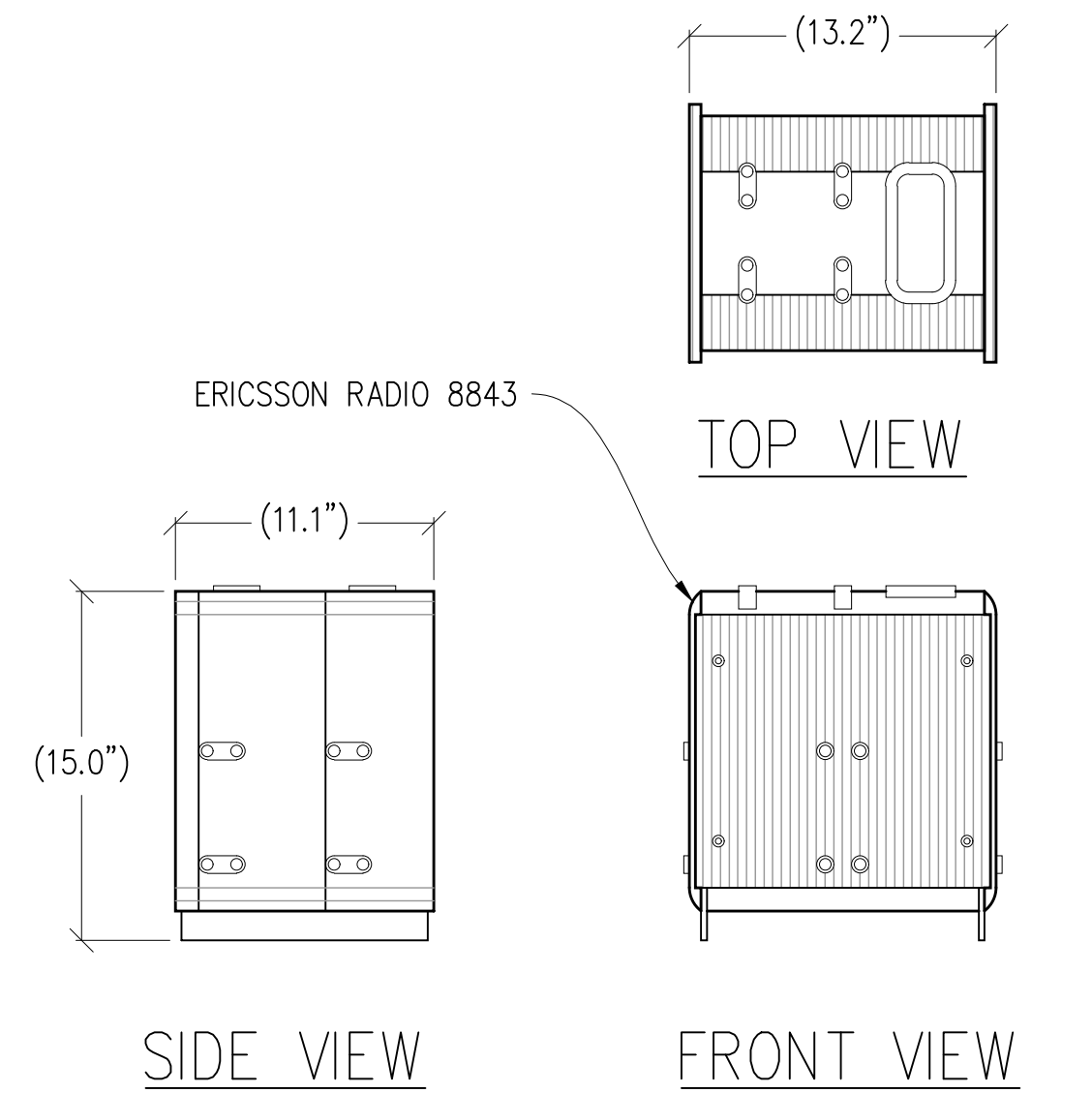
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ELEVATIONS  
SHEET NUMBER:  
**A-5**



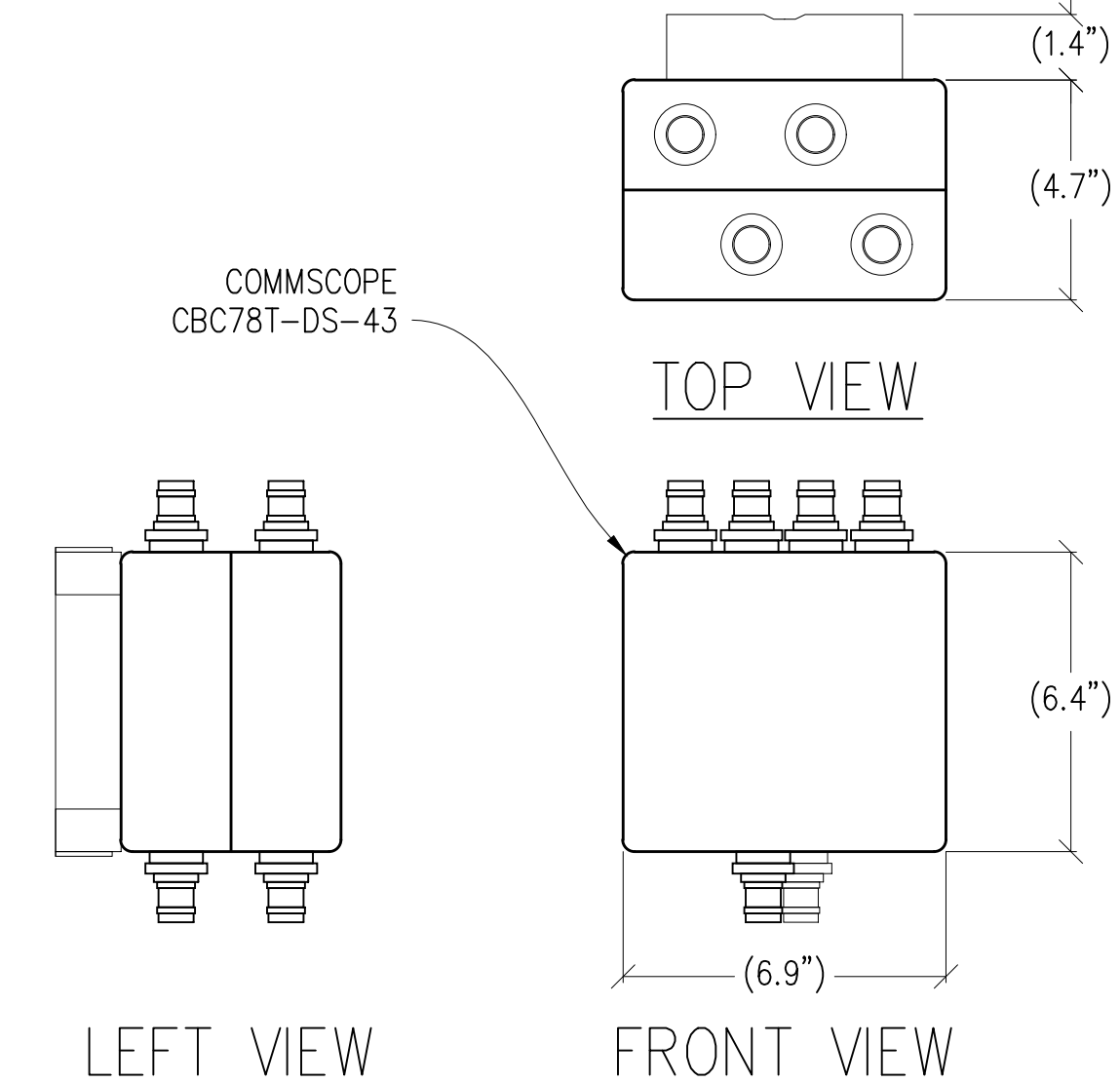
1 ANTENNA DETAIL  
1"=1'-0" MAX WEIGHT W/ MOUNT: 101.1 LBS



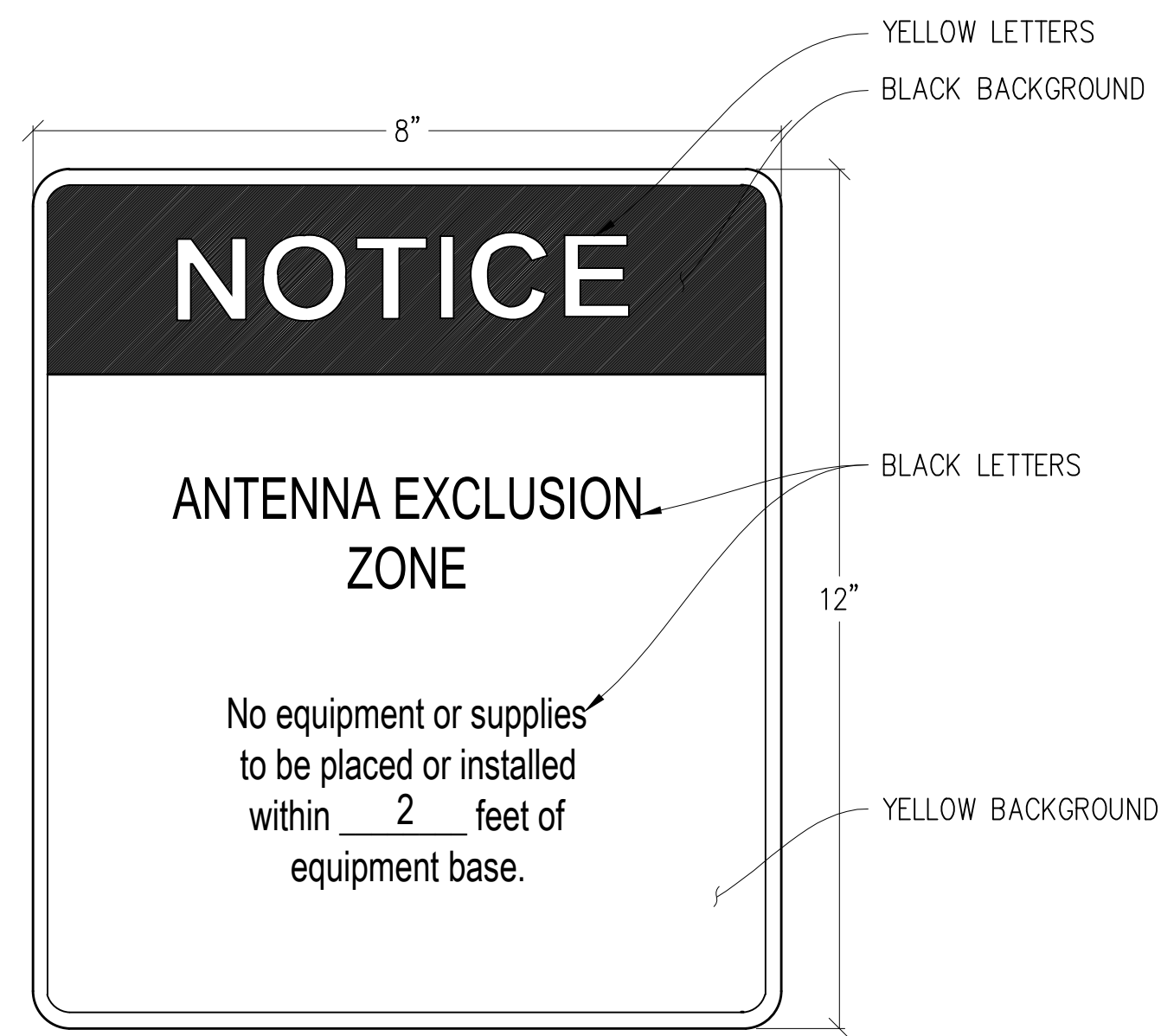
2 SURGE PROTECTION BOX  
1"=1'-0" MAX WEIGHT: 32.0 LBS



3 RADIO 8843 DETAIL  
1 1/2"=1'-0" MAX WEIGHT: 75 LBS

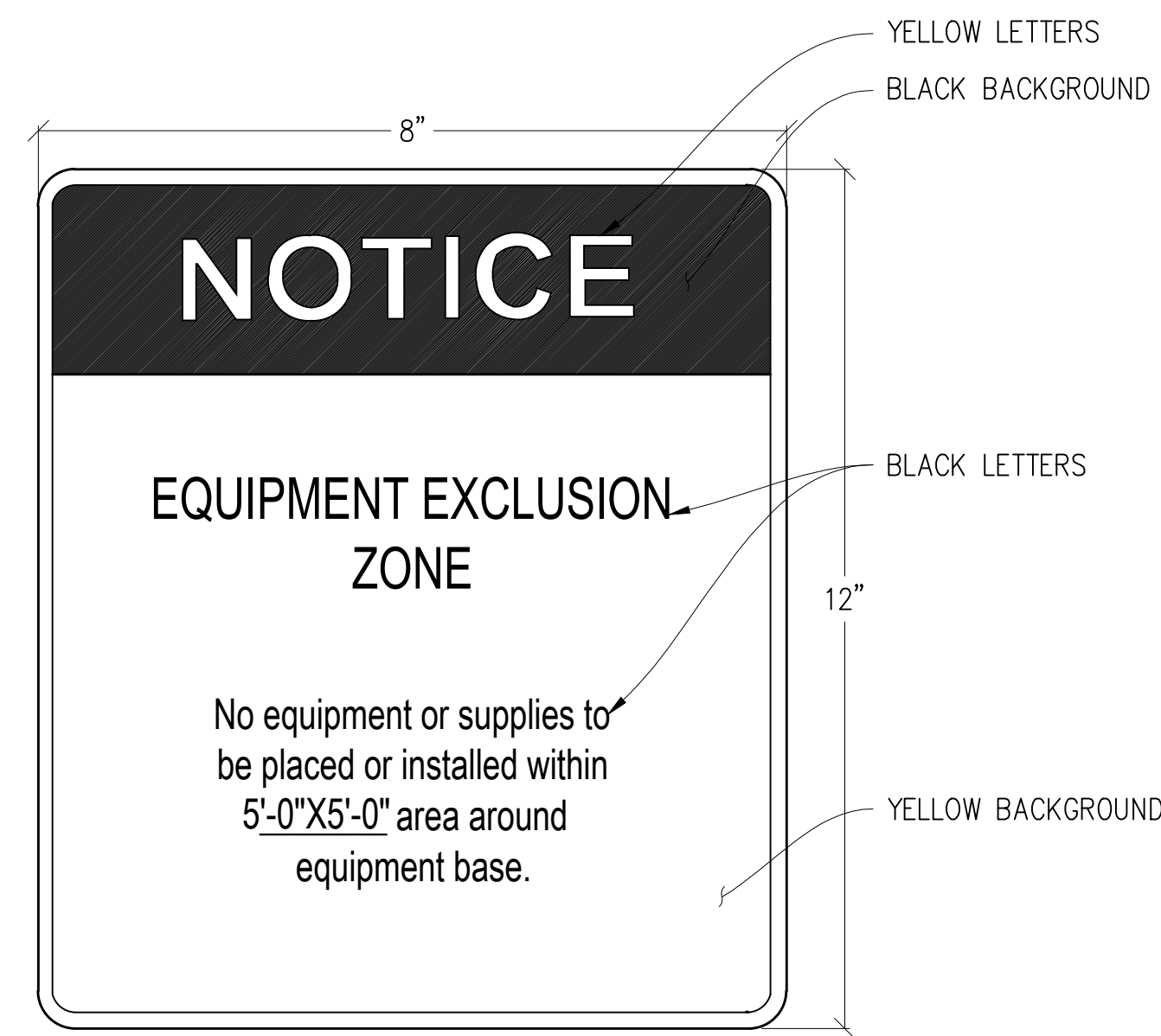


4 DIPLEXER DETAIL  
3"=1'-0" MAX WEIGHT: 11.5 LBS



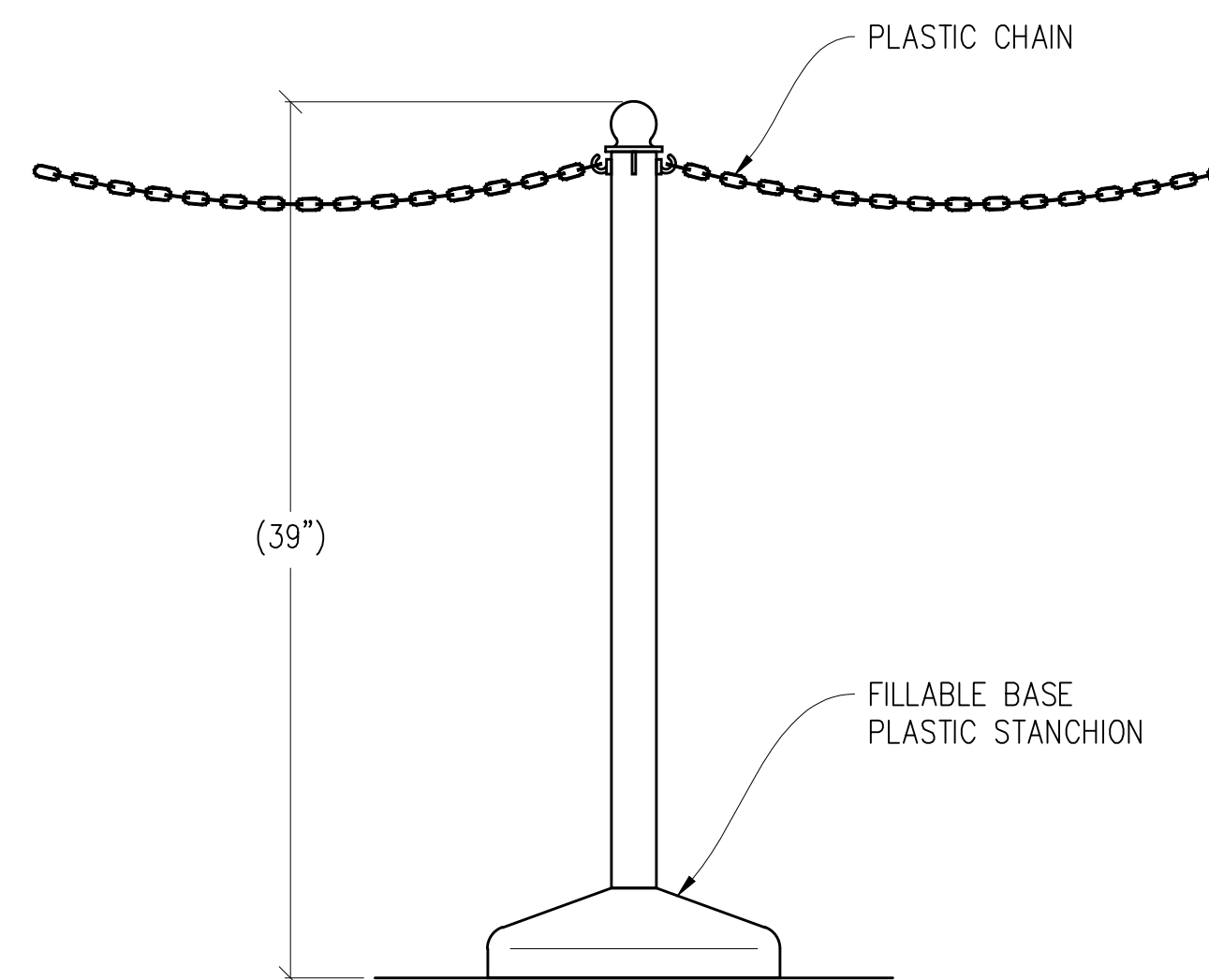
5 TYPICAL ANTENNA EXCLUSION ZONE SIGN

NOTES: 1. SIGN TO BE PERMANENTLY MOUNTED AT ANTENNA TRI-POD MOUNT IN A VISIBLE LOCATION AND OR PER PLAN  
2. SIGN TO BE YELLOW BACKGROUND W/ BLACK LETTERS  
3. 142 SQ FT TOTAL AREA AROUND ANTENNA MOUNT



6 TYPICAL EQUIPMENT EXCLUSION ZONE SIGN

NOTES: 1. SIGN TO BE PERMANENTLY MOUNTED AT EQUIPMENT MOUNT IN A VISIBLE LOCATION AND OR PER PLAN  
2. SIGN TO BE YELLOW BACKGROUND W/ BLACK LETTERS  
3. 25 SQ FT TOTAL AREA AROUND EQUIPMENT H-FRAME



7 BARRIER DETAIL  
1 1/2"=1'-0"

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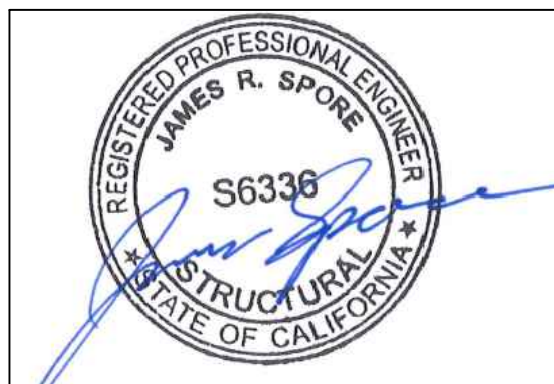
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APPROVED BY: J. SPORE  
DATE: 07/02/21

SHEET TITLE:  
DETAILS  
SHEET NUMBER:  
A-6

## CONSTRUCTION NOTES

- EXISTING BUILDING CONSTRUCTION CONDITIONS INDICATED ON THE DRAWINGS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO PROCEEDING WITH CONSTRUCTION OR ORDERING OF MATERIALS. IF EXISTING CONDITIONS DO NOT ALLOW FOR DETAILS OF CONSTRUCTION AS SHOWN ON THESE DRAWINGS, NOTIFY ENGINEER OF RECORD FOR RESOLUTION PRIOR TO PROCEEDING. CONTRACTOR SHALL EXPOSE AND REVIEW EXISTING CONDITIONS IN A TIMELY MANNER SUCH THAT ALTERNATE DESIGNS OR DETAILS, IF REQUIRED, MAY BE GENERATED WITHOUT DELAY TO THE PROJECT.
- DURING CONSTRUCTION, THE CONTRACTOR SHALL NOT ALTER, DAMAGE OR REMOVE ANY PART OF THE EXISTING STRUCTURE UNLESS SPECIFICALLY DETAILED ON THESE DRAWINGS.
- THE INTENT OF THESE DRAWINGS IS THAT THE WORK OF THE ADDITION, ALTERATION, REHABILITATION, OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH THE 2019 CBC. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NONCOMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH THE 2019 CBC, A CHANGE ORDER, OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE PREPARED AND SUBMITTED TO AND APPROVED BY THE BUILDING DEPARTMENT PRIOR TO PROCEEDING WITH THE WORK.
- ALL WORK AND MATERIALS SHOWN ARE NEW UNLESS INDICATED AS EXISTING (E). IT MAY BE NECESSARY TO REMOVE ARCHITECTURAL FINISHES, PLUMBING PIPES AND FIXTURES, ELECTRICAL CONDUIT, FIXTURES, PANELS, BOXES, TELEPHONE OR FIRE ALARM WIRING AND FIXTURES OR OTHER NON-STRUCTURAL ITEMS TO INSTALL STRUCTURAL WORK AND MATERIALS SHOWN ON THESE DRAWINGS. SUCH ITEMS SHALL BE REMOVED, REPAIRED AND/OR REPLACED TO MATCH PRE-CONSTRUCTION CONDITIONS AT THE CONTRACTORS EXPENSE.
- ALL WEATHER PROOFING. INCLUDING BUT NOT LIMITED TO TORCH DOWN, CAULKING, Z-FLASHING OR ANY OTHER MATERIAL THAT MAY BE ALTERED DURING INSTALLATION SHALL BE REPAIRED REPLACED AND/OR MODIFIED TO ENSURE THE BUILDING AT THE INSTALLATION SITE IS WEATHER PROOF.
- ANY PROPOSED SUBSTITUTIONS FOR STRUCTURAL MEMBERS, HARDWARE, ANCHOR TYPES, OR DETAILING INDICATED IN THESE DRAWINGS SHALL BE SUBMITTED TO AND REVIEWED BY THE ENGINEER OF RECORD PRIOR TO ORDERING MATERIALS. SUCH REVIEW SHALL BE BILLED ON A TIME AND MATERIALS BASIS TO THE CONTRACTOR WITH NO GUARANTEE THAT THE SUBSTITUTION WILL BE ALLOWED.
- CONTRACTOR SHALL ENSURE ALL ROOF AREAS HAVE POSITIVE SLOPE TO ALL EXISTING ROOF DRAINS. PROVIDE ADDITIONAL CRICKETS OR BUILD UP ROOFING AS REQUIRED TO PROVIDE POSITIVE DRAINAGE AROUND ALL NEW CONSTRUCTION INCLUDING ANY CURBS, SLEEPERS, SUPPORT BASES, ETC.

## FRAMING NOTES

- ALL JOINTS AND PENETRATIONS SHALL BE CAULKED AND SEALED.
- ALL 2X OR 4X FRAMING LUMBER SHALL BE DOUGLAS FIR #2 OR BTR, 6X DOUGLAS FIR # 1 OR BTR UNLESS OTHERWISE NOTED.
- ALL EXTERIOR USE LUMBER SHALL BE PRESSURE TREATED W/ FASTENERS HDG & METAL CONNECTORS G135 OR BETTER AS REQUIRED FOR CORROSION RESISTANCE TO THE PRESERVATIVE TYPE USED.
- ALL STRUCTURAL CONNECTORS SHALL BE AS SPECIFIED OR AN EQUIVALENT.
- NAILING SHALL CONFORM WITH THE REQUIREMENTS OF THE 2019 CBC UNLESS OTHERWISE NOTED. DRAWING SPECIFIC CALLOUTS SUPERCEDE CODE NAILING REQUIREMENTS
- HOLES FOR BOLTS IN WOOD SHALL BE BORED WITH A BIT OF THE SAME NOMINAL DIAMETER AS THE BOLT PLUS  $\frac{1}{16}$ ".
- HOLES FOR LAG SCREWS  $\phi\frac{3}{8}$ " OR GREATER SHALL BE BORED AS FOLLOWS:
  - THE CLEARANCE HOLE FOR THE SHANK SHALL HAVE THE SAME DIAMETER AS THE SHANK, AND THE SAME DEPTH OF PENETRATION AS THE LENGTH OF UNTHREADED SHANK.
  - THE LEAD HOLE FOR THE THREADED PORTION SHALL HAVE A DIAMETER EQUAL TO 75% OF THE SHANK DIAMETER AND A LENGTH EQUAL TO AT LEAST THE LENGTH OF THE THREADED PORTION.
  - LAG SCREWS AND WOOD SCREWS SHALL BE SCREWED AND NOT DRIVEN INTO PLACE. PROVIDE LIQUID SOAP AS REQUIRED TO LUBRICATE LAG SCREWS DURING INSTALLATION.
- LAG SCREWS SHALL BE GALVANIZED ASTM A307 MINIMUM. BOLTED CONNECTIONS SHALL BE BEARING TYPE. SEE PLANS FOR LOCATION, NUMBER, & SIZE OF BOLTS.

## STRUCTURAL STEEL NOTES

- ALL STEEL CONSTRUCTION INCLUDING FABRICATION, ERECTION AND MATERIALS SHALL COMPLY WITH ALL REQUIREMENTS OF THE 2016 AISC SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS AND THE 2019 CBC.
- ALL STRUCTURAL STEEL SHALL BE ASTM A36 UNLESS OTHERWISE NOTED. ALL WF (WIDE FLANGE) & WT (TEE) SHAPES TO BE ASTM A992 ( $F_y=50,000$  PSI) UNLESS NOTED OTHERWISE. ALL STRUCTURAL TUBING (TS OR HSS) SHALL BE ASTM A500 GRADE B ( $F_y=46,000$  PSI). ALL STEEL PIPE SHALL BE ASTM A53 (TYPE E OR S, GRADE B ( $F_y=35,000$  PSI)) SCHEDULE 40 WITH OUTSIDE DIAMETERS GIVEN UNLESS OTHERWISE NOTED.
- ALL WELDING SHALL BE PERFORMED USING E70XX ELECTRODES UNLESS OTHERWISE NOTED AND SHALL CONFORM TO AISC & AWS D1.4. WHERE FILLET WELD SIZES ARE NOT SHOWN PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC SPECIFICATION. PAINTED SURFACES SHALL BE TOUCHED UP.
- ALL WELDING SHALL BE PERFORMED BY QUALIFIED, CERTIFIED WELDERS.
- BOLTS SHALL BE GALVANIZED ASTM F3125/F3125M GRADE A325 MINIMUM. BOLTED CONNECTIONS SHALL BE BEARING TYPE. SEE PLANS FOR LOCATION, NUMBER, & SIZE OF BOLTS. SPECIAL INSPECTION IS REQUIRED FOR HIGH STRENGTH BOLTS.
- THREADED RODS SHALL BE ASTM F1554, GR 36 U.O.N. BOLTED CONNECTIONS SHALL BE BEARING TYPE. SEE PLANS FOR LOCATION, NUMBER, & SIZE OF BOLTS.
- ALL HOLES FOR BOLTED CONNECTIONS SHALL BE  $1/16$ " LARGER THAN THE NOMINAL BOLT DIAMETER. USE STANDARD AISC GAGE AND PITCH FOR BOLTS EXCEPT AS NOTED OTHERWISE. HOLES FOR ANCHOR BOLTS IN BASE PLATES MAY BE AISC "OVERSIZE" HOLES WHERE ACCOMPANIED BY OVERSIZED HARDENED HOT DIPPED GALVANIZED WASHERS.
- ALL SHOP FABRICATED STEEL STRUCTURAL MEMBERS FOR EXTERIOR USE SHALL BE HOT DIP GALVANIZED PER ASTM A123 AFTER FABRICATION & PAINTED PER CUSTOMER SPECIFICATIONS AS REQUIRED. STEEL FOR INTERIOR USE SHALL BE SHOP COAT OR GALVANIZED & PAINTED PER PLAN.
- ALL FIELD FABRICATED GALVANIZED STEEL THAT IS CUT, GROUND, DRILLED, WELDED OR DAMAGED SHALL BE TREATED WITH "ZINC RICH" COLD GALVANIZING SPRAY OR COATING. NO RAW STEEL SHALL BE EXPOSED.
- AT ALL WEB STIFFENER PLATES LEAVE  $\frac{3}{4}$ " $\phi$  (OR K, WHICHEVER IS LARGER) HOLE @ WEB/FLANGE INTERSECTION UNLESS NOTED OTHERWISE.
- BOLTS AND NUTS AT ANTENNA & RRU MOUNTS TO BE ASTM F3125/F3125M GRADE A325 WITH A194M NUTS U.O.N.
- ALL NUTS SHALL BE ASTM A563/A563M ALL WASHERS SHALL BE ASTM F436/F436M.
- ALL STRUT MEMBERS USED IN EXTERIOR APPLICATIONS SHALL BE HOT DIPPED GALVANIZED PER ASTM A123 OR ASTM A153.
- ALL STAINLESS STEEL BOLTED CONNECTIONS SHALL BE ASTM F593-17 ALLOY GROUP 1 OR 2 AND STAINLESS STEEL NUTS SHALL BE ASTM F594-09 (2015).

## ROOFING & WATERPROOFING NOTES:

- CONTRACTOR SHALL JOINTLY GUARANTEE THE FINISHED INSTALLATION AS WEATHER TIGHT AND FREE DRAINING ON COMPLETION DIRECTLY TO THE BUILDING OWNER & TO THE WIRELESS CARRIER FOR ALL WORK SHOWN HEREIN.
- ALL WORK SHALL BE PERFORMED IN SUB-UNITS SUCH THAT CUT OPEN WEATHERPROOFING SYSTEMS ARE REPAIRED PERMANENTLY OR TEMPORARILY IN DEFENSE OF ANY INCLEMENT WEATHER AS MAY OCCUR DURING CONSTRUCTION.
- WHEREVER PENETRATION OF PROPRIETARY WEATHERPROOFING SYSTEMS OCCURS, THE CONTRACTOR SHALL EMPLOY SUBCONTRACTORS APPROVED FOR APPLICATION OF SAID SYSTEM AND WITH MINIMUM OF 3 YEARS EXPERIENCE WITH THE APPLICABLE PRODUCT(S) AND ITS(THEIR) APPLICATION (e.g. DRY-VIT, GAKO-FLEX DECKING &/OR ROOFING, SINGLE-PLY ROOFING SYSTEMS (VARIOUS), ETC.).
- WHERE APPLICABLE THE CONTRACTOR SHALL EMPLOY THE BUILDING OWNER'S ROOFING CONTRACTOR FOR ALL PATCHWORK.
- CONTRACTOR IS RESPONSIBLE TO INVESTIGATE ALL WEATHERPROOFING REQUIREMENTS FOR THE WORK SHOWN HEREIN PRIOR TO SUBMITTING A BID, AND SHALL NOTIFY THE PROJECT ENGINEER OF ANY DISCREPANCIES IN DETAILS SHOWN THAT MAY RESULT IN SUBSTANDARD WEATHERPROOFING IN THE FINISHED ASSEMBLY.
- CONTRACTOR SHALL ENSURE ALL ROOF AREAS HAVE POSITIVE SLOPE TO ALL EXISTING ROOF DRAINS. PROVIDE ADDITIONAL CRICKETS OR BUILD UP ROOFING AS REQUIRED TO PROVIDE POSITIVE DRAINAGE AROUND ALL NEW CONSTRUCTION INCLUDING ANY CURBS, SLEEPERS, SUPPORT BASES, ETC.

BAY & 11TH

184673  
723 MARSH ROAD  
MENLO PARK, CA 94025

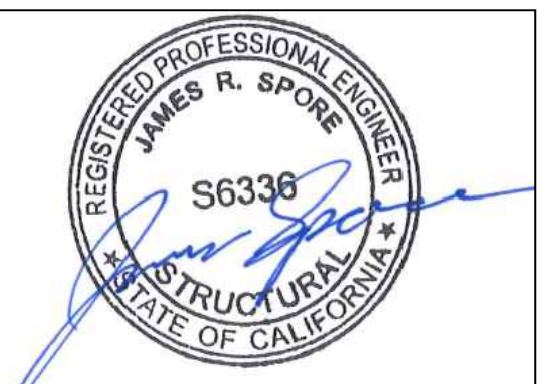
**verizon**

2785 MITCHELL DRIVE, BLDG 9  
WALNUT CREEK, CA 94598

**Streamline Engineering  
& Design, Inc.**

8445 Sierra College Blvd., Suite E Granite Bay, CA 95746  
Contact: Kevin Sorensen Phone: 916-660-1930  
E-Mail: kevin@streamlineeng.com Fax: 916-660-1941

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## ISSUE STATUS

Δ	DATE	DESCRIPTION	REV.
	01/25/21	CD 90%	C.C.
	07/02/21	CD 100%	C.C.
	-	-	-
	-	-	-
	-	-	-
	-	-	-

DRAWN BY: C. CODY

CHECKED BY: J. GRAY

APPROVED BY: J. SPORE

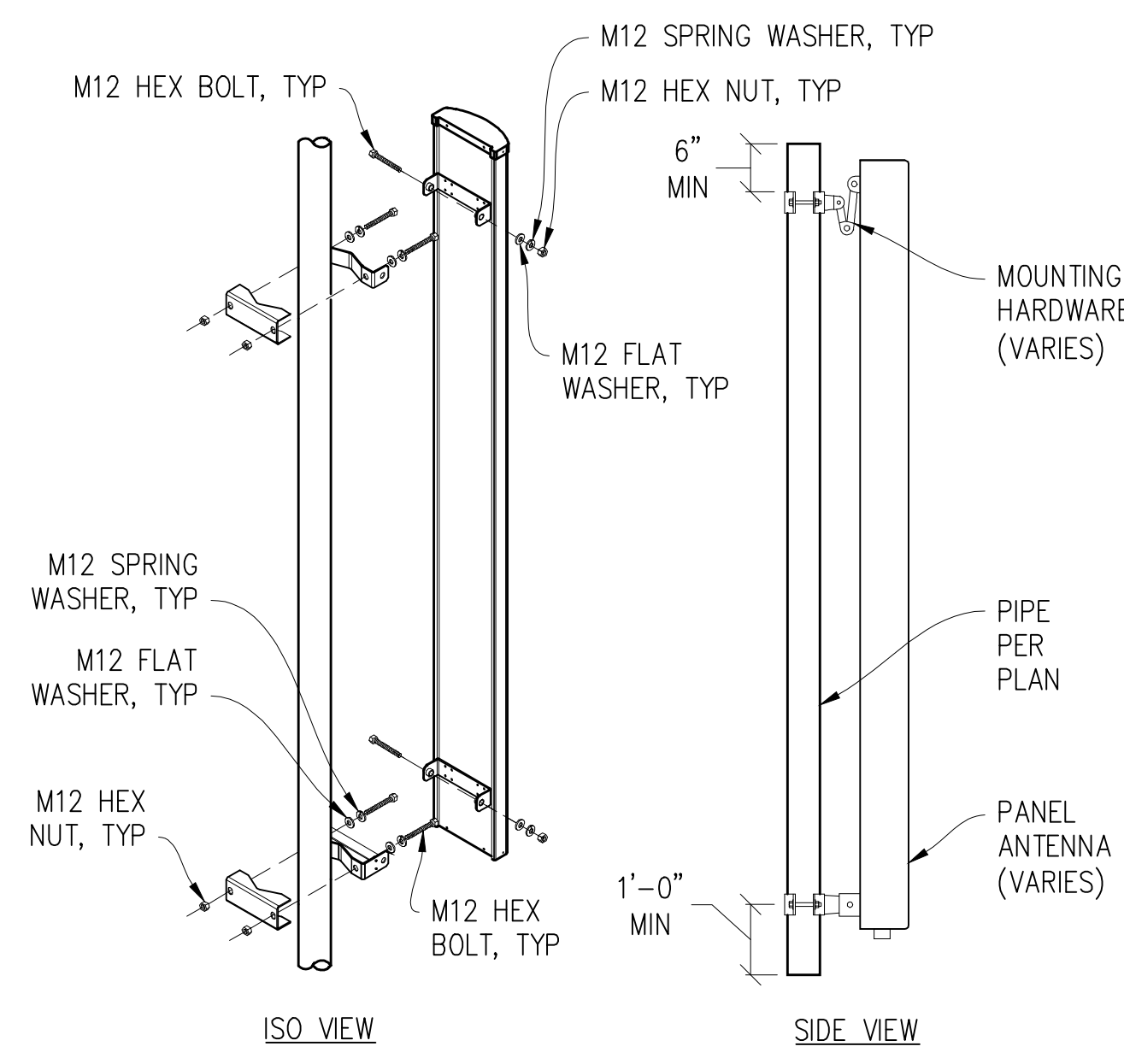
DATE: 07/02/21

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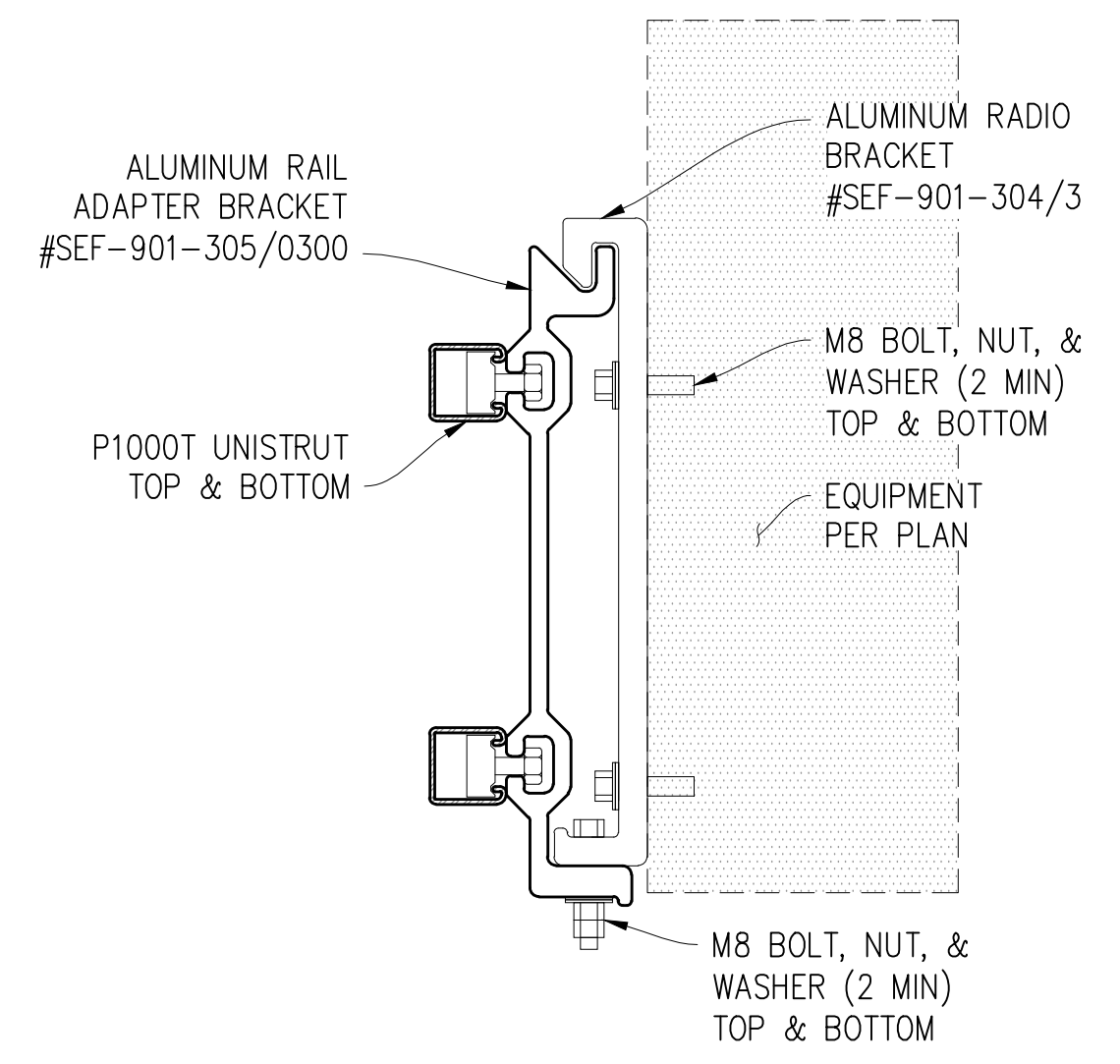
STRUCTURAL NOTES

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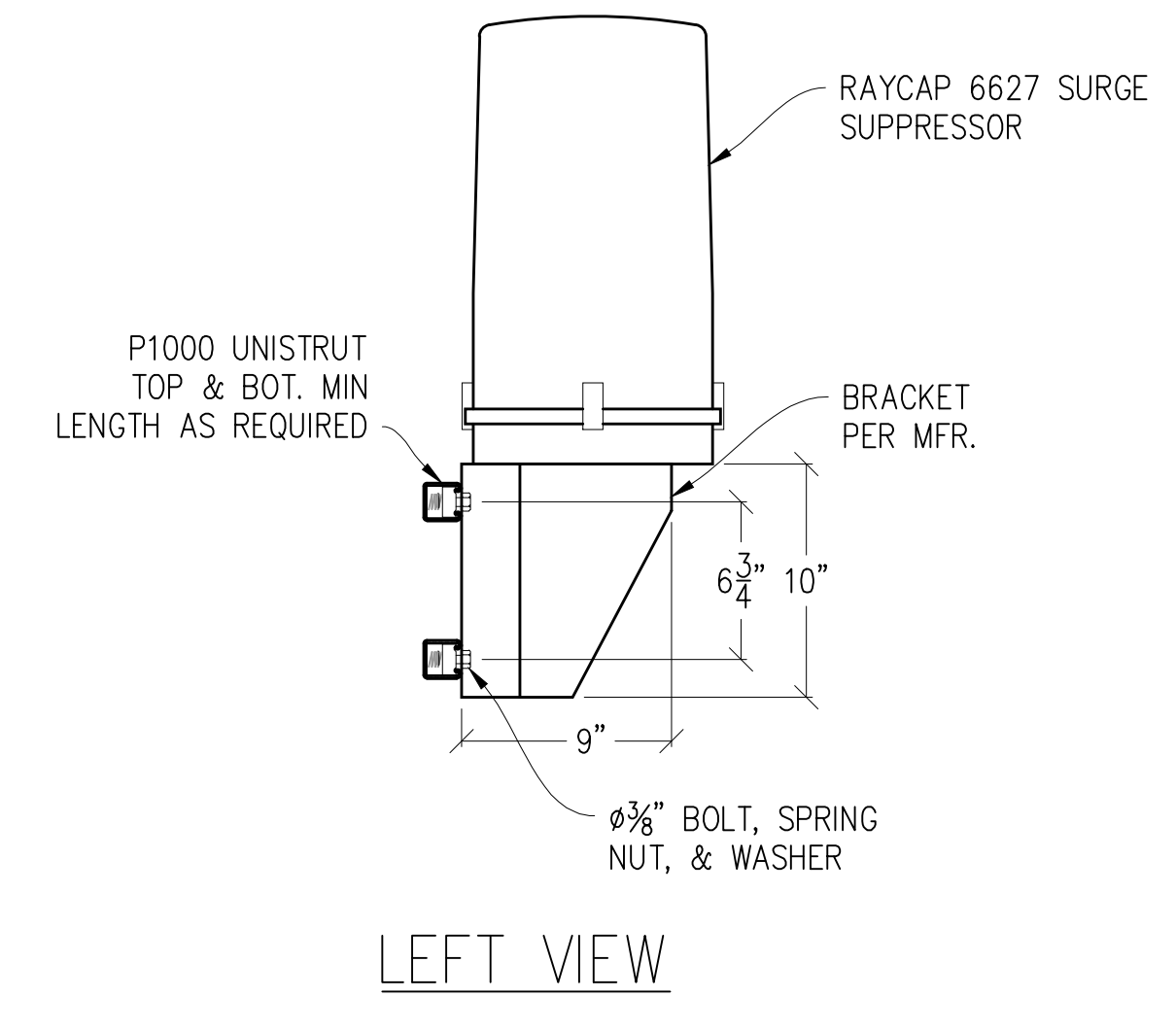
S-1



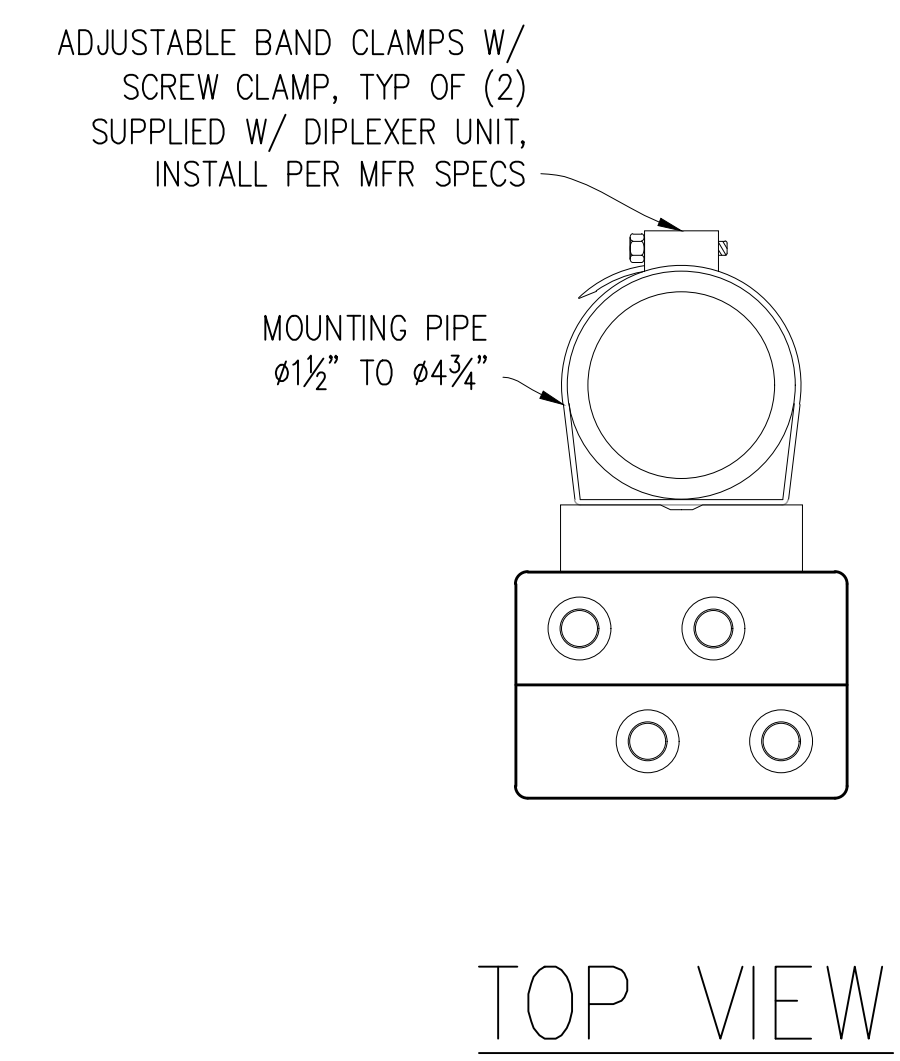
1 ANTENNA MOUNT  
1"=1'-0"



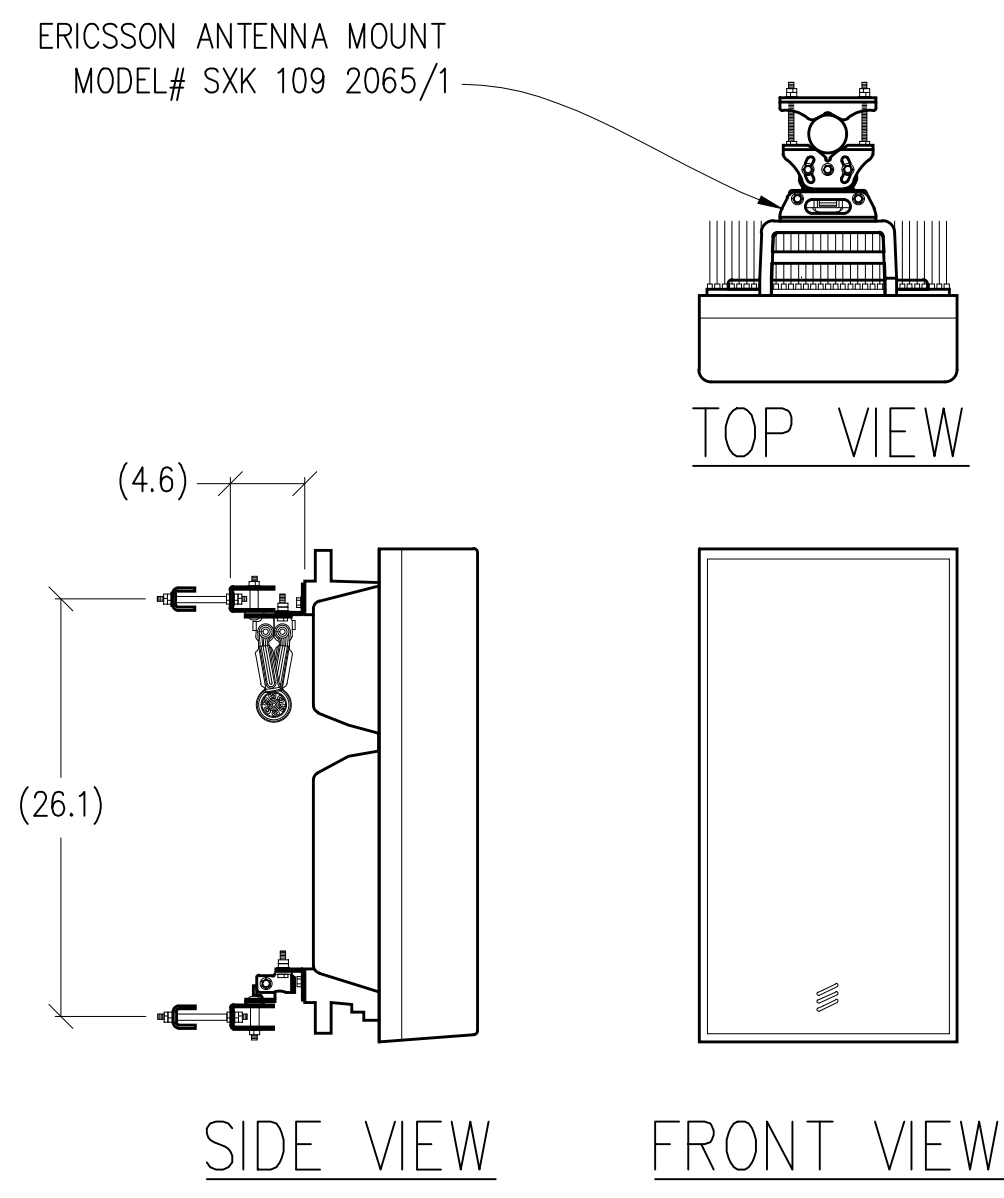
2 EQUIPMENT MOUNTING  
3"=1'-0"



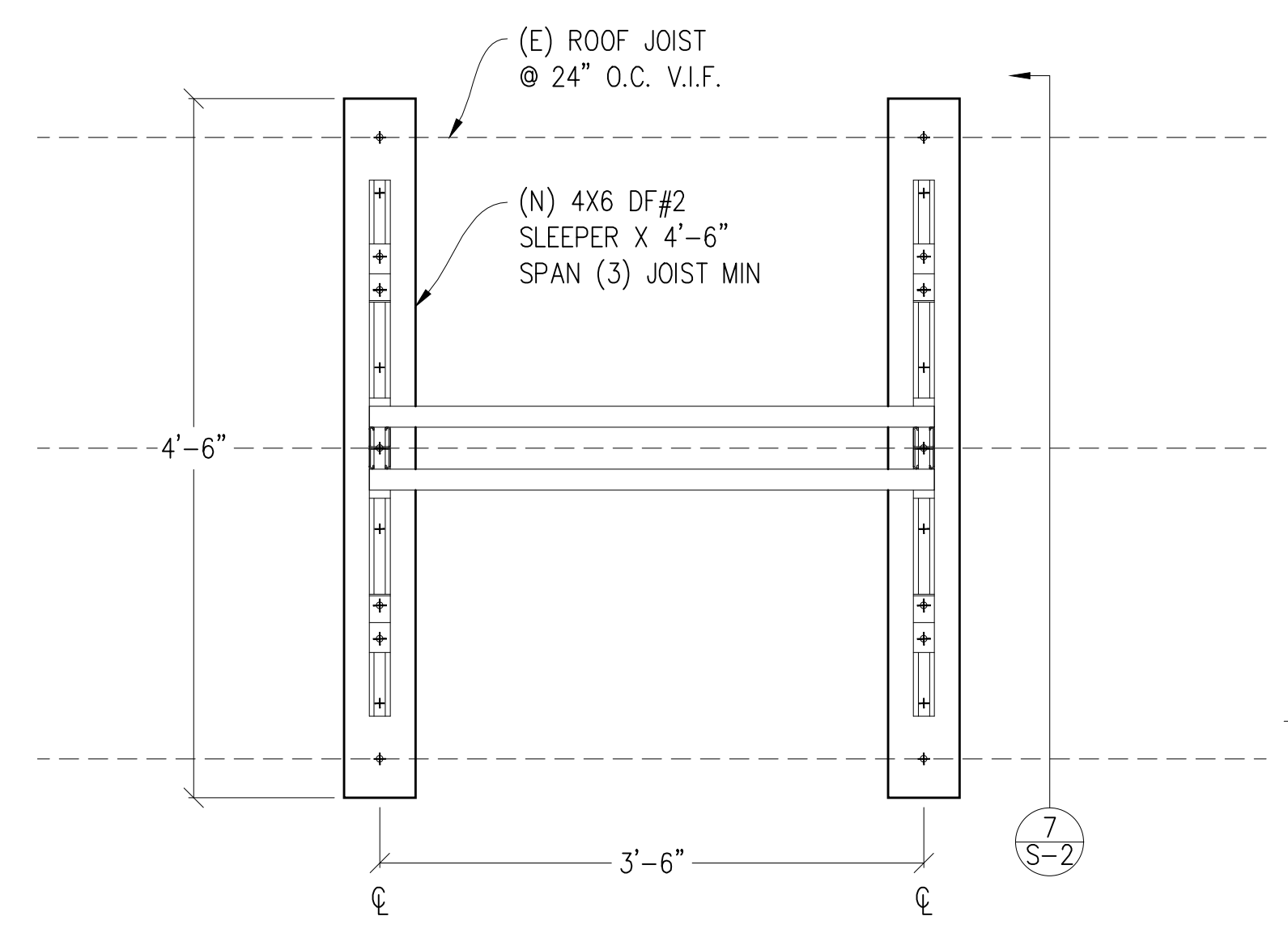
3 SURGE UNISTRUT MOUNT  
1 1/2"=1'-0"



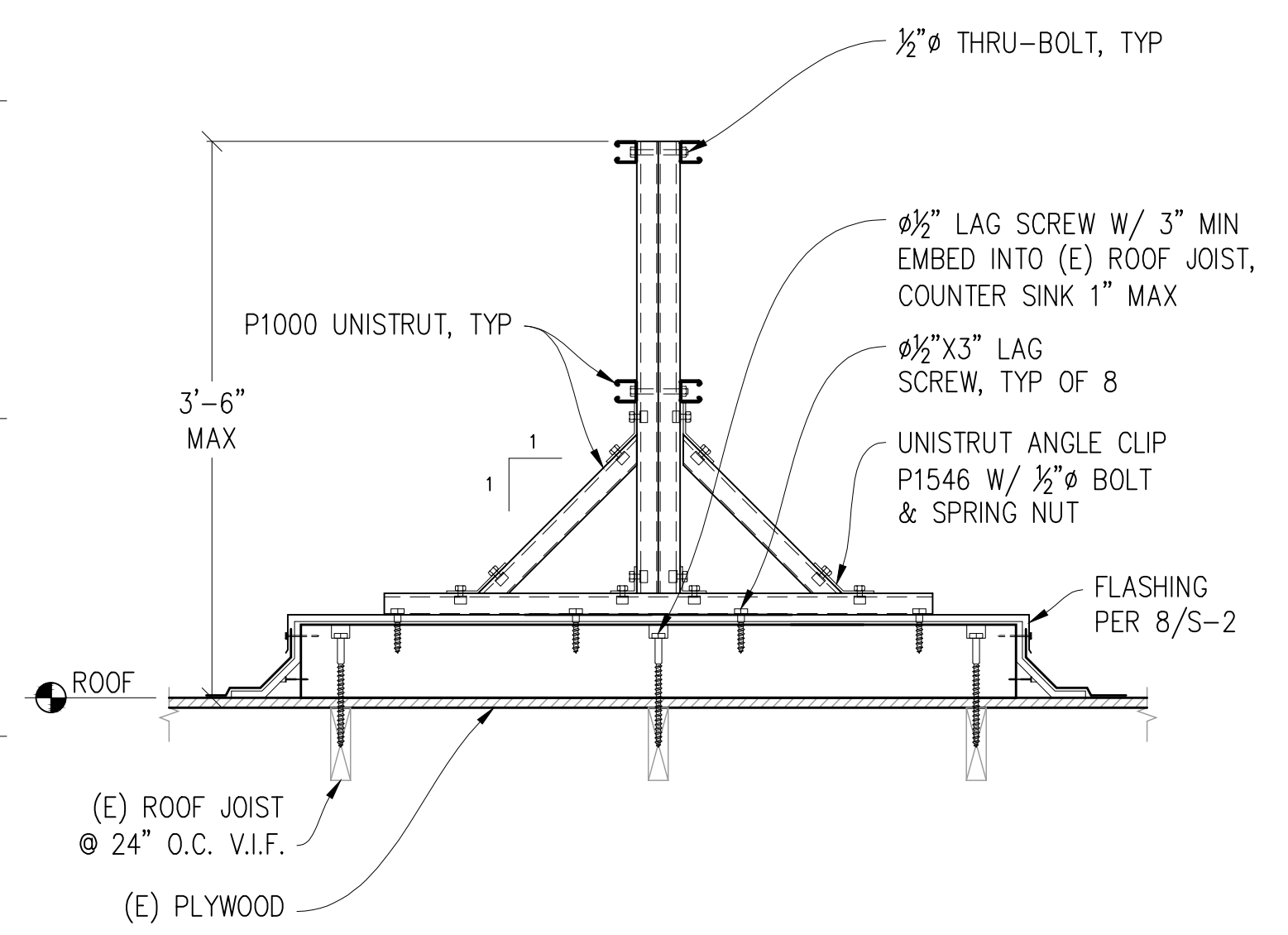
4 DIPLEXER MOUNTING  
3"=1'-0"



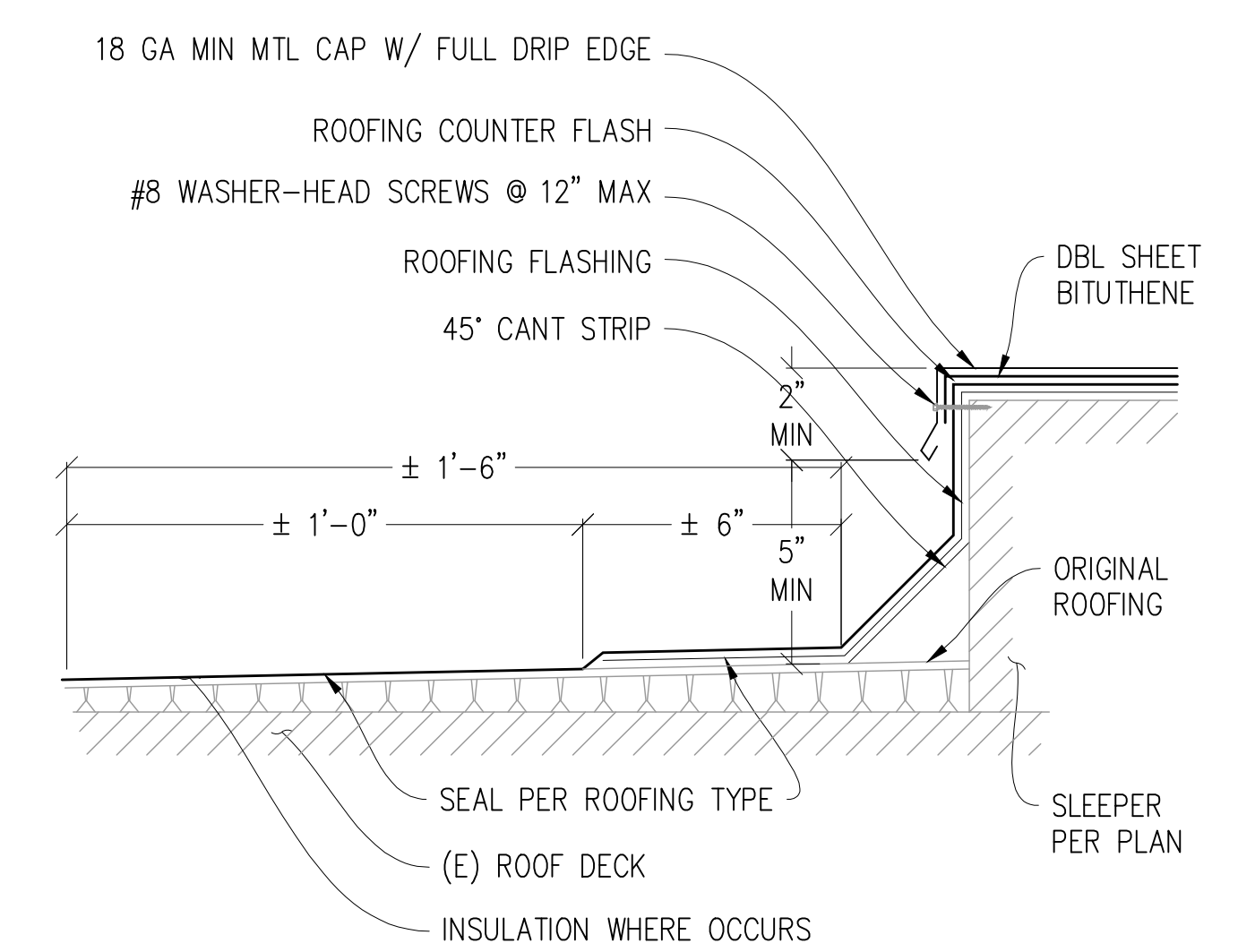
5 ANTENNA MOUNT DETAIL  
1"=1'-0"



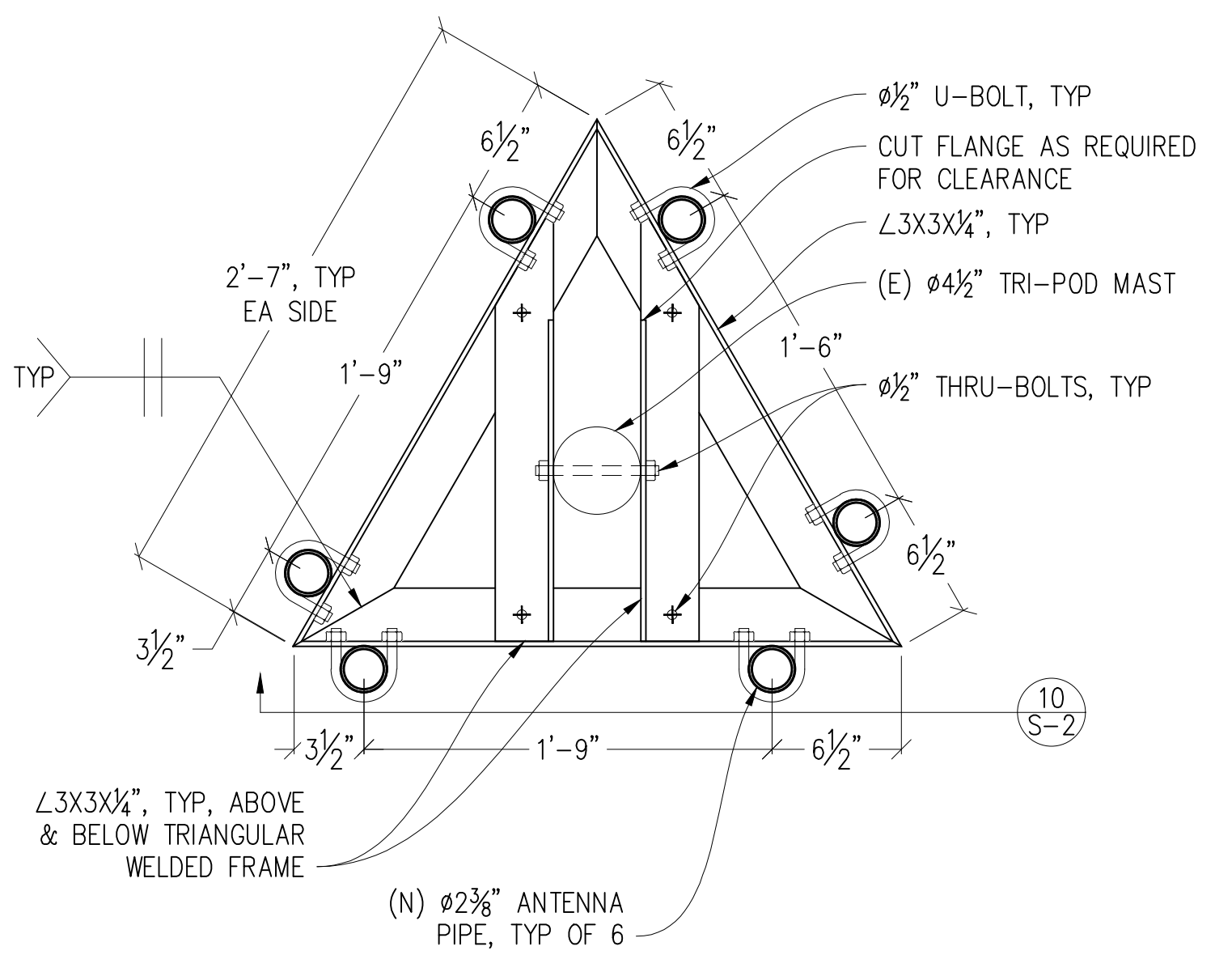
6 LOW H-FRAME DETAIL  
1"=1'-0"



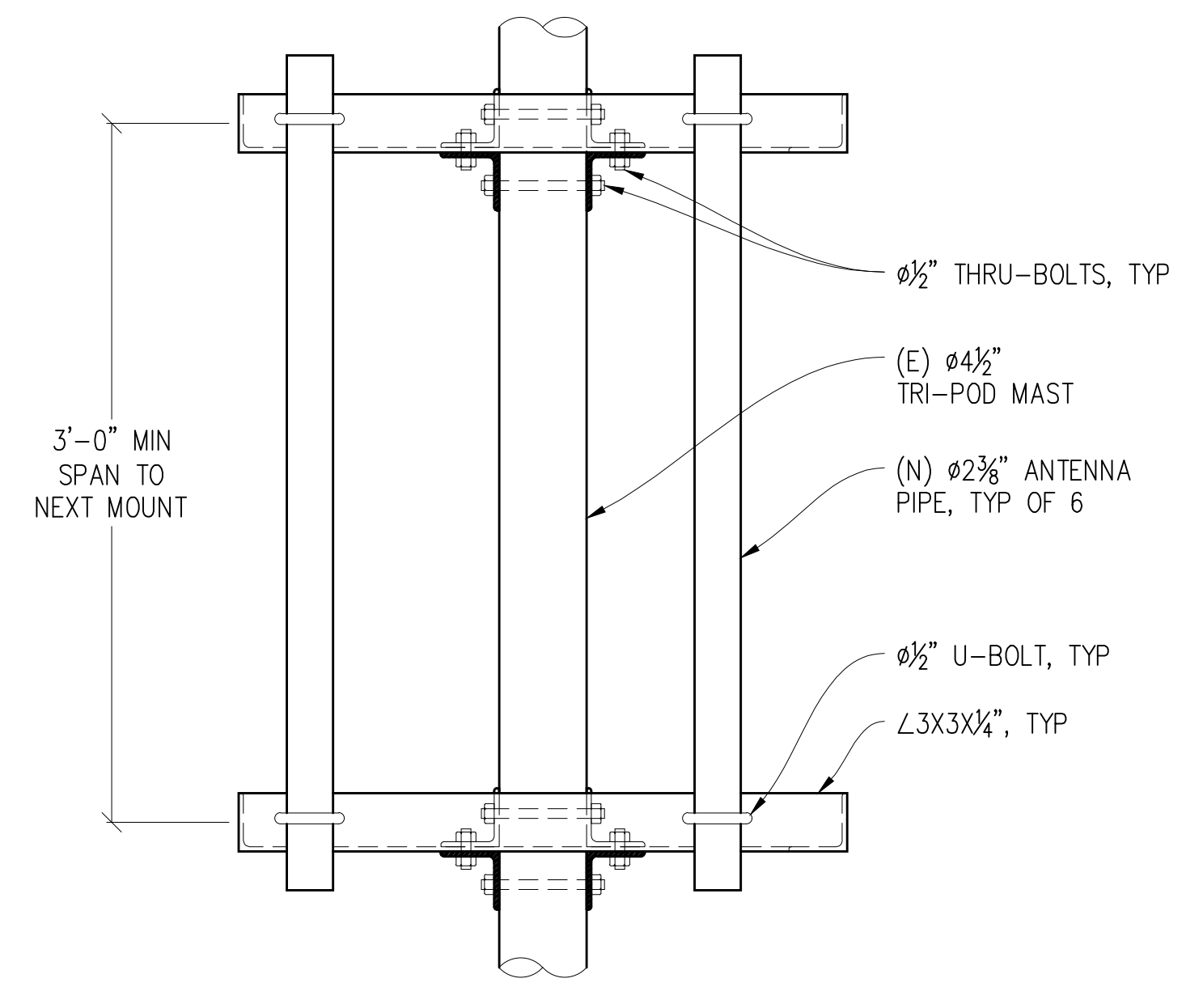
7 LOW H-FRAME DETAIL  
1"=1'-0"



8 SLEEPER FLASHING DETAIL  
3"=1'-0"



9 ANTENNA MOUNT DETAIL  
1 1/2"=1'-0"



10 ANTENNA MOUNT DETAIL  
1 1/2"=1'-0"

BAY & 11TH

184673  
723 MARSH ROAD  
MENLO PARK, CA 94025

**verizon**

2785 MITCHELL DRIVE, BLDG 9  
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	-	-	-
	-	-	-

DRAWN BY: C. CODY  
CHECKED BY: J. GRAY  
APPROVED BY: J. SPORE  
DATE: 07/02/21

SHEET TITLE:  
STRUCTURAL DETAILS  
SHEET NUMBER:  
**S-2**





**COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT**

**ATTACHMENT D**



Existing



proposed antennas inside radome

Proposed



**COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT**

**ATTACHMENT E**



County of San Mateo

## Planning & Building Department

455 County Center, 2nd Floor  
Redwood City, California 94063  
650/363-4161 Fax: 650/363-4849

Mail Drop PLN122  
plngbldg@co.sanmateo.ca.us  
www.co.sanmateo.ca.us/planning

**Please reply to: Angela Chavez  
650/599-7217**

December 16, 2010

**PROJECT FILE**

Verizon Wireless  
2785 Mitchell Drive  
Walnut Creek, CA 94598

**Subject: PLN2009-00280**  
**Location: 723 Marsh Road, North Fair Oaks**  
**APN: 060-143-320**

On December 16, 2010 the Zoning Hearing Officer considered your request for a Use Permit, pursuant to Section 6500 of the County Zoning Regulations, and certification of a Mitigated Negative Declaration, pursuant to the California Environmental Quality Act, to allow for the co-location of a new cellular telecommunications facility which will include two roof mounted monopoles with three panel antennas each for a total of six panel antennas, two wireless GPS antennas, and associated equipment cabinets to be located within an existing apartment building at 723 Marsh Road in the unincorporated North Fair Oaks area of San Mateo County.

The Zoning Hearing Officer made the findings and approved this project subject to the conditions of approval as attached.

Any interested party aggrieved by the determination of the Zoning Hearing Officer may appeal this decision to the Planning Commission within ten (10) working days from such date of determination. The appeal period for this project will end on **January 6, 2011 at 5:00 p.m.**

If you have any questions concerning this item, please contact the Project Planner above.

Very truly yours,

Matthew Seubert  
Zoning Hearing Officer  
Zhd1216U\_3\_dr

cc: Public Works Department  
Building Inspection Section  
Ridge Consultants

Assessor's Office  
Mario and Maly Despres  
Menlo Park Fire Protection District

County of San Mateo  
Planning and Building Department

**FINDINGS AND CONDITIONS OF APPROVAL**

Permit or Project File Number: PLN 2009-00280

Hearing Date: December 16, 2010

Prepared By: Angela Chavez

Adopted By: Zoning Hearing Officer

**FINDINGS**

Regarding the Mitigated Negative Declaration, Found:

1. That the Zoning Hearing Officer does hereby find that this Mitigated Negative Declaration reflects the independent judgment of San Mateo County.
2. That the Mitigated Negative Declaration is complete, correct, and adequate and prepared in accordance with the California Environmental Quality Act and applicable State and County guidelines.
3. That, on the basis of the Initial Study, comments received hereto, and testimony presented and considered at the public hearing, there is no substantial evidence that the project will have a significant effect on the environment.
4. That the mitigation measures in the Mitigated Negative Declaration and agreed to by the owner and placed as conditions on the project have been incorporated into the Mitigation Monitoring and Reporting Plan in conformance with the California Public Resources Code Section 21081.6.

Regarding the Use Permit, Found:

5. That the establishment, maintenance and/or conducting of the use will not, under the circumstances of this particular case, be detrimental to the public welfare or injurious to property or improvements in said neighborhood as the site does not result in any additional visual significant impacts and the facility will not exceed FCC exposure limits.
6. That the telecommunications facility is necessary for the public health, safety, convenience or welfare of the community by enhancing and providing continuity in communication services to residents, commuters, and emergency responders.

## **CONDITIONS OF APPROVAL**

### Current Planning Section

1. This use permit shall be valid for ten (10) years until December 16, 2020. The applicant shall file for a renewal of this permit six months prior to expiration with the San Mateo County Planning and Building Department, by submitting the applicable applications forms and paying the applicable fees, if continuation of this use is desired.
2. This approval applies only to the proposal, documents and plans described in this report and submitted to and approved by the Zoning Hearing Officer on December 16, 2010. The Community Development Director may approve minor adjustments to the project in the course of applying for building permits if they are consistent with the intent of and in substantial conformance with this approval.
3. Any change in use or intensity shall require an amendment to the use permit. Amendment to this use permit requires an application for amendment, payment of applicable fees, and consideration at a public hearing prior to any construction or modifications to this facility.
4. The wireless telecommunication facility and all equipment associated with it shall be removed in its entirety by the applicant within 90 days if the FCC and/or CPUC license and/or registration are revoked or the facility is abandoned or no longer needed.
5. The applicant shall paint the monopole, radome, and antennas a light beige color to match the existing equipment. In the event that the equipment needs to be repainted, they shall be repainted a light beige color.
6. The applicant shall not enter into a contract with the landowner or lessee that reserves for one company exclusive use of the site for telecommunication facilities.
7. All construction activities associated with the proposed project shall be limited to 7:00 a.m. to 6:00 p.m., Monday through Friday, and 9:00 a.m. to 5:00 p.m. on Saturday. Construction activities will be prohibited on Sunday and any nationally observed holiday. Noise levels produced by construction activities shall not exceed the 80-dBA level at any one moment.
8. The applicant shall apply for and obtain a building permit from the Building Inspection Section prior to commencement of any work on the project site.
9. The Department of Fish and Game has determined that this project is not exempt from Department of Fish and Game California Environmental Quality Act filing fees

per Fish and Game Section 711.4. The applicant shall pay to the San Mateo County Recorder's Office an amount of \$2,060.25.

Menlo Park Fire Protection District

10. The site shall have a current Hazardous Material Inventory Sheet and all applicable HMBP and MSDS sheets on-site and on file with the San Mateo County and Menlo Park Fire Department Hazardous Material Divisions.
11. The applicant shall provide signage on the door of the equipment areas and doors to equipment structures. The signs shall state the type of battery system, voltage of electrical circuits and if batteries have electrolyte solution with corrosive liquids (704 label). The signs shall also have the 24-hour a day emergency contact numbers and the name of the lessee company (i.e. Verizon). Please provide a detail of the sign for approval.
12. The applicant shall state if the building has more than or could have more than 1.0% of hydrogen concentration from charging system, and if so, what kind of ventilation and rate of ventilation is being installed. CFC2007 608.6.1
13. As the equipment room is part of residential structure, a smoke detection system (a smoke detector(s)) shall be installed and supervised by a central station monitoring company. Local audible alarms are also required for notification of occupants. CFC 2007 608.9
14. If non-recombinant (lead acid/free flowing liquid) batteries are used the applicant shall provide spill control and neutralization spill kit. CFC 2007 608.5
15. Batteries shall be seismically braced in accordance with the California Building Code.
16. Upon completion of work and prior to occupancy, the applicant shall contact Inspector Ron Keefer of the Menlo Park Fire Protection District at 650/688-8428 to schedule a final inspection. Please note that a 48-hour notice is required for all inspections.

Department of Public Works

17. The applicant shall comply with all requirements of the San Mateo County Department of Public Works.
18. The applicant shall submit a Traffic Control Plan to the Department of Public Works for their review and approval.



**COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT**

**ATTACHMENT F**





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## Radio Frequency Emissions Compliance Report For Verizon

<b>Site Name:</b> Bay and 11th	<b>Site Structure Type:</b> Rooftop
<b>Address:</b> 723 Marsh Road	<b>Latitude:</b> 37.473903
Menlo Park, CA 94025	<b>Longitude:</b> -122.188786
<b>Report Date:</b> October 25, 2021	<b>Project:</b> Modification

---

### Compliance Statement

Based on information provided by Verizon and predictive modeling, the Bay and 11th installation proposed by Verizon will be compliant with Radiofrequency Radiation Exposure Limits of 47 C.F.R. §§ 1.1307(b)(3) and 1.1310. At the rooftop of 723 Marsh Road, delineating areas that are predicted to exceed the FCC MPE limits with barriers and RF alerting signage and restricting access to these areas to authorized personnel that have completed RF safety training is required for Occupational environment compliance. The proposed operation will not expose members of the General Public to hazardous levels of RF energy at ground level or in adjacent buildings.

### Certification

I, David H. Kiser, am the reviewer and approver of this report and am fully aware of and familiar with the Rules and Regulations of both the Federal Communications Commissions (FCC) and the Occupational Safety and Health Administration (OSHA) with regard to Human Exposure to Radio Frequency Radiation, specifically in accordance with FCC's OET Bulletin 65. I have reviewed this Radio Frequency Exposure Assessment report and believe it to be both true and accurate to the best of my knowledge.

### General Summary

The compliance framework is derived from the Federal Communications Commission (FCC) Rules and Regulations for preventing human exposure in excess of the applicable Maximum Permissible Exposure ("MPE") limits. At any location at this site, the power density resulting from each transmitter may be expressed as a percentage of the frequency-specific limits and added to determine if 100% of the exposure limit has been exceeded. The FCC Rules define two tiers of permissible exposure differentiated by the situation in which the exposure takes place and/or the status of the individuals who are subject to exposure. General Population / Uncontrolled exposure limits apply to those situations in which persons may not be aware of the presence of electromagnetic energy, where exposure is not employment-related, or where persons cannot exercise control over their exposure. Occupational / Controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment, have been made fully aware of the potential for exposure, and can exercise control over their exposure. Based on the criteria for these classifications, the FCC General Population limit is considered to be a level that is safe for continuous exposure time. The FCC General Population limit is 5 times more restrictive than the Occupational limits.

In situations where the predicted MPE exceeds the General Population threshold in an accessible area as a result of emissions from multiple transmitters, FCC licensees that contribute greater than 5% of the aggregate MPE share responsibility for mitigation.

Table 1: FCC Limits

Frequency (MHz)	Limits for General Population/ Uncontrolled Exposure		Limits for Occupational/ Controlled Exposure	
	Power Density (mW/cm <sup>2</sup> )	Averaging Time (minutes)	Power Density (mW/cm <sup>2</sup> )	Averaging Time (minutes)
30-300	0.2	30	1	6
300-1500	f/1500	30	f/300	6
1500-100,000	1.0	30	5.0	6

f=Frequency (MHz)

Based on the computational guidelines set forth in FCC OET Bulletin 65, Waterford Consultants, LLC has developed software to predict the overall Maximum Permissible Exposure possible at any location given the spatial orientation and operating parameters of multiple RF sources. The power density in the Far Field of an RF source is specified by OET-65 Equation 5 as follows:

$$S = \frac{EIRP}{4 \cdot \pi \cdot R^2} \text{ (mW/cm}^2\text{)}$$

where EIRP is the Effective Radiated Power relative to an isotropic antenna and R is the distance between the antenna and point of study. Additionally, consideration is given to the manufacturers' horizontal and vertical antenna patterns as well as radiation reflection. At any location, the predicted power density in the Far Field is the spatial average of points within a 0 to 6-foot vertical profile that a person would occupy. Near field power density is based on OET-65 Equation 20 stated as

$$S = \left( \frac{180}{\theta_{BW}} \right) \cdot \frac{100 \cdot P_{in}}{\pi \cdot R \cdot h} \text{ (mW/cm}^2\text{)}$$

where P<sub>in</sub> is the power input to the antenna, θ<sub>BW</sub> is the horizontal pattern beamwidth and h is the aperture length.

Some antennas employ beamforming technology where RF energy allocated to each customer device is dynamically directed toward their location. In the analysis presented herein, predicted exposure levels are based on all beams at full utilization (i.e. full power) simultaneously focused in any direction. As this condition is unlikely to occur, the actual power density levels at ground and at adjacent structures are expected to be less than the levels reported below. These theoretical results represent maximum-case predictions as all RF emitters are assumed to be operating at 100% duty cycle.

For any area in excess of 100% General Population MPE, access controls with appropriate RF alerting signage must be put in place and maintained to restrict access to authorized personnel. Signage must be posted to be visible upon approach from any direction to provide notification of potential conditions within these areas. Subject to other site security requirements, occupational personnel should be trained in RF safety and equipped with personal protective equipment (e.g. RF personal monitor) designed for safe work in the vicinity of RF emitters. Controls such as physical barriers to entry imposed by locked doors, hatches and ladders or other access control mechanisms may be supplemented by alarms that alert the individual and notify site management of a breach in access control. Waterford Consultants, LLC recommends that any work activity in these designated areas or in front of any transmitting antennas be coordinated with all wireless tenants.

## Analysis

Verizon proposes the following installation at this location:

- Removing & Replacing (1) (E) 3' FRP Radome W/ (1) (N) 5'-6" FRP Radome
- Relocating (3) (E) Antennas & Installing (3) (N) Antennas
- Relocating (3) (E) Rrus-4449 Units From (E) Equipment Room To Roof @ Antenna

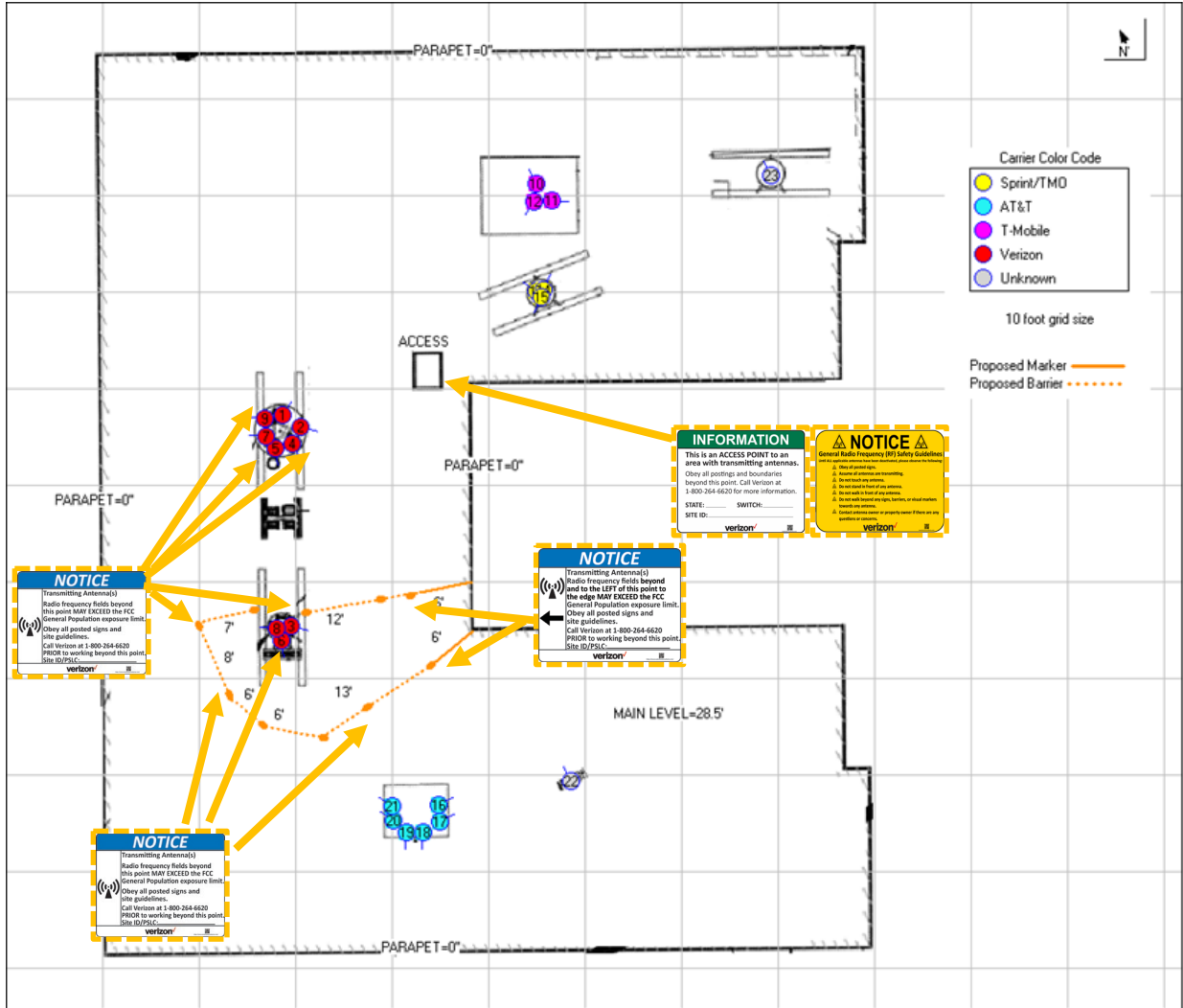
The antennas will be mounted on a 28.5-foot rooftop with centerlines at 40.6 and 39.5 feet above ground level. Proposed antenna operating parameters are listed in Appendix A. Other appurtenances such as GPS antennas, RRUs and hybrid cable below the antennas are not sources of RF emissions. Panel antennas have been installed at this site by other wireless operators. Operating parameters for these antennas considered in this analysis are also listed in Appendix A.



Power density decreases significantly with distance from any antenna. The panel-type antennas to be employed at this site are highly directional by design and the orientation in azimuth and mounting elevation, as documented, serves to reduce the potential to exceed MPE limits at any location other than directly in front of the antennas. For accessible areas at ground level, the maximum predicted power density level resulting from all Verizon operations is 1.89% of the FCC General Population limits. Based on the operating parameters in Appendix A, the cumulative power density level at this location from all antennas is 6.9364% of the FCC General Population limits. Incident at adjacent buildings depicted in Figure 1, the maximum predicted power density level resulting from all Verizon operations is 22.9304% of the FCC General Population limits. Based on the operating parameters in Appendix A, the cumulative power density level at this location from all antennas is 29.0838% of the FCC General Population limits. The proposed operation will not expose members of the General Public to hazardous levels of RF energy at ground level or in adjacent buildings.

For accessible areas at the roof level of 723 Marsh Road, the maximum predicted power density level resulting from all Verizon operations is 30.4796% of the FCC Occupational limits (152.398% of the FCC General Population limits). Based on the operating parameters in Appendix A, the cumulative power density level at this location from all antennas is 42.89188% of the FCC Occupational limits (214.4594% of the FCC General Population limits) and the cumulative power density level on the top floor from all antennas is 23.9% of the FCC General Population limits.

Waterford Consultants, LLC recommends posting contact information and RF Guidelines signage that informs personnel entering the site of basic precautions to be followed when working around antennas. For areas on the roof near the antennas that are predicted to exceed the General Population limits, barriers and RF alerting signs (Notice and RF Guidelines) should be posted to be visible upon approach to provide notification of potential conditions at these areas. These recommendations are depicted in Figure 2. Any work activity in front of transmitting antennas should be coordinated with Verizon.



Final Compliant Configuration						
	GUIDELINES	NOTICE	CAUTION	WARNING	NOC INFO	BARRIER/MARKER
Access Point(s)	<input checked="" type="checkbox"/> [1]	<input type="checkbox"/> [#]	<input type="checkbox"/> [#]	<input type="checkbox"/> [#]	<input checked="" type="checkbox"/> [1]	<input type="checkbox"/> N/A
Alpha	<input type="checkbox"/> [#]	<input checked="" type="checkbox"/> [4]	<input type="checkbox"/> [#]	<input type="checkbox"/> [#]	<input type="checkbox"/> [#]	<input checked="" type="checkbox"/> 6'x12'
Beta	<input type="checkbox"/> [#]	<input checked="" type="checkbox"/> [5]	<input type="checkbox"/> [#]	<input type="checkbox"/> [#]	<input type="checkbox"/> [#]	<input checked="" type="checkbox"/> 6'x13'x6'x6'x8'
Gamma	<input type="checkbox"/> [#]	<input checked="" type="checkbox"/> [3]	<input type="checkbox"/> [#]	<input type="checkbox"/> [#]	<input type="checkbox"/> [#]	<input checked="" type="checkbox"/> 7'

Figure 2: Mitigation Recommendations

**Appendix A: Operating Parameters Considered in this Analysis**

Antenna #:	Carrier:	Manufacturer	Pattern:	Band (MHz):	Mech Az (deg):	Mech DT (deg):	H BW (deg):	Length (ft):	TPO (W):	Channels:	Loss (dB):	Gain (dBd):	ERP (W):	Rad Center (ft):
1	Verizon	ERICSSON	SON_AIR6449 NR TB 03.24.21 3700 VZW	3700	60	0	11	2.8	320	1	12	23.55	4572	40.583
2	Verizon	COMMSCOPE	SBNHH-1D65A 00DT	700	130	0	66	4.6	40	4	0.5	11.21	1884	39.5
2	Verizon	COMMSCOPE	SBNHH-1D65A 00DT	850	130	0	61	4.6	40	4	0.5	11.57	2047	39.5
2	Verizon	COMMSCOPE	SBNHH-1D65A 00DT	2100	130	0	62	4.6	40	4	0.5	14.7	4208	39.5
2	Verizon	COMMSCOPE	SBNHH-1D65A 00DT	2100	130	0	62	4.6	20	4	0.5	14.7	2104	39.5
3	Verizon	COMMSCOPE	SBNHH-1D65A 00DT	700	130	0	66	4.6	40	4	0.5	11.21	1884	39.5
3	Verizon	COMMSCOPE	SBNHH-1D65A 00DT	850	130	0	61	4.6	40	4	0.5	11.57	2047	39.5
3	Verizon	COMMSCOPE	SBNHH-1D65A 00DT	1900	130	0	65	4.6	20	4	0.5	14.7	2104	39.5
3	Verizon	COMMSCOPE	SBNHH-1D65A 00DT	850	130	0	61	4.6	20	4	2	11.57	725	39.5
4	Verizon	ERICSSON	SON_AIR6449 NR TB 03.24.21 3700 VZW	3700	180	0	11	2.8	320	1	12	23.55	4572	40.583
5	Verizon	COMMSCOPE	SBNHH-1D65A 00DT	700	200	0	66	4.6	40	4	0.5	11.21	1884	39.5
5	Verizon	COMMSCOPE	SBNHH-1D65A 00DT	850	200	0	61	4.6	40	4	0.5	11.57	2047	39.5
5	Verizon	COMMSCOPE	SBNHH-1D65A 00DT	2100	200	0	62	4.6	40	4	0.5	14.7	4208	39.5
5	Verizon	COMMSCOPE	SBNHH-1D65A 00DT	2100	200	0	62	4.6	20	4	0.5	14.7	2104	39.5
6	Verizon	COMMSCOPE	SBNHH-1D65A 00DT	700	200	0	66	4.6	40	4	0.5	11.21	1884	39.5
6	Verizon	COMMSCOPE	SBNHH-1D65A 00DT	850	200	0	61	4.6	40	4	0.5	11.57	2047	39.5
6	Verizon	COMMSCOPE	SBNHH-1D65A 00DT	1900	200	0	65	4.6	20	4	0.5	14.7	2104	39.5
6	Verizon	COMMSCOPE	SBNHH-1D65A 00DT	850	200	0	61	4.6	20	4	2	11.57	725	39.5
7	Verizon	COMMSCOPE	SBNHH-1D65A 00DT	700	300	0	66	4.6	40	4	0.5	11.21	1884	39.5
7	Verizon	COMMSCOPE	SBNHH-1D65A 00DT	850	300	0	61	4.6	40	4	0.5	11.57	2047	39.5
7	Verizon	COMMSCOPE	SBNHH-1D65A 00DT	2100	300	0	62	4.6	40	4	0.5	14.7	4208	39.5
7	Verizon	COMMSCOPE	SBNHH-1D65A 00DT	2100	300	0	62	4.6	20	4	0.5	14.7	2104	39.5
8	Verizon	COMMSCOPE	SBNHH-1D65A 00DT	700	300	0	66	4.6	40	4	0.5	11.21	1884	39.5
8	Verizon	COMMSCOPE	SBNHH-1D65A 00DT	850	300	0	61	4.6	40	4	0.5	11.57	2047	39.5
8	Verizon	COMMSCOPE	SBNHH-1D65A 00DT	1900	300	0	65	4.6	20	4	0.5	14.7	2104	39.5
8	Verizon	COMMSCOPE	SBNHH-1D65A 00DT	850	300	0	61	4.6	20	4	2	11.57	725	39.5

Antenna #:	Carrier:	Manufacturer	Pattern:	Band (MHz):	Mech Az (deg):	Mech DT (deg):	H BW (deg):	Length (ft):	TPO (W):	Channels:	Loss (dB):	Gain (dBd):	ERP (W):	Rad Center (ft):
9	Verizon	ERICSSON	SON_AIR6449 NR TB 03.24.21 3700 VZW	3700	300	0	11	2.8	320	1	12	23.55	4572	40.583
10	T-Mobile	AMPHENOL	HEX336CW0000x-T00	700	0	0	36	6.1	30	2	0	13.7	1407	38
10	T-Mobile	AMPHENOL	HEX336CW0000x-T00	1900	0	0	33	6.1	40	2	0	16.4	3492	38
10	T-Mobile	AMPHENOL	HEX336CW0000x-T00	2100	0	0	34	6.1	40	2	0	16.7	3742	38
11	T-Mobile	AMPHENOL	HEX336CW0000x-T00	700	120	0	36	6.1	30	2	0	13.7	1407	38
11	T-Mobile	AMPHENOL	HEX336CW0000x-T00	1900	120	0	33	6.1	40	2	0	16.4	3492	38
11	T-Mobile	AMPHENOL	HEX336CW0000x-T00	2100	120	0	34	6.1	40	2	0	16.7	3742	38
12	T-Mobile	AMPHENOL	HEX336CW0000x-T00	700	240	0	36	6.1	30	2	0	13.7	1407	38
12	T-Mobile	AMPHENOL	HEX336CW0000x-T00	1900	240	0	33	6.1	40	2	0	16.4	3492	38
12	T-Mobile	AMPHENOL	HEX336CW0000x-T00	2100	240	0	34	6.1	40	2	0	16.7	3742	38
13	Sprint/TMO	RFS	APXV9ERR18-C-02DT	850	330	0	80	6	25	4	0	11.9	1549	38
13	Sprint/TMO	RFS	APXV9ERR18-C-00DT	1900	330	0	80	6	45	4	0	14.6	5191	38
14	Sprint/TMO	RFS	APXV9ERR18-C-02DT	850	50	0	80	6	25	4	0	11.9	1549	38
14	Sprint/TMO	RFS	APXV9ERR18-C-00DT	1900	50	0	80	6	45	4	0	14.6	5191	38
15	Sprint/TMO	RFS	APXV9ERR18-C-02DT	850	230	0	80	6	25	4	0	11.9	1549	38
15	Sprint/TMO	RFS	APXV9ERR18-C-00DT	1900	230	0	80	6	45	4	0	14.6	5191	38
16	AT&T	COMMSCOPE	SBNHH-1D45A 02DT	700	90	0	48	4	30	2	0	12.5	1067	38
16	AT&T	COMMSCOPE	SBNHH-1D45A 02DT	850	90	0	43	4	40	1	0	13.8	960	38
16	AT&T	COMMSCOPE	SBNHH-1D45A 10DT	850	90	0	43	4	60	2	0	13.8	2879	38
17	AT&T	COMMSCOPE	SBNHH-1D45B 00DT	1900	90	0	42	6	40	4	0	17.8	9641	38
17	AT&T	COMMSCOPE	SBNHH-1D45B 00DT	2100	90	0	42	6	40	4	0	18.2	10571	38
17	AT&T	COMMSCOPE	SBNHH-1D45B 00DT	2300	90	0	39	6	25	4	0	18.4	6918	38
18	AT&T	COMMSCOPE	SBNHH-1D45A 02DT	700	210	0	48	4	30	2	0	12.5	1067	38
18	AT&T	COMMSCOPE	SBNHH-1D45A 02DT	850	210	0	43	4	40	1	0	13.8	960	38
18	AT&T	COMMSCOPE	SBNHH-1D45A 10DT	850	210	0	43	4	60	2	0	13.8	2879	38
19	AT&T	COMMSCOPE	SBNHH-1D45B 00DT	1900	210	0	42	6	40	4	0	17.8	9641	38
19	AT&T	COMMSCOPE	SBNHH-1D45B 00DT	2100	210	0	42	6	40	4	0	18.2	10571	38
19	AT&T	COMMSCOPE	SBNHH-1D45B 00DT	2300	210	0	39	6	25	4	0	18.4	6918	38

Antenna #:	Carrier:	Manufacturer	Pattern:	Band (MHz):	Mech Az (deg):	Mech DT (deg):	H BW (deg):	Length (ft):	TPO (W):	Channels:	Loss (dB):	Gain (dBd):	ERP (W):	Rad Center (ft):
20	AT&T	COMMSCOPE	SBNHH-1D45A 02DT	700	330	0	48	4	30	2	0	12.5	1067	38
20	AT&T	COMMSCOPE	SBNHH-1D45A 02DT	850	330	0	43	4	40	1	0	13.8	960	38
20	AT&T	COMMSCOPE	SBNHH-1D45A 10DT	850	330	0	43	4	60	2	0	13.8	2879	38
21	AT&T	COMMSCOPE	SBNHH-1D45B 00DT	1900	330	0	42	6	40	4	0	17.8	9641	38
21	AT&T	COMMSCOPE	SBNHH-1D45B 00DT	2100	330	0	42	6	40	4	0	18.2	10571	38
21	AT&T	COMMSCOPE	SBNHH-1D45B 00DT	2300	330	0	39	6	25	4	0	18.4	6918	38
22	Unknown	GENERIC	PANEL 6FT 00DT	1900	0	0	66	6	2.6	1	0	15.84	100	38
23	Unknown	GENERIC	YAGI 3.5FT	450	0	0	60	3.5	6.2	1	0	12.1	100	38

Notes: Table depicts recommended operating parameters for Verizon Wireless proposed operations. Colocated antenna parameters based on industry standards. Signal propagation loss due to rooftop building material assumed to be 6 dB.