

Negative Declaration & Notice Of Determination

PLANNING & BUILDING DEPARTMENT • COUNTY OF SAN LUIS OBISPO
976 OSOS STREET • ROOM 200 • SAN LUIS OBISPO • CALIFORNIA 93408 • (805) 781-5600

ENVIRONMENTAL DETERMINATION NO. ED13-194

DATE: 5/29/14

PROJECT/ENTITLEMENT: Silva & Verizon Wireless Conditional Use Permit; DRC2013-00069

APPLICANT NAME: John Silva (landowner) and Verizon Wireless

ADDRESS: 123 Seacliff Drive, Psimo Beach, CA 93449

CONTACT PERSON: Tricia Knight

Telephone: 805-448-4221

PROPOSED USES/INTENT: A request by John Silva and Verizon Wireless for a Conditional Use Permit to allow the construction and operation of an unmanned wireless communication facility consisting of: a) six (6) new antennas mounted at a height of 35 feet above ground level attached to a 40-foot high monopine; b) two (2) new Verizon wireless GPS antennas; c) one 11'-6" x 16'-10-1/2" equipment shelter; d) one 210-gallon 30KW standby emergency generator; e) new Verizon wireless ice bridge and electrical meter; f) new 8'-0" high wood fence around the base of the facility; and g) associated utility trenching for the installation of power and telco lines. The project is located on an approximately 37-acre parcel and will result in the disturbance of approximately 1,000 square feet (25-foot by 40-foot concrete pad) for the construction of the proposed facility. The facility will be accessed by an existing twelve foot wide agricultural road. No road improvements or grading are proposed. The proposed project is within the Agriculture land use category and is located at 2707 Stagecoach Road, approximately 0.5-mile north of Creston Road and 3 miles east of the City of Paso Robles. The subject property is within the rural El Pomar/Estrella sub-area of the North County planning area.

LOCATION: 2707 Stagecoach Road, Paso Robles, CA 93446

LEAD AGENCY: County of San Luis Obispo
Dept of Planning & Building
976 Osos Street, Rm. 200
San Luis Obispo, CA 93408-2040
Website: <http://www.sloplanning.org>

STATE CLEARINGHOUSE REVIEW: YES NO

OTHER POTENTIAL PERMITTING AGENCIES: N/A

ADDITIONAL INFORMATION: Additional information pertaining to this Environmental Determination may be obtained by contacting the above Lead Agency address or (805)781-5600.

COUNTY "REQUEST FOR REVIEW" PERIOD ENDS AT 4:30 p.m. (2 wks from above DATE)

30-DAY PUBLIC REVIEW PERIOD begins at the time of public notification

Notice of Determination

State Clearinghouse No. _____

This is to advise that the San Luis Obispo County _____ as *Lead Agency*
 Responsible Agency approved/denied the above described project on _____, and has made the following determinations regarding the above described project:

The project will not have a significant effect on the environment. A Negative Declaration was prepared for this project pursuant to the provisions of CEQA. Mitigation measures and monitoring were made a condition of approval of the project. A Statement of Overriding Considerations was not adopted for this project. Findings were made pursuant to the provisions of CEQA.

This is to certify that the Negative Declaration with comments and responses and record of project approval is available to the General Public at the 'Lead Agency' address above.

Megan Martin

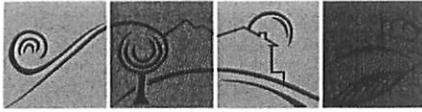
County of San Luis Obispo

Signature

Project Manager Name

Date

Public Agency



Initial Study Summary – Environmental Checklist

PLANNING & BUILDING DEPARTMENT • COUNTY OF SAN LUIS OBISPO
976 OSOS STREET • ROOM 200 • SAN LUIS OBISPO • CALIFORNIA 93408 • (805) 781-5600

(ver 5.1) Using Form

Project Title & No. Silva Conditional Use Permit ED13-194 (DRC2013-00069)

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: The proposed project could have a "Potentially Significant Impact" for at least one of the environmental factors checked below. Please refer to the attached pages for discussion on mitigation measures or project revisions to either reduce these impacts to less than significant levels or require further study.

<input checked="" type="checkbox"/> Aesthetics	<input type="checkbox"/> Geology and Soils	<input type="checkbox"/> Recreation
<input type="checkbox"/> Agricultural Resources	<input type="checkbox"/> Hazards/Hazardous Materials	<input type="checkbox"/> Transportation/Circulation
<input type="checkbox"/> Air Quality	<input type="checkbox"/> Noise	<input type="checkbox"/> Wastewater
<input checked="" type="checkbox"/> Biological Resources	<input type="checkbox"/> Population/Housing	<input type="checkbox"/> Water /Hydrology
<input type="checkbox"/> Cultural Resources	<input type="checkbox"/> Public Services/Utilities	<input type="checkbox"/> Land Use

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation, the Environmental Coordinator finds that:

- The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- The proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- Although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Megan Martin
Prepared by (Print)

Megan Martin
Signature

5-22-14
Date

Airlin Singewald
Reviewed by (Print)

Airlin Singewald
Signature

Ellen Carroll,
Environmental Coordinator
(for) 5-22-14
Date

Project Environmental Analysis

The County's environmental review process incorporates all of the requirements for completing the Initial Study as required by the California Environmental Quality Act (CEQA) and the CEQA Guidelines. The Initial Study includes staff's on-site inspection of the project site and surroundings and a detailed review of the information in the file for the project. In addition, available background information is reviewed for each project. Relevant information regarding soil types and characteristics, geologic information, significant vegetation and/or wildlife resources, water availability, wastewater disposal services, existing land uses and surrounding land use categories and other information relevant to the environmental review process are evaluated for each project. Exhibit A includes the references used, as well as the agencies or groups that were contacted as a part of the Initial Study. The County Planning Department uses the checklist to summarize the results of the research accomplished during the initial environmental review of the project.

Persons, agencies or organizations interested in obtaining more information regarding the environmental review process for a project should contact the County of San Luis Obispo Current Planning Division, 976 Osos Street, Rm. 200, San Luis Obispo, CA, 93408-2040 or call (805) 781-5600.

A. PROJECT

DESCRIPTION: Request by John Silva and Verizon Wireless for a Conditional Use Permit to allow the construction and operation of an unmanned wireless communication facility consisting of: a) six (6) new antennas mounted at a height of 35 feet above ground level attached to a 40-foot high monopine; b) two (2) new Verizon wireless GPS antennas; c) one 11'-6" x 16'-10-1/2" equipment shelter; d) one 210-gallon 30KW standby emergency generator; e) new Verizon wireless ice bridge and electrical meter; f) new 8'-0" high wood fence around the base of the facility; and g) associated utility trenching for the installation of power and telco lines. The project is located on an approximately 37-acre parcel and will result in the disturbance of approximately 1,000 square feet (25-foot by 40-foot concrete pad) for the construction of the proposed facility. The facility will be accessed by an existing twelve foot wide agricultural road. No road improvements or grading are proposed. The proposed project is within the Agriculture land use category and is located at 2707 Stagecoach Road, approximately 0.5-mile north of Creston Road and 3 miles east of the City of Paso Robles. The subject property is within the rural El Pomar/Estrella sub-area of the North County planning area.

ASSESSOR PARCEL NUMBER(S): 035-071-011

Latitude: 35 degrees 34' 51" N Longitude: 120 degrees 34' 52" W

SUPERVISORIAL DISTRICT # 5

B. EXISTING SETTING

PLANNING AREA: North County Planning Area;

Rural El Pomar-Estrella Sub Area

LAND USE CATEGORY: Agriculture

COMBINING DESIGNATION(S): None

EXISTING USES: Single-family residence(s); cattle grazing

TOPOGRAPHY: Gently sloping
to moderately sloping

VEGETATION: Scattered Oaks; Scattered <10%
Blue Oak woodland; Non-native Grasses

PARCEL SIZE: Approximately 37 acres

SURROUNDING LAND USE CATEGORIES AND USES:

<i>North:</i> Residential Rural; single-family residence(s)	<i>East:</i> Agriculture; single-family residence(s) and agricultural uses
<i>South:</i> Agriculture; single-family residence(s) and agricultural uses	<i>West:</i> Agriculture; single-family residence(s) and agricultural uses

C. ENVIRONMENTAL ANALYSIS

During the Initial Study process, several issues were identified as having potentially significant environmental effects (see following Initial Study). Those potentially significant items associated with the proposed uses can be minimized to less than significant levels.



COUNTY OF SAN LUIS OBISPO INITIAL STUDY CHECKLIST

1. AESTHETICS

Will the project:

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Create an aesthetically incompatible site open to public view?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) <i>Introduce a use within a scenic view open to public view?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) <i>Change the visual character of an area?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) <i>Create glare or night lighting, which may affect surrounding areas?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) <i>Impact unique geological or physical features?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting. The project site is located within an agricultural setting. Surrounding landscape is characterized by rolling hills covered with a mix of low density residential development, oak woodlands, grasslands, vineyards, and dry farm grain fields. Due to the surrounding large lots with scattered homes, and rural pastoral aspects, the visual qualities of the area are considered high.

The proposed project would be located on an approximately 37-acre parcel in the Agriculture land use category. The subject parcel contains a single-family residence and an agricultural accessory structure. The proposed facility would be sited approximately 140 feet to the east of the residence.

Regulatory Setting

Land Use Ordinance Section 22.30.180 establishes the following screening standard for wireless communication facilities:

All facilities shall be screened with vegetation or landscaping. Where screening with vegetation is not feasible, the facilities shall be disguised to resemble rural, pastoral architecture (ex: windmills, barns, trees) or other features determined to blend with the surrounding area and be finished in a texture and color deemed unobtrusive to the neighborhood in which it is located.

Conservation and Open Space Element Policy VR 9.3 states:

Locate, design and screen communications facilities, including towers, antennas, and associated equipment and buildings in order to avoid views of them in scenic areas, minimize their appearance and visually blend with the surrounding natural and built environments. Locate such facilities to avoid ridge tops where they would silhouette against the sky as viewed from major public view corridors and locations.

Conservation and Open Space Element Policy VR 9.4 states:

Encourage collocation of communication facilities (one or more carriers sharing a site, tower, or equipment) when feasible and where it would avoid or minimize adverse visual effects.

Impact. The proposed unmanned wireless communications facility would consist of nine (9) panel antennas concealed on a new 40-foot monopine structure. It also includes ground-mounted

equipment to be located within a faux barn structure (approximately 194 square foot equipment shelter). The facility would be clustered near an existing water tank approximately 170 feet east of the single-family residence. The facility would be designed to resemble a pine tree so as to be more compatible with the surrounding tree canopy and be less discernable as a wireless communications facility.

The proposed project could have a potentially significant impact on visual resources since it would introduce a new use that is visually incompatible with the character of surrounding residential and agricultural uses. The full extent of the proposed 40-foot tall monopine would be visible from Stagecoach Road, Creston Road, and the residential neighborhood to the north.

A Photo-Simulation Study was performed by Robert Carr SWCA Environmental Consultants in February 2014. The analysis was performed from three key viewing locations:

- Creston Road – approximately 0.66 miles south of the subject site;
- Stagecoach Road – approximately 0.2 miles west of the subject site; and
- Linne Road – approximately 0.66 miles north of the subject site.

The photo-simulations provided two alternatives to demonstrate the visual impacts of the proposed facility on the surrounding neighborhood and roadways: water tower and monopine. The project site, as shown in the photo-simulations would be visible from all three locations. After reviewing both alternatives, staff determined that the monopine would have a lesser visual impact since it would blend with the vegetative patterns of the landscape. Although the water tank alternative would be consistent with the agrarian character of the landscape, it would be the tallest man-made structure in the viewshed and its visual impact would be magnified due to its location on a primary ridgeline. As such, the facility will be disguised to resemble a monopine and, based on this design, would not be discernible as a wireless communications facility.

Mitigation/Conclusion. Generally a communications facility is not a use that is inherently compatible with the character of the surrounding residential and agricultural uses; however, the proposed project is a stealth design that would blend with the existing setting. Mitigation measures are recommended to require the use of colors and materials that are characteristic of an agrarian-style structure and a 40-foot tall steel monopole, configured and disguised to resemble a pine tree. Implementation of these mitigation measures (see Exhibit B) will reduce visual impacts to less than significant levels.

2. AGRICULTURAL RESOURCES <i>Will the project:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Convert prime agricultural land, per NRCS soil classification, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Impair agricultural use of other property or result in conversion to other uses?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Conflict with existing zoning for agricultural use, or Williamson Act program?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

2. AGRICULTURAL RESOURCES
Will the project:

Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

e) *Other:* _____

Setting. The proposed project would be located on an approximately 37 acre parcel in the Agriculture land use category. The subject parcel supports limited cattle grazing. It contains a single family residence, water storage tank, and an agricultural accessory structure. Adjacent parcels to the south and west contain irrigated vineyards. The subject property is not under Williamson Act contract and the soil is not considered prime farmland.

The proposed facility would be developed on the following non-prime soil type:

Balcom-Nacimiento association (9 – 30% slope).

Balcom. This moderately sloping loamy soil is considered moderately drained. The soil has high erodibility and moderate shrink-swell characteristics, as well as having potential septic system constraints due to: steep slopes, shallow depth to bedrock. The soil is considered Class IV without irrigation and Class IV when irrigated.

Nacimiento. This moderately sloping loamy soil is considered not well drained. The soil has moderate erodibility and moderate shrink-swell characteristics, as well as having potential septic system constraints due to: steep slopes, shallow depth to bedrock, slow percolation. The soil is considered Class IV without irrigation and Class IV when irrigated.

Nacimiento-Los Osos complex (30 - 50 % slope).

Nacimiento. This steeply sloping, fine loamy soil is considered not well drained. The soil has moderate erodibility and moderate shrink-swell characteristics, as well as having potential septic system constraints due to: steep slopes, shallow depth to bedrock, slow percolation. The soil is considered Class IV without irrigation and Class is not rated when irrigated.

Los Osos. This steeply sloping, fine loamy soil is considered not well drained. The soil has moderate erodibility and moderate shrink-swell characteristics, as well as having potential septic system constraints due to: steep slopes, shallow depth to bedrock, slow percolation. The soil is considered Class IV without irrigation and Class is not rated when irrigated.

Nacimiento-Los Osos complex (50 - 75 % slope).

Nacimiento. This very steeply sloping, fine loamy soil is considered not well drained. The soil has moderate erodibility and moderate shrink-swell characteristics, as well as having potential septic system constraints due to: steep slopes, shallow depth to bedrock, slow percolation. The soil is considered Class VII without irrigation and the Class is not rated when irrigated.

Los Osos. This very steeply sloping, fine loamy soil is considered not well drained. The soil has moderate erodibility and moderate shrink-swell characteristics, as well as having potential septic system constraints due to: steep slopes, shallow depth to bedrock, slow percolation. The soil is considered Class VII without irrigation and Class is not rated when irrigated.

Impact. The proposed project will result in the disturbance of approximately 1,000 square feet on an Agriculture-designated parcel for the construction of the proposed facility. The project site does not contain prime agricultural soils and is not under Williamson Act Contract. The proposed unmanned facility is not anticipated to adversely affect adjacent or on-site agricultural operations. Impacts to agriculture would therefore be considered less than significant. In a referral response dated February 26, 2014, the County Agricultural Commissioner’s office indicated the project would have a “less than significant” impact on agricultural resources. The facility could have a positive impact on agriculture

as it will provide supplemental income to an agricultural landowner, without causing agricultural land use conflicts.

Mitigation/Conclusion. The project was reviewed for consistency with the Agriculture and Open Space Element and found to be consistent. The project would not impact agricultural resources; therefore, no mitigation measures are necessary.

3. AIR QUALITY

Will the project:

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Violate any state or federal ambient air quality standard, or exceed air quality emission thresholds as established by County Air Pollution Control District?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Expose any sensitive receptor to substantial air pollutant concentrations?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Create or subject individuals to objectionable odors?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Be inconsistent with the District's Clean Air Plan?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) <i>Result in a cumulatively considerable net increase of any criteria pollutant either considered in non-attainment under applicable state or federal ambient air quality standards that are due to increased energy use or traffic generation, or intensified land use change?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
GREENHOUSE GASES				
f) <i>Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) <i>Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting. The Air Pollution Control District (APCD) has developed and updated their CEQA Air Quality Handbook (2012) to evaluate project specific impacts and help determine if air quality mitigation measures are needed, or if potentially significant impacts could result. To evaluate long-term emissions, cumulative effects, and establish countywide programs to reach acceptable air quality

levels, a Clean Air Plan has been adopted (prepared by APCD).

Greenhouse Gas (GHG) Emissions are said to result in an increase in the earth's average surface temperature. This is commonly referred to as global warming. The rise in global temperature is associated with long-term changes in precipitation, temperature, wind patterns, and other elements of the earth's climate system. This is also known as climate change. These changes are now thought to be broadly attributed to GHG emissions, particularly those emissions that result from the human production and use of fossil fuels.

The passage of AB32, the California Global Warming Solutions Act (2006), recognized the need to reduce GHG emissions and set the greenhouse gas emissions reduction goal for the State of California into law. The law required that by 2020, State emissions must be reduced to 1990 levels. This is to be accomplished by reducing greenhouse gas emissions from significant sources via regulation, market mechanisms, and other actions. Subsequent legislation (e.g., SB97-Greenhouse Gas Emissions bill) directed the California Air Resources Board (CARB) to develop statewide thresholds.

In March 2012, the San Luis Obispo County Air Pollution Control District (APCD) approved thresholds for GHG emission impacts, and these thresholds have been incorporated into the APCD's CEQA Air Quality Handbook. APCD determined that a tiered process for residential / commercial land use projects was the most appropriate and effective approach for assessing the GHG emission impacts. The tiered approach includes three methods, any of which can be used for any given project:

1. **Qualitative GHG Reduction Strategies** (e.g. Climate Action Plans): A qualitative threshold that is consistent with AB 32 Scoping Plan measures and goals; or,
2. **Bright-Line Threshold**: Numerical value to determine the significance of a project's annual GHG emissions; or,
3. **Efficiency-Based Threshold**: Assesses the GHG impacts of a project on an emissions per capita basis.

For most projects the Bright-Line Threshold of 1,150 Metric Tons CO₂/year (MT CO₂e/yr) will be the most applicable threshold. In addition to the residential/commercial threshold options proposed above, a bright-line numerical value threshold of 10,000 MT CO₂e/yr was adopted for stationary source (industrial) projects.

It should be noted that projects that generate less than the above mentioned thresholds will also participate in emission reductions because air emissions, including GHGs, are under the purview of the California Air Resources Board (or other regulatory agencies) and will be "regulated" either by CARB, the Federal Government, or other entities. For example, new vehicles will be subject to increased fuel economy standards and emission reductions, large and small appliances will be subject to more strict emissions standards, and energy delivered to consumers will increasingly come from renewable sources. Other programs that are intended to reduce the overall GHG emissions include Low Carbon Fuel Standards, Renewable Portfolio standards and the Clean Car standards. As a result, even the emissions that result from projects that produce fewer emissions than the threshold will be subject to emission reductions.

Under CEQA, an individual project's GHG emissions will generally not result in direct significant impacts. This is because the climate change issue is global in nature. However, an individual project could be found to contribute to a potentially significant cumulative impact. Projects that have GHG emissions above the noted thresholds may be considered cumulatively considerable and require mitigation.

Impact. As proposed, the project will result in the disturbance of approximately 1,000 square feet. This will result in the creation of construction dust, as well as short-term vehicle emissions associated with routine maintenance at the facility. Based on Table 1-1 of the CEQA Air Quality Handbook, the project will result in less than 10 lbs/day of pollutants, which is below thresholds warranting any

mitigation. The project is consistent with the general level of development anticipated and projected in the Clean Air Plan. No significant air quality impacts are expected to occur.

Mitigation/Conclusion. Impacts to air quality are considered less than significant; therefore, no mitigation measures are necessary.

4. BIOLOGICAL RESOURCES

<i>Will the project:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Result in a loss of unique or special status species* or their habitats?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Reduce the extent, diversity or quality of native or other important vegetation?</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) <i>Impact wetland or riparian habitat?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Interfere with the movement of resident or migratory fish or wildlife species, or factors, which could hinder the normal activities of wildlife?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) <i>Conflict with any regional plans or policies to protect sensitive species, or regulations of the California Department of Fish & Wildlife or U.S. Fish & Wildlife Service?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

* Species – as defined in Section 15380 of the CEQA Guidelines, which includes all plant and wildlife species that fall under the category of rare, threatened or endangered, as described in this section.

Setting. The following are existing elements on or near the proposed project relating to potential biological concerns:

On-site Vegetation: Grasses and scattered Blue Oaks

Name and distance from blue line creek(s): Huer Huero Creek approximately 0.5 miles to the North

Site's tree canopy coverage: Approximately <10%.

The California Natural Diversity Database (CNDDDB) did not identify any special status vegetation, wildlife, or habitat within one mile search radius of the proposed project.

Impact. The project site does not support any sensitive native vegetation, significant wildlife habitats, or special status species, nor is it located in area that is subject to a habitat conservation plan. Construction of the proposed wireless facility would disturb an approximately 1,000 square foot area, adjacent to an existing water storage tank. This area and the subject property have been disturbed due to historic and ongoing anthropogenic and grazing activities. Furthermore, the CNDDDB did not identify any special status plant or sensitive habitats on the property.

The project proposes to install telco and power lines to an existing power pole approximately 110 feet from the project site. The applicant will be required to bore the utilities in order to minimize and avoid

impact to roots systems of nearby oak trees. Boring will occur within the dripline of two (2) oak trees. The applicant has agreed to plant four oak trees to mitigate for the potential disturbance to the two oaks and their root system.

Mitigation/Conclusion. The portion of the subject site subject to disturbance does not contain sensitive habitat or special status species. It has been previously disturbed by agricultural uses, specifically grazing. To minimize and avoid impacts to oak trees, the applicant will be required to install protective fencing, bore telco and power utilities from the power pole to the cell site, minimize unnecessary trimming of adjacent oak trees, tag trees to be impacted, and submit a landscape/revegetation plan clearly showing the proposed location of four (4) one gallon size Blue oak trees required to mitigate for the projects impacts to two (2) adjacent oak trees. No other significant biological impacts are expected to occur; therefore, no mitigations aside from planting four oaks are required for the proposed project.

5. CULTURAL RESOURCES

<i>Will the project:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Disturb archaeological resources?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Disturb historical resources?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Disturb paleontological resources?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting. The project is located in an area historically occupied by the Salinan and Obispeno Chumash. No historic structures are present and no paleontological resources are known to exist in the area. No previous cultural surveys were found for the subject property and no properties have been reported within ¼-miles around the subject site.

Land Use Ordinance Section 22.94.020(A) (El Pomar-Estrella Areawide Planning Area Standards) requires archaeological surveys to be conducted for projects located with 100 feet of a blue line stream, or within 300 feet of a blue line stream where the slope of the site is less than 10 percent. The section does not necessitate the preparation of an archaeological survey for the project because the nearest blue line stream is Huerruero Creek, located approximately 0.5 mile to the north.

Impact. The proposed project will result in the disturbance of approximately 1,000 square feet for the construction of the proposed facility. The project is not located in an area that would be considered culturally sensitive due to lack of physical features typically associated with prehistoric occupation. No evidence of cultural materials was noted during a site visit (April 17, 2014) on the portion of the property where development is proposed. Impacts to historical or paleontological resources are not expected.

Mitigation/Conclusion. No significant cultural resource impacts are expected to occur, and no mitigation measures are necessary.

6. GEOLOGY AND SOILS

Will the project:

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Result in exposure to or production of unstable earth conditions, such as landslides, earthquakes, liquefaction, ground failure, land subsidence or other similar hazards?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Be within a California Geological Survey "Alquist-Priolo" Earthquake Fault Zone", or other known fault zones*?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) <i>Result in soil erosion, topographic changes, loss of topsoil or unstable soil conditions from project-related improvements, such as vegetation removal, grading, excavation, or fill?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Include structures located on expansive soils?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) <i>Be inconsistent with the goals and policies of the County's Safety Element relating to Geologic and Seismic Hazards?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) <i>Preclude the future extraction of valuable mineral resources?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

* Per Division of Mines and Geology Special Publication #42

Setting. The following relates to the project's geologic aspects or conditions:

- Topography: Gently sloping to moderately sloping
- Within County's Geologic Study Area?: No
- Landslide Risk Potential: Moderate
- Liquefaction Potential: Low
- Nearby potentially active faults?: No Distance? Not applicable
- Area known to contain serpentine or ultramafic rock or soils?: No
- Shrink/Swell potential of soil: Moderate
- Other notable geologic features? None

DRAINAGE – The following relates to the project's drainage aspects:

- Within the 100-year Flood Hazard designation? No
- The closest creek is the Huerhuero Creek located approximately 0.5 miles north.
- Soil drainage characteristics: Moderately drained to not well drained.

For areas where drainage is identified as a potential issue, the Land Use Ordinance (LUO Sec.

22.52.110) includes a provision to prepare a drainage plan to minimize potential drainage impacts. When required, this plan would need to address measures such as: constructing on-site retention or detention basins, or installing surface water flow dissipaters. This plan would also need to show that the increased surface runoff would have no more impacts than that caused by historic flows.

SEDIMENTATION AND EROSION – Soil type, amount of disturbance and slopes are key aspects to analyzing potential sedimentation and erosion issues. The project's soil types and descriptions are listed in the previous Agriculture section under "Setting". As described in the NRCS Soil Survey, the project's soil erodibility is as follows:

Soil erodibility: Moderate to high

When highly erosive conditions exist, a sedimentation and erosion control plan is required (LUO Sec. 22.52.120) to minimize these impacts. When required, the plan is prepared by a civil engineer to address both temporary and long-term sedimentation and erosion impacts. Projects involving more than one acre of disturbance are subject to the preparation of a Storm Water Pollution Prevention Plan (SWPPP), which focuses on controlling storm water runoff. The Regional Water Quality Control Board is the local extension who monitors this program.

Impact. As proposed, the project will result in the disturbance of approximately 1,000 square feet to construct an unmanned wireless communications facility. While the soil erodibility has been characterized by the NRCS Soil Survey to be moderate to high, site disturbance is not located within a geologically unstable area, is located in an area that has a maximum slope of less than 10 percent, and will create minimal site disturbance from combined activities. As such, the project is exempt from an erosion and sedimentation control plan (Section 22.52.120(B)(1-6)).

Mitigation/Conclusion. There is no evidence that measures above what will already be required by ordinance or codes are needed; therefore, no mitigation measures are necessary.

7. HAZARDS & HAZARDOUS MATERIALS - Will the project:

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Create a hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Create a hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼-mile of an existing or proposed school?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

7. HAZARDS & HAZARDOUS MATERIALS - Will the project:

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
d) <i>Be located on, or adjacent to, a site which is included on a list of hazardous material/waste sites compiled pursuant to Gov't Code 65962.5 ("Cortese List"), and result in an adverse public health condition?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) <i>Impair implementation or physically interfere with an adopted emergency response or evacuation plan?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) <i>If within the Airport Review designation, or near a private airstrip, result in a safety hazard for people residing or working in the project area?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) <i>Increase fire hazard risk or expose people or structures to high wildland fire hazard conditions?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) <i>Be within a 'very high' fire hazard severity zone?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) <i>Be within an area classified as a 'state responsibility' area as defined by CalFire?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting. The project is not located in an area of known hazardous material contamination. The project is not within the Airport Review area.

With regards to potential fire hazards, the subject project is within the "High" Fire Hazard Severity Zone(s) in a state responsibility area as defined by CalFire. The project would require verification from the responsible fire agency (CAL FIRE) that all conditions prepared in the Fire Safety Plan have been met prior to final approval. Based on the County's fire response time map, it will take approximately 5-15 minutes to respond to a call regarding fire or life safety. Refer to the Public Services section for further discussion on Fire Safety impacts.

Impact. The proposed project will include lead acid batteries within the equipment cabinets. Other than the lead acid batteries, the project does not propose the use of hazardous materials. The project does not propose the use of hazardous materials, nor the generation of hazardous wastes. The proposed project is not found on the 'Cortese List' (which is a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5). The project is not expected to conflict with any regional emergency response or evacuation plan. Furthermore, the Department of Environmental Health reviewed the proposed project and will require the applicant to submit to the Department of Environmental Health, the hazardous materials business plan.

Mitigation/Conclusion. No significant impacts as a result of hazards or hazardous materials are anticipated, and no mitigation measures are necessary.

8. NOISE

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
<i>Will the project:</i>				
a) <i>Expose people to noise levels that exceed the County Noise Element thresholds?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Generate permanent increases in the ambient noise levels in the project vicinity?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Cause a temporary or periodic increase in ambient noise in the project vicinity?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Expose people to severe noise or vibration?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) <i>If located within the Airport Review designation or adjacent to a private airstrip, expose people residing or working in the project area to severe noise levels?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting. The project is not within close proximity of loud noise sources, and will not conflict with any sensitive noise receptors (e.g., residences). Based on the Noise Element’s projected future noise generation from known stationary and vehicle-generated noise sources, the project is within an acceptable threshold area.

Impact. The project is not expected to generate loud noises, nor conflict with the surrounding uses. However, the project would introduce noise generating equipment into a relatively quiet rural area. The facility’s primary noise sources include AC units to cool the equipment shelter and an emergency back-up generator. Based on specifications provided by the applicant, the AC units would produce a maximum noise level of 66 dBA (at the source) and the emergency generator would produce a maximum noise level of 66.7 dBA (at a distance of about 23 feet). The emergency generator is intended to power the facility in the event of a power outage, after the lead acid batteries within the equipment cabinets fail. It would also be operated for about 15 minutes each month for routine maintenance and testing. As conditioned, the generator would only be operated for testing during day-time hours. In addition, the proposed facility will be unmanned and as such would not be considered noise sensitive.

Mitigation/Conclusion. No significant noise impacts are anticipated and no mitigation measures are necessary. As a standard condition of approval to ensure the project will not conflict with any sensitive noise receptors (e.g., residences), the proposed AC units shall be sound attenuated to meet applicable County and State exterior noise standards. The project shall be maintained in compliance with the County Noise Element (including emergency generators). Implementation of these existing requirements would reduce noise impacts to a less than significant level.

9. POPULATION/HOUSING

Will the project:

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Induce substantial growth in an area either directly (e.g., construct new homes or businesses) or indirectly (e.g., extension of major infrastructure)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) <i>Displace existing housing or people, requiring construction of replacement housing elsewhere?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Create the need for substantial new housing in the area?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting/Impact. The proposed project is not anticipated to induce growth, create the need for new housing, or use a substantial amount of fuel or energy to construct and maintain. The proposed wireless communications facility would not result in a need for a significant amount of new housing or displace existing housing. No significant population and housing impacts are anticipated.

Mitigation/Conclusion. The project is consistent with the County's Housing Element. No significant population and housing impacts are anticipated; therefore, no mitigation measures are necessary.

10. PUBLIC SERVICES/UTILITIES

Will the project have an effect upon, or result in the need for new or altered public services in any of the following areas:

	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Fire protection?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Police protection (e.g., Sheriff, CHP)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Schools?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) <i>Roads?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) <i>Solid Wastes?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) <i>Other public facilities?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting. The project area is served by the following public services/facilities:

Police: County Sheriff

Location: Templeton Approximately 6.73 miles to the West

Fire: Cal Fire (formerly CDF)

Hazard Severity: High

Response Time: 5-15 minutes

Location: Approximately 4.66 miles to the West

For additional information regarding fire hazard impacts, go to the 'Hazards and Hazardous Materials' section

Impact. The proposed project involves the construction of an unmanned wireless communications facility. No significant project-specific impacts to utilities or public services were identified. This project, along with others in the area, will have a cumulative effect on police/sheriff and fire protection, and schools. The project's direct and cumulative impacts are within the general assumptions of allowed use for the subject property that was used to estimate the fees in place.

Mitigation/Conclusion. The project was reviewed by Cal Fire for consistency with the Uniform Fire Code and will be required to prepare a fire safety plan. The project will not increase demands for police, fire, or school facilities and therefore no additional mitigation is needed.

11. RECREATION

<i>Will the project:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Increase the use or demand for parks or other recreation opportunities?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Affect the access to trails, parks or other recreation opportunities?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Other _____</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting. The County's Parks and Recreation Element does not show that a potential trail goes through the proposed project. The project is not proposed in a location that will affect any trail, park, recreational resource, coastal access, and/or Natural Area.

Impact. The proposed project will not create a significant need for additional park, Natural Area, and/or recreational resources.

Mitigation/Conclusion. No significant recreation impacts are anticipated, and no mitigation measures are necessary.

12. TRANSPORTATION/CIRCULATION

<i>Will the project:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) <i>Increase vehicle trips to local or areawide circulation system?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Reduce existing "Level of Service" on public roadway(s)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Create unsafe conditions on public roadways (e.g., limited access, design features, sight distance, slow vehicles)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

12. TRANSPORTATION/CIRCULATION

<i>Will the project:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
d) Provide for adequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with an established measure of effectiveness for the performance of the circulation system considering all modes of transportation (e.g. LOS, mass transit, etc.)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with an applicable congestion management program?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Result in a change in air traffic patterns that may result in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting. The County has established the acceptable Level of Service (LOS) on roads for this rural area as "C" or better. The existing road network in the area, including Creston Road and the project's access street Stagecoach Road, are operating at acceptable levels. Based on existing road speeds and configuration (vertical and horizontal road curves), sight distance is considered acceptable.

Referrals were sent to County Public Works and no significant traffic-related concerns were identified.

Impact. Once constructed, the proposed project is estimated to generate approximately one (1) trip per month for routine maintenance. In comparison, the average single family residence generates approximately 10 trips per day (or 300 trips per month). This small amount of additional traffic will not result in a significant change to the existing road service or traffic safety levels and will not result in a significant contribution to cumulative impacts to County roads in the area.

Mitigation/Conclusion. No significant traffic impacts were identified, and no mitigation measures above what are already required by ordinance are necessary.

13. WASTEWATER

<i>Will the project:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
a) Violate waste discharge requirements or Central Coast Basin Plan criteria for wastewater systems?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Change the quality of surface or ground water (e.g., nitrogen-loading, day-lighting)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

13. WASTEWATER

<i>Will the project:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
c) <i>Adversely affect community wastewater service provider?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Other: _____</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting/Impact. The proposed project consists of an unmanned wireless communications facility and would not generate wastewater or require wastewater disposal.

Mitigation/Conclusion. No wastewater impacts are anticipated and no mitigation measures are necessary.

14. WATER & HYDROLOGY

<i>Will the project:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
QUALITY				
a) <i>Violate any water quality standards?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Discharge into surface waters or otherwise alter surface water quality (e.g., turbidity, sediment, temperature, dissolved oxygen, etc.)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Change the quality of groundwater (e.g., saltwater intrusion, nitrogen-loading, etc.)?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide additional sources of polluted runoff?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) <i>Change rates of soil absorption, or amount or direction of surface runoff?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) <i>Change the drainage patterns where substantial on- or off-site sedimentation/ erosion or flooding may occur?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) <i>Involve activities within the 100-year flood zone?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
QUANTITY				
h) <i>Change the quantity or movement of available surface or ground water?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

14. WATER & HYDROLOGY

<i>Will the project:</i>	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
i) <i>Adversely affect community water service provider?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j) <i>Expose people to a risk of loss, injury or death involving flooding (e.g., dam failure, etc.), or inundation by seiche, tsunami or mudflow?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
k) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting. The proposed unmanned facility would not use water. The topography of the project is nearly level to moderately sloping. The closest creek from the proposed development is the Huerhuero Creek, located approximately 0.5 miles north. As described in the NRCS Soil Survey, the soil surface is considered to have moderate to high erodibility. Projects involving more than one acre of disturbance are subject to preparing a Storm Water Pollution Prevention Plan (SWPPP) to minimize on-site sedimentation and erosion. When work is done in the rainy season, the County Ordinance requires that temporary sedimentation and erosion control measures be installed prior to the start of the rainy season.

The subject property is within the Paso Robles Ground Water Basin. The Paso Robles Ground Water Basin Resource Capacity Study (RCS) has found that the Basin's demand is approaching its safe yield. The RCS has also found that groundwater levels are generally dropping throughout the basin, resulting in dry wells and causing property owners to drill deeper wells. The Board of Supervisors has directed several actions in order to address the continuing groundwater problems. These actions would 1) allow no further creation of additional rural parcels that will raise the demand for water in the basin; 2) would require discretionary land uses to offset new pumping from the basin; 3) develop a special landscape irrigation ordinance for the basin area; and 4) establish specific growth limits in the basin. The Board determined that ministerial development such as construction of single family residences will not require special attention to water use beyond what is required in the Building Ordinance and existing Land Use Ordinance requirements.

Impact. The project is not within close proximity to surface water sources. The project will involve less than one acre of disturbance and will not require a SWPPP. The project will not use water.

Mitigation/Conclusion. Since no potentially significant water quantity or quality impacts were identified, no specific measures above standard requirements have been determined necessary. Standard drainage and erosion control measures will be required for the proposed project and will provide sufficient measures to adequately protect surface water quality.

15. LAND USE

Will the project:

	Inconsistent	Potentially Inconsistent	Consistent	Not Applicable
a) <i>Be potentially inconsistent with land use, policy/regulation (e.g., general plan [County Land Use Element and Ordinance], local coastal plan, specific plan, Clean Air Plan, etc.) adopted to avoid or mitigate for environmental effects?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Be potentially inconsistent with any habitat or community conservation plan?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Be potentially inconsistent with adopted agency environmental plans or policies with jurisdiction over the project?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) <i>Be potentially incompatible with surrounding land uses?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) <i>Other:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Setting/Impact. Surrounding uses are identified on Page 2 of the Initial Study. The proposed project was reviewed for consistency with policy and/or regulatory documents relating to the environment and appropriate land use (Title 22 County Land Use Ordinance, etc.). Referrals were sent to outside agencies to review for policy consistencies (e.g., CAL FIRE for Fire Code, APCD for Clean Air Plan, etc.). The project was found to be consistent with these documents (refer also to Exhibit A on reference document used).

Section 22.94.040D. Agriculture (AG). Protection of Productive Agricultural Land. For project requiring discretionary approval on irrigated lands or dry farm lands (as defined in the Agriculture and Open Space Element), new buildings, structures and roads shall be located on the least productive area of the property or closest to access roads, so that development does not diminish the utility of farm fields, unless the discretionary review shows there is no practical alternative for siting the proposed improvements.

The proposed project will be located on approximately 1,000 square foot pad at the north central portion of an approximately 37-acre parcel. The remainder of the property will not be disturbed and the proposed project will not inhibit the use of the parcel for future agricultural uses. In a referral response, dated February 26, 2014, the County Agricultural Commissioner’s office indicated the project would have a “less than significant” impact on agricultural resources.

The project is not within or adjacent to a Habitat Conservation Plan area. The project is consistent or compatible with the surrounding uses as summarized on page 2 of this Initial Study.

Land Use Ordinance Section 22.94.020(A) (El Pomar-Estrella Areawide Planning Area Standards) requires archaeological surveys to be conducted for projects located with 100 feet of a blue line stream, or within 300 feet of a blue line stream where the slope of the site is less than 10 percent. The section does not necessitate the preparation of an archaeological survey for the project because the nearest blue line stream is Huerruero Creek, located approximately 0.5 mile to the north.

Although the proposed communications facility is not a use that is inherently compatible with the visual character of the surrounding residential and agricultural landscapes, the proposed project is a stealth design that would blend with the rural character of the landscape. Since the proposed facility would visually blend with the landscape, it would not be readily discernable as a wireless communications facility. This is consistent with the visual screening standards for wireless communications facilities which require new facilities to either be completely screened by vegetation or disguised to resemble natural or built features of the landscape.

Mitigation/Conclusion. No inconsistencies were identified and therefore no additional measures above what will already be required were determined necessary.

16. MANDATORY FINDINGS OF SIGNIFICANCE	Potentially Significant	Impact can & will be mitigated	Insignificant Impact	Not Applicable
<i>Will the project:</i>				
a) <i>Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) <i>Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) <i>Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

For further information on CEQA or the county's environmental review process, please visit the County's web site at "www.sloplanning.org" under "Environmental Information", or the California Environmental Resources Evaluation System at: http://www.ceres.ca.gov/topic/env_law/ceqa/guidelines for information about the California Environmental Quality Act.

Exhibit A - Initial Study References and Agency Contacts

The County Planning Department has contacted various agencies for their comments on the proposed project. With respect to the subject application, the following have been contacted (marked with an ☒) and when a response was made, it is either attached or in the application file:

<u>Contacted</u>	<u>Agency</u>	<u>Response</u>
<input checked="" type="checkbox"/>	County Public Works Department	Attached
<input checked="" type="checkbox"/>	County Environmental Health Division	Attached
<input checked="" type="checkbox"/>	County Agricultural Commissioner's Office	Attached
<input type="checkbox"/>	County Airport Manager	Not Applicable
<input type="checkbox"/>	Airport Land Use Commission	Not Applicable
<input type="checkbox"/>	Air Pollution Control District	Not Applicable
<input type="checkbox"/>	County Sheriff's Department	Not Applicable
<input type="checkbox"/>	Regional Water Quality Control Board	Not Applicable
<input type="checkbox"/>	CA Coastal Commission	Not Applicable
<input type="checkbox"/>	CA Department of Fish and Wildlife	Not Applicable
<input checked="" type="checkbox"/>	CA Department of Forestry (Cal Fire)	Not Applicable
<input type="checkbox"/>	CA Department of Transportation	Not Applicable
<input type="checkbox"/>	Community Services District	Not Applicable
<input checked="" type="checkbox"/>	Other <u>COUNTY BUILDING DIVISION</u>	Attached
<input type="checkbox"/>	Other _____	Not Applicable

*** "No comment" or "No concerns"-type responses are usually not attached*

The following checked ("☒") reference materials have been used in the environmental review for the proposed project and are hereby incorporated by reference into the Initial Study. The following information is available at the County Planning and Building Department.

- | | |
|---|---|
| <input checked="" type="checkbox"/> Project File for the Subject Application | <input type="checkbox"/> Design Plan |
| <u>County documents</u> | <input type="checkbox"/> Specific Plan |
| <input type="checkbox"/> Coastal Plan Policies | <input checked="" type="checkbox"/> Annual Resource Summary Report |
| <input checked="" type="checkbox"/> Framework for Planning (Coastal/Inland) | <input type="checkbox"/> Circulation Study |
| <input checked="" type="checkbox"/> General Plan (Inland/Coastal), includes all maps/elements; more pertinent elements: | <u>Other documents</u> |
| <input checked="" type="checkbox"/> Agriculture Element | <input checked="" type="checkbox"/> Clean Air Plan/APCD Handbook |
| <input checked="" type="checkbox"/> Conservation & Open Space Element | <input checked="" type="checkbox"/> Regional Transportation Plan |
| <input type="checkbox"/> Economic Element | <input checked="" type="checkbox"/> Uniform Fire Code |
| <input checked="" type="checkbox"/> Housing Element | <input checked="" type="checkbox"/> Water Quality Control Plan (Central Coast Basin – Region 3) |
| <input checked="" type="checkbox"/> Noise Element | <input checked="" type="checkbox"/> Archaeological Resources Map |
| <input type="checkbox"/> Parks & Recreation Element/Project List | <input checked="" type="checkbox"/> Area of Critical Concerns Map |
| <input checked="" type="checkbox"/> Safety Element | <input checked="" type="checkbox"/> Special Biological Importance Map |
| <input checked="" type="checkbox"/> Land Use Ordinance (Inland/Coastal) | <input checked="" type="checkbox"/> CA Natural Species Diversity Database |
| <input type="checkbox"/> Building and Construction Ordinance | <input checked="" type="checkbox"/> Fire Hazard Severity Map |
| <input checked="" type="checkbox"/> Public Facilities Fee Ordinance | <input checked="" type="checkbox"/> Flood Hazard Maps |
| <input type="checkbox"/> Real Property Division Ordinance | <input checked="" type="checkbox"/> Natural Resources Conservation Service Soil Survey for SLO County |
| <input checked="" type="checkbox"/> Affordable Housing Fund | <input checked="" type="checkbox"/> GIS mapping layers (e.g., habitat, streams, contours, etc.) |
| <input type="checkbox"/> Airport Land Use Plan | <input type="checkbox"/> Other |
| <input type="checkbox"/> Energy Wise Plan | |
| <input checked="" type="checkbox"/> El Pomar/Estrella Area Plan and Update EIR | |

In addition, the following project specific information and/or reference materials have been considered

as a part of the Initial Study:

Radio Frequency Report, Hammett & Edison, Inc., January 17, 2012

Visual Photo-Simulations, Robert Carr; February 2014

Exhibit B - Mitigation Summary Table

Per Public Resources Code Section 21081.6, the following measures also constitute the mitigation monitoring and/or reporting program that will reduce potentially significant impacts to less than significant levels. These measures will become conditions of approval (COAs) should the project be approved. The Lead Agency (County) or other Responsible Agencies, as specified in the following measures, are responsible to verify compliance with these COAs.

Visual Resources

VR-1 At the time of application for construction permits, the construction drawings shall show the following specifications:

- a. The monopine shall be designed and constructed to appear as an organic, non-symmetrical form, with varying branch lengths and shapes and “needle” clusters installed in random, seemingly natural-occurring patterns. The branch lengths shall taper up the monopine “trunk” and the longest (lowest) branches shall begin at a sufficient elevation to blend with the existing tree line as viewed from all surrounding public roads
- b. The monopine “needles” shall not be all one color. Varying shades of hues shall be used appropriately to replicate a living plant. Monopine colors shall be field matched with the existing adjacent on-site mature oak trees.
- c. The monopine shall include realistic appearing color and texture treatments for the entire lengths of the faux branches and the upper 40 feet (i.e. top half) of the trunk.
- d. Antennas shall be hidden and not extend beyond the ends of the artificial branches. Antennas and associated support arms and hardware shall be textured and or colored to blend with the monopine branches and needles.
- e. The equipment shelter shall be designed to match the existing agricultural setting. It shall be constructed with realistic-appearing faux aged-wood and painted a non-reflective earth-tone color.

VR-2 At the time of application for construction permits, the applicant shall submit accurate scaled engineering and architectural drawings of the monopine exactly as proposed. Monopine Plans shall not include generic illustrations of a typical monopine. The drawings shall include elevations and plan views. Monopine plans shall include specific dimensions of all faux branches, needles, needle clusters, including spacing and arrangements for each component that will be used on the project. Once approved, the monopine plans shall be specifically used (in conjunction with approved color and material samples and other related documents) as a basis for assessing condition compliance during construction. The plans, specifications and estimates and construction schedule shall provide for revisions and corrections to the monopine engineering and architectural plans prior to preparation of the final plans.

VR-3 Prior to issuance of construction permits, the applicant shall submit material and color test samples of all visible elements of the monopine to the County Department of Planning and Building for review and approval.

Biological Resources

- BR-1 Tree Removal/Protection.** The applicant shall limit tree impacts to *no more than 2 trees impacted*. **Prior to construction permit issuance**, construction plans shall clearly delineate all trees within 50 feet of the proposed project, and shall show which trees are to be impacted, and which trees are to remain unharmed; no oak trees are to be removed. **Prior to any ground disturbing activities**, adequate protection measures (e.g., sturdy fencing) per the approved construction plans, shall be installed to protect those trees identified to remain unharmed as well as to minimize impacts for those trees identified as being impacted. Protection measures shall remain in good working order during construction. The applicant shall not remove any oak trees without consent of the Department of Planning and Building.
- BR-2 At the time of application for construction permit**, the applicant shall indicate on the plan notes that the proposed approximately 110 foot long utility run shall be installed using boring equipment (rather than a trench).
- BR-3** Oak trees provide an essential component of wildlife habitat and visual benefits. The applicant recognizes this and agrees to minimize trimming of the adjacent oaks. If trimming is necessary, the applicant agrees to either use a skilled arborist or apply accepted arborist's techniques when removing limbs. Trimming shall be done only during the winter for deciduous species. Smaller trees (6 inches diameter and smaller) within the project area are considered to be of high importance, and when possible, shall be given similar consideration as larger trees.
- BR-4 Prior to issuance of a construction permit**, the applicant shall fence the proposed area of disturbance and clearly tag which trees are to be impacted. The trees tagged in the field shall be consistent with the trees delineated on the construction plans. Tree removal, grading, utility boring, compaction of soil, or placement of fill shall not occur beyond the fenced disturbance area. The fencing shall remain installed until final inspection.
- BR-5 Prior to issuance of a construction permit**, the applicant shall submit to the Department of Planning and Building for review and approval, a landscape plan/revegetation plan that provides for the planting of all open areas of the site disturbed by project construction with native, drought and fire resistant species that are compatible with the habitat values of the surrounding forest. The landscape plan/revegetation plan shall clearly show the proposed location of four (4) one gallon size Blue oak trees that are required to be planted to mitigate for the project's impacts to adjacent oak trees. The trees shall be planted prior to final inspection.

**DEVELOPER'S STATEMENT & MITIGATION MONITORING/REPORTING PROGRAM
FOR JOHN SILVA CONDITIONAL USE PERMIT
ED13-194 (DRC2013-00069)**

The applicant agrees to incorporate the following measures into the project. These measures become a part of the project description and therefore become a part of the record of action upon which the environmental determination is based. All development activity must occur in strict compliance with the following mitigation measures. These measures shall be perpetual and run with the land. These measures are binding on all successors in interest of the subject property.

Per Public Resources Code Section 21081.6 the following measures also constitute the mitigation monitoring and/or reporting program that will reduce potentially significant impacts to less than significant levels. These measures will become conditions of approval (COAs) should the project be approved. The Lead Agency (County) or other Responsible Agencies, as specified in the following measures, is responsible to verify compliance with these COAs.

Project Description: A request by John Silva and Verizon Wireless for a Conditional Use Permit to allow the construction and operation of an unmanned wireless communication facility consisting of: a) six (6) new antennas mounted at a height of 35 feet above ground level attached to a 40-foot high monopine; b) two (2) new Verizon wireless GPS antennas; c) one 11'-6" x 16'-10-1/2" equipment shelter; d) one 210-gallon 30KW standby emergency generator; e) new Verizon wireless ice bridge and electrical meter; f) new 8'-0" high wood fence around the base of the facility; and g) associated utility trenching for the installation of power and telco lines. The project is located on an approximately 37-acre parcel and will result in the disturbance of approximately 1,000 square feet (25-foot by 40-foot concrete pad) for the construction of the proposed facility. The facility will be accessed by an existing twelve foot wide agricultural road. No road improvements or grading are proposed. The proposed project is within the Agriculture land use category and is located at 2707 Stagecoach Road, approximately 0.5-mile north of Creston Road and 3 miles east of the City of Paso Robles. The subject property is within the rural El Pomar/Estrella sub-area of the North County planning area.

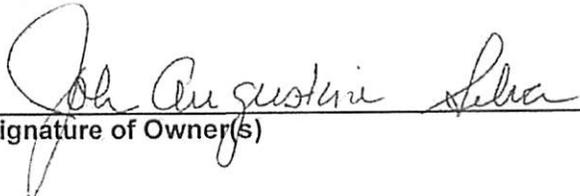
VISUAL RESOURCES – Land Use	MILESTONE	At the time of application for construction permits	Prior to grading/ construction permit	Prior to commencement of grading activities	During construction (grading disturbing activities)	Prior to occupancy or final inspection	Within 90 days after final inspection (occupancy)	Other
Visual Resources – Construction Drawings		X						
<p>VR-1 At the time of application for construction permits, the construction drawings shall show the following specifications:</p> <p>a. The monopine shall be designed and constructed to appear as an organic, non-symmetrical form, with varying branch lengths and shapes and "needle" clusters installed in random, seemingly natural-occurring patterns. The branch lengths shall taper up the monopine "trunk" and the longest (lowest) branches shall begin at a sufficient elevation to blend with the existing tree line as viewed from all surrounding public roads</p>								

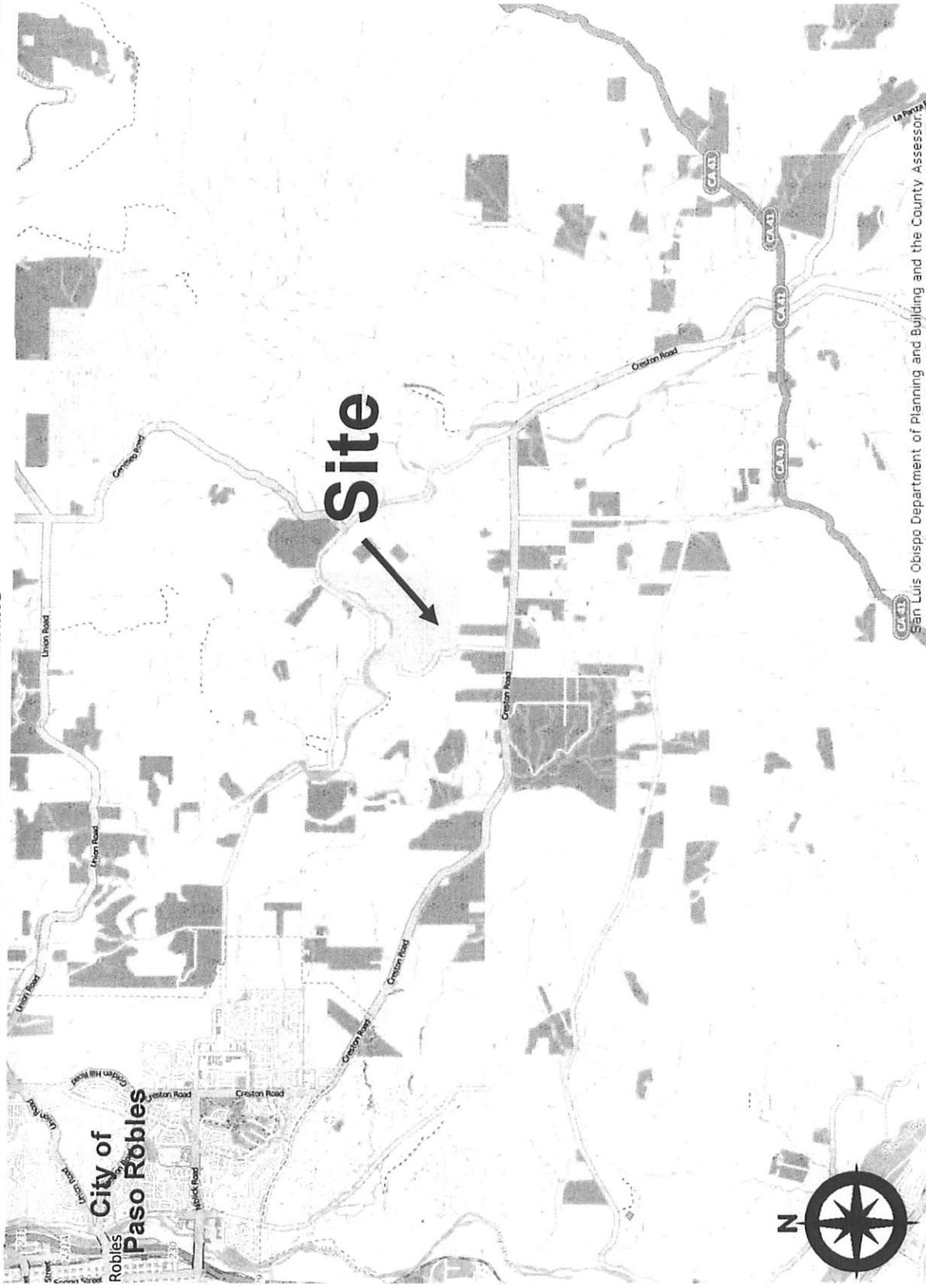
VISUAL RESOURCES – Land Use	MILESTONE	At the time of application for construction permits	Prior to grading/ construction permit	Prior to commencement of grading activities	During construction/ground disturbing activities	Prior to occupancy or final inspection	Within 90 days after final inspection/ occupancy	Other*
<p>b. The monopine “needles” shall not be all one color. Varying shades of hues shall be used appropriately to replicate a living plant. Monopine colors shall be field matched with the existing adjacent on-site mature oak trees.</p> <p>c. The monopine shall include realistic appearing color and texture treatments for the entire lengths of the faux branches and the upper 40 feet (i.e. top half) of the trunk.</p> <p>d. Antennas shall be hidden and not extend beyond the ends of the artificial branches. Antennas and associated support arms and hardware shall be textured and or colored to blend with the monopine branches and needles.</p> <p>e. The equipment shelter shall be designed to match the existing agricultural setting. It shall be constructed with realistic-appearing faux aged-wood and painted a non-reflective earth-tone color.</p>								
<p><u>Monitoring:</u> Compliance will be verified by the Department of Planning and Building, in consultation with the Environmental Coordinator.</p>	<p>* (Other) – None</p>							
<p>Visual Resources – Architectural Drawings</p>	<p>X</p>							
<p>VR-2 At the time of application for construction permits, the applicant shall submit accurate scaled engineering and architectural drawings of the monopine exactly as proposed. Monopine Plans shall not include generic illustrations of a typical monopine. The drawings shall include elevations and plan views. Monopine plans shall include specific dimensions of all faux branches, needles, needle clusters, including spacing and arrangements for each component that will be used on the project. Once approved, the monopine plans shall be specifically used (in conjunction with approved color and material samples and other related documents) as a basis for assessing condition compliance during construction. The plans, specifications and estimates and construction schedule shall provide for revisions and corrections to the monopine engineering and architectural plans prior to preparation of the final plans.</p>								
<p><u>Monitoring</u> - Compliance will be verified by the Department of Planning and Building, in consultation with the Environmental Coordinator.</p>	<p>* (Other) – None</p>							
<p>Visual Resources – Materials Board</p>	<p>X</p>							
<p>VR-3 Prior to issuance of construction permits, the applicant shall submit material and color test samples of all visible elements of the monopine to the County Department of Planning and Building for review and approval.</p>								
<p><u>Monitoring</u> - Compliance will be verified by the Department of Planning and Building, in consultation with the Environmental Coordinator.</p>	<p>* (Other) – None</p>							

BIOLOGY – TREE REMOVAL/PROTECTION	MILESTONE	At the time of application for construction permits	Prior to grading/construction permit	Prior to commencement of grading activities	During construction/ground disturbing activities	Prior to occupancy or final inspection	Within 90 days after final inspection/occupancy	Other
Tree Removal/Protection			X	X	X			
BR-1 Tree Removal/Protection. The applicant shall limit tree impacts to no more than 2 trees impacted. Prior to construction permit issuance, construction plans shall clearly delineate all trees within 50 feet of the proposed project, and shall show which trees are to be impacted, and which trees are to remain unharmed; No oak trees are to be removed. Prior to any ground disturbing activities, adequate protection measures (e.g., sturdy fencing) per the approved construction plans, shall be installed to protect those trees identified to remain unharmed as well as to minimize impacts for those trees identified as being impacted. Protection measures shall remain in good working order during construction.								
Monitoring: Department of Planning and Building will verify inclusion of required elements on plans. Building Inspector will verify compliance with approved plans.		* (Other) - None						
Existing Trees – Root Protection		X						
BR-2 At the time of application for construction permit, the applicant shall indicate on the plan notes that the proposed approximately 110 foot long utility run shall be installed using boring equipment (rather than a trench).								
Monitoring: Compliance will be verified by the Department of Planning and Building in consultation with the Environmental Coordinator.		* (Other) - None						
Existing Trees – Trimming Protection				X				
BR-3 Oak trees provide an essential component of wildlife habitat and visual benefits. The applicant recognizes this and agrees to minimize trimming of the adjacent oaks. If trimming is necessary, the applicant agrees to either use a skilled arborist or apply accepted arborist's techniques when removing limbs. Trimming shall be done only during the winter for deciduous species. Smaller trees (6 inches diameter and smaller) within the project area are considered to be of high importance, and when possible, shall be given similar consideration as larger trees.								
Monitoring: Compliance will be verified by the Environmental Coordinator.		* Other – None						
Existing Trees - Protection		X	X	X				
BR-4 Prior to issuance of a construction permit, the applicant shall fence the proposed area of disturbance and clearly tag which trees are to be impacted. No oak trees are to be removed. The trees tagged in the field shall be consistent with the trees delineated on the construction plans. Tree removal, grading, utility boring, compaction of soil, or placement of fill shall not occur beyond the fenced disturbance area. The fencing shall remain installed until final inspection.								
Monitoring: Compliance will be verified by the Environmental Coordinator.		* Other – None						

BIOLOGY – TREE REMOVAL/PROTECTION	MILESTONE	At the time of application for construction permits	Prior to grading/ construction permit	Prior to commencement of grading activities	During construction/ ground disturbing activities	Prior to occupancy or final inspection	Within 90 days after final inspection/ occupancy	Other*
Oak Tree Replacement			X					
BR-5 Prior to issuance of a construction permit, the applicant shall submit to the Department of Planning and Building for review and approval, a landscape plan/revegetation plan that provides for the planting of all open areas of the site disturbed by project construction with native, drought and fire resistant species that are compatible with the habitat values of the surrounding forest. The landscape plan/revegetation plan shall clearly show the proposed location of four (4) one gallon size Blue oak trees that are required to be planted to mitigate for the project's impacts to adjacent oak trees. The trees shall be planted prior to final inspection.								
<u>Monitoring</u> - Planning and Building Department will verify compliance with approved plans.						* Other – None		

The applicant understands that any changes made to the project description subsequent to this environmental determination must be reviewed by the Environmental Coordinator and may require a new environmental determination for the project. By signing this agreement, the owner(s) agrees to and accepts the incorporation of the above measures into the proposed project description.


JOHN AUGUSTINE SILVA
Date
5/20/2004



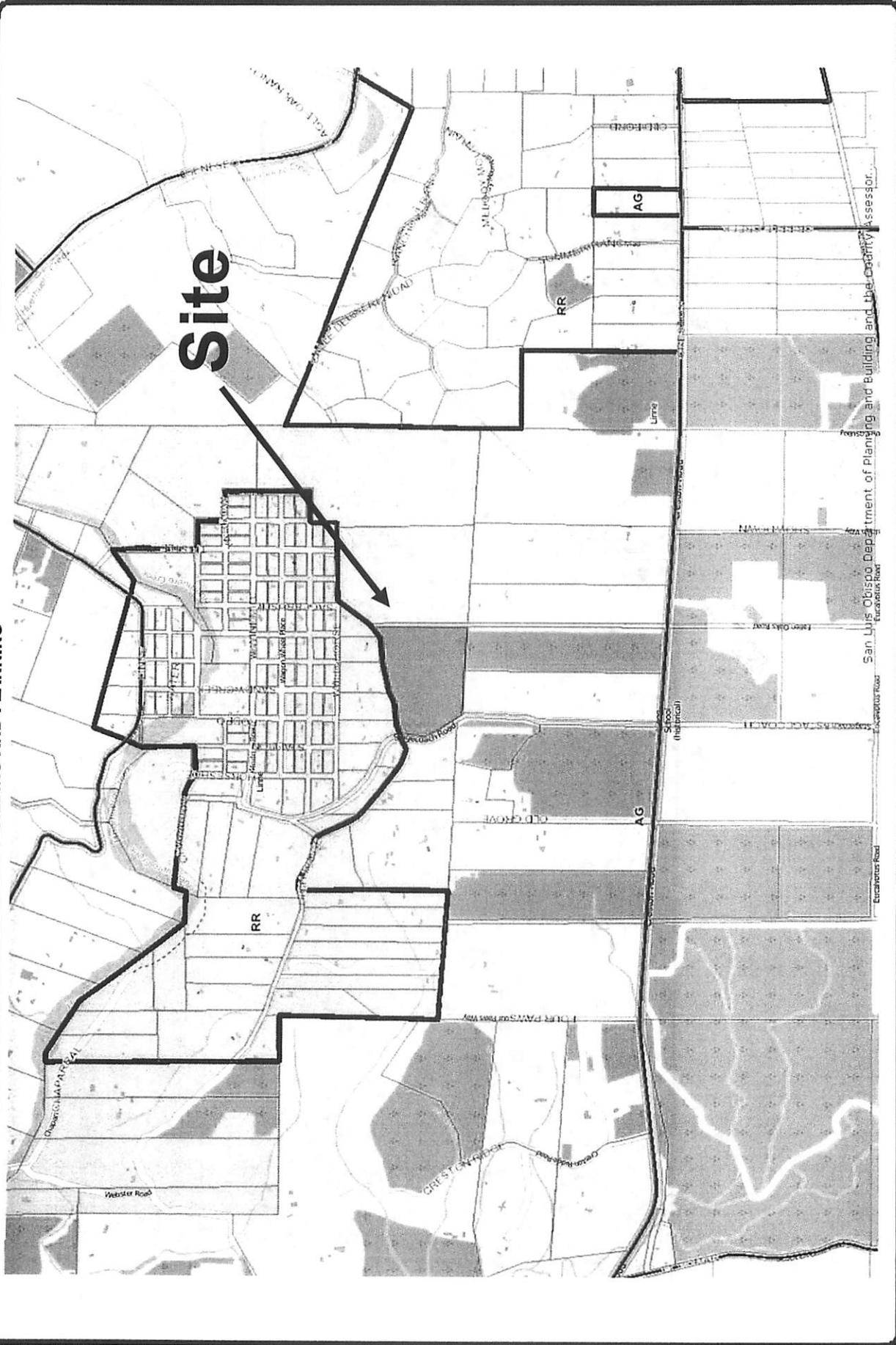
PROJECT

Conditional Use Permit
Silva and Verizon Wireless / DRC2013-00069

EXHIBIT

Vicinity Map





PROJECT

Conditional Use Permit
Silva and Verizon Wireless / DRC2013-00069



EXHIBIT

Land Use Category Map



PROJECT

Conditional Use Permit
Silva and Verizon Wireless / DRC2013-00069

EXHIBIT

Aerial Photograph

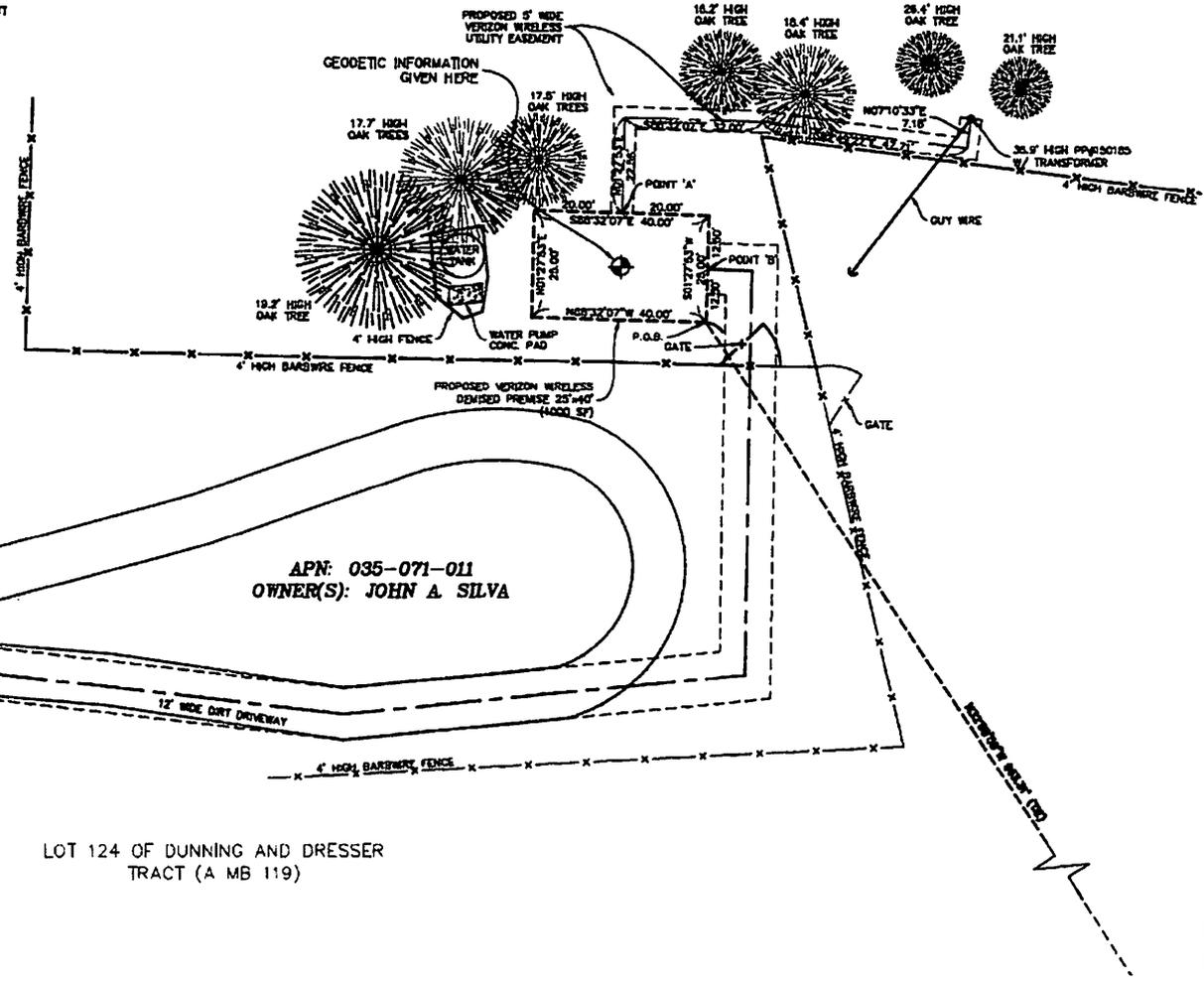
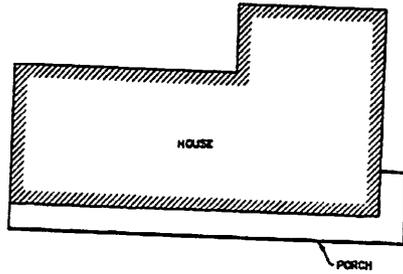


SAN LUIS OBISPO COUNTY DEPARTMENT OF BUILDING AND PLANNING



LEGEND

- SITE BOUNDARY LINE
- OVERHEAD POWER LINE
- PROPERTY LINE
- POWER POLE
- GROUND ELEVATION
- EDGE OF PAVEMENT
- CONCRETE PAD
- POINT OF BEGINNING
- POINT OF COMMENCEMENT



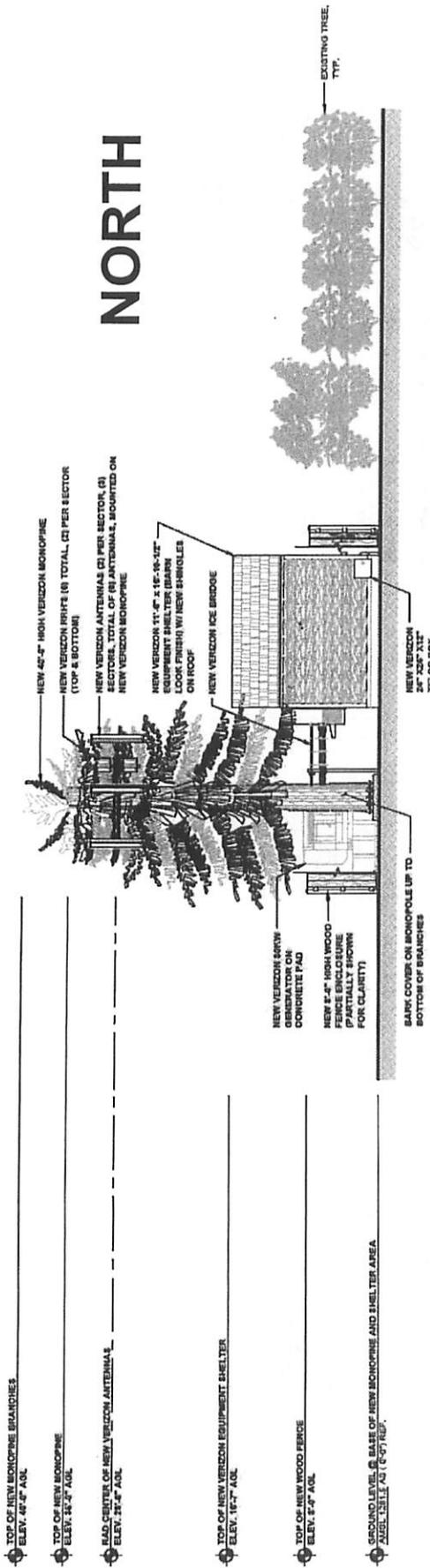
APN: 035-071-011
OWNER(S): JOHN & SILVA

LOT 124 OF DUNNING AND DRESSER TRACT (A MB 119)

PROJECT
Conditional Use Permit
Silva and Verizon Wireless / DRC2013-00069

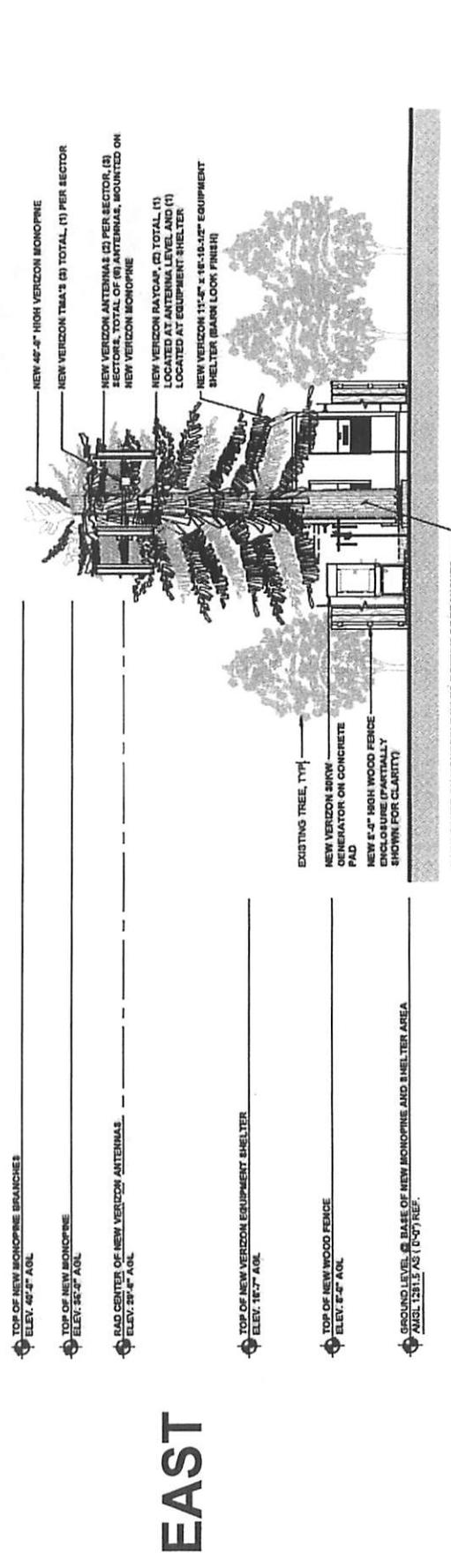


EXHIBIT
Site Map



NORTH

- TOP OF NEW MONOPOLE BRANCHES
ELEV. 49'-3" A.O.L.
- TOP OF NEW MONOPOLE
ELEV. 54'-3" A.O.L.
- RAD. CENTER OF NEW VERIZON ANTENNAS
ELEV. 15'-3" A.O.L.
- TOP OF NEW VERIZON EQUIPMENT SHELTER
ELEV. 15'-3" A.O.L.
- TOP OF NEW WOOD FENCE
ELEV. 5'-0" A.O.L.
- GROUND LEVEL @ BASE OF NEW MONOPOLE AND SHELTER AREA
AS ELEV. 1231.1 AS (D-07) REF.



EAST

- TOP OF NEW MONOPOLE BRANCHES
ELEV. 49'-3" A.O.L.
- TOP OF NEW MONOPOLE
ELEV. 54'-3" A.O.L.
- RAD. CENTER OF NEW VERIZON ANTENNAS
ELEV. 15'-3" A.O.L.
- TOP OF NEW VERIZON EQUIPMENT SHELTER
ELEV. 15'-3" A.O.L.
- TOP OF NEW WOOD FENCE
ELEV. 5'-0" A.O.L.
- GROUND LEVEL @ BASE OF NEW MONOPOLE AND SHELTER AREA
AS ELEV. 1231.1 AS (D-07) REF.

PROJECT

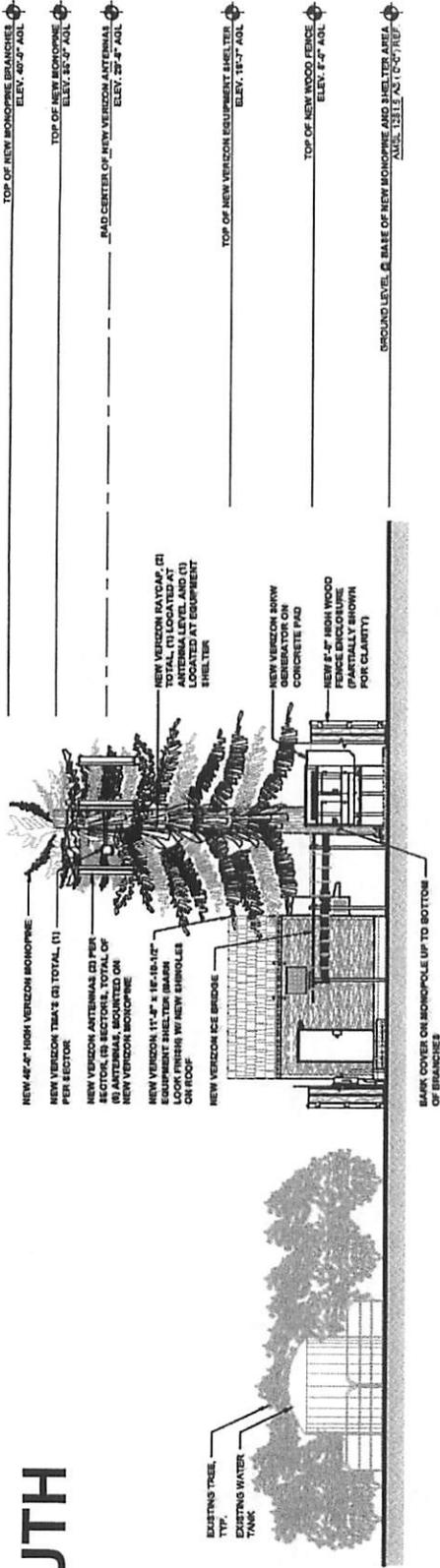
Conditional Use Permit
Silva and Verizon Wireless / DRC2013-00069

EXHIBIT

Elevations: North and South

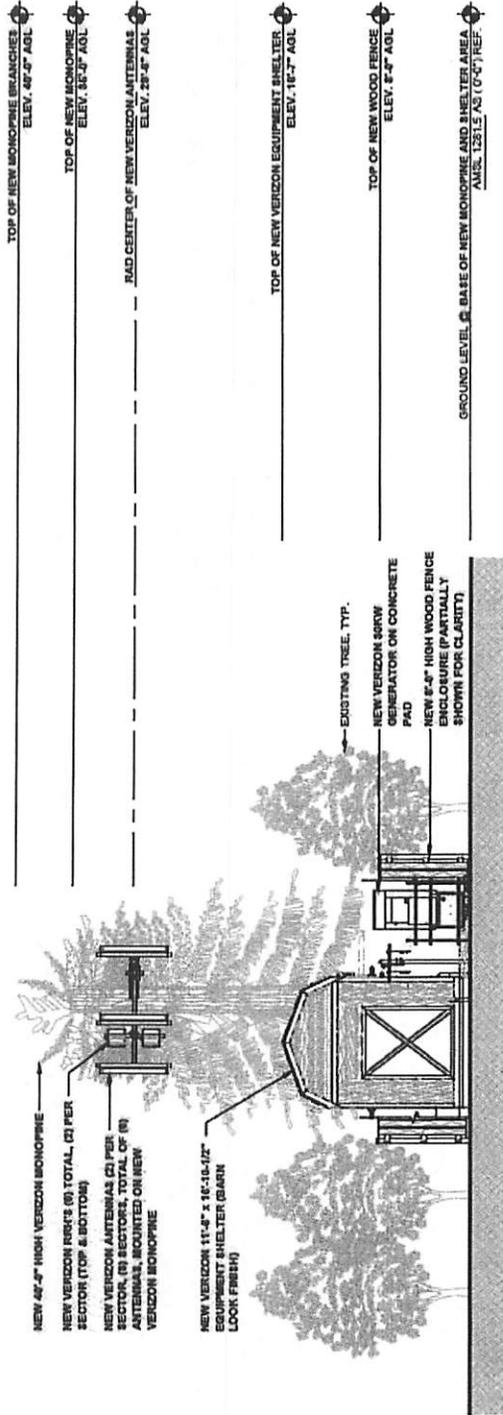


SOUTH



- TOP OF NEW MONOPHIRE BRANCHES
ELEV. 49'-7" AGL
- TOP OF NEW MONOPHIRE
ELEV. 84'-7" AGL
- RAD CENTER OF NEW VERIZON ANTENNAS
ELEV. 25'-8" AGL
- TOP OF NEW VERIZON EQUIPMENT SHELTER
ELEV. 19'-7" AGL
- TOP OF NEW WOOD FENCE
ELEV. 8'-4" AGL
- GROUND LEVEL @ BASE OF NEW MONOPHIRE AND SHELTER AREA
AMS. 1281.5 AS (0'-0") REF.

WEST



- TOP OF NEW MONOPHIRE BRANCHES
ELEV. 49'-7" AGL
- TOP OF NEW MONOPHIRE
ELEV. 84'-7" AGL
- RAD CENTER OF NEW VERIZON ANTENNAS
ELEV. 25'-8" AGL
- TOP OF NEW VERIZON EQUIPMENT SHELTER
ELEV. 19'-7" AGL
- TOP OF NEW WOOD FENCE
ELEV. 8'-4" AGL
- GROUND LEVEL @ BASE OF NEW MONOPHIRE AND SHELTER AREA
AMS. 1281.5 AS (0'-0") REF.

PROJECT

Conditional Use Permit
Silva and Verizon Wireless / DRC2013-00069

EXHIBIT

Elevations: South and West



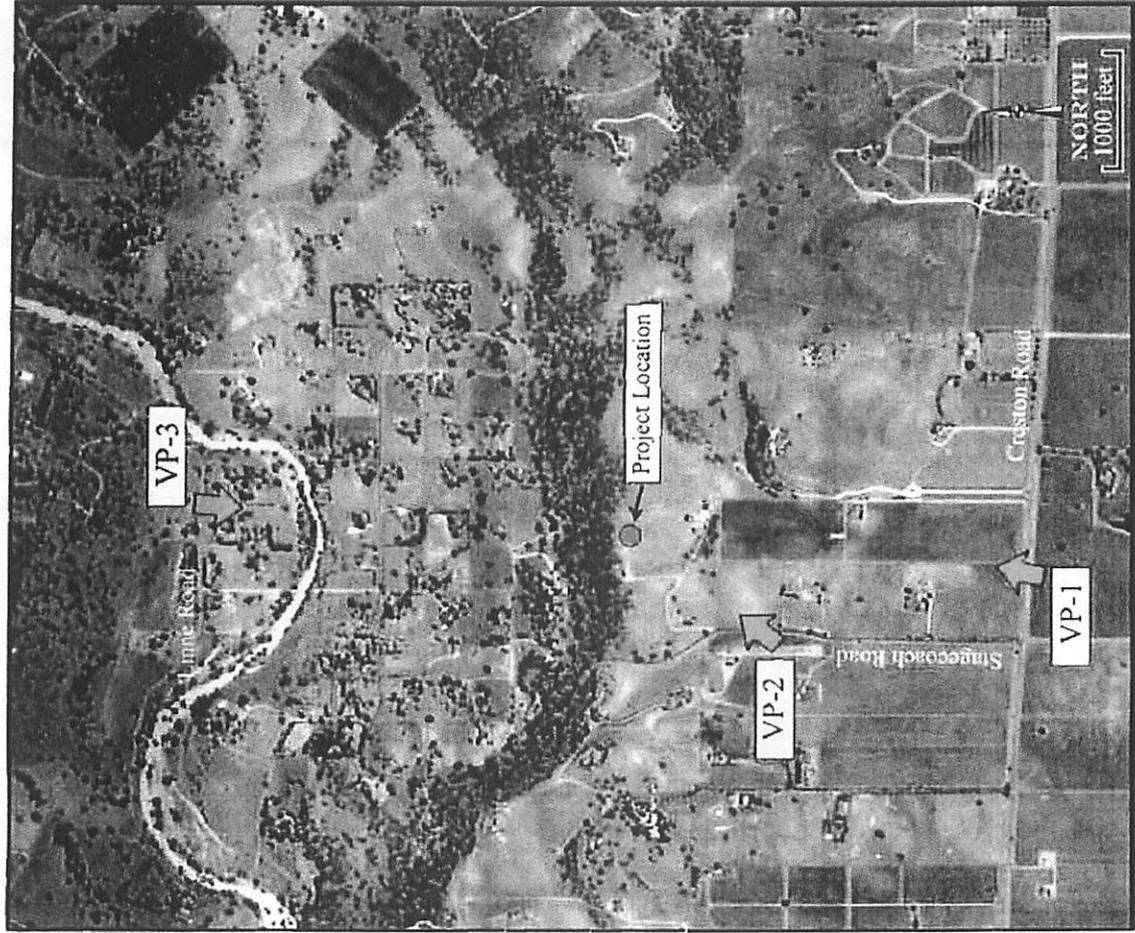
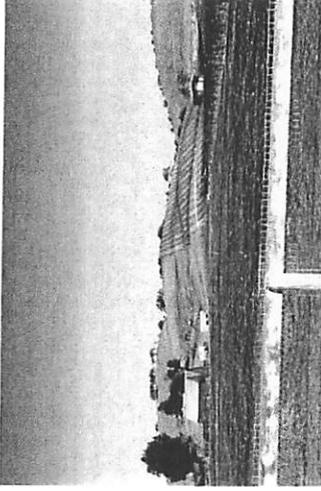
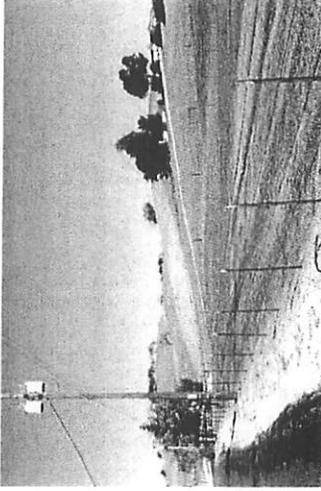


PHOTO-SIMULATION STUDY
VERIZON WIRELESS FACILITY
SILVA - STAGECOACH ROAD - SAN LUIS OBISPO COUNTY
SWCA Environmental Consultants / Robert Carr RL4 3473

VP-1



VP-2



VP-3



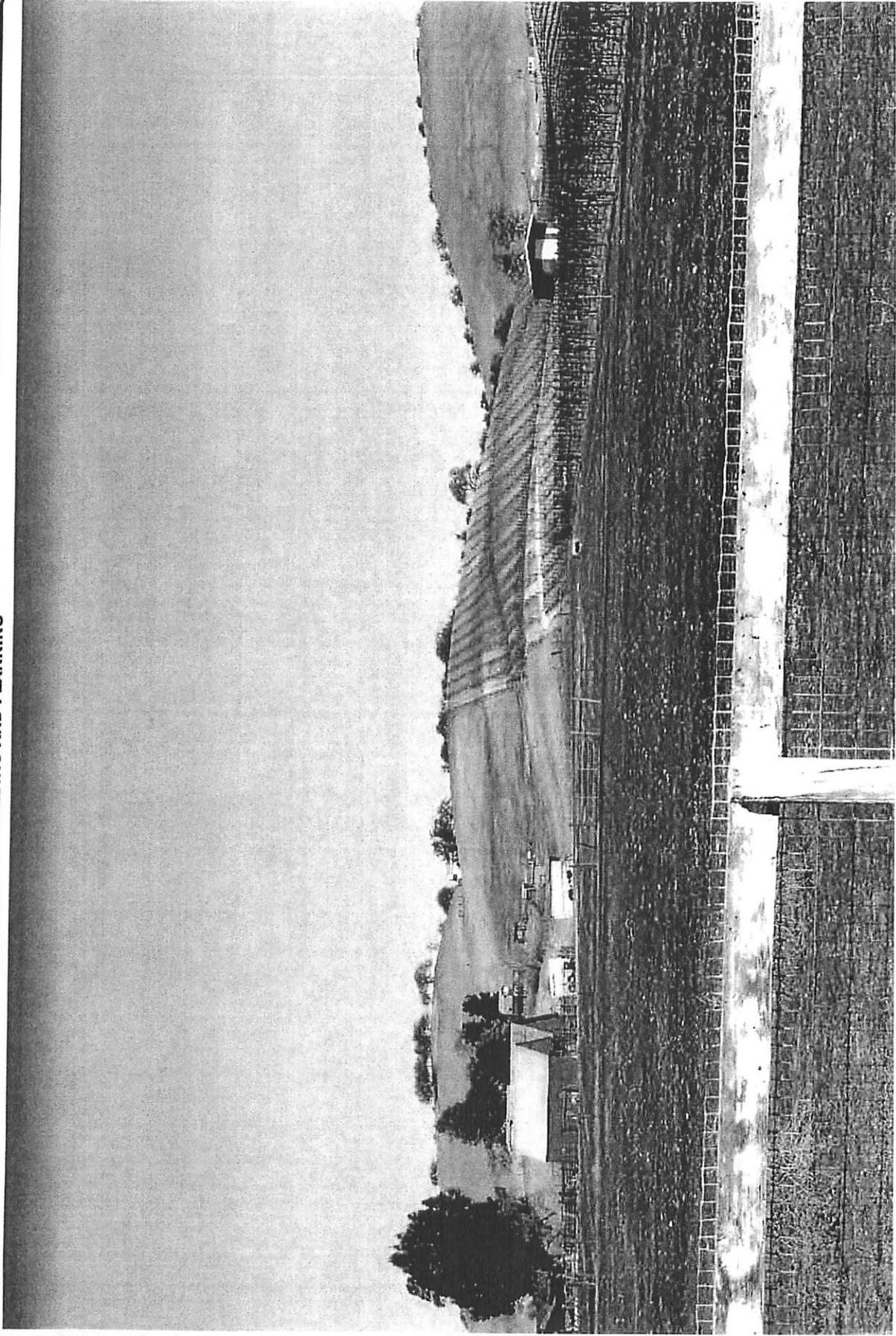
PROJECT

Conditional Use Permit
Silva and Verizon Wireless / DRC2013-00069

EXHIBIT

Photo-Simulation: Key Location Map





PROJECT

Conditional Use Permit
Silva and Verizon Wireless / DRC2013-00069

EXHIBIT

Photo-Simulation: VP-1 Creston Road Existing





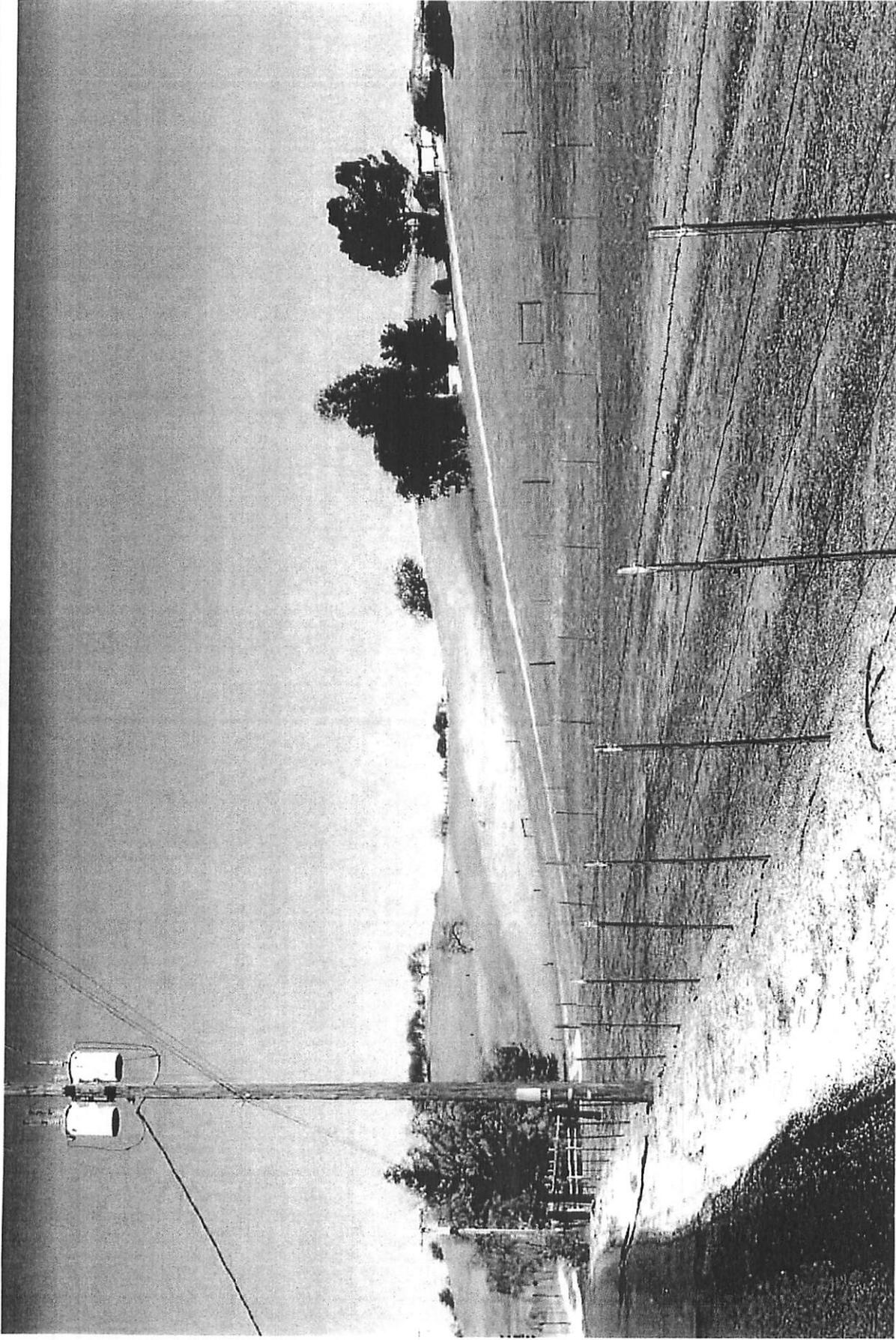
PROJECT

Conditional Use Permit
Silva and Verizon Wireless / DRC2013-00069



EXHIBIT

Photo-Simulation: VP-1 Creston Road



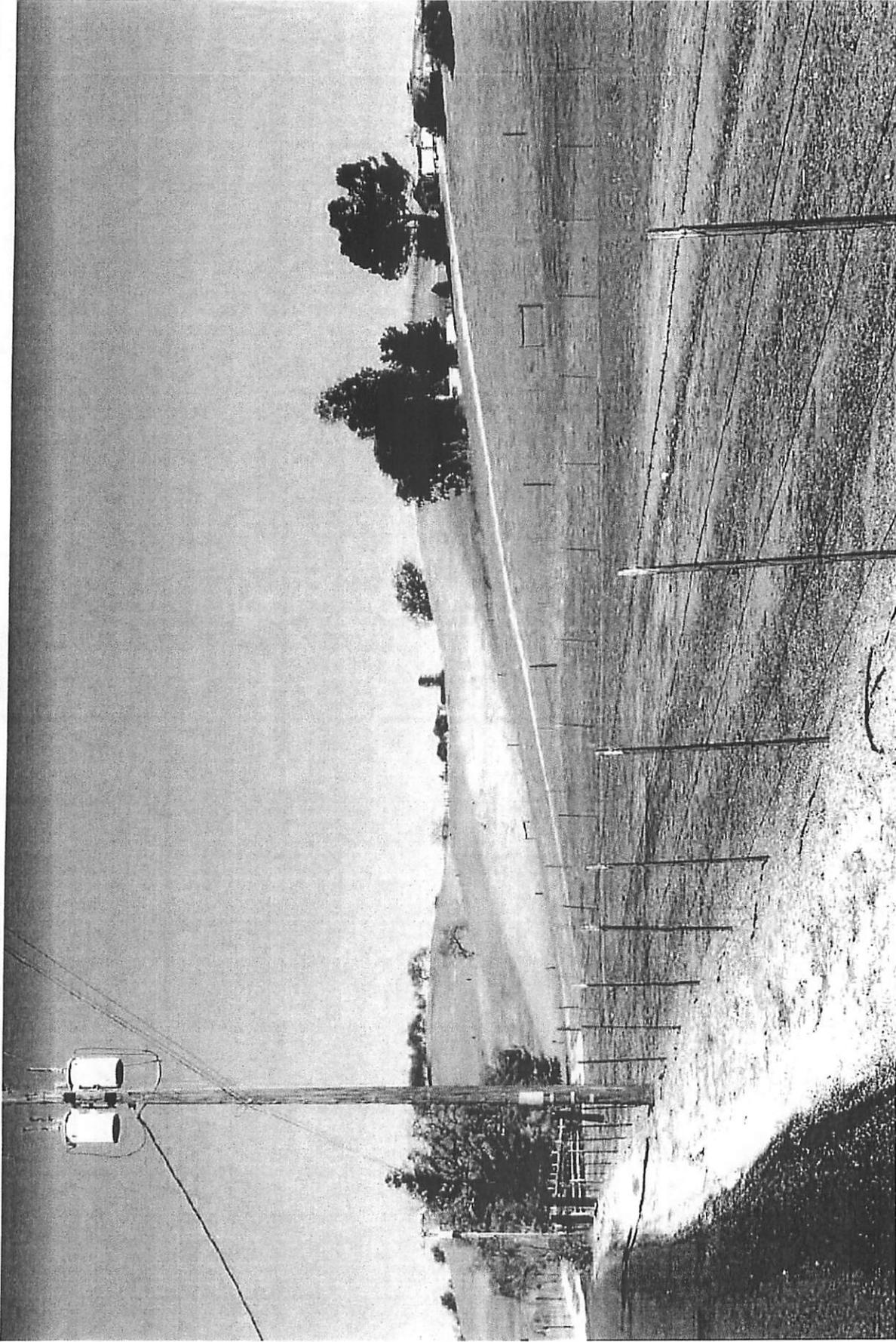
PROJECT

Conditional Use Permit
Silva and Verizon Wireless / DRC2013-00069

EXHIBIT

Photo-Simulation: VP-2 Stagecoach Road Existing





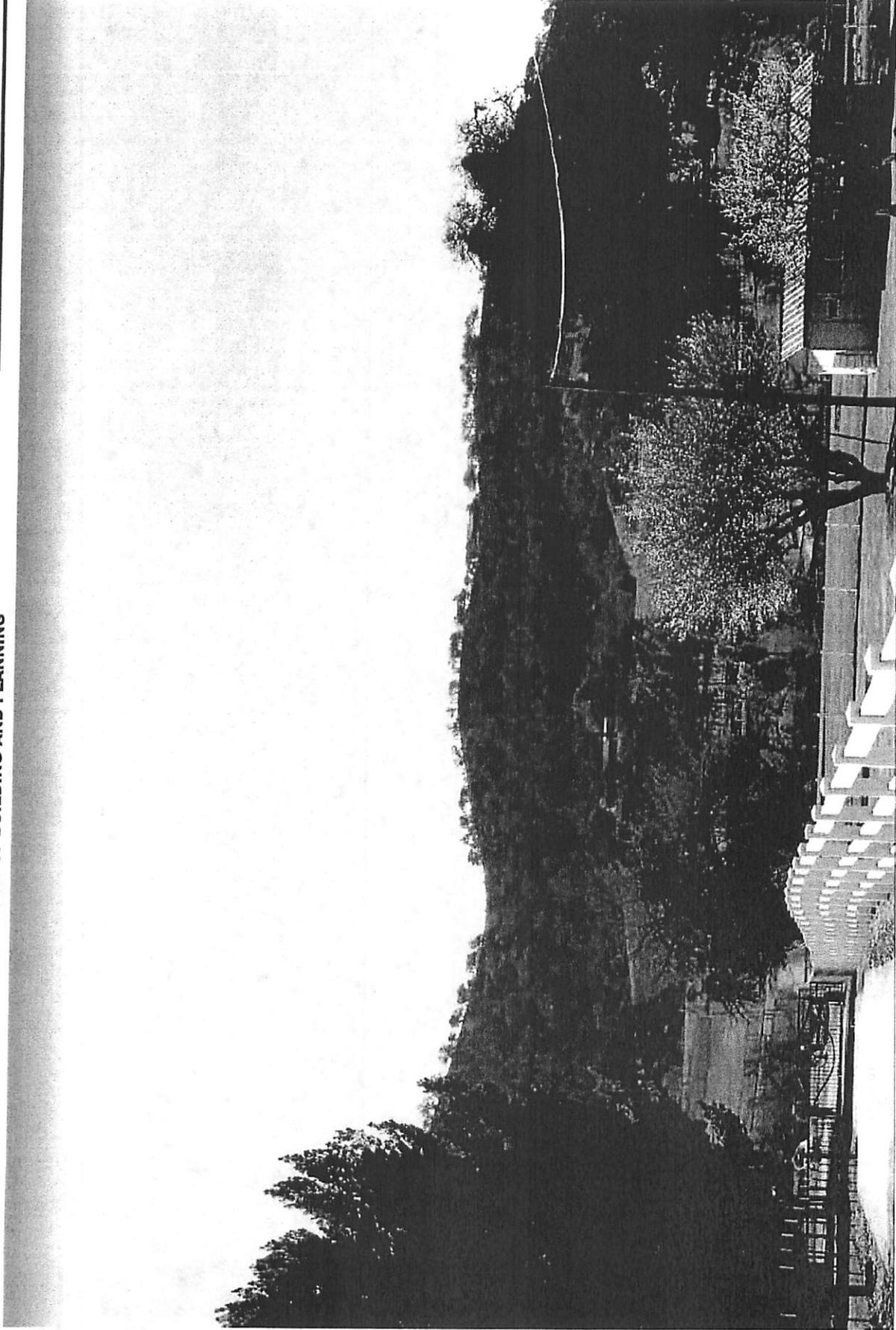
PROJECT

Conditional Use Permit
Silva and Verizon Wireless / DRC2013-00069

EXHIBIT

Photo-Simulation: VP-2 Stagecoach Road





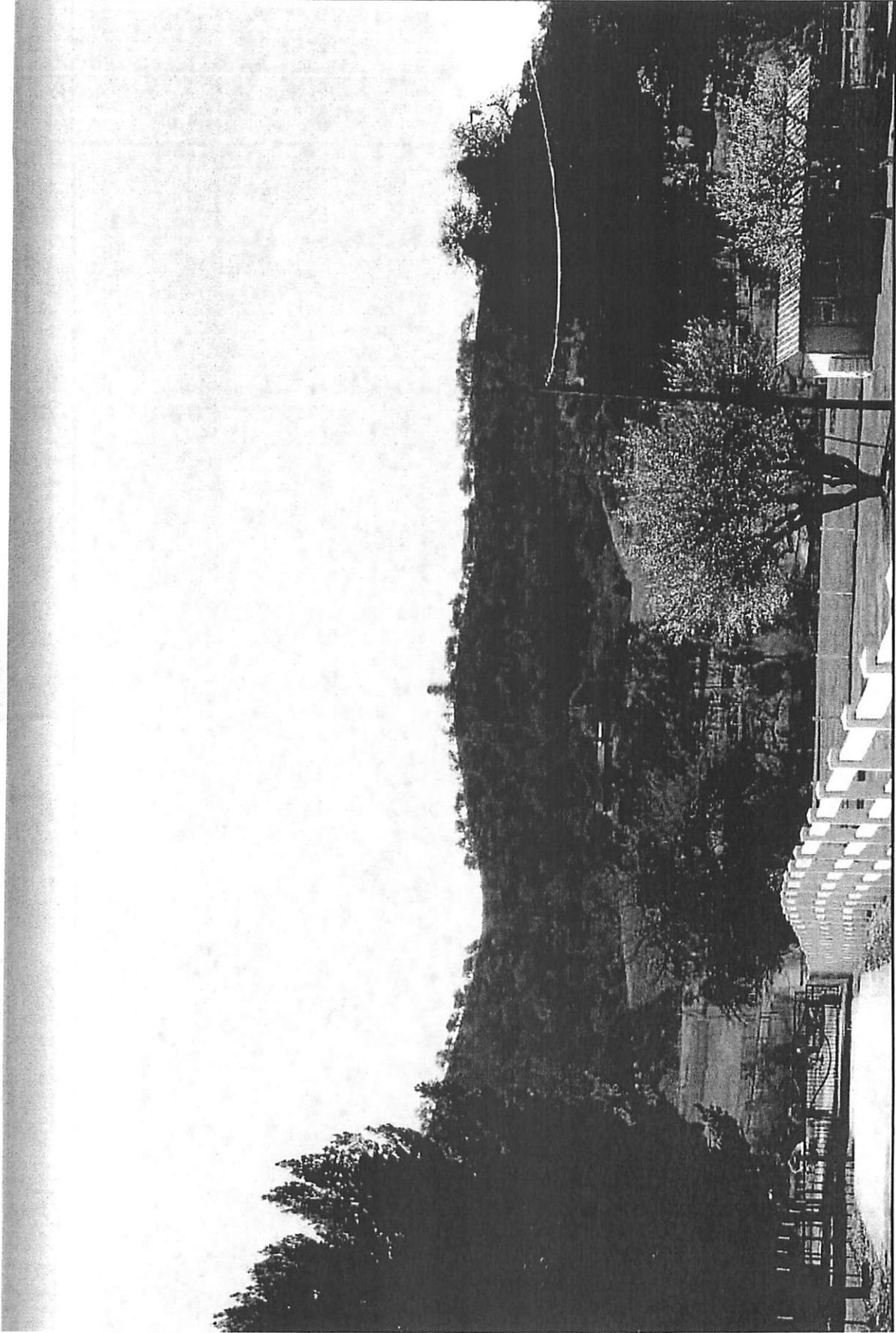
PROJECT

Conditional Use Permit
Silva and Verizon Wireless / DRC2013-00069



EXHIBIT

Photo-Simulation: VP-3 Linne Road Existing



PROJECT

Conditional Use Permit
Silva and Verizon Wireless / DRC2013-00069

EXHIBIT

Photo-Simulation: VP-3 Linne Road



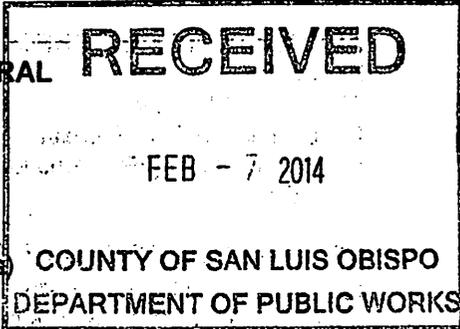
FHX



SAN LUIS OBISPO COUNTY

DEPARTMENT OF PLANNING AND BUILDING

THIS IS A NEW PROJECT REFERRAL



DATE: 2/6/2014

TO: PW

FROM: Megan Martin (805-781-4163 or mamartin@co.slo.ca.us)
North County Team / Development Review

COUNTY OF SAN LUIS OBISPO
DEPARTMENT OF PUBLIC WORKS

PROJECT DESCRIPTION: DRC2013-00069 SILVA – Proposed conditional use permit for nine new antennas, 240 sf equipment area, one emergency generator, one faux water tank. (Other design options have been included such as a monopine and a grain silo.) Site location is 2707 Stagecoach Rd, Paso Robles. APN: 035-071-011.

Return this letter with your comments attached no later than: 14 days from receipt of this referral. CACs please respond within 60 days. Thank you.

PART I - IS THE ATTACHED INFORMATION ADEQUATE TO COMPLETE YOUR REVIEW?

- YES
- NO

(Please go on to PART II.)
(Call me ASAP to discuss what else you need. We have only 10 days in which we must obtain comments from outside agencies.)

PART II - ARE THERE SIGNIFICANT CONCERNS, PROBLEMS OR IMPACTS IN YOUR AREA OF REVIEW?

- YES
- NO

(Please describe impacts, along with recommended mitigation measures to reduce the impacts to less-than-significant levels, and attach to this letter)
(Please go on to PART III)

PART III - INDICATE YOUR RECOMMENDATION FOR FINAL ACTION.

Please attach any conditions of approval you recommend to be incorporated into the project's approval, or state reasons for recommending denial.

IF YOU HAVE "NO COMMENT," PLEASE SO INDICATE, OR CALL.

[Signature]

no comment

2.21.14
Date

[Signature]
Name

5271
Phone

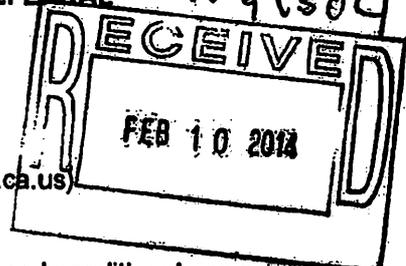


SAN LUIS OBISPO COUNTY

DEPARTMENT OF PLANNING AND BUILDING

THIS IS A NEW PROJECT REFERRAL

6213591
EN 91304



DATE: 2/6/2014
TO: ENV HEALTH
FROM: Megan Martin (805-781-4163 or mamartin@co.slo.ca.us)
North County Team / Development Review

PROJECT DESCRIPTION: DRC2013-00069 SILVA – Proposed conditional use permit for nine new antennas, 240 sf equipment area, one emergency generator, one faux water tank. (Other design options have been included such as a monopine and a grain silo.) Site location is 2707 Stagecoach Rd, Paso Robles. APN: 035-071-011.

Return this letter with your comments attached no later than: 14 days from receipt of this referral. CACs please respond within 60 days. Thank you.

PART 1 - IS THE ATTACHED INFORMATION ADEQUATE TO COMPLETE YOUR REVIEW?

- YES (Please go on to PART II.)
- NO (Call me ASAP to discuss what else you need. We have only 10 days in which we must obtain comments from outside agencies.)

PART II - ARE THERE SIGNIFICANT CONCERNS, PROBLEMS OR IMPACTS IN YOUR AREA OF REVIEW?

- YES (Please describe impacts, along with recommended mitigation measures to reduce the impacts to less-than-significant levels, and attach to this letter)
- NO (Please go on to PART III)

PART III - INDICATE YOUR RECOMMENDATION FOR FINAL ACTION.

Please attach any conditions of approval you recommend to be incorporated into the project's approval, or state reasons for recommending denial.

IF YOU HAVE "NO COMMENT," PLEASE SO INDICATE, OR CALL.

Applicant shall submit, to this office, the hazardous materials business plan for the proposed cell site. The plans shall be reviewed and approved prior to final sign-off. Please contact Aaron LaBarre at 781-5595 if you have any questions.

Date: 2/14/14
Name: [Signature]
Phone: x 5551



COUNTY OF SAN LUIS OBISPO

Department of Agriculture/Weights and Measures

2156 SIERRA WAY, SUITE A • SAN LUIS OBISPO, CALIFORNIA 93401-4556

(805) 781-5910 • FAX (805) 781-1035

Martin Settevendemie
Agricultural Commissioner/Sealer

www.slocounty.ca.gov/agcomm
AgCommSLO@co.slo.ca.us

DATE: February 26, 2014

RECEIVED

TO: Megan Martin, Project Manager

FEB 27 2014

FROM: Lynda L. Auchinachie, Agriculture Department *JA*

PLANNING & BUILDING

SUBJECT: Silva Conditional Use Permit DRC2013-00069 (1741)

Summary of Findings

The Agriculture Department's review finds that the proposed Silva Conditional Use Permit for a new 1,000 square foot wireless lease area containing a faux water tank with nine antennas, an equipment area, and an emergency generator located within an agricultural area will have:

- Potential to create a significant environmental impact(s) to agricultural resources or operations.
- Less than significant impact(s) to agricultural resources or operations because the project will not result in the conversion of an important agricultural soil as identified in the Conservation and Open Space Element. Additionally, the proposed project should not be incompatible with existing on-site or adjacent agricultural uses due to locating the facility outside of the fenced pasture areas. During construction activities, the responsible party should work with the property owner to minimize the disruption to on and off site agricultural activities.
- No anticipated impact to agricultural resources or operations.

Comments and recommendations are based on policies in the San Luis Obispo County Agriculture Element and the Conservation and Open Space Element, the Land Use Ordinance, the California Environmental Quality Act (CEQA), and on current departmental policy to conserve agricultural resources and to provide for public health, safety and welfare while mitigating negative impacts of development to agriculture. If you have questions, please call 781-5914.



DRC2013-00069 SILVA, North County E-Referral, CUP, Paso Robles

Bobbie Baxter to: Megan A Martin

02/25/2014 11:18 AM

Cc: Stephen Hicks, Cheryl Journey

History: This message has been forwarded.

Megan,

These are the Building Division Comments to be incorporated into the Conditions. Please call me if you have any questions.

Comments from Building Division:

- 1. The project will require a construction permit .**
- 2. All plans and engineering shall be prepared by a California Licensed Architect of Record unless exempted by the Business and Professions Code.**
- 3. At the time of construction permit application submittal, the project will require a full soils report for the design of all structure foundations.**
- 4. The project shall conform to the "National Pollutant Discharge Elimination System" storm water management program regulations.**
- 5. The project must be submitted to Cal Fire for review and all requirements from the resulting Fire Safety Plan must be incorporated into the building permit plans.**
- 6. Verify that all existing structures are legally permitted or were constructed before permits were required and that they meet approved setbacks to the property lines. If any structures are to be demolished, permits will be required to do so.**

Other Comments:

It appears a grading permit may be required. Depending on the extent, the grading may be included with the building permit for the structures and equipment or it may need a separate permit.

We would encourage a meeting with Stephen Hicks and/or me (free of charge) before construction permit application submittal to clarify any issues related to the building permit process.

**Bobbie Ann Baxter
805 781-5605
Building Plans Examiner
San Luis Obispo County Building & Planning
www.sloplanning.org**

**Verizon Wireless • Proposed Base Station (Site No. 249602 “Creston & El Pomar”)
2707 Stagecoach Road • Paso Robles, 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. 249602 “Creston & El Pomar”) proposed to be located at 2707 Stagecoach Road in Paso Robles, California, for compliance with appropriate guidelines limiting human exposure to radio frequency (“RF”) electromagnetic fields.

Executive Summary

Verizon proposes to install directional panel antennas within a new 40-foot structure configured to resemble a pine tree, to be located at 2707 Stagecoach Rd, in Paso Robles. 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:

<u>Wireless Service</u>	<u>Frequency Band</u>	<u>Occupational Limit</u>	<u>Public Limit</u>
Microwave (Point-to-Point)	5,000–80,000 MHz	5.00 mW/cm ²	1.00 mW/cm ²
BRS (Broadband Radio)	2,600	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.



**Verizon Wireless • Proposed Base Station (Site No. 249602 “Creston & El Pomar”)
2707 Stagecoach Road • Paso Robles, 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. Along with the low power of such facilities, 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 attached 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 SAC Wireless, LLC, dated July 19, 2011, it is proposed to install six Andrew Model DMXNH-6565 directional panel antennas within a new 35-foot structure, configured to resemble a pine tree, to be constructed about 150 feet east of the residence located at 2707 Stagecoach Road in Paso Robles. The antennas would be mounted with up to 4° downtilt at an effective height of about 35 feet above ground, and would be oriented in groups of three toward 10°T, 140°T, and 260°T, to provide service in all directions. The maximum effective radiated power in any direction would be 5,870 watts, representing simultaneous operation at 1,180 watts for AWS, 1,680 watts for PCS, 2,540 watts for cellular, and 470 watts for 700 MHz service. Also proposed to be located on the same structure is a microwave “dish” antenna for interconnection of this site with others in the Verizon network. 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, including the contribution of the microwave antenna, is calculated to be 0.030 mW/cm², which is 5.4% of the applicable public exposure limit. The maximum calculated level at the second-floor elevation of any nearby building* is 10% of the public exposure limit. The maximum calculated

* Including the nearby residence.



**Verizon Wireless • Proposed Base Station (Site No. 249602 “Creston & El Pomar”)
2707 Stagecoach Road • Paso Robles, California**

level for a worker on the existing tank nearby is 6.1% of the applicable public 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.

Recommended Mitigation Measures

Due to their mounting locations, the Verizon antennas would not be accessible to the general public, and so no mitigation measures are necessary to comply with the FCC public exposure guidelines. To prevent occupational exposures in excess of the FCC guidelines, no access within 10 feet directly in front of the antennas themselves, such as might occur during maintenance work on the structure, should be allowed while the base station is in operation, unless other measures can be demonstrated to ensure that occupational protection requirements are met. Posting explanatory warning signs[†] on the structure in front of the antennas and/or on the structure below the antennas, such that the signs would be readily visible from any angle of approach to persons who might need to work within that distance, would be sufficient to meet FCC-adopted guidelines.

Conclusion

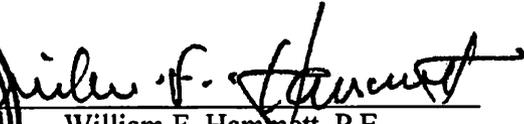
Based on the information and analysis above, it is the undersigned’s professional opinion that operation of the base station proposed by Verizon Wireless at 2707 Stagecoach Road in Paso Robles, California, will comply with the prevailing standards for limiting public exposure to radio frequency energy 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. Posting explanatory signs is recommended to establish compliance with occupational exposure limitations.

† Warning 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. 249602 "Creston & El Pomar")
2707 Stagecoach Road • Paso Robles, California**

Authorship

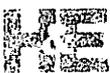
The undersigned author of this statement is a qualified Professional Engineer, holding California Registration Nos. E-13026 and M-20676, which expire on June 30, 2013. This work has been carried out under his direction, and all statements are true and correct of his own knowledge except, where noted, when data has been supplied by others, which data he believes to be correct.



William F. Hammett, P.E.

707/996-5200

January 17, 2012



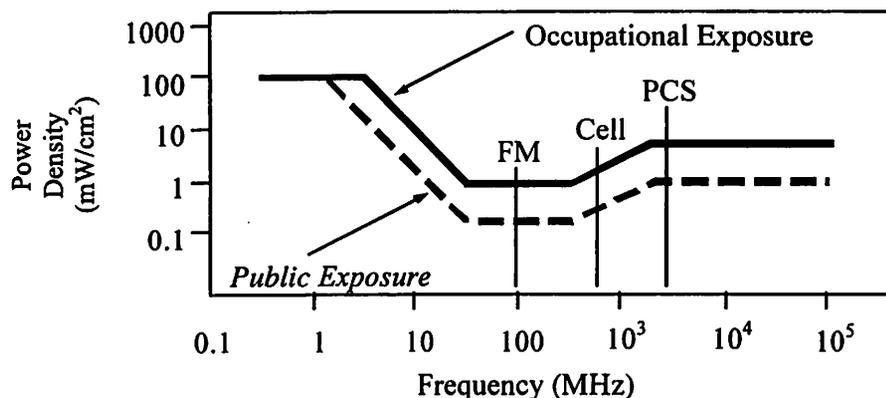
HAMMETT & EDISON, INC.
CONSULTING ENGINEERS
SAN FRANCISCO

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 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√ <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.



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:

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

- 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.

