CITY OF DANA POINT
PLANNING COMMISSION
AGENDA REPORT

DATE: **JULY 8, 2024**

TO: **DANA POINT PLANNING COMMISSION**

FROM: **COMMUNITY DEVELOPMENT DEPARTMENT**
BRENDA WISNESKI, DIRECTOR
DANNY GIOMETTI, SENIOR PLANNER

SUBJECT: **ANTENNA USE PERMIT AUP24-0001; COASTAL DEVELOPMENT PERMIT CDP24-0007 AND MINOR CONDITIONAL USE PERMIT CUP24-0002(M) TO INSTALL PANEL AND MICROWAVE ANTENNAS HOUSED WITHIN TWO, INDIVIDUAL, FAUX MANSARD ROOFTOP ENCLOSURES, EACH PROJECTING A MAXIMUM OF 7'-3" ABOVE THE TOP OF THE EXISTING GABLE ROOFLINE**

RECOMMENDATION: That the Planning Commission adopt the attached draft Resolution approving Antenna Use Permit (AUP24-0001); Coastal Development Permit (CDP24-0007) and Minor Conditional Use Permit (CUP24-0002(M)).

APPLICANT: Peter Blied/Plancom Inc. on behalf of Verizon Wireless

OWNER: Blue Lantern Property, LLC

REQUEST: Approval of entitlements to permit the installation of roof mounted panel and microwave antennas on an existing building.

LOCATION: 34085 Pacific Coast Highway (APN: 672-231-07)

NOTICE: Notices of the Public Hearing were mailed to property owners within a 500-foot radius and occupants within a 100-foot radius on June 20, 2024, published within a newspaper of general circulation on June 21, 2024, and posted on June 20, 2024, at Dana Point City Hall, the Dana Point and Capistrano Beach Branch Post Offices. Notice was also provided pursuant to Section 9.26.010(f) of Dana Point Town Center Plan (DPTCP).

ENVIRONMENTAL: Pursuant to the California Environmental Quality Act (CEQA), the project is categorically exempt per Section 15301 of the CEQA Guidelines (Class 1 – Existing Facility) since the project consists of a minor alteration to an existing structure.

ISSUES:

1. Is the proposal consistent with the Dana Point General Plan, the Dana Point Town Center Plan (DPTCP) and the Dana Point Zoning Code?

2. Does the proposal satisfy all findings required pursuant to the DPZC for approval of an AUP, CDP and a CUP(M)?

3. Is the proposed project compatible with and an enhancement to the site and surrounding neighborhood?

BACKGROUND: This project was pulled from the June 10th, Planning Commission meeting agenda due to a lack of Planning Commission quorum for the item. The project has been re-noticed for the subject Planning Commission hearing.

The subject site consists of two lots totaling 66,722 square feet and located at the northwest intersection of the street of the Blue Lantern and Pacific Coast Highway (PCH) within the City of Dana Point's Town Center. The site (referred to as Blue Lantern Plaza) is surrounded by a variety of restaurants and residential dwellings and a vacant lot and the Headlands Preserve to the north across the Street of the Green Lantern (Supporting Document 2 – Vicinity Map). The site is developed with an existing two-level, L-shaped multi-tenant commercial building, with a parking lot in the front and on the upper rear side. The building's exterior finishes include a combination of horizontal wood siding, adhered large format tile and stucco painted a three (3) tone color pallet. The building's mansard style roof line has built-up gable ends and a pitched parapet which screens the flat roof center where a variety of mechanical equipment is currently installed (Supporting Document 3 – Site Photos).

DISCUSSION: The subject application proposes the installation of multiple commercial wireless antennas and microwaves housed within two (2) separate, roof-mounted enclosures and accessory equipment located within an existing equipment room on the upper parking lot of the site. A total of 12 panel antennas, 6 radio units and one microwave antenna are proposed to be installed within two separate roof mounted enclosures. The roof mounted telecommunication facility is proposed to be located at both the north and southeastern ends of the building roof, screened behind the existing mansard style parapet walls, and housed within two fire-retardant panel (FRP) enclosures designed to match the wall and roof materials of the existing building (Supporting Document 4 – Materials). Both FRP antenna enclosures extend 7'-3" feet above the existing roofline. The height of the building with the enclosure meets the maximum height limit for structures within the City's Town Center which is 40-feet, measured from the mid-point grade elevation (structure low

point) of 184.89-feet to the top of the enclosure at 224.89-feet. The roof mounted enclosure on the northern end is proposed to be 33-feet in length by 14'-6" in width with the long side facing PCH. The roof mounted enclosure on the southern end is 14'6" by 19-feet with the short side facing PCH. All additional equipment which serves the facility is proposed to be located within an existing storage room in the back, upper parking lot of the building. Additionally, both the lower and upper parking lots will maintain the same number of parking stalls, and DPZC required drive aisles and circulation will be maintained (Supporting Document 5 – Plans and Simulations).

Prior to finalizing the staff report, at the staff's request, the applicant assessed the current design with his engineers and confirmed the possibility of reducing the length of the structures by two (2) feet. Rather than requesting an additional redesign to reduce the length of the enclosures, Condition of Approval number 14 has been added to the attached resolution which states that the final design shall be reviewed by the Community Development Director to ensure the height and width of the enclosures are at the minimum size necessary to house the proposed antennas and microwaves. It's important to note that although the proposed dimensions meet the findings for approval, minimizing the size would be in the best interest of the community.

During the preliminary and initial project review stages, the applicant evaluated multiple alternative sites, however the targeted "gap" area had limited options due to existing topography and residential development in the area. Furthermore, Staff strongly discouraged the installation of any freestanding mono pole wireless facility and encouraged collocation or building mounted, screened wireless antennas. After the applicant chose the subject location, staff reviewed multiple designs and worked through potential issues with the applicant. Staff concluded that given the non-distinct architecture, fire-resistance requirements and locational cell coverage constraints, the current proposal fulfills the stealth design criteria established in Section 9.07.020(5) of the DPZC (Supporting Document 6 – Site Search Exhaustion Study).

<u>Antenna Use Permit AUP24-0001</u>

Sections 9.07.020(2)(4)(J) and (K), of the City's Zoning Code require approval of a major antenna use permit for stealth and non-freestanding commercial wireless telecommunication antenna facilities setback 100 to 150 feet from residential districts, and setback 0 to 150 feet from the centerline of scenic highways, respectively. Although both roof mounted antenna facilities are located well over 150 from the centerline of PCH (which is defined as a scenic highway in the City's General Plan), the southern roof mounted enclosure is between 100 to 150 feet from the nearest residential property line and therefore necessitates approval for the subject major AUP. The proposed roof and wall mounted screens are architecturally compatible with the existing building and the proposed equipment will be located within an existing enclosure on site.

Pursuant to Section 9.07.020(b)(6) "Antenna Use Permit Findings" of the DPZC, the following are required findings for every Antenna Use Permit:

1. That the proposed antenna facility will not create any significant or meaningful blockage to public views; and,

2. That the proposed antenna facility will be an enhancement to the City due to its ability to provide additional communication capabilities; and,

3. That the proposed antenna facility will be aesthetically integrated into its surrounding environment; and,

4. That the proposed antenna facility will not interfere with the reception or transmission of other wireless telecommunication signals within the surrounding community; and,

5. That the proposed antenna facility will operate in compliance with all applicable Federal safety regulations for such facilities; and,

6. That the public need for the use of the antenna facility has been documented.

A Radio Frequency (RF) report has been submitted by the applicant verifying that the proposed facility will comply with Federal Communication Commission (FCC) standards for public radio frequency exposure (Supporting Document 7 – RF Report). In addition, the submitted coverage maps verify that placement of the new antennas would not only provide an adequate replacement, but an improvement to Verizon's cellular service for both public and private users within DPTCP area (Supporting Document 8 – Coverage Maps). The recommended findings for approval of the AUP are outlined in draft Resolution No. 24-07-08-XX, attached to this report as Action Document 1.

<u>Coastal Development Permit CDP24-0007</u>

The proposed project is considered "coastal development," pursuant to the DPZC definition in Section 9.75.040 of the DPZC, thereby necessitating the need for a CDP.

Section 9.69.070 of the DPZC identifies the following findings required to approve a Coastal Development Permit:

1. *Be in conformity with the certified Local Coastal Program as defined in Chapter 9.75 of this Zoning Code. (Coastal Act/30333, 30604(b); 14 CA Code of Regulations/13096).*

2. *If located between the nearest public roadway and the sea or shoreline of any body of water, be in conformity with the public access and public recreation policies of Chapter Three of the Coastal Act. (Coastal Act/30333, 30604(c); 14 CA Code of Regulations/13096).*

3. *Conform with Public Resources Code Section 21000 and following, and there are no feasible mitigation measures or feasible alternatives available which would substantially lessen any significant adverse impact that the activity may have on the environment. (Coastal Act/30333; 14 CA Code of Regulations/13096).*

4. *Be sited and designed to prevent adverse impacts to environmentally sensitive habitats and scenic resources located in adjacent parks and recreation areas, and will provide adequate buffer areas to protect such resources.*

5. *Minimize the alterations of natural landforms and not result in undue risks from geologic and erosional forces and/or flood and fire hazards.*

6. *Be visually compatible with the character of surrounding areas, and, where feasible, will restore and enhance visual quality in visually degraded areas.*

7. *Conform to the General Plan, Zoning Code, applicable Specific Plan, Local Coastal Program, or any other applicable adopted plans and programs.*

The recommended findings for approval of the CDP are outlined in draft Resolution No. 24-07-08-XX, attached to this report as Action Document 1.

Conditional Use Permit CUP24-0002(M)

Pursuant to the DPTCP, “Commercial Antennas” are subject to review and approval of a CUP. The subject application proposes the installation of new antennas atop an existing building located in the Town Center.

Pursuant to Section 9.65.060(b) “Basis of Approval, Conditional Approval, or Denial of a Conditional Use Permit” of the DPZC, the Planning Commission shall make the following findings:

1. That the proposed conditional use is consistent with the General Plan;

2. That the nature, condition, and development of adjacent uses, buildings, and structures have been considered;

3. That the proposed conditional use will not adversely affect or be materially detrimental to the adjacent uses, buildings, or structures;

4. That the proposed site is adequate in size and shape to accommodate the yards, walls, fences, parking and loading facility, landscaping, and other land use development features prescribed in this Code and required by the Commission or Council in order to integrate the use with existing and planned uses in the vicinity.

The application proposes multiple antennas with ancillary equipment to be housed inside FRP screen structures which meet the maximum height limit for the DPTCP. There would be no impact on existing parking, surrounding uses or structures, or to the subject building. The recommended findings for approval of the CUP(M) are outlined in draft Resolution No. 24-07-08-XX, attached to this report as Action Document 1.

CORRESPONDENCE:

To date, no formal correspondence has been received.

CONCLUSION:

Based on the subject analysis, Staff has determined that the project is consistent with the policies and provisions of the City of Dana Point General Plan, the DPTCP and the DPZC and consequently, all applicable findings for approval can be made. Therefore, staff recommends approval of AUP24-0001; CDP24-0007; CUP24-0002(M), subject to the conditions contained in the attached draft resolution.

ATTACHMENTS:

Action Document

1. Draft Planning Commission Resolution No. 24-07-08-XX

Supporting Documents

2. Vicinity Map
3. Site Photos
4. Materials
5. Plans and Simulations
6. Site Search Exhaustion Study
7. RF Emissions Compliance Report
8. Verizon Wireless Coverage Maps

ACTION DOCUMENT 1: Draft Planning Commission Resolution No. 24-07-08-XX

RESOLUTION NO. 24-07-08-XX

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF DANA POINT, CALIFORNIA, FOR ANTENNA USE PERMIT AUP24-0001; COASTAL DEVELOPMENT PERMIT CDP24-0007 AND MINOR CONDITIONAL USE PERMIT CUP24-0002(M) TO INSTALL PANEL AND MICROWAVE ANTENNAS HOUSED WITHIN TWO, INDIVIDUAL, FAUX MANSARD ROOFTOP ENCLOSURES, EACH PROJECTING A MAXIMUM OF 7'-3" ABOVE THE TOP OF THE EXISTING GABLE ROOFLINE

The Planning Commission for the City of Dana Point does hereby resolve as follows:

WHEREAS, Blue Lantern Property, LLC (the "Owner") is the owner of real property commonly referred to as 34085 Pacific Coast Highway (APN: 672-231-07) (the "Property"); and

WHEREAS, the Owners authorized Peter Blied/Plancom Inc. on behalf of Verizon Wireless (the "Applicant") and the applicant caused to be filed a verified application for the subject entitlements authorizing the installation of roof mounted panel and microwave antennas on an existing building; and

WHEREAS, said verified application constitutes a request as provided by Title 9 of the Dana Point Municipal Code; and

WHEREAS, pursuant to the California Environmental Quality Act (CEQA), the project is categorically exempt per Section 15301 (Class 1 – Existing Facilities) because the project involves the minor alteration to an existing structure; and

WHEREAS, the Planning Commission did, on the 8th day of July, 2024, hold a duly noticed public hearing as prescribed by law to consider said requests; and

WHEREAS, at said public hearing, upon considering all testimony and arguments, if any, of all persons desiring to be heard, said Commission considered all factors relating to the subject entitlements.

NOW, THEREFORE, BE IT HEREBY RESOLVED by the Planning Commission of the City of Dana Point as follows:

A) The above recitations are true and correct and incorporated herein by this reference.

Findings:

B) Based on the evidence presented, the Planning Commission adopts the following findings and approves AUP24-0001; CDP24-0007 and CUP24-0002(M), subject to conditions:

Antenna Use Permit AUP24-0001

1. That the proposed antenna facility will not create any significant or meaningful blockage to public views **in that the proposed faux mansard rooftop enclosures will be setback from the edges of building and increases the total building height 7'-3" from the top of the existing flat roof (a portion of which is already screened by an mansard roof element). The revised overall height of the structure will not exceed 40-feet as measured from the structure low point to top of each enclosure, which conforms to the maximum height limit within the City's Town Center. Furthermore, the applicant provided multiple designs and simulations as viewed from the most sensitive angles, including views from the public trails located within the Headlands Conservation area, indicating that the proposed enclosures would not create any significant meaningful blockage of public views.**

2. That the proposed antenna facility will be an enhancement to the City due to its ability to provide additional communication capabilities **in that based on the provided coverage maps, the installation of the facility will fill an existing gap in coverage for the subject carrier (Verizon Wireless), resulting in an improvement to cellular and data transfer services for private, commercial and emergency users. Therefore, the new facility will be an enhancement to the City due to its ability to provide additional communication capabilities.**

3. That the proposed antenna facility will be aesthetically integrated into its surrounding environment **in that the proposed faux enclosures are designed to appear as an integral element of the existing building, incorporating architectural features and finish materials which are identical to the existing exterior finishes of the building and therefore will also blend into the surrounding environment.**

4. That the proposed antenna facility will not interfere with the reception or transmission of other wireless telecommunication signals within the surrounding community **in that the proposed antennas are designed to work on a stand-alone radio frequency designated for the subject carrier. The facility must also conform to 2024 radio frequency emission standards, as well as Federal Communication Commission (FCC) regulations regarding non-interference.**

5. That the proposed antenna facility will operate in compliance with all applicable Federal safety regulations for such facilities **in that the subject wireless antenna facility installation will be tested to demonstrate that the facility complies with all current government safety standards prior to building final sign off.**

6. That the public need for the use of the antenna facility has been documented **in that the proposed commercial wireless antenna facility is necessary to fill a gap in coverage and help bridge communication services between other nearby antennas. The need for the facility is supported by the coverage maps provided which demonstrate a significant gap in coverage, thereby providing evidence of the public need for the proposed facility. Additionally, the coverage maps indicate an increase in coverage to private, commercial and/or emergency cellular users with implementation of the proposed antenna facility which provides for the documentation of public need for the use of the antenna facility.**

Coastal Development Permit CDP24-0007

1. That the proposed development is in conformity with the certified Local Coastal Program as defined in Chapter 9.75 of this Zoning Code **in that the proposed project qualifies as development within the Coastal Zone and therefore necessitates the approval of the subject coastal development permit. Furthermore, the project meets all requisite development standards as well as design and location criteria.**

2. That the proposed development, if located between the nearest public roadway and the sea or shoreline of any body of water, is in conformity with the public access and public recreation policies of Chapter Three of the Coastal Act **in that the proposed development does not alter existing public access and public recreation areas in the vicinity.**

3. That the proposed development conforms with Public Resources Code Section 21000 and following and that there are no feasible mitigation measures or feasible alternatives available which would substantially lessen any significant adverse impact that the activity may have on the environment **in that the project is qualified as Categorically Exempt from review under CEQA pursuant to Section 15301 (Class 1 – Existing Facilities) because the project involves the minor modification to an existing structure.**

4. That the proposed development be sited and designed to prevent adverse impacts to environmentally sensitive habitats and scenic resources located in adjacent parks and recreation areas and will provide adequate buffer areas to protect such resources **in that although the project is located near the Headlands Conservation area, the proposed development is on an existing commercial building located within a commercial zone. Therefore, the project does not impact environmentally sensitive habitats and scenic resources which are in adjacent parks and recreation areas.**

5. That the proposed development will minimize the alterations of natural landforms and will not result in undue risks from geologic and erosional forces and/or flood and fire hazards **in that the project proposes the installation of a structure on top of an existing building which will have no impact to the alterations of natural landforms and will not result in undue risks from geologic and erosional forces and/ or floor and fire hazards. Furthermore, the enclosures will be constructed out of fire-retardant paneling which resists fire hazards.**

6. That the proposed development be visually compatible with the character of surrounding areas, and, where feasible, will restore and enhance visual quality in visually degraded areas **in that the antenna enclosures will be integrated into the design of the existing building, therefore resulting in a project which is visually compatible with the existing structure. Additionally, the improvements will provide a renewed design to the existing building, thereby enhancing the visual quality of the building and surrounding areas.**

7. That the proposed development will conform with the General Plan, Zoning Code, applicable Specific Plan, Local Coastal Program, or other applicable adopted plans and programs **in that the proposed project conforms with all applicable development standards and City regulations related to wireless antenna facilities and general development standards and conforms to development standards identified in the Dana Point Town Center Plan (DPTCP).**

Conditional Use Permit CUP24-0002(M)

1. That the proposed conditional use is consistent with the General Plan **in that, the proposed installation of the of the antenna facility is consistent with Goal Six (6) of the Public Facilities/ Growth Management Element of the City's General Plan to maintain, improve, and expand utilities including natural gas, electricity, and communications.**

2. That the nature, condition, and development of adjacent uses, buildings, and structures have been considered, and the proposed conditional use will not adversely affect or be materially detrimental to the adjacent uses, buildings, or structures **in that, the proposed screening enclosures are architecturally compatible with the building by incorporating dormer style roof elements and will match the color scheme of the existing building.**

3. That the proposed site is adequate in size and shape to accommodate the yards, walls, fences, parking and loading facilities, landscaping, and other land use development features prescribed in this Code and required by the Commission or Council in order to integrate the use with existing and planned uses in the vicinity **in that the proposed antennas, rooftop enclosures and accessory equipment are non-habitable improvements to a developed site containing the aforementioned land use development features and that are designed within the prescribed land use development standards of the DPTCP. Therefore, the existing site is adequate in size and shape to accommodate the proposed improvements prescribed in the DPTCP and integrates the use into the existing and planned uses in the vicinity.**

Conditions:

A. General:

1. Approval of this application permits the installation of panel and microwave antennas housed within two, individual, faux mansard rooftop enclosures, each projecting a maximum of 7'-3" above the top of the existing gable roofline of the existing Blue Lantern Plaza building located at 34085 Pacific Coast Highway. Subsequent submittals for this project shall be in substantial compliance with the plans presented to the Planning Commission, and in compliance with the applicable provisions of the Dana Point General Plan, Municipal Code, DPTCP and LCP (as applicable).

2. Approval of this application is valid for a period of 24 months (two years) from the date of determination. If the development approved by this action is not established, or a building permit for the project is not issued within such period of time, the approval shall expire and shall thereafter be null and void.

3. The application is approved as a plan for the location and design of the uses, structures, features, and materials, shown on the approved plans. Any relocation, alteration, or addition to any use, structure, feature, or material, not specifically approved by this application, will nullify this approving action. If any changes are proposed regarding the location or alteration to the appearance or use of any structure, an amendment to this permit shall be submitted for approval by the Director of Community Development. If the Director of Community Development determines that the proposed change complies with the provisions and the spirit and intent of this approval action, and that the action would have been the same for the amendment as for the approved plot plan, he may approve the amendment without requiring a new public hearing.

4. Failure to abide by and faithfully comply with any and all conditions attached to the granting of this permit shall constitute grounds for revocation of said permit.

5. The applicant or any successor-in-interest shall defend, indemnify, and hold harmless the City of Dana Point ("CITY"), its agents, officers, or employees from any claim, action, or proceeding against the CITY, its agents, officers, or employees to attack, set aside, void, or annul an approval or any other action of the CITY, its advisory agencies, appeal boards, or legislative body concerning the project. Applicant's duty to defend, indemnify, and hold harmless the City shall include paying the City's attorney's fees, costs and expenses incurred concerning the claim, action, or proceeding.

   The applicant or any successor-in-interest shall further protect, defend, indemnify and hold harmless the City, its officers, employees, and agents from any and all claims, actions, or proceedings against the City, its offers, employees, or agents arising out of or resulting from the negligence of the applicant or the applicant's agents, employees, or contractors. Applicant's duty to defend, indemnify, and hold harmless the City shall include paying the City's attorney's fees, costs and expenses incurred concerning the claim, action, or proceeding.

   The applicant shall also reimburse the City for City Attorney fees and costs associated with the review of the proposed project and any other related documentation.

6. The applicant and applicant's successors in interest shall be fully responsible for knowing and complying with all conditions of approval, including making known the conditions to City staff for future governmental permits or actions on the project site.

7. The applicant and applicant's successors in interest shall be responsible for payment of all applicable fees along with reimbursement for all City expense in ensuring compliance with these conditions.

8. The construction site shall be posted with signage indicating that construction may not commence before 7:00 AM and must cease by 8:00 PM, Monday through Saturday, with no construction activity permitted on Sundays or Federal holidays.

9. The applicant, property owner or successor in interest shall submit a standard Waste Reduction and Recycling Plan to the City's C&D official per the Dana Point Municipal Code. A deposit will be required upon approval of the Waste Management Plan to ensure compliance. The standard Waste Reduction and Recycling Plan shall be reviewed and approved and deposit posted prior to issuance of any permits.

10. The applicant shall be responsible for coordination with water district, sewer district, SDG&E, AT&T California and Cox Communication Services for the provision of water, sewer, electric, cable television and telephone and services. The applicant is responsible to coordinate any potential conflicts or existing easements.

11. The applicant shall exercise special care during the construction phase of this project to prevent any off-site siltation. The applicant shall provide erosion and sediment control measures at all times. The applicant shall maintain the erosion and sediment control devices until the final approval of all permits.

12. Prior to the commencement of any work within the public right-of-way, the applicant shall apply and be approved for an encroachment permit.

13. Prior to submitting any permit, an address assignment may be required from the Public Works Department. Please consult with Public Works Department at 949-248-3554 regarding addressing prior to submittal.

14. The final design and size of each roof-top enclosure shall be reviewed and approved by the Director of Community Development to ensure the linear length and height of the enclosures are the minimum necessary, while maintaining the design aesthetic that is consistent with the existing structure.

15. The approved antenna equipment and application shall be subject to review by the City every two years from the date of approval to determine if technology has changed to the point where an installation can be reduced in size or redesigned in a more "stealth" manner and to evaluate Radio-Frequency emissions. Should this review be deemed required/appropriate, the applicant shall submit technology upgrade and Radio-Frequency emission testing reports for review by the Planning Division. Said report shall not be required more than once within a 24 month (two year) period.

16. At all times, other than during a 24-hour "cure period," the applicant shall not prevent the City of Dana Point from having adequate spectrum capacity on the City's 800 MHz radio frequency; should any interruptions or interference to this frequency occur, operation of the facility shall cease and until the cause of interference or interruption is eliminated.

17. The faux lighthouse screen and associated mechanical equipment screens shall be cleaned and maintained periodically and/ or at the City of Dana Point's discretion in order to maintain aesthetics.

B. <u>Prior to Building Plan Check Submittal</u>:

18. Project "Conditions of Approval shall appear on the submitted drawings.

19. Building plan check submittal shall include the following construction documents:

    - Building Plans (4 sets)
    - Trade plans (i.e. Electrical/Plumbing/Mechanical plans) by a Registered Design Professional
    - Structural Calculations (2 sets)

    All documents prepared by a registered-design-professional shall be wet-stamped & signed.

20. Fire Department review may be required. Submit plans directly to the Orange County Fire Authority for their review.

21. Minimum roofing classification is Class "A".

22. Fire-rated Construction: Plans should clearly identify and detail the fire-rated construction for any construction due to close proximity to the property line.

23. Separate review, approval, and permits are required for separate structures.

C. <u>Prior to final inspection or release on certain related inspections including final inspection</u>:

24. A radio-frequency testing report shall be provided upon initial installation and an additional report shall be submitted within 45 days to demonstrate that the facility is in compliance with government safety standards.

25. The applicant shall provide a "single point of contact" in its Engineering and Maintenance Departments to ensure continuity on all interference issues. The name, telephone number, fax number, and e-mail address of that person shall be provided to the Communications Division of the Orange County Sheriff's Department.

26. Planning final approval will be required for all permits.

27. A height certification shall be required upon completion of the sheeting of the proposed faux roof mounted enclosures. The total height of the building shall not exceed 40-feet as measured from the structure low point identified on the plans.

28. Verification of all conditions of approval is required by all City Departments.

29. Public Works final approval will be required for all permits.

30. All structural best management practices (BMPs) shall be constructed and installed in conformance with approved plans and specifications.

31. All approvals from outside Departments and Agencies (i.e. Fire Department) is/are required.

32. All applicable supplemental/development impact fees shall be paid prior to building permit issuance.

PASSED, APPROVED, AND ADOPTED at a regular meeting of the Planning Commission of the City of Dana Point, California, held on this 8th day of July 2024, by the following vote, to wit:

AYES:

NOES:

ABSENT:

ABSTAIN:

_____
Mary Opel, Chair
Planning Commission

ATTEST:

_____
Brenda Wisneski, Director
Community Development Department

SUPPORTING DOCUMENT 2: Vicinity Map

Vicinity Map

34085 Pacific Coast Highway
AUP24-0001; CDP24-0007; CUP24-0002

SUPPORTING DOCUMENT 3: Site Photos

SUPPORTING DOCUMENT 4: Materials

SUPPORTING DOCUMENT 5: Plans and Simulations

ATTACHMENT

SELVA HILL RELO

PROJECT I.D. 15949473

34085 COAST HWY
DANA POINT, CA 92629

OVERALL HEIGHT

40' ABOVE GRADE LEVEL

VALUATION ESTIMATE

$350,000

PROJECT DESCRIPTION

VERIZON PROPOSES TO BUILD A ROOFTOP ANTENNA STRUCTURE AND INSTALL EQUIPMENT IN AN EXISTING STORAGE ROOM.

THIS WILL BE AN UNMANNED WIRELESS TELECOMMUNICATION FACILITY AND WILL CONSIST OF THE FOLLOWING:

- INSTALL (2) (N) VERIZON FRP SCREENED ROOFTOP ENCLOSURE, TO MATCH (E) BUILDING
- INSTALL (12) (N) VERIZON PANEL ANTENNAS
- INSTALL (6) (N) VERIZON RADIO UNITS
- INSTALL (3) (N) VERIZON RAYCAP UNITS
- INSTALL (1) (N) 2'-0" Ø VERIZON MICROWAVE ANTENNA
- INSTALL (1) (N) VERIZON GPS ANTENNA
- INSTALL (3) (N) VERIZON 12X24 HYBRID CABLE
- INSTALL (4) (N) VERIZON EQUIPMENT RACKS FOR RADIOS, BATTERIES & FIBER IN (E) STORAGE ROOM
- INSTALL A REVERSE SERVICE EMERGENCY GENERATOR RECEPTACLE
- INSTALL (N) VERIZON ELECTRICAL AND TELCO CONNECTIONS

PROJECT TEAM

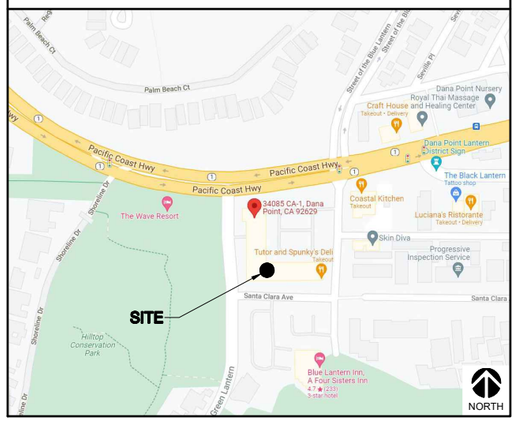
SITE ACQUISITION:
PLANCOM, INC.
250 EL CAMINO REAL, SUITE 117
TUSTIN, CA 92780
CONTACT: BRIAN MEURS
TELEPHONE: (714) 315-5760

PLANNING:
PLANCOM, INC.
250 EL CAMINO REAL, SUITE 117
TUSTIN, CA 92780
CONTACT: PETER BLIED
TELEPHONE: (714) 262-0651

ARCHITECTURE:
PLANCOM, INC.
16776 BERNARDO CENTER DR, UNIT 203
SAN DIEGO, CA 92128
CONTACT: WILLIAM BOOTH
TELEPHONE: (760) 891-6107

SURVEYOR:
AJK ENGINEERING & SURVEY
23072 LAKE CENTER DRIVE, SUITE 211
LAKE FOREST, CALIFORNIA 92630
CONTACT: ANDREW KOLTAVARY
TELEPHONE: (714) 624-9027

VICINITY MAP



DRIVING DIRECTIONS

FROM: VERIZON OFFICE
15505 SAND CANYON AVENUE
BUILDING C
IRVINE, CA 92618

TO: 34085 COAST HWY
DANA POINT, CA 92629

1. TURN LEFT ONTO SAND CANYON AVE
2. TURN RIGHT TO MERGE ONTO I-5 S
3. MERGE ONTO I-5 S
4. TAKE EXIT 79 FOR CA-1 / PACIFIC COAST HWY
5. CONTINUE ONTO CA-1 N / E PACIFIC COAST HWY
6. TURN LEFT ONTO STREET OF THE BLUE LANTERN
7. TURN RIGHT

DESTINATION WILL BE ON THE RIGHT

GENERAL CONTRACTOR NOTES

DO NOT SCALE DRAWINGS

THE GENERAL CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS MATCH THE DRAWINGS AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT IN WRITING OF ANY DISCREPANCIES. PROCEEDING WITH CONSTRUCTION WITHOUT SUCH NOTIFICATION OF DISCREPANCIES INDICATES THE GENERAL CONTRACTOR ACCEPTS RESPONSIBILITY FOR THE EXISTING CONDITIONS AND HAS INCLUDED RESOLUTION OF THOSE DISCREPANCIES IN THE BID FOR CONSTRUCTION.

PROJECT SUMMARY

APPLICANT:
verizon
15505 SAND CANYON AVENUE
BUILDING C
IRVINE, CA 92618
OFFICE: (949) 286-7000

APPLICANT'S REPRESENTATIVE:
PLANCOM, INC.
250 EL CAMINO REAL, SUITE 117
TUSTIN, CA 92780
CONTACT: ERIC MEURS
TELEPHONE: (949) 370-5939

PROPERTY OWNER:
BLUE LANTERN PROPERTY LLC
2600 S. SANTA FE AVE
VISTA, CA 92084
CONTACT: STEVEN HYNDAM
TELEPHONE: (760) 727-0533

ASSESSOR'S PARCEL NUMBER:
APN: 672-231-06 & 07

LEGAL DESCRIPTION:
PARCEL1: LOTS 1, 2, 3 AND 4 IN BLOCK "F" OF TRACT NO. 573, IN THE CITY OF DANA POINT, COUNTY OF ORANGE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 20, PAGE 29 OF MISCELLANEOUS MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

PROPERTY INFORMATION:
SITE NAME: SELVA HILL RELO
SITE ADDRESS: 34085 COAST HWY
DANA POINT, CA 92629
JURISDICTION: CITY OF DANA POINT

CONSTRUCTION INFORMATION:

AREA OF CONSTRUCTION:

EQUIPMENT ROOM: 170 S.F.
ROOFTOP SCREENS AREAS: 479 S.F. (BETA & GAMMA)
276 S.F. (ALPHA)

OCCUPANCY: B-2

TYPE OF CONSTRUCTION: III A SPRINKLERED

ZONING CLASSIFICATION: COMMERCIAL TOWN CENTER

USE: WIRELESS COMMUNICATIONS FACILITY

ADA COMPLIANCE: FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. MACHINERY SPACES ARE EXEMPT FROM STATE OF CALIFORNIA ACCESSIBILITY REQUIREMENTS PER THE CBC SECTION 11B-203.5.

COORDINATES (NAD 83):
LATITUDE / LONGITUDE:
ALPHA: 33° 27' 52.96" N (33.46474°) 117° 42' 24.47" W (-117.70696°)
BETA: 33° 27' 53.06" N (33.464739°) 117° 42' 26.23" W (-117.707286°)
GAMMA: 33° 27' 53.12" N (33.464756°) 117° 42' 26.05" W (-117.707236°)

NOTE: THERE IS NO (E) TELECOMMUNICATIONS FACILITY ON THIS PROPERTY

CODE COMPLIANCE

- 2022 CALIFORNIA ENERGY CODE
- 2022 CALIFORNIA BUILDING CODE
- 2022 CALIFORNIA ELECTRICAL CODE
- 2022 CALIFORNIA FIRE CODE
- 2022 CALIFORNIA GREEN BUILDING CODE
- 2022 CALIFORNIA MECHANICAL CODE
- 2022 CALIFORNIA PLUMBING CODE

IN THE EVENT OF A CONFLICT, THE MORE RESTRICTIVE CODE SHALL GOVERN.

SHEET	DESCRIPTION
T-1	TITLE SHEET & PROJECT DATA
A-0	SITE PLAN
A-1	ENLARGED SITE & EQUIPMENT PLANS
A-2	ROOF PLAN
A-3	ANTENNA PLANS
A-4	EXTERIOR ELEVATIONS
A-5	EXTERIOR ELEVATIONS
D-1	DETAILS
D-2	DETAILS
LS-1	TITLE DETAILS
LS-2	TOPOGRAPHIC SURVEY
LS-3	SURVEY ELEVATIONS

ZONING DRAWINGS

811 Know what's below. Call before you dig.

TO OBTAIN LOCATION OF PARTICIPANTS UNDERGROUND FACILITIES BEFORE YOU DIG IN CALIFORNIA (SOUTH), CALL DIG ALERT
TOLL FREE: 1-800-227-2600 OR www.digalert.org
CALIFORNIA STATUTE REQUIRES MIN OF 2 WORKING DAYS NOTICE BEFORE YOU EXCAVATE

ISSUE STATUS

REV.	DATE	DESCRIPTION	BY
0	11/17/2021	90% ZD	RD
1	01/20/2023	DRM COMMENTS	JN
2	04/11/2023	DRM COMMENTS	RL
3	04/21/2023	100% ZD DRM REVS	RL
4	08/10/2023	HEIGHT DETERMINATION	RL
5	08/24/2023	COORDINATE W/ SURVEY	RL
6	12/22/2023	ROOFTOP REDESIGN	RL
7	04/18/2024	REVISED 90% ZD	RL
8	04/30/2024	REVISED ALPHA SECTOR	RL

PLANCOM INC
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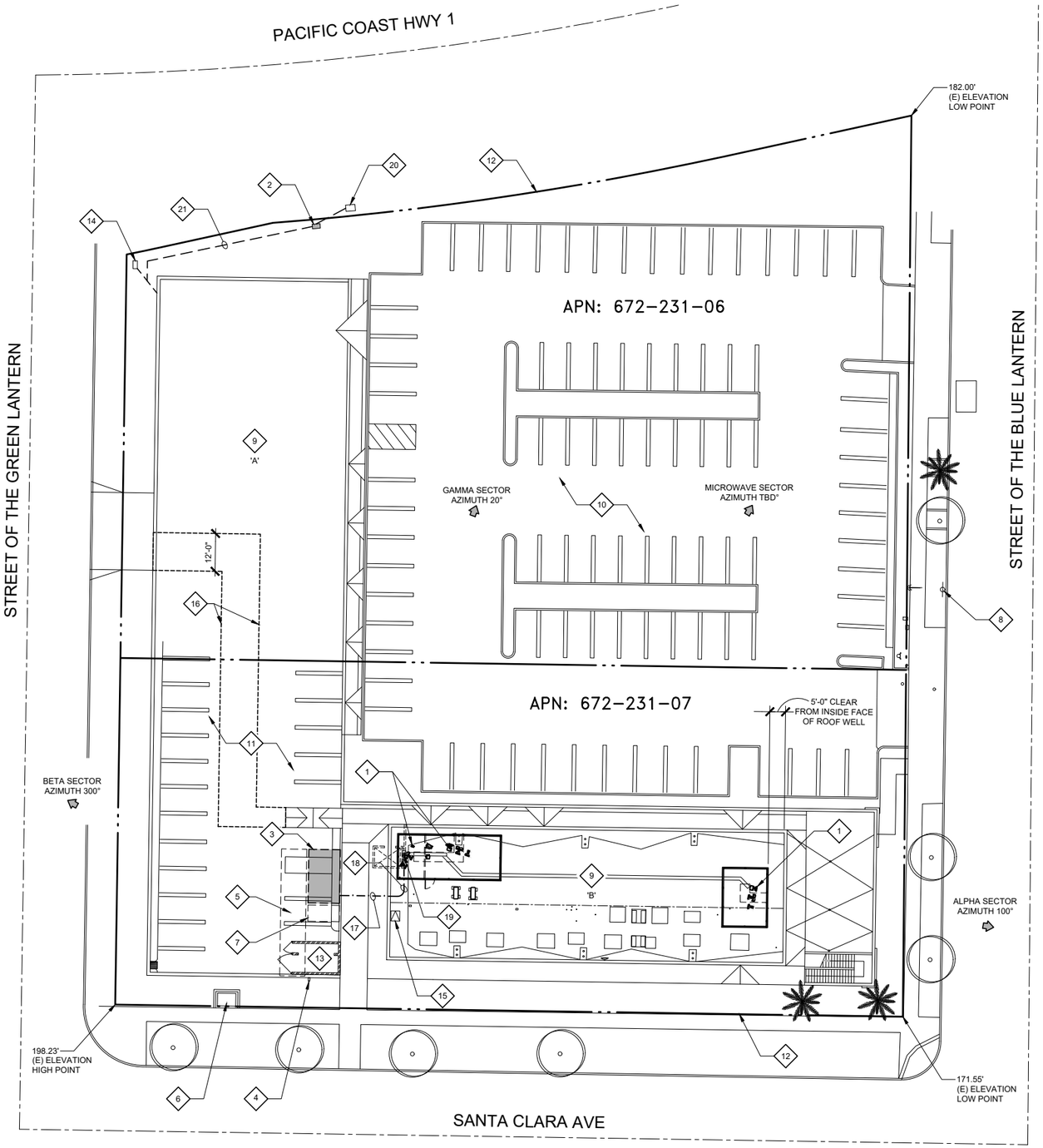
SAN DIEGO, CA 92128

verizon
15505 SAND CANYON AVENUE
BUILDING C
IRVINE, CA 92618

SELVA HILL RELO
PROJECT I.D. 15949473
34085 COAST HWY
DANA POINT, CA 92629

SHEET TITLE:
TITLE SHEET
&
PROJECT DATA

T-1



SITE PLAN

SCALE: 1" = 20'-0"

0" 10' 20' 40'

KEYED NOTES:

1. (N) VERIZON PANEL & MICROWAVE ANTENNAS MOUNTED BEHIND A (N) FRP SCREENED ROOFTOP ENCLOSURE. SEE ROOF PLAN SHEET A-2.
2. 17" x 30" VERIZON MMP HANDHOLE
3. (N) VERIZON EQUIPMENT INSIDE (E) STORAGE ROOM. SEE ENLARGED SITE & EQUIPMENT PLANS SHEET A-1.
4. (N) REVERSE SERVICE GENERATOR RECEPTACLE ADJACENT TO DOOR TO MAIN ELECTRICAL ROOM
5. (E) ELECTRICAL ROOM INBASEMENT. (N) POWER P.O.C. (OPTION #1) (E) SDG&E 120/208 VOLT, 3Ø, 4W, 2000A PULL SECTION IN
6. (E) SDG&E TRANSFORMER #D118879-794 ON AN (E) CONCRETE PAD. (N) POWER P.O.C. (OPTION #2)
7. (E) COX AND AT&T FIBER FTP IN MPOE OR UTILIZE (E) CONDUIT INTO MPOE IN (E) TELCO ROOM. (N) FIBER P.O.C. (OPTION #1)
8. (E) COX AND AT&T FIBER ON (E) POLE #P207331S. (N) FIBER P.O.C. (OPTION #2)
9. (E) BUILDING
10. (E) ASPHALT PARKING LOT
11. (E) CONCRETE PARKING DECK
12. PROPERTY LINE, TYPICAL
13. (E) CONCRETE BLOCK TRASH ENCLOSURE WITH CHAIN LINK GATES
14. (E) COX HANDHOLE FIBER TO MPOE (VERIFY)
15. (E) ROOF ACCESS HATCH
16. 12'-0" WIDE VEHICLE ACCESS PATH FOR VERIZON OPERATIONS. NO ASSIGNED PARKING. ACCESS TO SITE IS VIA EXISTING PUBLIC STREETS, WALKWAYS & STAIRS.
17. APPROXIMATE CABLE ROUTE THROUGH SOFFIT OVER BREEZEWAY & BETWEEN BUILDINGS
18. APPROXIMATE CABLE ROUTE TO BETA & GAMMA SECTORS IN CEILING SPACE BETWEEN FIRST & SECOND FLOORS
19. VERTICAL CABLE ROUTE TO ROOF IN DEAD SPACE ADJACENT TO ELEVATOR
20. 24" x 36" ONE FIBER HANDHOLE LOCATED IN SIDEWALK
21. (N) ONE-FIBER ROUTE TO WYE INTO (E) PATH TO MPOE

HEIGHT DETERMINATION

198.23' (HIGH) + 171.55' (LOW) = 369.78'
MID-POINT GRADE ELEVATION: 184.89'

TOP OF TALLEST SCREEN: 224.89'
HEIGHT OF STRUCTURE: = 40.00'

BOUNDARY NOTE:

THE PROJECT BOUNDARY SHOWN ON THIS DRAWING IS APPROXIMATE AND IS SHOWN FOR REFERENCE ONLY. A COMPLETE BOUNDARY SURVEY WAS NOT PERFORMED.

EASEMENTS:

EASEMENTS SHOWN REFLECT PRELIMINARY RECORDS RESEARCH OF RECORDED PARCEL MAPS & PRELIMINARY TITLE REPORT. EASEMENTS ARE SUBJECT TO REVIEW OF FINAL TITLE REPORT.

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7	04/18/2024	REVISED 90% ZD	RL
8	04/30/2024	REVISED ALPHA SECTOR	RL

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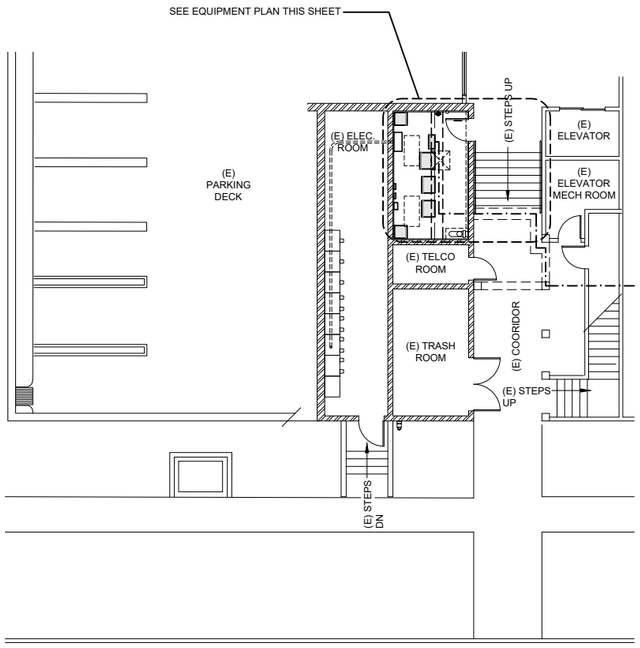
SELVA HILL
RELO
PROJECT I.D. 15949473
34085 COAST HWY
DANA POINT, CA 92629

SHEET TITLE:
SITE PLAN

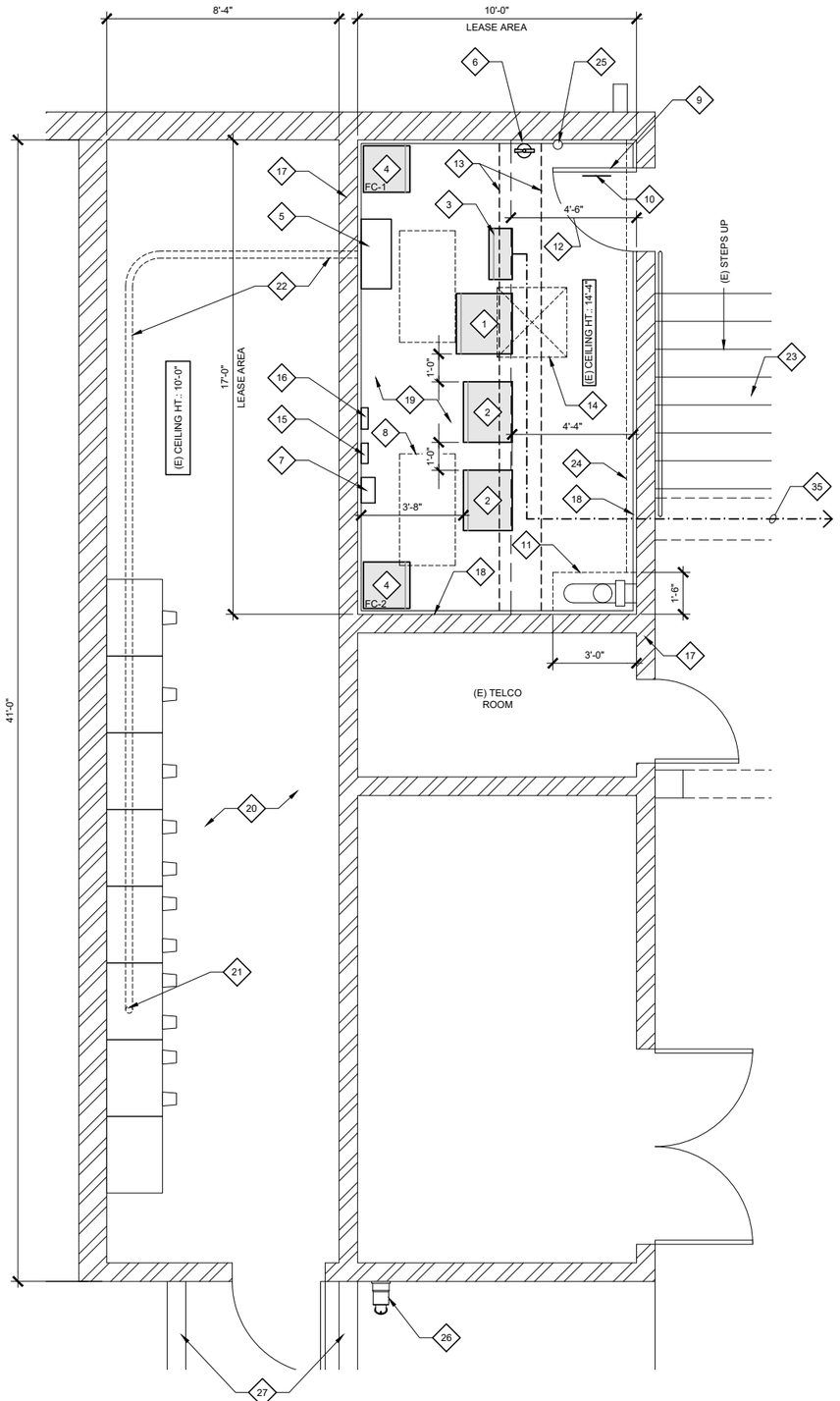
A-0



ENLARGED SITE PLAN

SCALE: 1" = 10'-0"

0" 5' 10' 20'



EQUIPMENT PLAN

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

0" 1' 2' 4'

KEYED NOTES:

1. (N) VERIZON INTERIOR RADIO RACK. 26" WIDE x 24" DEEP x 84" HIGH (TYPICAL OF 1)
2. (N) VERIZON INTERIOR BATTERY & POWER PLANT. 26" WIDE x 21" DEEP x 84" HIGH (TYPICAL OF 2)
3. (N) VERIZON INTERIOR FIBER RACK. 22" WIDE x 10" DEEP x 78" HIGH (TYPICAL OF 1)
4. (N) VERIZON FAN COIL UNITS (TYPICAL OF 2)
5. (N) VERIZON INTEGRATED LOAD CENTER (ILC) MOUNTED TO WALL
6. (N) CLASS "ABC" FIRE EXTINGUISHER MOUNTED TO WALL
7. (N) BATTERY ACID NEUTRALIZATION KIT
8. (N) FLOURESCENT LIGHT FIXTURE IN (N) T-BAR SUSPENDED CEILING (SHOWN DASHED)(TYPICAL OF 2)
9. (E) 1-HOUR RATED STEEL DOOR & FRAME TO REMAIN
10. (N) VERIZON SIGNAGE. SEE DETAILS 15/D2 16/D2
11. CLEAR SPACE FOR (E) FIRE STAND PIPE ACCESS & SERVICE
12. CLEARANCE TO (E) FIRE SPRINKLER MAIN LINE ABOVE (SHOWN DASHED)
13. (N) OVERHEAD 18" CABLE LADDER @ +8'-0" (SHOWN DASHED)
14. (N) CABLE HATCH ABOVE (SHOWN DASHED)
15. (N) ENVIRONMENTAL CONTROL PANEL
16. (N) LEAD/LAG CONTROL FOR AIR HANDLERS
17. (E) CONCRETE BLOCK WALL
18. (N) DRYWALL WALL FINISH OVER HAT CHANNEL (ALL WALLS)
19. (N) T-BAR SUSPENDED CEILING AT +9'-0"
20. (E) ELECTRICAL ROOM
21. ELECTRICAL POINT OF CONNECTION AT (E) 120/208, 2000A. UTILIZE (E) EMPTY METER SOCKET AT (E) ELECTRICAL SWITCHGEAR
22. (N) OVERHEAD ELECTRICAL POWER CONDUIT FROM ILC THROUGH WALL TO P.O.C. @ (E) SWITCHGEAR
23. (E) EXTERIOR STAIRS
24. (E) DRAIN LINE ON WALL @ +7'-0" (SHOWN DASHED)
25. (E) VERTICAL ROOF DRAIN
26. (N) REVERSE SERVICE GENERATOR RECEPTACLE
27. (E) 2'-0" TALL SPLIT-FACE BLOCK RETAINING WALL

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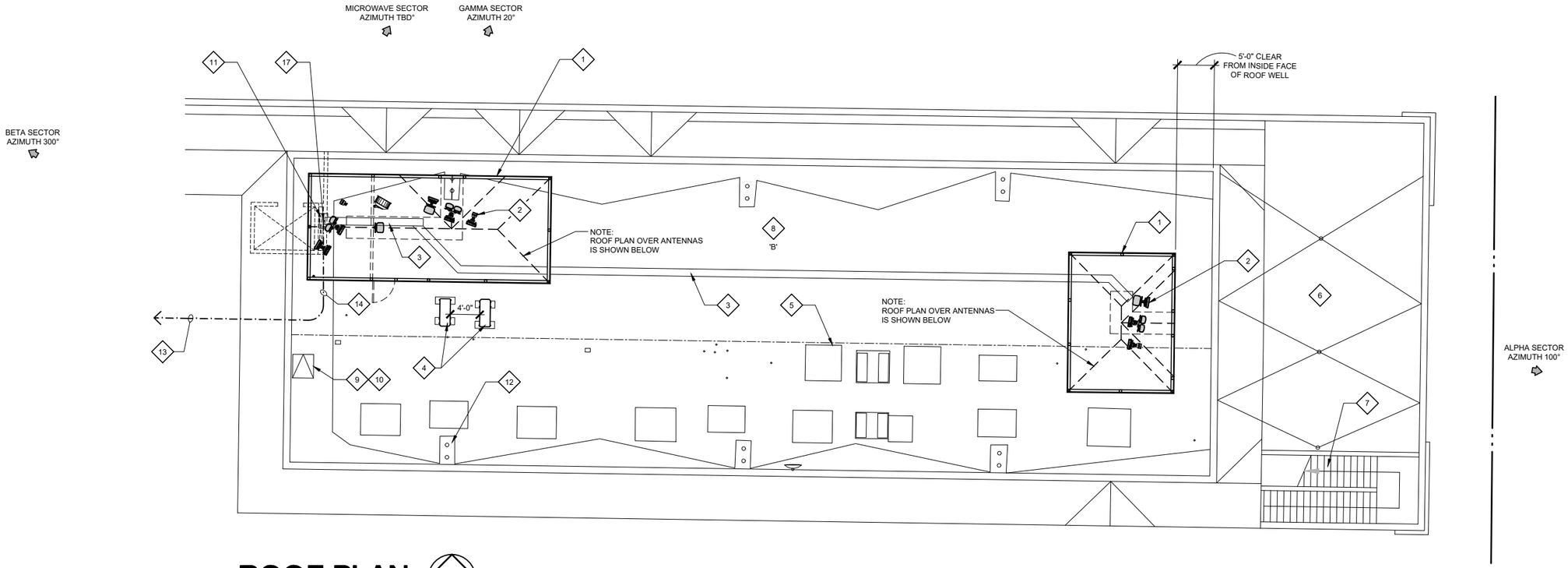
SHEET TITLE:
ENLARGED SITE & EQUIPMENT PLANS

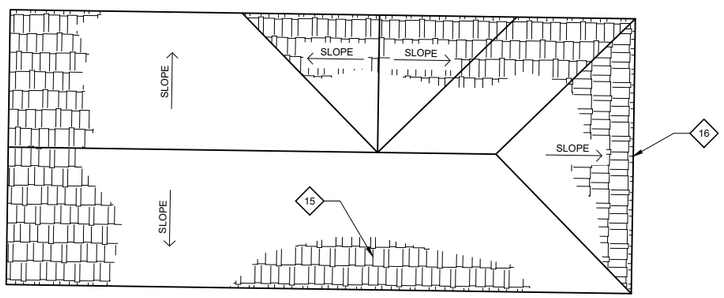
A-1



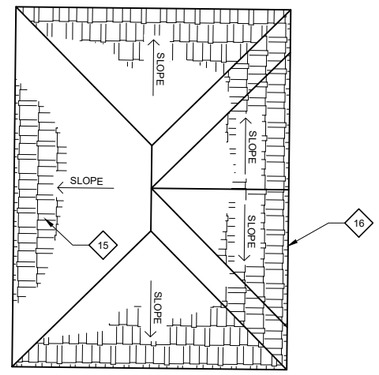
ROOF PLAN

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

0" 4' 8' 16'



BETA & GAMMA SECTORS



ALPHA SECTOR

ROOF PLAN (ABOVE ANTENNAS)

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

0" 2' 4' 8'

KEYED NOTES:

1. (N) VERIZON FRP SCREENED ROOFTOP ENCLOSURE. SEE ANTENNA PLANS SHEET A-3.
2. (N) VERIZON PANEL ANTENNAS MOUNTED BEHIND (N) FRP SCREEN. SEE ANTENNA PLANS SHEET A-3.
3. (N) VERIZON CABLE TRAY
4. (N) A/C/ CONDENSER UNITS ON PVC SPEEPERS LOCATED ON ROOF (TYPICAL OF 2)
5. (E) ROOF MOUNTED EQUIPMENT
6. (E) LOWER PATIO DECK
7. (E) STAIRS
8. (E) BUILDING ROOF
9. (E) ROOF ACCESS HATCH
10. (N) VERIZON SIGNAGE BELOW (14/D2)
11. (E) MECHANICAL CHASE ADJACENT TO ELEVATOR SHAFT
12. (E) ROOF DRAINS (TYPICAL)
13. APPROXIMATE CABLE ROUTE THROUGH SOFFIT OVER BREEZEWAY & BETWEEN BUILDINGS
14. APPROXIMATE CABLE ROUTE TO BETA & GAMMA SECTORS IN CEILING SPACE BETWEEN FIRST & SECOND FLOORS
15. (N) FRP TILE ROOFING TO MATCH (E) CONCRETE TILE ROOFING
16. MATCH (E) ROOF PITCH
17. VERTICAL CABLE ROUTE TO ROOF IN DEAD SPACE ADJACENT TO ELEVATOR

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7	04/18/2024	REVISED 90% ZD	RL
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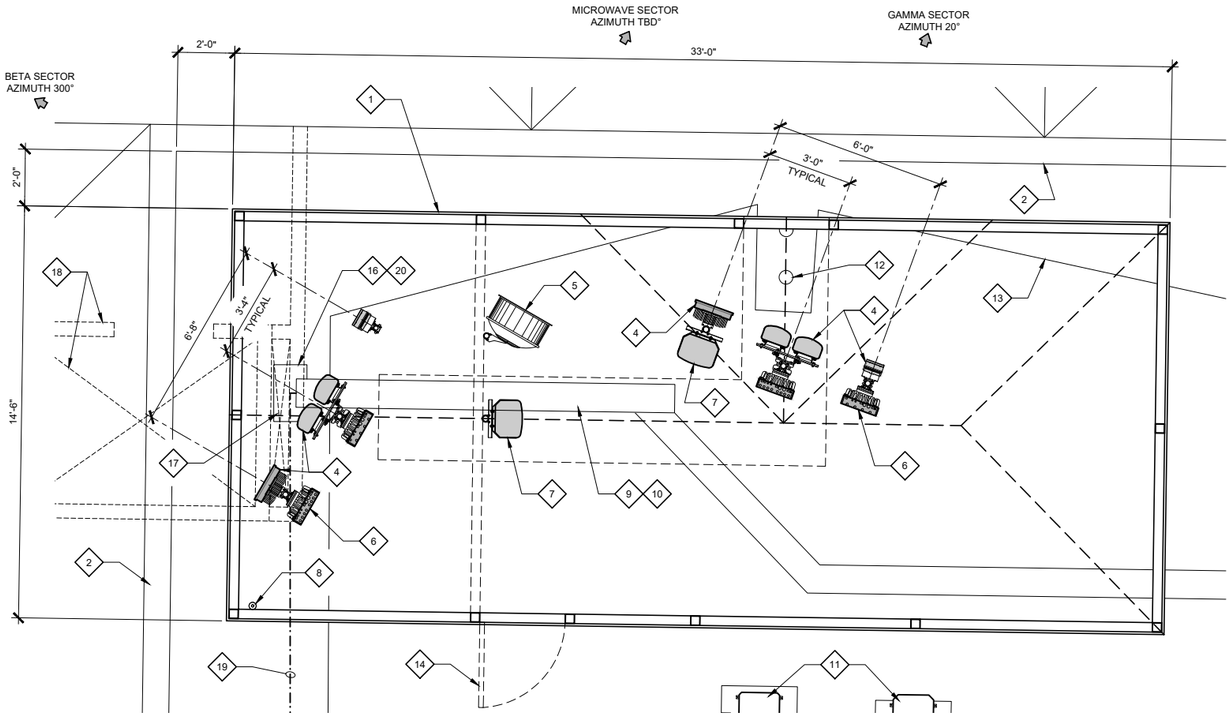
DANA POINT, CA 92629

SHEET TITLE:

ROOF PLAN

A-2



ANTENNA PLAN "GAMMA & BETA"

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

0" 1' 2' 4'

N

RFDS DATED: 01/31/2024

SECTOR	DIRECTION	AZIMUTH	MODEL (1)	SIZE	RAD CENTER	RADIO TYPE (4)(5)	NUMBER OF CABLES PER SECTOR (2)	COAX. CABLE LENGTH (+/- 5')	SURGE SUPPRESSOR (3)	JUMPER LENGTH (+/- 3')
ALPHA1	SOUTHEAST	100°	ERICSSON: AIR6419	31.3" L X 16.1" W X 9.8" D	23'-3"	INTEGRAL WITH ANTENNA	(1) 12 X 24 HYBRID CABLE	250'-0"	(1)	6'-0"
ALPHA2			COMMSCOPE: NHH-65A-R2B	55.6" L X 11.9" W X 7.1" D		(1) RRU 4890				
ALPHA3			COMMSCOPE: NHH-65A-R2B	55.6" L X 11.9" W X 7.1" D		(1) RRU 4490				
ALPHA4			ERICSSON: KRE105281/1	8.4" L x 7.9" W x 4.9" D		INTEGRAL WITH ANTENNA				
BETA1	NORTHWEST	300°	ERICSSON: AIR6419	31.3" L X 16.1" W X 9.8" D		INTEGRAL WITH ANTENNA	(1) 12 X 24 HYBRID CABLE	98'-0"	(1)	6'-0"
BETA2			COMMSCOPE: NHH-65A-R2B	55.6" L X 11.9" W X 7.1" D		(1) RRU 4890				
BETA3			COMMSCOPE: NHH-65A-R2B	55.6" L X 11.9" W X 7.1" D		(1) RRU 4490				
BETA4			ERICSSON: KRE105281/1	8.4" L x 7.9" W x 4.9" D		INTEGRAL WITH ANTENNA				
GAMMA1	NORTHEAST	20°	ERICSSON: AIR6419	31.3" L X 16.1" W X 9.8" D	38'-9"	INTEGRAL WITH ANTENNA	(1) 12 X 24 HYBRID CABLE	118'-0"	(1)	6'-0"
GAMMA2			COMMSCOPE: NHH-65A-R2B	55.6" L X 11.9" W X 7.1" D		(1) RRU 4890				
GAMMA3			COMMSCOPE: NHH-65A-R2B	55.6" L X 11.9" W X 7.1" D		(1) RRU 4490				
GAMMA4			ERICSSON: KRE105281/1	8.4" L x 7.9" W x 4.9" D		INTEGRAL WITH ANTENNA				
MICROWAVE		TBD	TBD	4'-0"Ø						32'-0"

NOTES:

(1) INSTALL (16) ANTENNAS: (3) ERICSSON KRE105281/1: 8.4" LENGTH X 7.9" WIDE X 4.9" DEEP, WEIGHT: 11.0 LBS
(6) COMMSCOPE NHH-65A-R2B: 55.6" LENGTH x 11.9" WIDE x .7.1" DEEP, WEIGHT: 35.1 LBS
(3) ERICSSON AIR6419: 31.3" LENGTH X 16.1" WIDE X 9.8" DEEP, WEIGHT: 63.05 LBS
(1 D1) (2 D1) (3 D1) (4 D1) (7 D1)

(2) INSTALL (1) 12 x 24 HYBRID FIBER POWER CABLE FOR EACH SECTOR (TOTAL OF 3)

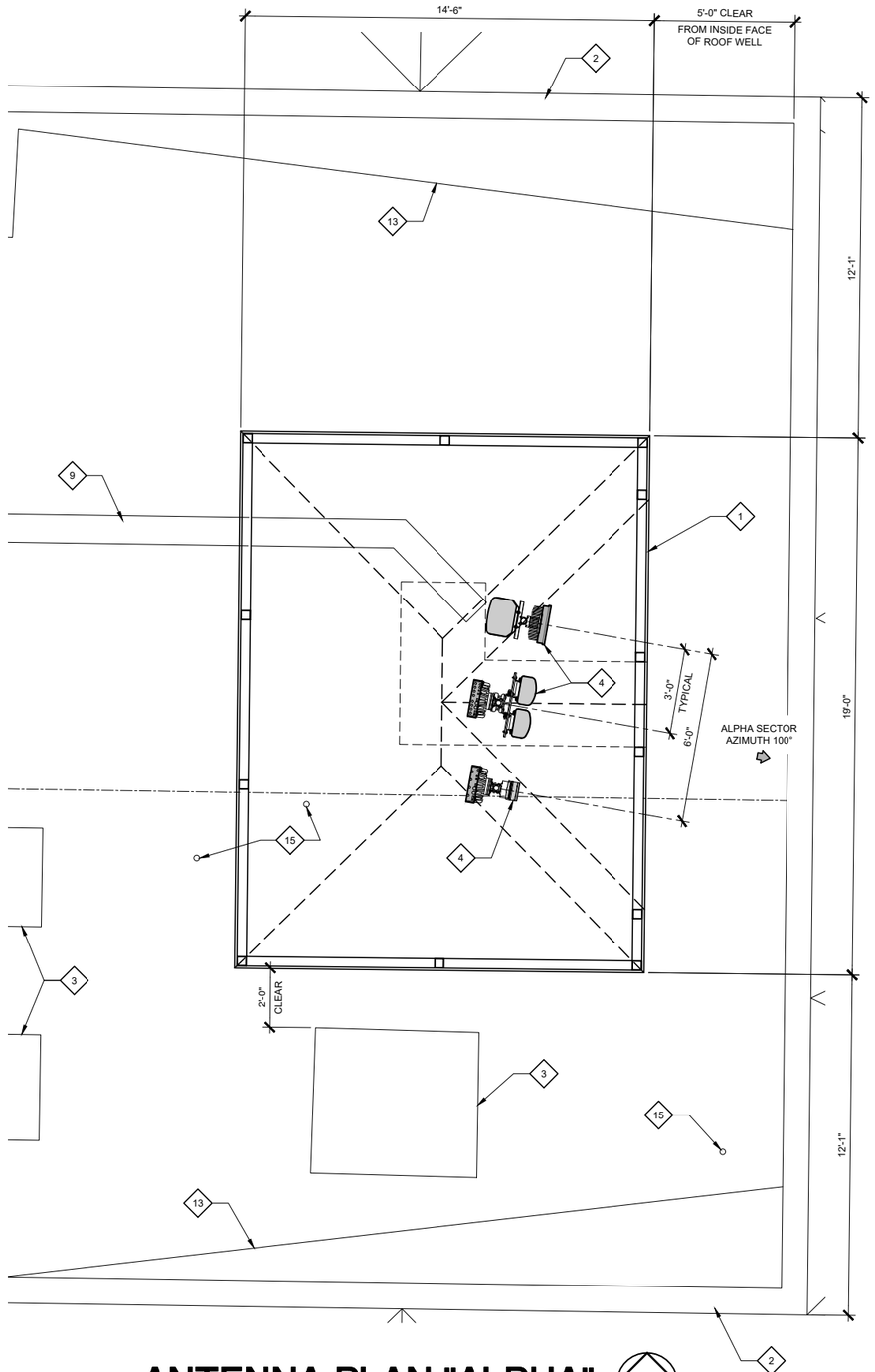
(3) INSTALL (1) DEMARCATION JUNCTION BOX (RAYCAP SURGE SUPPRESSOR) FOR EACH SECTOR (TOTAL OF 3) SEE DETAILS (5 D1) (6 D1)

(4) INSTALL (2) RRU UNITS FOR EACH SECTOR, (TOTAL OF 6). SEE DETAILS (8 D1) (10 D1) (11 D1) (12 D1) (19 D2) (20 D2)

(5) 4408-B48 RRU UNITS ARE INTEGRAL WITH KRE105281/1 ANTENNAS

KEYED NOTES:

1. (N) FRP SCREENED ROOFTOP ENCLOSURE SHALL BE DETAILED, PAINTED & TEXTURED TO MATCH (E) ADJACENT WALL & ROOF SURFACES.
2. (E) PARAPET
3. (E) ROOF MOUNTED EQUIPMENT
4. (N) VERIZON ANTENNAS, TOTAL OF 12
5. (N) VERIZON 2'-0"Ø MICROWAVE ANTENNA, TOTAL OF 1
6. (N) VERIZON RRU RADIO UNIT, TOTAL OF 6
7. (N) VERIZON RAYCAP, TOTAL OF 3
8. (N) VERIZON GPS ANTENNA
9. (N) VERIZON CABLE TRAY
10. (N) VERIZON 6 x 12 HYBRID CABLE INSIDE CABLE TRAY, TOTAL OF 3
11. (N) MECHANICAL UNITS ON PTDF SLEEPERS ON ROOF (TYPICAL OF 2)
12. (E) ROOF DRAINS
13. (E) DRAINAGE CRICKETS
14. (N) ACCESS PANEL
15. (E) ROOF VENT
16. (N) GALVANIZED STEEL DOGHOUSE AT TOP OF CHASE
17. CABLE ROUTE THROUGH (E) MECHANICAL SHAFT BELOW (SHOWN DASHED)
18. (E) ELEVATOR SHAFT BELOW (SHOWN DASHED)
19. APPROXIMATE CABLE ROUTE TO BETA & GAMMA SECTORS IN CEILING SPACE BETWEEN FIRST & SECOND FLOORS
20. VERTICAL CABLE ROUTE TO ROOF IN DEAD SPACE ADJACENT TO ELEVATOR



ANTENNA PLAN "ALPHA"

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

0" 1' 2' 4'

N

ISSUE STATUS

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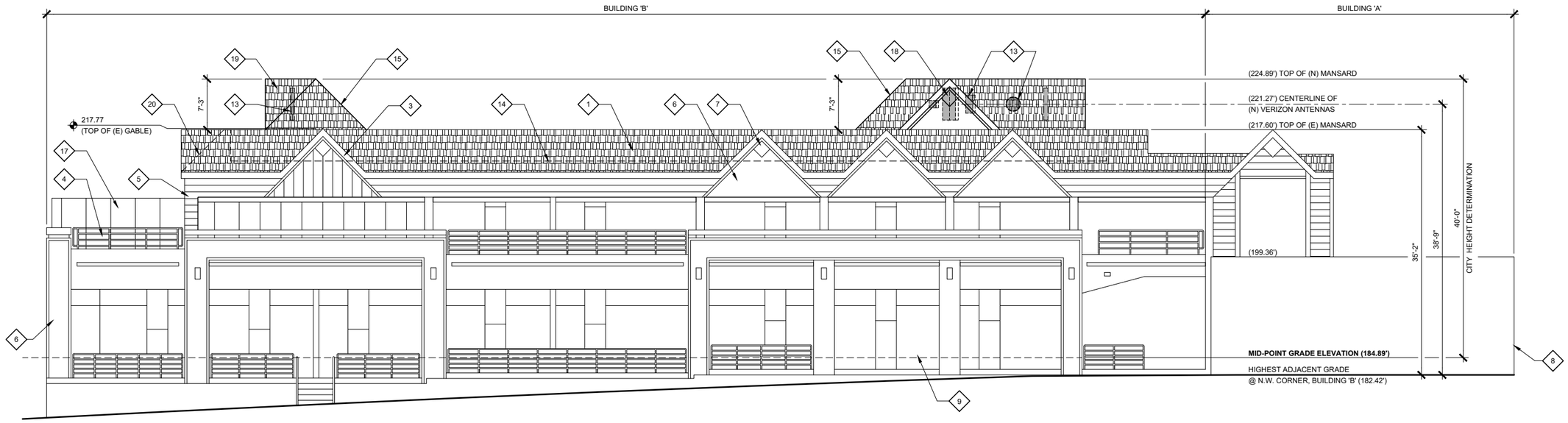
SHEET TITLE:
ANTENNA PLANS

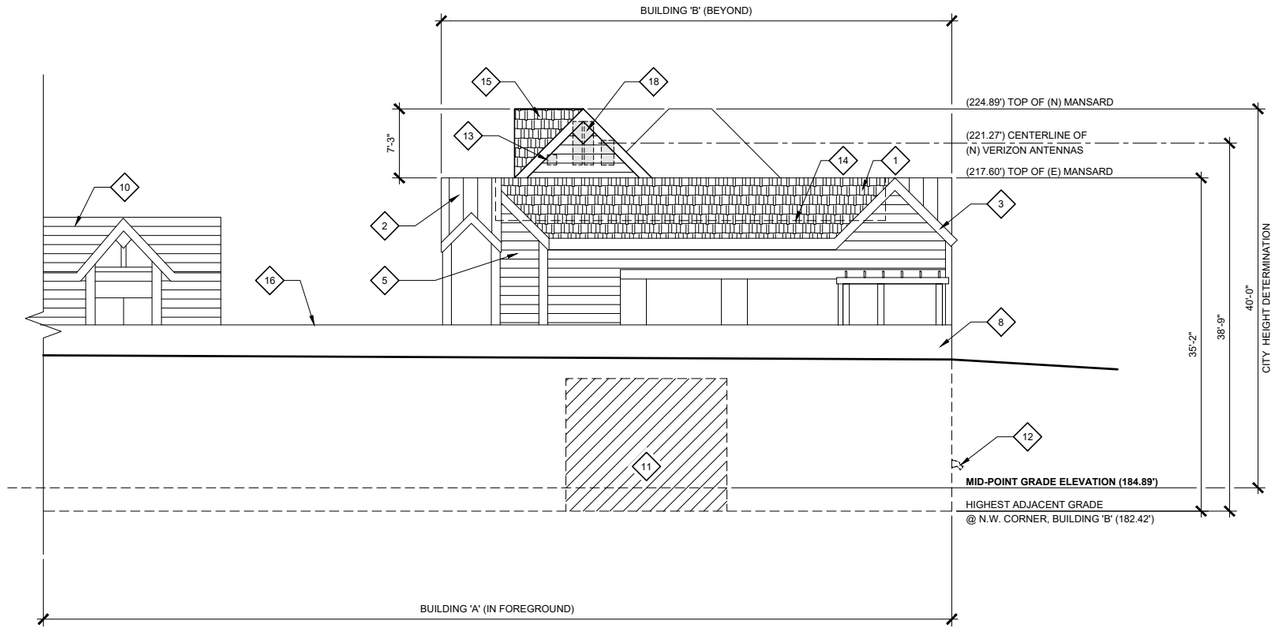
A-3



NORTH ELEVATION

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

0" 4' 8' 16'



WEST ELEVATION

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

0" 4' 8' 16'

NOTE:
RF TRANSPARENT FRP SCREENED ROOFTOP ENCLOSURE SHALL BE DETAILED, PAINTED & TEXTURED TO MATCH (E) ADJACENT WALL & ROOF SURFACES.

KEYED NOTES:

1. (E) CONCRETE TILE ROOFING
2. (E) METAL RAISED RIB ROOFING
3. (E) WOOD TRIM
4. (E) STEEL RAILING
5. (E) WOOD SIDING
6. (E) STUCCO SIDING
7. (E) GRANITE PANEL
8. (E) CONCRETE BLOCK PARKING GARAGE WALLS
9. (E) STOREFRONT
10. (E) BUILDING 'A' RETAIL
11. (N) VERIZON EQUIPMENT INSIDE (E) STORAGE ROOM
12. (N) REVERSE SERVICE GENERATOR RECEPTACLE AT GRADE ADJACENT TO MAIN ELECTRICAL ROOM DOOR (BEYOND)
13. (N) VERIZON PANEL & MICROWAVE ANTENNAS MOUNTED BEHIND A (N) FRP SCREENED ROOFTOP ENCLOSURE AND (N) FRP ANTENNA SCREEN.
14. LINE FOR ROOF DECK BEYOND
15. MATCH (E) ROOF PITCH
16. TOP OF WALL & HEDGE
17. (E) GREEN SCREEN AROUND DECK AREA
18. MATCH (E) GRANITE PANEL WITH FRP MATERIAL
19. (N) CONCRETE TILE ROOFING TO MATCH (E)
20. (E) SLOPED ROOF BEYOND

ISSUE STATUS

REV.	DATE	DESCRIPTION	BY
0	11/17/2021	90% ZD	RD
1	01/20/2023	DRM COMMENTS	JN
2	04/11/2023	DRM COMMENTS	RL
3	04/21/2023	100% ZD DRM REVS	RL
4	08/10/2023	HEIGHT DETERMINATION	RL
5	08/24/2023	COORDINATE W/ SURVEY	RL
6	12/22/2023	ROOFTOP REDESIGN	RL
7	04/18/2024	REVISED 90% ZD	RL
8	04/30/2024	REVISED ALPHA SECTOR	RL

PLANCOM INC
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16776 BERNARDO CENTER DR,
UNIT 203
SAN DIEGO, CA 92128

verizon

15505 SAND CANYON AVENUE
BUILDING C
IRVINE, CA 92618

SELVA HILL
RELO

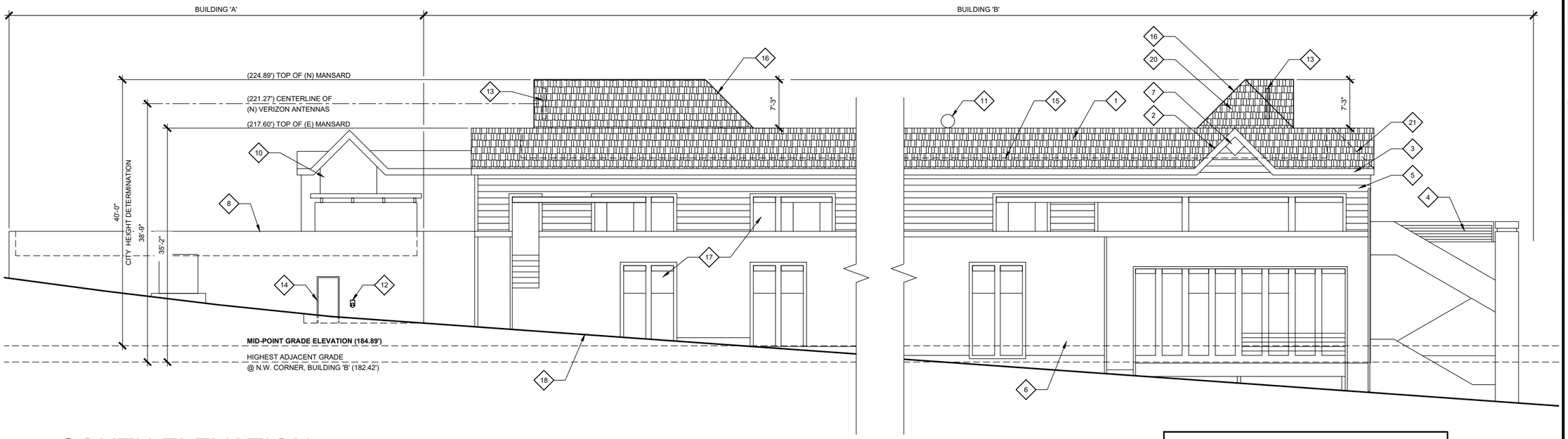
PROJECT I.D. 15949473

34085 COAST HWY
DANA POINT, CA 92629

SHEET TITLE:

EXTERIOR ELEVATIONS

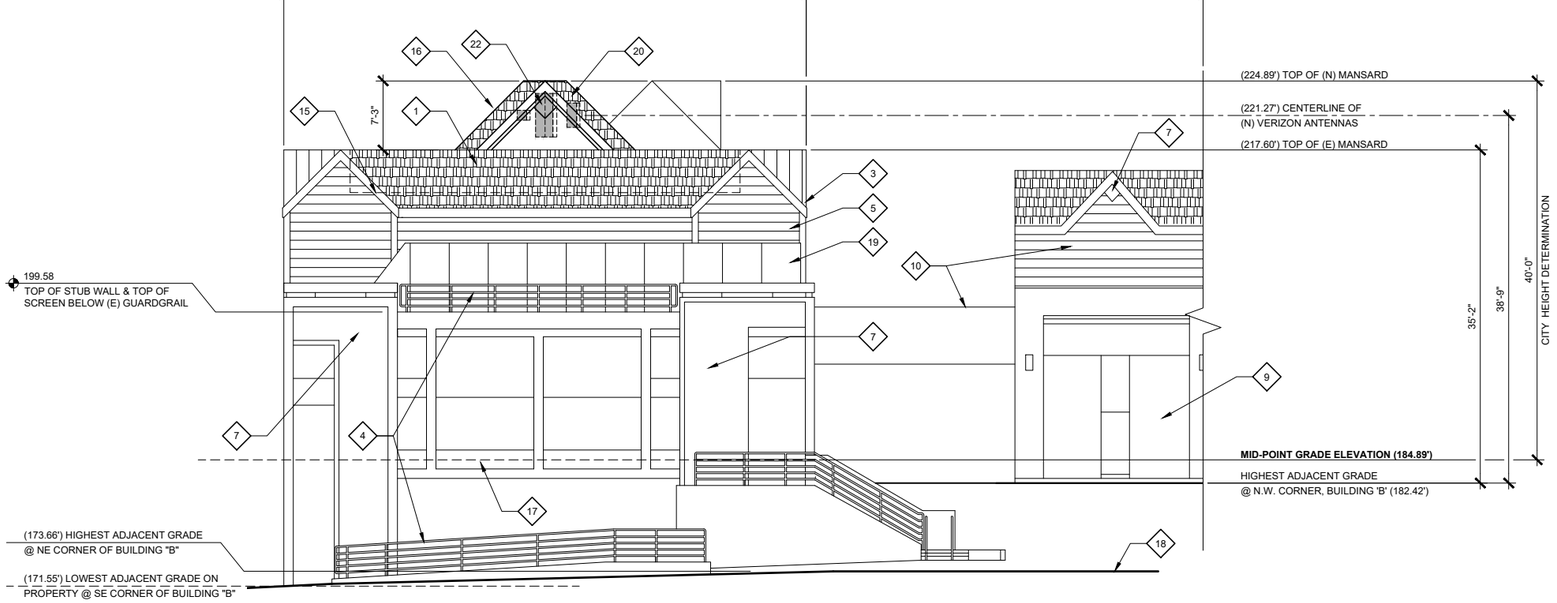
A-4



SOUTH ELEVATION

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

0" 4' 8' 16'



EAST ELEVATION

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

0" 4' 8' 16'

NOTE:
RF TRANSPARENT FRP SCREENED ROOFTOP ENCLOSURE SHALL BE DETAILED, PAINTED & TEXTURED TO MATCH (E) ADJACENT WALL & ROOF SURFACES.

KEYED NOTES:

1. (E) CONCRETE TILE ROOFING
2. (E) ROOF DORMER
3. (E) WOOD TRIM
4. (E) STEEL RAILING
5. (E) WOOD SIDING
6. (E) STUCCO SIDING
7. (E) GRANITE PANEL
8. (E) BUILDING 'A', CONCRETE BLOCK PARKING GARAGE WALLS
9. (E) STOREFRONT
10. (E) BUILDING 'A' RETAIL IN BACKGROUND
11. (E) SATELLITE ANTENNA
12. (N) REVERSE SERVICE GENERATOR RECEPTACLE AT GRADE ADJACENT TO MAIN ELECTRICAL ROOM DOOR
13. (N) VERIZON PANEL & MICROWAVE ANTENNAS MOUNTED BEHIND A (N) FRP SCREENED ROOFTOP ENCLOSURE
14. (E) DOOR TO MAIN ELECTRICAL ROOM
15. LINE FOR ROOF DECK BEYOND
16. MATCH (E) ROOF PITCH
17. (E) WINDOWS
18. (E) GRADE
19. (E) GREEN SCREEN
20. (N) CONCRETE TILE ROOFING TO MATCH (E)
21. (E) SLOPED ROOF BEYOND
22. MATCH (E) GRANITE PANEL WITH FRP MATERIAL

ISSUE STATUS

REV.	DATE	DESCRIPTION	BY
0	11/17/2021	90% ZD	RD
1	01/20/2023	DRM COMMENTS	JN
2	04/11/2023	DRM COMMENTS	RL
3	04/21/2023	100% ZD DRM REVS	RL
4	08/10/2023	HEIGHT DETERMINATION	RL
5	08/24/2023	COORDINATE W/ SURVEY	RL
6	12/22/2023	ROOFTOP REDESIGN	RL
7	04/18/2024	REVISED 90% ZD	RL
8	04/30/2024	REVISED ALPHA SECTOR	RL

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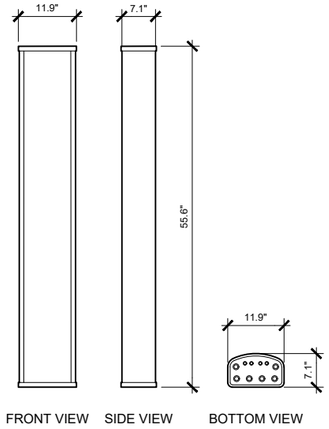
SHEET TITLE:
EXTERIOR ELEVATIONS

A-5

COMMSCOPE NHH-65A-R2B

COLOR:	LIGHT GRAY
DIMENSIONS, HxWxD:	55.6" x 11.9" x 7.1"
WEIGHT:	35.1 lbs
WIND LOAD:	FRONTAL: 206.0 N @ 150 km/h LATERAL: 169.0 N @ 150 km/h
RF CONNECTOR INTERFACE:	7-16 DIN FEMALE
RF CONNECTOR LOCTION:	BOTTOM
RF CONNECTOR QUANTITY:	2 LOW BAND 4 HIGH BAND



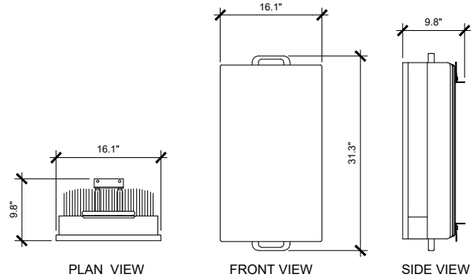
FRONT VIEW SIDE VIEW BOTTOM VIEW

ANTENNA SPECIFICATIONS | SCALE: N.T.S. | 1

ERICSSON AIR 6419

DIMENSIONS, HxWxD: 31.3" x 16.1" x 9.8"

WEIGHT: 63.05 lbs



PLAN VIEW FRONT VIEW SIDE VIEW

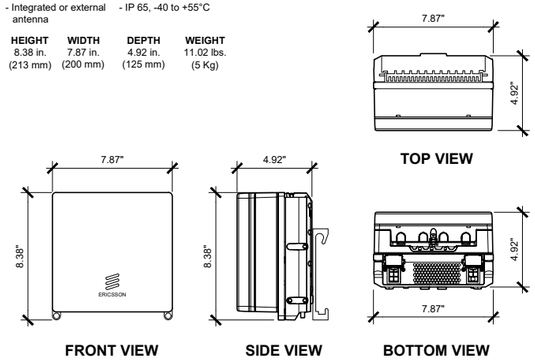
ANTENNA SPECIFICATIONS | SCALE: N.T.S. | 2

RADIO 4408 B48 DC, WITH ANTENNA

CAPACITY AND SPECIFICATIONS
- 4TX / 4RX
- UP TO 4x5W
- 120Mhz IBW
- 6 LTE CARRIERS
- 2x 10.1Gbps CPRI

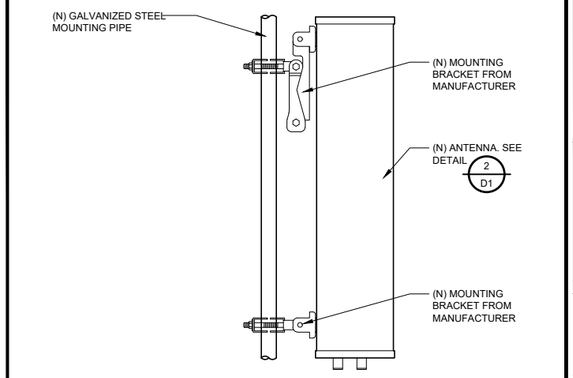
OTHER SPECIFICATIONS
- AC or -48 VDC
- Integrated or external antenna
- 2 external alarm
- IP 65, -40 to +55°C

HEIGHT	WIDTH	DEPTH	WEIGHT
8.38 in. (213 mm)	7.87 in. (200 mm)	4.92 in. (125 mm)	11.02 lbs. (5 Kg)

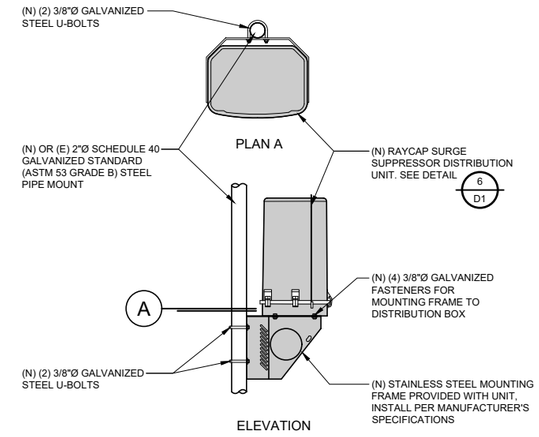


FRONT VIEW SIDE VIEW BOTTOM VIEW

RADIO 4408 W/ ANTENNA, SINGLE RADIO | SCALE: N.T.S. | 3



ANTENNA MOUNT | SCALE: N.T.S. | 4



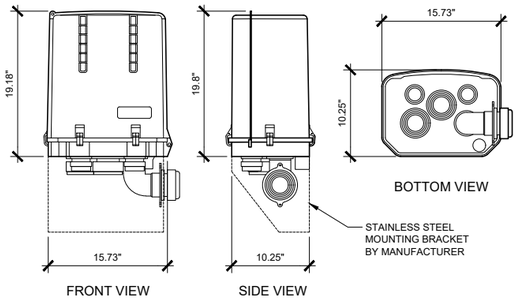
ELEVATION

RAYCAP UNIT MOUNTING | SCALE: 1" = 1'-0" | 5

RAYCAP SURGE SUPPRESSOR

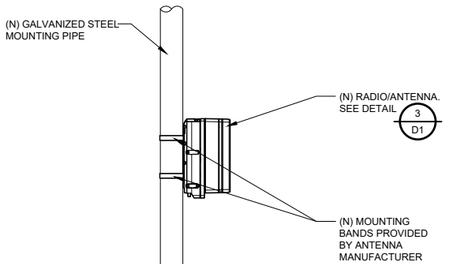
RAYCAP RVZDC-3315-PF-48 WITH SURGE SUPPRESSOR
WEIGHT: 26.9 LBS.

*VERIFY ALL DIMENSIONS AND WEIGHT WITH MANUFACTURER

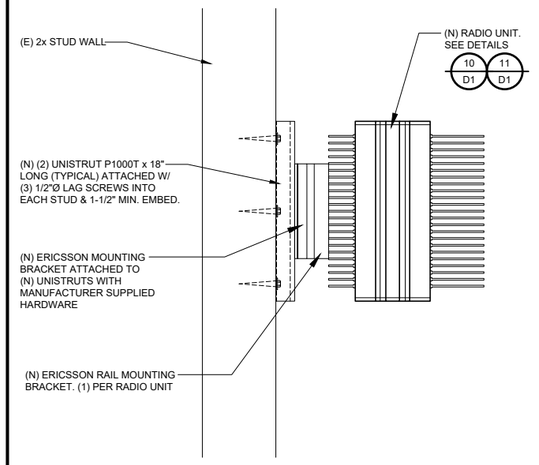


FRONT VIEW SIDE VIEW

RAYCAP SURGE SUPPRESSOR UNIT | SCALE: N.T.S. | 6



RADIO/ANTENNA MOUNT | SCALE: N.T.S. | 7

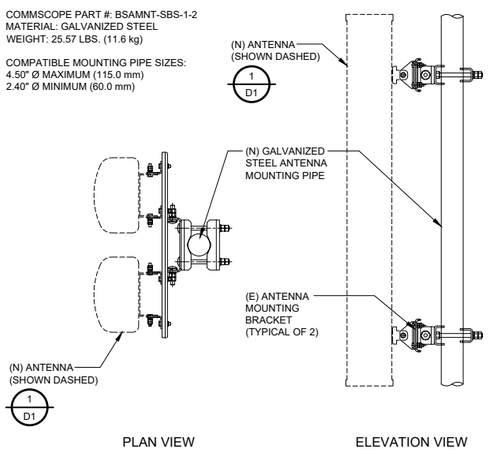


RRU MOUNTING @ ALPHA SECTOR | SCALE: N.T.S. | 8

COMMSCOPE 4-TX ANTENNA MOUNT

COMMSCOPE PART #: BSAMNT-SBS-1-2
MATERIAL: GALVANIZED STEEL
WEIGHT: 25.57 LBS. (11.6 kg)

COMPATIBLE MOUNTING PIPE SIZES:
4.50" Ø MAXIMUM (115.0 mm)
2.40" Ø MINIMUM (60.0 mm)



PLAN VIEW ELEVATION VIEW

4-TX ANTENNA MOUNT | SCALE: N.T.S. | 9

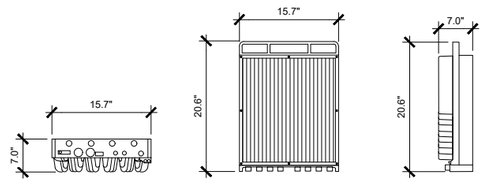
RADIO 4490

4 COMMON RF PORTS (C)

B5: 4X60W, B13; 4X60W
480 W TOTAL RF OUTPUT POWER
L, NR, NB-IoT
2x 2.5/4.9/9.8/10.1/24.3 Gbps CPRI/eCPRI

HEIGHT	WIDTH	DEPTH	WEIGHT
20.6 in. (522 mm)	15.7 in. (397 mm)	7.0 in. (178 mm)	68.4 lbs. (31.0 Kg)

-48 VDC 2-WIRE (ONE DC CONNECTOR INPUT)
AISG V3.0 TMA & RET SUPPORT VIA RS-485 OR RF CONNECTORS
TYPE 4.3-10 RF + CONNECTORS
2 EXTERNAL ALARMS
CONVECTIONAL COOLING
OPTIONAL FAN FOR INCREASED SITE FLEXIBILITY
IP 65, -40 TO +55 °C



TOP VIEW FRONT VIEW SIDE VIEW

RRU 4490 SPECIFICATIONS | SCALE: N.T.S. | 10

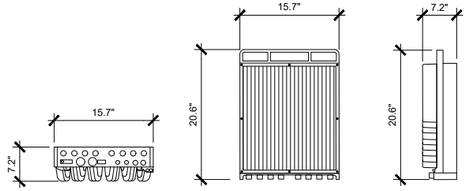
RADIO 4890

8 RF PORTS, 4T8R PER BAND (S FOR TX)

B2: 4X60W
B66: 4X60W
UP TO 480W IN TOTAL RF POWER
L, NR, NB-IoT
2x 2.5/4.9/9.8/10.1/24.3 Gbps CPRI/eCPRI

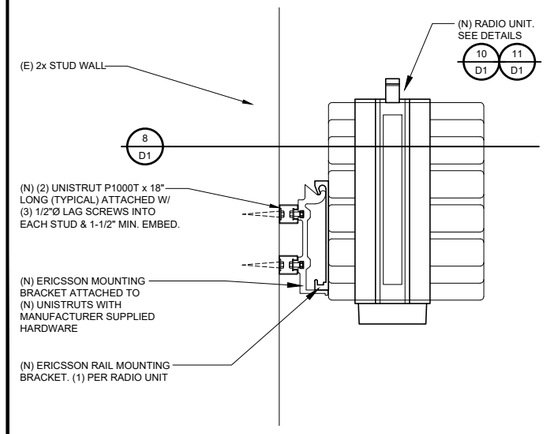
HEIGHT	WIDTH	DEPTH	WEIGHT
20.6 in. (522 mm)	15.7 in. (397 mm)	7.2 in. (182 mm)	69.5 lbs. (31.5 Kg)

-48 VDC 2-WIRE (SINGLE DC-CONNECTOR),
AISG V3.0 TMA & RET SUPPORT VIA RS-485 OR RF CONNECTORS
TYPE 4.3-10 RF + CONNECTORS
2 EXTERNAL ALARMS
CONVECTIONAL COOLING
OPTIONAL FAN FOR INCREASED SITE FLEXIBILITY
IP 65, -40 TO +55 °C



TOP VIEW FRONT VIEW SIDE VIEW

RADIO 4890 SPECIFICATIONS | SCALE: N.T.S. | 11



RRU MOUNTING @ ALPHA SECTOR | SCALE: N.T.S. | 12

ISSUE STATUS

REV.	DATE	DESCRIPTION	BY
0	11/17/2021	90% ZD	RD
1	01/20/2023	DRM COMMENTS	JN
2	04/11/2023	DRM COMMENTS	RL
3	04/21/2023	100% ZD DRM REVS	RL
4	08/10/2023	HEIGHT DETERMINATION	RL
5	08/24/2023	COORDINATE W/ SURVEY	RL
6	12/22/2023	ROOFTOP REDESIGN	RL
7	04/18/2024	REVISED 90% ZD	RL
8	04/30/2024	REVISED ALPHA SECTOR	RL

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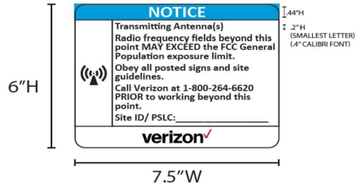
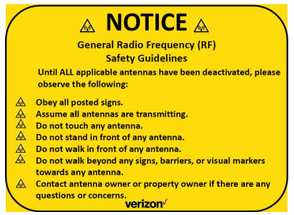
SELVA HILL RELO
PROJECT I.D. 15949473
34085 COAST HWY
DANA POINT, CA 92629

SHEET TITLE:
DETAILS

D-1

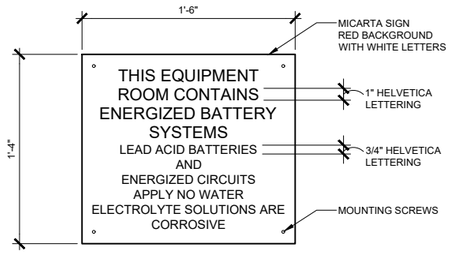
NOT USED | 13





NOTE: GENERAL CONTRACTOR SHALL CONFIRM SPECIFIC SIGNAGE AND LOCATION WITH THE RFE / EME STUDY AND THE VERIZON CONSTRUCTION MANAGER

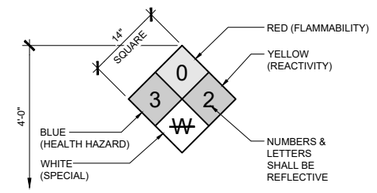
VERIZON NOTICE SIGNS | SCALE: N.T.S. | 14



PLACED ON (1) VISIBLE SIDE OF (N) EQUIPMENT ROOM ENTRANCE

NOTE: GENERAL CONTRACTOR SHALL CONFIRM SPECIFIC SIGNAGE AND LOCATION WITH THE RFE / EME STUDY AND THE VERIZON CONSTRUCTION MANAGER

BATTERY CAUTION SIGN | SCALE: N.T.S. | 15



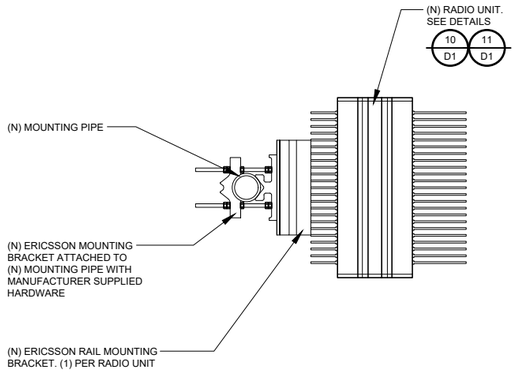
FOR BATTERIES

NOTE: GENERAL CONTRACTOR SHALL CONFIRM SPECIFIC SIGNAGE AND LOCATION WITH THE RFE / EME STUDY AND THE VERIZON CONSTRUCTION MANAGER

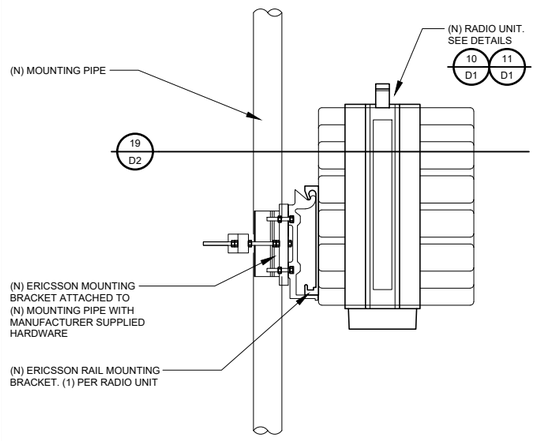
NFPA 704 PLACARDS | SCALE: N.T.S. | 16

NOT USED | 17

NOT USED | 18



RADIO UNIT MOUNTING | SCALE: N.T.S. | 19



RADIO UNIT MOUNTING | SCALE: N.T.S. | 20

NOT USED | 21

NOT USED | 22

NOT USED | 23

NOT USED | 24

ISSUE STATUS

REV.	DATE	DESCRIPTION	BY
0	11/17/2021	90% ZD	RD
1	01/20/2023	DRM COMMENTS	JN
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3	04/21/2023	100% ZD DRM REVS	RL
4	08/10/2023	HEIGHT DETERMINATION	RL
5	08/24/2023	COORDINATE W/ SURVEY	RL
6	12/22/2023	ROOFTOP REDESIGN	RL
7	04/18/2024	REVISED 90% ZD	RL
8	04/30/2024	REVISED ALPHA SECTOR	RL

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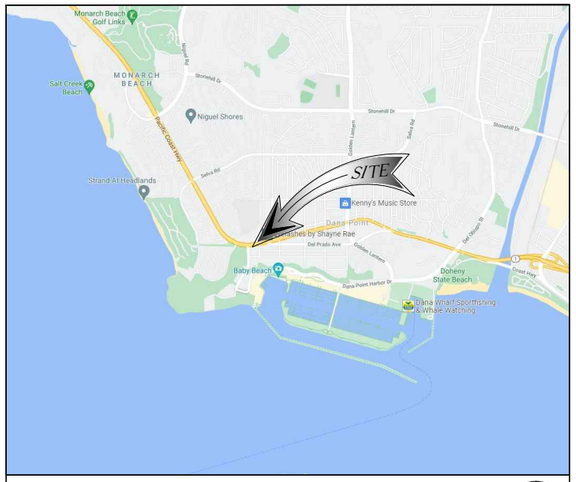
SHEET TITLE:
DETAILS

D-2



VICINITY MAP

REFERENCES

1. TRACT NO 573
BK 20 PG 29
REC DATE: APR 16 1924

2. TRACT NO 10793
BK 478 PG 46–47
REC DATE: OCT. 30, 1980

3. TRACT NO. 11684
BK 540 PG 32–34
REC DATE: JUN 3, 1985

4.TRACT NO. 16331
BK 875 PG 22
REC DATE: DEC 19, 2005

5. PARCEL MAP
BK 52 PG 57
REC DATE: JUN 13, 1973

6. RECORD OF SURVEY
NO. 2003–1037
BK 197 PG 1–7
REC DATE: DEC 03, 2003

APN

672–231–06 AND 672–231–07, ORANGE COUNTY, CALIFORNIA

RECORD OWNER

BLUE LANTERN PROPERTY LLC, A CALIFORNIA LIMITED LIABILITY COMPANY

TITLE REPORT

TITLE REPORT WAS PREPARED BY COMMONWEALTH LAND TITLE INSURANCE COMPANY WITH ORDER NO. 92020481–920–CM8 DATED MARCH 31, 2023.

BASIS OF BEARING

THE CENTERLINE OF SANTA CLARA AVE BEARING N 89°07'22" W WAS USED AS THE BASIS OF BEARING FOR THIS SURVEY.

BASIS OF ELEVATIONS: (NAVD 1988)

SITE ELEVATIONS ARE ESTABLISHED FROM THE GPS DERIVED ORTHOMETRIC HEIGHTS BY APPLICATION OF NGS "GEOID 12A" MODELED SEPARATIONS TO ELLIPSOID HEIGHTS DETERMINED BY OBSERVATIONS OF THE "LEICA SMARTNET" REAL TIME NETWORK. ALL ELEVATIONS SHOWN HEREON ARE REFERENCED TO NAVD88. CALIFORNIA ZONE 6.

FLOOD ZONE

SITE IS LOCATED IN FLOOD ZONE "X" AS PER F.I.R.M. MAP NO. 06059C0504K
EFFECTIVE DATE 03/21/2019

LEGAL DESCRIPTION

ALL THAT CERTAIN REAL PROPERTY SITUATED IN THE CITY OF DANA POINT, COUNTY OF ORANGE, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

PARCEL A:
LOTS 1, 2, 3, AND 4 IN BLOCK "F" OF TRACT NO. 573, IN THE CITY OF DANA POINT, COUNTY OF ORANGE, STATE OF CALIFORNIA, AS SHOWN ON A MAP RECORDED IN BOOK 20, PAGE 29 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA.

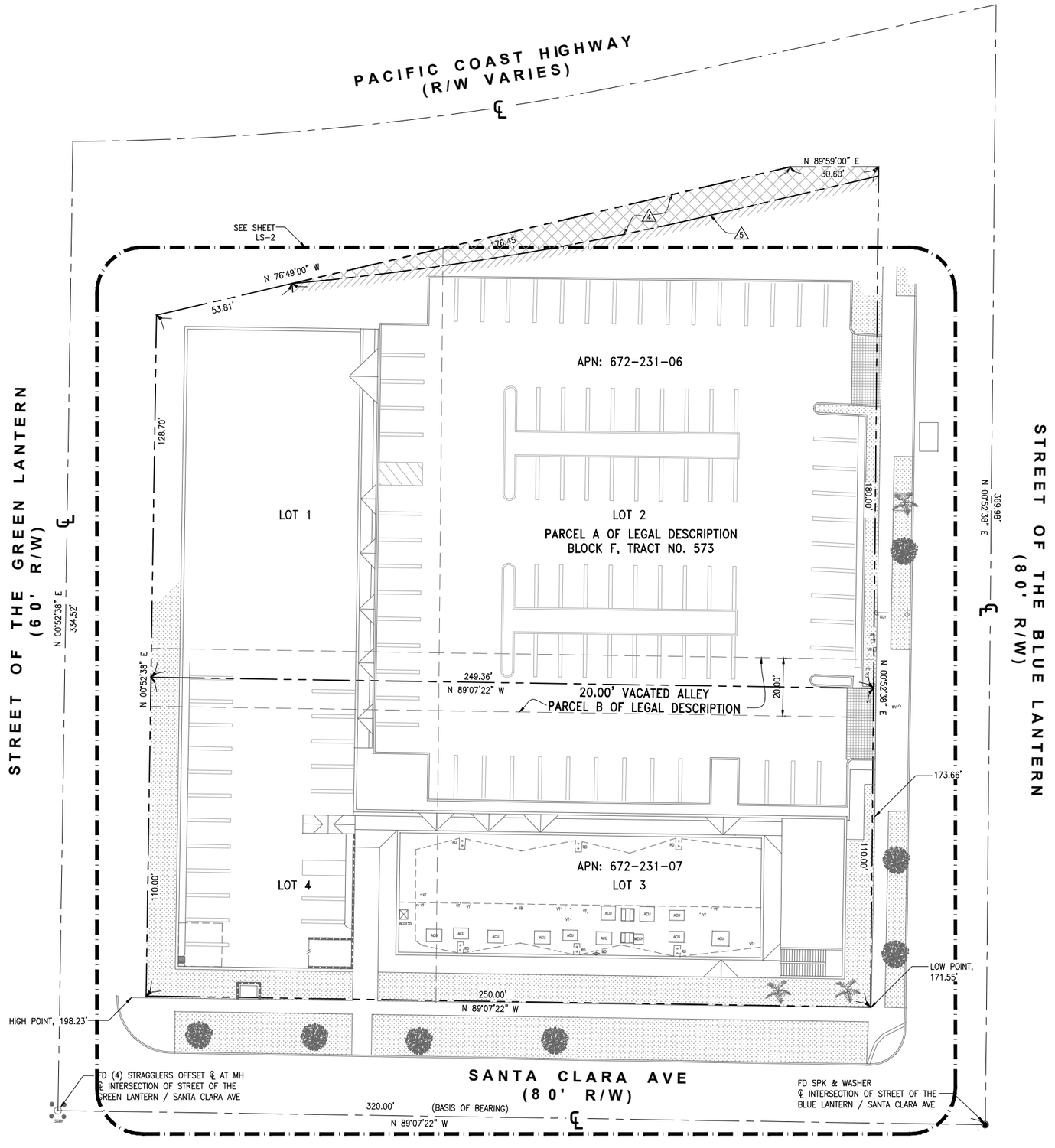
PARCEL B:
THAT PORTION OF TRACT NO. 573, AS SHOWN ON A MAP RECORDED IN BOOK 20, PAGE 29 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA BOUNDED AS FOLLOWS: ON THE SOUTH BY THE NORTH LINES OF LOT 3 AND 4 IN BLOCK "F" SAID TRACT, ON THE NORTH BY THE SOUTH LINES OF LOTS 1 AND 2 IN SAID BLOCK "F," ON THE EAST BY THE NORTHERLY PROLONGATION OF THE EAST LINE OF SAID LOT 3, AND ON THE WEST BY THE NORTHERLY PROLONGATION OF THE WEST LINE OF SAID LOT 4, AS VACATED BY RESOLUTION NO. 89–52 OF THE CITY COUNCIL OF THE CITY OF DANA POINT, A CERTIFIED COPY OF WHICH WAS RECORDED JUNE 21, 1991 AS INSTRUMENT NO. 91–320831 OF OFFICIAL RECORDS OF SAID ORANGE COUNTY.

SCHEDULE B

ITEMS A–E ARE TAX/LIEN RELATED
ITEM 1 IS WATER RIGHTS RELATED
ITEMS 2,6,7 ARE COVENANTS, CONDITIONS AND RESTRICTIONS NOT RELATED TO THE SURVEY OF THE LAND
ITEM 3 IS A RESOLUTION
ITEMS 8–12 ARE NOTICE RELATED
ITEMS 13 AND 14 ARE DISCLAIMERS

⚠3 EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:
GRANTED TO: STATE OF CALIFORNIA
PURPOSE: STATE HIGHWAY
RECORDING DATE: APRIL 29, 1932
RECORDING NO: BOOK 549 PAGE 304 OF OFFICIAL RECORDS
AFFECTS: A PORTION OF SAID LAND

⚠5 THE OWNERSHIP OF SAID LAND DOES NOT INCLUDE RIGHTS OF ACCESS TO OR FROM THE STREET, HIGHWAY, OR FREEWAY ABUTTING SAID LAND, SUCH RIGHTS HAVING BEEN RELINQUISHED BY THE DOCUMENT,
RECORDING DATE: APRIL 29, 1932
RECORDING NO: BOOK 549 PAGE 304 OF OFFICIAL RECORDS
AFFECTS: A PORTION OF SAID LAND



20' 10' 0' 20' 40'
GRAPHIC SCALE: 1"=20'

NOTE: THE ORIGINAL SIZE OF THIS PLAN IS 24" X 36". SCALE RATIO IS NOT VALID FOR REDUCED OR ENLARGED SHEET SIZES

ISSUE STATUS

REV.	DATE	DESCRIPTION	BY
0	04/26/21	PRELIMINARY SURVEY	AB
1	05/05/23	FINAL SURVEY	LJ
2	08/08/23	UPDATE SURVEY	LJ
3	08/14/23	PARAPET/GABLE ELEVATION UPDATE	LJ
4	08/25/23	FINISH SURFACE UPDATE	LJ

AJK
23072 LAKE CENTER DR., SUITE 211
LAKE FOREST, CA 92630
714.624.9027

verizon

15505 SAND CANYON AVENUE, D1
IRVINE, CA 92618

REGISTERED PROFESSIONAL ENGINEER
ANDREW J KOLTAVARY
EXP. 03/31/24
CIVIL
STATE OF CALIFORNIA

NCD
SELVA HILL

34085 PACIFIC COAST HWY
DANA POINT, CA 92629

SHEET TITLE:
TITLE DETAILS

LS-1

LEGEND

	CENTER LINE
	PROPERTY LINE
—x—x—	CHAIN–LINK FENCE
	WOOD FENCE
	WROUGHT IRON FENCE
	EASEMENT LINE
	CMU WALL
TW	TOP OF WALL
TC	TOP OF CURB
BW	BACK–OF–WALK
FS	FINISH SURFACE
FG	FINISH GRADE
EG	EXISTING GRADE
RS	ROOF SURFACE
TPP	TOP OF PARAPET
JB	JUNCTION BOX
VT	VENT
VLT	VAULT
MD	MICROWAVE DISH
RD	ROOF DRAIN
WW	WINDOW WASHER
ACU	AIR–CONDITION UNIT
SSMH	SANITARY SEWER MANHOLE
SDMH	STORM DRAIN MANHOLE
	EXISTING STREET LIGHT
	EXISTING SIGN
	GUY WIRE
	CATCH BASIN
	POWER POLE
	FIRE HYDRANT
	TREE

MONUMENTS

MONUMENT FD. (AS NOTED)

COORDINATES

ALPHA
LATITUDE: 33°27'52.96" N (33.464711°)
LONGITUDE: 117°42'24.47" W (–117.706797°)

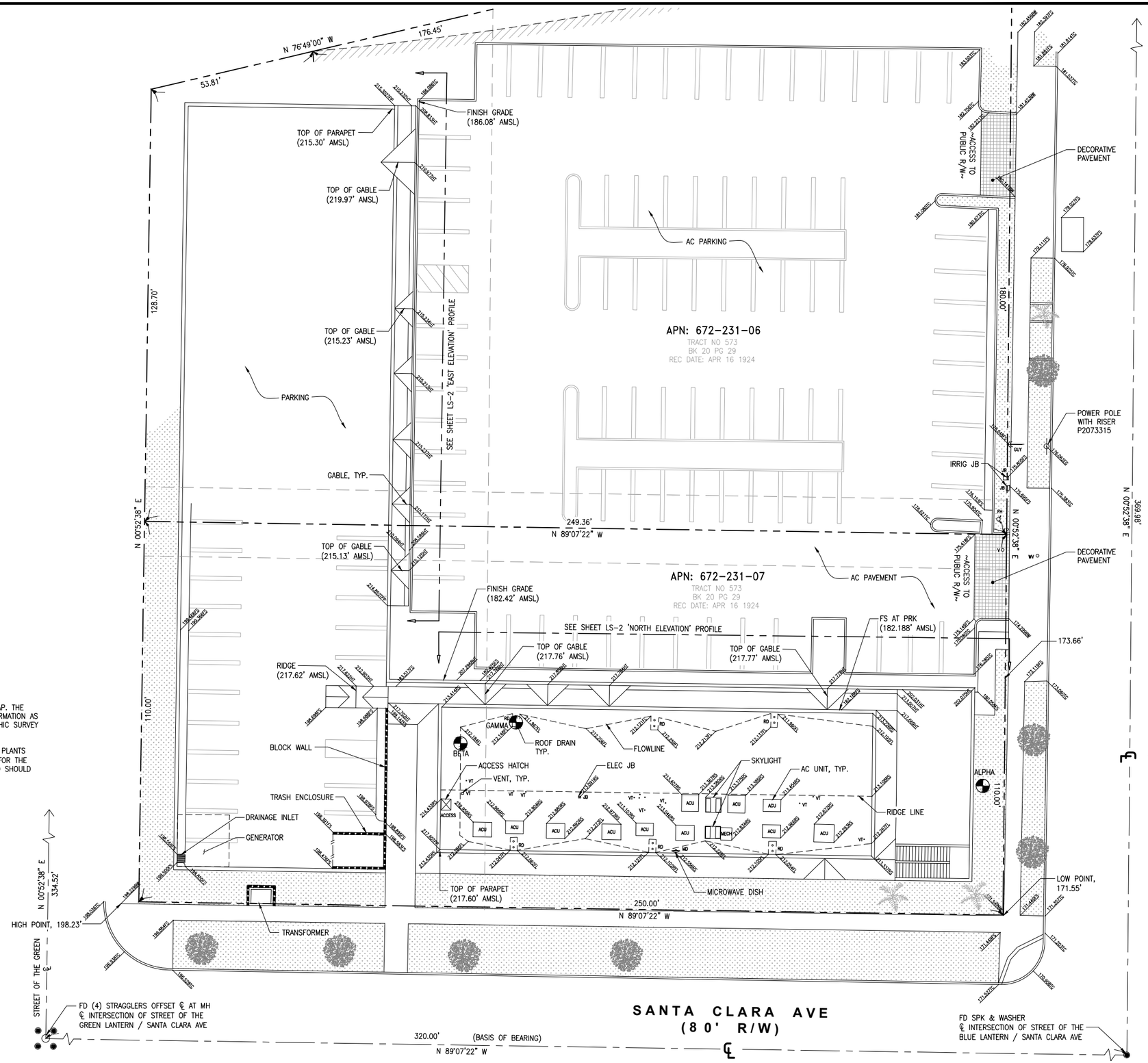
BETA
LATITUDE: 33°27'53.06" N (33.464739°)
LONGITUDE: 117°42'26.23" W (–117.707286°)

GAMMA
LATITUDE: 33°27?53.12" N (33.464756°)
LONGITUDE: 117°42'26.05" W (–117.707236°)

NOTES:
1. THIS IS NOT A BOUNDARY SURVEY. THIS IS A SPECIALIZED TOPOGRAPHIC MAP. THE PROPERTY LINES AND EASEMENTS SHOWN HEREON ARE FROM RECORD INFORMATION AS NOTED HEREON. AJK ENGINEERING AND SURVEY TRANSLATED THE TOPOGRAPHIC SURVEY TO RECORD INFORMATION USING FOUND MONUMENTS SHOWN HEREON.
2. THE HEIGHTS AND ELEVATIONS FOR THE TREES, BUSHES AND OTHER LIVING PLANTS SHOWN HEREON, SHOULD BE CONSIDERED APPROXIMATE (+/–) AND ONLY FOR THE DATE OF THIS SURVEY. THEY ARE PROVIDED AS A GENERAL REFERENCE AND SHOULD NOT BE USED FOR DESIGN PURPOSES.
3. FIELD SURVEY COMPLETED ON APRIL 22, 2021

15' 7.5' 0' 15' 30'
GRAPHIC SCALE: 1"=15'

NOTE: THE ORIGINAL SIZE OF THIS PLAN IS 24" X 36". SCALE RATIO IS NOT VALID FOR REDUCED OR ENLARGED SHEET SIZES



ISSUE STATUS

REV.	DATE	DESCRIPTION	BY
0	04/26/21	PRELIMINARY SURVEY	AB
1	05/05/23	FINAL SURVEY	LJ
2	08/08/23	UPDATE SURVEY	LJ
3	08/14/23	PARAPET/GABLE ELEVATION UPDATE	LJ
4	08/25/23	FINISH SURFACE UPDATE	LJ

AJK
23072 LAKE CENTER DR., SUITE 211
LAKE FOREST, CA 92630
714.624.9027

verizon

15505 SAND CANYON AVENUE, D1
IRVINE, CA 92618

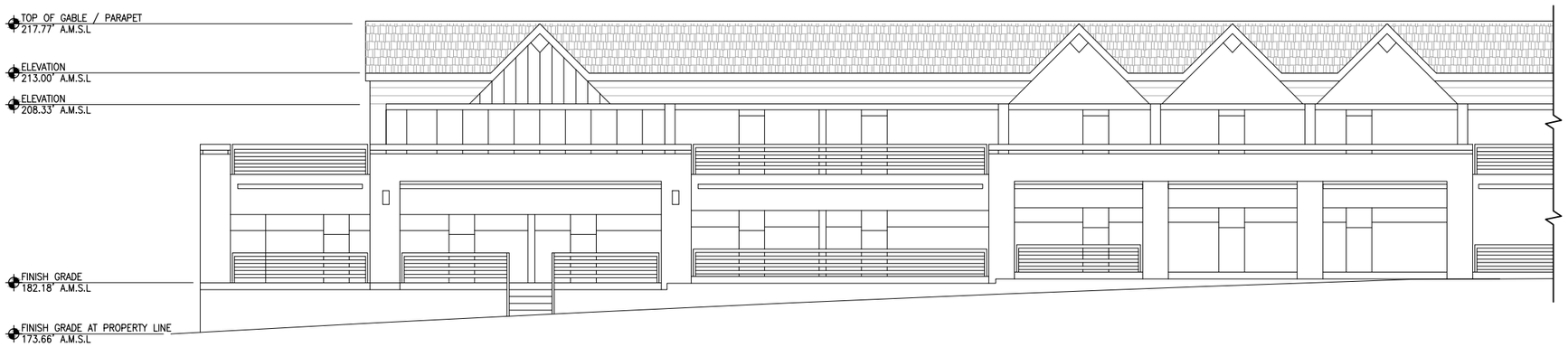
REGISTERED PROFESSIONAL ENGINEER
ANDREW J KOLTAVARY
No. 26574
EXP. 03/31/24
CIVIL
STATE OF CALIFORNIA

NCD
SELVA HILL

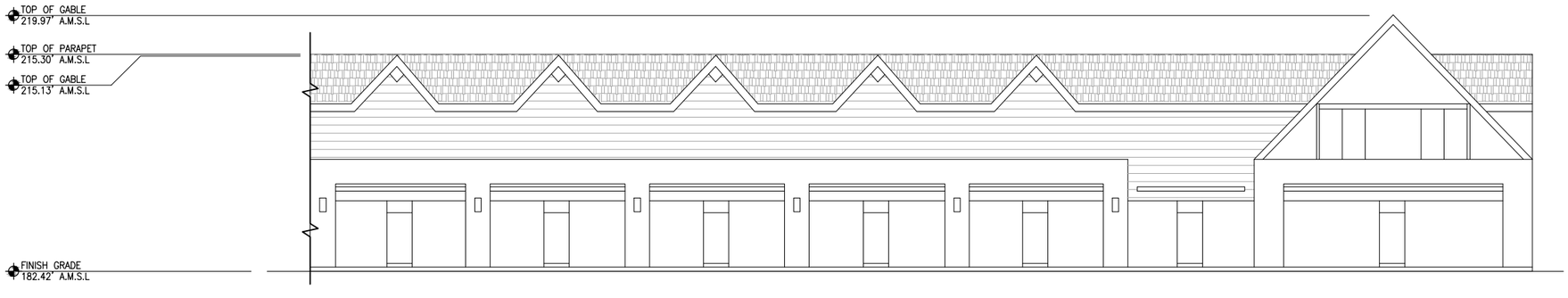
34085 PACIFIC COAST HWY
DANA POINT, CA 92629

SHEET TITLE:
TOPOGRAPHIC SURVEY

LS-2



NORTH ELEVATION
NTS



EAST ELEVATION
NTS

NOTE: THE ORIGINAL SIZE OF THIS PLAN IS 24" X 36". SCALE RATIO IS NOT VALID FOR REDUCED OR ENLARGED SHEET SIZES

ISSUE STATUS

REV.	DATE	DESCRIPTION	BY
0	04/27/21	PRELIMINARY SURVEY	AB
1	05/05/23	FINAL SURVEY	LJ
2	08/08/23	UPDATE SURVEY	LJ
3	08/14/23	PARAPET/GABLE ELEVATION UPDATE	LJ
4	08/25/23	FINISH SURFACE UPDATE	LJ

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EXP. 03/31/24
CIVIL
STATE OF CALIFORNIA

NCD
SELVA HILL

34085 PACIFIC COAST HWY
DANA POINT, CA 92629

SHEET TITLE:

ELEVATIONS

LS-3

Selva Hill NCD
Project ID 15949473
34085 Coast Highway
Dana Point, CA 92629

verizon

EXISTING

PROPOSED

These simulations are intended for graphical purposes only and not intended to be part of or to replace the information provided on the construction drawings

5/13/2024

Photosimulation of proposed telecommunications site: Northeasterly elevation view from PCH

Selva Hill NCD
Project ID 15949473
34085 Coast Highway
Dana Point, CA 92629

verizon

EXISTING

Proposed antennas mounted behind
a new FRP screened roof enclosure

PROPOSED

These simulations are intended for graphical purposes only and not intended to be part of or to replace the information provided on the construction drawings

Photosimulation of proposed telecommunications site: Southeast elevation view from Blue Lantern

5/13/2024

Selva Hill NCD
Project ID 15949473
34085 Coast Highway
Dana Point, CA 92629

verizon

EXISTING

PROPOSED

These simulations are intended for graphical purposes only and not intended to be part of or to replace the information provided on the construction drawings

5/13/2024

Photosimulation of proposed telecommunications site: Southwesterly elevation view from Green Lantern

Selva Hill NCD
Project ID 15949473
34085 Coast Highway
Dana Point, CA 92629

verizon

EXISTING

PROPOSED

These simulations are intended for graphical purposes only and not intended to be part of or to replace the information provided on the construction drawings

5/13/2024

Photosimulation of proposed telecommunications site: Northwesterly elevation view from PCH

Selva Hill NCD
Project ID 15949473
34085 Coast Highway
Dana Point, CA 92629

verizon

EXISTING

PROPOSED

These simulations are intended for graphical purposes only and not intended to be part of or to replace the information provided on the construction drawings

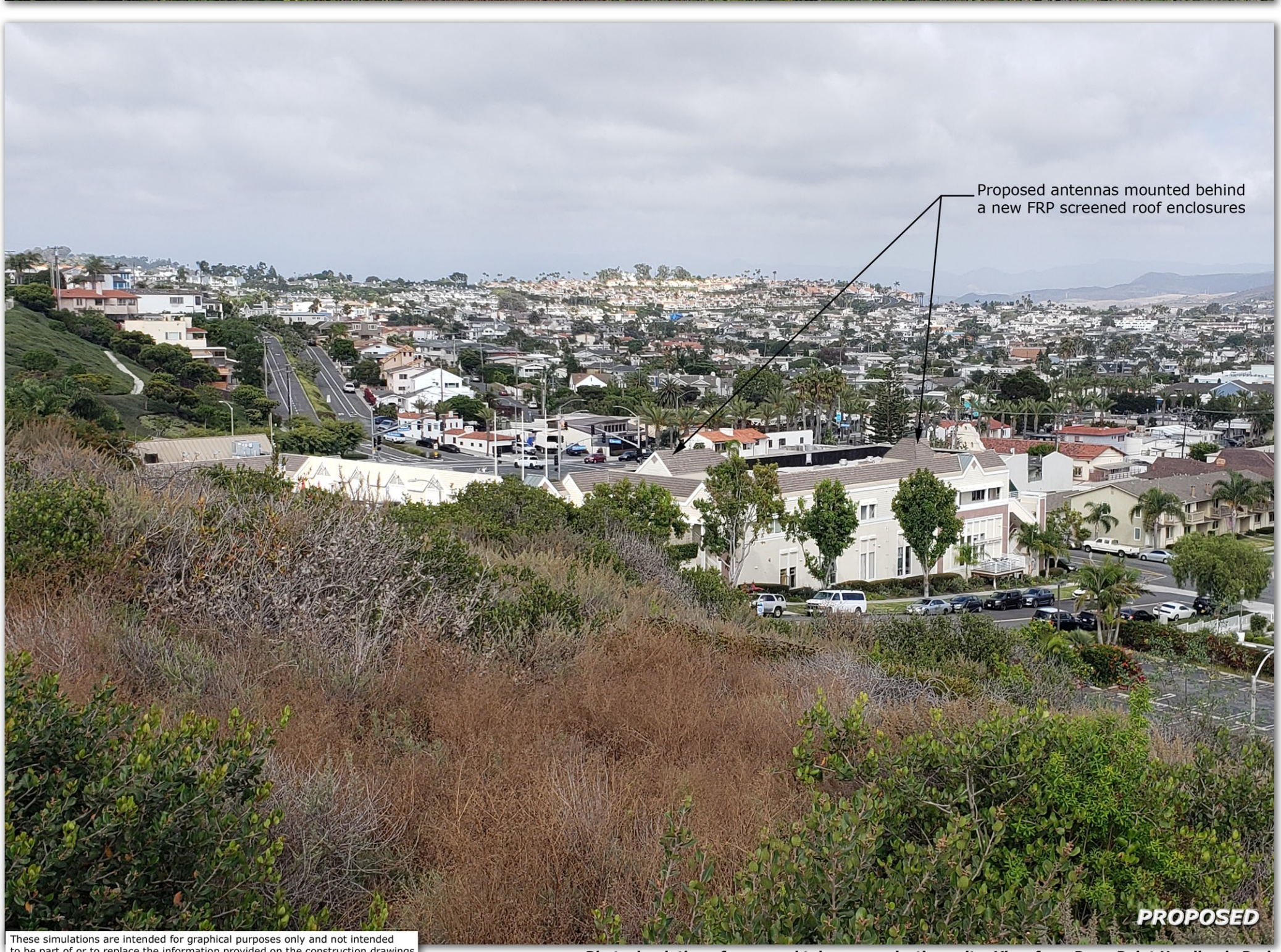
Photosimulation of proposed telecommunications site: View from Dana Point Headlands Park

5/13/2024

Selva Hill NCD
Project ID 15949473
34085 Coast Highway
Dana Point, CA 92629

verizon

EXISTING



PROPOSED

These simulations are intended for graphical purposes only and not intended to be part of or to replace the information provided on the construction drawings

Photosimulation of proposed telecommunications site: View from Dana Point Headlands Park

5/13/2024

Selva Hill NCD
Project ID 15949473
34085 Coast Highway
Dana Point, CA 92629

verizon

EXISTING

Proposed antennas mounted behind a new FRP screened roof enclosures
(Alpha sector enclosure not visible behind palm trees from this viewpoint)

PROPOSED

These simulations are intended for graphical purposes only and not intended to be part of or to replace the information provided on the construction drawings

5/28/2024

Photosimulation of proposed telecommunications site: View from upper balcony at 77 Palm Beach Ct.

SUPPORTING DOCUMENT 6: Site Search Exhaustion Study

VZW "SELVA HILL" – SITE SEARCH EXHAUSTION HISTORY **EXHIBIT A**

The following candidates were explored, evaluated, and abandoned (2016 – 2017 – 2018):

Name	Address	Reason
Blue Lantern Inn	34343 Street of the Blue Lantern DANA POINT, CA 92624	RF needs a site closer to PCH. Explored a faux chimney design. LL was interested, but very concerned with the level of noise during construction. Initial rent discussions with LL were extremely high.
Gracie	34085 COAST HWY DANA POINT, CA 92624	Site was killed when the LL refused to return emails and calls. LL had requested xxx$K upfront and when VZW said they were not able to provide payments until lease was signed, LL went silent.
Hilltop Park	Street of the Green Lantern	Code prohibits wireless site here
Bella	34100 COAST HWY DANA POINT, CA 92629	Nursery Site has no room for a tower and ground equipment.
Enterprise	24366 DEL PRADO DANA POINT, CA 92629	Site has low roof and little to no room for a tower.
Jack's	24462 DEL PRADO DANA POINT, CA 92629	RF not satisfied with location, too low. Limited options for roof location; no ground space.

Summary:

This targeted area of Dana Point has limited options and is mostly low single- and two-story structures with topography declining to the south and west. This limits options to essentially properties along PCH and towards the upper elevations at the base of the residential hillside homes. Options for free-standing towers are minimal, rooftop sites deemed most likely to succeed if lease terms can be reached successfully and design concepts can be approved.

VZW "SELVA HILL" – SITE SEARCH EXHAUSTION HISTORY **EXHIBIT A**

The following candidates were explored, evaluated, and abandoned (2016 – 2017 – 2018):

Name	Address	Reason
Blue Lantern Inn	34343 Street of the Blue Lantern DANA POINT, CA 92624	RF needs a site closer to PCH. Explored a faux chimney design. LL was interested, but very concerned with the level of noise during construction. Initial rent discussions with LL were extremely high.
Gracie	34085 COAST HWY DANA POINT, CA 92624	Site was killed when the LL refused to return emails and calls. LL had requested xxx$K upfront and when VZW said they were not able to provide payments until lease was signed, LL went silent.
Hilltop Park	Street of the Green Lantern	Code prohibits wireless site here
Bella	34100 COAST HWY DANA POINT, CA 92629	Nursery Site has no room for a tower and ground equipment.
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Summary:

This targeted area of Dana Point has limited options and is mostly low single- and two-story structures with topography declining to the south and west. This limits options to essentially properties along PCH and towards the upper elevations at the base of the residential hillside homes. Options for free-standing towers are minimal, rooftop sites deemed most likely to succeed if lease terms can be reached successfully and design concepts can be approved.

SUPPORTING DOCUMENT 7: RF Emissions Compliance Report

TTS·Wireless
Telecom Technology Services
AN AMDOCS COMPANY

Radio Frequency Exposure

RF Safety and NIER Analysis Report

05/31/2024

Site: SELVA HILL

Dana Point, CA

Prepared for: Verizon

Table of Contents

1 Certification

This report, prepared by Telecom Technology Services, Inc. for **Verizon**, is intended to document compliance and evaluate power density levels as outlined in the report. The computations, analysis, and resulting report and conclusions were based on applicable FCC guidelines and regulations for maximum permissible exposure to humans consistent with FCC OET Bulletin 65, Edition 97-01.

Additionally, Telecom Technology Services, Inc. certifies that the assumptions are valid and that the data used within Telecom Technology Services control are accurate, including information collected as part of Telecom Technology Services field surveys. Telecom Technology Services, Inc. does not however certify the accuracy or correctness of any data provided to Telecom Technology Services, Inc. for this analysis and report by Verizon or other third parties working on behalf of Verizon.

I certify that the attached RF exposure analysis and report is correct to the best of my knowledge, and all calculations, assumptions and conclusions are based on generally acceptable engineering practices:

SIGNED, 18 JUN 2024

Tim Alexander, PE

Digitally signed by Tim Alexander, PE
DN: cn=Tim Alexander, PE, o=Proteus Power Engineering, ou, email=proteuspower@outlook.com, c=US
Date: 2024.06.18 15:26:05 -07'00'

Tim Alexander, P.E.

Report Prepared by: Mohamed Ahmed, 05/31/2024
Report Reviewed by: Mike Arnold, 05/31/2024

2 Executive Summary

This report provides the results of an RF power density analysis performed for **Verizon** at site **SELVA HILL** in accordance with the Federal Communications Commission (FCC) rules and regulations for RF emissions described in OET Bulletin 65, Edition 97-01.

This report addresses RF safety for two classified groups defined by OET Bulletin 65: Occupational/ Controlled and General Population/ Uncontrolled. Based on the analysis, this site will be **Compliant** with FCC rules and regulations and Verizon's Signage and Barrier Policy if the mitigation details provided in Table 1 are implemented.

Final Compliant Configuration							
	GUIDELINES	**NOTICE**	**CAUTION**	**WARNING**	**NOC INFO**	**BARRIER/MARKER**	
Access Point(s)	☒ [1]*	☐ [ ]	☐ [ ]	☐ [ ]	☒ [1]*	☐	
Alpha	☐ [ ]	☒ [2]	☐ [ ]	☐ [ ]	☐ [ ]	☒	8'x 8'
Beta	☐ [ ]	☐ [ ]	☐ [ ]	☐ [ ]	☐ [ ]	☐	
Gamma	☐ [ ]	☐ [ ]	☐ [ ]	☐ [ ]	☐ [ ]	☐	

NOTE: The table represents either the signage/barriers installed / removed OR items required by the market (if mitigation is not installed by consultant/vendor).

** These RF signs should be posted at the Access Hatch to the Main Roof.*
** These RF signs should be posted on the Barrier of Alpha sector. (See drawing in Section 5.2).*

Specialty Sign Detail

Location	**N/A**
Access Point	**N/A**
Alpha	**N/A**
Beta	**N/A**
Gamma	**N/A**

NOTE: The tables above represent EXISTING compliance items implemented at this location.

Notes/ Additional Compliance Requirements(s):
Mitigation is required per the Signage/ Barrier Diagram.

Table 1: Mitigation Requirements for Compliance

2.1 Conclusion and Recommendations

- The results of the analysis indicate that the power density levels in the generally accessible areas on the Antenna Level for Alpha Sector will not exceed the FCC's MPE limit for General Population. Notice that the power density levels will exceed the FCC's MPE limit for General Population, Occupational and 10x Occupational limits in front of the antennas which it is not generally accessible areas.
- The results of the analysis indicate that the power density levels in the generally accessible areas on the Pitched Roof 1 Level will not exceed the FCC's MPE limit for General Population.
- The results of the analysis indicate that the power density levels in the generally accessible areas on the Main Roof Level will exceed the FCC's MPE limit for General Population.
- The results of the analysis indicate that the power density levels in the generally accessible areas on the Parking Roof Level will not exceed the FCC's MPE limit for General Population.
- The results of the analysis indicate that the power density levels in the generally accessible areas on the Lower Roof (Balcony) Level will not exceed the FCC's MPE limit for General Population.
- The results of the analysis indicate that the power density levels in the generally accessible areas on the Stairs Level will not exceed the FCC's MPE limit for General Population.
- The results of the analysis indicate that the power density levels in the generally accessible areas on the Ground Level will not exceed the FCC's MPE limit for General Population.
- The max theoretical % MPE (General Public) is **8158.02%** directly in front of the antennas beams at the Antenna Level for Alpha Sector. Notice that the power density levels will exceed the FCC's MPE limit for General Population Occupational and 10x Occupational limits in front of the antennas which it is not generally accessible areas.
- NOC and Guidelines signs need to be posted at the Access Hatch to the Main Roof.

Note: Modifications to the site; and/or increases in channel counts or power levels exceeding those listed in this report will require additional evaluation to determine compliance.

3 Introduction

The purpose of this analysis and report is to evaluate the cumulative power density levels of all non-excluded antennas located on the site and identify any areas of concern that require mitigation. This report also assesses the site's compliance with FCC OET Bulletin 65; "Guidelines for Human Exposure to Radio-frequency Electromagnetic Fields".

The power density simulation performed for this site utilized RoofMaster® analysis software. All antennas were assigned an operating frequency and transmit power and were deemed to be operating at 100% of their configured output power.

3.1 Site Description:

- **Site Name:** SELVA HILL
- **Street Address:** 34085 Coast Highway
  Dana Point, CA 92629
- **Latitude:** 33° 27' 53.14" N
- **Longitude:** 117° 42' 24.73" W
- **Structure Type**: Rooftop
- **Structure Height**: ± 40.0' AGL
- **Co-Locators/ Other Antennas**: N/A
- **BTS Equipment Location**: The Verizon equipment is located on the Main Roof.

3.2 Site Configuration Being Modeled

- This is a Three-sector site supporting 5GNR at 850 MHz, LTE at 700, 850, 1900, 2100 MHz, CBRS at 3600 MHz and C-Band at 3700 MHz for all sectors. ALL LTE assumes 4x4 MIMO.
- The values of the antennas rad center of Alpha sector (26.08'), the values of the antennas rad center of Beta and Gamma sectors (18.44'), Main Roof height (30') and Stairs height (9') are based on the CDs, Google Erath and RFDS. These values must be verified on the site audit for the post study.
- The Pitched Roof 1 has the same height as the Pitched Roof 2 (34').
- The Parking Roof has the same height as the Lower Roof (Balcony) (15').

4 Predictive Analysis Details

For purposes of this analysis, RoofMaster® was configured to provide an output based on the appropriate MPE limit(s) published in the FCC's guidelines. The antenna information was loaded into RoofMaster®, an MPE predictive analysis tool by Waterford Consultants, LLC.

4.1 Analysis Locations:

Number of Elevations Analyzed: 6

- Antenna Level for Alpha Sector Level
- Pitched Roof Level.
- Main Roof Level.
- Parking Roof Level.
- Stairs Level.
- Ground Level.

4.2 Antenna Inventory

The following table contains the technical data used to simulate the power density that may be encountered with all antennas simultaneously operating at full rated power with the exception of any excluded antennas cited in this document. If co-locator's antennas exist and specific antenna details could not be secured, generic antennas, frequencies, and transmit powers were used for modeling. The assumptions used are based on past experience with communications carriers.

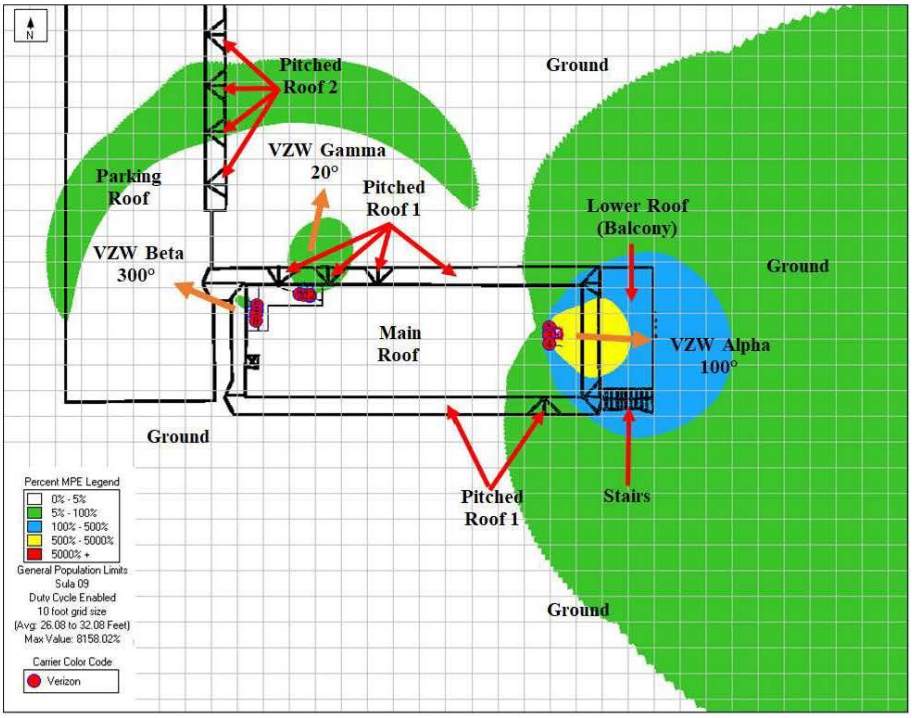
ID	Name	(MHz) Freq	Trans Power	Trans Count	Other Loss	Calc Power	Power ERP	MD Tilt (Deg)	Mfg	Model	Antenna Level (Alpha Sector) Z (ft)	Pitched Roof 1 Z (ft)	Main Roof Z (ft)	Parking Roof Z (ft)	Stairs Z (ft)	Ground Z (ft)	Type	(ft) Aper	dBd Gain	BWdth	Orientation
VZ Alpha_Ant1	C-Band	3700	0.3125	64	0	20.0	7259	0	ERICSSON	SON_AIR6419	0.00	-7.92	-3.92	11.08	17.08	26.08	Panel	2.4	23.45	11	100
VZ Alpha_Ant2	L700	730	60	2	0.5	107.0	2149.2	0	COMMSCOPE	SON_NHH-65A-R2B	0.00	-7.92	-3.92	11.08	17.08	26.08	Panel	4.6	10.88	66	100
VZ Alpha_Ant2	L850	880	60	2	0.5	107.0	2444.5	0	COMMSCOPE	SON_NHH-65A-R2B	0.00	-7.92	-3.92	11.08	17.08	26.08	Panel	4.6	11.44	61	100
VZ Alpha_Ant2	L2100	2110	40	4	0.5	142.6	6471	0	COMMSCOPE	SON_NHH-65A-R2B	0.00	-7.92	-3.92	11.08	17.08	26.08	Panel	4.6	14.42	61	100
VZ Alpha_Ant2	L2100_3	2170	40	4	0.5	142.6	6471	0	COMMSCOPE	SON_NHH-65A-R2B	0.00	-7.92	-3.92	11.08	17.08	26.08	Panel	4.6	14.42	61	100
VZ Alpha_Ant3	L700	730	60	2	0.5	107.0	2149.2	0	COMMSCOPE	SON_NHH-65A-R2B	0.00	-7.92	-3.92	11.08	17.08	26.08	Panel	4.6	10.88	66	100
VZ Alpha_Ant3	L850	880	60	2	0.5	107.0	2444.5	0	COMMSCOPE	SON_NHH-65A-R2B	0.00	-7.92	-3.92	11.08	17.08	26.08	Panel	4.6	11.44	61	100
VZ Alpha_Ant3	L1900	1900	80	4	0.5	285.2	12764	0	COMMSCOPE	SON_NHH-65A-R2B	0.00	-7.92	-3.92	11.08	17.08	26.08	Panel	4.6	14.36	64	100
VZ Alpha_Ant4	CBRS	3600	5	4	0	20.0	294	0	ERICSSON	SON_KRE105281	0.00	-7.92	-3.92	11.08	17.08	26.08	Switched Beam	1.0	9.53	64	100
VZ Beta_Ant1	C-Band	3700	0.3125	64	0	20.0	7259	0	ERICSSON	SON_AIR6419	-7.64	-15.56	-11.56	3.44	9.44	18.44	Panel	2.4	23.45	11	300
VZ Beta_Ant2	L700	730	5	2	0.5	8.9	178.82	0	COMMSCOPE	SON_NHH-65A-R2B	-7.64	-15.56	-11.56	3.44	9.44	18.44	Panel	4.6	10.88	66	300
VZ Beta_Ant2	L850	880	5	2	0.5	8.9	203.43	0	COMMSCOPE	SON_NHH-65A-R2B	-7.64	-15.56	-11.56	3.44	9.44	18.44	Panel	4.6	11.44	61	300
VZ Beta_Ant2	L2100	2110	5	4	0.5	17.8	809	0	COMMSCOPE	SON_NHH-65A-R2B	-7.64	-15.56	-11.56	3.44	9.44	18.44	Panel	4.6	14.42	61	300
VZ Beta_Ant2	L2100_3	2170	5	4	0.5	17.8	809	0	COMMSCOPE	SON_NHH-65A-R2B	-7.64	-15.56	-11.56	3.44	9.44	18.44	Panel	4.6	14.42	61	300
VZ Beta_Ant3	L700	730	5	2	0.5	8.9	178.82	0	COMMSCOPE	SON_NHH-65A-R2B	-7.64	-15.56	-11.56	3.44	9.44	18.44	Panel	4.6	10.88	66	300
VZ Beta_Ant3	L850	880	5	2	0.5	8.9	203.43	0	COMMSCOPE	SON_NHH-65A-R2B	-7.64	-15.56	-11.56	3.44	9.44	18.44	Panel	4.6	11.44	61	300
VZ Beta_Ant3	L1900	1900	5	4	0.5	17.8	797	0	COMMSCOPE	SON_NHH-65A-R2B	-7.64	-15.56	-11.56	3.44	9.44	18.44	Panel	4.6	14.36	64	300
VZ Beta_Ant4	CBRS	3600	5	4	0	20.0	294	0	ERICSSON	SON_KRE105281	-7.64	-15.56	-11.56	3.44	9.44	18.44	Switched Beam	1.0	9.53	64	300
VZ Gamma_Ant1	C-Band	3700	0.3125	64	0	20.0	7259	0	ERICSSON	SON_AIR6419	-7.64	-15.56	-11.56	3.44	9.44	18.44	Panel	2.4	23.45	11	20
VZ Gamma_Ant2	L700	730	60	2	0.5	107.0	2149.2	0	COMMSCOPE	SON_NHH-65A-R2B	-7.64	-15.56	-11.56	3.44	9.44	18.44	Panel	4.6	10.88	66	20
VZ Gamma_Ant2	L850	880	60	2	0.5	107.0	2444.5	0	COMMSCOPE	SON_NHH-65A-R2B	-7.64	-15.56	-11.56	3.44	9.44	18.44	Panel	4.6	11.44	61	20
VZ Gamma_Ant2	L2100	2110	40	4	0.5	142.6	6471	0	COMMSCOPE	SON_NHH-65A-R2B	-7.64	-15.56	-11.56	3.44	9.44	18.44	Panel	4.6	14.42	61	20
VZ Gamma_Ant2	L2100_3	2170	40	4	0.5	142.6	6471	0	COMMSCOPE	SON_NHH-65A-R2B	-7.64	-15.56	-11.56	3.44	9.44	18.44	Panel	4.6	14.42	61	20
VZ Gamma_Ant3	L700	730	60	2	0.5	107.0	2149.2	0	COMMSCOPE	SON_NHH-65A-R2B	-7.64	-15.56	-11.56	3.44	9.44	18.44	Panel	4.6	10.88	66	20
VZ Gamma_Ant3	L850	880	60	2	0.5	107.0	2444.5	0	COMMSCOPE	SON_NHH-65A-R2B	-7.64	-15.56	-11.56	3.44	9.44	18.44	Panel	4.6	11.44	61	20
VZ Gamma_Ant3	L1900	1900	80	4	0.5	285.2	12764	0	COMMSCOPE	SON_NHH-65A-R2B	-7.64	-15.56	-11.56	3.44	9.44	18.44	Panel	4.6	14.36	64	20
VZ Gamma_Ant4	CBRS	3600	5	4	0	20.0	294	0	ERICSSON	SON_KRE105281	-7.64	-15.56	-11.56	3.44	9.44	18.44	Switched Beam	1.0	9.53	64	20

The antenna Z-heights listed above are referenced to Antenna Level for Alpha sector, Pitched Roof 1, Main Roof, Parking Roof, Stairs and Ground Levels.

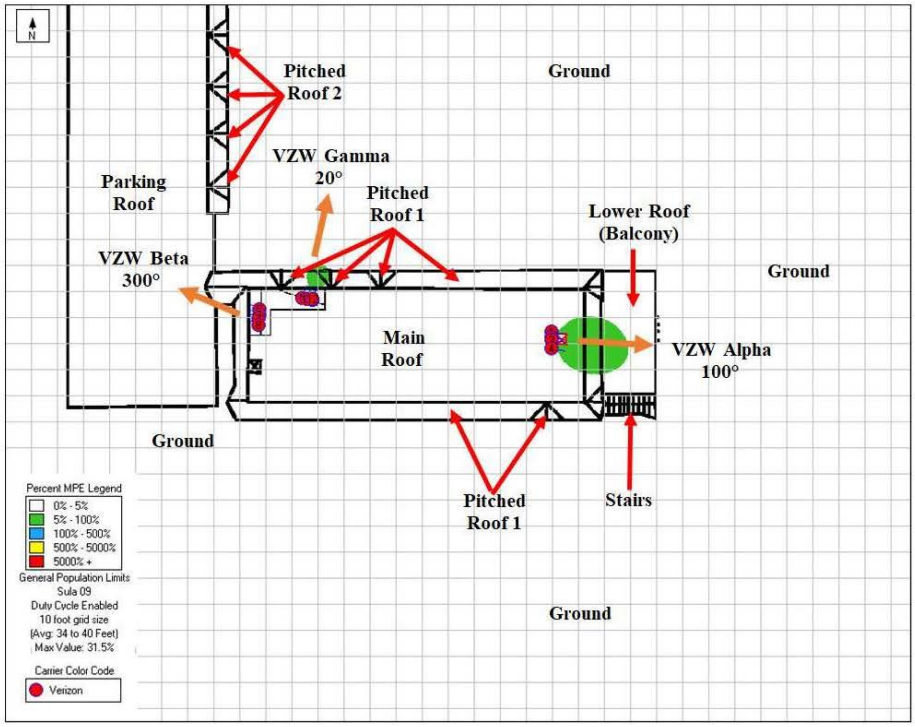
4.3 RF Emissions Diagram(s) - All Transmitters

The following Diagram(s) represent the theoretical spatially averaged Maximum Permissible Exposure (MPE) percentages that are expected for each study's elevation. An additional 1% Occupational MPE Limit (5% General Population MPE limit) is included to demonstrate where Verizon is a significant contributor to the accessible areas where multiple carriers' transmitters may be present.

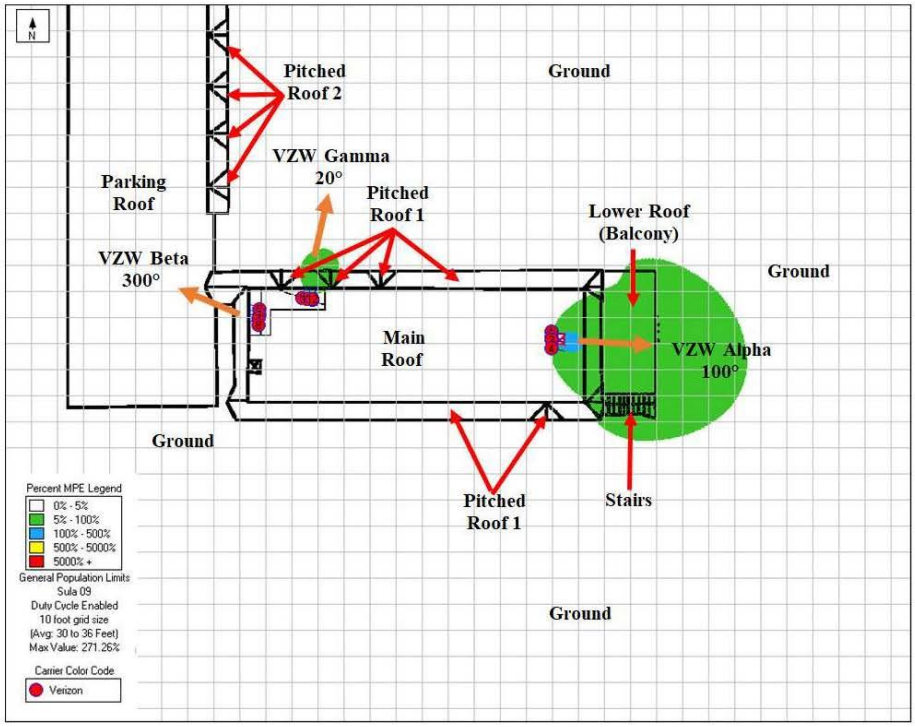
Reference Plane: Antenna Level for Alpha Sector



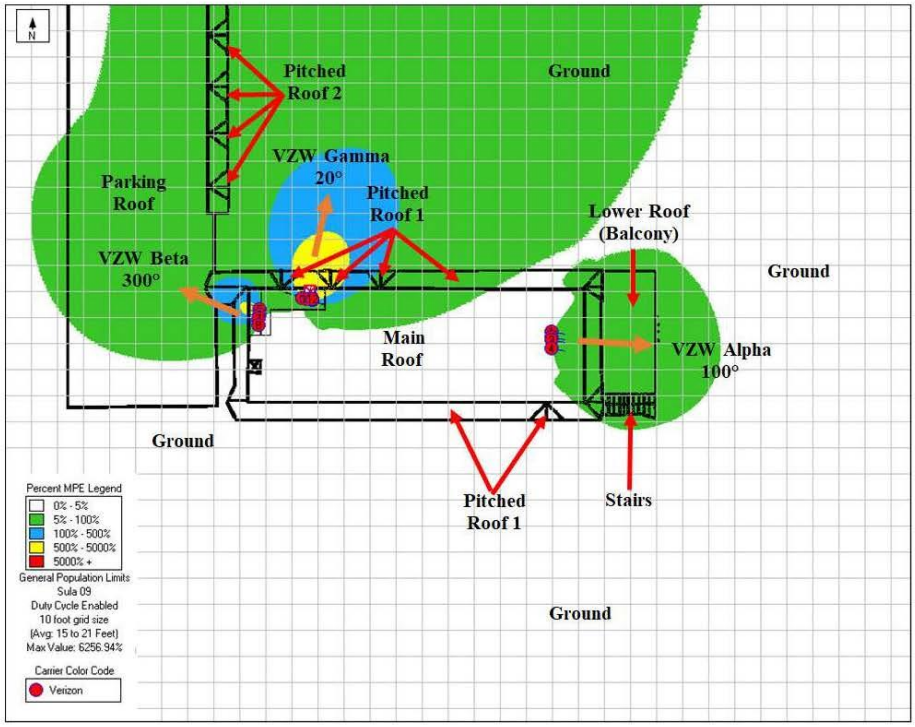
Reference Plane: Pitched Roof 1 Level



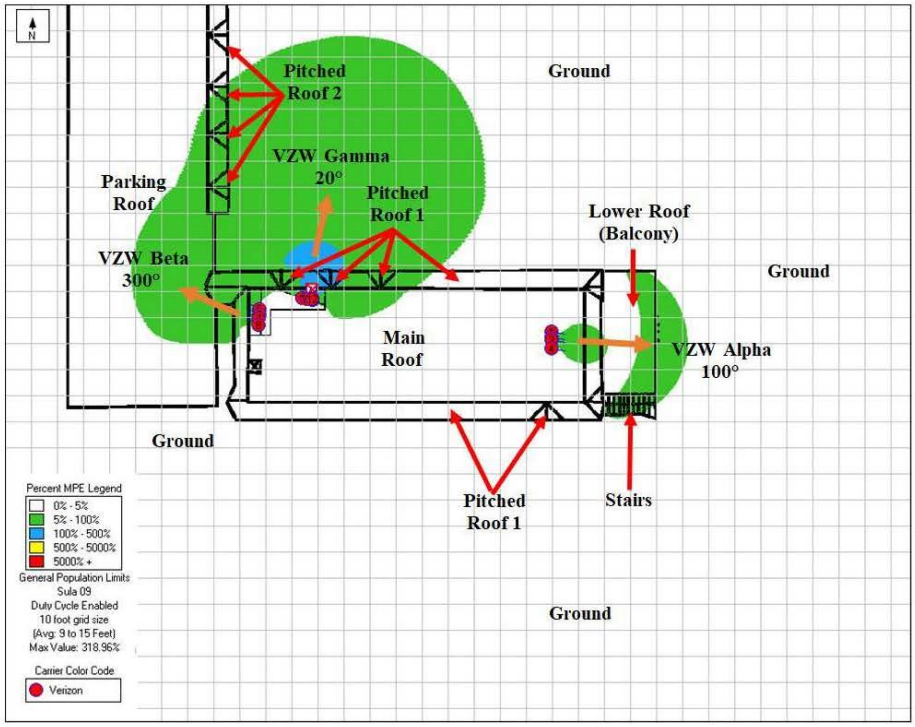
Reference Plane: Main Roof Level



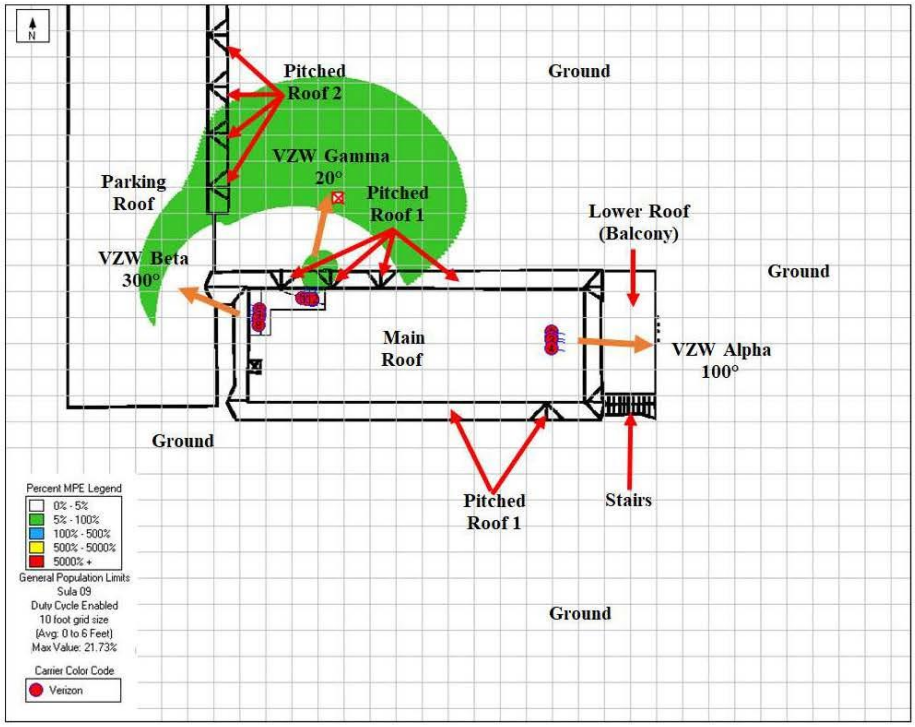
Reference Plane: Parking Roof & Lower Roof (Balcony) Level



Reference Plane: Stairs Level



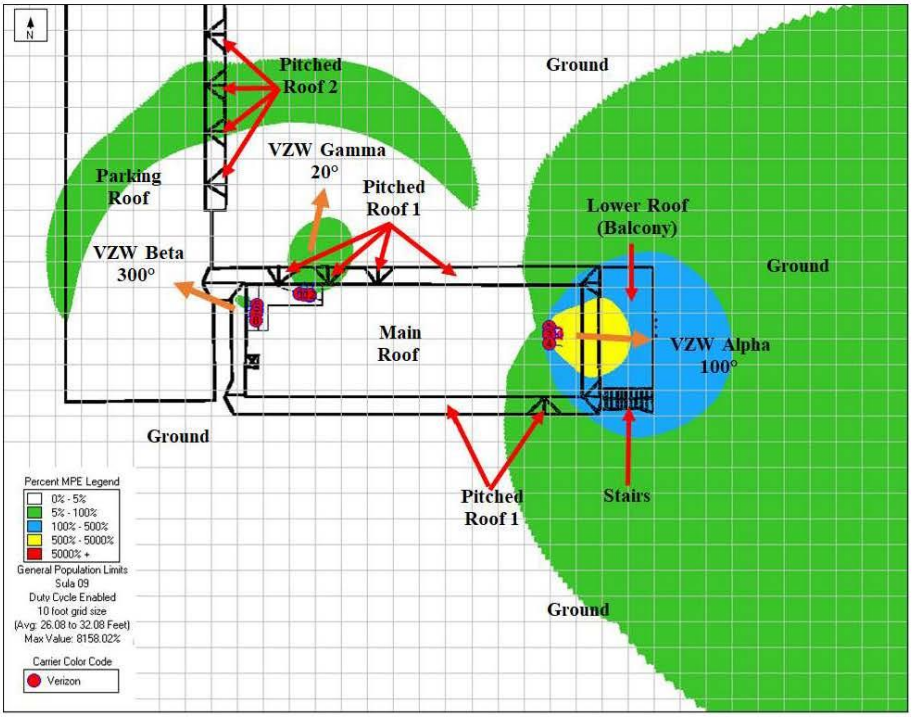
Reference Plane: Ground Level



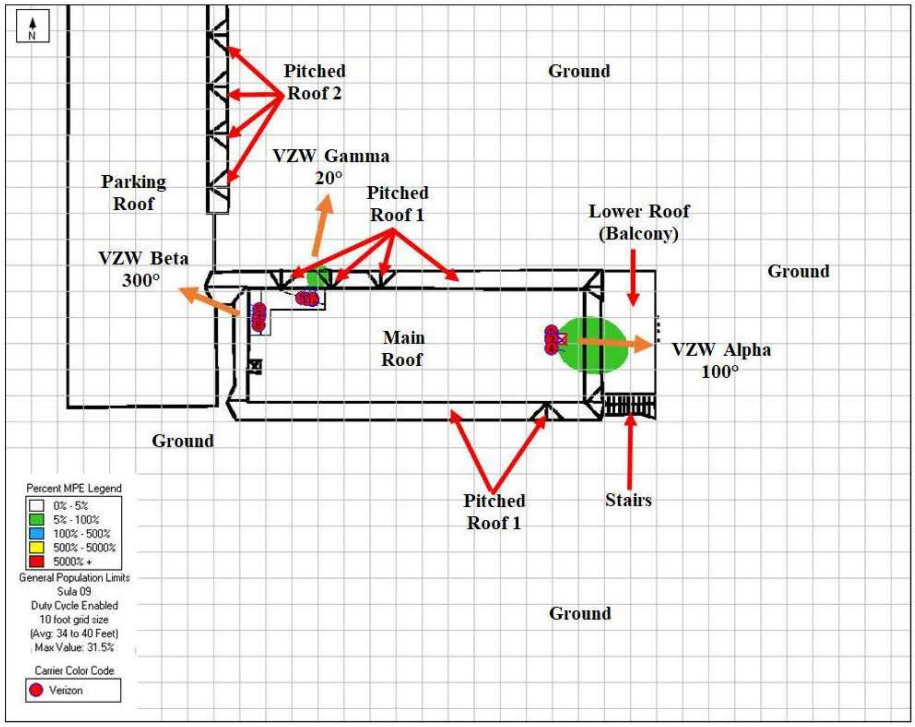
4.4 RF Emissions Diagram(s) - Verizon Transmitters *Only*

The following Diagram(s) represent the theoretical spatially averaged Maximum Permissible Exposure (MPE) percentages that are expected for each study's elevation. An additional 1% Occupational MPE Limit (5% General Population MPE limit) is included to demonstrate where Verizon is a significant contributor to the accessible areas where multiple carriers' transmitters may be present.

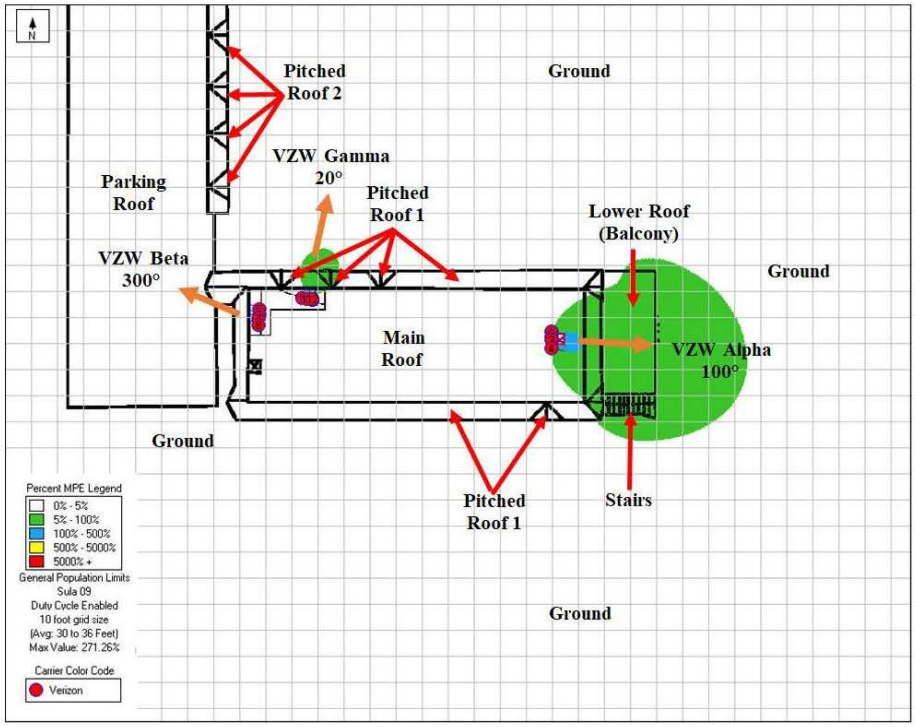
Reference Plane: Antenna Level for Alpha Sector



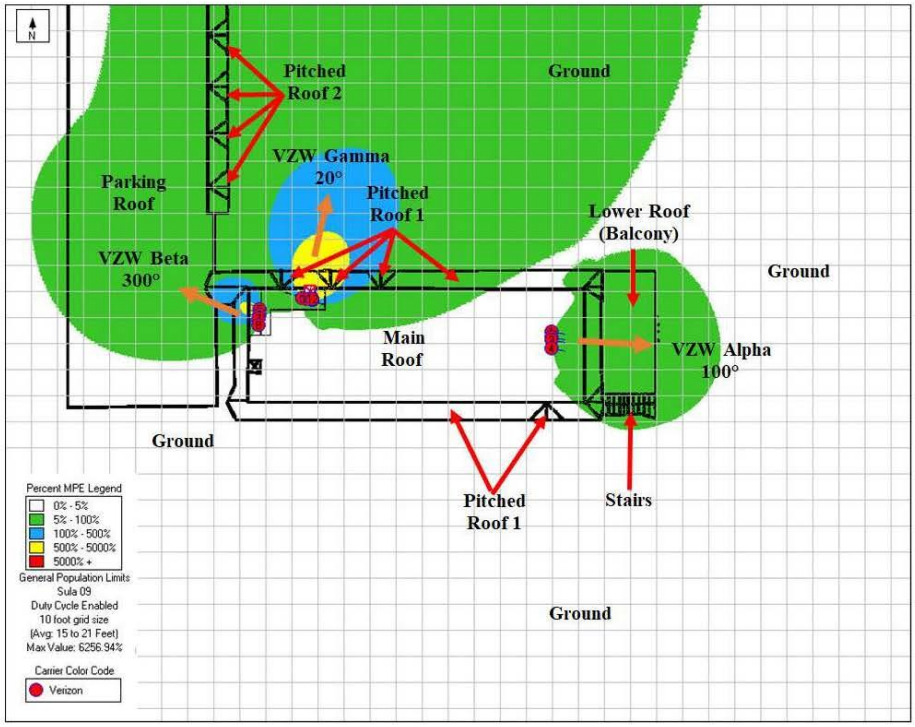
Reference Plane: Pitched Roof 1 Level



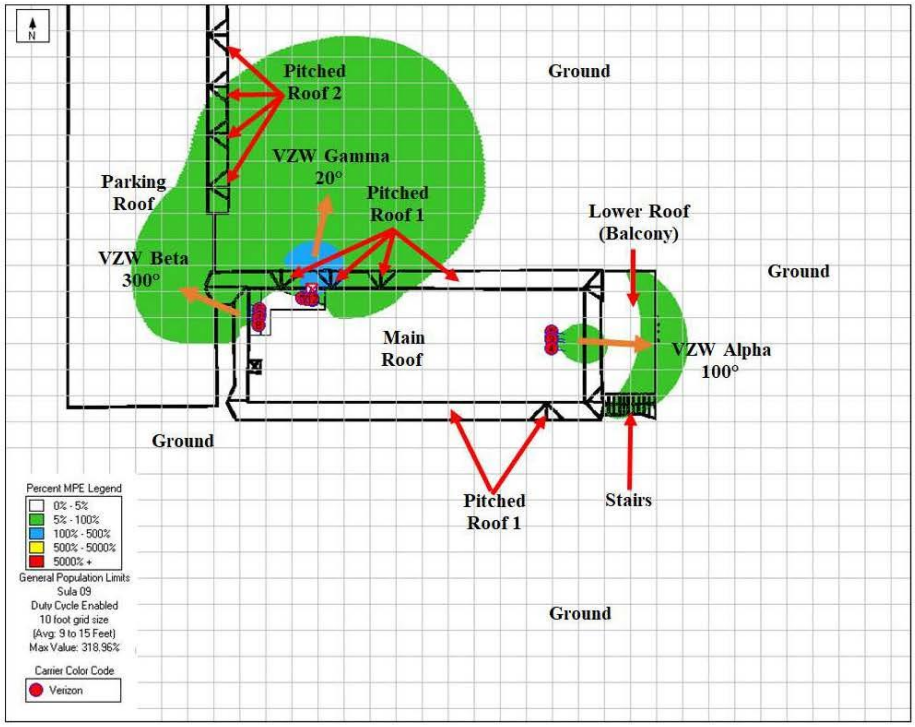
Reference Plane: Main Roof Level



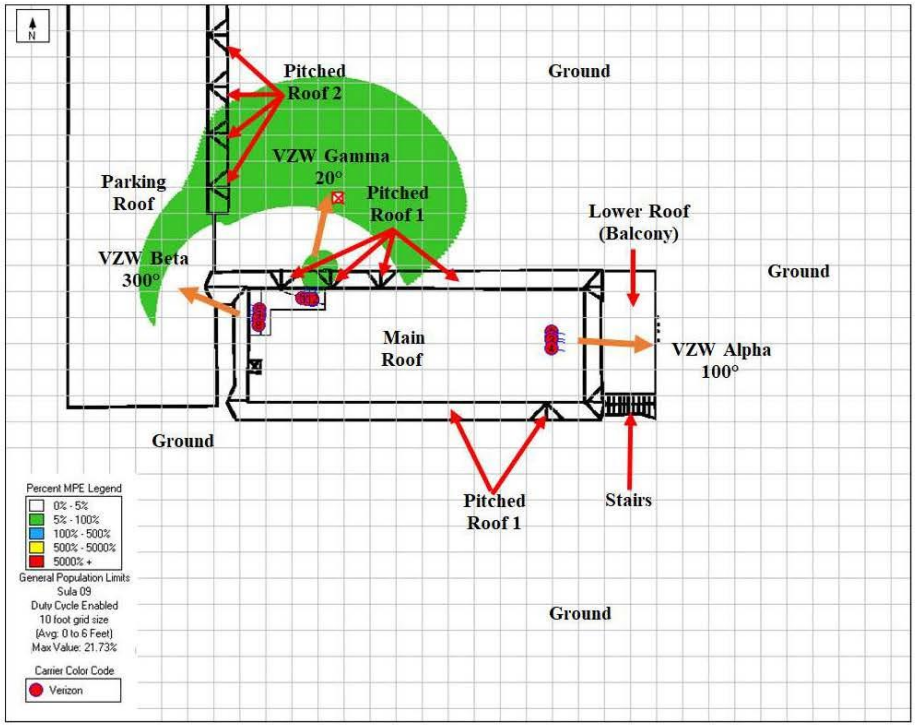
Reference Plane: Parking Roof & Lower Roof (Balcony) Level



Reference Plane: Stairs Level



Reference Plane: Ground Level



5 Signage/ Mitigation

5.1 Signage/ Barrier Detail

Final Compliant Configuration							
	GUIDELINES	**NOTICE**	**CAUTION**	**WARNING**	**NOC INFO**	**BARRIER/MARKER**	
Access Point(s)	☒ [1]*	☐ [ ]	☐ [ ]	☐ [ ]	☒ [1]*	☐	
Alpha	☐ [ ]	☒ [2]	☐ [ ]	☐ [ ]	☐ [ ]	☒	8'x 8'
Beta	☐ [ ]	☐ [ ]	☐ [ ]	☐ [ ]	☐ [ ]	☐	
Gamma	☐ [ ]	☐ [ ]	☐ [ ]	☐ [ ]	☐ [ ]	☐	

NOTE: The table represents either the signage/barriers installed / removed OR items required by the market (if mitigation is not installed by consultant/vendor).

** These RF signs should be posted at the Access Hatch to the Main Roof.*
** These RF signs should be posted on the Barrier of Alpha sector. (See drawing in Section 5.2).*

Specialty Sign Detail

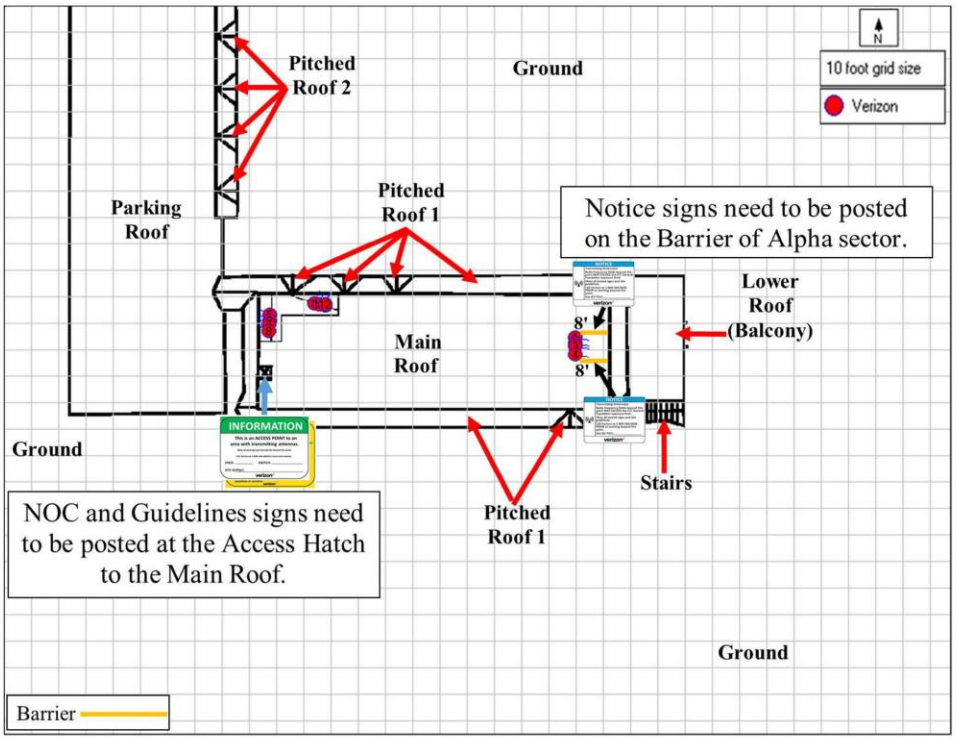
Location	N/A
Access Point	N/A
Alpha	N/A
Beta	N/A
Gamma	N/A

NOTE: The tables above represent EXISTING compliance items implemented at this location.

Notes/ Additional Compliance Requirements(s):
Mitigation is required per the Signage/ Barrier Diagram.

Table 2: Mitigation Requirements for Compliance

5.2 Signage/ Barrier Diagram



6 Conclusions and Recommendations

- The results of the analysis indicate that the power density levels in the generally accessible areas on the Antenna Level for Alpha Sector will not exceed the FCC's MPE limit for General Population. Notice that the power density levels will exceed the FCC's MPE limit for General Population, Occupational and 10x Occupational limits in front of the antennas which it is not generally accessible areas.
- The results of the analysis indicate that the power density levels in the generally accessible areas on the Pitched Roof 1 Level will not exceed the FCC's MPE limit for General Population.
- The results of the analysis indicate that the power density levels in the generally accessible areas on the Main Roof Level will exceed the FCC's MPE limit for General Population.
- The results of the analysis indicate that the power density levels in the generally accessible areas on the Parking Roof Level will not exceed the FCC's MPE limit for General Population.
- The results of the analysis indicate that the power density levels in the generally accessible areas on the Lower Roof (Balcony) Level will not exceed the FCC's MPE limit for General Population.
- The results of the analysis indicate that the power density levels in the generally accessible areas on the Stairs Level will not exceed the FCC's MPE limit for General Population.
- The results of the analysis indicate that the power density levels in the generally accessible areas on the Ground Level will not exceed the FCC's MPE limit for General Population.
- The max theoretical % MPE (General Public) is **8158.02**% directly in front of the antennas beams at the Antenna Level for Alpha Sector. Notice that the power density levels will exceed the FCC's MPE limit for General Population Occupational and 10x Occupational limits in front of the antennas which it is not generally accessible areas.
- NOC and Guidelines signs need to be posted at the Access Hatch to the Main Roof.

Note: Modifications to the site; and/or increases in channel counts or power levels exceeding those listed in this report will require additional evaluation to determine compliance.

7 Appendix A: FCC Compliance and RF Safety Policies

In August of 1997, the FCC published OET Bulletin 65 Edition 97-01 to regulate methods for evaluating compliance with FCC guidelines for human exposure to radiofrequency (RF) electromagnetic fields. The FCC guidelines for human exposure to RF electromagnetic fields incorporate two categories of limits; namely "Controlled" (a.k.a. Occupational) and "Uncontrolled" (a.k.a. General Public). The guidelines offer suggested methods for evaluating fixed RF transmitters to ensure that the controlled and uncontrolled limits deemed safe by the FC for human exposure are not exceeded.

OET Bulletin 65 recommended guidelines are intended to allow an applicant to "make a reasonably quick determination as to whether a proposed facility is in compliance with the limits." In addition, the guidelines offer alternate supplementary considerations and procedures such as field measurements and more detailed analysis that should be used for multiple emitter situations.

These guidelines define RF as emissions in the frequency range of 300 kHz to 100 GHz. The FCC define Maximum Permissible Exposure (MPE) limits within this frequency range based on limits recommended by the National Council on Radiation Protection and Measurement, the Institute of Electrical and Electronics Engineers (IEEE), and by the American National Standards Institute (ANSI).

The specific MPE limits defined by the FCC are as follows:

Limits for Occupational/Controlled Exposure				
Frequency Range [MHz]	Electric Field Strength (E) [V/m]	Magnetic Field Strength (H) [A/m]	Power Density (S) [mW/Cm^2]	Averaging Time |E|^2, |H|^2 or S [minutes]
0.3 - 3.0	614	1.63	100*	6
3.0 - 30	1842/f	4.89/f	900/f^2*	6
30 - 300	61.4	0.163	1	6
300 - 1,500	-	-	f/300	6
1,500 - 100,000	-	-	5	6

Limits for General Population/Uncontrolled Exposure				
Frequency Range [MHz]	Electric Field Strength (E) [V/m]	Magnetic Field Strength (H) [A/m]	Power Density (S) [mW/Cm^2]	Averaging Time |E|^2, |H|^2 or S [minutes]
0.3 - 3.0	614	1.63	100*	30
3.0 - 30	842/f	2.19/f	180/f^2*	30
30 - 300	27.5	0.073	0.2	30
300 - 1,500	-	-	f/1500	30
1,500 - 100,000	-	-	1	30

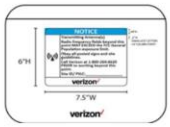
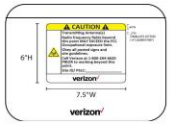
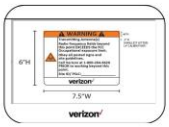
f = frequency *Plane-wave equivalent power density

The FCC states that "Occupational/ Controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for Occupational/ Controlled exposure also apply in situations when an individual is transient through a location where Occupational/ Controlled limits apply provided he or she is made aware of the potential for exposure."

For General Population/ Uncontrolled limits, the FCC states that "General Population/ Uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not fully be aware of the potential for exposure or cannot exercise control over their exposure."

For purposes of this analysis, all limits are evaluated against the Power Density limits.

Typical guidelines for determining whether Occupational/ Controlled limits can be applied include ensuring the environment (such as a rooftop) as limited/controlled access via locked doors or physical barrier that are preferably controlled by a landlord that is aware of the situation and can inform anyone going through the locked door of the existence of the RF emissions. Such notification/awareness is typically accomplished by means of signage on the door, or other access to the area of concern, as well as signage on or near the antennas. Examples of such signs include the following:

GUIDELINES	NOTICE	CAUTION	WARNING
This sign will inform anyone of the basic precautions to follow when entering an area with transmitting radiofrequency equipment.	This sign indicates that RF emissions may exceed the FCC General Population MPE limit.	This sign indicates that RF emissions may exceed the FCC Occupational MPE limit.	This sign indicates that RF emissions may exceed at least 10x the FCC Occupational MPE limit.
			

NOC INFORMATION	
Information signs are used as a means to provide contact information for any questions or concerns. They will include specific cell site identification information and the Verizon Wireless Network Operations Center phone number.	

Standards for when to use each of the above signs for Occupational situations are as follows:

No sign required: <20% of Occupational MPE
Blue Sign, Notice: 20% to <100% of MPE
Yellow Sign, Caution: 100% to <1000% of MPE
Red Sign, Warning: ≥1000% of MPE

All MPE references are to the FCC Occupational limits.

8 Appendix B: Overview of RoofMaster® Functions and Assumptions

RoofMaster® is a RF Compliance software package designed to enable the analysis, assessment and mitigation of communications sites with respect to human exposure to radiofrequency electromagnetic fields.

RoofMaster® was developed in 2008 by Waterford Consultants to support compliance assessments performed at single and multi-operator wireless locations throughout North America and has been in service since 2008. Real-world experience in evaluating thousands of base station installations is reflected in the RoofMaster® design approach. This document provides a guide for creating simulations of RF hazard conditions through the characterization of antenna systems and site features and through FCC-specified computational analysis.

On any structure, one may encounter antennas installed by wireless service providers, public safety and other FCC-licensed and unlicensed operators. Siting constraints have resulted in diverse and complex environments accessible to people performing a variety of activities around these antennas. RoofMaster® supports the characterization of these locations to convey important information regarding RF sources and accessible areas necessary to evaluate the potential for human exposure to hazardous levels of RF energy.

RoofMaster® supports the depiction of communications sites through the display of construction drawing or aerial photography image files as well as providing line drawing tools. These representations are scalable to enable the modeling of any location.

RoofMaster® utilizes a three-dimensional spatial framework consisting of a 1000 x 1000 grid with unlimited vertical dimensions necessary for the positioning of antennas and modeling of RF conditions at each grid point throughout the space. Predictive analysis is performed on a study plane at a specified elevation. The subsequent sections of this guide provide the steps necessary to create a site representation and conduct these studies.

RoofMaster® employs several power density prediction models based on the computational approaches set forth in the Federal Communications Commission's Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields, OET Bulletin 65. This guideline utilizes several antenna and operational parameters in calculating the power density contributions from each emitter at specified points throughout the study space. RoofMaster® enables antennas to be fully defined in site specific aspects as well as through the use of a library of manufacturer data. The parameters include:

§ Antenna model
§ Radiation patterns
§ Aperture length
§ Gain
§ Beamwidth
§ Antenna radiation center
§ Azimuth
§ Mechanical downtilt
§ Location
§ Frequency
§ Power into antenna

In OET-65, the Cylindrical Model is presented as an approach to determine the spatially averaged power density in the near field directly in front of an antenna. In order to implement this model in all directions, RoofMaster® utilizes the antenna manufacturer horizontal pattern data. Additionally, RoofMaster® incorporates factors that reduce the power density by the inverse square of horizontal and vertical distance beyond the near field region.

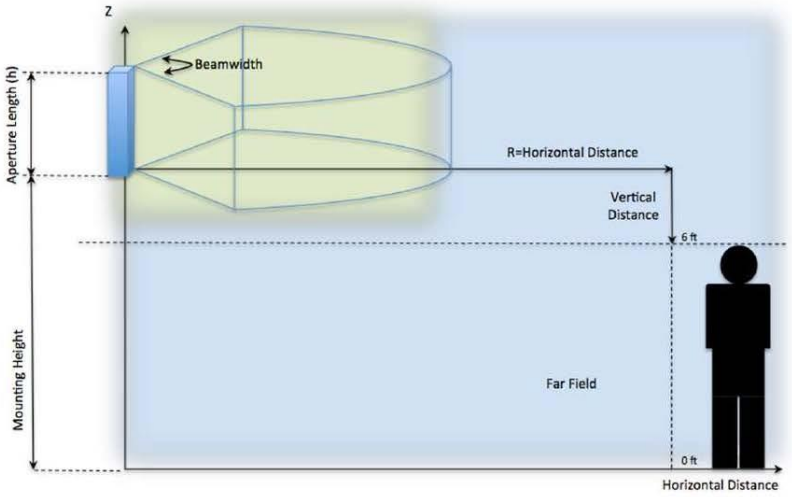
Power density is calculated as follows:

$$S = \left(\left(\frac{360}{Beamwidth} \right) \frac{P_{in} G_H H_r V_r}{2\pi Rh} \right) \frac{\mu W}{cm^2}$$

- S is the spatially averaged power density value
- R is the horizontal distance meters to the study point
- h is the aperture length in meters
- P_{in} is power into the antenna input port in Watts

RoofMaster® Implementation:

- G_H is gain offset to study point as specified in manufacturer horizontal pattern
- P_{in} is adjusted by the portion of the antenna aperture in the 0-6 ft. vertical study zone
- H_r accounts for $1/R^2$ Far Field roll off which starts at 2*h
- V_r accounts for 1/ (vertical distance)^2 roll off from antenna bottom to the top of the 0-6 ft. study zone (or antenna top to bottom of 0-6 ft. study zone)


Z
Beamwidth
Aperture Length (h)
R=Horizontal Distance
Vertical Distance
6 ft
Mounting Height
Far Field
0 ft
Horizontal Distance

9 References

FCC (1997). "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields"; Federal Communications Commission; Office of Engineering and Technology, OET Bulletin 65, Edition 97-01, August.

Waterford Consultants, LLC (2008). RoofMaster® User Guide, Waterford Consultants, LLC.

10 Limited Warranty

Telecom Technology Services, Inc. warrants that this analysis was performed in good faith using the methodologies and assumptions covered in this report and that data used for the analysis and report were obtained by Telecom Technology Services, Inc. employees or representatives via site surveys or research of Verizon's available information. In the event that specific third-party details were not available, best efforts were made to use assumptions that are based on industry experience of various carriers' standards without violating any confidential information obtained under non-disclosure terms.

Telecom Technology Services, Inc. also warrants that this analysis was performed in accordance with industry acceptable standards and methods.

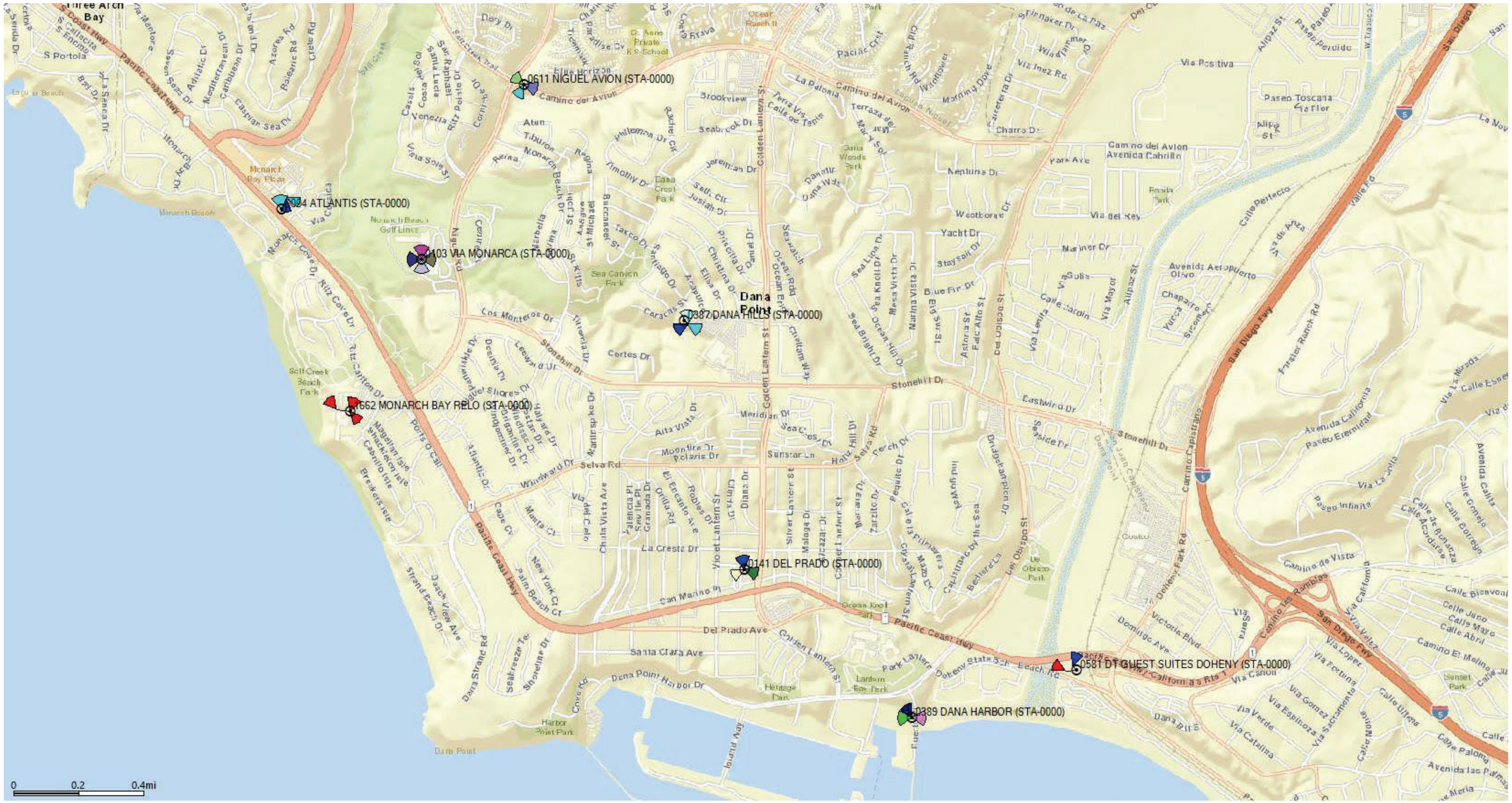
There are no other warranties, express or implied, including but not limited to, the implied warranties of merchantability and fitness for a particular purpose, relating to this agreement or to the services rendered by Telecom Technology Services hereunder. In no event shall Telecom Technology Services be held liable to Verizon, or to any third party, for any indirect, special, incidental, or consequential damages, including but not limited to loss of profits, loss of data, loss of good will, and increased expenses. In no event shall Telecom Technology Services be liable to Verizon for damages, whether based in contract, tort, negligence, strict liability, or otherwise, exceeding the amount payable hereunder for the services giving rise to such liability.

SUPPORTING DOCUMENT 8: Verizon Wireless Coverage Maps

ATTACHMENT

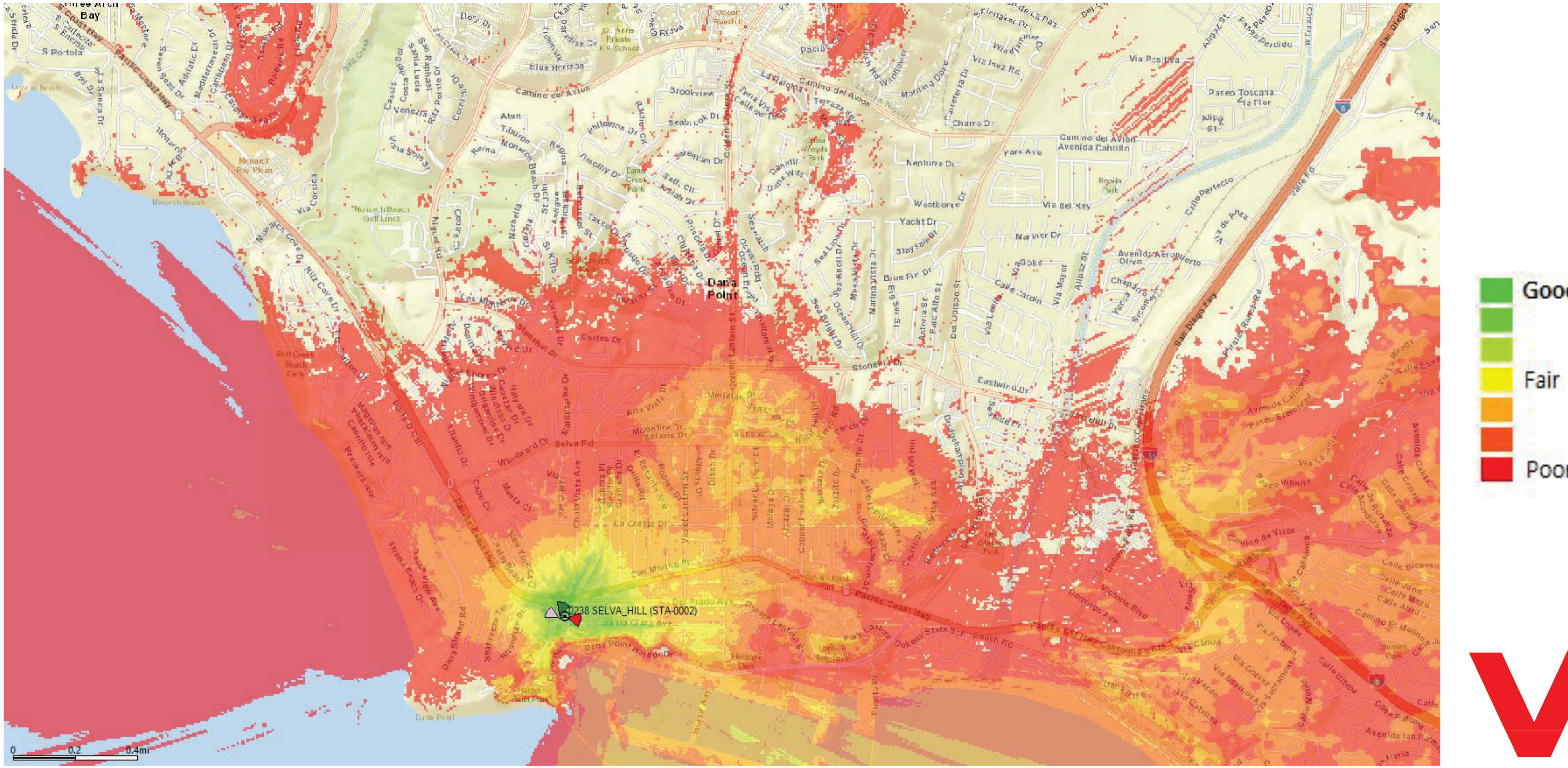
Dana Point RF Maps

Sites in Dana Point



Current Coverage without Selva Hill

Coverage of Selva Hill



Coverage with Selva Hill