



## **Staff Report to the Zoning Administrator**

**Application Number: 171213**

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**Applicant: Brian Moore**

**Owner: Stephen Henry**

**APN: 049-171-17**

**Site Address: 682 Buena Vista Drive, Watsonville**

**Agenda Date: November 16, 2018**

**Agenda Item #: 5**

**Time: After 9:00 a.m.**

**Project Description:** Proposal to construct a new 65-foot tall mono-eucalyptus wireless communication facility (WCF) for Verizon with an initial installation of 9 panel antennas, and 9 remote radio units (RRUs). Associated equipment would be located within a 784 square foot, 8-foot high fenced enclosure including two equipment cabinets, a utility H-Frame, a 7-foot tall Verizon cable ice bridge, a generator, and a 132-gallon diesel fuel tank on a 50 square foot concrete pad. The project site is located in the A (Agriculture) zone district.

**Location:** Property located on the north side of Buena Vista Drive approximately 650 feet northwest of Buena Vista Drive at 682 Buena Vista Drive.

**Permits Required:** Requires a Commercial Development Permit and Over-Height Fence Certification.

**Supervisory District:** District 2 (District Supervisor: Zach Friend)

### **Staff Recommendation:**

- Determine that the proposal is exempt from further Environmental Review under the California Environmental Quality Act.
- Approval of Application 171213, based on the attached findings and conditions.

### **Subject Description & Setting**

The proposed mono-eucalyptus pole and associated equipment would be located on the southeast corner of the parcel, approximately 650 feet from Buena Vista Drive. The parcel is currently developed with a single-family dwelling and accessory structures. The zoning of adjacent parcels north, west, and south of the project site is Agriculture, with CA (Commercial Agriculture) parcels on the east side of the site. All adjacent parcels are developed with single family homes. The closest residence is approximately 220 feet north of the proposed WCF, which is a single-family home located on the subject parcel. The terrain of the site is relatively flat where the proposed equipment within the 8-foot high fence enclosure will be placed. A Commercial Development Permit is required because per Section 13.10.661(A) of the County Code, all new wireless communication facilities shall be subject to a Commercial Development Permit.

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## **Zoning & General Plan Consistency**

The subject property is a parcel of approximately 2.8 acres, located in the A (Agriculture) zone district, a designation which allows wireless communication facility uses. The proposed wireless communication facility (WCF) is a principal permitted use within the zone district subject to approval by the Zoning Administrator, and the zoning is consistent with the site's AG (Agriculture) General Plan designation.

## **Design Review**

The proposed WCF complies with the requirements of the County Design Review Ordinance, in that the proposed project has been designed to resemble a eucalyptus tree to reduce the visual impact of the proposed development. The color of the proposed foliage for the faux eucalyptus tree (mono-eucalyptus) will be chosen to blend with other eucalyptus trees in the vicinity. The pole will be textured and colored to resemble natural eucalyptus bark. The proposed tower will blend into the natural landscape; therefore, it will not have a significant visual impact on surrounding land uses.

## **Visual Analysis**

The area surrounding the project site is rural with many mature trees, including eucalyptus, pine, oak and fruit trees. The project site is approximately 600 feet north of Buena Vista Drive off a one lane road that dead ends at the parcel just beyond the existing residence. This 'one lane road' off Buena Vista Drive is elevated above the roads to the west that are parallel to the road such as Old Adobe Road and Larkin Valley Road. There are a couple of rows of mature trees along these roads that will reduce the visibility of the new WCF tower. There are groups of mature trees and a large group of commercial buildings east of the proposed WCF tower that will reduce visibility from neighborhoods along the north and southeastern side of the subject site. As shown by the submitted visual simulation views that show the site both with and without the proposed WCF tower, the mono-eucalyptus will be visible from a particular spot on Buena Vista Drive looking northeast towards parcel 049-171-17. However, the tower will be made of faux materials to simulate a eucalyptus tree greatly reducing the visibility of the antennas and associated equipment on the tower. The visual simulations show the proposed mono-eucalyptus will blend in well with the existing rural backdrop, thus the project will not significantly impact views. The proposed fence enclosure that would surround the proposed WCF would be screened and softened by landscape plantings that will include hardy, fast growing drought tolerant species that are suitable to the site.

## **Radio Frequency Emissions**

A radio frequency (RF) radiation emissions calculation report has been submitted for this project by a qualified consulting engineer. The proposed facility is calculated to result in a maximum ambient RF level of 2.8% of the applicable public exposure limit at ground level, and .44% of the public exposure limit at the second-floor elevation of any nearby building (located at least 100 feet away, based on photographs from Google Maps). The maximum calculated level at the second-floor elevation of any nearby residence is .33% of the public exposure limit (located at least 220 feet away, based on photographs from Google Maps).

## **Environmental Review**

Staff has determined that the proposed project is categorically exempt from the requirements of the California Environmental Quality Act (CEQA) because it qualifies as "New Construction or Conversion of Small Structures" (Class 3, Section 15303) and "Minor Alterations to Land" (Class 4, Section 15304). The CEQA Categorical Exemption form is attached as Exhibit A.

## **Federal "Shock Clock" Ruling November 18, 2009**

On November 18, 2009, the Federal Communication Commission adopted and released its Declaratory Ruling concerning provisions in 47 U.S.C. Section 253 and 332(c)(7), regarding state and local review of wireless facility siting applications. This Declaratory Ruling provides that a "reasonable period of time" to review and take action on a new wireless telecommunications facility shall not exceed 150 days. This timeframe commenced upon application submittal, and accounted for a deemed incomplete determination period of time. Accordingly, the County must take action on Application No. 171213 no later than November 21, 2018, unless a mutual extension of time is agreed to by the County and applicant.

## **Conclusion**

As proposed and conditioned, the project is consistent with all applicable codes and policies of the Zoning Ordinance and General Plan/LCP. Please see Exhibit "B" ("Findings") for a complete listing of findings and evidence related to the above discussion.

## **Staff Recommendation**

- Determine that the proposal is exempt from further Environmental Review under the California Environmental Quality Act.
- **APPROVAL** of Application Number 171213, based on the attached findings and conditions.

**Supplementary reports and information referred to in this report are on file and available for viewing at the Santa Cruz County Planning Department, and are hereby made a part of the administrative record for the proposed project.**

**The County Code and General Plan, as well as hearing agendas and additional information are available online at: [www.co.santa-cruz.ca.us](http://www.co.santa-cruz.ca.us)**

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## **Exhibits**

- A. Categorical Exemption (CEQA determination)
- B. Findings
- C. Conditions
- D. Project plans
- E. Assessor's, Location, Zoning and General Plan Maps
- F. Photo Simulations
- G. Project Description and Support Statement
- H. Radio Frequency Radiation Emissions Report
- I. Comments & Correspondence

## Parcel Information

### Services Information

Urban/Rural Services Line:    ☐ Inside    ☒ Outside  
Water Supply:    Well  
Sewage Disposal:    Septic  
Fire District:    Pajaro Valley Fire District  
Drainage District:    Existing drainage adequate

### Parcel Information

Parcel Size:    2.85 Acres  
Existing Land Use - Parcel:    Agriculture  
Existing Land Use - Surrounding:    Agriculture/Commercial Agriculture  
Project Access:    Buena Vista Drive  
Planning Area:    Pajaro Valley  
Land Use Designation:    AG (Agriculture)  
Zone District:    A (Agriculture)  
Coastal Zone:    ☐ Inside    ☒ Outside  
Appealable to Calif. Coastal    ☐ Yes    ☒ No  
Comm.

Technical Reviews: N/A

### Environmental Information

Geologic Hazards:    Not mapped/no physical evidence on site  
Fire Hazard:    Not a mapped constraint  
Slopes:    N/A  
Env. Sen. Habitat:    Not mapped/no physical evidence on site  
Grading:    No grading proposed  
Tree Removal:    Apple trees  
Scenic:    Not a mapped resource  
Archeology:    Yes

# CALIFORNIA ENVIRONMENTAL QUALITY ACT

## NOTICE OF EXEMPTION

The Santa Cruz County Planning Department has reviewed the project described below and has determined that it is exempt from the provisions of CEQA as specified in Sections 15061 - 15332 of CEQA for the reason(s) which have been specified in this document.

Application Number: 171213

Assessor Parcel Number: 049-171-17

Project Location: 682 Buena Vista Drive

**Project Description:** Proposal to construct a new 65-foot tall mono-eucalyptus wireless communication facility (WCF) with 9 panel antennas, 9 remote radio units (RRUs) and associated equipment, located within a 784 square foot fenced enclosure with 2 equipment cabinets, a utility H-Frame, a 7-foot tall Verizon cable ice bridge, a generator, and a 132-gallon diesel fuel tank on a 50 square foot concrete pad, located in the A (Agriculture) district.

**Person or Agency Proposing Project:** Brian Moore for Verizon Wireless

**Contact Phone Number:** (510) 480-5574

- A. ☐ The proposed activity is not a project under CEQA Guidelines Section 15378.  
B. ☐ The proposed activity is not subject to CEQA as specified under CEQA Guidelines Section 15060 (c).  
C. ☐ **Ministerial Project** involving only the use of fixed standards or objective measurements without personal judgment.  
D. ☐ **Statutory Exemption** other than a Ministerial Project (CEQA Guidelines Section 15260 to 15285).  
E. ☒ **Categorical Exemption**

Specify type: Class 3 – New Construction or Conversion of Small Structures (Section 15303)  
Class 4 – Minor Alterations to Land (Section 15304)

**F. Reasons why the project is exempt:**

Construction of a wireless communication facility disguised as a 64-foot tall faux eucalyptus tree is not anticipated to generate any environmental impacts, and minor digging and grading where the surface is restored.

In addition, none of the conditions described in Section 15300.2 apply to this project.

\_\_\_\_\_  
Elizabeth Cramblet, Project Planner

Date: \_\_\_\_\_

**EXHIBIT A**

## **Development Permit Findings**

1. That the proposed location of the project and the conditions under which it would be operated or maintained will not be detrimental to the health, safety, or welfare of persons residing or working in the neighborhood or the general public, and will not result in inefficient or wasteful use of energy, and will not be materially injurious to properties or improvements in the vicinity.

This finding can be made, in that the project is located in a zone district that permits wireless communication facility (WCF) uses and allows fence heights up to 8' with an Over Height Fence Certification. The project is not encumbered by physical constraints to development. Construction will comply with prevailing building technology, the California Building Code, and the County Building ordinance to ensure the optimum in safety and the conservation of energy and resources. The proposed WCF and redwood fence will not deprive adjacent properties or the neighborhood of light, air, or open space, in that the structure meets all current setbacks that ensure access to these amenities.

2. That the proposed location of the project and the conditions under which it would be operated or maintained will be consistent with all pertinent County ordinances and the purpose of the zone district in which the site is located.

This finding can be made, in that the proposed location of the WCF and the conditions under which it would be operated or maintained will be consistent with all pertinent County ordinances and the purpose of the A (Agriculture) zone district, as the primary uses of the property will remain agricultural and residential, with the proposed WCF being ancillary to these uses, and because the WCF use will meet all current site standards for the zone district. The proposed redwood fence will conform with the required setbacks of the zone district.

3. That the proposed use is consistent with all elements of the County General Plan and with any specific plan which has been adopted for the area.

This finding can be made, in that the proposed WCF use is consistent with the use and density requirements specified for the Rural Residential (AG) land use designation in the County General Plan.

The proposed WCF will not adversely impact the light, solar opportunities, air, and/or open space available to other structures or properties and meets all current site and development standards for the zone district in that the WCF will not adversely shade adjacent properties and the development will meet current setbacks for the zone district. Most of the proposed ground equipment within the fence enclosure will not be seen minimizing the visual impact to neighbors.

The proposed WCF will be properly proportioned to the parcel size and the character of the neighborhood as specified in General Plan Policy 8.6.1 (Maintaining a Relationship Between Structure and Parcel Sizes), in that the proposed WCF will be of a similar size to surrounding mature trees and will also comply with the site standards for the AG zone district (including setbacks, lot coverage) and will comply with the maximum height limit allowed for a free standing WCF in the AG zone district, to result in a structure consistent with a design that could be approved on any similarly sized lot in the vicinity.

A specific plan has not been adopted for this portion of the County.

4. That the proposed use will not overload utilities and will not generate more than the acceptable level of traffic on the streets in the vicinity.

This finding can be made, in that the proposed WCF and redwood fence are to be constructed on an existing 2.85-acre residential parcel and will not overload utilities in the area. Once all construction at the site has been completed, additional traffic is not anticipated as a result of the proposed WCF project, thus the project will not adversely impact existing roads or intersections in the surrounding area.

5. That the proposed project will complement and harmonize with the existing and proposed land uses in the vicinity and will be compatible with the physical design aspects, land use intensities, and dwelling unit densities of the neighborhood.

This finding can be made, in that the proposed structure is located in a rural area containing dense vegetation and many stands of tall, mature trees. The bottom portion of the tower and much of the ground equipment within the redwood fence will not be visible with the help of the 8' redwood fence. Therefore the proposed faux eucalyptus tree (mono-eucalyptus) tower WCF and redwood fence, located close to other mature trees with similar heights, will be consistent with that context of the site and will blend in seamlessly with the surrounding properties.

6. The proposed development project is consistent with the Design Standards and Guidelines (sections 13.11.070 through 13.11.076), and any other applicable requirements of this chapter.

This finding can be made, in that the proposed 65-foot tall mono-eucalyptus WCF will be of an appropriate scale and type of design that will complement the aesthetic qualities of the surrounding properties and will not reduce or visually impact available open space in the surrounding area. The redwood fence will blend in with the rural character of the surrounding neighborhood.



## **Wireless Communication Facility Use Permit Findings**

1. That the development of the proposed wireless communications facility as conditioned will not significantly affect any designated visual resources, environmentally sensitive habitat resources (as defined in the Santa Cruz County General Plan/LCP Sections 5.1, 5.10, and 8.6.6), and/or other significant County resources, including agricultural, open space, and community character resources; or there are no other environmentally equivalent and/or superior and technically feasible alternatives to the proposed wireless communications facility as conditioned (including alternative locations and/or designs) with less visual and/or other resource impacts and the proposed facility has been modified by condition and/or project design to minimize and mitigate its visual and other resource impacts.

The subject property is not located within an area that has been designated as a scenic resource in the County General Plan; therefore, the proposed WCF will not significantly affect any designated visual resources. The area surrounding the project site and the subject parcel contains many mature trees including pines, eucalyptus, oaks and redwoods, and the proposed WCF has been designed to resemble a eucalyptus tree, so as to blend with the natural environment and reduce the visual impact of the proposed development. The color of the proposed foliage for the proposed mono-eucalyptus will be similar to eucalyptus in the area and the pole will be textured and colored to resemble natural eucalyptus bark. Therefore the proposed tower will blend into the natural landscape and not have a significant visual impact on surrounding land uses. The proposed fenced enclosure and equipment cabinets will be screened and softened by proposed landscape plantings that will include hardy, fast growing drought tolerant species that are suitable to the site.

The parcel is not mapped within a sensitive habitat. The proposed WCF will be located in an area of existing open lawn; therefore, it will not impact any sensitive habitat resources. Further, the proposed WCF will not negatively impact other County resources, including open space or community character resources. Finally, there are no other environmentally equivalent and/or superior and technically feasible alternatives to the proposed faux eucalyptus tree tower design that would result in less visual and/or other resource impacts.

2. That the site is adequate for the development of the proposed wireless communications facility and, for sites located in one of the prohibited and/or restricted areas set forth in Sections 13.10.661(b) and 13.10.661(c), that the applicant has demonstrated that there are not environmentally equivalent or superior and technically feasible: (1) alternative sites outside the prohibited and restricted areas; and/or (2) alternative designs for the proposed facility as conditioned.

This finding can be made, in that the proposed WCF will not be located in a prohibited or restricted area. The WCF will initially include 9 antennas mounted upon a faux eucalyptus tree that will blend in with the mature trees on the same parcel and will not significantly affect any designated visual resources, environmentally sensitive habitat resources (as defined in the Santa Cruz County General Plan/LCP Sections 5.1, 5.10, and 8.66), or agriculture (i.e. will not displace viable agricultural land), open space, or community character resources. Future colocations that include additional antennas for additional carriers will all be located lower in the canopy of the

eucalyptus than the proposed Verizon antennas. Moreover, as shown in the applicant's alternative analysis, there are no other environmentally equivalent and/or superior and technically feasible alternatives to the faux eucalyptus tree design (including alternative locations and/or designs) with less visual and/or other resource impacts.

3. The subject property upon which the wireless communications facility is to be built is in compliance with all rules and regulations pertaining to zoning uses, subdivisions and any other applicable provisions of this title (County Code 13.10.660) and that all zoning violation abatement costs, if any, have been paid.

This finding can be made, in that the existing residential-related use of the subject property is in compliance with the requirements of the A (Agriculture) zone district and AG (Agriculture) General Plan designations, in which it is located, and that there are no outstanding or unpaid zoning violation abatement costs.

4. The proposed wireless communication facility as conditioned will not create a hazard for aircraft in flight.

This finding can be made, in that the proposed WCF will be located a sufficient distance from Watsonville Airport (approximately one-half mile) and will be of a height (65 feet) too low to interfere with aircraft in flight.

5. The proposed wireless communication facility as conditioned is in compliance with all FCC and California PUC standards and requirements.

This finding can be made, in that the maximum ambient RF levels at ground level of the proposed WCF facility are calculated to be no more than 2.8% of the applicable FCC public exposure limit at ground level, and .44% of the public exposure limit at the second-floor elevation of any nearby building. The maximum calculated level at the second-floor elevation of any nearby residence is .33% of the public exposure limit (located at least 220 feet away, based on photographs from Google Maps).

6. The proposed wireless communication facilities as conditioned are consistent with all applicable requirements of the Local Coastal Program (LCP).

This finding is not applicable, in that the proposed WCF is located outside the Coastal Zone and is therefore not subject to the LCP.

## Conditions of Approval

Exhibit D: Project plans, 14 sheets, prepared by J5 Infrastructure, dated 8/7/2018.

- I. This permit authorizes the construction of a 65-foot tall mono-eucalyptus wireless communication facility as indicated on the approved Exhibit "D" for this permit. This approval does not confer legal status on any existing structure(s) or existing use(s) on the subject property that are not specifically authorized by this permit. Prior to exercising any rights granted by this permit including, without limitation, any construction or site disturbance, the applicant/owner shall:
  - A. Sign, date, and return to the Planning Department one copy of the approval to indicate acceptance and agreement with the conditions thereof.
  - B. Obtain a Building Permit from the Santa Cruz County Building Official.
    1. Any outstanding balance due to the Planning Department must be paid prior to making a Building Permit application. Applications for Building Permits will not be accepted or processed while there is an outstanding balance due.
  - C. Obtain an Encroachment Permit from the Department of Public Works for all off-site work performed in the County road right-of-way.
  - D. Submit proof that these conditions have been recorded in the official records of the County of Santa Cruz (Office of the County Recorder) within 30 days from the effective date of this permit.
- II. Prior to issuance of a Building Permit the applicant/owner shall:
  - A. Submit final architectural plans for review and approval by the Planning Department. The final plans shall be in substantial compliance with the plans marked Exhibit "D" on file with the Planning Department. Any changes from the approved Exhibit "D" for this development permit on the plans submitted for the Building Permit must be clearly called out and labeled by standard architectural methods to indicate such changes. Any changes that are not properly called out and labeled will not be authorized by any Building Permit that is issued for the proposed development. The final plans shall include the following additional information:
    1. A copy of the text of these conditions of approval incorporated into the full size sheets of the architectural plan set.
    2. Plans shall indicate that the maximum height of the structure, including all portions of any antenna or other equipment mounted on the tower and including all "branches" or other camouflage features, shall not exceed 65 feet as measured from the existing garade at the base of the tower. The proposed camouflage branches shall extend above the level of all antennas

etc. to the same extent as shown on Exhibit D. If specific materials and colors have not been approved with this Discretionary Application, in addition to showing the materials and colors on the elevation, the applicant shall supply a color and material sheet in 8 1/2" x 11" format for Planning Department review and approval.

3. One elevation shall indicate proposed materials and colors. In addition to showing the materials and colors on the elevation, the applicant shall supply a revised color and material sheet in 8 1/2" x 11" format for Planning Department review and approval that complies with the following: The mono-eucalyptus pole shall be finished with either the standard or aged eucalyptus bark finish as preferred. Foliage shall be chosen to blend with the foliage in surrounding eucalyptus trees, and panel antennas shall be concealed using foliage covered socks.
  4. The applicant shall submit the appropriate form(s) to the Federal Aviation Administration (FAA) which include the proposal of the 65' wireless communication facility (WCF) and its associated equipment for their review and comments and approval or denial prior to building permit issuance. Form(s) should include FAA Form 7460-1 and 2 if applicable. The applicant shall send a copy of any comments or conditions administered by the FAA regarding the proposed WCF in addition to documentation allowing its construction at the proposed site to the Planning Department. No building permit will be issued until documentation from the FAA allows this use and structure.
  5. Grading, drainage, and erosion control plans.
  6. The building plans must include detailed elevations and cross-sections and the topography of the project site which clearly depict the total height of the proposed structure. Maximum height is 65 feet.
  7. Details showing compliance with fire department requirements. If the proposed structure(s) are located within the State Responsibility Area (SRA) the requirements of the Wildland-Urban Interface code (WUI), California Building Code Chapter 7A, shall apply.
  8. A landscape plan shall be included to show plantings to screen the proposed fence enclosure. A minimum of 18 plants around the perimeter will be required. The plan must include details of ground preparation and the required maintenance to ensure survival of the plants.
- B. Meet all requirements of the County Department of Public Works, Stormwater Management. If drainage fees are required these will be assessed on the net increase in impervious area. Permit conditions are as follows:
1. A drainage review will be required at the building application stage. The current drainage review fee is \$470.00. Projects are required to maintain

predevelopment runoff rates where feasible. Mitigating measures should be used on-site to limit increases in post-development runoff leaving the site. Best Management Practices should be employed within the development to meet this goal as much as possible. Such measures include pervious or semi-pervious pavements, runoff surface spreading, discharging roof and driveway runoff into landscaping, etc.

2. Please provide a tabulation table for the proposed impervious areas. Please note – a drainage fee will be assessed on the net increase in impervious area (i.e. roofs, paved areas, patios, walways, driveway, etc.). The fees are currently \$1.27 per square foot. A 50% credit is given when you use semi-pervious pavement such as pavers, baserock, pea gravel, porous concrete. Contact Gerry Vargas if you have any questions about the above comments: Email: [dpw105@santacruzcounty.us](mailto:dpw105@santacruzcounty.us). Counter (Monday-Friday) 8-12pm. Phone: 831-454-2160.
- C. Obtain an Environmental Health Clearance for this project from the County Department of Environmental Health Services. Due to a locked gate, the EH staff could not inspect the sewage disposal system for the property. Compliance with Environmental Health requirements are not yet determined. The owner applies for the Discretionary and Building Permits at own risk. The discretionary permit is complete. Questions may be directed to Cheryl Wong at (831) 454-2022.
  - D. Meet all requirements of the Environmental Planning section of the Planning Department.
  - E. Meet all requirements and pay any applicable plan check fee of the County Fire Protection District.
  - F. Submit 3 copies of a soils report prepared and stamped by a licensed Geotechnical Engineer.
- III. All construction shall be performed according to the approved plans for the Building Permit. Prior to final building inspection, the applicant/owner must meet the following conditions:
- A. All site improvements shown on the final approved Building Permit plans shall be installed.
  - B. All inspections required by the building permit shall be completed to the satisfaction of the County Building Official.
  - C. The project must comply with all recommendations of the approved soils reports.
  - D. Pursuant to Sections 16.40.040 and 16.42.080 of the County Code, if at any time during site preparation, excavation, or other ground disturbance associated with this development, any artifact or other evidence of an historic archaeological resource or a Native American cultural site is discovered, the responsible persons

shall immediately cease and desist from all further site excavation and notify the Sheriff-Coroner if the discovery contains human remains, or the Planning Director if the discovery contains no human remains. The procedures established in Sections 16.40.040 and 16.42.080, shall be observed.

#### IV. Operational Conditions

- A. All replacement antennas and other equipment mounted on the tower shall comply with the maximum height set out in II.A.2 (above) unless a increased height is approved subject to a Variance.
- B. All future co-locations on the approved mono-eucalyptus WCF facility shall be located as shown on Attachment D, below the currently proposed antennas, and shall not result in a further increase in height without the approval of the Planning Department in accordance with the Santa Cruz County Code. Future co-locations on the mono-eucalyptus pole must maintain the same or greater level of camouflage as approved by this permit. All ground mounted equipment shall be located within the approved fenced and landscaped enclosure. All required permits as set out in County Code shall also be obtained.
- C. The foliage on the mono-eucalyptus shall be maintained in good condition and if damaged by wind, weather or other reason, shall be replaced in-kind to retain the appearance of a natural tree to the greatest extent possible.
- D. All landscape screening around the fenced enclosure shall be maintained in good condition. All dead plants shall be replaced in kind or with a similar large-scale, hardy, drought-tolerant, non-invasive species.
- E. All maintenance activities associated with the WCF, including tests to the generator, shall be between the hours of 8:00 a.m. and 5:00 p.m. weekdays and shall not occur on any holiday.
- F. No light shall be added at the top of the mono-eucalyptus unless evidence is submitted, in writing, to show that this is a Federal Aviation Authority (FAA) requirement.
- G. In the event that future County inspections of the subject property disclose noncompliance with any Conditions of this approval or any violation of the County Code, the owner shall pay to the County the full cost of such County inspections, including any follow-up inspections and/or necessary enforcement actions, up to and including permit revocation.

- V. As a condition of this development approval, the holder of this development approval ("Development Approval Holder"), is required to defend, indemnify, and hold harmless the COUNTY, its officers, employees, and agents, from and against any claim (including attorneys' fees), against the COUNTY, its officers, employees, and agents to attack, set aside, void, or annul this development approval of the COUNTY or any subsequent amendment of this development approval which is requested by the Development

Approval Holder.

- A. COUNTY shall promptly notify the Development Approval Holder of any claim, action, or proceeding against which the COUNTY seeks to be defended, indemnified, or held harmless. COUNTY shall cooperate fully in such defense. If COUNTY fails to notify the Development Approval Holder within sixty (60) days of any such claim, action, or proceeding, or fails to cooperate fully in the defense thereof, the Development Approval Holder shall not thereafter be responsible to defend, indemnify, or hold harmless the COUNTY if such failure to notify or cooperate was significantly prejudicial to the Development Approval Holder.
- B. Nothing contained herein shall prohibit the COUNTY from participating in the defense of any claim, action, or proceeding if both of the following occur:
  - 1. COUNTY bears its own attorney's fees and costs; and
  - 2. COUNTY defends the action in good faith.
- C. Settlement. The Development Approval Holder shall not be required to pay or perform any settlement unless such Development Approval Holder has approved the settlement. When representing the County, the Development Approval Holder shall not enter into any stipulation or settlement modifying or affecting the interpretation or validity of any of the terms or conditions of the development approval without the prior written consent of the County.
- D. Successors Bound. "Development Approval Holder" shall include the applicant and the successor'(s) in interest, transferee(s), and assign(s) of the applicant.

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Minor variations to this permit which do not affect the overall concept or density may be approved by the Planning Director at the request of the applicant or staff in accordance with Chapter 18.10 of the County Code.

**Please note: This permit expires three years from the effective date listed below unless a building permit (or permits) is obtained for the primary structure described in the development permit (does not include demolition, temporary power pole or other site preparation permits, or accessory structures unless these are the primary subject of the development permit). Failure to exercise the building permit and to complete all of the construction under the building permit, resulting in the expiration of the building permit, will void the development permit, unless there are special circumstances as determined by the Planning Director.**

Application #: 171213  
APN: 049-171-17  
Owner: Stephen Henry

Approval Date: \_\_\_\_\_

Effective Date: \_\_\_\_\_

Expiration Date: \_\_\_\_\_

\_\_\_\_\_  
Steven Guiney, AICP  
Deputy Zoning Administrator

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Appeals: Any property owner, or other person aggrieved, or any other person whose interests are adversely affected by any act or determination of the Zoning Administrator, may appeal the act or determination to the Planning Commission in accordance with chapter 18.10 of the Santa Cruz County Code.







[illegible]

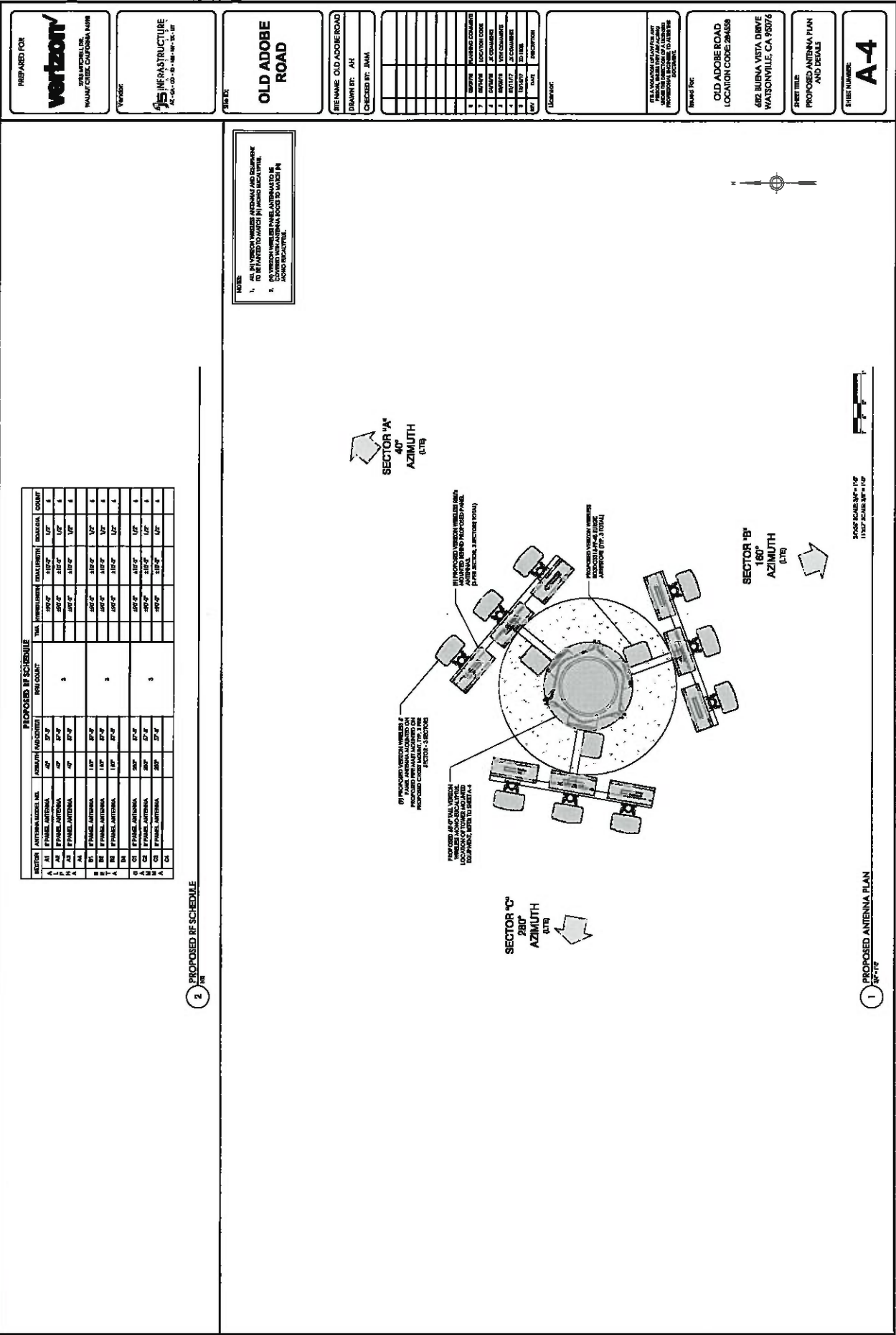










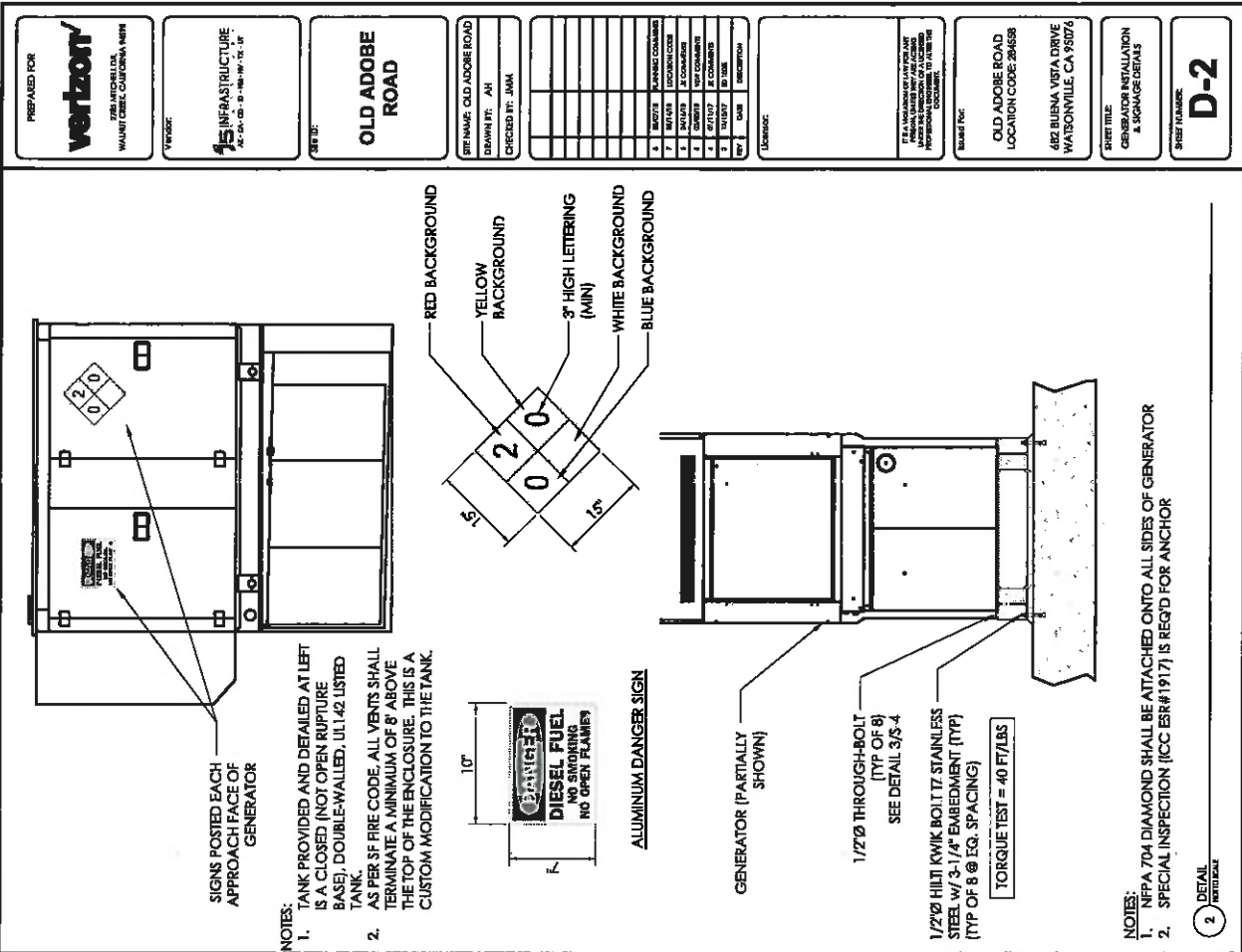
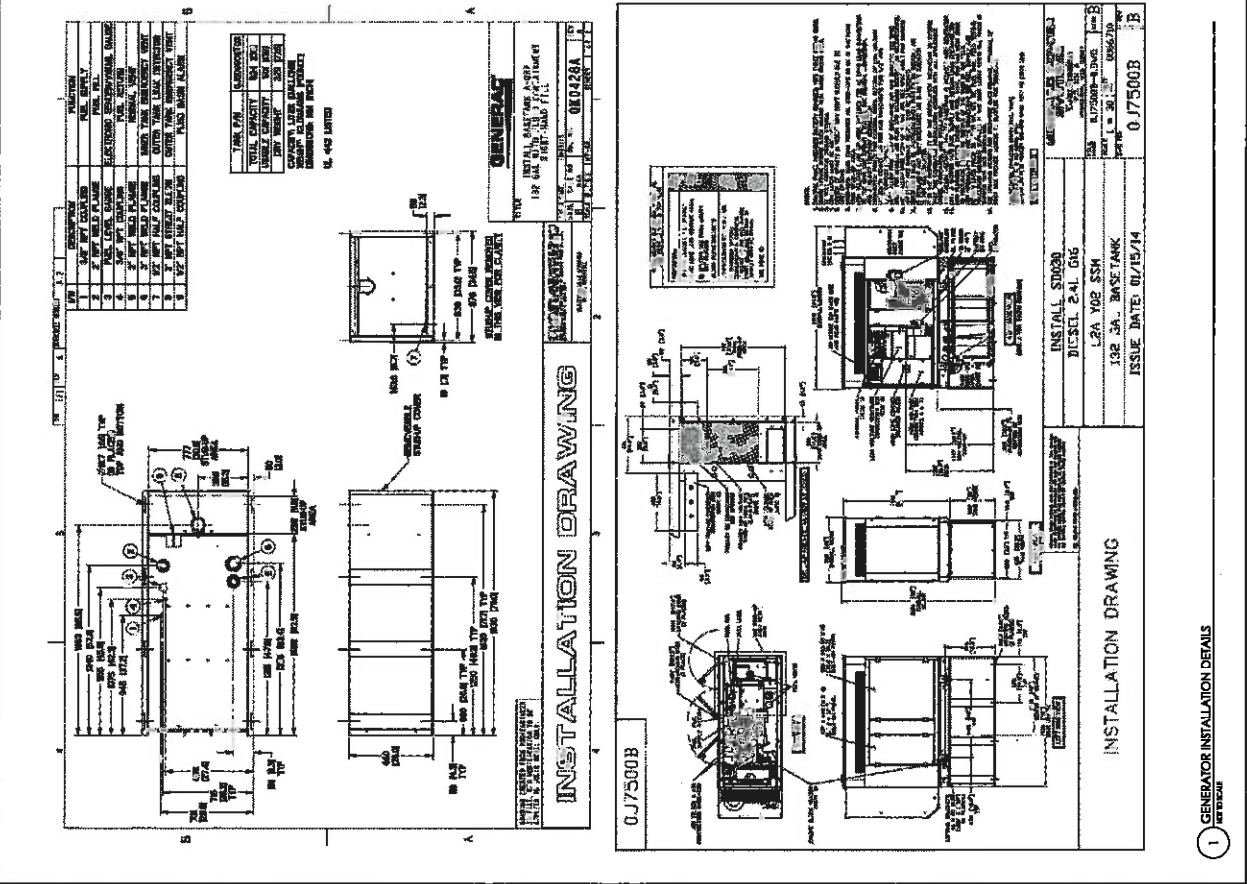


















Electronically drawn 1/31/97 KSA  
 Rev. 1/31/97 KSA (Street Name)  
 Rev. 5/28/97 GG (Cor. Pg. ref 47)  
 Rev. 5/27/98 (TCA CONSOLIDATION) rw  
 Rev. 11/10/98 GG (Remove easement, 1-58 & 59)  
 Rev. 5/4/01 mvm (changed page refs.)  
 Rev. 2/25/02 mvm (st. names)  
 Rev. 12/31/02 mvm (cor. st. names)  
 Rev. 5/31/08 mvm (59PM28, split 1-64 & 65)  
 Rev. 8/8/07 TD (corr. to scarlet cl. rw)

# FOR TAX PURPOSES ONLY

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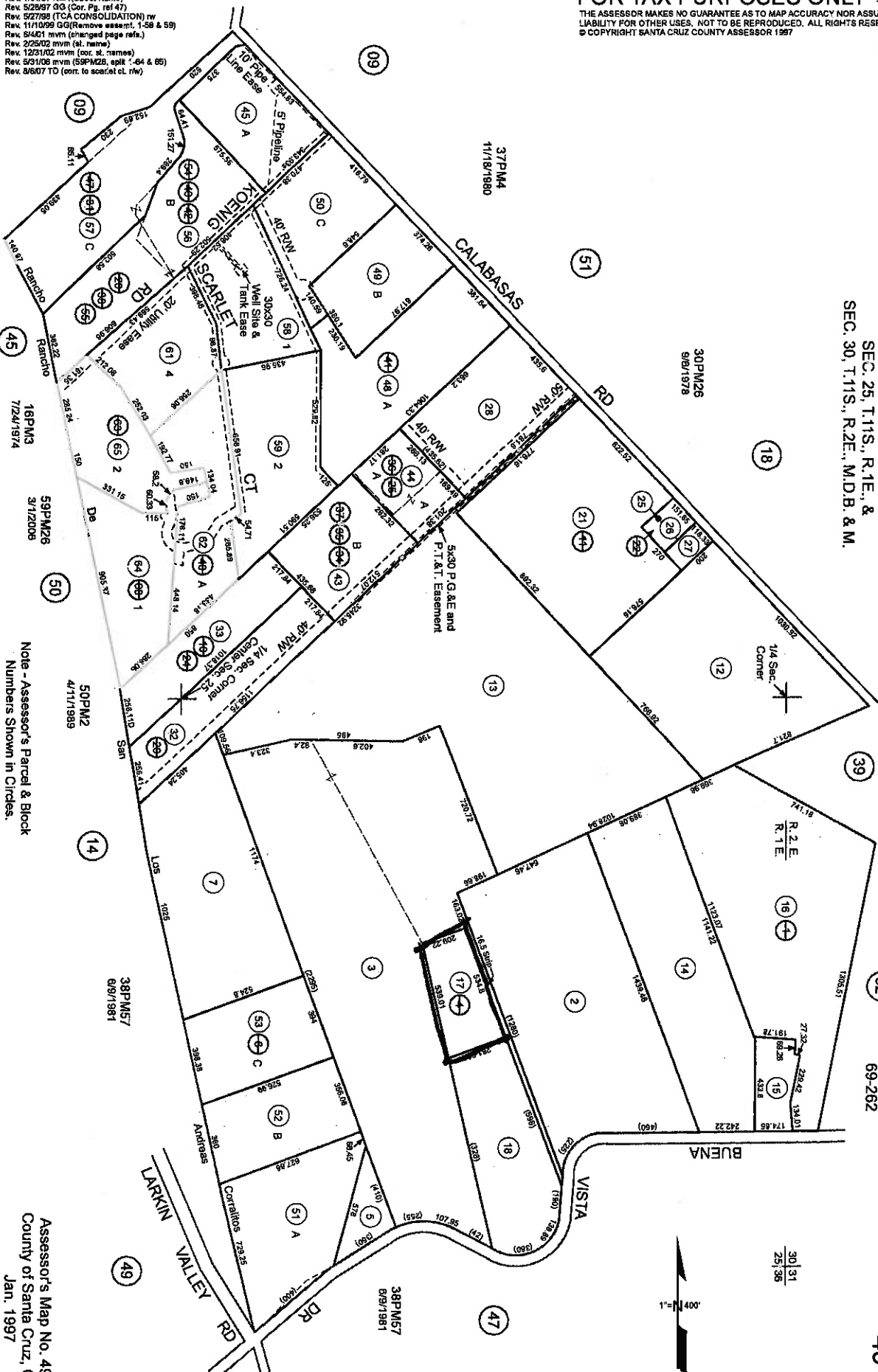
POR. RANCHO DE LOS CORRALITOS  
 SEC. 25, T.11S., R.1E., &  
 SEC. 30, T.11S., R.2E., M.D.B. & M.

Tax Area Code  
 69-262

49-17

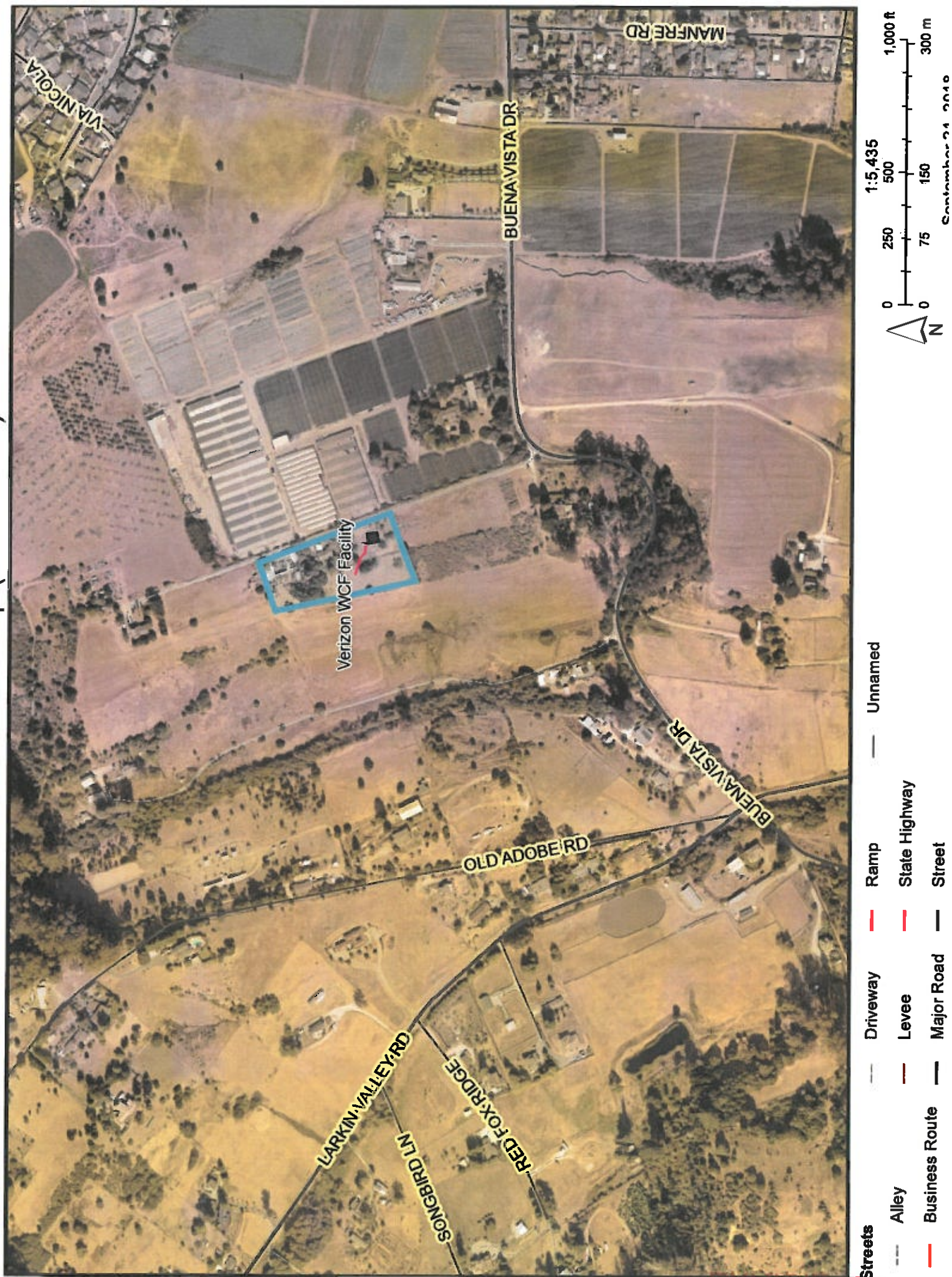
Note - Assessor's Parcel & Block  
 Numbers Shown in Circles.

Assessor's Map No. 49-17  
 County of Santa Cruz, Calif.  
 Jan. 1997





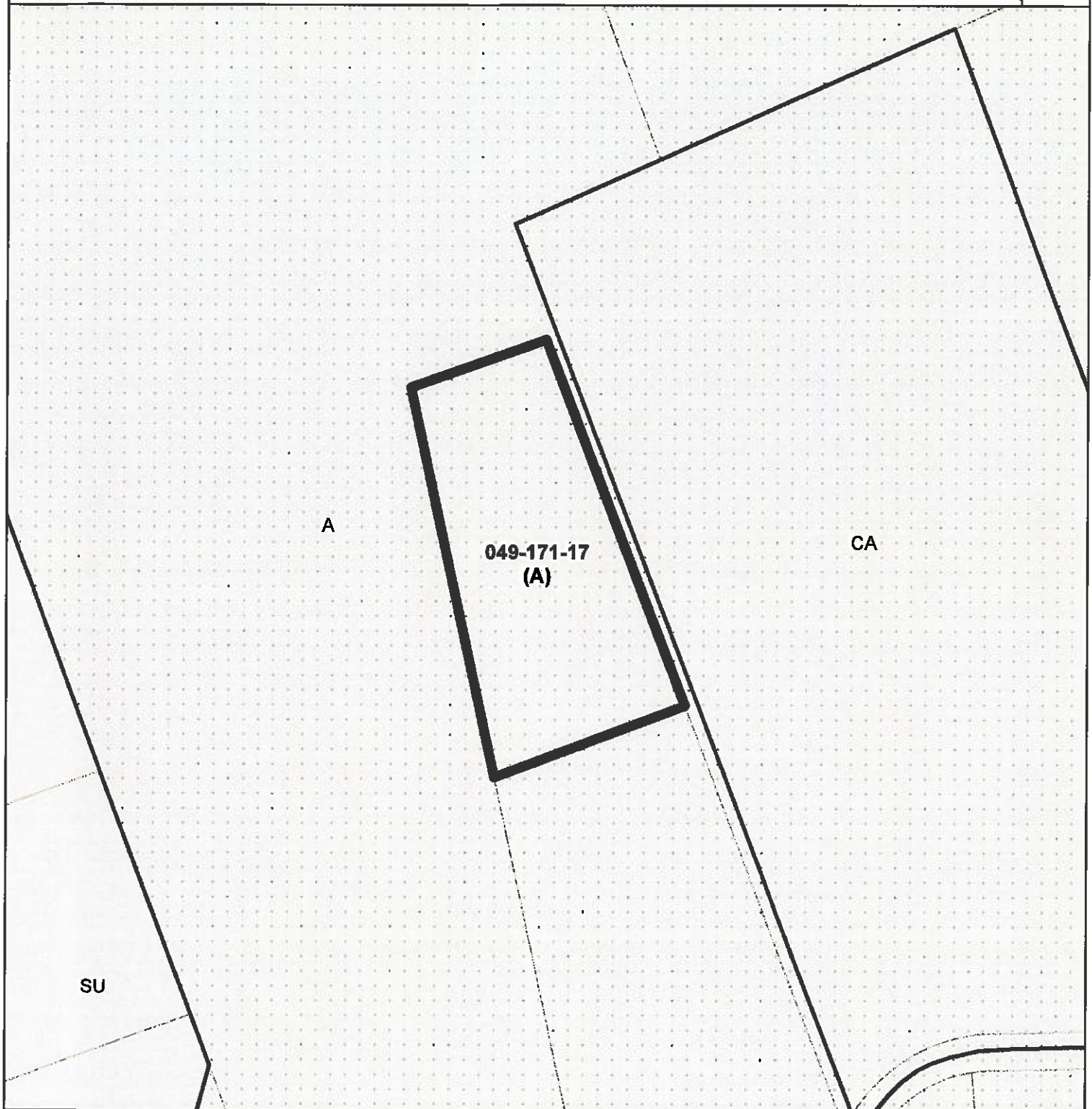
# Parcel Location Map (049-171-17)



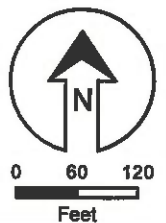




# Parcel Zoning Map



- A Agriculture
- CA Commercial Agriculture
- SU Special Use

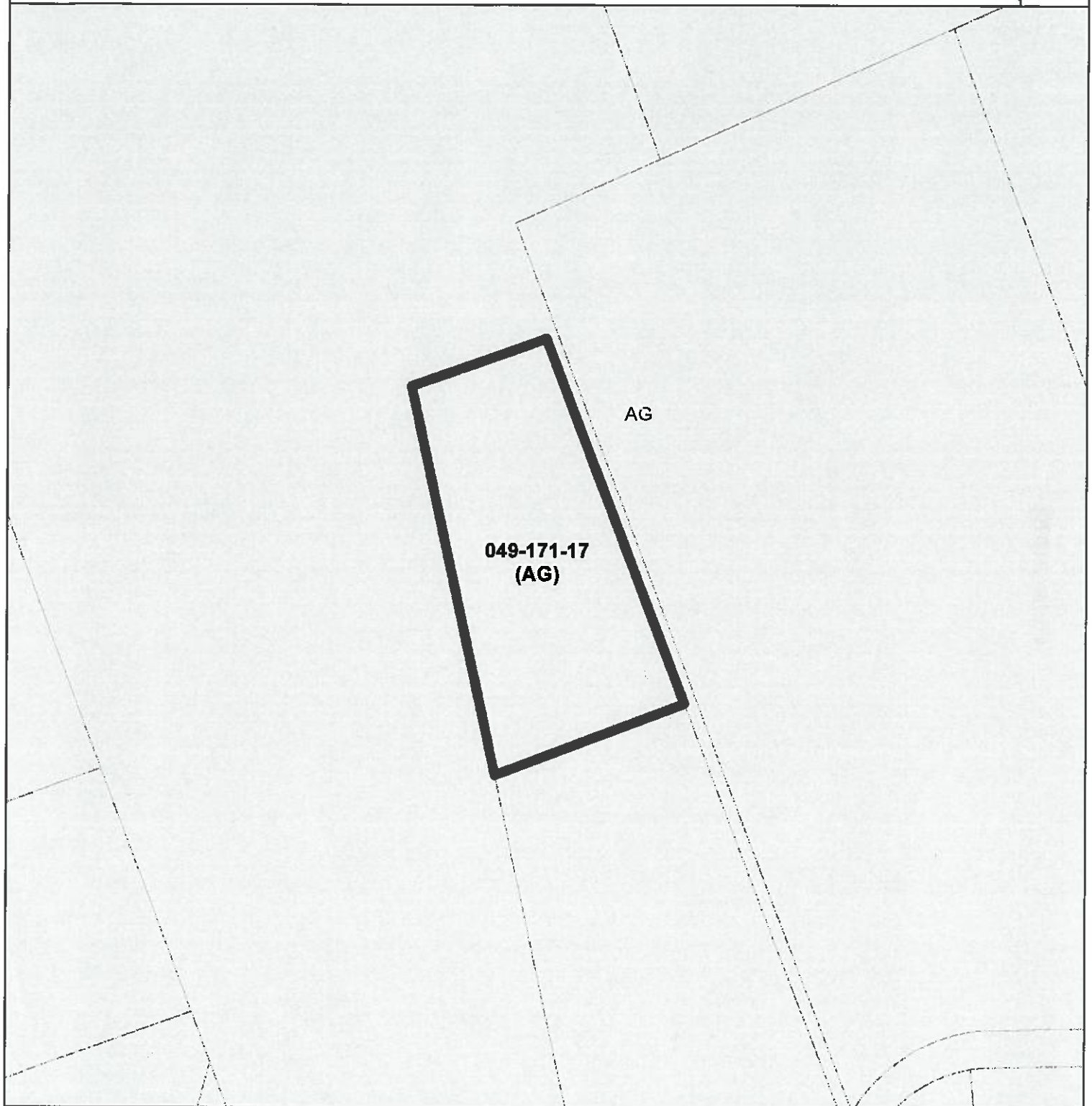




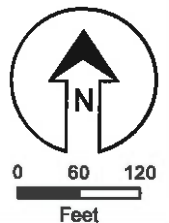
# Parcel General Plan Map



Mapped  
Area



AG Agricultural

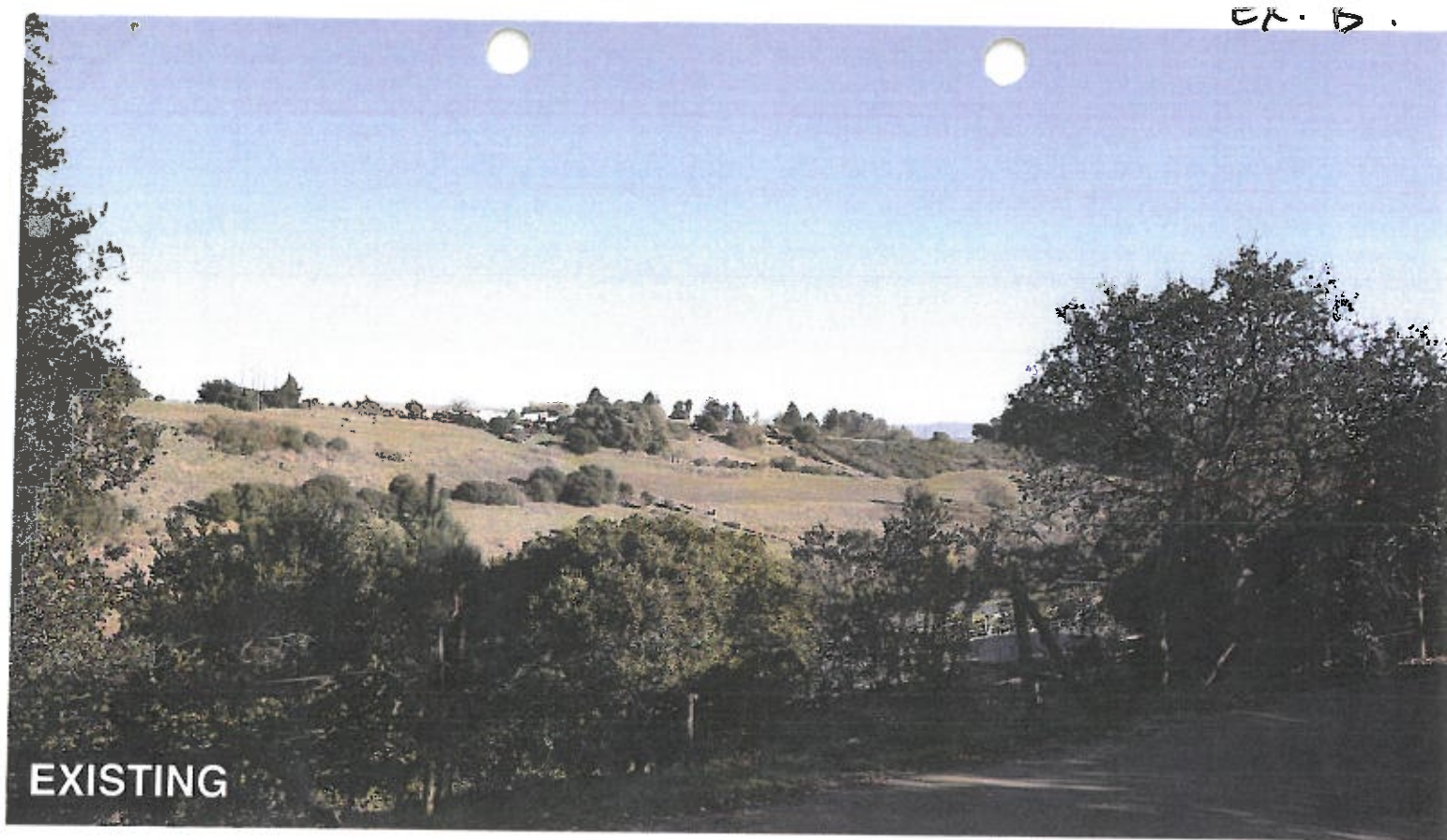




EX. B

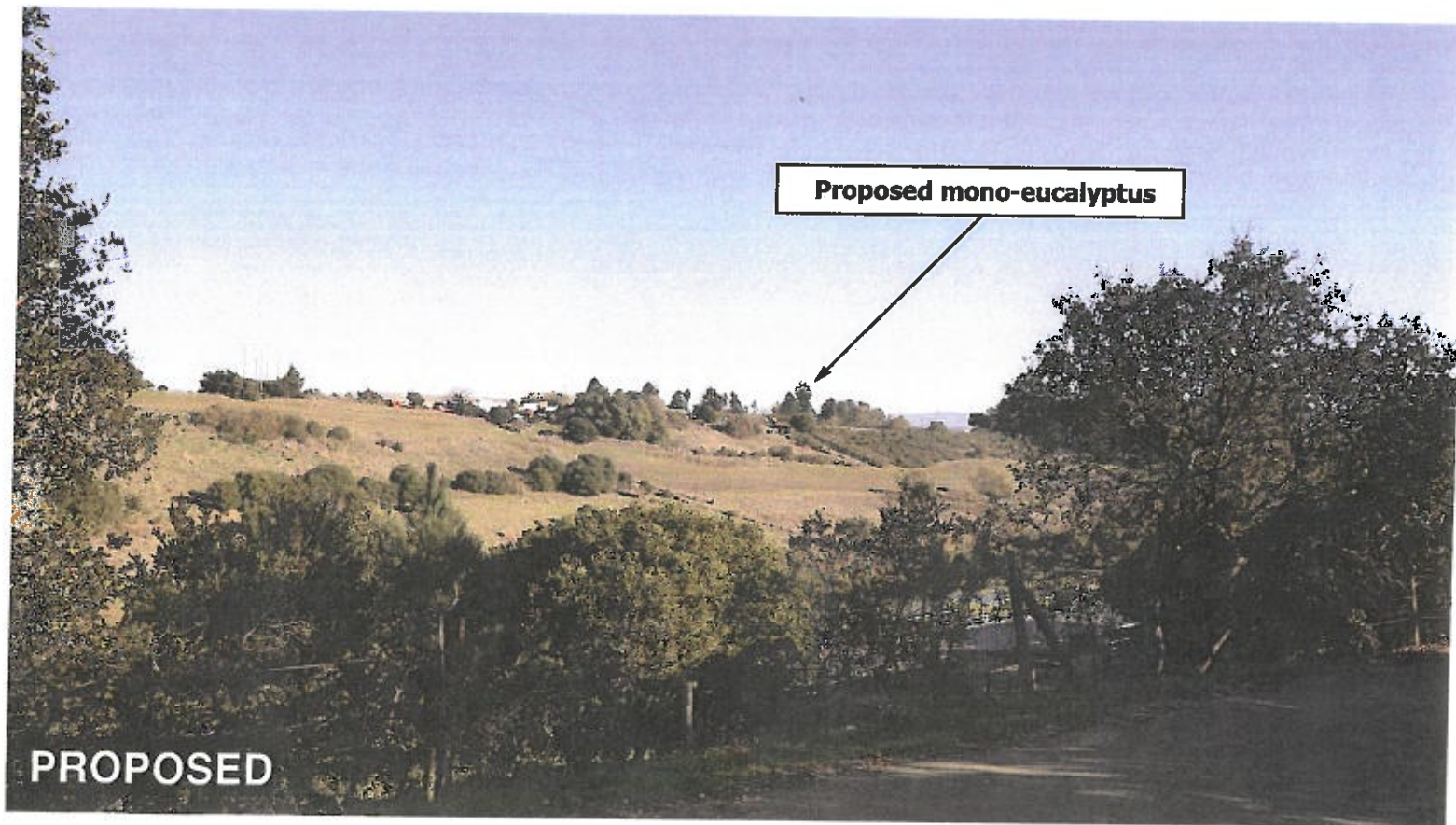






**EXISTING**

Install (9) panel antennas, (9) RRUS on an 65' mono-eucalyptus



**PROPOSED**

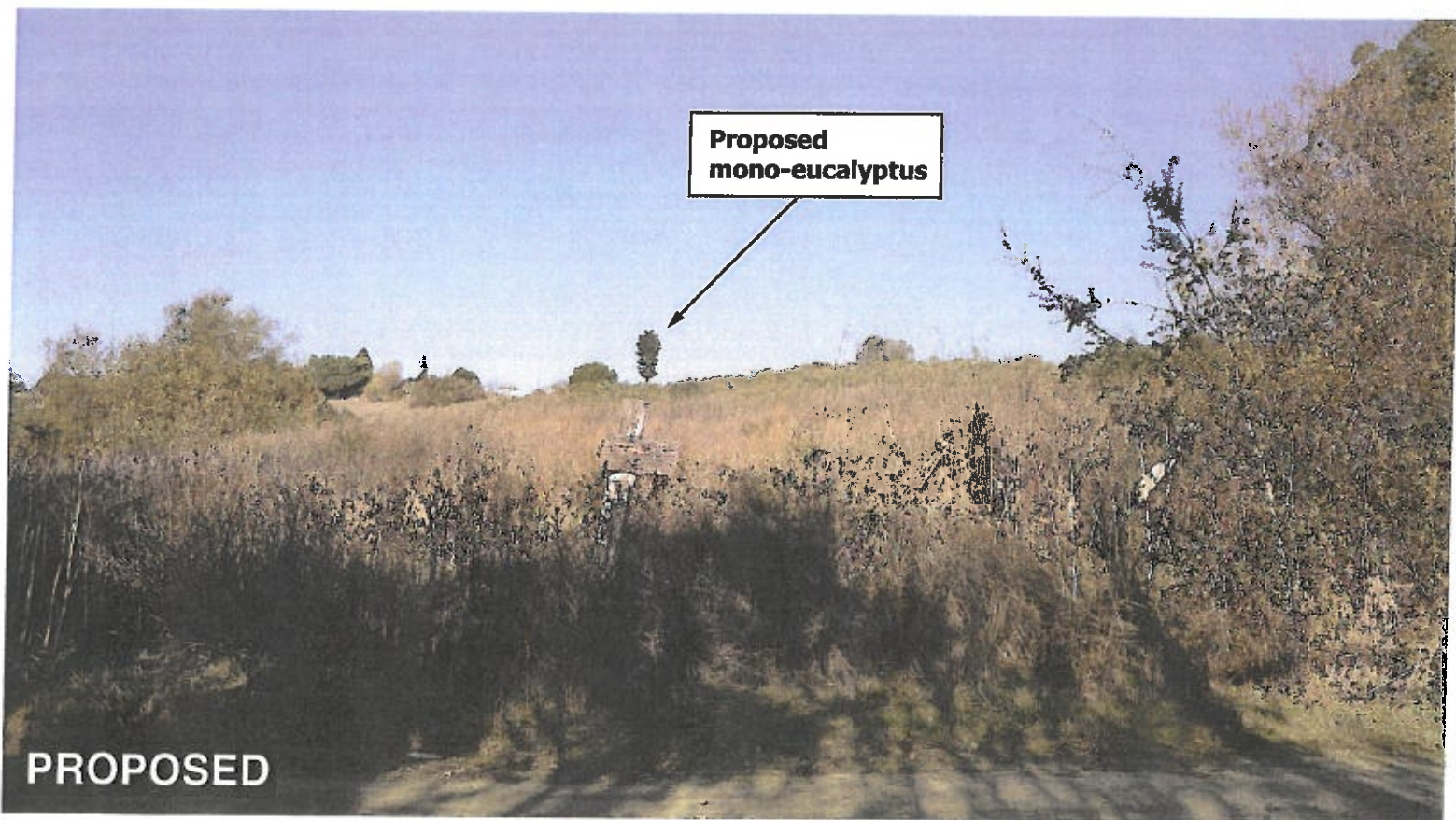


EX-15



**EXISTING**

**Install (9) panel antennas, (9) RRUS on an 65' mono-eucalyptus**



**Proposed  
mono-eucalyptus**

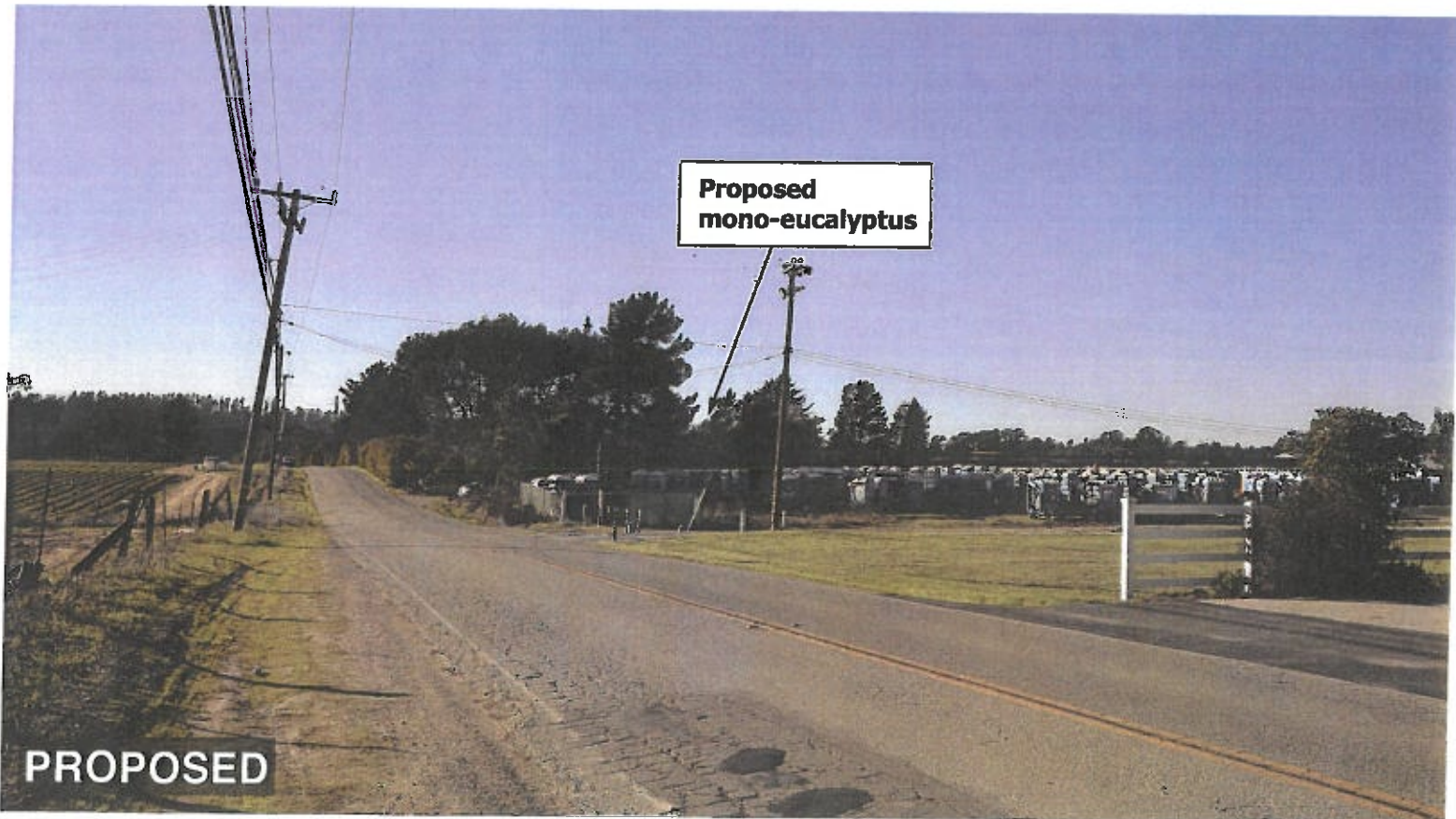
**PROPOSED**





**EXISTING**

**Install (9) panel antennas, (9) RRUS on an 65' mono-eucalyptus**



**Proposed  
mono-eucalyptus**

**PROPOSED**





EXISTING

Install (9) panel antennas, (9) RRUS on an 65' mono-eucalyptus



PROPOSED

**Verizon Wireless**

**Site Name: Old Adobe Rd.**

**Site Address: 628 Buena Vista Dr., Watsonville, CA**

**APN: 682 049-171-17-000**

**Project Description / Site Selection Process**

**PROJECT DESCRIPTION**

Verizon Wireless ("Applicant") proposes to establish and operate an unmanned wireless telecommunications facility on the parcel located at 628 Buena Vista Dr., Watsonville, CA / APN 0148-200-610. Structure Type: Stealth -- Mono Pine with equipment shelter. Structure Height: 85' feet (AGL). The leased area is 28' x 28' where the Stealth Mono Pine and Equipment shelter will be located.

The scope of work consists of the following:

- Installation of an 85' mono-pine with 3 sectors consisting of 9 panel antennas with 3 antennas per sector
- Installation of an outdoor equipment concrete pad within a 28' x 28' lease area
- Installation of 9 Remote Radio Units (RRU's) with an A2 unit
- Installation of a 30 kw generator

The proposed site will greatly improve internet and voice coverage for commercial and residential areas to the North, East, West, and South of 682 Buena Vista Dr., Watsonville, CA. The RF objective is to improve coverage along Buena Vista Drive in Watsonville.

This site is part of a larger infill project designed to improve internet connectivity and voice coverage in rural areas that are predominately reliant on dial-up connections. The proposed site will bring connectivity up to at least 10 Megabits per second for fixed-wireless Internet service which represents a tremendous leap in terms of speed and reliant connectivity.

**SITE SELECTION PROCESS**

No other candidate was viable in the search area that met will all the leasing, zoning, engineering, and construction requirements. Applicant originally identified 6 potential candidates within 1 mile of the Center of the Search Ring. However, due to visibility concerns, RF eliminated 3 of the candidates. In addition, two PG&E collocations were not considered since macrocell sites were not feasible at either pole. The remaining candidate, Candidate 1, was no longer responsive and Verizon decided to drop the candidate. As a result Applicant re-scrubbed the search ring and identified the following single candidate.



EX-6

**Verizon Wireless • Proposed Base Station (Site No. 284558 "Old Adobe Road")  
682 Buena Vista Drive • Watsonville, 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. 284558 "Old Adobe Road") proposed to be located at 682 Buena Vista Drive in Watsonville, California, for compliance with appropriate guidelines limiting human exposure to radio frequency ("RF") electromagnetic fields.

**Executive Summary**

Verizon proposes to install directional panel antennas on a tall steel pole, configured to resemble a pine tree, to be sited at 682 Buena Vista Drive in Watsonville. The proposed operation will comply with the FCC guidelines limiting public exposure to RF energy.

**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 <sup>2</sup>	1.00 mW/cm <sup>2</sup>
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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EXHIBIT H

**Verizon Wireless • Proposed Base Station (Site No. 284558 "Old Adobe Road")  
682 Buena Vista Drive • Watsonville, 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 L.D.Strobel Co. Inc., dated December 2, 2016, it is proposed to install nine JMA Wireless Model X7CQAP-FRO-860-VR0 directional panel antennas on a new 75-foot steel pole, configured to resemble a pine tree, to be sited near the southeast corner of the 3-acre parcel located at 682 Buena Vista Drive in Watsonville. The antennas would employ no downtilt, would be mounted at an effective height of about 71 feet above ground, and would be oriented in groups of three toward 40°T, 160°T, and 280°T, to provide service in all directions. The maximum effective radiated power in any direction would be 13,760 watts, representing simultaneous operation at 6,240 watts for AWS, 5,360 watts for PCS, and 2,160 watts for 700 MHz service; no operation on cellular frequencies is presently proposed from this site. 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 0.028 mW/cm<sup>2</sup>, which is 2.8% of the applicable public exposure limit. The maximum calculated level at the second-floor elevation of any nearby building\* is 0.44% of the public exposure limit. The maximum calculated level at the second-floor elevation of any nearby residence† is 0.33% of the public exposure limit. It should be noted that these results include several

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\* Located at least 100 feet away, based on photographs from Google Maps.

† Located at least 220 feet away, based on photographs from Google Maps.



**Verizon Wireless • Proposed Base Station (Site No. 284558 "Old Adobe Road")  
682 Buena Vista Drive • Watsonville, California**

"worst-case" assumptions and therefore are expected to overstate actual power density levels from the proposed operation.

**No Recommended Mitigation Measures**

Due to their mounting location and height, the Verizon antennas would not be accessible to unauthorized persons, and so no mitigation measures are necessary to comply with the FCC public exposure guidelines. It is presumed that Verizon will, as an FCC licensee, take adequate steps to ensure that its employees or contractors receive appropriate training and comply with FCC occupational exposure guidelines whenever work is required near the antennas themselves.

**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 682 Buena Vista Drive in Watsonville, California, will comply with the prevailing standards for limiting public exposure to radio frequency energy and, therefore, will 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.

**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, 2017. 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

May 12, 2017



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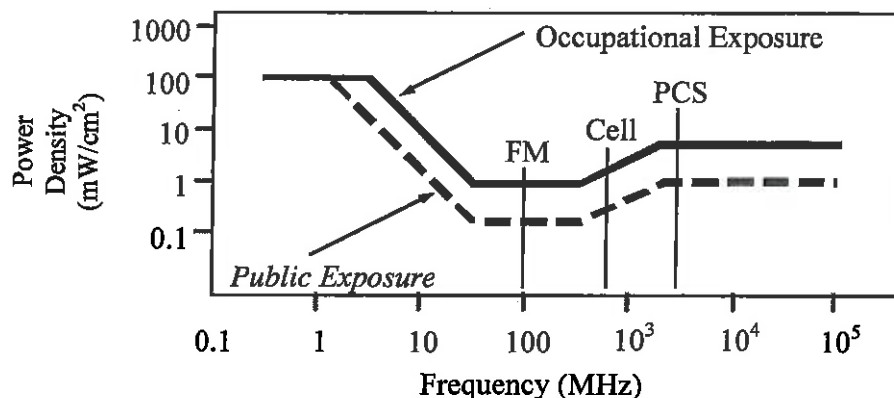
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Page 3 of 3

## 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 ( <i>f</i> is frequency of emission in MHz)					
	Electric Field Strength (V/m)		Magnetic Field Strength (A/m)		Equivalent Far-Field Power Density (mW/cm <sup>2</sup> )	
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/f<sup>2</sup></i>
3.0 – 30	1842/f	<i>823.8/f</i>	4.89/f	<i>2.19/f</i>	900/f <sup>2</sup>	<i>180/f<sup>2</sup></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√ <i>f</i>	<i>1.59√f</i>	√ <i>f</i> /106	<i>√f/238</i>	<i>f/300</i>	<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/cm<sup>2</sup>,

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/cm<sup>2</sup>,

where  $\theta_{BW}$  = 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

$\eta$  = 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/cm<sup>2</sup>,

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 ( $1.6 \times 1.6 = 2.56$ ). 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.



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Methodology  
Figure 2