

Case File Number: PLN18447

January 23, 2019

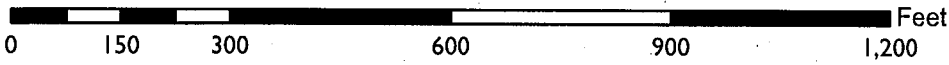
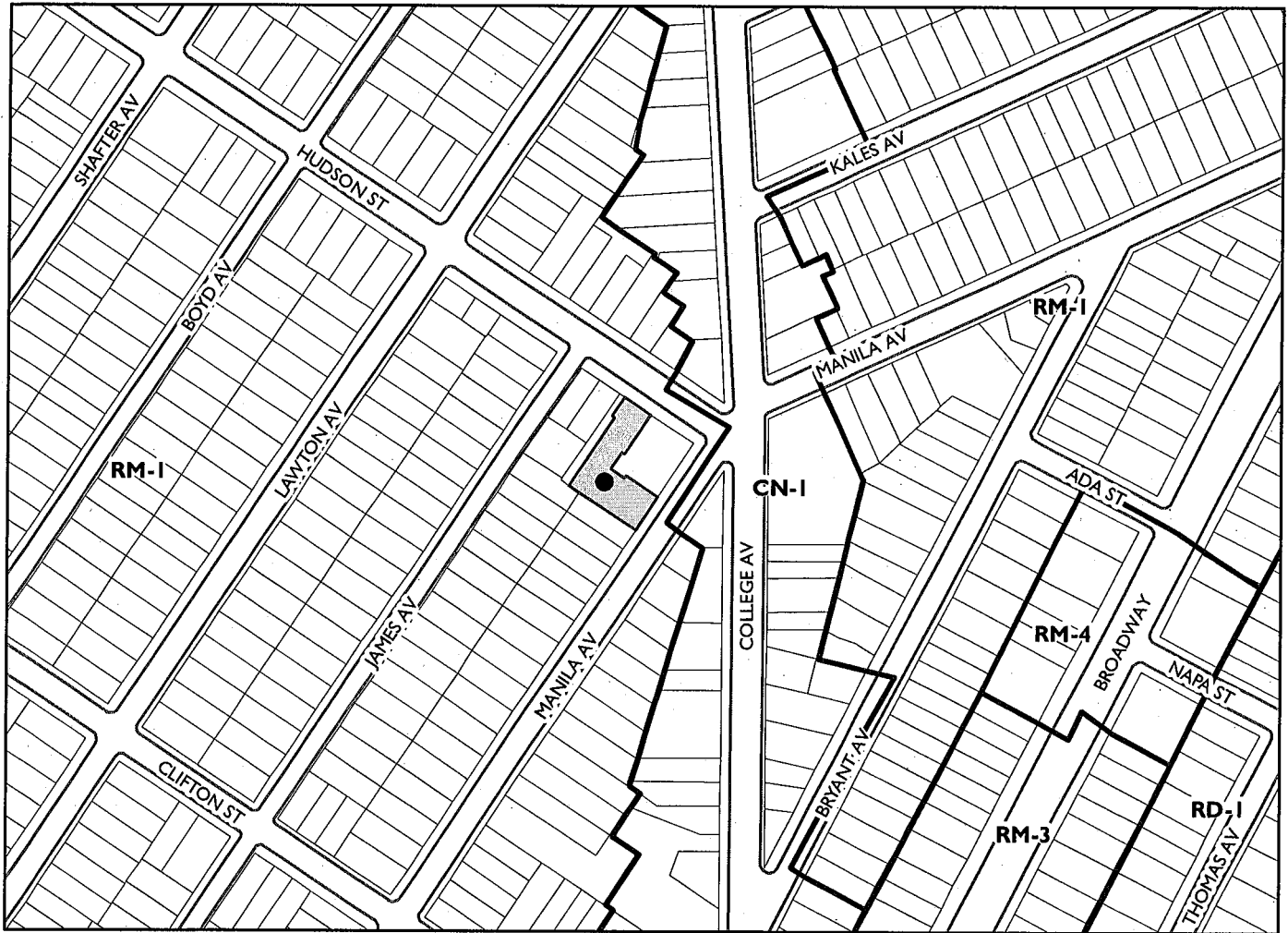
Location:	5375 Manila Ave. (See map on reverse)
Assessor Parcel Numbers:	(014-1251-007-01)
Proposal:	Installation of a rooftop wireless telecommunications facility involving eight (8) new antennas; twelve (12) radio units; and three (3) power cabinets located within three (11'x13' and 10'x10') screening enclosures located on the roof of an existing residential building; associated cable runs located on the roof of this forty-(40')-foot tall residential building.
Applicant:	Complete Wireless Consulting.
Contact Person	Gerie Johnson
Phone Number:	(916) 747-0624
Owner:	Satellite Senior Homes. Inc.
Planning Permits Required:	Major Conditional Use Permit; and Regular Design Review to install a Macro Telecommunications Facility within a residential zone; Conditional Use Permit for ten (10') foot projection above existing forty-(40')-foot tall residential building.
General Plan:	Mixed Housing Type Residential
Zoning:	RM-1 Mixed Housing Type Residential -1
Environmental Determination:	Exempt, Sections 15301: existing facilities; Section 15183: projects consistent with a community plan, general plan or zoning.
Historic Status:	Non-Historic Property;
City Council District:	1
Staff Recommendation:	Determine on application based on staff report.
Finality of Decision:	Appealable to City Council
For Further Information:	Contact case planner Robert Smith at (510) 238-5217 or rsmith3@oaklandca.gov

SUMMARY

The project applicant (Complete Wireless Consulting) is proposing to install a wireless telecommunications facility involving eight (8) new antennas; twelve (12) radio units; and three (3) associated equipment cabinets on the roof of an existing senior housing residential building. The facility will be housed within one 11'x13' enclosure and two 10'x10' enclosures screened on all sides to match existing siding. The two new structures will be approximately ten (10') feet in height above the roof line (50' above ground level), and will be set back at least ten (10') feet from the existing buildings exterior walls.

The site is located in the RM-1 Zone, where a Major Conditional Use Permit and Design Review are required to install a Macro Telecommunications Facility within a residential zone. The proposal is located within an area consisting of several one-and two-story residential homes to the north, south, and west, and religious and commercial buildings of two-and three-story's to the east in the College Avenue commercial corridor characterized by restaurants, general retail stores, café, church, and restaurants. The proposed antenna and equipment cabinets are designed to be largely concealed from public view and constructed to match the

CITY OF OAKLAND PLANNING COMMISSION



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Applicant: Gerie Johnson
Address: 5375 Manila Avenue
Zone: RM-1

existing building. The rooftop cabinets are among the allowed projections, subject to the conditional use permit, at roof level for these types of utility structures.

The telecommunications facility will fill a service gap in coverage in the area around College Avenue. The project meets all the required findings for approval (see *Findings* section). Staff recommends

TELECOMMUNICATIONS BACKGROUND

Limitations on Local Government Zoning Authority under the Telecommunications Act of 1996
approval of the project subject to the attached conditions of approval.

Section 704 of the Telecommunications Act of 1996 (TCA) provides federal standards for the siting of "Personal Wireless Services Facilities." "Personal Wireless Services" include all commercial mobile services (including personal communications services (PCS), cellular radio mobile services, and paging); unlicensed wireless services; and common carrier wireless exchange access services. Under Section 704, local zoning authority over personal wireless services is preserved such that the FCC is prevented from preempting local land use decisions; however, local government zoning decisions are still restricted by several provisions of federal law. Specifically:

- Under Section 253 of the TCA, no state or local regulation or other legal requirement can prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service.
- Further, Section 704 of the TCA imposes limitations on what local and state governments can do. Section 704 prohibits any state and local government action which unreasonably discriminates among personal wireless providers. Local governments must ensure that its wireless ordinance does not contain requirements in the form of regulatory terms or fees which may have the "effect" of prohibiting the placement, construction, or modification of personal wireless services.
- Section 704 also preempts any local zoning regulation purporting to regulate the placement, construction and modification of personal wireless service facilities on the basis, either directly or indirectly, on the environmental effects of radio frequency emissions (RF) of such facilities, which otherwise comply with Federal Communications Commission (FCC) standards in this regard. (See 47 U.S.C. Section 332(c)(7)(B)(iv) (1996)). This means that local authorities may not regulate the siting or construction of personal wireless facilities based on RF standards that are more stringent than those promulgated by the FCC.
- Section 704 mandates that local governments act upon personal wireless service facility siting applications to place, construct, or modify a facility within a reasonable time (See 47 U.S.C.332(c)(7)(B)(ii) and FCC Shot Clock ruling setting forth "reasonable time" standards for applications deemed complete).

For more information on the FCC's jurisdiction in this area, consult the following:

Competition & Infrastructure Policy Division (CIPD) of the Wireless Telecommunications Bureau, main division number: (202) 418-1310. <https://www.fcc.gov/general/competition-infrastructure-policy-division-wireless-telecommunications-bureau>

PROPERTY DESCRIPTION

The subject property is a 10,971 sq. ft. parcel containing a 40' tall, residential building. The building is located adjacent to the College Avenue commercial corridor.

PROJECT DESCRIPTION

The applicant is proposing to (Attachments C and D):

- Install a wireless telecommunications facility involving eight (8) new antennas;
- Install twelve (12) radio units;
- Locate the facility on the roof behind three (3) screened enclosures: one 11'x13' and two 10'x10'. The 10'x10' enclosures will locate four (4) antennas each. The larger screened area will support equipment platforms and house three (3) equipment cabinets providing power to the facilities. The antenna areas will be setback at least ten (10') feet from the edge of the roofline of the building on all sides.

SURROUNDING USES

The subject property is located at the northwest corner of Manila Avenue with a frontage (providing access to parking) also located on Hudson Street. The proposal is in an area consisting of several one-and two-story residential and one-two-and three-story commercial buildings (restaurants, general retail stores, church, and restaurant).

SIMILAR CASES

Records show that the Planning Commission has approved over 100 Macro Telecommunications Facilities requiring Design Review throughout the City since 2016. However, most of the projects are located on City light or utility poles.

GENERAL PLAN ANALYSIS

The subject property is located within the Mixed Housing Type Residential land use classification of the Oakland General Plan's Land Use and Transportation Element (LUTE). The Mixed Housing Type Residential classification is intended to create, maintain and enhance residential areas typically located near the City's major arterials and characterized by a mix of single family homes, townhouses, small multi-unit buildings, and neighborhood businesses where appropriate. The proposed unmanned wireless telecommunication facility will not adversely affect or detract from the desired character and intent of the neighborhood. The proposed antennas will be behind two ten (10') feet tall, enclosures located on the roof. Visual impacts to the building will be mitigated since the antennas will be screened by the enclosures which will be painted to give the appearance of being part of the existing building structure. As such, the proposed project will have minimal effect on the character of the existing structure.

The proposed unmanned wireless telecommunication facility will provide better telecom services and will not adversely affect nor detract from the characteristics of the residential neighborhood or adjacent commercial corridor. As a result, the proposal is an appropriate

location and would not significantly increase negative visual impacts to adjacent neighboring commercial or residential properties.

ZONING ANALYSIS

The subject property is in the RM-1 Zoning District. The intent of the RM-1 Zone is to enhance the character of established neighborhood residential areas and commercial centers that have a compact, vibrant pedestrian environment.

Section 17.17.040 of the City of Oakland Planning Code requires a Conditional Use Permit to install a Macro Telecommunication facility. Furthermore, pursuant to Section 17.134.020 (A) (3)(d), a Major Conditional Use Permit is required for any telecommunication facility in or within 300' of the boundary of any residential zone.

Sections 17.128.070, and 17.136.040(A)(10) of the City of Oakland Planning Code requires a regular Design Review permit for Macro Telecommunication facilities. Special findings are also required for Design Review approval to ensure that the facility is concealed to the greatest extent possible. The project design is discussed later in the *Key Issues* section of this report, and the required *Findings* for the Major Conditional Use Permit and Design Review are included in staff's evaluation later in this report.

Section 17.108.030 (A) of the City of Oakland Planning Code requires a minor Conditional Use Permit for structures above the allowed height limit. As a projection above the maximum vertical allowed height, Section 17.108.030 allows a structure in excess of the maximum allowed height.

ENVIRONMENTAL DETERMINATION

The California Environmental Quality Act (CEQA) Guidelines lists the projects that qualify as categorical exemptions from environmental review. The proposed project is categorically exempt from the environmental review requirements pursuant to Section 15301; for minor alterations to existing facilities. In addition, the project is also exempt per Section 15183; projects consistent with a community plan, general plan or zoning. The project does not meet the exceptions for use of the exemption and specifically the finding related to an adverse effect on historic structures as noted in the findings below.

KEY ISSUES AND IMPACTS

Project Site

Section 17.128.110 of the City of Oakland Telecommunication Regulations requires that new wireless facilities shall generally be located on designated properties or facilities in the following ranked order of preference:

- A. Co-located on an existing structure or facility with existing wireless antennas.
- B. City owned properties or other public or quasi-public facilities.
- C. Existing commercial or industrial structures in non-residential zones (excluding all HBX Zones and the D-CE3 and D-C-4 Zones).

- D. Existing commercial or industrial structures in residential zones, HBX Zones, or the D-CE-3 or D-CE-4 Zones.
- E. Other non-residential uses in residential zones, HBX Zones, or the D-CE-3 or D-CE-4 Zones.
- F. Residential uses in non-residential zones (excluding all HBX Zones and the D-CE-3 and D-CE-4 Zones).
- G. Residential uses in residential zones, HBX Zones, or the D-CE-3 or D-CE-4 Zones.

Facilities sited on an A, B or C ranked preferences do not require a site alternatives analysis. Since the proposed project involves installation of fully concealed new telecommunication facility within a residential zone, the proposed project meets preference G, and a site alternatives analysis is not required. The applicant reviewed a number of other properties in the vicinity for the proposed installation. The alternative sites were generally discarded due to their height limitations with more appropriate alternatives having challenging roof slopes, lacking landlord support or having locational constraints.

Project Design

Section 17.128.120 of the City of Oakland Telecommunications Regulations requires that new wireless facilities shall generally be designed in the following order of preference:

- A. Building or structure mounted antennas completely concealed from view.
- B. Building or structure mounted antennas set back from roof edge, not visible from the public right-of way.
- C. Building or structure mounted antennas below roof line (facade mount, pole mount) visible from public right-of-way, painted to match existing structure.
- D. Building or structure mounted antennas above roof line visible from public right of-way.
- E. Monopoles.
- F. Towers.

Facilities designed to meet an A and B ranked preference do not require a site design alternatives analysis. Since the proposed project meets preference A, a site design alternatives analysis is not required. The project has been designed so that new antennas, radio units, and equipment cabinets will be screened behind three, rooftop enclosures. The structures will extend above the roof approximately ten (10') feet. The screening walls around each enclosure are designed to reduce visual impacts as seen from the street level. Furthermore, staff has included a condition of approval requiring the applicant to submit further details of the screening materials, colors, and textures to ensure that the facilities don't detract from the building.

Project Radio Frequency Emissions Standards

Section 17.128.130 of the City of Oakland Telecommunication Regulations require that the applicant submit the following verifications including requests for modifications to existing facilities:

a. The Telecommunications regulations require that the applicant submit written documentation demonstrating that the emission from the proposed project are within the limits set by the Federal Communications Commission.

b. Prior to final building permit sign off, a Radio Frequency (RF) emissions report indicating that the site is operating within the acceptable thresholds as established by the Federal government or any such agency who may be subsequently authorized to establish such standards.

In the RF emissions report (Attachment E) prepared by Hammett & Edison, the proposed project was evaluated for compliance with appropriate guidelines limiting human exposure to radio frequency electromagnetic fields. The report states that the proposed project will operate and comply with the prevailing standards for limiting public exposure to radio frequency energy, and therefore, will not cause a significant impact on the environment. Additionally, staff recommends that, prior to the final building permit sign off, the applicant submits a certified RF emissions report stating that the facility is operating within acceptable thresholds established by the regulatory federal agency.

CONCLUSION

The new telecommunication facility will be largely concealed from public view and will not have significant visual impacts on the characteristics of the existing neighborhood residential and adjacent commercial corridor. It will provide an essential telecommunication service to the community and the City of Oakland at large. It will also be available to emergency services such as Police, Fire and Health response teams. Staff believes that the findings for approval can be made to support the Conditional Use Permit, and Design Review.

RECOMMENDATIONS:

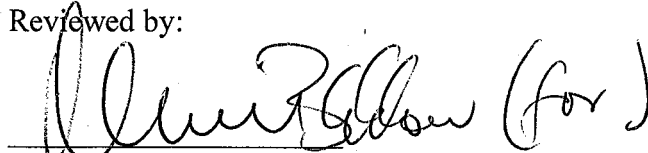
1. Affirm staff's Environmental Determination
2. Approve the Conditional Use Permit, Design Review, application subject to the attached Findings and Conditions of Approval

Prepared by:



Robert Smith
Planner III

Reviewed by:



Robert Merkamp
Zoning Manager

Approved for forwarding to the
City Planning Commission



Ed Manasse Interim Deputy Director
Bureau of Planning

ATTACHMENTS:

- A. Findings
- B. Conditions of Approval
- C. Project Plans
- D. Site Alternative Analysis
- E. Photo-simulations
- F. RF Emissions Report
- G. CPUC Compliance Letter
- H. Proof of public notification posting
- I. Public comments received by date of packet preparation

FINDINGS FOR APPROVAL

This proposal meets the required findings under Sections 17.134.050 (General Use Permit criteria); 17.136.050 (Design Review criteria); and 17.128.060(B) (Telecommunications Macro Facilities 17.128.060(C)), as set forth below. Required findings are shown in **bold type**; reasons proposal satisfies them are shown in normal type.

SECTION 17.134.050 – GENERAL USE PERMIT FINDINGS:

A. That the location, size, design, and operating characteristics of the proposed development will be compatible with, and will not adversely affect, the livability or appropriate development of abutting properties and the surrounding neighborhood, with consideration to be given to harmony in scale, bulk, coverage, and density; to the availability of civic facilities and utilities; to harmful effect, if any upon desirable neighborhood character; to the generation of traffic and the capacity of surrounding streets; and to any other relevant impact of the development.

The purpose of the project is to enhance wireless telecommunications service in this area. The installation of the telecommunications equipment will not adversely affect the operating characteristics of the existing residential or adjacent commercial area because the proposed antennas, radio units, and equipment cabinets will be behind proposed enclosures located to maintain a 1:1 ratio setback from the edge of building roof line to minimize visual impacts at the street level. The enclosures will read as typical mechanical equipment enclosures located on building rooftops. The proposed rooftop enclosures will be approximately ten (10') feet above the existing roofline. In the Mixed Housing Type Residential -1 the maximum height limit is set at thirty-five (35') foot. At the time the building was constructed, the height of the building was forty-one foot with an additional fifty foot circulation tower. Although the existing building exceeds the allowed height limit, the building in its present form is considered to be legal, but nonconforming. The addition of roof level projections is allowed, with the submission of a conditional use permit. As the proposed projection (roof level enclosure) does not exceed that allowed by the projections section of the development standards, the proposed enclosures are considered acceptable and within the parameters of the height limits for the legal nonconforming structure. The facility will be unmanned and will not create additional vehicular traffic in the area.

B. That the location, design, and site planning of the proposed development will provide a convenient and functional living, working, shopping, or civic environment, and will be as attractive as the nature of the use and its location and setting warrant.

The location, design and site planning of the proposed facility will provide enhanced telecommunications service for the area. The proposed telecommunications use will not alter existing residential uses or commercial uses within the adjacent commercial corridor. The appearance of the building will not be altered due to the similar appearance of the proposed enclosures to other rooftop enclosures. The project is not expected to negatively affect the general quality and character of the neighborhood.

C. That the proposed development will enhance the successful operation of the surrounding area in its basic community functions, or will provide an essential service to the community or region.

The proposed facility will enhance the successful operation of the surrounding area in its basic community function and will provide an essential telecommunications service to the community. Specifically, the proposal will improve telecommunications coverage for residents and businesses within the College Avenue commercial corridor, and will be available to the Police, Fire Services, and the public safety organizations and the general public.

D. That the proposal conforms to all applicable design review criteria set forth in the DESIGN REVIEW PROCEDURE of Chapter 17.136 of the Oakland Planning Code.

The proposal conforms to all significant aspects of the Design Review criteria set forth in Chapter 17.136 of the Oakland Planning Code, as outlined below.

E. That the proposal conforms in all significant respects with the Oakland General Plan and with any other applicable plan or development control map which has been adopted by the City Council.

The subject property is located within the Mixed Housing Type Residential classification of the Oakland General Plan's Land Use and Transportation Element (LUTE). The Mixed Housing Type Residential classification is intended to create, maintain and enhance residential areas typically located near the City's major arterials and characterized by a mix of single family homes, townhouses, small multi-unit buildings, and neighborhood businesses where appropriate. The proposed unmanned wireless telecommunications facility will not adversely affect or detract from the Mixed Housing Type Residential characteristics of this residential neighborhood.

The proposed unmanned wireless telecommunications facility will not adversely affect and detract from the residential characteristics of the area where it will be located. It will be similar in design to other rooftop mechanical equipment structures. Therefore, the facility is not expected to affect the general quality and character of the neighborhood. As a result, the proposal is appropriate for the location and would not significantly increase negative visual impacts to adjacent neighboring residential properties.

17.128.070(B) DESIGN REVIEW CRITERIA FOR MACRO FACILITIES

1. Antennas should be painted and/or textured to match the existing structure:

The proposed enclosures will be compatible in color and texture with the existing building materials. The proposed equipment will be screened and enclosures designed to blend in with existing structures at roof level. The rooftop equipment/antenna areas will be setback 10' from the edge of the rooftop to reduce potential visual impacts at street level.

2. Antennas mounted on architecturally significant structures or significant architectural details of the building should be covered by appropriate casings which are manufactured to match existing architectural features found on the building:

The proposed telecommunications facility consists of three new rooftop mounted antenna and radio unit platforms housed behind screen walls on top of an existing building. The proposed screen walls will be painted to match existing color and style of the building. The screen wall structures are designed to look like other typical rooftop equipment on residential structures.

3. Where feasible, antennas can be placed directly above, below or incorporated with vertical design elements of a building to help in camouflaging:

The antennas are located on the proposed rooftop, behind screen walls, and are largely screened from view and look similar to other rooftop equipment.

4. Equipment shelters or cabinets shall be screened from the public view by using landscaping, or materials and colors consistent with surrounding backdrop:

The proposed equipment cabinets are located on the roof. The equipment will be behind enclosures and painted to be identified as utility structure associated with the existing architectural style of the building.

5. Equipment shelters or cabinets shall be consistent with the general character of the area.

See above findings.

6. For antennas attached to the roof, maintain a 1:1 ratio for equipment setback; screen the antennas to match existing air conditioning units, stairs, or elevator towers; avoid placing roof mounted antennas in direct line with significant view corridors.

The placement of the enclosures will maintain a 1:1 ratio setback from the edge of building roof line. The proposed equipment enclosures are designed to generally match other typical roof level structures.

7. That all reasonable means of reducing public access to the antennas and equipment has been made, including, but not limited to, placement in or on buildings or structures, fencing, anti-climbing measures and anti-tampering devices.

The proposed panel antennas and radio units will be mounted on the roof of an existing residential building and will not be accessible to the public due to the location, approximately 50' above ground. The associated equipment cabinets will be fully concealed from public view with limited access.

Section 17.128.070(C) CONDITIONAL USE PERMIT (CUP) FINDINGS FOR MACRO FACILITIES

1. The project must meet the special design review criteria listed in subsection B of this section (17.128.070B):

The proposed project meets the special design review criteria listed in section 17.128.070B (see above).

2. The proposed project must not disrupt the overall community character:

The proposed telecommunications facility will be located on the roof of existing residential building, and is fully screened from public view. Therefore, the proposal will not disrupt the overall community character surrounding the subject site.

CONDITIONS OF APPROVAL

1. Approved Use

The project shall be constructed and operated in accordance with the authorized use as described in the approved application materials, **PLN18447** and the submitted plans **submitted November 8th, 2018**, as amended by the following conditions of approval and mitigation measures, if applicable (“Conditions of Approval” or “Conditions”).

2. Effective Date, Expiration, Extensions and Extinguishment

This Approval shall become effective immediately, unless the Approval is appealable, in which case the Approval shall become effective in ten calendar days unless an appeal is filed. Unless a different termination date is prescribed, this Approval shall expire **two years** from the Approval date, or from the date of the final decision in the event of an appeal, unless within such period all necessary permits for construction or alteration have been issued, or the authorized activities have commenced in the case of a permit not involving construction or alteration. Upon written request and payment of appropriate fees submitted no later than the expiration date of this Approval, the Director of City Planning or designee may grant a one-year extension of this date, with additional extensions subject to approval by the approving body. Expiration of any necessary building permit or other construction-related permit for this project may invalidate this Approval if said Approval has also expired. If litigation is filed challenging this Approval, or its implementation, then the time period stated above for obtaining necessary permits for construction or alteration and/or commencement of authorized activities is automatically extended for the duration of the litigation.

3. Compliance with Other Requirements

The project applicant shall comply with all other applicable federal, state, regional, and local laws/codes, requirements, regulations, and guidelines, including but not limited to those imposed by the City’s Bureau of Building, Fire Marshal, and Public Works Department. Compliance with other applicable requirements may require changes to the approved use and/or plans. These changes shall be processed in accordance with the procedures contained in Condition #4.

4. Minor and Major Changes

a. Minor changes to the approved project, plans, Conditions, facilities, or use may be approved administratively by the Director of City Planning

b. Major changes to the approved project, plans, Conditions, facilities, or use shall be reviewed by the Director of City Planning to determine whether such changes require submittal and approval of a revision to the Approval by the original approving body or a new independent permit/approval. Major revisions shall be reviewed in accordance with the procedures required for the original permit/approval. A new independent permit/approval shall be reviewed in accordance with the procedures required for the new permit/approval.

5. Compliance with Conditions of Approval

a. The project applicant and property owner, including successors, (collectively referred to hereafter as the “project applicant” or “applicant”) shall be responsible for compliance

with all the Conditions of Approval and any recommendations contained in any submitted and approved technical report at his/her sole cost and expense, subject to review and approval by the City of Oakland.

b. The City of Oakland reserves the right at any time during construction to require certification by a licensed professional at the project applicant's expense that the as-built project conforms to all applicable requirements, including but not limited to, approved maximum heights and minimum setbacks. Failure to construct the project in accordance with the Approval may result in remedial reconstruction, permit revocation, permit modification, stop work, permit suspension, or other corrective action.

c. Violation of any term, Condition, or project description relating to the Approval is unlawful, prohibited, and a violation of the Oakland Municipal Code. The City of Oakland reserves the right to initiate civil and/or criminal enforcement and/or abatement proceedings, or after notice and public hearing, to revoke the Approval or alter these Conditions if it is found that there is violation of any of the Conditions or the provisions of the Planning Code or Municipal Code, or the project operates as or causes a public nuisance. This provision is not intended to, nor does it, limit in any manner whatsoever the ability of the City to take appropriate enforcement actions. The project applicant shall be responsible for paying fees in accordance with the City's Master Fee Schedule for inspections conducted by the City or a City-designated third-party to investigate alleged violations of the Approval or Conditions.

6. Signed Copy of the Approval/Conditions

A copy of the Approval letter and Conditions shall be signed by the project applicant, attached to each set of permit plans submitted to the appropriate City agency for the project, and made available for review at the project job site at all times.

7. Blight/Nuisances

The project site shall be kept in a blight/nuisance-free condition. Any existing blight or nuisance shall be abated within 60 days of approval, unless an earlier date is specified elsewhere.

8. Indemnification

a. To the maximum extent permitted by law, the project applicant shall defend (with counsel acceptable to the City), indemnify, and hold harmless the City of Oakland, the Oakland City Council, the Oakland Redevelopment Successor Agency, the Oakland City Planning Commission, and their respective agents, officers, employees, and volunteers (hereafter collectively called "City") from any liability, damages, claim, judgment, loss (direct or indirect), action, causes of action, or proceeding (including legal costs, attorneys' fees, expert witness or consultant fees, City Attorney or staff time, expenses or costs) (collectively called "Action") against the City to attack, set aside, void or annul this Approval or implementation of this Approval. The City may elect, in its sole discretion, to participate in the defense of said Action and the project applicant shall reimburse the City for its reasonable legal costs and attorneys' fees.

b. Within ten (10) calendar days of the filing of any Action as specified in subsection (a) above, the project applicant shall execute a Joint Defense Letter of Agreement with the City, acceptable to the Office of the City Attorney, which memorializes the above obligations. These obligations and the Joint Defense Letter of Agreement shall survive termination,

extinguishment, or invalidation of the Approval. Failure to timely execute the Letter of Agreement does not relieve the project applicant of any of the obligations contained in this Condition or other requirements or Conditions of Approval that may be imposed by the City.

9. Severability

The Approval would not have been granted but for the applicability and validity of each and every one of the specified Conditions, and if one or more of such Conditions is found to be invalid by a court of competent jurisdiction this Approval would not have been granted without requiring other valid Conditions consistent with achieving the same purpose and intent of such Approval.

10. Job Site Plans

Ongoing throughout demolition, grading, and/or construction

At least one (1) copy of the stamped approved plans, along with the Approval Letter and Conditions of Approval, shall be available for review at the job site at all times.

11. Special Inspector/Inspections, Independent Technical Review, Project Coordination and Management

Prior to issuance of a demolition, grading, and/or construction permit

The project applicant may be required to pay for on-call special inspector(s)/inspections as needed during the times of extensive or specialized plan check review, or construction.

The project applicant may also be required to cover the full costs of independent technical and other types of peer review, monitoring and inspection, including without limitation, third party plan check fees, including inspections of violations of Conditions of Approval.

The project applicant shall establish a deposit with the Building Services Division, as directed by the Building Official, Director of City Planning or designee.

12. Days/Hours of Construction Operation

Ongoing throughout demolition, grading, and/or construction

The project applicant shall require construction contractors to limit standard construction activities as follows:

- a) Construction activities are limited to between 7:00 AM and 7:00 PM Monday through Friday, except that pile driving and/or other extreme noise generating activities greater than 90 dBA shall be limited to between 8:00 a.m. and 4:00 p.m. Monday through Friday.
- b) Any construction activity proposed to occur outside of the standard hours of 7:00 am to 7:00 pm Monday through Friday for special activities (such as concrete pouring which may require more continuous amounts of time) shall be evaluated on a case by case basis, with criteria including the proximity of residential uses and a consideration of resident's preferences for whether the activity is acceptable if the overall duration of construction is shortened and such construction activities shall only be allowed with the prior written authorization of the Building Services Division.
- c) Construction activity shall not occur on Saturdays, with the following possible exceptions:
 - i. Prior to the building being enclosed, requests for Saturday construction for special activities (such as concrete pouring which may require more continuous amounts of time), shall be evaluated on a case by case basis, with criteria including the

- proximity of residential uses and a consideration of resident's preferences for whether the activity is acceptable if the overall duration of construction is shortened. Such construction activities shall only be allowed on Saturdays with the prior written authorization of the Building Services Division.
- ii. After the building is enclosed, requests for Saturday construction activities shall only be allowed on Saturdays with the prior written authorization of the Building Services Division, and only then within the interior of the building with the doors and windows closed.
 - iii. No construction activity shall take place on Sundays or Federal holidays.
- d) No extreme noise generating activities (greater than 90 dBA) shall be allowed on Saturdays, with no exceptions.
 - e) Construction activities include but are not limited to: truck idling, moving equipment (including trucks, elevators, etc) or materials, deliveries, and construction meetings held on-site in a non-enclosed area.

13. Radio Frequency Emissions

Prior to the final building permit sign off.

The applicant shall submit a certified RF emissions report stating the facility is operating within the acceptable standards established by the regulatory Federal Communications Commission.

14. Operational

Ongoing.

Noise levels from the activity, property, or any mechanical equipment on site shall comply with the performance standards of Section 17.120 of the Oakland Planning Code and Section 8.18 of the Oakland Municipal Code. If noise levels exceed these standards, the activity causing the noise shall be abated until appropriate noise reduction measures have been installed and compliance verified by the Planning and Zoning Division and Building Services.

15. Graffiti Control

Requirement: During construction and operation of the project, the project applicant shall incorporate best management practices reasonably related to the control of graffiti and/or the mitigation of the impacts of graffiti. Such best management practices may include, without limitation: The project applicant shall remove graffiti by appropriate means within seventy-two (72) hours. Appropriate means include the following:

- i. Removal through scrubbing, washing, sanding, and/or scraping (or similar method) without
damaging the surface and without discharging wash water or cleaning detergents into the City
storm drain system.
- ii. For galvanized poles, covering with new paint to match the color of the surrounding surface.
- iii. Replace pole numbers.

When Required: Ongoing

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

16. Screening Materials and revised plan

The project applicant shall submit to City Bureau of Planning staff a revised plan showing, for review and approval:

- Enclosure screen walls,
- A materials board,
- Samples and colors (gray color) of the following: FRP screen; exposed cabinet platform including posts; cable runs; and proposed enclosure texturing.

Applicant Statement


I have read and accept responsibility for the Conditions of Approval. I agree to abide by and conform to the Conditions of Approval, as well as to all provisions of the Oakland Planning Code and Oakland Municipal Code pertaining to the project.


Name of Project Applicant

Signature of Project Applicant

Date

Z D DRAWING SIGN-OFF

DATE:	TIME:	%	CWC-PLEASE RETURN BY:
			
SITE ACQUISITION:	SIGNATURE		DATE
PLANNING:			
CONSTRUCTION:			
MANAGEMENT:			

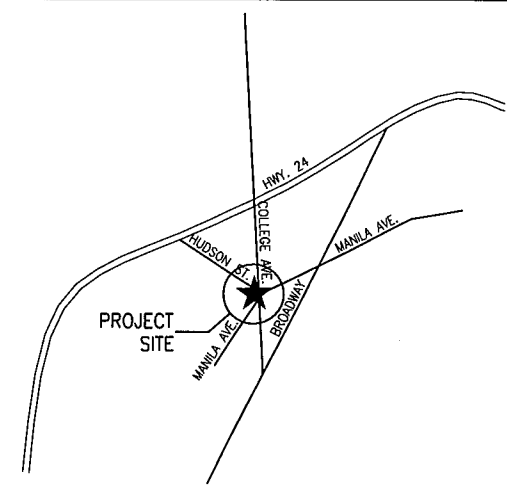
			
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REAL ESTATE:			
RF ENGINEER:			
EQUIPMENT ENGINEER:			
MW ENG./TRANSPORT:			

OTHER (IF APPLICABLE)			
	SIGNATURE		DATE



2785 Mitchell Drive, Walnut Creek, CA 94598

RECEIVED ROCKRIDGE
 NOV 08 2018 5375 MANILA AVE.
 OAKLAND, CA 94618
 CITY OF OAKLAND APN: 014-1251-007-01
 BUREAU OF PLANNING LOCATION #: 286675



LOCATION PLAN

PROJECT DIRECTORY

APPLICANT:
 VERIZON WIRELESS
 2785 MITCHELL DRIVE
 WALNUT CREEK, CA 94598

PROPERTY OWNER:
 SATELLITE SENIOR HOMES
 1835 ALCATRAZ AVENUE
 BERKELEY, CA 94703
 CONTACT: ALEX RODGERS
 510-809-2766
 arodgers@schohomes.org

ARCHITECT:
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 MST ARCHITECTS, INC.
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 916-567-9630
 manuel@mstarchitects.com

CONSTRUCTION MANAGER:
 MARK CASEY
 COMPLETE WIRELESS CONSULTING, INC.
 2009 V STREET
 SACRAMENTO, CA 95818
 916-508-7945
 mcasey@completewireless.net

SURVEYOR:
 PHIL AUER SURVEYING
 14407 CORTE LEJOS
 BAKERSFIELD, CA 93314
 661-587-6129
 posis5075@att.net

INDEX OF DRAWINGS

SHEET NUMBER	SHEET TITLE
T1.1	TITLE SHEET, LOCATION PLAN, PROJECT DATA
LS1	SURVEY
LS2	SURVEY
A1.1	SITE PLAN
A2.1	EQUIPMENT LAYOUT PLAN
A2.2	ANTENNA LAYOUT PLAN
A3.1	ELEVATIONS

PROJECT SUMMARY

ASSESSOR'S PARCEL NUMBER: 014-1251-007-01

JURISDICTION: CITY OF OAKLAND

OCCUPANCY: S-2 (UNMANNED TELECOMMUNICATIONS FACILITY) U (TOWER)

TYPE OF CONSTRUCTION: V-B

ZONING: RM-1 MIXED USE RESIDENTIAL

CODE COMPLIANCE

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

2016 CALIFORNIA BUILDING STANDARDS CODE, TITLE 24, CALIFORNIA CODE OF REGULATIONS EFFECTIVE JANUARY 1, 2017

- PART 1 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE
- PART 2 CALIFORNIA BUILDING CODE
- PART 2.5 CALIFORNIA RESIDENTIAL BUILDING CODE
- PART 3 CALIFORNIA ELECTRICAL CODE
- PART 4 CALIFORNIA MECHANICAL CODE
- PART 5 CALIFORNIA PLUMBING CODE
- PART 6 CALIFORNIA ENERGY CODE
- PART 8 CALIFORNIA HISTORICAL BUILDING CODE
- PART 9 CALIFORNIA FIRE CODE
- PART 10 CALIFORNIA EXISTING BUILDING CODE
- PART 11 CALIFORNIA GREEN BUILDING STANDARDS CODE
- PART 12 CALIFORNIA REFERENCE STANDARDS CODE

LOCAL COUNTY OR CITY ORDINANCES

ACCESSIBILITY REQUIREMENTS: THIS FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. ACCESSIBILITY NOT REQUIRED IN ACCORDANCE WITH THE 2016 CBC 11B-203.5, AND 11B-202.4 EXCEPTION 7.

DIRECTIONS

- FROM VERIZON OFFICE @ 2785 MITCHELL DRIVE, WALNUT CREEK, CA 94598:
1. HEAD NORTHEAST ON MITCHELL DR TOWARD OAK GROVE RD
 2. TURN RIGHT ONTO OAK GROVE RD
 3. TURN RIGHT ONTO YGNACIO VALLEY RD
 4. YGNACIO VALLEY RD TURNS RIGHT AND BECOMES HILLSIDE AVE
 5. TURN RIGHT ONTO THE 24 W RAMP TO OAKLAND
 6. CONTINUE ONTO CA-24 W/HWY 24 W
 7. KEEP LEFT AT THE FORK TO CONTINUE ON CA-24 W
 8. TAKE EXIT 4B TO MERGE ONTO BROADWAY
 9. MERGE ONTO BROADWAY
 10. TURN RIGHT ONTO MANILA AVE
 11. DESTINATION WILL BE ON THE RIGHT

PROJECT DESCRIPTION


- PROPOSED VERIZON WIRELESS UNMANNED TELECOMMUNICATIONS FACILITY INCLUDING:**
- A ROOFTOP EQUIPMENT LEASE AREA.
 - A METAL EQUIPMENT PLATFORM WITH CONTINUOUS EQUIPMENT SCREEN WALL, TEXTURED AND PAINTED TO MATCH EXISTING BUILDING.
 - (2) ANTENNA LEASE AREAS.
 - OUTDOOR EQUIPMENT CABINETS ON METAL EQUIPMENT PLATFORM.
 - POWER & TELCO CONDUITS FROM EXISTING POINTS OF CONNECTION.
 - ROOFTOP CABLE TRAYS.
 - ANTENNAS MOUNTED ON ANTENNA FRAMES.
 - (2) PROPOSED VERIZON WIRELESS ANTENNA RF SCREEN ENCLOSURES W/ ACCESS DOOR, TEXTURED AND PAINTED TO MATCH EXISTING BUILDING


PROJECT MILESTONES


08/14/2017	90% ZONING DOCUMENTS
11/15/2017	100% ZONING DOCUMENTS
12/01/2017	100% ZONING DOCUMENTS REV 1
XX/XX/XXXX	90% CONSTRUCTION DOCUMENTS
XX/XX/XXXX	100% CONSTRUCTION DOCUMENTS

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 mcasey@completewireless.net


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 ROCKRIDGE
 5375 MANILA AVE.
 OAKLAND, CA 94618

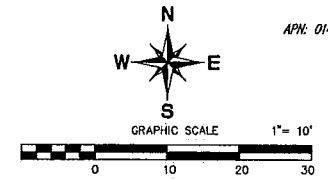
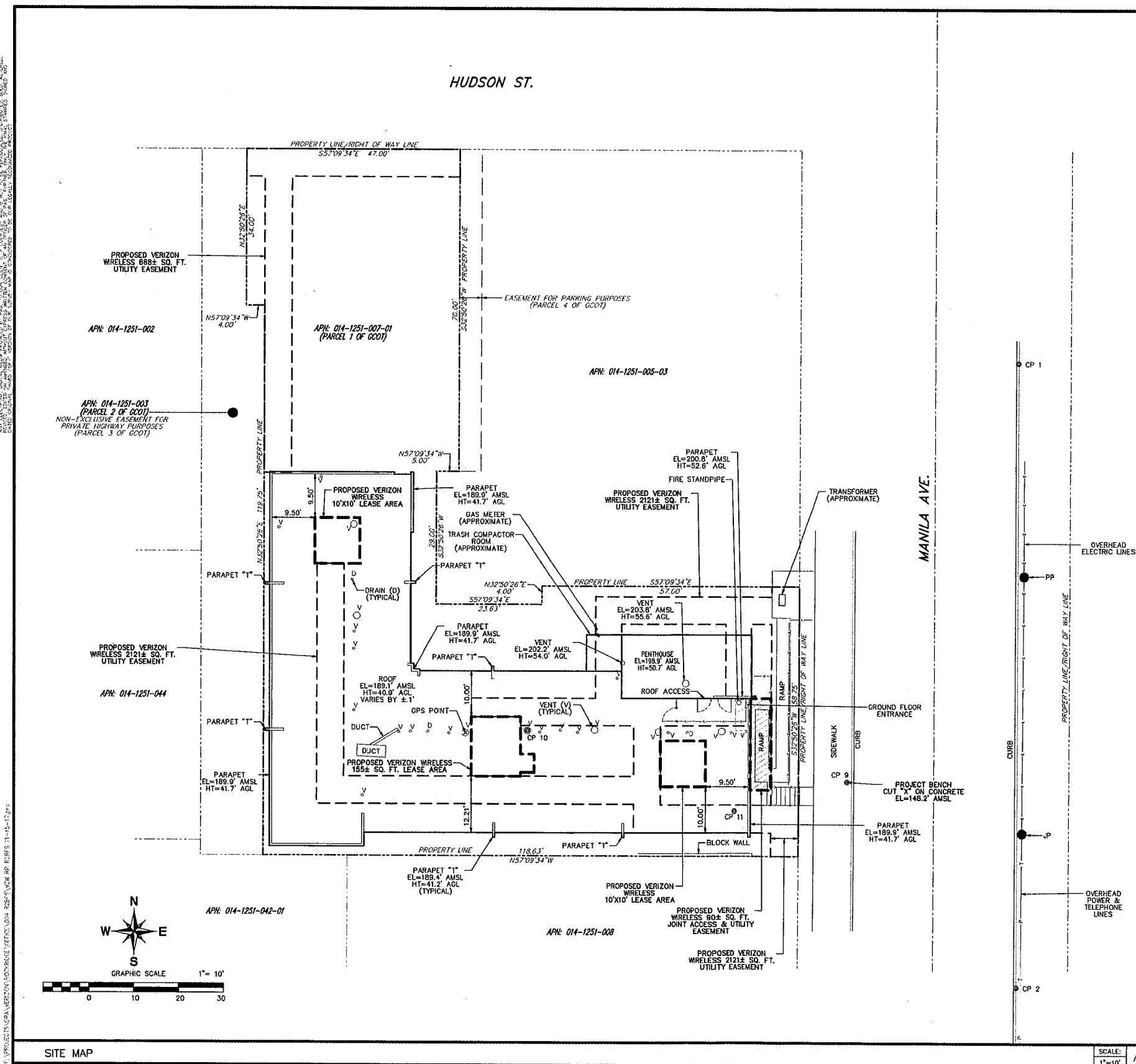
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 TITLE SHEET, LOCATION PLAN, PROJECT DATA

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File: 1622082_T11.dwg
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Checked By: sv
Scale: AS NOTED
Date: 12/01/17

Job No. 1622082

T1.1



SITE MAP

LEGEND	
GCOT = GUARANTEE CONDITION OF TITLE	OVERHEAD POWER & TELEPHONE LINES
☀ LIGHT POLE	OVERHEAD ELECTRIC LINE
🌳 TREE	RAIL
● UP JOINT POLE	PROPERTY LINE
🚶 HANDICAPPED PARKING	AMSL.....ABOVE MEAN SEA LEVEL
⊕ FIRE HYDRANT	AGL.....ABOVE GROUND LEVEL
● TP TELEPHONE POLE	● CP #.....FIELD CONTROL POINT
⊕ SPOT ELEVATION	

DATE OF FIELD VISIT: 08/02/2017
 SURVEYED BY/ OR UNDER THE DIRECTION OF: Oliver Philip Auer L.S. 5075

NOTES:
 THIS IS NOT A BOUNDARY SURVEY. THIS IS A CELLULAR TELECOMMUNICATIONS TOPOGRAPHIC SURVEY MAP WITH EXISTING PARENT PARCEL LINES AND EASEMENTS BEING A GRAPHIC DEPICTION OF VARIOUS INFORMATION GATHERED FROM PRELIMINARY REPORTS, RECORD INFORMATION AND AVAILABLE MONUMENTS FOUND DURING THE FIELD SURVEY. UNLESS OTHERWISE NOTED, NO UNDERGROUND UTILITY LOCATING SERVICE COMPANY WAS CONTACTED PRIOR TO THIS MAP BEING PREPARED. THEREFORE, THERE MAY BE NON-VISIBLE OR OBSCURE UTILITIES EXISTING ON THE PROPERTY NOT SHOWN ON THIS MAP.

PARENT PARCEL DESCRIPTION:
 SEE GUARANTEE CONDITION OF TITLE DESCRIPTION EXTRACT, LS2 SHEET.

LEASE AREA DESCRIPTIONS:
 SEE LS2 SHEET.

JOINT ACCESS AND UTILITY EASEMENT DESCRIPTION:
 SEE LS2 SHEET.

UTILITY EASEMENT DESCRIPTIONS:
 SEE LS2 SHEET.

BASIS OF ELEVATIONS: NAVD 88.
 BASIS OF BEARINGS: CALIFORNIA STATE PLANE COORDINATE SYSTEM, ZONE 3, NAD 83.

PROJECT BENCH: AS INDICATED HEREON.
 LANDLORD INFORMATION: SATELLITE SENIOR HOMES INC.
 1835 ALCATRAZ AVENUE
 BERKELEY, CA 94703

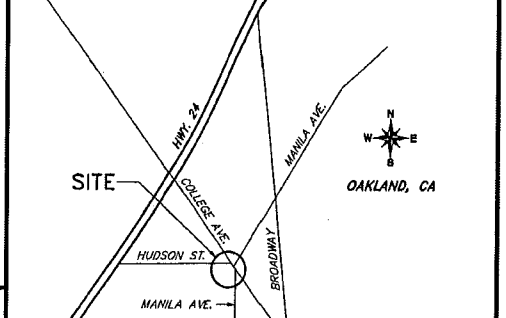
NET AREA OF UNDERLYING PARCEL(S): 0.25± AC.
 SITE LOCATED IN FLOOD ZONE X, AN AREA OF MINIMAL FLOOD HAZARD, PER FEMA FIRM COMMUNITY PANEL NUMBER 0601000596, EFFECTIVE DATE 06/03/2009, PER FEMA INTERACTIVE WEBSITE.

FAA 1A CERTIFICATION:
 LATITUDE AND LONGITUDE WAS OBTAINED FROM INFORMATION PROVIDED BY A GPS SURVEY. THE GEODETIC POSITION SHOWN WAS DETERMINED UTILIZING FAST-STATIC GPS OBSERVATIONS FROM NGS CORS STATION(S) USING TRIMBLE 4600LS RECEIVERS. THE DATA WAS DIFFERENTIALLY CORRECTED WITH TRIMBLE GPS SURVEY SOFTWARE.

LATITUDE, LONGITUDE AND ELEVATIONS DENOTED ON THIS SURVEY MEET OR EXCEED THE FEDERAL AVIATION ADMINISTRATION 1-A STANDARD.
 ELEVATION OF GROUND AT GPS POINT: 148.2' AMSL

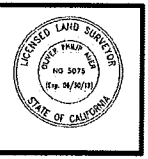
STRUCTURE HEIGHT: TOP OF (E) VENT/EL=203.8' AMSL/HT=55.6' AGL
 LATITUDE: N37°50'23.44"
 LONGITUDE: W122°15'07.52" (NAD 83)

VICINITY MAP NOT TO SCALE



Phil Auer Surveying
 14107 Curtis Lane, #3314
 Bakersfield, CA 93314
 Phone: (805) 974-9293
 Mobile: (805) 974-9293
 E-mail: pasha@psurvey.net

ROCKRIDGE
 5375 MANILA AVE.
 OAKLAND, CA 94618
verizon
 TOPOGRAPHIC SURVEY MAP
 SHEET TITLE: LS1



Revisions:

Name: ROCKRIDGE
 Drawn By: PAB
 Checked By: OPA
 Scale: AS NOTED
 Date: 11/15/17

Job No. N/A
LS1

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GUARANTEE CONDITION OF TITLE DESCRIPTION EXTRACT

Real property in the City of Oakland, County of Alameda, State of California, described as follows:
PORTION OF LOT 6 IN BLOCK 7, AS SHOWN ON THE MAP OF A PORTION OF VERNON PARK, FILED APRIL 14, 1984, IN BOOK 4 OF MAPS, PAGE 18, ALAMEDA COUNTY RECORDS, DESCRIBED AS FOLLOWS:

PARCEL 1: (APN: 014-1251-007-D1)

BEGINNING AT A POINT ON THE SOUTHWESTERN LINE OF SAID LOT 6, DISTANT THEREON SOUTH 57° 37' EAST, SAID BEARINGS USED FOR THE PURPOSE OF THIS DESCRIPTION, 14.00 FEET FROM THE INTERSECTION THEREOF WITH THE NORTHWESTERN LINE OF THE PARCEL OF LAND DESIGNATED AS PARCEL 4 IN THE DEED TO EDWARD E. WOTE, JR., ET AL., RECORDED FEBRUARY 9, 1971, ON REEL 2783, IMAGE 843, INSTRUMENT NO. 14624, ALAMEDA COUNTY RECORDS; RUNNING THENCE NORTH 32° 23' EAST 118.75 FEET; THENCE NORTH 57° 37' WEST 4.00 FEET; THENCE NORTH 32° 23' EAST 14.00 FEET TO THE SOUTHWESTERN LINE OF HUDSON STREET, AS SHOWN ON SAID MAP; THENCE ALONG THE LAST NAMED LINE SOUTH 57° 37' EAST 47.00 FEET; THENCE SOUTH 32° 23' WEST 70.00 FEET; THENCE NORTH 57° 37' WEST 5.00 FEET; THENCE SOUTH 32° 23' WEST 20.00 FEET; THENCE SOUTH 57° 37' EAST 23.63 FEET; THENCE NORTH 32° 23' EAST 4.00 FEET; THENCE SOUTH 57° 37' EAST 57.00 FEET TO THE NORTHWESTERN LINE OF MANILA AVENUE, FORMERLY FOURTH AVENUE, AS SHOWN ON SAID MAP; THENCE ALONG SAID NORTHWESTERN LINE SOUTH 32° 23' WEST 26.75 FEET TO SAID SOUTHWESTERN LINE OF LOT 6; THENCE ALONG THE LAST NAMED LINE NORTH 57° 37' WEST 118.63 FEET TO THE POINT OF BEGINNING.

PARCEL 2: (PORTION OF APN: 014-1251-03)

AN UNDIVIDED 2/3 INTEREST IN AND TO THE PARCEL OF LAND DESCRIBED AS FOLLOWS:
BEGINNING AT A POINT ON THE SOUTHWESTERN LINE OF SAID LOT 6, DISTANT THEREON SOUTH 57° 37' EAST, SAID BEARINGS USED FOR THE PURPOSE OF THIS DESCRIPTION, 14.00 FEET FROM THE INTERSECTION THEREOF WITH THE NORTHWESTERN LINE OF THE PARCEL OF LAND DESIGNATED AS PARCEL 4 IN THE DEED TO EDWARD E. WOTE, JR., ET AL., RECORDED FEBRUARY 9, 1971, ON REEL 2783, IMAGE 843, INSTRUMENT NO. 14624, ALAMEDA COUNTY RECORDS; RUNNING THENCE NORTH 32° 23' EAST 118.75 FEET; THENCE NORTH 57° 37' WEST 4.00 FEET; THENCE NORTH 32° 23' EAST 14.00 FEET TO THE SOUTHWESTERN LINE OF HUDSON STREET, AS SHOWN ON SAID MAP; THENCE ALONG THE LAST NAMED LINE NORTH 57° 37' WEST 10.00 FEET TO THE NORTHWESTERN LINE OF SAID PARCEL OF LAND DESIGNATED AS PARCEL 4 IN SAID DEED TO EDWARD E. WOTE, JR., ET AL., 2783 O.R. 843; THENCE ALONG SAID NORTHWESTERN LINE SOUTH 32° 23' WEST 153.75 FEET TO THE SOUTHWESTERN LINE OF SAID LOT 6; THENCE ALONG THE LAST NAMED LINE SOUTH 57° 37' EAST 14.00 FEET TO THE POINT OF BEGINNING.

PARCEL 3:

A NON-EXCLUSIVE EASEMENT FOR PRIVATE HIGHWAY PURPOSES OVER THE PARCEL OF LAND DESCRIBED AS FOLLOWS:
BEGINNING AT A POINT ON THE SOUTHWESTERN LINE OF SAID LOT 6, DISTANT THEREON SOUTH 57° 37' EAST, SAID BEARINGS USED FOR THE PURPOSE OF THIS DESCRIPTION, 14.00 FEET FROM THE INTERSECTION THEREOF WITH THE NORTHWESTERN LINE OF THE PARCEL OF LAND DESIGNATED AS PARCEL 4 IN THE DEED TO EDWARD E. WOTE, JR., ET AL., RECORDED FEBRUARY 9, 1971, ON REEL 2783, IMAGE 843, INSTRUMENT NO. 14624, ALAMEDA COUNTY RECORDS; RUNNING THENCE NORTH 32° 23' EAST 118.75 FEET; THENCE NORTH 57° 37' WEST 4.00 FEET; THENCE NORTH 32° 23' EAST 14.00 FEET TO THE SOUTHWESTERN LINE OF HUDSON STREET, AS SHOWN ON SAID MAP; THENCE ALONG THE LAST NAMED LINE NORTH 57° 37' WEST 10.00 FEET TO THE NORTHWESTERN LINE OF SAID PARCEL OF LAND DESIGNATED AS PARCEL 4 IN SAID DEED TO EDWARD E. WOTE, JR., ET AL., 2783 O.R. 843; THENCE ALONG SAID NORTHWESTERN LINE SOUTH 32° 23' WEST 153.75 FEET TO THE SOUTHWESTERN LINE OF SAID LOT 6; THENCE ALONG THE LAST NAMED LINE SOUTH 57° 37' EAST 14.00 FEET TO THE POINT OF BEGINNING.

PARCEL 4:

AN EASEMENT FOR PARKING PURPOSES OVER THE PARCEL OF LAND DESCRIBED AS FOLLOWS:
BEGINNING AT THE INTERSECTION OF THE SOUTHWESTERN LINE OF HUDSON STREET, AS SHOWN ON SAID MAP, WITH THE SOUTHEASTERN LINE OF PARCEL 1 ABOVE; RUNNING THENCE ALONG THE LAST NAMED LINE SOUTH 32° 23' WEST, SAID BEARINGS USED FOR THE PURPOSE OF THIS DESCRIPTION, 70.00 FEET; THENCE SOUTH 57° 37' EAST 5.00 FEET; THENCE NORTH 32° 23' EAST 70.00 FEET TO SAID LINE OF HUDSON STREET; THENCE ALONG THE LAST NAMED LINE NORTH 57° 37' WEST 5.00 FEET TO THE POINT OF BEGINNING.

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SHEET TITLE: TOPOGRAPHIC SURVEY MAP

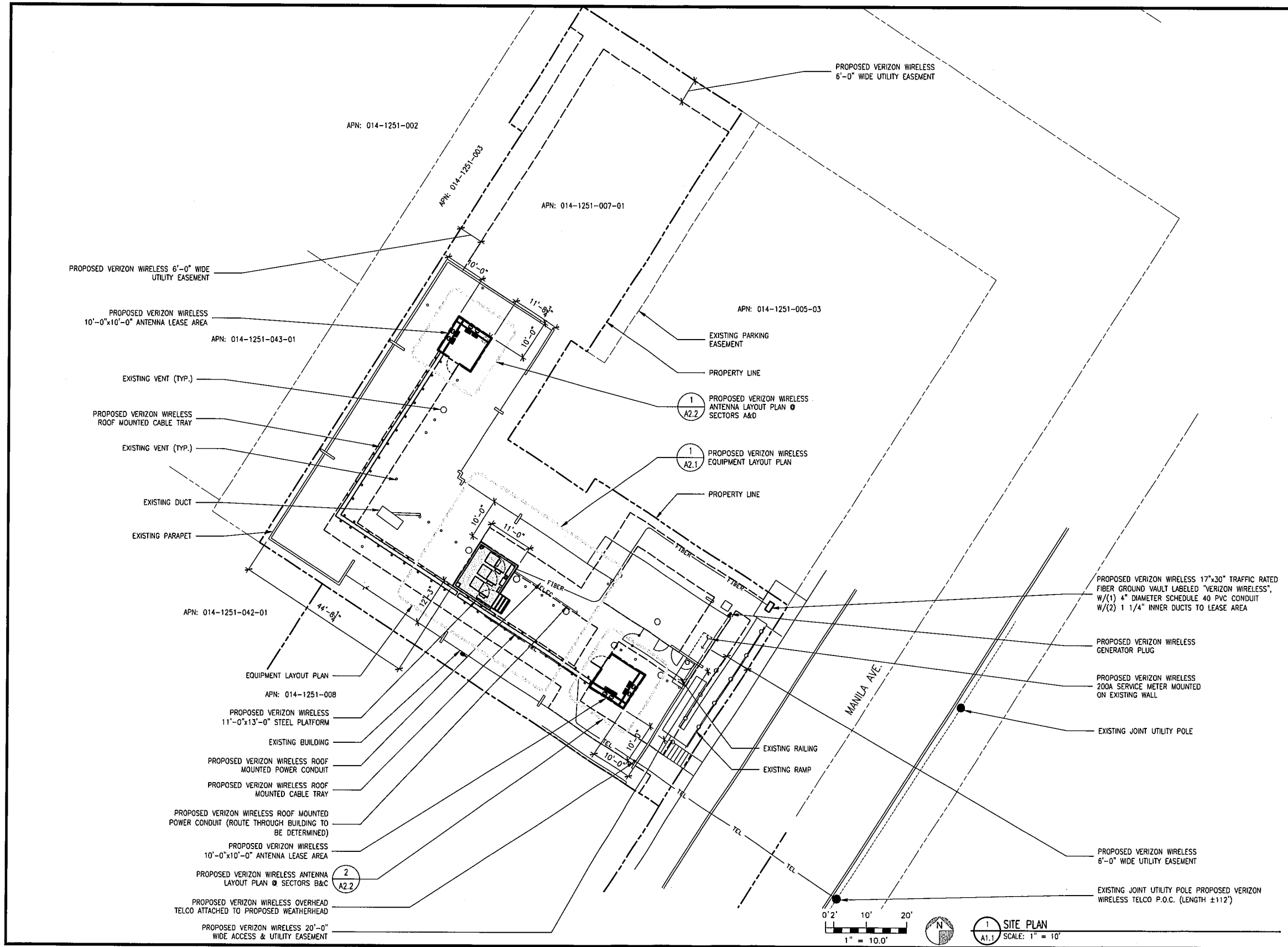


Revisions:

Name: ROCKRIDGE
Drawn By: PAO
Checked By: OPA
Scale: AS NOTED
Date: 11/15/17

Job No. N/A

LS2



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SITE PLAN

SHEET TITLE:

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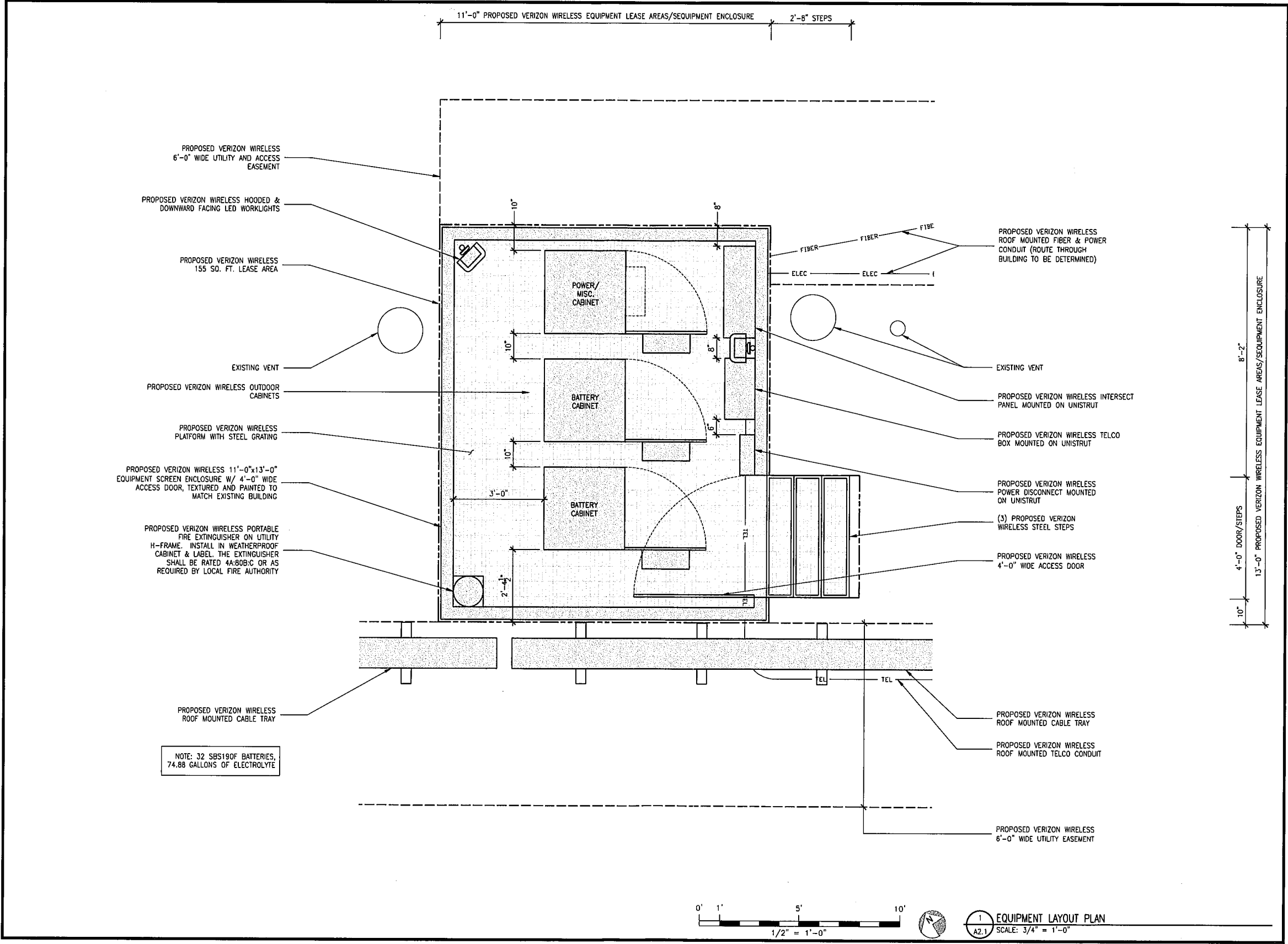
Job No. 1622082

A1.1

0' 2' 10' 20'

1" = 10.0'

1 SITE PLAN
 A1.1 SCALE: 1" = 10'



NOTE: 32 SBS190F BATTERIES,
74.88 GALLONS OF ELECTROLYTE

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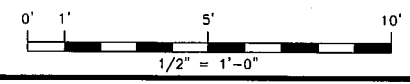
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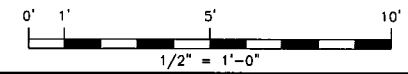
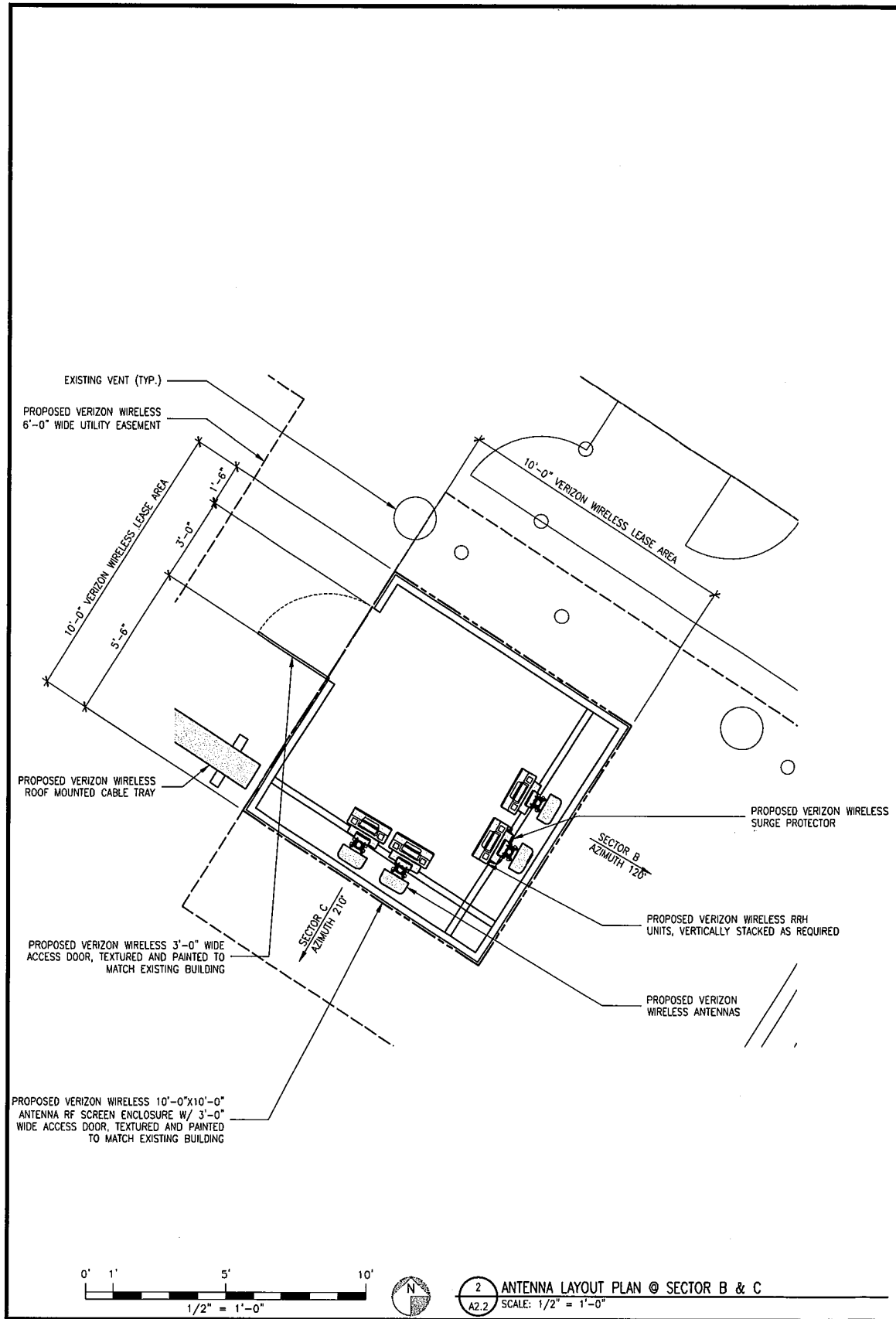
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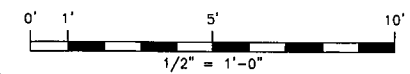
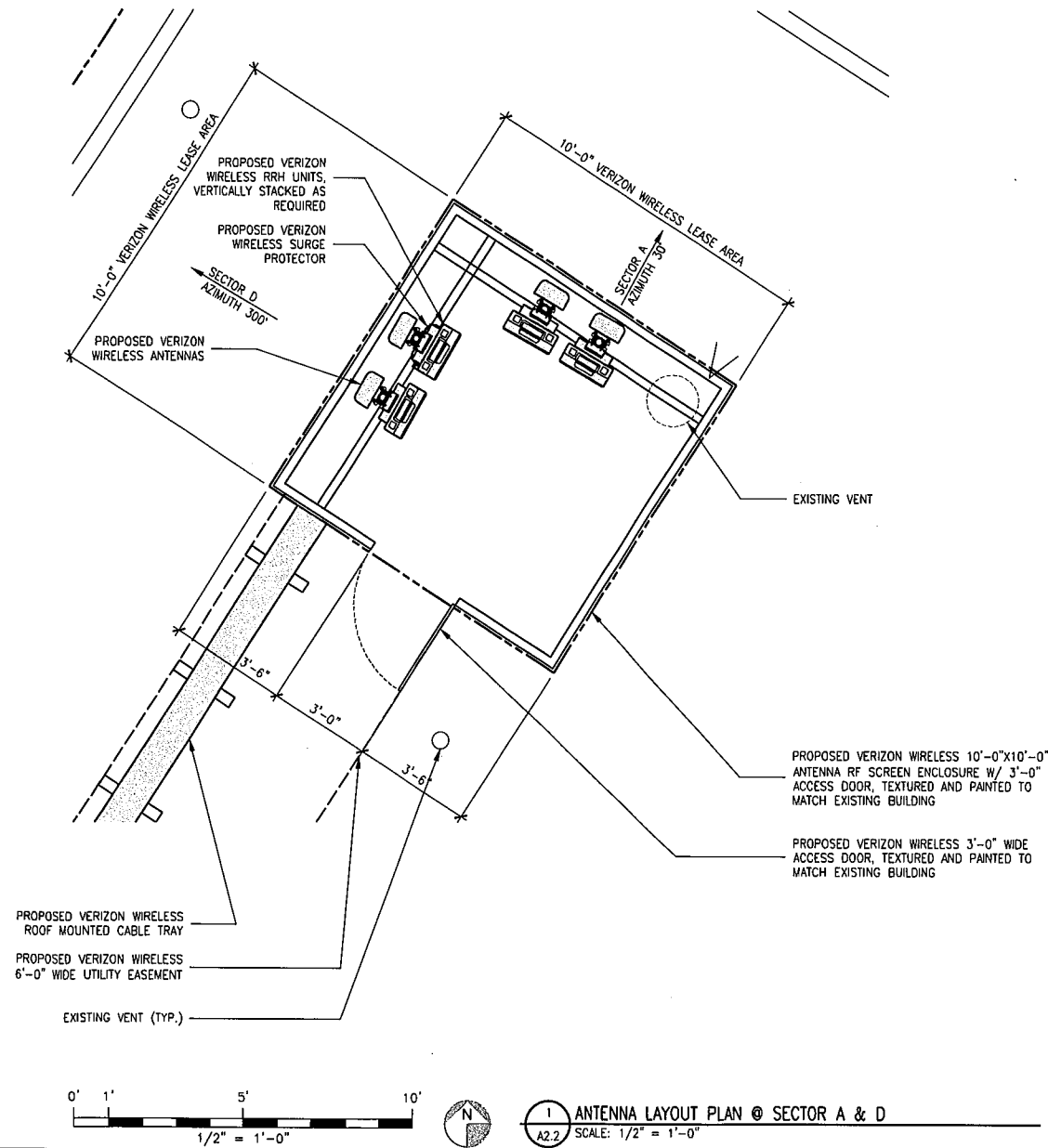


EQUIPMENT LAYOUT PLAN
 SCALE: 3/4" = 1'-0"



2 ANTENNA LAYOUT PLAN @ SECTOR B & C
SCALE: 1/2" = 1'-0"

TOWER MOUNTED EQUIPMENT SCHEDULE (PRELIMINARY & SUBJECT TO CHANGE)						
EQUIPMENT	DESCRIPTION	QUANTITY				TOTAL
		SECTOR A	SECTOR B	SECTOR C	SECTOR D	
ANTENNA	TO BE DETERMINED	2	2	2	2	8
RRH/RADIO	RRUS	3	3	3	3	12
SURGE PROTECTOR/HYBRID	RAYCAP DC3315 OR EQUIVALENT / HYBRID TRUNK CABLE	2/2				2/2
COAXIAL CABLE	5/8" DIAMETER COAX	0	0	0	0	0



1 ANTENNA LAYOUT PLAN @ SECTOR A & D
SCALE: 1/2" = 1'-0"

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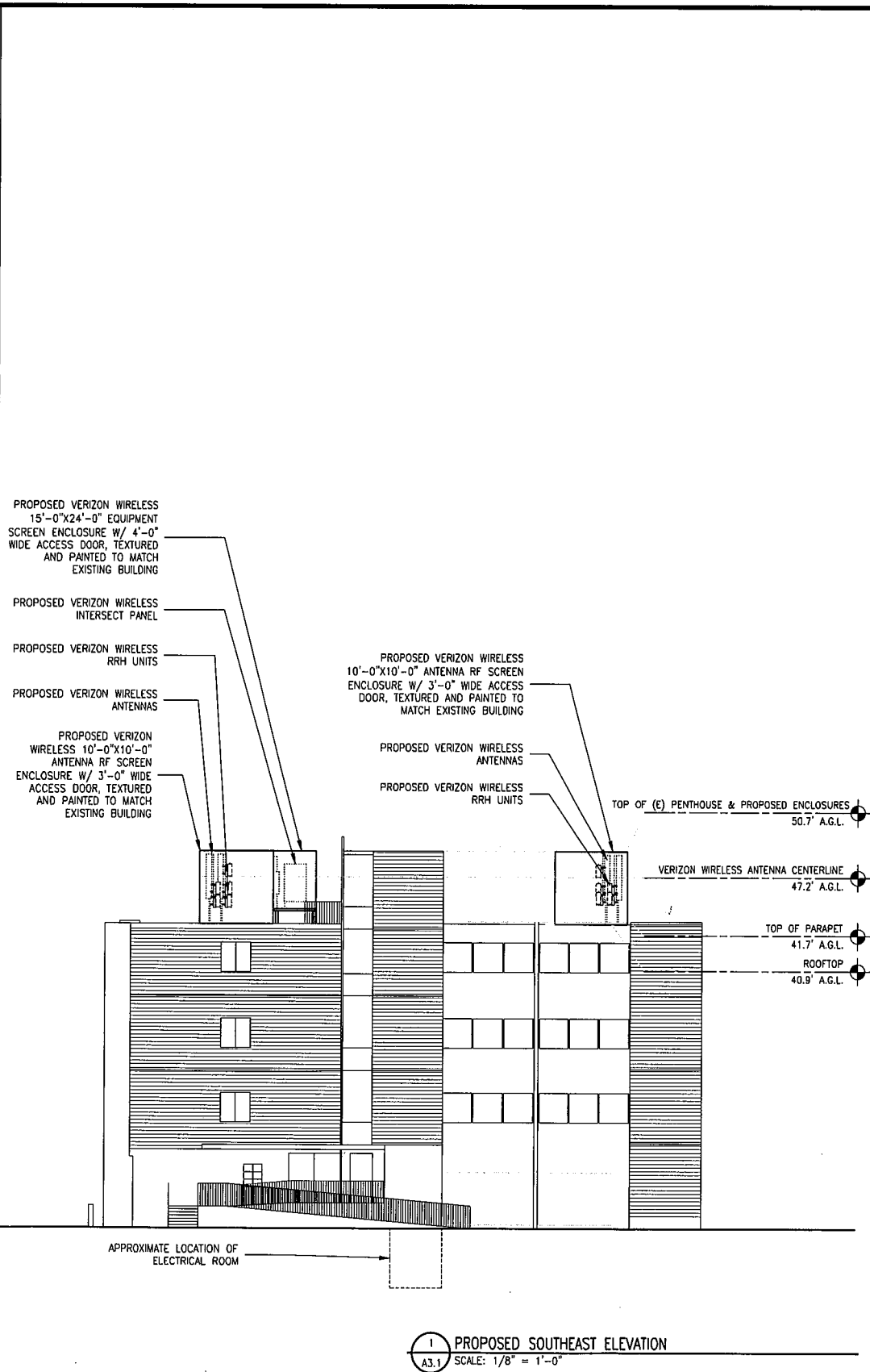
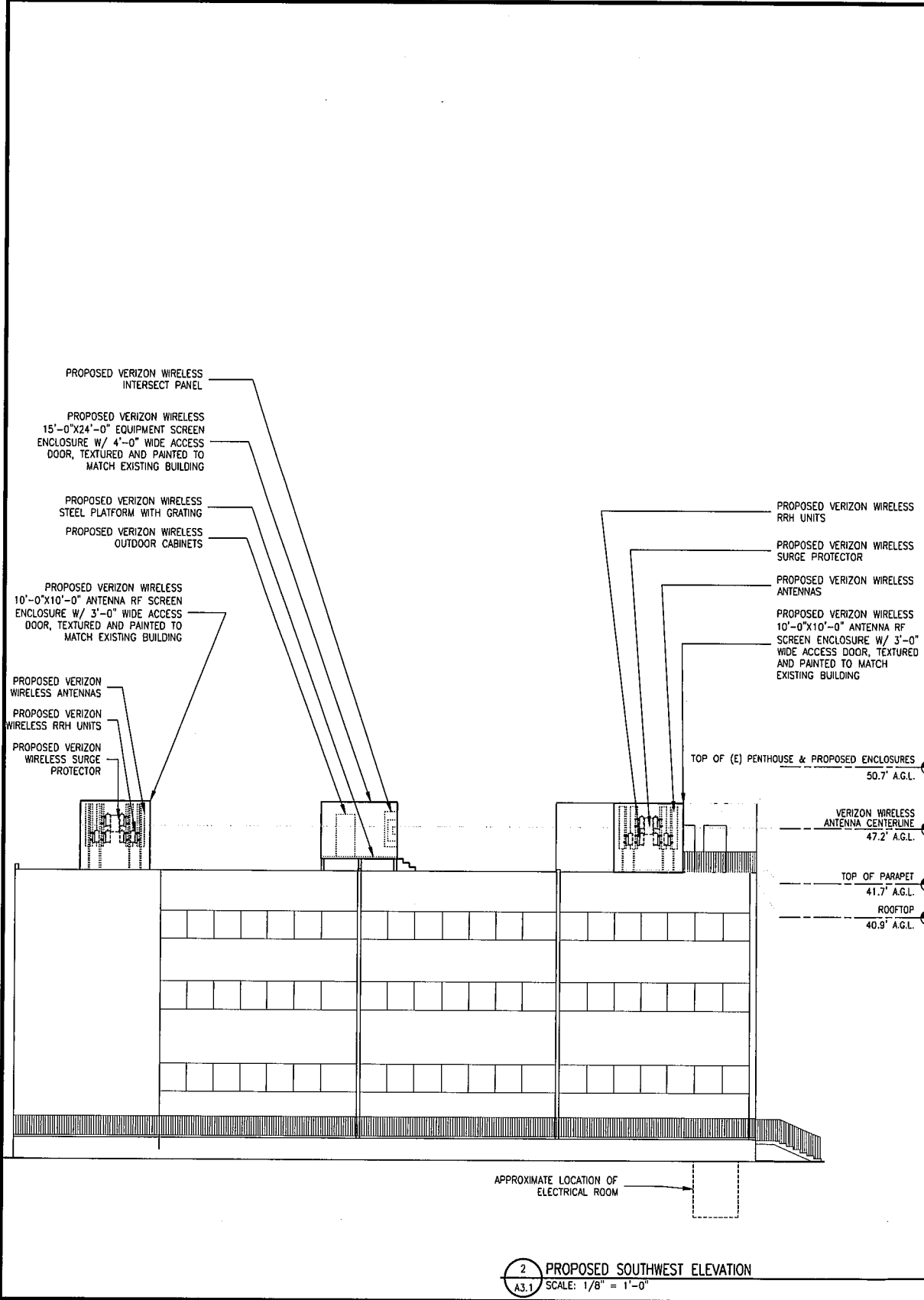
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A2.2



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SHEET TITLE: ELEVATIONS

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Drawn By: xst
Checked By: sv
Scale: AS NOTED
Date: 11/15/17

Job No. 162.2082

A3.1

PROPOSED VERIZON WIRELESS 15'-0" x 24'-0" EQUIPMENT SCREEN ENCLOSURE W/ 4'-0" WIDE ACCESS DOOR, TEXTURED AND PAINTED TO MATCH EXISTING BUILDING

PROPOSED VERIZON WIRELESS 10'-0" x 10'-0" ANTENNA RF SCREEN ENCLOSURE W/ 3'-0" WIDE ACCESS DOOR, TEXTURED AND PAINTED TO MATCH EXISTING BUILDING

NOTE: ALL ANTENNAS, CABINETS AND ASSOCIATED EQUIPMENT TO BE FULLY CONCEALED WITHIN PROPOSED ENCLOSURES



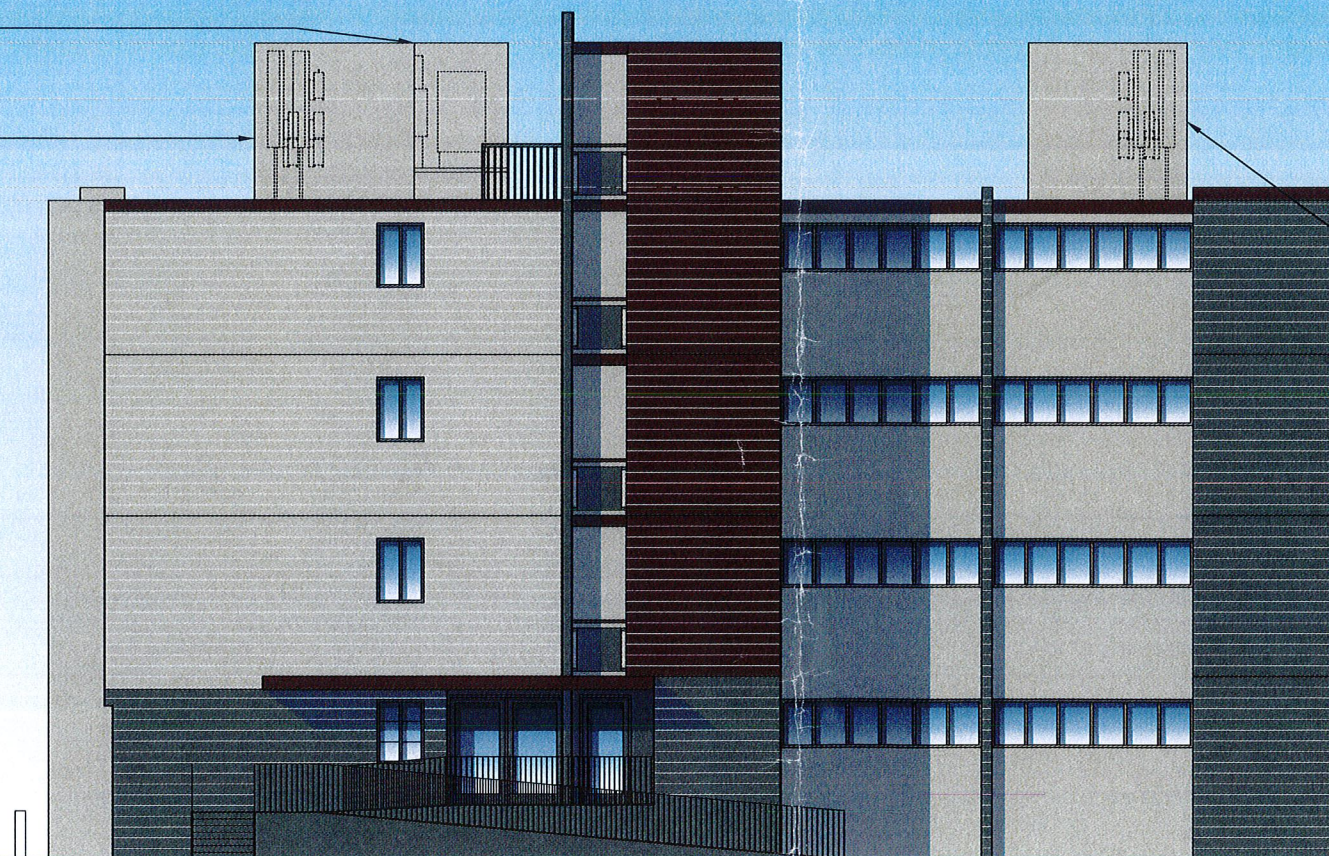
APPROXIMATE LOCATION OF ELECTRICAL ROOM BELOW GRADE

2 PROPOSED SOUTHWEST ELEVATION
SCALE: 1/8" = 1'-0"

PROPOSED VERIZON WIRELESS 15'-0" x 24'-0" EQUIPMENT SCREEN ENCLOSURE W/ 4'-0" WIDE ACCESS DOOR, TEXTURED AND PAINTED TO MATCH EXISTING BUILDING

PROPOSED VERIZON WIRELESS 10'-0" x 10'-0" ANTENNA RF SCREEN ENCLOSURE W/ 3'-0" WIDE ACCESS DOOR, TEXTURED AND PAINTED TO MATCH EXISTING BUILDING

NOTE: ALL ANTENNAS, CABINETS AND ASSOCIATED EQUIPMENT TO BE FULLY CONCEALED WITHIN PROPOSED ENCLOSURES



APPROXIMATE LOCATION OF ELECTRICAL ROOM BELOW GRADE

1 PROPOSED SOUTHEAST ELEVATION
SCALE: 1/8" = 1'-0"

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SHEET TITLE:
COLOR BOARD

Revisions:

File:162.2082_COLOR BOARD.dwg
Drawn By: MST
Checked By: MST
Scale: AS NOTED
Date: 02/28/18

Job No. 162.2082

CB

Supplemental Alternative Sites Analysis Verizon Wireless

Site Name: Rockridge
Site Address: 5375 Manila Avenue, Oakland, CA 94618
APN: 014-1251-007

Introduction

Customer demand drives the need for new cell sites. Data relating to incomplete and dropped calls is gathered, drive-tests are conducted, and scientific modeling using sophisticated software is evaluated. Once the area requiring a new site is identified, a search ring on a map is provided to a real estate professional to search for a suitable location. To satisfy the coverage objective, Verizon Wireless must balance the land use goals of the community while still meeting technical, design and construction objectives for the installation.

Four key elements are considered in the selection process:

- Leasing: The property must have an owner who is willing to enter a long-term lease agreement under very specific terms and conditions.
- Zoning: It must be suitably zoned in accordance with local land-use codes to allow for a successful permitting process.
- Construction: Construction constraints and costs must be reasonable from a business perspective, and it must be feasible for the proposed project to be constructed in accordance with local building code and safety standards.
- Radiofrequency (RF): The property and facility must strategically be located to be able to achieve the RF engineer's objective to close the significant gap with antennas at a height to clear nearby obstructions.

Factors which govern the network objectives include, but are not limited to, RF signal strength, topography, and the physical proximity to existing facilities in the network. Topography is a critical component because wireless facilities utilize line of sight technology, which means that the antennas must be able to "see" the facilities in the existing network for the wireless devices to be served. The antennas must be installed at a sufficient height above ground level to function properly; this height is referred to as the "centerline." Natural features such as hills, rocks, or mountains can block signal transmission. Similarly, man-made structures such as buildings can restrict network performance if located within the requisite "line of sight."

In December of 2013, Verizon Wireless (VZW) began a search within Oakland to secure a location for a new communications facility, in the Rockridge neighborhood around College Avenue. To address a significant coverage gap in this area and to offload capacity from an existing UC Berkeley site, VZW identified a search area in Oakland and a requisite antenna centerline height of at least 50 feet above-ground-level.

Attachment D

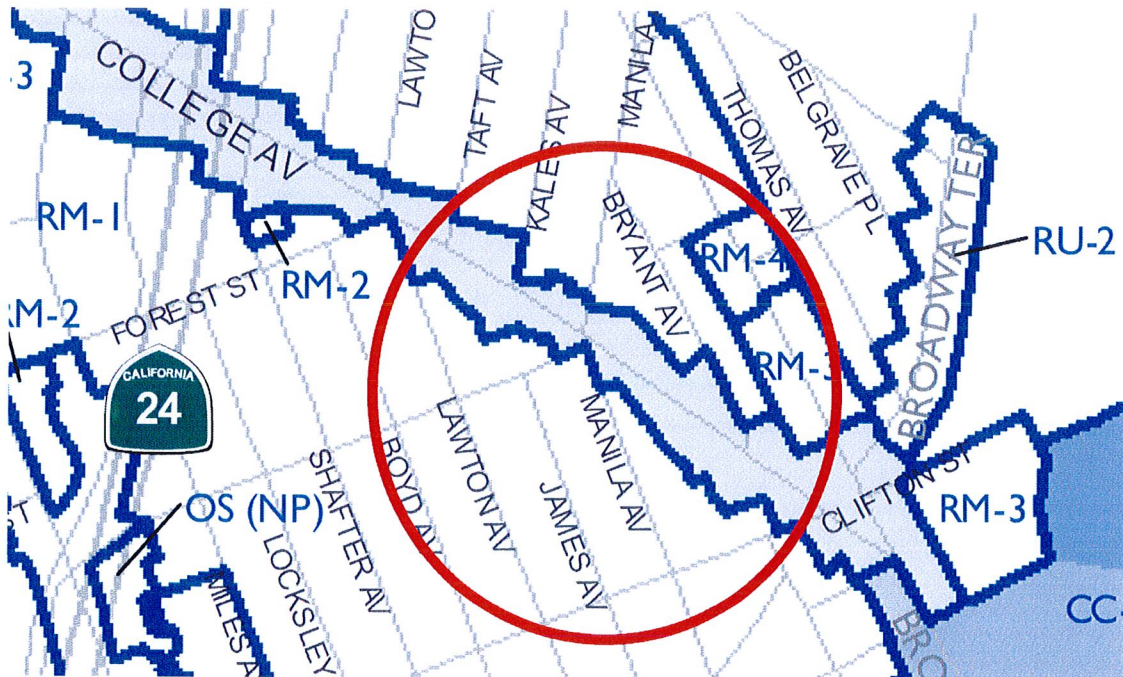
17.128.110 - Site location preferences.

New wireless facilities shall generally be located on the following properties or facilities in order of preference:

- A. Co-located on an existing structure or facility with existing wireless antennas.
- B. City-owned properties or other public or quasi-public facilities.
- C. Existing commercial or industrial structures in Nonresidential Zones (excluding all HBX Zones and the D-CE-3 and D-CE-4 Zones).
- D. Existing commercial or industrial structures in Residential Zones, HBX Zones, or the D-CE-3 or D-CE-4 Zones.
- E. Other Nonresidential uses in Residential Zones, HBX Zones, or the D-CE-3 or D-CE-4 Zones.
- F. Residential uses in Nonresidential Zones (excluding all HBX Zones and the D-CE-3 and D-CE-4 Zones).
- G. Residential uses in Residential Zones, HBX Zones, or the D-CE-3 or D-CE-4 Zones.

The search area for this facility is zoned residential. In order to maximize the chances of success in obtaining use permit by avoiding placement of the facility in a residential zone, we focused on properties in the few non-residential areas. A total of twenty-two candidates were investigated in this search, but for various reasons, only one satisfied coverage objections and factors mentioned in Page 1. Despite the best efforts to find a non-residential candidate, the proposed facility is located on a parcel zoned RM-1 (Residential Mixed Use). Viable candidates that would meet Site Preferences A through F were located outside the target area and/or would not meet coverage objectives. Additionally, out of the parcels investigated, lease negotiations were not successful and/or no positive responses were received from potential and/or investigated property owners.

Zoning Map (Zoning Districts Within 1,000' of Proposed Location)



Google Earth Map of Alternative Candidates Within 1,000' of Proposed Project Site



Below is a list of other candidates that were investigated but ultimately rejected, as well as the reasons they were unsuitable for this facility.

List of alternative candidates investigated but not selected:

The following properties were considered due to their location as good options for placement of a new facility. However, upon review by Verizon Wireless Radiofrequency Engineer, they were all found to be too low in height to provide the necessary antenna centerline for the facility to accomplish the necessary coverage objective.

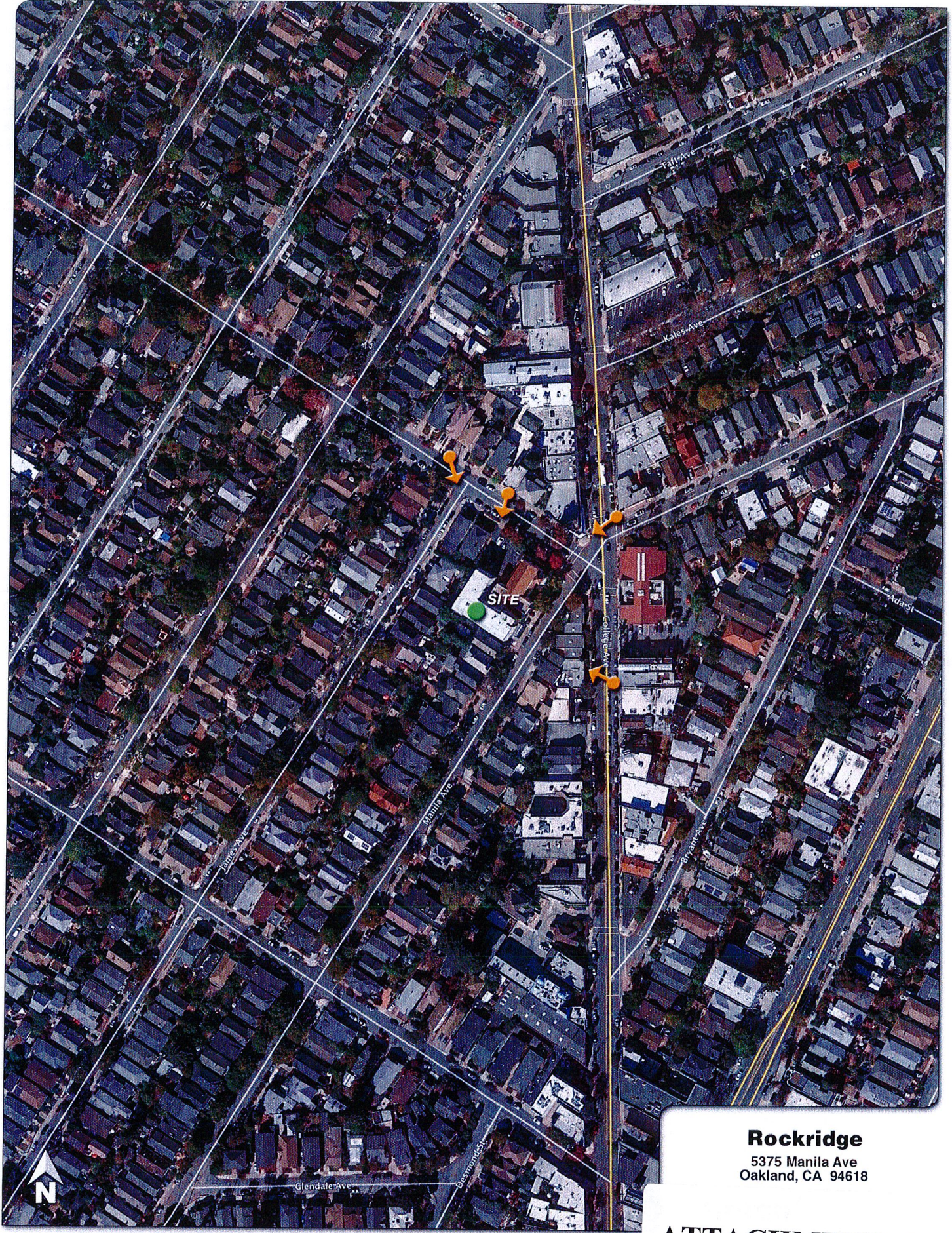
- **Cook:** 5418 College Avenue, Oakland, CA 94618-1503
- **Eoero** At the intersection of College Avenue and Kales Avenue
- **5425 College Ave. Apts** 5425 College Avenue, Oakland, CA 94618-1566
- **Olson** 5445 College Avenue, Oakland, CA 94618-1502
- **Keshishian** 5450 College Avenue, Oakland, CA 94618-1553
- **Hoff** 5469 College Avenue, Oakland, CA 94618
- **Silva** 5491 College Avenue, Oakland, CA 94618-1502
 - o Additionally, the topography of the roof would make construction of the facility very difficult.
- **Russell Properties** 5330 College Avenue, Oakland, CA 94618-2812
- **Allen, John** 5295 College Avenue, Oakland, CA 94618-1462
- **Roman Catholic Church** 4529 Howe Street, Oakland, CA 94611-4217
 - o Additionally, the topography of the roof would make construction of the facility very difficult.
- **Mountain View Cemetery** 5000 Piedmont Avenue, Oakland, CA 94611-4220

- **Kroot** 5488 College Avenue, Oakland, CA 94618-1552
 - o Additionally, this location was deemed too far north by the RF Engineer.
- **310 Forest Street Associates** 310 Forest Street, Oakland, CA 94618-1206
 - o Additionally, this location was also deemed too far north, and the shape of the building would limit design.

Other candidates that were considered but not selected

- **Lantz**
 - o This was the initially accepted Candidate – A. Was rejected after the LL would only move forward with substantially more rent than proposed.
- **Rockridge Masonic Hall** 5449 College Avenue, Oakland, CA 94618-1502
 - o Previously and accepted candidate. LL Backed out of process after informed a Phase II environmental would be required
- **Berkeley Korean United Methodist Church** 303 Hudson Street, Oakland, CA 94618-1101
 - o Site Ranked as a less desirable location by RF due to low roofs. No response from LL after multiple attempts. Letters sent 3/2014, 4/2017. No response to calls.
- **Talai** 5400 College Avenue, Oakland, CA 94618-1503
 - o Site ranked as a less desirable location by RF. No response from LL after multiple attempts. Letters sent 12/2014, 1/2015, 4/2017. No response to calls.
- **Madison** 5474 College Avenue, Oakland, CA 94618-1552
 - o Site ranked unacceptable by RF. No response from LL after multiple attempts.
- **5385 Broadway LLC** 5385 Broadway, Oakland, CA 94618-1454
 - o Site ranked unacceptable by RF, stating this site was too close to another search ring (CCA Oakland)
- **Richard Garcia** 5351 Belgrave PL #1, Oakland, CA 94618-1700
 - o Site ranked unacceptable by RF, stating that it was too close to another search ring (CCA Oakland)
- **Wright** 5427 College Avenue, Oakland, CA 94618
 - o Ranked acceptable by RF, but with poor views in some directions. Unable to get in contact with LL after multiple attempts by mail. Unable to locate any additional contact information.

Aerial photograph showing the viewpoints for the photosimulations.



Rockridge
5375 Manila Ave
Oakland, CA 94618

ATTACHMENT E



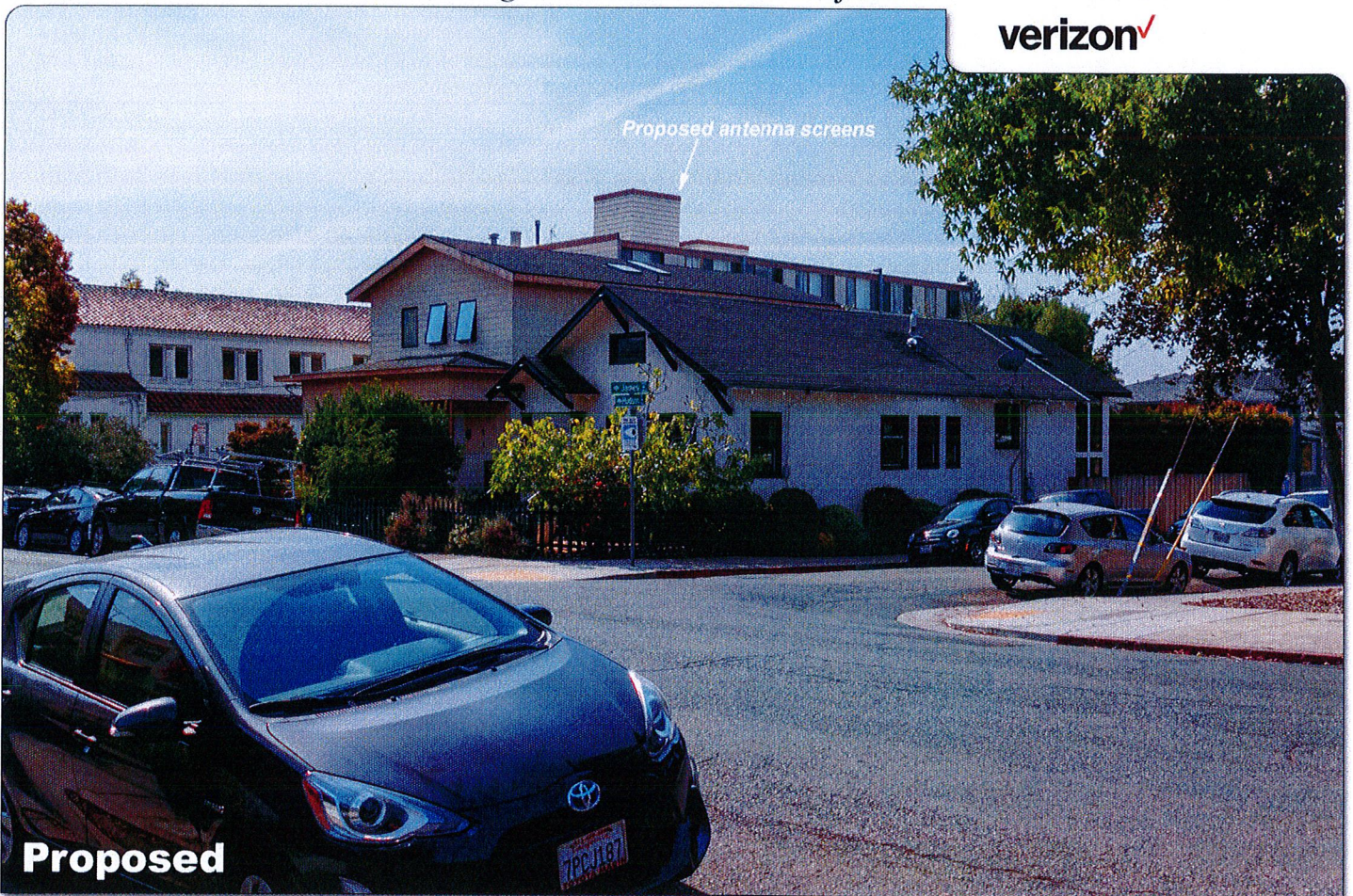
Existing

Photosimulation of the view looking south from Hudson at James.

Rockridge

5375 Manila Ave
Oakland, CA 94618

verizon✓



Proposed



Existing

Photomontage of the view looking west from College Ave.

Rockridge
5375 Manila Ave
Oakland, CA 94618



Proposed antenna screens

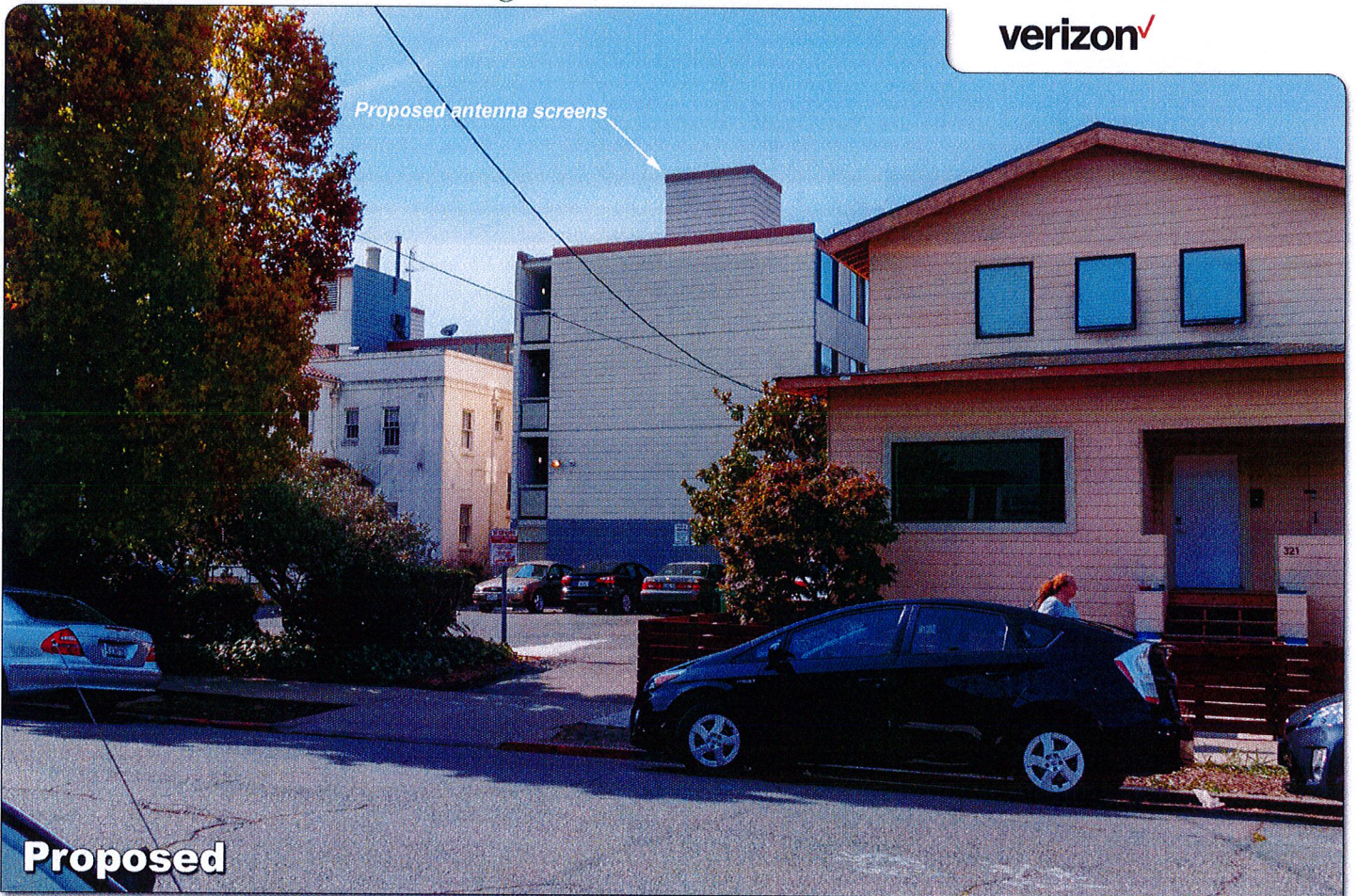
Proposed



Existing

Photosimulation of the view looking south from across Hudson St.

Rockridge
5375 Manila Ave
Oakland, CA 94618



Proposed



Existing

Photosimulation of the view looking southwest across College at Manila.

Rockridge

5375 Manila Ave
Oakland, CA 94618

verizon^v



Proposed

**Verizon Wireless • Proposed Base Station (Site No. 286675 “Rockridge”)
5375 Manila Avenue • Oakland, California**

Statement of Hammett & Edison, Inc., Consulting Engineers

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained on behalf of Verizon Wireless, a personal wireless telecommunications carrier, to evaluate the base station (Site No. 286675 “Rockridge”) proposed to be located at 5375 Manila Avenue in Oakland, California, for compliance with appropriate guidelines limiting human exposure to radio frequency (“RF”) electromagnetic fields.

Executive Summary

Verizon proposes to install directional panel antennas above the roof of the four-story apartment building located at 5375 Manila Avenue in Oakland. The proposed operation will comply with the FCC guidelines limiting public exposure to RF energy; certain mitigation measures are recommended to comply with FCC occupational guidelines.

Prevailing Exposure Standards

The U.S. Congress requires that the Federal Communications Commission (“FCC”) evaluate its actions for possible significant impact on the environment. A summary of the FCC’s exposure limits is shown in Figure 1. These limits apply for continuous exposures and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health. The most restrictive FCC limit for exposures of unlimited duration to radio frequency energy for several personal wireless services are as follows:

Wireless Service	Frequency Band	Occupational Limit	Public Limit
Microwave (Point-to-Point)	5–80 GHz	5.00 mW/cm ²	1.00 mW/cm ²
WiFi (and unlicensed uses)	2–6	5.00	1.00
BRS (Broadband Radio)	2,600 MHz	5.00	1.00
WCS (Wireless Communication)	2,300	5.00	1.00
AWS (Advanced Wireless)	2,100	5.00	1.00
PCS (Personal Communication)	1,950	5.00	1.00
Cellular	870	2.90	0.58
SMR (Specialized Mobile Radio)	855	2.85	0.57
700 MHz	700	2.40	0.48
[most restrictive frequency range]	30–300	1.00	0.20

General Facility Requirements

Base stations typically consist of two distinct parts: the electronic transceivers (also called “radios” or “channels”) that are connected to the traditional wired telephone lines, and the passive antennas that send the wireless signals created by the radios out to be received by individual subscriber units. The transceivers are often located at ground level and are connected to the antennas by coaxial cables. A small antenna for reception of GPS signals is also required, mounted with a clear view of the sky.



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G5NK
Page 1 of 4

**Verizon Wireless • Proposed Base Station (Site No. 286675 “Rockridge”)
5375 Manila Avenue • Oakland, California**

Because of the short wavelength of the frequencies assigned by the FCC for wireless services, the antennas require line-of-sight paths for their signals to propagate well and so are installed at some height above ground. The antennas are designed to concentrate their energy toward the horizon, with very little energy wasted toward the sky or the ground. This means that it is generally not possible for exposure conditions to approach the maximum permissible exposure limits without being physically very near the antennas.

Computer Modeling Method

The FCC provides direction for determining compliance in its Office of Engineering and Technology Bulletin No. 65, “Evaluating Compliance with FCC-Specified Guidelines for Human Exposure to Radio Frequency Radiation,” dated August 1997. Figure 2 describes the calculation methodologies, reflecting the facts that a directional antenna’s radiation pattern is not fully formed at locations very close by (the “near-field” effect) and that at greater distances the power level from an energy source decreases with the square of the distance from it (the “inverse square law”). The conservative nature of this method for evaluating exposure conditions has been verified by numerous field tests.

Site and Facility Description

Based upon information provided by Verizon, including zoning drawings by MST Architects, dated November 15, 2017, it is proposed to install eight CommScope Model SBNHH-1D45B directional panel antennas within two view screen enclosures to be constructed near the north and south ends of the roof of the four-story apartment building located at 5375 Manila Avenue in Oakland. The antennas would employ up to 6° downtilt, would be mounted at an effective height of about 47 feet above ground, 6 feet above the roof, and would be oriented in pairs toward 30°T, 120°T, 210°T, and 300°T, to provide service in all directions. The maximum effective radiated power in any direction would be 27,040 watts, representing simultaneous operation at 9,220 watts for AWS, 8,460 watts for PCS, 5,000 watts for cellular, and 4,360 watts for 700 MHz service. There are reported no other wireless telecommunications base stations at the site or nearby.

Study Results

For a person anywhere at ground, the maximum RF exposure level due to the proposed Verizon operation is calculated to be 0.044 mW/cm², which is 8.1% of the applicable public exposure limit. The maximum calculated level at the second-floor elevation of any nearby residence is 14% of the public exposure limit. It should be noted that these results include several “worst-case” assumptions and therefore are expected to overstate actual power density levels from the proposed operation.



**Verizon Wireless • Proposed Base Station (Site No. 286675 "Rockridge")
5375 Manila Avenue • Oakland, California**

Recommended Mitigation Measures

It is recommended that the roof access door be kept locked, so that the Verizon antennas are not accessible to unauthorized persons. To prevent occupational exposures in excess of the FCC guidelines, it is recommended that appropriate RF safety training, to include review of personal monitor use and lockout/tagout procedures, be provided to all authorized personnel who have access to the structure, including employees and contractors of Verizon and of the property owner. No access within 37 feet directly in front of the Verizon antennas themselves, such as might occur during certain maintenance activities, should be allowed while the base station is in operation, unless other measures can be demonstrated to ensure that occupational protection requirements are met. It is recommended that the boundary lines be marked on the roof with yellow paint to identify areas within which exposure levels are calculated to exceed the FCC public or occupational limits, as shown in Figure 3. It is recommended that explanatory signs* be posted at the roof access door, on the antenna enclosure, at the boundary lines, and at the antennas, readily visible from any angle of approach to persons who might need to work within that distance.

Conclusion

Based on the information and analysis above, it is the undersigned's professional opinion that operation of the base station proposed by Verizon Wireless at 5375 Manila Avenue in Oakland, California, can comply with the prevailing standards for limiting human exposure to radio frequency energy and, therefore, need not for this reason cause a significant impact on the environment. The highest calculated level in publicly accessible areas is much less than the prevailing standards allow for exposures of unlimited duration. This finding is consistent with measurements of actual exposure conditions taken at other operating base stations. Locking the roof access door is recommended to establish compliance with public exposure limits; training authorized personnel, marking roof areas, and posting explanatory signs are recommended to establish compliance with occupational exposure limits.

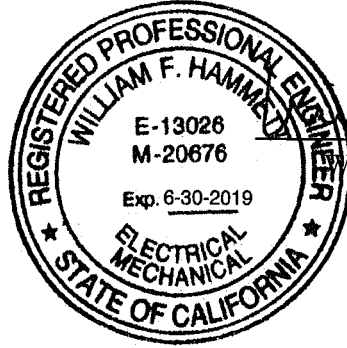
* Signs should comply with OET-65 color, symbol, and content recommendations. Contact information should be provided (e.g., a telephone number) to arrange for access to restricted areas. The selection of language(s) is not an engineering matter, and guidance from the landlord, local zoning or health authority, or appropriate professionals may be required.



Verizon Wireless • Proposed Base Station (Site No. 286675 "Rockridge")
5375 Manila Avenue • Oakland, California

Authorship

The undersigned author of this statement is a qualified Professional Engineer, holding California Registration Nos. E-13026 and M-20676, which expire on June 30, 2019. This work has been carried out under his direction, and all statements are true and correct of his own knowledge except, where noted, when data has been supplied by others, which data he believes to be correct.



William F. Hammett
William F. Hammett, P.E.
707/996-5200

January 2, 2018



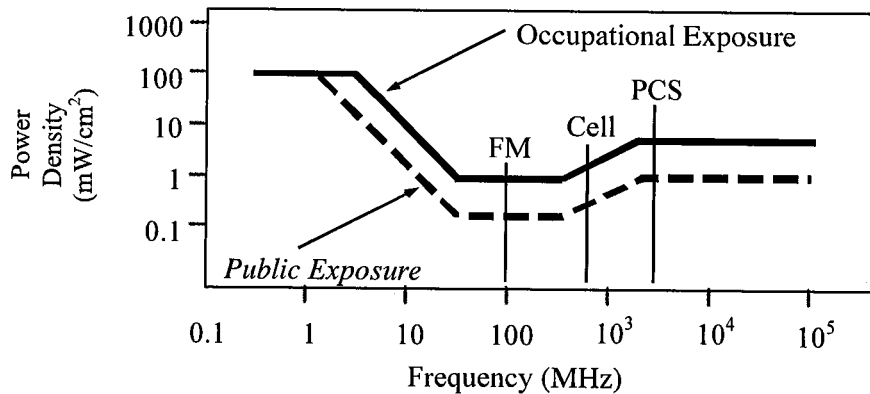
HAMMETT & EDISON, INC.
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FCC Radio Frequency Protection Guide

The U.S. Congress required (1996 Telecom Act) the Federal Communications Commission ("FCC") to adopt a nationwide human exposure standard to ensure that its licensees do not, cumulatively, have a significant impact on the environment. The FCC adopted the limits from Report No. 86, "Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields," published in 1986 by the Congressionally chartered National Council on Radiation Protection and Measurements ("NCRP"). Separate limits apply for occupational and public exposure conditions, with the latter limits generally five times more restrictive. The more recent standard, developed by the Institute of Electrical and Electronics Engineers and approved as American National Standard ANSI/IEEE C95.1-2006, "Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz," includes similar limits. These limits apply for continuous exposures from all sources and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health.

As shown in the table and chart below, separate limits apply for occupational and public exposure conditions, with the latter limits (in *italics* and/or dashed) up to five times more restrictive:

Frequency Applicable Range (MHz)	Electromagnetic Fields (f is frequency of emission in MHz)					
	Electric Field Strength (V/m)		Magnetic Field Strength (A/m)		Equivalent Far-Field Power Density (mW/cm ²)	
0.3 – 1.34	614	<i>614</i>	1.63	<i>1.63</i>	100	<i>100</i>
1.34 – 3.0	614	<i>823.8/f</i>	1.63	<i>2.19/f</i>	100	<i>180/f²</i>
3.0 – 30	1842/f	<i>823.8/f</i>	4.89/f	<i>2.19/f</i>	900/f ²	<i>180/f²</i>
30 – 300	61.4	<i>27.5</i>	0.163	<i>0.0729</i>	1.0	<i>0.2</i>
300 – 1,500	3.54√f	<i>1.59√f</i>	√f/106	<i>√f/238</i>	f/300	<i>f/1500</i>
1,500 – 100,000	137	<i>61.4</i>	0.364	<i>0.163</i>	5.0	<i>1.0</i>



Higher levels are allowed for short periods of time, such that total exposure levels averaged over six or thirty minutes, for occupational or public settings, respectively, do not exceed the limits, and higher levels also are allowed for exposures to small areas, such that the spatially averaged levels do not exceed the limits. However, neither of these allowances is incorporated in the conservative calculation formulas in the FCC Office of Engineering and Technology Bulletin No. 65 (August 1997) for projecting field levels. Hammett & Edison has built those formulas into a proprietary program that calculates, at each location on an arbitrary rectangular grid, the total expected power density from any number of individual radio sources. The program allows for the description of buildings and uneven terrain, if required to obtain more accurate projections.



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FCC Guidelines
Figure 1

RFR.CALC™ Calculation Methodology

Assessment by Calculation of Compliance with FCC Exposure Guidelines

The U.S. Congress required (1996 Telecom Act) the Federal Communications Commission ("FCC") to adopt a nationwide human exposure standard to ensure that its licensees do not, cumulatively, have a significant impact on the environment. The maximum permissible exposure limits adopted by the FCC (see Figure 1) apply for continuous exposures from all sources and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health. Higher levels are allowed for short periods of time, such that total exposure levels averaged over six or thirty minutes, for occupational or public settings, respectively, do not exceed the limits.

Near Field.

Prediction methods have been developed for the near field zone of panel (directional) and whip (omnidirectional) antennas, typical at wireless telecommunications base stations, as well as dish (aperture) antennas, typically used for microwave links. The antenna patterns are not fully formed in the near field at these antennas, and the FCC Office of Engineering and Technology Bulletin No. 65 (August 1997) gives suitable formulas for calculating power density within such zones.

For a panel or whip antenna, power density $S = \frac{180}{\theta_{BW}} \times \frac{0.1 \times P_{net}}{\pi \times D \times h}$, in mW/cm²,

and for an aperture antenna, maximum power density $S_{max} = \frac{0.1 \times 16 \times \eta \times P_{net}}{\pi \times h^2}$, in mW/cm²,

where θ_{BW} = half-power beamwidth of the antenna, in degrees, and

P_{net} = net power input to the antenna, in watts,

D = distance from antenna, in meters,

h = aperture height of the antenna, in meters, and

η = aperture efficiency (unitless, typically 0.5-0.8).

The factor of 0.1 in the numerators converts to the desired units of power density.

Far Field.

OET-65 gives this formula for calculating power density in the far field of an individual RF source:

power density $S = \frac{2.56 \times 1.64 \times 100 \times RFF^2 \times ERP}{4 \times \pi \times D^2}$, in mW/cm²,

where ERP = total ERP (all polarizations), in kilowatts,

RFF = relative field factor at the direction to the actual point of calculation, and

D = distance from the center of radiation to the point of calculation, in meters.

The factor of 2.56 accounts for the increase in power density due to ground reflection, assuming a reflection coefficient of 1.6 (1.6 x 1.6 = 2.56). The factor of 1.64 is the gain of a half-wave dipole relative to an isotropic radiator. The factor of 100 in the numerator converts to the desired units of power density. This formula has been built into a proprietary program that calculates, at each location on an arbitrary rectangular grid, the total expected power density from any number of individual radiation sources. The program also allows for the description of uneven terrain in the vicinity, to obtain more accurate projections.

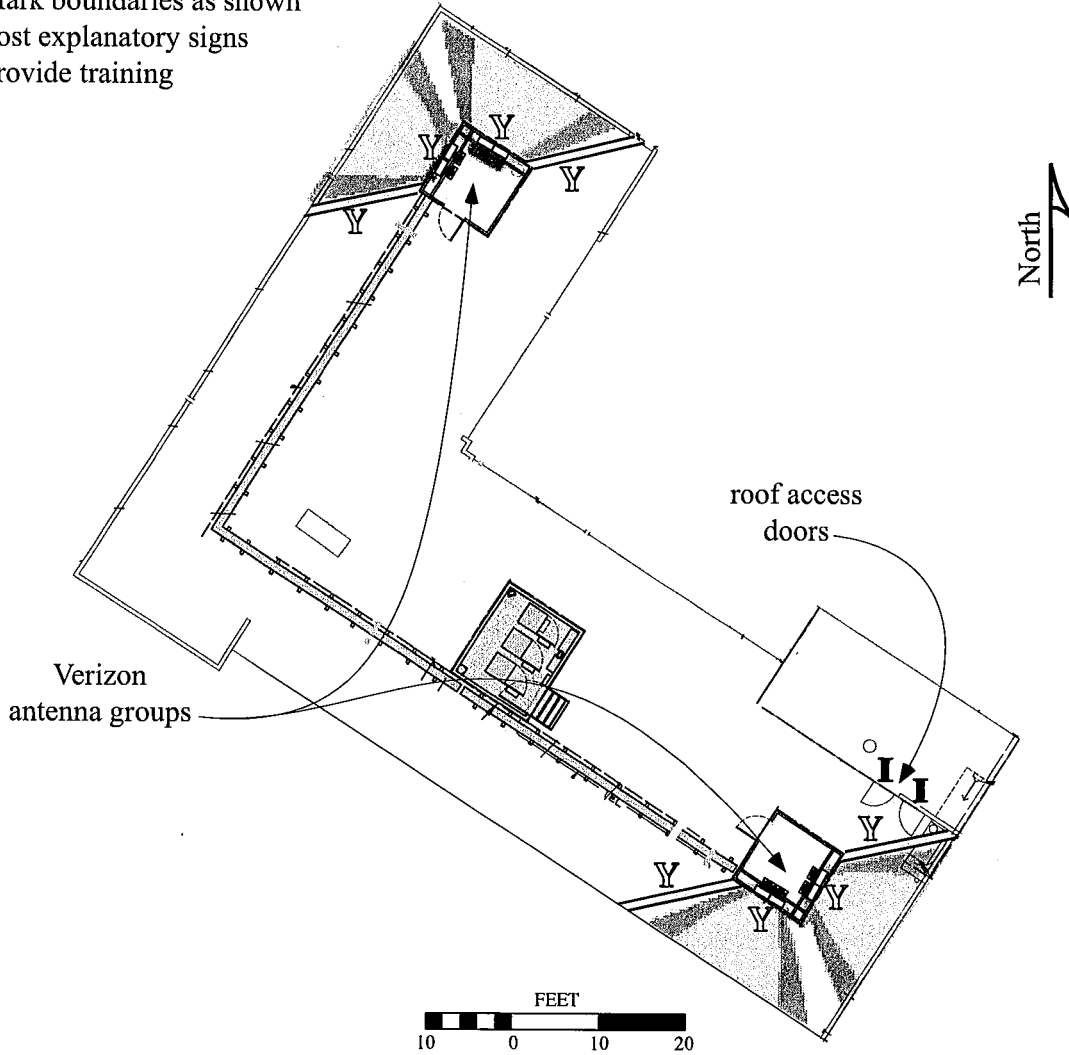


Verizon Wireless • Proposed Base Station (Site No. 286675 "Rockridge")
 5375 Manila Avenue • Oakland, California

Calculated RF Exposure Levels on Roof

Recommended Mitigation Measures

- Lock roof access doors
- Mark boundaries as shown
- Post explanatory signs
- Provide training



Notes: See text.

Base drawing from MST Architects, dated November 15, 2017.

Calculations performed according to OET Bulletin 65, August 1997.

Legend:	Less Than Public	Exceeds Public	Exceeds Occupational	Exceeds 10x Occupational
Shaded color	blank	■	□	■
Boundary marking	N/A	—	—	—
Sign type	I - Green INFORMATION	B - Blue NOTICE	Y - Yellow CAUTION	O - Orange WARNING



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G5NK
 Figure 3

Attachment H

