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Verizon Wireless Response to Appeal, S54-0001, One Eye Creek Road - Board Agenda, June 7, 2016

1 message

Paul Albritton <pa@mallp.com> Thu, May 26, 2016 at 6:34 PM
Reply-To: Paul Albritton <pa@mallp.com>
To: Ron Mikulaco <bsone@edcgov.us>, Shiva Frentzen <bostwo@edcgov.us>, "Brian K. Veerkamp" <bosthree@edcgov.us>, Michael Ranalli <bosfour@edcgov.us>, Sue Novasel <bosfive@edcgov.us>
Cc: El Dorado County Board Clerk <Edc.cob@edcgov.us>, David Livingston <david.livingston@edcgov.us>, Aaron Mount <aaron.mount@edcgov.us>

Dear Supervisors, attached please find our letter written on behalf of Verizon Wireless responding the the appeal of the above-referenced wireless facility application approved by the Planning Commission and to be heard at your meeting of June 7, 2016.

Hard copies have been FedExed to arrive at the Board office tomorrow morning.

Please contact me with any questions.

Thank you.

--
Paul Albritton
Mackenzie & Albritton LLP
220 Sansome Street, 14th Floor
San Francisco, California 94103
(415) 288-4000

Verizon Wireless Letter 05.26.16.pdf
7563K

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May 26, 2016

VIA EMAIL AND FEDEX

Chair Ron Mikulaco
Supervisors Shiva Frentzen,
Brian Veerkamp, Sue Novasel
and Michael Ranalli
Board of Supervisors
El Dorado County
330 Fair Lane
Placerville, California 95667

Re: Appeal of Verizon Wireless Application S54-0001
Telecommunications Facility, One Eye Creek Road
Board of Supervisors Agenda, June 7, 2016

Dear Chair Mikulaco and Supervisors:

We write on behalf of our client Verizon Wireless to urge you to follow the recommendation of Development Services Division Staff and uphold the Planning Commission's unanimous approval of a wireless facility disguised as a pine tree (the "Approved Facility"). The appeal filed by Loretta Webb ("Appellant") provides no substantial evidence to warrant denying the application and must be rejected. The Approved Facility complies with the El Dorado County Ordinance Code (the "Code") and meets all findings for issuance of a use permit. It also represents the least intrusive means to fill a significant gap in Verizon Wireless service in the Mosquito area. For this reason, denial of the Approved Facility would violate the federal Telecommunications Act. The Mosquito Fire Protection District supports the Approved Facility for the improved communications it will bring to the Mosquito area as shown in a letter from Fire Chief Mike Hazlett attached as Exhibit A. We urge you to deny the appeal and uphold the Planning Commission's approval.

I. The Project

The Approved Facility has been thoughtfully designed to minimize any impact on the adjacent community. In fact, Verizon Wireless has twice revised the location of the Approved Facility on the subject parcel in response to comments provided by the County and community regarding visual impacts, such that the Approved Facility receives maximum screening from adjacent trees.

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Verizon Wireless proposes to place its antennas on a 104 foot tower disguised as a pine tree. Antennas will be concealed within faux foliage and branches, and branches will extend an additional five feet above the tower, providing a realistic tapered appearance. Antennas will be covered with pine needle socks for further concealment. The treepole will be placed within a 321 square foot fenced area, 20 feet west of 248 square foot equipment area which will contain radio cabinets. The equipment area will be adjacent to the access roadway. Verizon Wireless will lay gravel on the first 50 feet of the access roadway to accommodate fire truck access as requested by the Mosquito Fire Protection District. The Approved Facility is located on a nearly 40-acre forested parcel and set back over 100 feet from One Eye Creek Road, with ample established oak and pine trees providing screening from public view.

To demonstrate its insignificant visual impact, we have attached photosimulations of the Approved Facility as Exhibit B. A report prepared by Hammett & Edison, Inc., Consulting Engineers, attached as Exhibit C (the "H&E RF Study"), confirms that the Approved Facility will operate within Federal Communications Commission radio-frequency ("RF") exposure guidelines. Another report prepared by the same firm, attached as Exhibit D (the "H&E Noise Study"), confirms that the Approved Facility will comply with the County's noise standards.

II. The Approved Facility Complies with All Code Requirements and Meets All Findings for Issuance of a Use Permit.

As confirmed in the Staff Report to the Planning Commission, the Approved Facility complies with the County's standards for wireless facilities and meets all findings for issuance of a use permit. Verizon Wireless designed the Approved Facility to resemble a pine tree and chose a location on a large forested parcel where plentiful established pine and oak trees provide screening in compliance with Code §130.40.130(D)(1). In fact, at the County's urging, Verizon Wireless relocated the Approved Facility on the subject parcel to an area farther from One Eye Creek Road, allowing for an additional buffer of screening vegetation as well as greater distance from residences to the south. Set back over 32 feet from the closest property line to the east, the Approved Facility exceeds the setback requirements of Code §130.40.130(D)(2).

Staff has also confirmed that the Approved Facility is consistent with General Plan requirements, meeting the finding of Code §130.52.021(C)(1). The Approved Facility poses no detriment to public health, safety or welfare, and with a minimal footprint as well as a design and tree screening that minimize visual impacts, it is not injurious to the neighborhood, consistent with the finding of Code §130.52.021(C)(2). In fact, the Approved Facility provides an important public safety benefit through improved communications with emergency response personnel. As Code §130.40.130(D)(7) allows Verizon Wireless to construct the treepole upon issuance a use permit, the Approved Facility meets the finding of Code §130.52.021(C)(3). Because the Approved Facility meets all findings for approval, the Board should deny the appeal and affirm the Planning Commission's approval.

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III. Federal Law Compels Approval of the Application.

Verizon Wireless is licensed by the FCC to provide wireless telecommunications services throughout the United States, including El Dorado County. The siting of wireless communications facilities ("WCFs"), including the one at issue here, is governed by federal law. While the Telecommunications Act (the "TCA") reserves to local governments traditional land use control over the siting, placement and modification of WCFs, it places certain restrictions on such local regulation. The following restrictions are relevant here:

- Any denial of an application must be in writing and supported by substantial evidence contained in a written record (47 U.S.C. §332(c)(7)(B)(iii));

- The local government may *not* regulate the placement, construction, or modification of WCFs on the basis of the environmental effects of radio frequency emissions to the extent such facilities comply with the FCC's regulations concerning such emissions (47 U.S.C. §332(c)(7)(B)(iv));

- The local government's decision must not "prohibit or have the effect of prohibiting the provision of personal wireless services" (47 U.S.C. §332(c)(7)(B)(i)(II)).

With this legal framework in mind, we address below the specific federal law issues before the Board with respect to this application.

IV. Substantial Evidence for Approval, Lack of Substantial Evidence for Denial

As interpreted under controlling federal court decisions, the "substantial evidence" requirement means that a local government's decision to deny a WCF application must be based on requirements set forth in the local code and supported by evidence in the record. (*See Metro PCS, Inc. v. City and County of San Francisco,* 400 F.3d 715, 725 (9th Cir. 2005) [denial of application must be "authorized by applicable local regulations and supported by a reasonable amount of evidence"].)

While a local government may regulate the placement of WCFs based on aesthetics, mere generalized concerns or opinions about aesthetics or compatibility with a neighborhood do not constitute substantial evidence upon which a local government could deny a permit. *See City of Rancho Palos Verdes v. Abrams*, 101 Cal. App. 4th 367, 381 (2002).

As set forth above, Verizon Wireless has provided substantial evidence to show that the Approved Facility complies with all requirements for approval under the Code. Among other evidence, photosimulations demonstrate the minimal visual impacts of the disguised treepole placed among established trees that provide ample screening. The H&E RF Study confirms that emissions from the Approved Facility will comply with

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FCC guidelines, and the H&E Noise Study confirms compliance with noise standards of the El Dorado County General Plan.

In contrast, Appellant has provided no evidence – let alone the substantial evidence required by federal law – to support denial of the Approved Facility. We respond briefly below to the points raised in the appeal, which fall into four general categories. As we will explain, none are supported by substantial evidence.

A. The Approved Facility Meets all Code Requirements.

Appellant's first, second, fourth and fifth grounds for appeal question the location and appearance of the Approved Facility, but Verizon Wireless has worked with the County to design a facility that minimizes visual impacts and complies with Code requirements. Staff has confirmed that use of privately-maintained One Eye Creek Road is a matter among neighboring property owners and not part of the Board's review. As noted above, the Approved Facility exceeds the 30-foot setback requirement of the RL zone, and Verizon Wireless has obtained a use permit as required under Code §130.40.130(B)(6)(b) for new towers within 500 feet of residences. While not a Code requirement, the Alternatives Analysis confirms that the Approved Facility is the least intrusive alternative to fill the significant gap and that distant locations in El Dorado National Forest cannot serve the gap.

With respect to aesthetics, the Approved Facility is disguised as a pine tree that will blend into the forested surroundings per Code requirements. To further minimize visual impacts, it will be located over the crest of a hill as viewed from developed areas and is set back over 100 feet from One Eye Creek Road. Photosimulations confirm the minimal visual impacts of the Approved Facility. These grounds for appeal have no basis in reality and must be rejected.

B. The County Will Ensure the Approved Facility Complies with Building and Safety Codes.

Appellant's third ground for appeal expresses an alarmist concern over tower collapse, fire, and explosion, but Staff has confirmed that the Mosquito Fire Protection District reviewed the project with no concerns. In fact, the Fire Protection District supports the Approved Facility. Furthermore, the El Dorado County Building Department will review and inspect the facility to ensure compliance with all building and safety codes prior to operation. This ground for appeal does not raise any considerations relevant to the zoning ordinance and must be rejected.

C. The Alleged Impacts of RF Emissions Have No Bearing on the County's Decision.

Appellant's sixth and seventh grounds for appeal raise unfounded concerns over the health effects of RF emissions. This issue is entirely preempted by federal law. As noted above, the TCA expressly prohibits local governments from considering any

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alleged health or environmental effects of RF emissions so long as a proposed wireless facility complies with FCC limits on such emissions. Here, there is no dispute that the Approved Facility will comply with those limits, as the H&E RF Study confirms. Indeed, the study concludes that the maximum exposure anywhere accessible at ground level from the Approved Facility will be only 0.55% – or 180 times below – the FCC public limit. Thus, there is no dispute that federal preemption applies here.

Moreover, federal preemption goes beyond decisions that are explicitly based on RF emissions. It also bars efforts to skirt such preemption through some proxy such as property values. *See, e.g., AT&T Wireless Servs. of Cal. LLC v. City of Carlsbad,* 308 F. Supp. 2d 1148, 1159 (S.D. Cal. 2003) (in light of federal preemption, "concern over the decrease in property values may not be considered as substantial evidence if the fear of property value depreciation is based on concern over the health effects caused by RF emissions"); *Calif. RSA No. 4, d/b/a Verizon Wireless v. Madera County,* 332 F. Supp. 2d 1291, 1311 (E.D. Cal. 2003) ("complaints about property values were really a proxy for concerns about possible environmental effects of RF [emissions], which cannot provide the basis to support a decision"). Where, as here, a WCF has been shown to comply with FCC guidelines, neither health concerns nor any proxy for health concerns can justify denial of the Approved Facility. In short, this ground for the appeal must be rejected.

D. The Approved Facility Poses No Significant Environmental Impacts.

Appellant's eighth, ninth and tenth grounds for appeal raise unfounded concerns over environmental impacts, but Staff has confirmed that the Approved Facility will have no significant environmental impacts. Specifically, there is no naturally occurring asbestos in the area (nor will the project introduce any), no important biological corridor or protected wildlife species are found on the site, and the Approved Facility will pose no impediment to wildlife movement. If construction occurs between February 1 and September 1, Verizon Wireless will take appropriate measures to protect any bat roosts or raptor nests identified on the site. Environmental impacts from the tower and equipment areas will be minimal, as these areas will occupy only 569 square feet of a nearly 40 acre parcel. In short, the project will have no significant potential environmental impacts, and these grounds for appeal must be rejected.

V. Approval is Required in Order to Avoid Unlawful Prohibition of Service.

A local government's denial of a permit for a wireless facility violates the "effective prohibition" clause of the TCA if the wireless provider can show two things: (1) that it has a "significant gap" in service; and (2) that the proposed facility is the "least intrusive means," in relation to the land use values embodied in local regulations, to address the gap. *See T-Mobile USA, Inc. v. City of Anacortes,* 572 F.3d 987 (9th Cir. 2009); *see also T-Mobile West Corp. v. City of Agoura Hills*, 2010 U.S. Dist. LEXIS 134329 (C.D. Cal. 2010).

If a provider demonstrates both the existence of a significant gap, and that the proposed facility meets the "least intrusive means" standard, the local government *must*

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approve the facility, even if there is substantial evidence to deny the permit under local land use provisions. This is because the provider has met the requirements for federal preemption; i.e., denial of the permit would "have the effect of prohibiting the provision of personal wireless services." 47 U.S.C. §332(c)(7)(B)(1)(ii); *T-Mobile v. Anacortes,* 572 F.3d at 999. To avoid such preemption, the local government must show that another alternative is available, technologically feasible, and less intrusive than the proposed facility. *T-Mobile v. Anacortes*, 572 F.3d at 998-999.

A. Verizon Wireless Has Demonstrated a Significant Gap in Service.

Verizon Wireless has identified a significant gap in coverage in the Mosquito area, including the Swansboro community. The significant gap is described in *the Statement of Radio Frequency Design Engineer Linda Lascano* attached as Exhibit E (the "RF Engineer's Statement"). As shown through coverage maps included in the RF Engineer's Statement, there is a significant gap in Verizon Wireless coverage in the vicinity. This affects local residents and visitors as well as communication with emergency response personnel. The importance of improved wireless service in the area is affirmed by the support of the Mosquito Fire Protection District.

B. The Approved Facility is the Least Intrusive Means to Fill the Significant Gap in Service.

In an effort to address the significant gap, Verizon Wireless evaluated seven locations as shown in the comprehensive Alternatives Analysis attached as Exhibit F. Verizon Wireless discounted locations that were infeasible, cannot serve the significant gap or are more intrusive. The Alternatives Analysis confirms that the Approved Facility is the least intrusive means of providing wireless service to the significant gap.

When comparing the locations of the Approved Facility to other potential alternatives, it is important to note that federal law does not require that a site be the "only" alternative, but rather that no feasible alternative is less intrusive than the Approved Facility. *MetroPCS v. San Francisco*, 400 F.3d at 734-35. In this case, as explained in the Alternatives Analysis, there is no feasible location that would be less intrusive.

In short, Verizon Wireless has identified a significant gap in coverage and has shown that the Approved Facility is the least intrusive means to address it, based on the values expressed in the Code. Under these circumstances, Verizon Wireless has established the requirements for federal preemption such that denial of the permit would constitute an unlawful prohibition of service.

Conclusion

Verizon Wireless has worked diligently to identify the ideal location and design for a camouflaged wireless facility to serve the Mosquito area. The Approved Facility is consistent with all Code requirements and meets all findings for issuance of a use permit.

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It also represents the least intrusive means to address a significant gap in Verizon Wireless coverage. Bringing improved Verizon Wireless service to this area is essential to reliable communications with emergency services providers, and to the health, safety, and welfare of residents and visitors in the surrounding community. We strongly encourage you to affirm the Planning Commission's approval and deny the appeal.

Very truly yours,

Paul B. Albritton

cc: David Livingston, Esq.
Aaron Mount

Schedule of Exhibits

Exhibit A: Support Letter from Mosquito Fire Protection District
Exhibit B: Photosimulations
Exhibit C: H&E RF Study
Exhibit D: H&E Noise Study
Exhibit E: RF Engineer's Statement
Exhibit F: Alternatives Analysis

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Exhibit A

MOSQUITO FIRE PROTECTION DISTRICT
8801 ROCK CREEK ROAD
PLACERVILLE, CA 95667
(530) 626-9017
Fax (530) 626-3240

February 5, 2016

To Whom It May Concern,

I wish to express my support for the proposed Verizon communications tower to be located on APN 085-010-06 One Eye Creek Road. I believe this project with serve the best interests of the Mosquito Fire Protection District personnel, as well as its residents and visitors. This project will improve communications, not only with the fire district, but for those Verizon and possibly other cellular customers in the future.

Sincerely,

Mike Hazlett
Fire Chief – Mosquito Fire Protection District

Exhibit B

Existing

Proposed

view from Eye Creek Road looking north at site

AdvanceSim
Photo Simulation Solutions
Contact (925) 202-8507

verizon

285387 Swansboro ***4-19-2016***
1 Eye Creek Road, Placerville, CA

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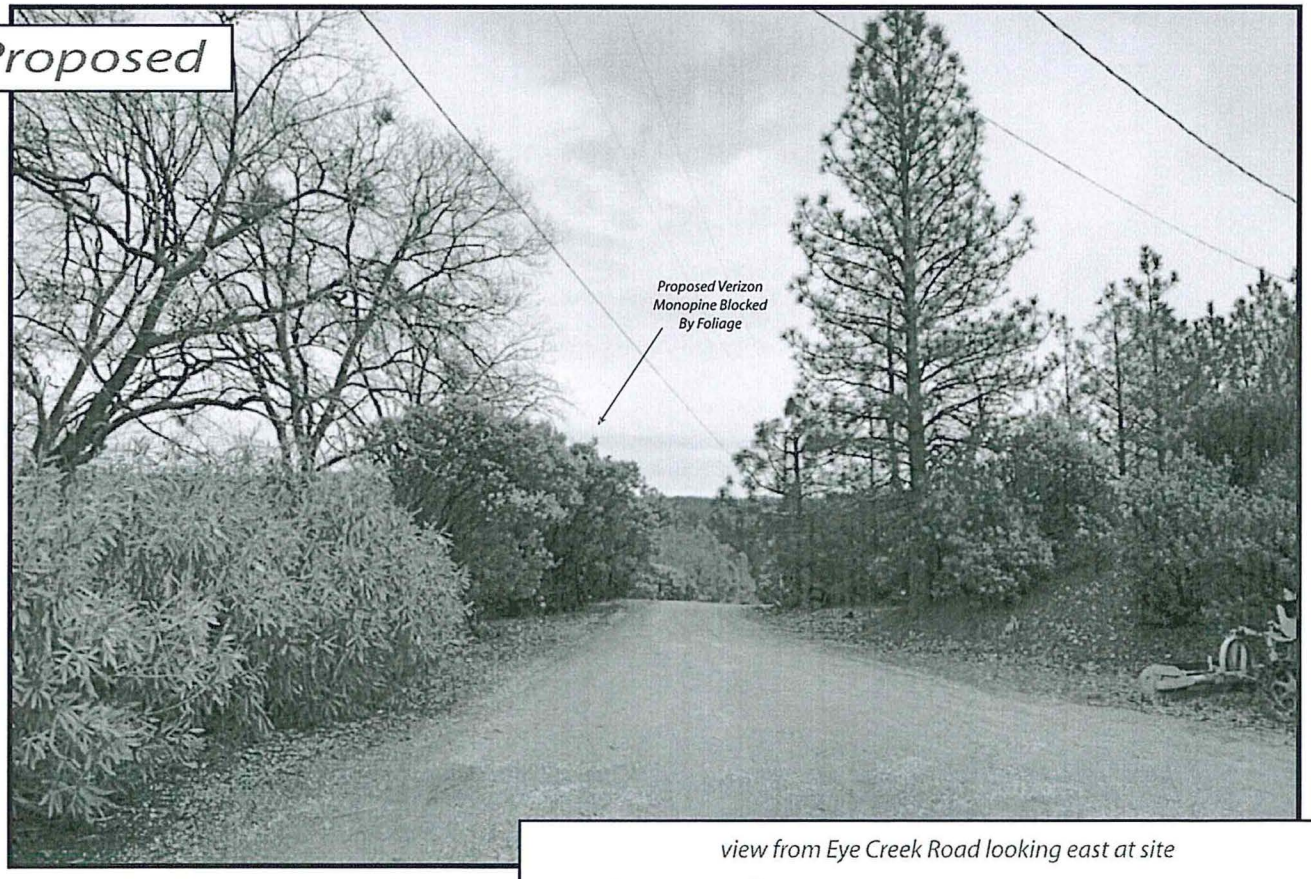
Existing

Proposed



AdvanceSim
Photo Simulation Solutions
Contact (925) 202-8507

view from Eye Creek Road looking east at site

verizon

285387 Swansboro ***4-19-2016***
1 Eye Creek Road, Placerville, CA

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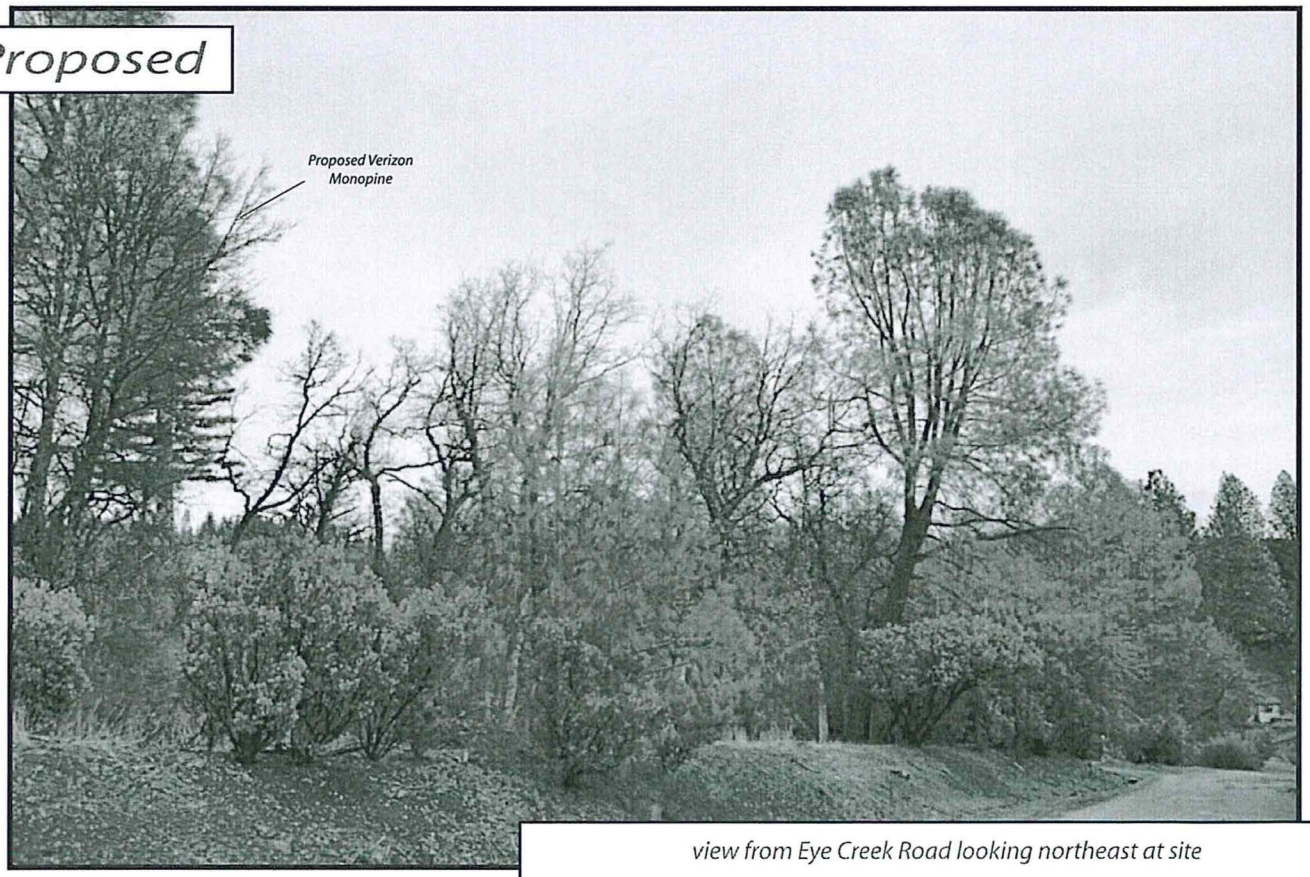
Existing

Proposed



view from Eye Creek Road looking northeast at site

285387 Swansboro **4-19-2016**
1 Eye Creek Road, Placerville, CA

verizon

AdvanceSim
Photo Simulation Solutions
Contact (925) 202-8507

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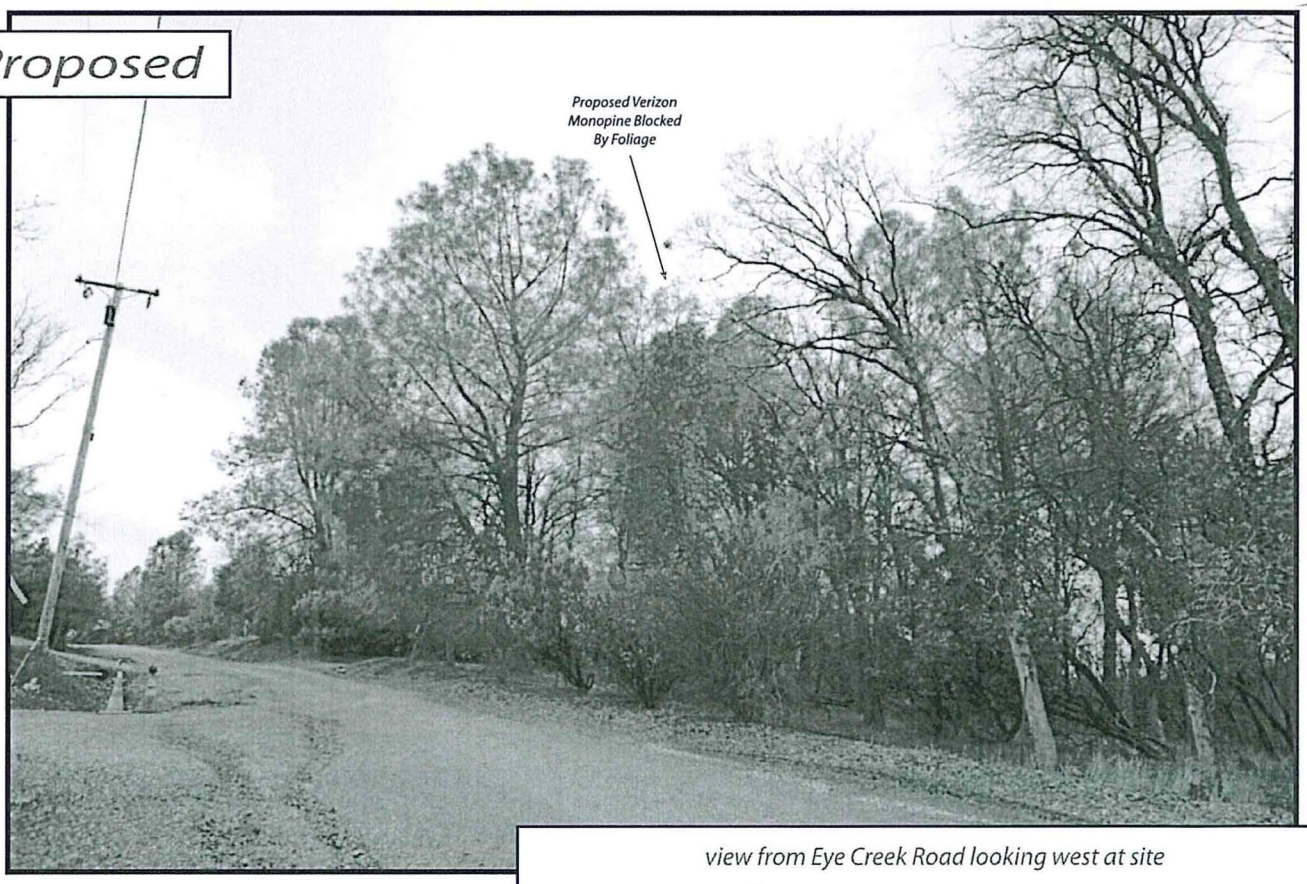
Existing

Proposed



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view from Eye Creek Road looking west at site

verizon

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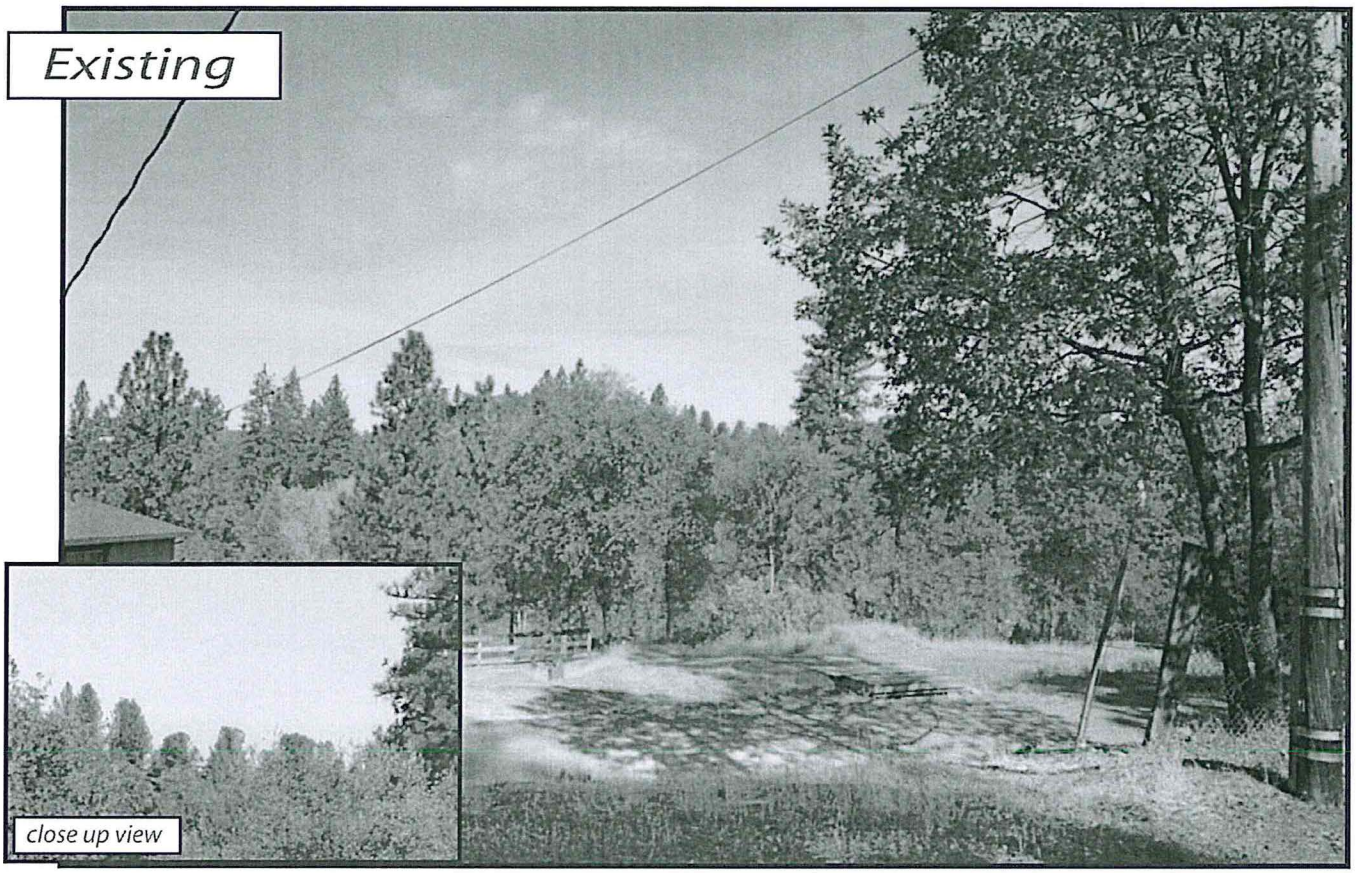

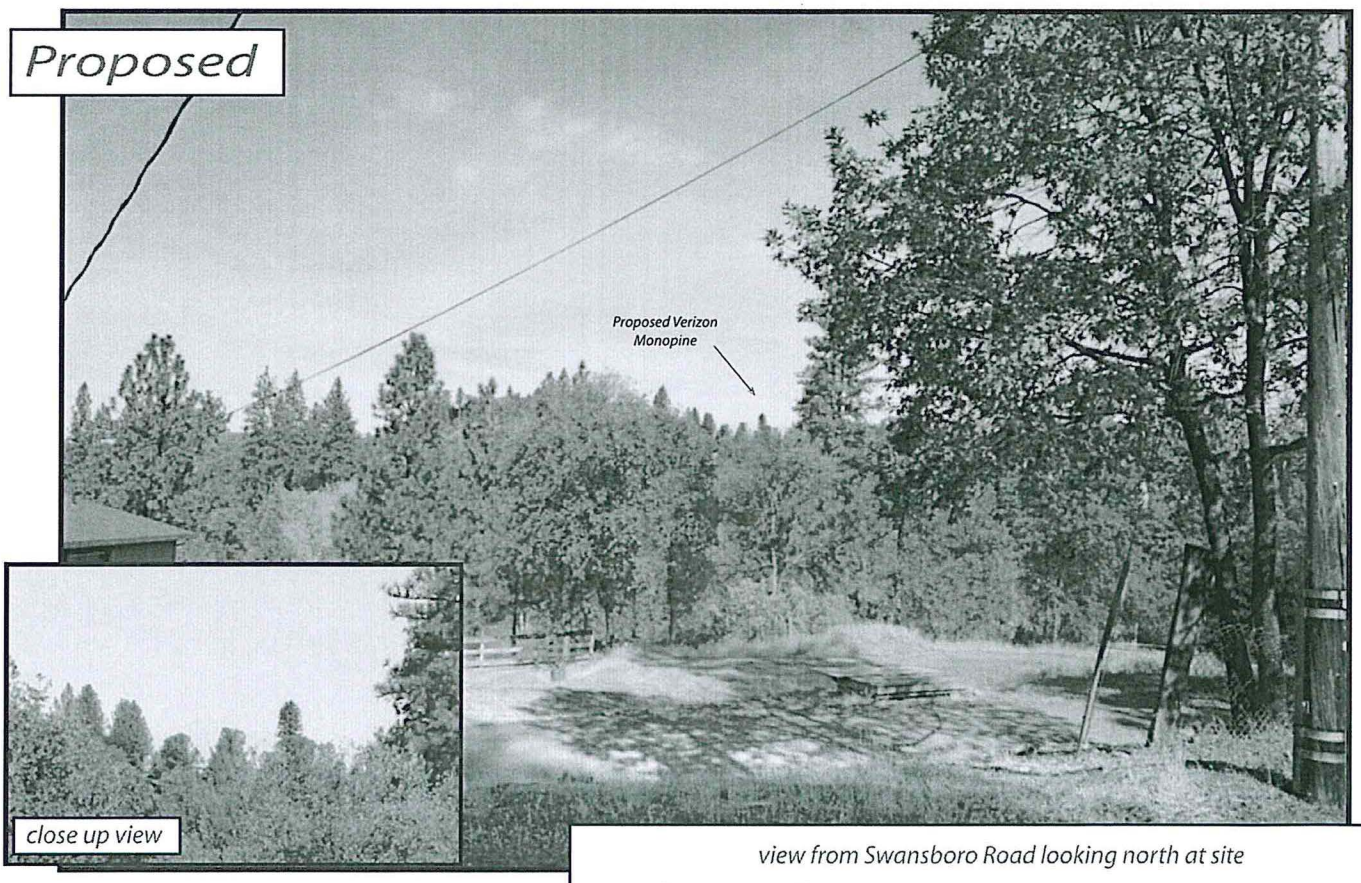

view from Swansboro Road looking north at site

verizon

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1 Eye Creek Road, Placerville, CA

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Verizon Wireless • Proposed Base Station (Site No. 285387 "Swansboro")
One Eye Creek Road • Placerville, California

Exhibit C

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. 285387 "Swansboro") proposed to be located at One Eye Creek Road in Placerville, California, for compliance with appropriate guidelines limiting human exposure to radio frequency ("RF") electromagnetic fields.

Executive Summary

Verizon proposes to install directional panel antennas on a tall pole, configured to resemble a pine tree, to be sited north of One Eye Creek Road in Placerville. The proposed operation will comply with the FCC guidelines limiting public exposure to RF energy.

Prevailing Exposure Standards

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

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

General Facility Requirements

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

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

Computer Modeling Method

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

Site and Facility Description

Based upon information provided by Verizon, including zoning drawings by Borges Architectural Group, Inc, dated December 23, 2015, it is proposed to install six Andrew Model SBNHH-1D65B directional panel antennas on a new 104-foot steel pole, configured to resemble a pine tree, to be sited up the hill, north of One Eye Creek Road in the Placerville area of unincorporated El Dorado County. The antennas would employ no downtilt, would be mounted at an effective height of about 100 feet above ground, and would be oriented in pairs toward 90°T, 180°T, and 270°T. The maximum effective radiated power in any direction would be 11,850 watts, representing simultaneous operation at 4,330 watts for AWS, 3,980 watts for PCS, 2,320 watts for cellular, and 1,220 watts for 700 MHz service. Also proposed to be located on the same pole are two microwave antennas, 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 antennas, is calculated to be 0.0053 mW/cm^2, which is 0.55% of the applicable public exposure limit. The maximum calculated level at the second-floor elevation of any nearby building, including the residences to the south, is 0.21% of the public exposure limit. It should be noted that these results include several "worst-case" assumptions and therefore are expected to overstate actual power density levels from the proposed operation.

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No Recommended Mitigation Measures

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

Conclusion

Based on the information and analysis above, it is the undersigned's professional opinion that operation of the base station proposed by Verizon Wireless at One Eye Creek Road in Placerville, California, will comply with the prevailing standards for limiting public exposure to radio frequency energy and, therefore, will not for this reason cause a significant impact on the environment. The highest calculated level in publicly accessible areas is much less than the prevailing standards allow for exposures of unlimited duration. This finding is consistent with measurements of actual exposure conditions taken at other operating base stations.

Authorship

The undersigned author of this statement is a qualified Professional Engineer, holding California Registration Nos. E-13026 and M-20676, which expire on June 30, 2017. This work has been carried out under his direction, and all statements are true and correct of his own knowledge except, where noted, when data has been supplied by others, which data he believes to be correct.

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

February 16, 2016

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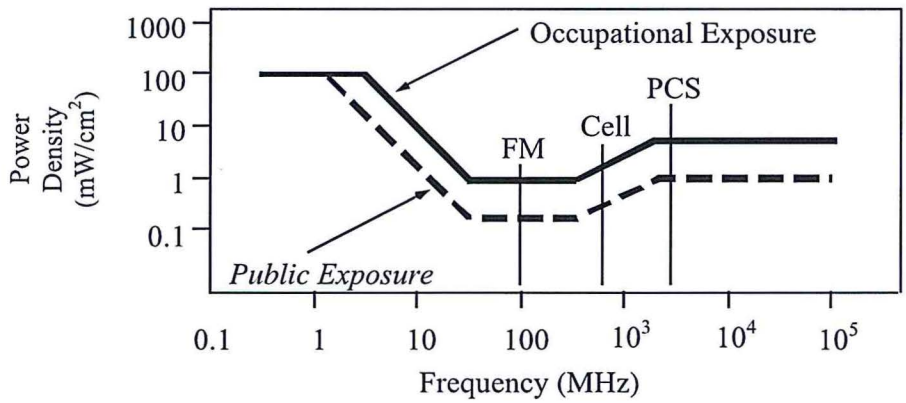
FCC Radio Frequency Protection Guide

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

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

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



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

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RFR.CALC™ Calculation Methodology

Assessment by Calculation of Compliance with FCC Exposure Guidelines

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

Near Field.

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

For a panel or whip antenna, power density $S = \frac{180}{\theta_{BW}} \times \frac{0.1 \times P_{net}}{\pi \times D \times h}$, in mW/cm^2,

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

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.

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Verizon Wireless • Proposed Base Station (Site No. 285387 "Swansboro")
One Eye Creek Road • Placerville, California

Exhibit D

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 telecommunications carrier, to evaluate the base station (Site No. 285387 "Swansboro") proposed to be located at One Eye Creek Road in the Placerville area of unincorporated El Dorado County, California, for compliance with appropriate guidelines limiting sound levels from the installation.

Executive Summary

Verizon proposes to install a new wireless telecommunications base station, consisting of equipment cabinets, a back-up generator, and antennas on a tall pole, to be sited at One Eye Creek Road in the Placerville area of unincorporated El Dorado County. Noise levels from the equipment operations will comply with the pertinent municipal noise limits.

Prevailing Standard

The County of El Dorado sets forth limits on sound levels in Chapter 6.5 (Acceptable Noise Levels) of the El Dorado County General Plan as amended March 2009. The Public Health, Safety, and Noise Element includes in Table 6-2 the following limits for hourly average noise caused by non-transportation sources:

Zone	Daytime	Evening	Night	Assessment Location
	7 am to 7 pm	*7 pm to 10 pm*	*10 pm to 7 am*	*on adjacent property*
Community	55 dBA	50 dBA	45 dBA	at property line
Rural	50 dBA	45 dBA	40 dBA	100 ft from residence

The operation of the back-up power generator during an emergency, when commercial power is unavailable, is considered to be exempt from these limits; however, for the purpose of this study, the generator's operation during periodic, no-load testing is evaluated for compliance.

Figure 1 attached describes the calculation methodology used to determine applicable noise levels for evaluation against the prevailing standard.

General Facility Requirements

Wireless telecommunications facilities ("cell sites") typically consist of two distinct parts: the electronic base transceiver stations ("BTS" or "cabinets") that are connected to traditional wired telephone lines, and the antennas that wireless signals created by the BTS out to be received by individual subscriber units. The BTS are often located outdoors at ground level and are connected to the antennas by coaxial cables. The BTS typically require environmental units to cool the electronics

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inside. Such cooling is often integrated into the BTS, although external air conditioning may be installed, especially when the BTS are housed within a larger enclosure.

Most cell sites have back-up battery power available, to run the base station for some number of hours in the event of a power outage. Many sites have back-up power generators installed, to run the station during an extended power outage.

Site & Facility Description

Based upon information provided by Verizon, including zoning drawings by Borges Architectural Group, Inc., dated December 23, 2015, that carrier proposes to install several equipment cabinets and a back-up power generator on a steel platform within a fenced compound to be constructed on the property (land use designated as "natural resources") located at One Eye Creek Road in the Placerville area of unincorporated El Dorado County. For the purpose of this study, the four equipment cabinets with active cooling fans are assumed to be one CUBE Model SS4C215XC1, one CUBE Model PM63912JF1, and two Ericsson Model RBS6101.

A back-up diesel generator is to be installed within the compound, for emergency use in the event of an extended commercial power outage. The generator, either a Generac Model SD030 or a Polar Power Model 8340Y-3TNV88-001, is typically operated with no load for a single 15-minute period once a week during daytime hours on a weekday, to maintain its readiness for emergency operation.

Several directional panel antennas are proposed to be located on a tall pole to be sited within the compound; this portion of the base station is passive, generating no noise. The nearest property lines are to the south and east, about 100 feet and 30 feet from the compound, respectively. The nearest residence to the east is about 490 feet from the compound.

Based on review of the pertinent map in the County's General Plan, the proposed site is not within an identified "Community" area, so the "Rural" noise limits are used for this assessment.

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Study Results

Information provided by the manufacturers gives the following maximum noise levels from the proposed equipment:

Equipment	Maximum Noise Level	Reference Distance
CUBE SS4C215XC1	67.3 dBA	1.5 meters
CUBE PM63912JF1	62 dBA	1.5 meters
Ericsson RBS6101	53 dBA	1 meter
generator	≤ 64.7 dBA	23 feet

At the property line to the south, the maximum calculated noise level, for hypothetical, continuous operation of all fans in all four cabinets during daytime hours, is 41.2 dBA, meeting the County's "rural" daytime limit of 50 dBA. On the day on which the generator is tested, the maximum calculated noise level is 46.7 dBA, still meeting the County's daytime noise limit. The maximum calculated noise level for hypothetical operation of all fans in all four cabinets during the night, assuming they operate only 50% of the time, when ambient temperatures are lower, is 38.2 dBA, meeting the County's nighttime limit of 40 dBA.

At a distance of 390 feet to the east (100 feet short of nearest residence, as specified by the County's General Plan), the maximum calculated noise level, for hypothetical, continuous operation of all fans in all four cabinets is 30.5 dBA. On the day on which the generator is tested, the maximum calculated noise level is 35.7 dBA. Both levels meet the County's most restrictive daytime and nighttime limits of 50 and 40 dBA, respectively.

Conclusion

Based on the information and analysis above, it is the undersigned's professional opinion that the operation of the Verizon Wireless base station proposed to be located at One Eye Creek Road in the Placerville area of unincorporated El Dorado County, California, will comply with the County's requirements for limiting acoustic noise emission levels.

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Verizon Wireless • Proposed Base Station (Site No. 285387 "Swansboro")
One Eye Creek Road • Placerville, 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, 2017. This work has been carried out under his direction, and all statements are true and correct of his own knowledge except, where noted, when data has been supplied by others, which data he believes to be correct.

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

February 12, 2016

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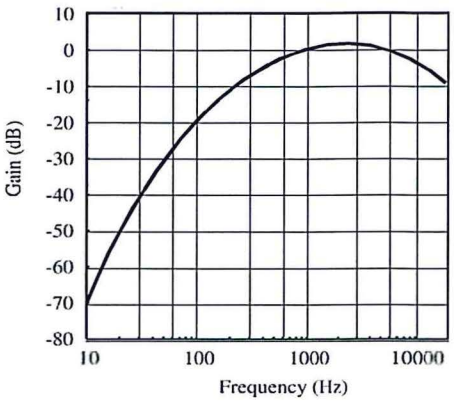
Noise Level Calculation Methodology

Most municipalities and other agencies specify noise limits in units of dBA, which is intended to mimic the reduced receptivity of the human ear to Sound Pressure ("L_P") at particularly low or high frequencies. This frequency-sensitive filter shape, shown in the graph to the right as defined in the International Electrotechnical Commission Standard No. 179, the American National Standards Institute Standard No. 5.1, and various other standards, is also incorporated into most calibrated field test equipment for measuring noise levels.



30 dBA	library
40 dBA	rural background
50 dBA	office space
60 dBA	conversation
70 dBA	car radio
80 dBA	traffic corner
90 dBA	lawnmower

The dBA units of measure are referenced to a pressure of 20 μPa (micropascals), which is the threshold of normal hearing. Although noise levels vary greatly by location and noise source, representative levels are shown in the box to the left.

Manufacturers of many types of equipment, such as air conditioners, generators, and telecommunications devices, often test their products in various configurations to determine the acoustical emissions at certain distances. This data, normally expressed in dBA at a known reference distance, can be used to determine the corresponding sound pressure level at any particular distance, such as at a nearby building or property line. The sound pressure drops as the square of the increase in distance, according to the formula:

$$L_P = L_K + 20 \log(D_K/D_P),$$

where L_P is the sound pressure level at distance D_p and L_K is the known sound pressure level at distance D_K.

Individual sound pressure levels at a particular point from several different noise sources cannot be combined directly in units of dBA. Rather, the units need to be converted to scalar sound intensity units in order to be added together, then converted back to decibel units, according to the formula:

where L_T is the total sound pressure level and L_1, L_2, etc are individual sound pressure levels.

$$L_T = 10 \log \left(10^{L_1/10} + 10^{L_2/10} + \ldots\right),$$

Certain equipment installations may include the placement of barriers and/or absorptive materials to reduce transmission of noise beyond the site. Noise Reduction Coefficients ("NRC") are published for many different materials, expressed as unitless power factors, with 0 being perfect reflection and 1 being perfect absorption. Unpainted concrete block, for instance, can have an NRC as high as 0.35. However, a barrier's effectiveness depends on its specific configuration, as well as the materials used and their surface treatment.

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Exhibit E

verizon
3257 North Marks Avenue
Fresno, California 93722

May 26, 2016

To: El Dorado County Board of Supervisors

From: Linda Lascano, Radio Frequency Design Engineer
Verizon Wireless Network Engineering Department

Subject: Statement in Support of Verizon Wireless's Proposed Telecommunications Facility, One Eye Creek Road

Executive Summary

Verizon Wireless seeks to fill a significant gap in its wireless services in the Mosquito area of El Dorado County which includes the Swansboro community. This area currently receives inadequate service from existing Verizon Wireless facilities located over 4 miles south of the proposed facility near Highway 50. There are no facilities to the north and east in El Dorado National Forest, nor any facilities to the west that serve the area.

As a result of the distance of existing facilities and intervening topography, there is an absence of LTE in-building service coverage in the Mosquito area as well as areas lacking LTE in-vehicle coverage and areas lacking reliable outdoor service. The coverage gap described below constitutes the "significant gap" Verizon Wireless seeks to serve (the "Significant Gap"). To provide new reliable LTE coverage in the Mosquito area, the Significant Gap must be remedied through construction of new infrastructure, in this case, a facility disguised as a tree north of One Eye Creek Road (the "Proposed Facility").

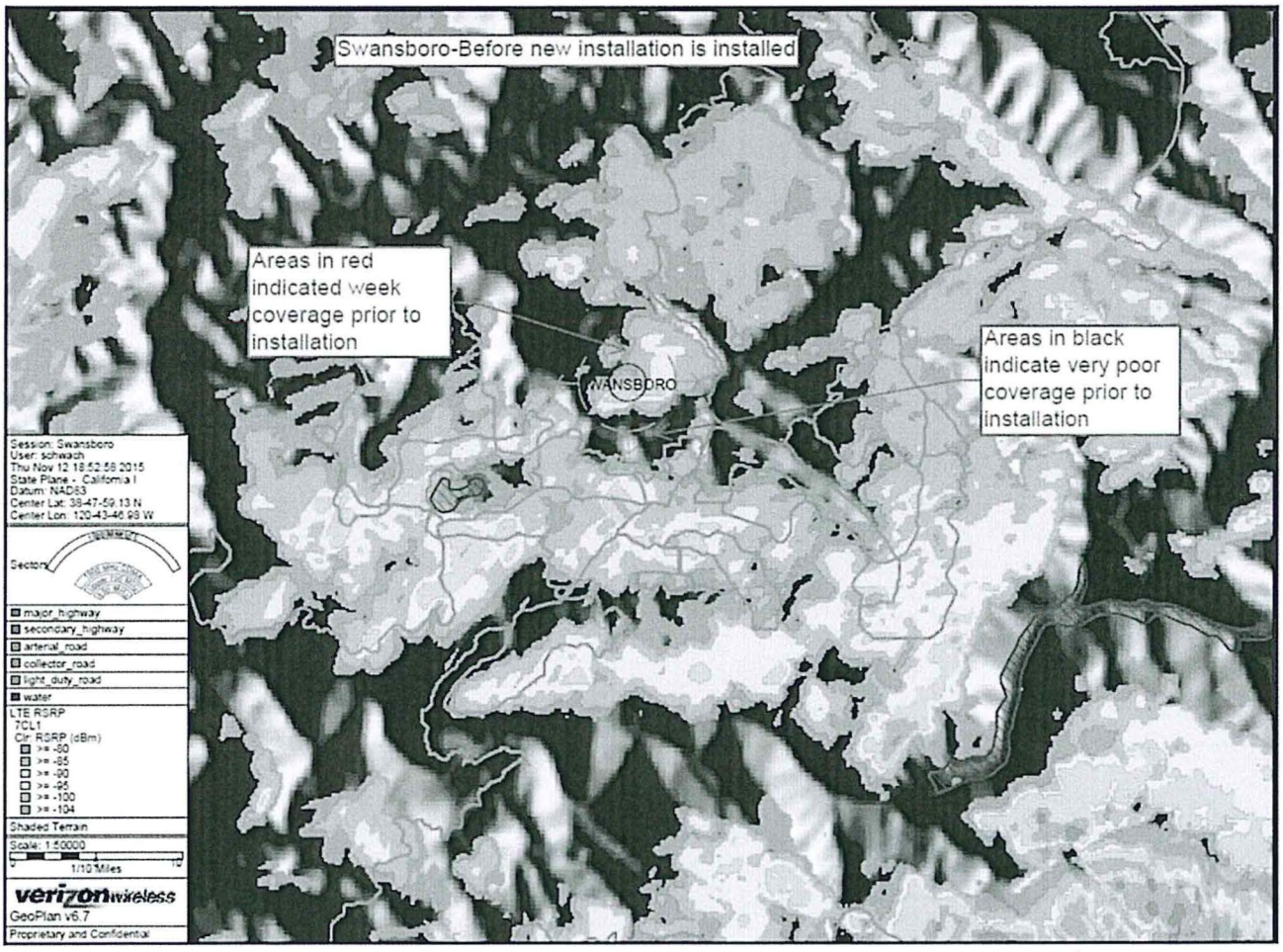
Coverage Gap

Verizon Wireless is experiencing a broad gap in LTE coverage in the Mosquito area, including the Swansboro community and other residential areas in the Mosquito Creek valley. There are only a few isolated pockets of reliable LTE in-building coverage in this area, and most of the area lacks reliable LTE in-vehicle service. In particular, important roadways experiencing unreliable LTE in-vehicle service include portions of Mosquito Road, with 1,133 vehicle trips per day.[1] Other areas of the gap receive service levels too unreliable for outdoor use. (Collectively, the "Coverage Gap.") A graphic description of the current Coverage Gap is shown in the map below. The Proposed Facility will provide new reliable LTE service to an area of approximately 7.4 square miles and a population of 1,262 residents.

[1] El Dorado County Community Development Agency Transportation Division.

Coverage plot maps like that below provide important information regarding the anticipated level of LTE signal, and therefore the projected coverage provided by a site at a given location. The areas in green reflect good coverage that meets or exceed thresholds to provide consistent and reliable network coverage in vehicles and in homes. The areas in yellow, orange and red depict decreasing levels of coverage, respectively, with yellow areas generally representing reliable in-vehicle coverage, and orange and red areas depicting poor service areas with marginal coverage unsuitable for in-vehicle use. Areas in black represent unreliable service levels or a lack of service.

Current LTE Coverage Map



Conclusion

The lack of Verizon Wireless LTE 4G service in the Mosquito area constitutes a Significant Gap in Verizon Wireless service. LTE 4G service is necessary to provide 4G data and voice services which are currently unavailable to Verizon Wireless customers in the area. Verizon Wireless must deploy the Proposed Facility to provide needed LTE 4G services required by its customers in the

Mosquito area, particularly as Verizon Wireless migrates its network from 3G to 4G network services.

Please feel free to contact me with any questions or comments regarding Verizon Wireless's proposed facility.

Respectfully submitted,

Linda Lascano

Linda Lascano
RF Design Engineer

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Exhibit F

verizon

Verizon Wireless Alternatives Analysis

Swansboro
One Eye Creek Road

May 26, 2016

Summary of Site Evaluations
Conducted by Epic Wireless Group Inc.
Compiled by Mackenzie & Albritton LLP

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I. Executive Summary

Verizon Wireless seeks to fill a significant gap in its coverage in the Mosquito area of El Dorado County. Based on a review of alternatives as set forth in the following analysis, Verizon Wireless believes that placing antennas on a wireless tower disguised to resemble a pine tree on a large forested non-residential parcel (the "Proposed Facility") constitutes the least intrusive alternative to provide service to the identified gap based on the values expressed in El Dorado County Ordinance Code (the "Code").

II. Significant Gap

There is a significant gap in Verizon Wireless coverage in the Mosquito area, including the Swansboro community. Due to distance and intervening topography, existing Verizon Wireless facilities over four miles distant near Highway 50 provide inadequate service to the Mosquito area, and Verizon Wireless must place a new facility in the vicinity of the Proposed Facility to provide service coverage for residents, visitors and emergency communications. The identified "significant gap" in network coverage is more fully described in the *Statement of Verizon Wireless Radio Frequency Engineer Linda Lascano* dated May 26, 2016.

III. Methodology

Once a significant gap has been determined, Verizon Wireless seeks to identify a location and design that will provide required coverage through the "least intrusive means" based upon the values expressed by local regulations. In addition to seeking the "least intrusive" alternative, sites proposed by Verizon Wireless must be feasible. In this regard, Verizon Wireless reviews the radio frequency propagation, elevation, grading requirements, height of any existing structures, available electrical and telephone utilities, access, available ground space, zoning and other critical factors such as a willing landlord in completing its site analysis.

The Code encourages façade- and roof-mounted facilities and collocation on existing structures or wireless towers. Code §130.40.130(A)(1)(a). The Development Services Director may issue an administrative permit for façade-mounted wireless facilities meeting certain standards as well as roof-mounted facilities meeting certain standards in commercial, industrial and research and development districts. Code §§130.40.130(B)(2), 130.40.130(B)(3). The Zoning Administrator may issue a minor use permit for collocations on existing wireless facilities meeting certain standards, collocations on non-building structures or public facilities such as water tanks meeting certain standards, and new towers and monopoles in commercial, industrial and research and development zones provided they are not located adjacent to state or scenic highways or within 500 feet of residential zones. Code §§130.40.130(B)(4), 130.40.130(B)(5), 130.40.130(B)(6)(a). All other wireless facilities, including new wireless towers and monopoles outside commercial, industrial and research development zones or within 500 feet of residential zones, are allowed with a use permit issued by the Planning Commission. Code §§130.40.130(B)(6)(b), 130.40.130(B)(7). All wireless facilities must be screened with vegetation, and the Code encourages facilities disguised as features that blend with surroundings such as trees. Code §130.40.130(D)(1).

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IV. Analysis

Verizon Wireless sought locations with sufficient elevation for antennas to provide service to the Significant Gap. Per the Code's encouragement, Verizon Wireless first sought existing buildings suitable for placement of façade- or roof-mounted facility that could be permitted administratively, but identified no non-residential buildings with sufficient elevation. Verizon Wireless next sought existing wireless facilities in the area where collocation could be permitted with a minor use permit, but identified no such facilities in the Mosquito area. The closest existing wireless facility identified is located in El Dorado National Forest, and as described in the review of Alternative 4, a facility at this location cannot serve the Significant Gap.

Verizon Wireless also sought existing non-building structures and public facilities where collocation could be permitted with a minor use permit, but found no such facilities with sufficient elevation. Verizon Wireless next reviewed the vicinity for zones that allow a new wireless tower to be placed with a minor use permit. No industrial or research and development zones were identified in the vicinity, and the only commercially-zoned parcels are located in a few scattered CC (community commercial) zoning districts that not only lack sufficient elevation but are also within 500 feet of residential zones, requiring a use permit to place a new wireless tower.

Verizon Wireless next sought parcels with sufficient elevation for placement of a new tower with a use permit, reviewing the following locations, several of which were reviewed at the request of the Planning Commission.

Locations Along West End of One Eye Creek Road

Verizon Wireless radio frequency engineers determined that a facility placed in the vicinity of the west end of of One Eye Creek Road can provide excellent radio frequency propagation to serve the Significant Gap. Verizon Wireless explored the following three sites located along One Eye Creek Road.

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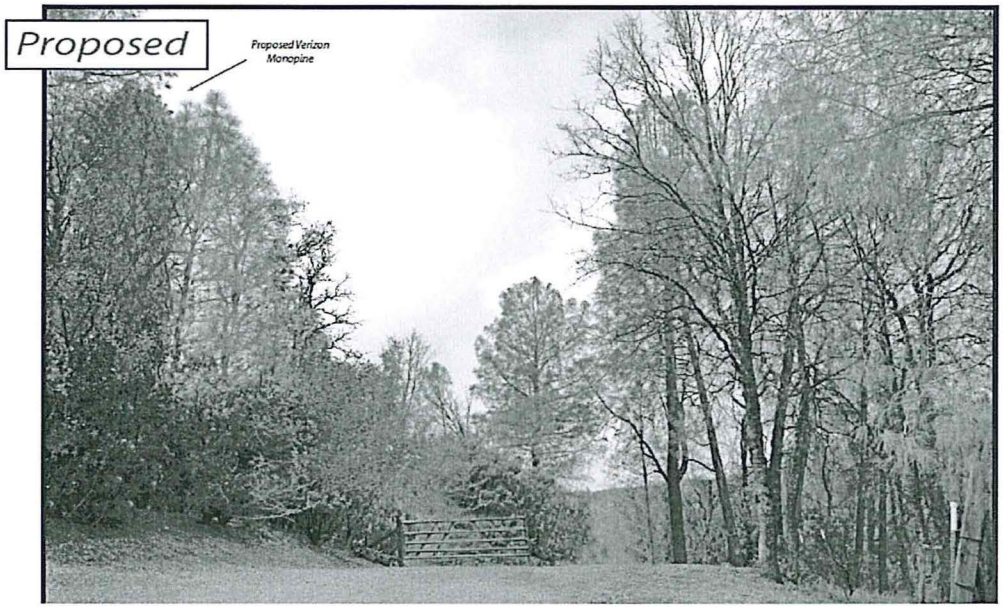
1. Proposed Facility

Address: Unaddressed Parcel, North Side of One Eye Creek Road
(APN 085-010-06-10)
Elevation: 2,660 feet
Zoning: RL-40



Verizon Wireless proposes to place its antennas on a 104 foot tower disguised as a pine tree. Antennas will be concealed within faux foliage and branches, and branches will extend an additional five feet above the tower, providing a realistic tapered appearance. Antennas will be covered with pine needle socks for further concealment. The treepole will be placed in a 321 square foot fenced area near a 248 square foot fenced equipment area which will contain radio cabinets. The equipment area is located adjacent to an existing access roadway on the parcel.

The Proposed Facility is located on a nearly 40 acre parcel zoned rural lands. Located on the north slope of the hill, this parcel has ample cover of established oak and pine trees that will provide screening of Verizon Wireless's treepole facility. Additionally, the Proposed Facility is located over the crest of the hill when viewed from the developed valley to the south, limiting views from the valley to only the topmost portion of the treepole. In response to comments provided by the County and community, Verizon Wireless has twice revised the location of the Approved Facility on the subject parcel, in each case to a location that further reduced visual impacts.

As shown in the following propagation map, the Proposed Facility will provide new coverage to the Mosquito area and fill the Significant Gap. At this location, all three of the Proposed Facility antenna sectors provide service to developed areas. This is Verizon Wireless's preferred location and design for the Proposed Facility.

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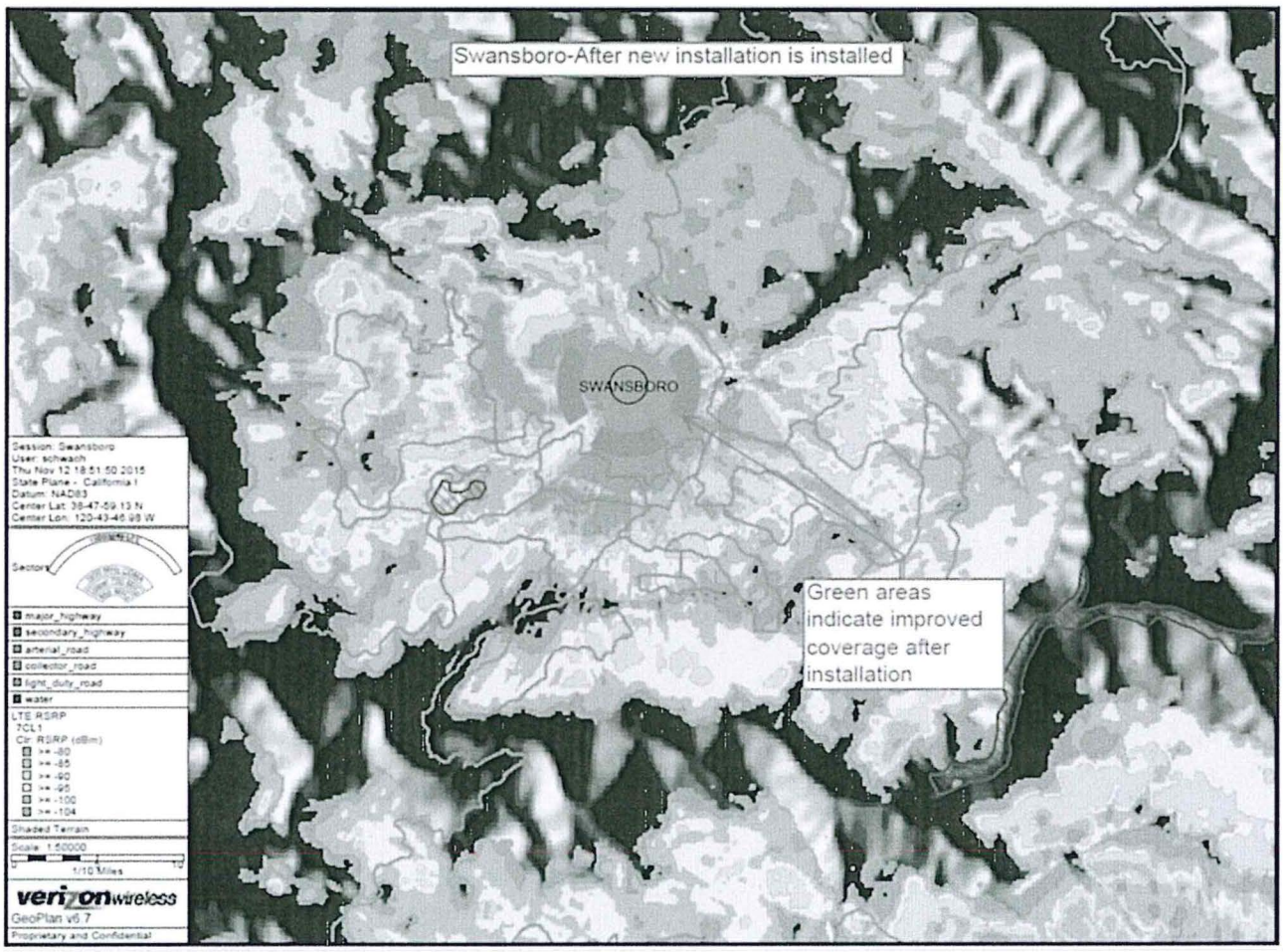
Coverage Provided by Proposed Facility
One Eye Creek Road



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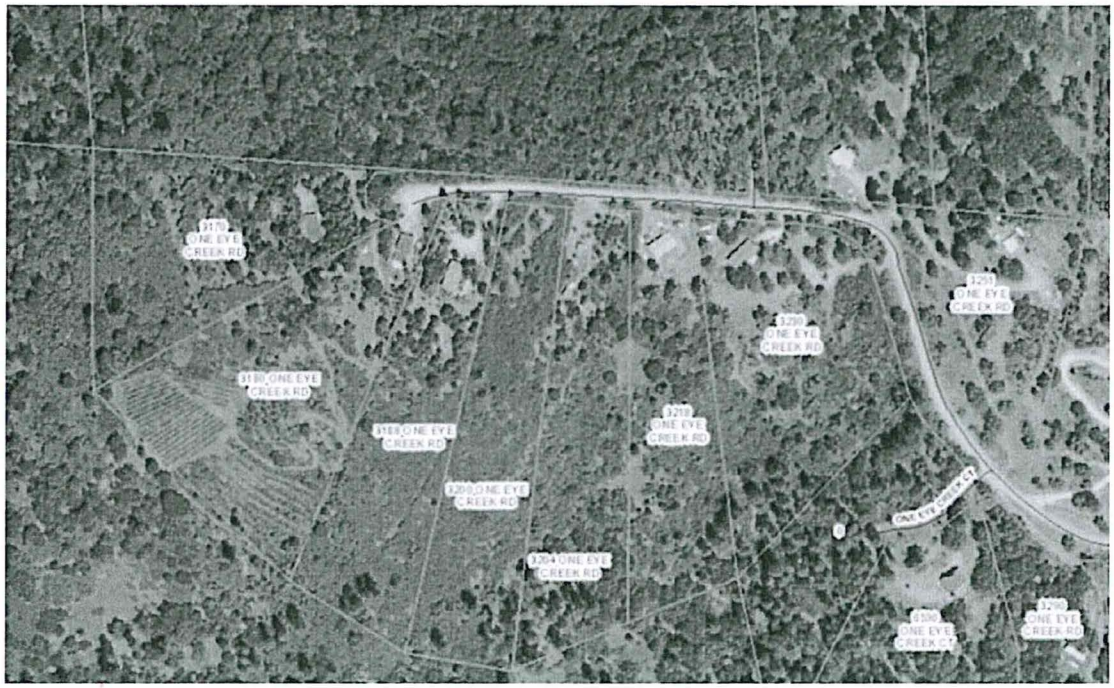
2. Parcels to South on South Side of One Eye Creek Road

Address: South Side of One Eye Creek Road
(3230-3270 One Eye Creek Road)
Elevation: Varying 2,745-2,520 Feet
Zoning: R3A



Verizon Wireless reviewed seven residentially-zoned parcels located south of One Eye Creek Road across from the Proposed Facility parcel. All of these parcels support residences with the exception of the unimproved parcel at 3200 One Eye Creek Road, which has no structures and no access roadway. The appellant of the Proposed Facility owns the parcel at 3230 One Eye Creek Road. Parcels such as these located on the south slope of the hill have sparse vegetation and tree cover, providing inadequate screening for a treepole facility. Additionally, these parcels are fully within view from the developed valley to the south, and a wireless facility would be exposed. These narrow parcels are steeply sloped, and Verizon Wireless was unable to identify suitable buildable areas, as the slopes would require substantial grading to provide a new access roadway, presenting additional environmental impacts. Due to greater visual and environmental impacts, none these parcels is a less intrusive alternative to the Proposed Facility.

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3. Adjacent Parcels to East on North Side of One Eye Creek Road

Address: North Side of One Eye Creek Road
(3237 and 3247 One Eye Creek Road)
Elevation: Varying 2,660-2,740 Feet
Zoning: RL-40

Verizon Wireless reviewed these parcels zoned rural lands located due east of the Proposed Facility parcel. Both of these parcels support residences. Verizon Wireless sent letters to each home owner expressing interest in placing a wireless facility on the property, but received no reply. Lacking a willing landlord, neither of these parcels is a feasible alternative to the Proposed Facility.

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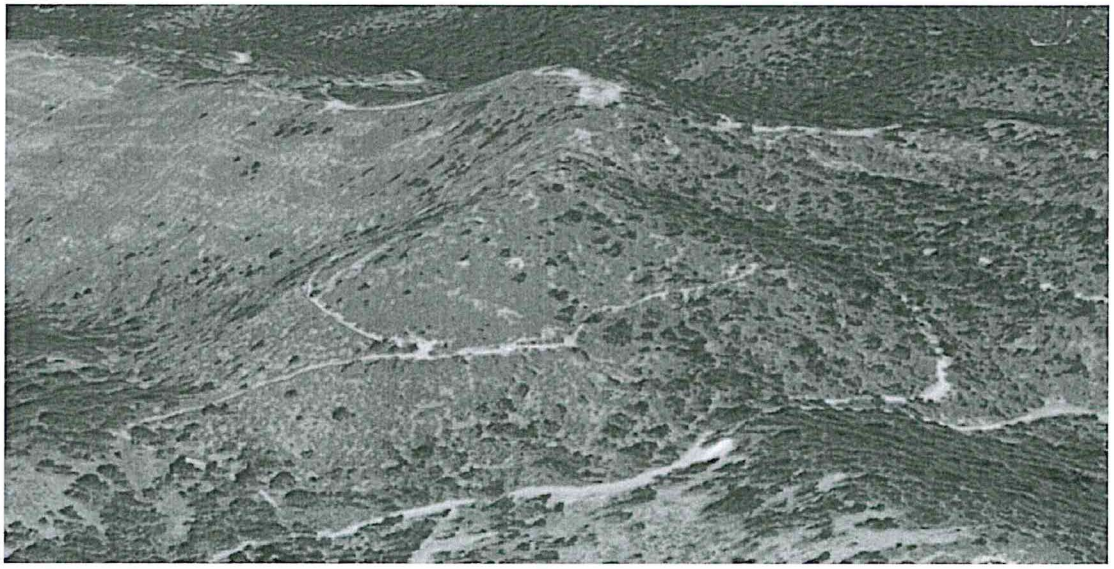
Locations Reviewed at Request of the Planning Commission

Verizon Wireless reviewed the following four locations at the request of the Planning Commission.

4. Slate Mountain
Address: West of Mosquito Road, El Dorado National Forest
Elevation: 3,900 Feet
Zoning: FR-160



Verizon Wireless reviewed this location in El Dorado National Forest 2.75 miles northeast of the Proposed Facility and 1,240 feet greater in elevation. There is currently a telecommunications facility at this location. Verizon Wireless radio frequency engineers determined that a facility at this location could not provide sufficient service to the Significant Gap, which lies entirely to the southwest, due to distance and intervening topography, including the hill on which the Proposed Facility is located. All demand would be concentrated in one antenna sector, constituting inefficient network design. As shown in the following coverage map, a facility at this location cannot provide in-building service to much of the gap area. Additionally, due to high elevation, a facility at this location would be a source of radio frequency interference with existing Verizon Wireless facilities serving the Placerville area to the southwest. Due to inability to serve the Significant Gap and interference issues, this is not a feasible alternative to the Proposed Facility.

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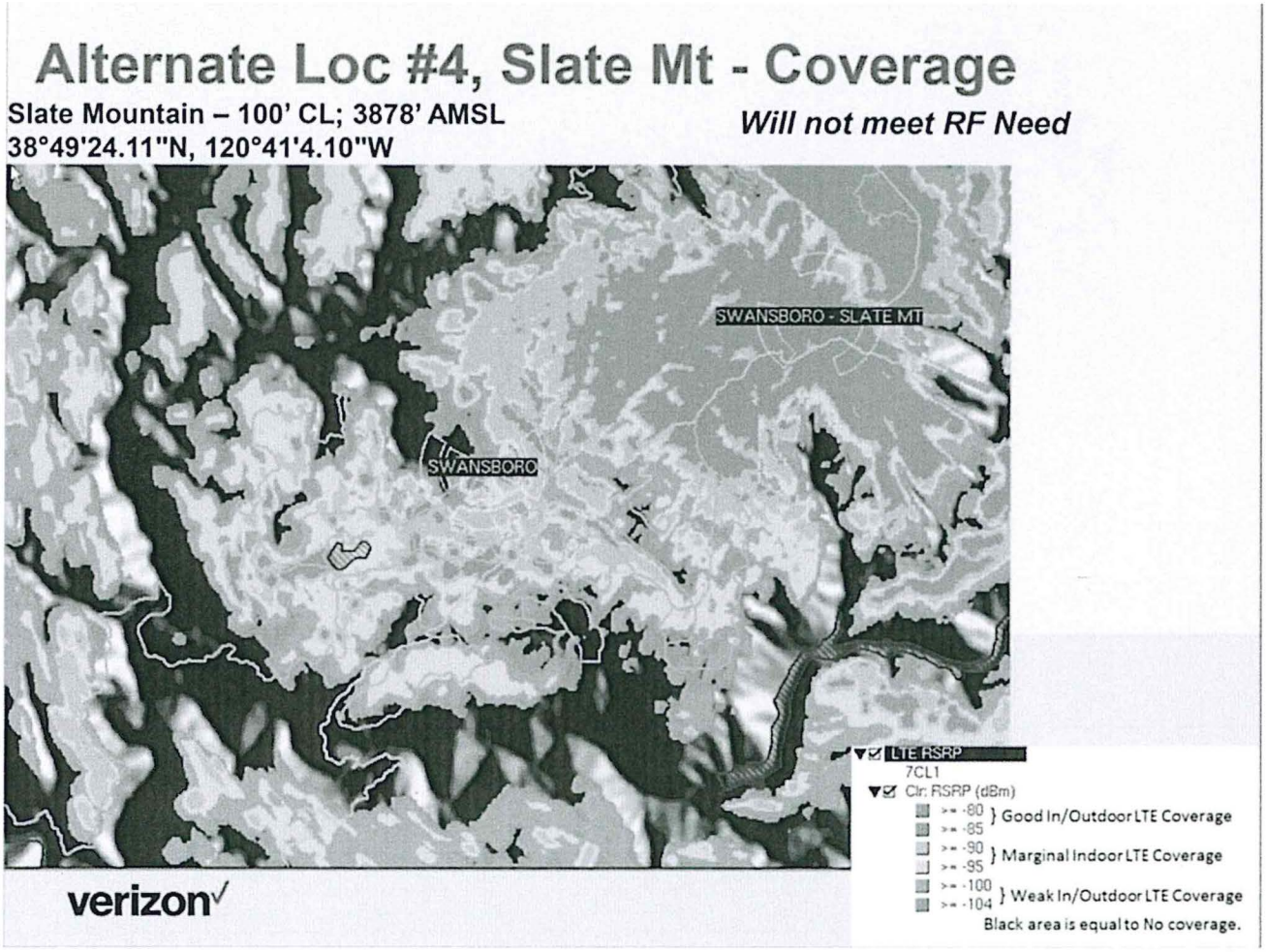
Coverage Provided by Facility at Slate Mountain



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5. Bald Mountain

Address: West of Rock Creek Road, El Dorado National Forest
Elevation: 3,360 Feet
Zoning: FR-160

Verizon Wireless reviewed this forest location in El Dorado National Forest five miles north of the Proposed Facility and 700 feet greater in elevation. Verizon Wireless radio frequency engineers determined that a facility at this location could not provide sufficient service to the Significant Gap which lies entirely to the south due to distance and intervening topography. All demand would be concentrated in one antenna sector, constituting inefficient network design. As shown in the following coverage map, a facility at this location cannot provide service to much of the gap area. Due to inability to serve the Significant Gap, this is not a feasible alternative to the Proposed Facility.

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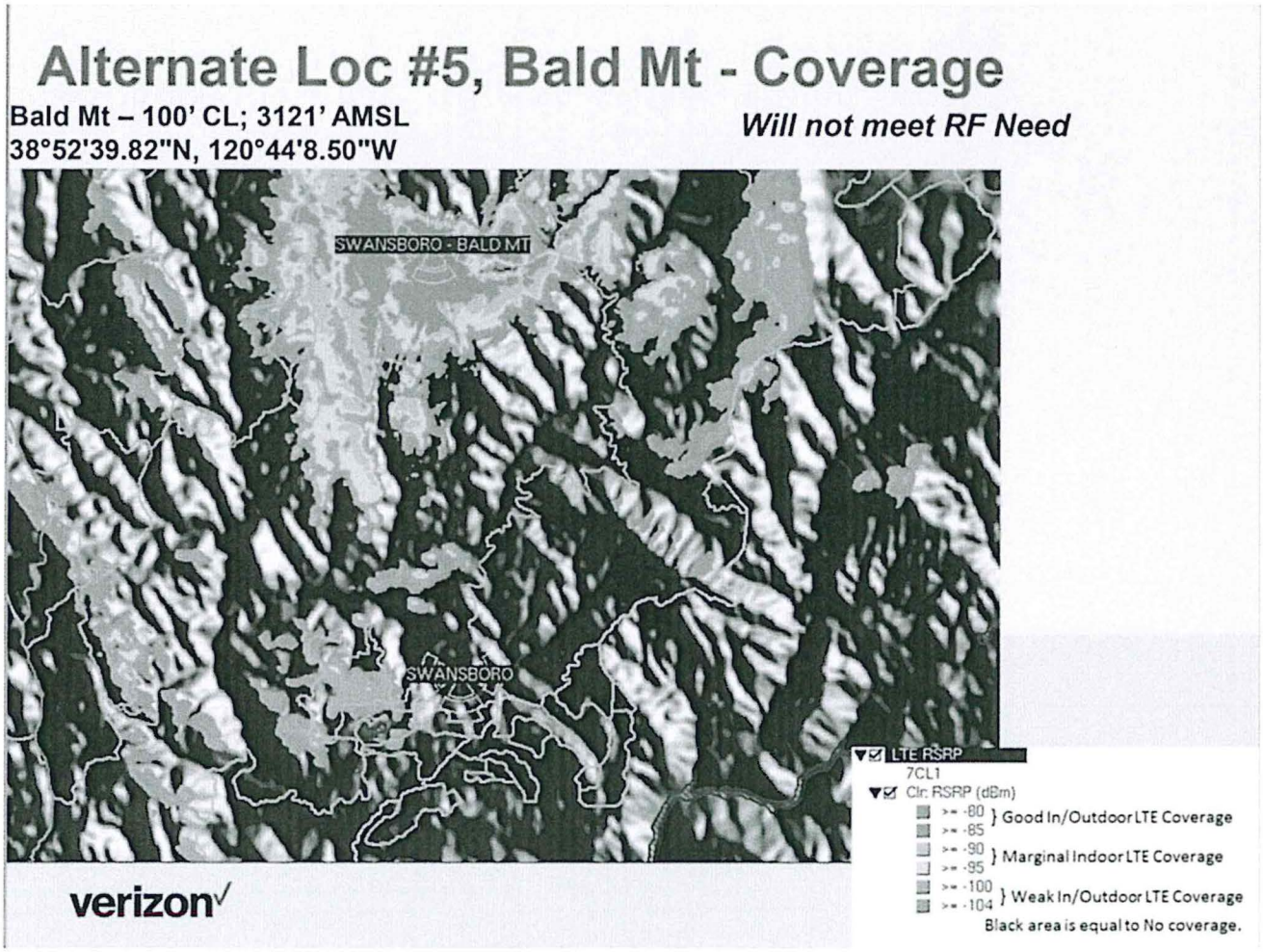
Coverage Provided by Facility at Bald Mountain



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6. 2000 Junco Court Property

Address: 2000 Junco Court
Elevation: 2,360 Feet
Zoning: R3A

Verizon Wireless reviewed this location 1.25 miles northwest of the Proposed Facility and 300 feet lower in elevation. There is a residence on this parcel. Verizon Wireless radio frequency engineers determined that a facility at this location could not provide sufficient service to the Significant Gap which lies to the southeast due to low elevation and intervening topography. As shown in the following coverage map, a facility at this location cannot provide service to much of the gap area. Due to inability to serve the Significant Gap, this is not a feasible alternative to the Proposed Facility.

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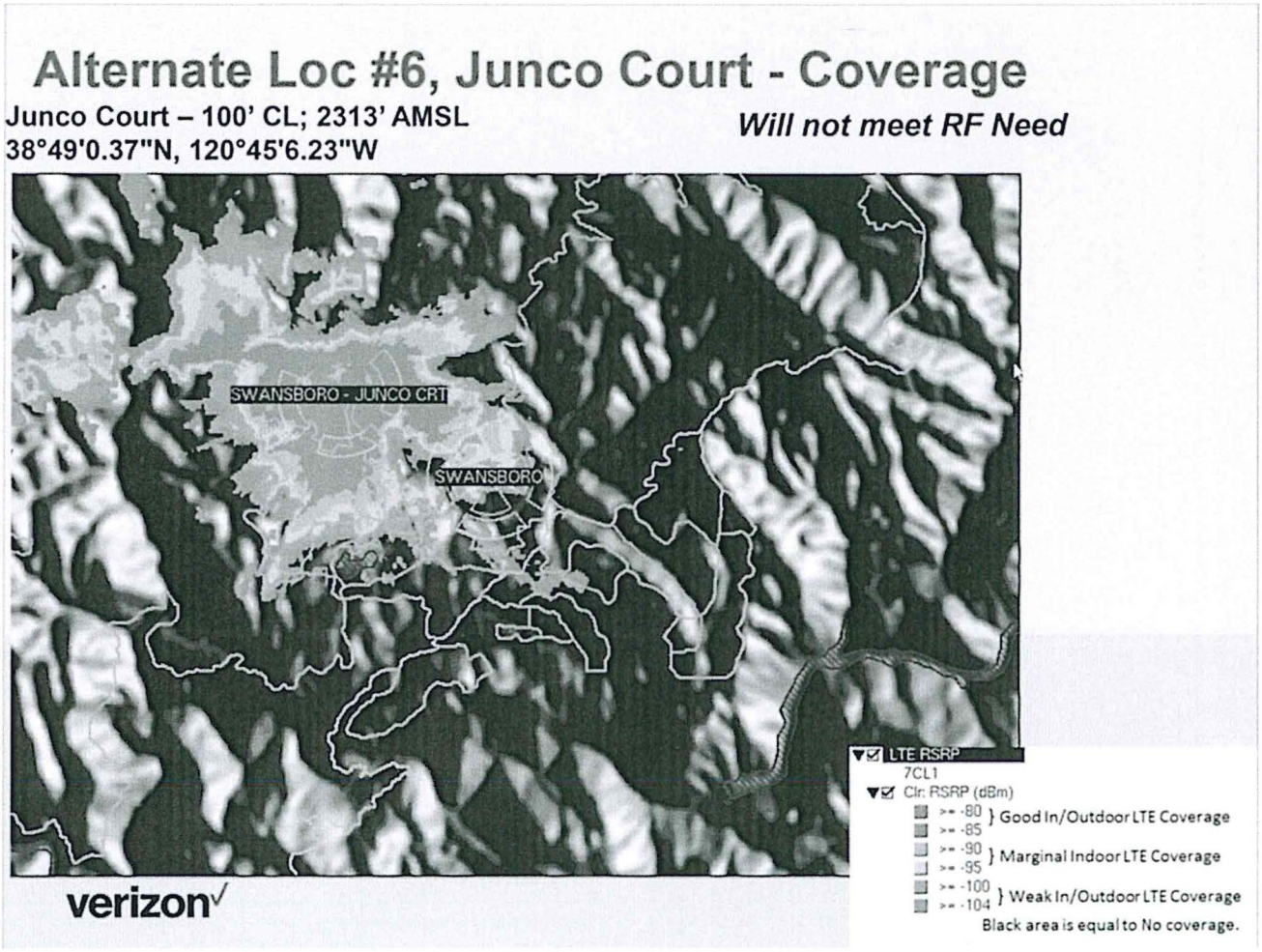
Coverage Provided by Facility at 2000 Junco Court



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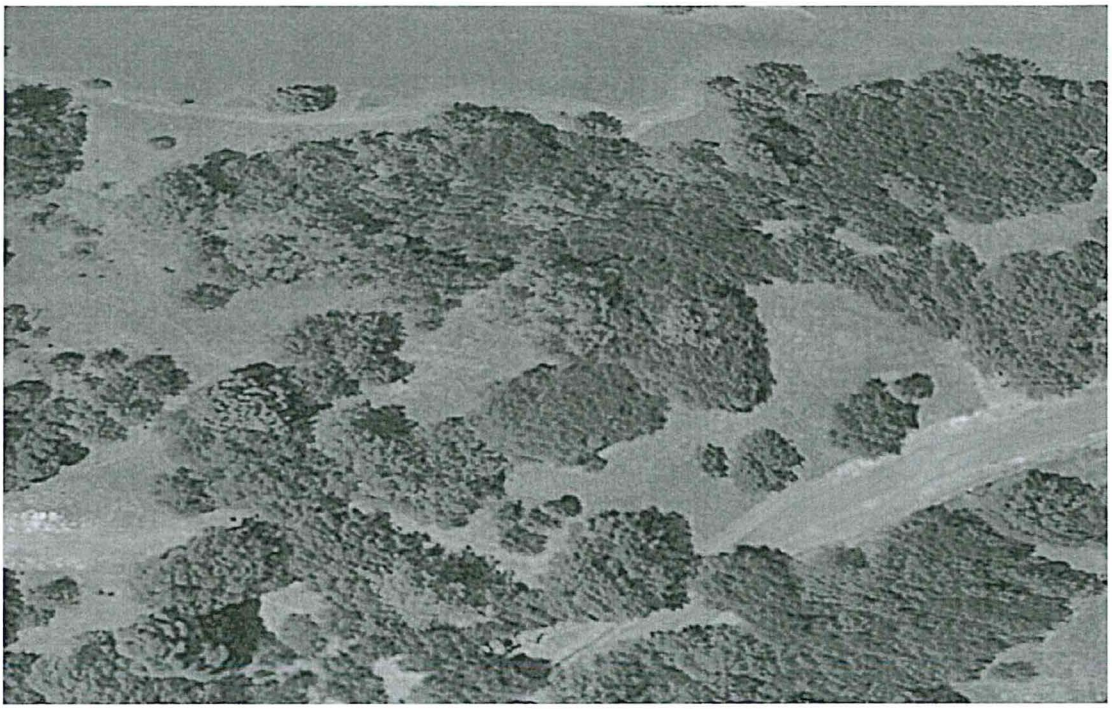
7. 6822 Mosquito Road Property

Address: 6822 Mosquito Road
Elevation: 2,590 Feet
Zoning: R2A



Verizon Wireless reviewed this undeveloped parcel 0.75 miles south of the Proposed Facility and 70 feet lower in elevation. A facility at this location would require a new access roadway. Due to limited oak tree cover and immediate proximity to major roadways, a tall facility on this hillside would pose significant visual impacts. Verizon Wireless radio frequency engineers determined that a facility with antennas placed at a centerline of 50 feet in height could not provide sufficient service to the Significant Gap. As shown in the following coverage map, a facility at this location cannot provide service to much of the gap area, particularly western portions. Due to inability to serve the Significant Gap, this is not a feasible alternative to the Proposed Facility.

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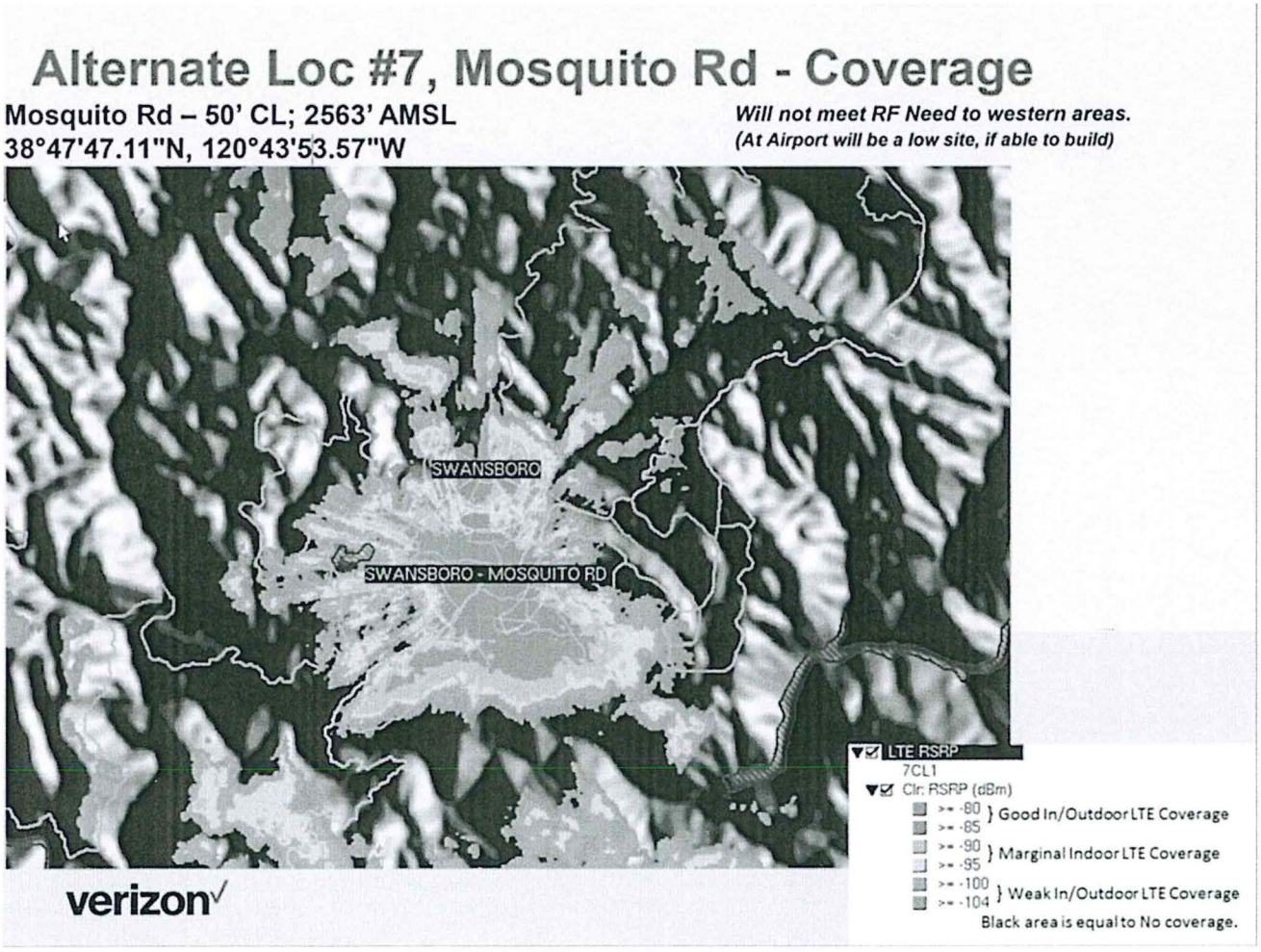
Coverage Provided by Facility at 6822 Mosquito Road



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Conclusion

Verizon Wireless has reviewed seven locations as alternatives to serve a Significant Gap in the Mosquito area of El Dorado County. Based upon the standards identified in the El Dorado County Ordinance Code, the Proposed Facility – with antennas placed on a wireless tower disguised as a pine tree on a large forested non-residential property – clearly constitutes the least intrusive location for Verizon Wireless's facility under the values expressed in El Dorado County regulations.

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verizon

Swansboro
El Dorado County
Alternative Locations

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