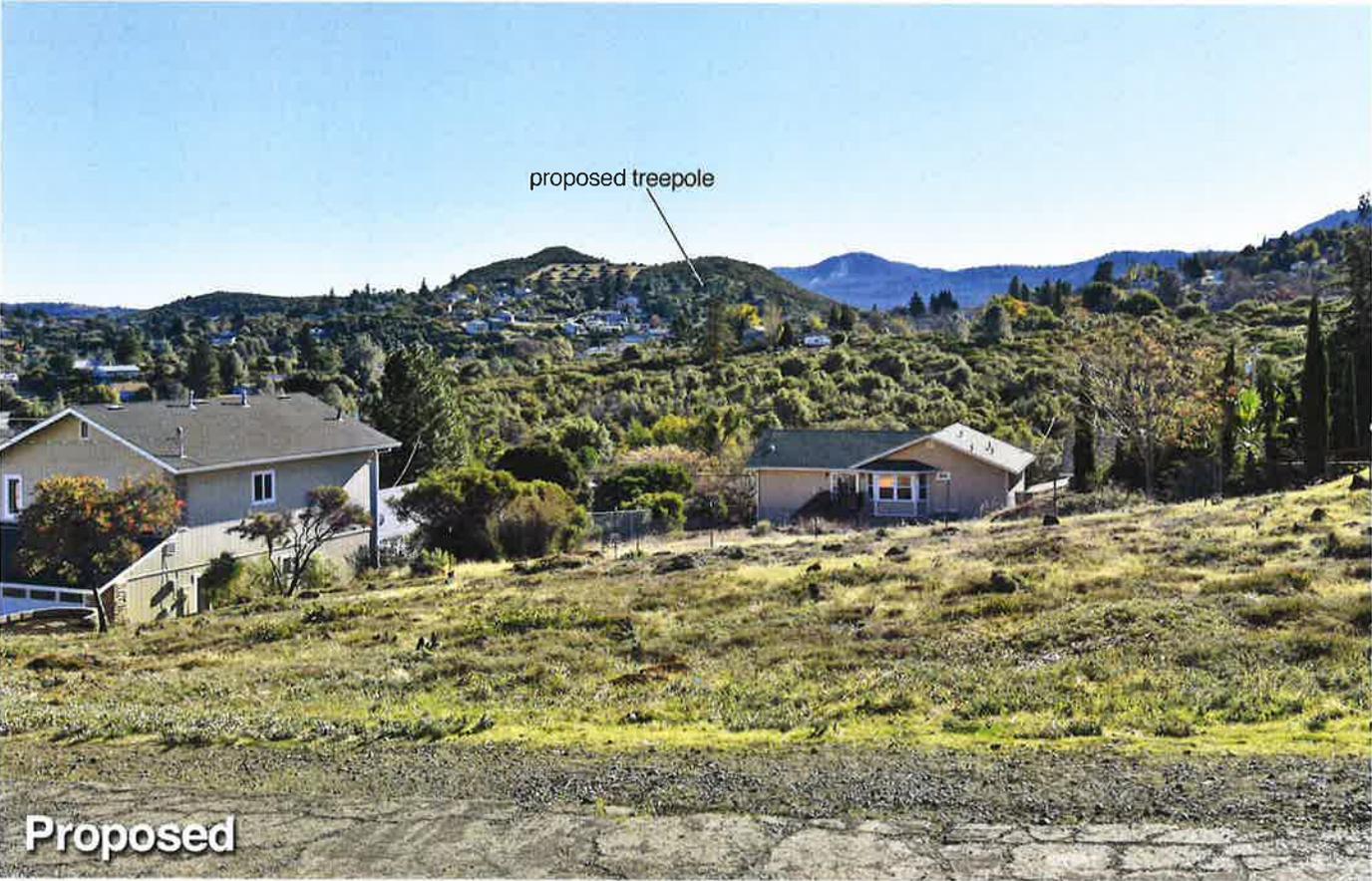




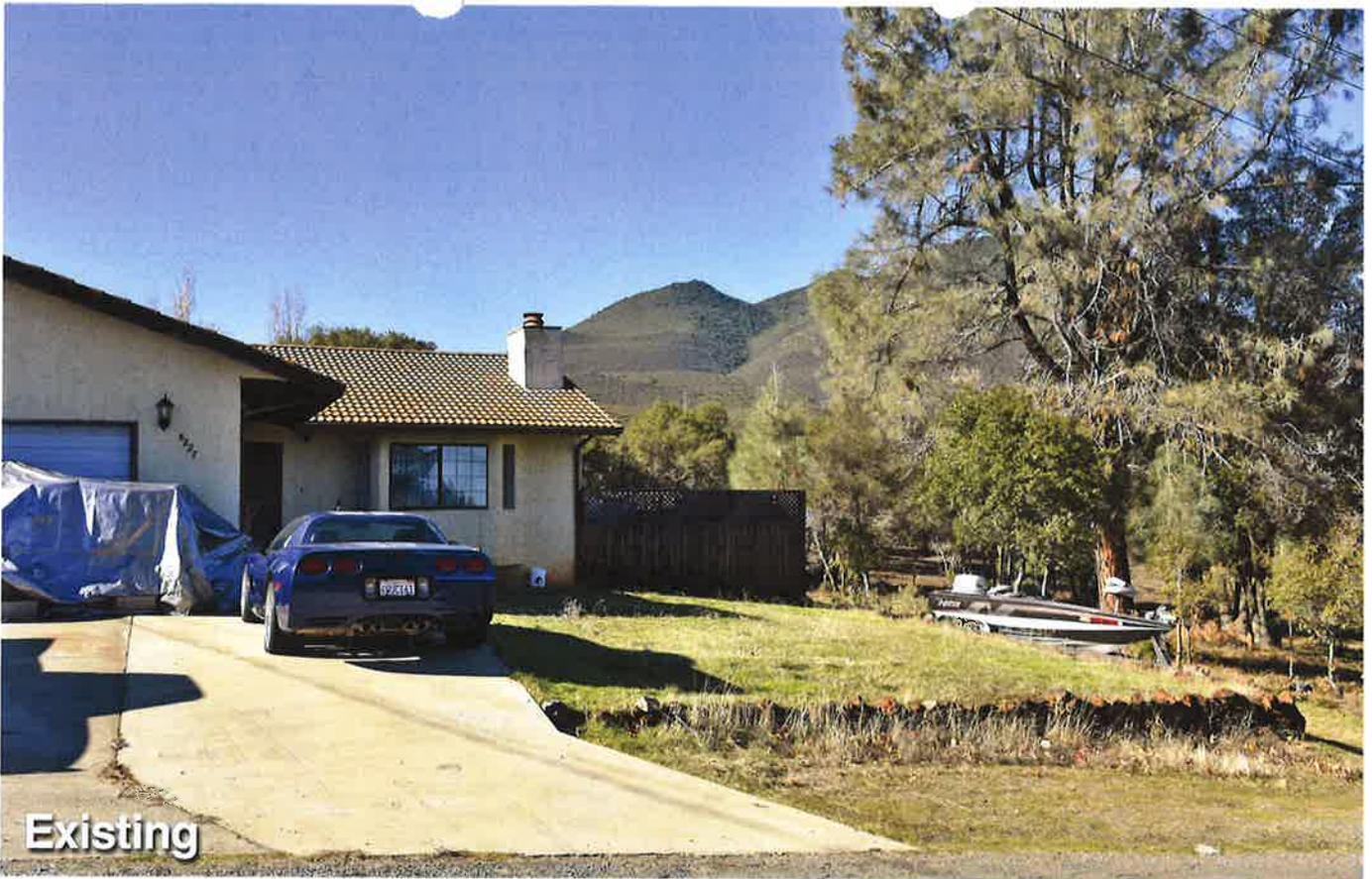
Existing



proposed treepole

Proposed





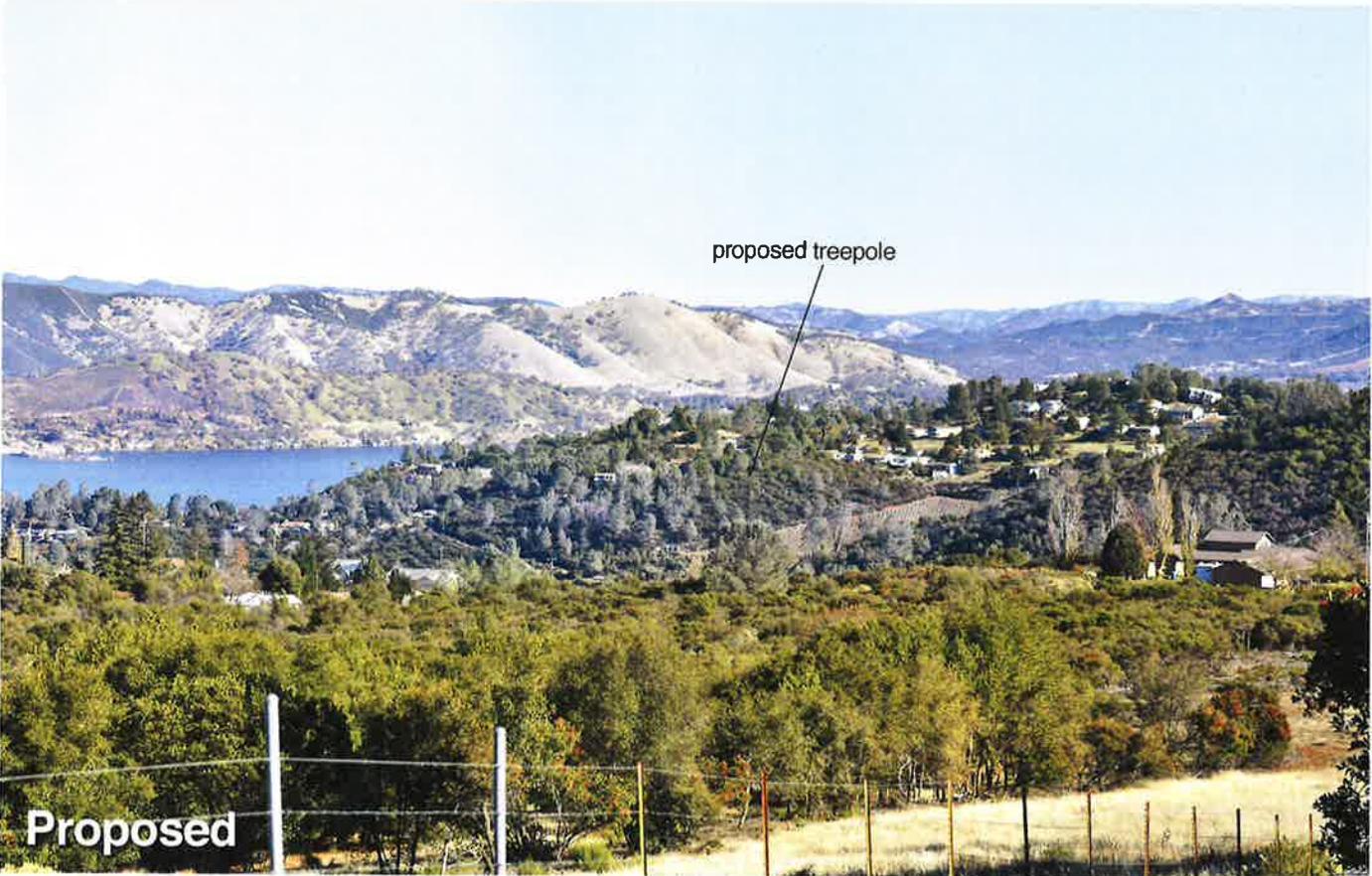
Existing



Proposed



Existing



proposed treepole

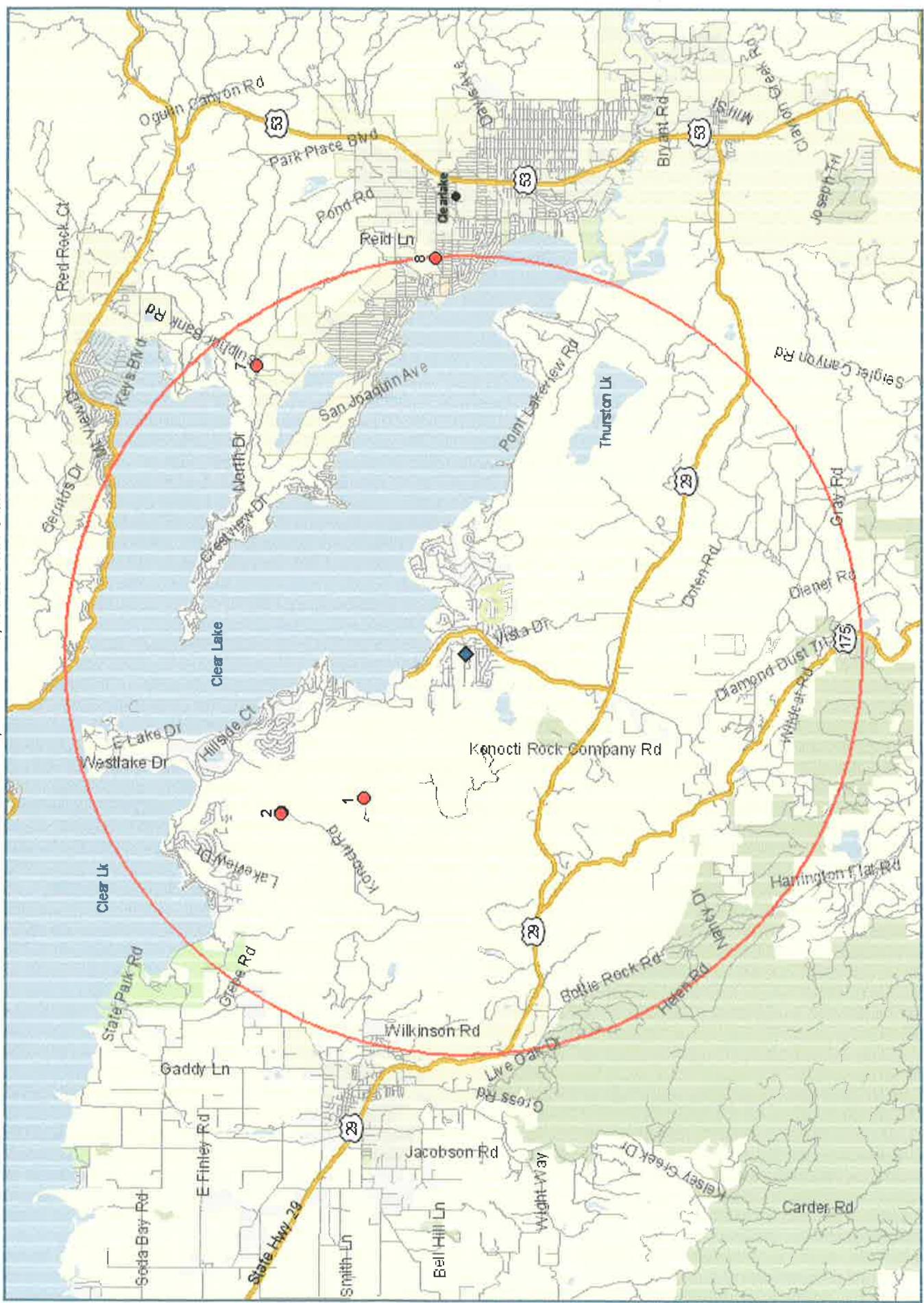
Proposed

ITEM # 8

AREA CELL SITE MAP

### Search Structures

38.956317, -122.732833, radius 5 mi / 8 km

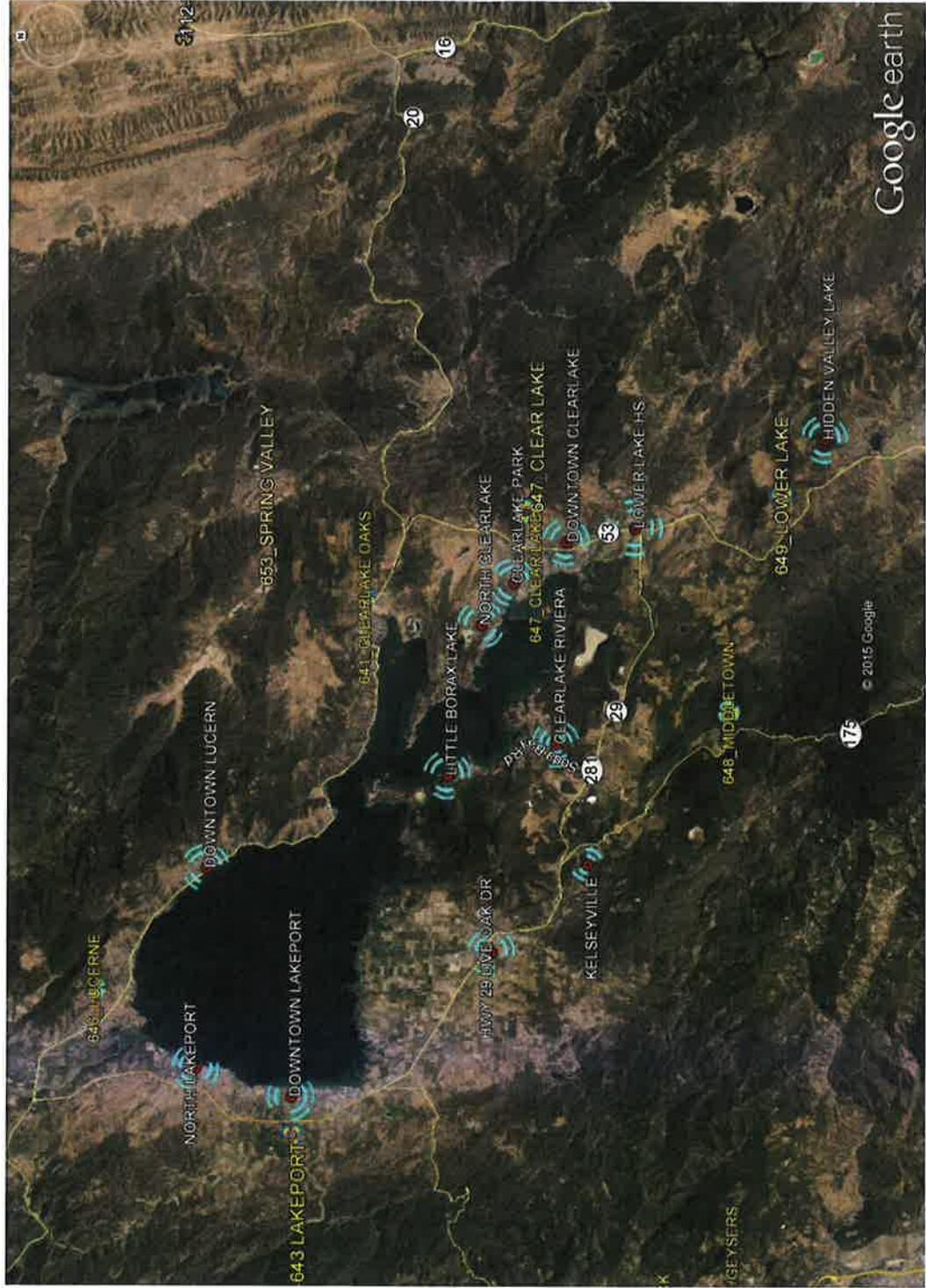




Item # 9

# LAKE COUNTY

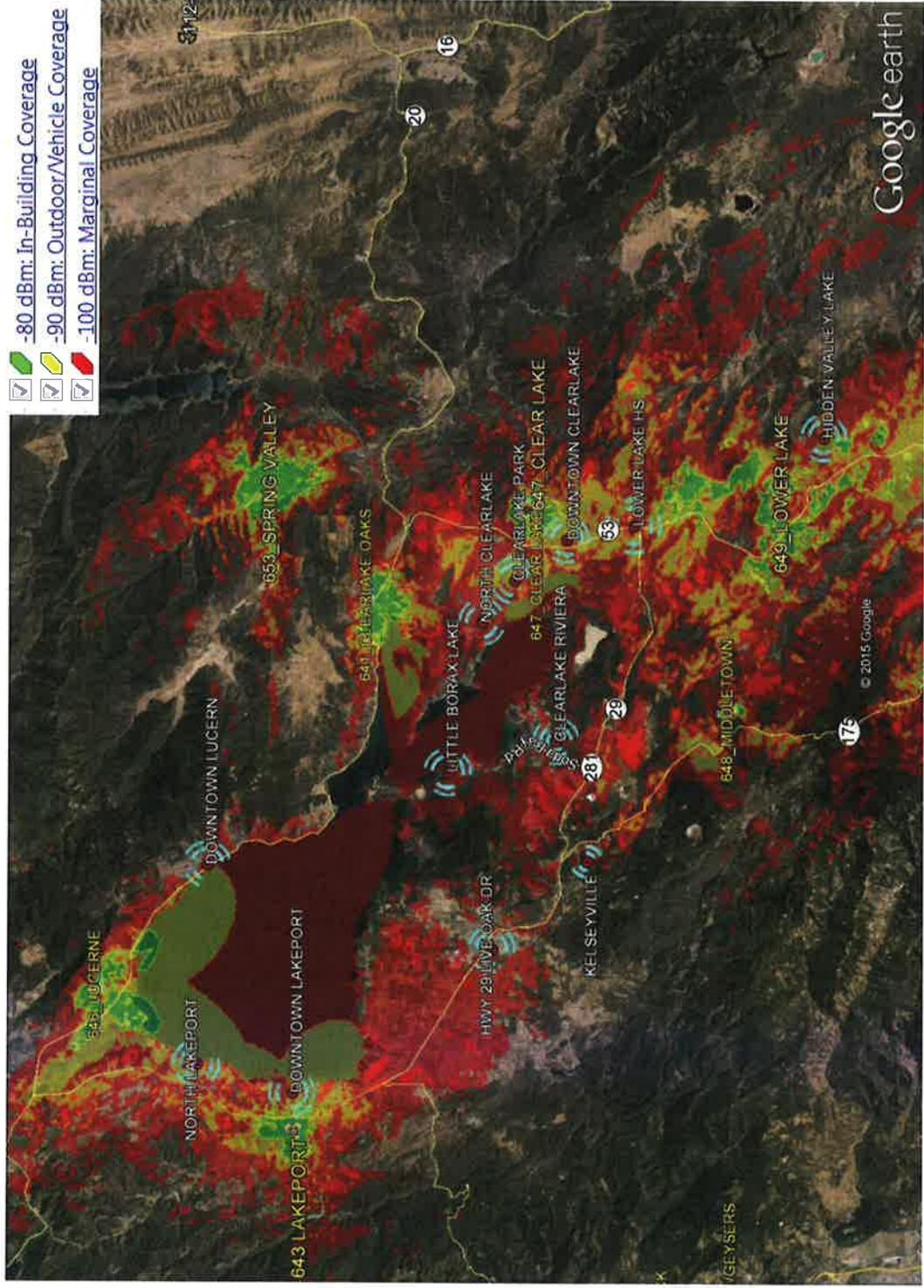
Site Location Map (Existing Sites in Yellow; Proposed Sites in White)





# LAKE COUNTY

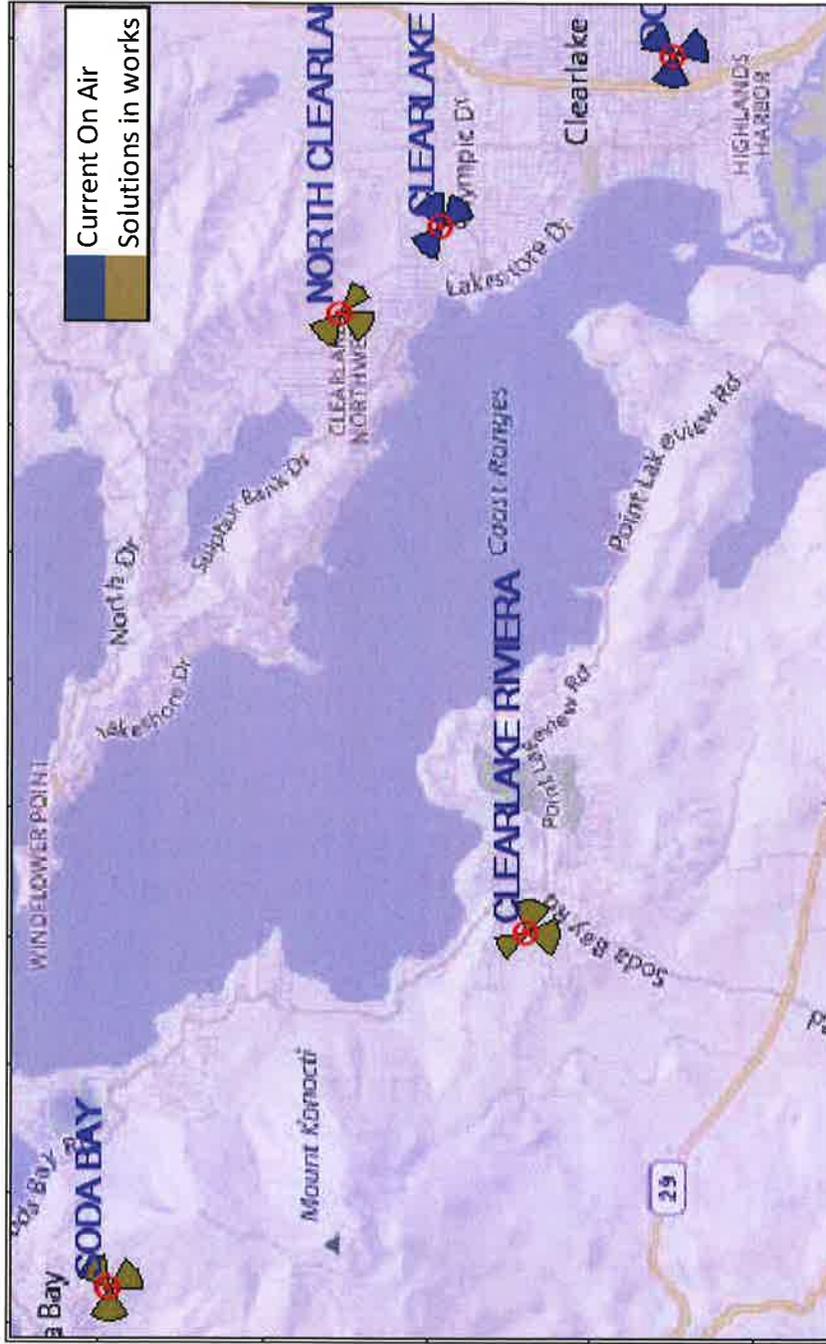
Propagation Maps (propagating only existing sites)





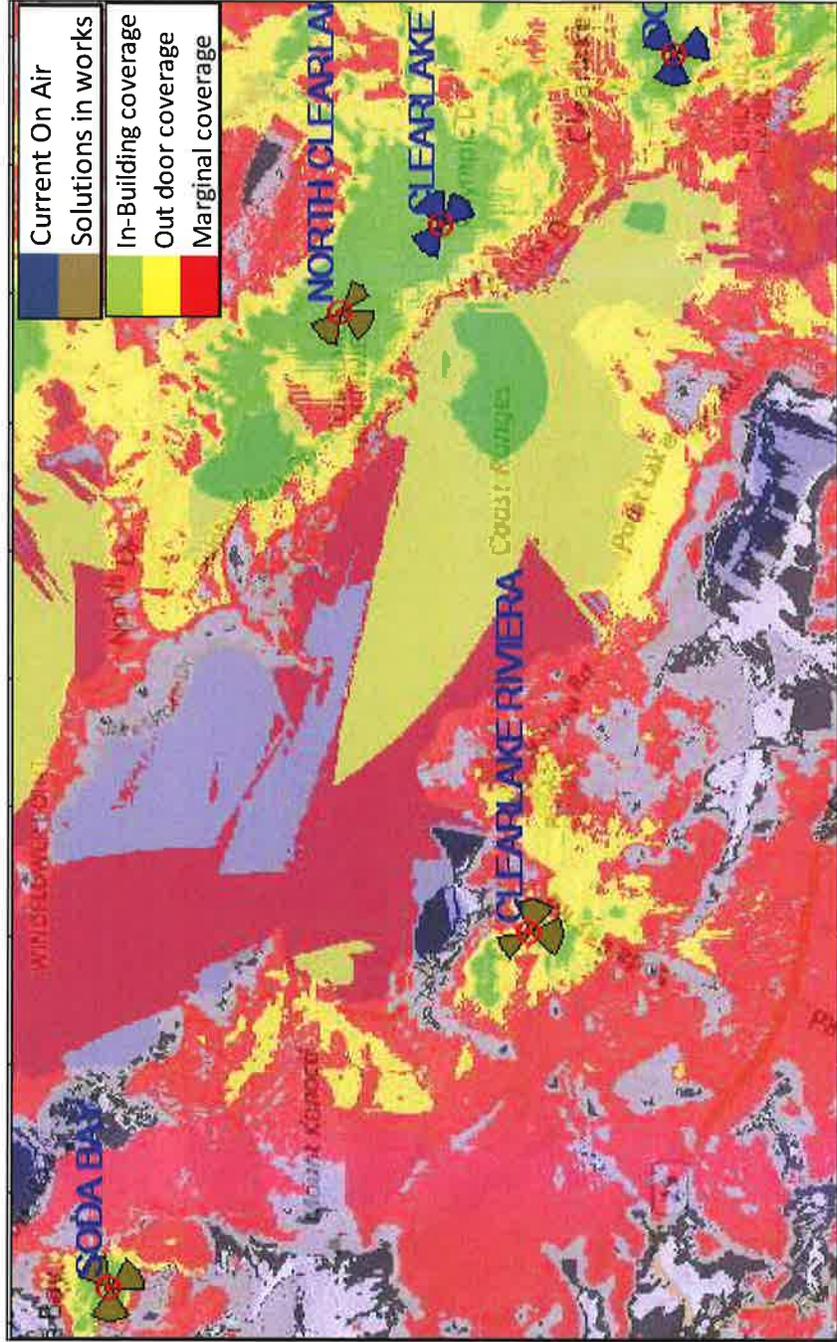
Item #10

Coverage Area





# With ClearLake Riviera





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**Documents submitted:**

- 1) \$4,355.42 fee as required for a deposit.
- 2) Completed Planning Division Application Form, At-Cost Project Reimbursement Agreement, Supplemental Data Form, Site Plan and Use Permit Application Checklists with a Letter of Authorization signed by the property owner.
- 3) Project Information
- 4) Eight (8) sets of 11" x 17" plans. The plans include a location/vicinity map.
- 5) A title report with Assessor's Parcel Map for the subject property.
- 6) Photos of the subject site with a map showing the locations selected for the photo simulations. Color photo simulations of four (4) views and a simulation of the proposed facility.
- 7) Google Earth Image of Subject Property.
- 8) Area Cell Site Map showing other facilities within 5 miles of the subject facility.
- 9) Lake County network map from Verizon with existing and proposed coverage plots.
- 10) Plots showing existing facilities coverage and coverage to be provided by the subject facility.
- 11) Horizon Tower Limited Partnership – II, certificate of liability insurance.
- 12) CD with soft copies of all submittal materials.

**Article 71.9 – Application Submittal Requirements - Responses**

71.9 (a) Horizon Tower is a carrier neutral telecommunications facility development company. Horizon Tower has secured a lease with the property owner and will obtain a building permit to develop the subject facility. Thereafter, each Federal Communications Commission (FCC) licensed carrier will secure the pertinent permits from the County to install their antennas and radio equipment at the subject facility.

The subject area has poor cellular telephone coverage and a facility is needed to provide in-building coverage to the residents and more robust service for emergency service personnel and visitors. The subject facility will provide high speed wireless connectivity utilizing the most current technology.

71.9 (b) The proposed wireless telecommunications facility and communications antennas proposed to be mounted thereon will comply with all applicable standards established by the FCC governing human exposure to electromagnetic radiation.



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71.9 (c) The proposed facility will comply with all applicable Federal Aviation Administration and applicable Airport Zoning Regulations.

71.9 (d) No structures exist within  $\frac{1}{4}$  of a mile of the subject facility that can support antennas at the required heights.

71.9 (e) The 85' tall proposed antenna support structure is required to accommodate up to four (4) carriers antennas at heights from 45' to 75' above ground level. Please see attached proposed coverage maps (Item # 10).

71.9 (f) A California registered professional engineer will design and approve the proposed subject facility to confirm it will be constructed in accordance with the current Structural Standards for Steel Antenna Towers and Antenna Supporting Structures, published by the Electrical Industrial Association/Telecommunications Industry Association and applicable requirements of the County's Building Code on the plans to be submitted with the building permit application. See note in Project Narrative on sheet T-1 of the attached plans (Item # 4).

71.9 (g) Horizon Tower is a facility development company and does not hold an FCC license. Each tenant will provide their FCC license when they apply to the County to occupy the subject facility and the pertinent emergency contact information. See attached Horizon Tower Certificate of Insurance.

71.9 (h) Facility Description

(1) The subject facility will provide wireless telecommunication services in multiple frequency bands, including Cellular, PCS, AWS, two-way radio and Broadband.

(2) See attached plans for number and dimensions of antennas and equipment (Item # 4).

(i) Up to 36 panel antennas, each being approximately 8' tall by 18" wide

(ii) Up to 8 microwave dish antennas, each being 36" in diameter

(iii) Base Transceiver Station equipment for up to 4 carriers to be mounted on a concrete pad within a 50' x 50' fenced compound

(3) The power rating for all antennas and equipment is defined as the maximum effective radiated power in any antenna signal propagation direction would be 10,400 watts, representing simultaneous operation at 4,400 watts for AWS, 4,400 watts for PCS, and 1,600 watts for 700 MHz service.

(4) The proposed facility, communications antennas proposed to be mounted thereon and the network which it will be part of will comply with all applicable standards established by the FCC governing human exposure to electromagnetic radiation. There are no other antenna facilities in the immediate area, which could contribute to the cumulative radio frequency emissions from the subject facility.

(5) The subject facility is designed to accommodate up to four (4) collocation carriers (item # 4).



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- 71.9 (i) Attached please find maps showing the Verizon existing and proposed cellular antenna facilities in Lake County and their coverage areas (Item # 9).
- 71.9 (j) Attached please find a map showing all existing cellular antenna facilities within 5 miles of the subject facility (Item # 8).
- 71.9 (k) See attached Letter of Authorization from the property owner (Item # 2A). The underlying lease allows for collocation.
- 71.9 (l) The underlying lease covers property that has public ROW frontage and it allows for access to utilities.
- 71.9 (m) See attached visual analysis which includes a map of the four (4) viewpoints selected to represent the subject facility with views to the existing location and photo simulations of the proposed facility (Item # 6).
- 71.9 (n) The subject location was selected as the property has an existing driveway with access to a public ROW, access to utilities and ground space to support a facility that meets the County requirements for collocation. The subject property contains 40 acres. The subject facility is sited to be away from adjacent residences. The nearest off site residence is approximately 446' away (Item # 4).

Other properties in the area were investigated, specifically 5195 Tomahawk Way; however a lease could not be secured for this property. The subject property and proposed facility design is the best means to provide needed wireless telecommunication coverage to the area.

- 71.9 (o) The subject facility is designed for collocation and Horizon Tower will only charge fair market value for space at the subject facility.
- 71.9 (p) Horizon Tower will cooperate with the Community Development Director to provide any necessary documents or additional reviews.
- 71.9 (q) & 71.10  
The subject facility does not propose to have any building mounted antennas.

#### **Article 71.11 Reporting Requirement - Response**

See Article 71.9 responses above, which also address Article 71.11 requirements.

Horizon Tower is a carrier neutral telecommunications tower development company, does not hold an FCC license and will not offer or provide telecommunication services to the public. Each FCC licensed carrier will provide the required reporting items when applying to the County to install equipment at the subject facility. Carriers anticipated occupying the subject facility,



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such as Verizon Wireless, will provide high speed wireless communication services ranging from cellular voice, data, PCS, AWS, broadband and two-way radio.

## **Project Information**

### **A. Site Selection, Alternatives and Surrounding Area**

Technology for wireless communication transmissions relies on line of sight radio signal propagation. The antennas must have an unobstructed view over the coverage objective areas, which for the subject facility are Clear Lake Riviera, Riviera Estates and the adjacent portion of Clear Lake. Siting of the facility must be in a location with a ground elevation allowing the antennas to have an unobstructed view over the coverage objective. To achieve line of sight over the coverage objective the antennas must be mounted on the proposed 85' tall antenna support structure to allow the radio signal to propagate over the area.

Locations 1 & 2 shown on the Area Cell Site Map showing other facilities within 5 miles of the subject facility are not viable locations due to the distance from the coverage objective and the terrain. Locations 7 & 8 shown on this map also are not viable locations as they are located on the east side of Clear Lake and cannot provide adequate radio signal to the coverage objective.

The subject property and location have been selected to best serve the coverage area while allowing the antenna support structure to blend in with the existing terrain.

The subject property and location were selected after a thorough evaluation of the area and for the following reasons:

- 1) There are no existing structures in the immediate area, which could support antennas at the required height.
- 2) Properties adjacent to the subject property were investigated; however a lease agreement could not be secured.
- 3) The location on the subject 40 acre property allows the subject facility to be sited away from adjacent residences.
- 4) The subject property has an existing access driveway with access to the required utilities.

For these reasons the subject property is the best single site solution to serve the subject area while allowing carriers to provide critical wireless communication services to the residents, emergency response personnel, travelers and boaters.

The subject property has a Rural Residential zoning designation with R-1 zoning and residences to the north, east and south and Rural Lands with open scrub brush to the west. The nearest off site residence to the subject facility is approximately 446' away.



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**B. Proposed Equipment Installation and Associated Facilities**

Horizon Tower proposes to install the infrastructure required for an unmanned wireless telecommunications facility consisting of an 85' tall faux monopine tree antenna support structure in a 50' x 50' fenced equipment compound.

The monopine support structure will conceal multiple carriers' antennas and microwave dishes.

Once the facility infrastructure is installed, and upon issuance of the required permits to each carrier by the County, each carrier will install their base transceiver station equipment in the equipment compound and antennas on the monopine. The plans included herewith reflect equipment pads for four (4) carriers, each with pull boxes for underground connections to the electrical and telephone services. The base transceiver station equipment will be connected via coaxial cables to the antennas via a cable tray, identified in the plans as an "ice bridge". Electrical power and telephone utility connections will be extended to the subject facility from the existing utility service providers' points of connection.

**C. Horizon Tower Property Rights**

The property owner and Horizon Tower have entered into a lease for development of the subject facility on the property. The property owner has signed a Letter of Authorization allowing Horizon Tower and their representatives to process any necessary permits for development of the subject facility, a copy of which is included herewith.

**D. Business hours of operation, employees, parking, noise & smoke**

The proposed unmanned facility will operate 24 hours a day and there will be no regular traffic. Once the facility is developed, each carrier will visit the site in a light utility vehicle approximately once a month, for a short period of time, to conduct routine maintenance of the equipment. Therefore, a water, sewer or septic system connection is not required. Parking is available at the subject facility to accommodate the technician visit. The radio equipment and antennas will not generate any significant noise nor will they equipment emit any fumes.

An emergency power generator is not proposed at this time; however a future tenant may propose one with their application to install equipment at the subject facility.

**E. Landscaping, Screening, Signage and Trash**

There is no landscaping proposed for the subject facility due to its location on the subject property as the equipment compound is not visible from adjacent properties. The ground mounted equipment will be enclosed within a chain link fenced compound.

No on street signage is proposed for the project. As required, site identification and emergency contact signage will be placed at the facility.

No trash collection will be necessary as the facility will be unmanned and it does not generate any waste.



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#### **F. Wireless Safety**

Scientists all over the world continually study the potential health effects of Radio Frequency (RF) energy. These studies have concluded that there is no evidence that RF energy from wireless communication facilities pose a public health threat when they are installed and operated properly. The proposed facility will be operated in compliance each carrier's FCC license and requirements. Horizon Tower will not operate any radio equipment at the subject facility. Each tenant can submit to the County an RF emissions study for their proposed radio equipment with their respective permit applications, which will confirm that their equipment will operate well within the FCC guidelines. The proposed antennas will be mounted between 45' and 75' above ground level thereby precluding any general public access or exposure. Signage will be installed as required by the FCC and any other regulatory agencies.

#### **G. Company Experience and Community Benefit**

Horizon Tower is highly experienced in the development of multi-carrier cellular telephone facilities throughout the western United States. Please visit their web site at <http://horizontower.com/> for additional company information.

The community benefit will be the provision of high speed state of the art wireless telecommunication services to the area, most importantly emergency service communications for first responders. The proposed facility will also provide wireless communication services to not only the residents but also to travelers and boaters in the area. The Horizon Tower tenant cellular carriers' networks will provide a wide range of wireless telecommunication services including voice and data, which will allow residents an alternative source for their communication needs.

To improve the ability of emergency services personnel to quickly assist those in need, a locating system known as Enhanced 9-1-1 (E911) has been deployed across the country. E911 provides four functions to help connect emergency responders and distressed wireless callers more quickly:

- The proposed tenants' cellular facilities will handle 911 calls from cell phones
- Ensures that a wireless 911 call is routed to the most appropriate emergency dispatch center
- Provides emergency dispatchers with the call back number of the caller
- Provides the approximate location of the caller

The proposed facility will greatly improve or establish wireless telecommunication services in the subject area, which currently has poor service, resulting in a needed service and a benefit to the community.

#### **H. Trees, demolition and grading**

No trees or existing landscaping are proposed to be removed. Some brush may be cleared. No existing structures will be impacted. There is minimal grading required for development of the project.



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**I. Telephone & Power**

Telephone and power are the only utility services required and they are will be extended to the subject facility from the service providers' points of connections.

**J. Site Photos, Photo Simulations & Visual Analysis (Item # 6)**

The location of the proposed facility on the subject property is at a ground elevation of 1,850', in an area of dense chaparral bushes just off an existing driveway and 421' from the nearest property line.

An aerial map is provided, which shows the subject location and identifies the four (4) vantage points selected for the photo simulations and visual analysis. The photos show a view to the existing location on the subject property and a simulation of the proposed facility in this view. The photo simulations represent the scale and dimensions of the proposed facility in accord with the plans included herewith. The subject facility is located in the interior of the subject property; therefore near field views of the facility and the ground mounted equipment are not possible.

The photo simulations depict the proposed facility from the following four (4) vantage points:

- View # 1: Looking southeast from Paloos Court
- View # 2: Looking southwest from Fairway Drive
- View # 3: Looking west from Tenino Way
- View # 4: Looking northeast from Tenaya Way

View # 1

This view is from the residential area northwest of the subject property. The monopine antenna support structure has a higher terrain backdrop allowing it to blend in with the terrain.

View # 2

This view is from Fairway Drive, the edge of the residential area just west of Soda Bay Road. The monopine antenna support structure has a partial higher terrain backdrop, which allows the lower portion to blend in with the terrain and there are other tall trees in this view allowing it to blend in with the surroundings.

View # 3

This view is looking west from Tenino Way just east of the entrance to the subject property. The monopine antenna support structure has a higher terrain backdrop allowing it to blend in with the terrain. Other near field obstructions such as trees and buildings limit direct views of the monopine and provide screening.

View # 4:

This view is looking northeast toward the subject facility from the edge of the subject property and the residential area near the intersection of Tenaya Way and Chippewa Trail. Due to the location of the subject facility in the interior of the subject property, the distance to the facility from view location # 4



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and the higher terrain backdrop with existing trees, allow the monopine antenna support structure to blend in with the surroundings.

#### Visual Analysis Summary

The equipment compound is not visible from off site. Due to the location of the subject facility, open brush lands to the west of the subject property and undulating terrain in the area, the proposed monopine antenna support structure will not impact views of Clear Lake.

The proposed facility has been carefully sited to not impact lake view corridors and to minimize direct views. The monopine antenna support structure blends in with the undulating terrain and existing trees resulting in a minimal visual impact.

#### **K. Construction/Installation**

Installation will only commence after receipt of a building permit issued by the County. Construction is expected to take several weeks.

#### **Summary**

The subject property was selected as the best available single site solution to provide critical wireless communication services to the subject area.

The ground based equipment will be located in an area not visible to the public. The visual analysis confirms that the proposed monopine antenna support structure will have a minimal visual impact.

The project complies with the County code requirements and the findings for the required permit can be made.

The proposed facility is the least intrusive means as a single site solution to provide critical high speed wireless communication services to the subject area.

Therefore, the subject facility is the best design and solution to provide needed communication services to the subject area with a minimal impact on the surrounding area.

Please contact Greg Guerrazzi @ (707) 935-1111 with any questions or for additional information. Submit email inquiries to [gregguerrazzi@vom.com](mailto:gregguerrazzi@vom.com)