MITIGATED NEGATIVE DECLARATION

FILE: S15-0007

PROJECT NAME: Indian Creek Verizon Wireless

NAME OF APPLICANT: Alan Heine

ASSESSOR'S PARCEL NO.: 317-250-56 **SECTION:** 16 **T:** 10N **R:** 10E

LOCATION: North side of Green Valley Road, approximately 750 feet east of the intersection with Mortara Circle in the Placerville area. 6521 Green Valley Rd. Supervisorial District 4.

☐ **GENERAL PLAN AMENDMENT:** **FROM:** **TO:**

☐ **REZONING:** **FROM:** CT **TO:** TR1

☐ **TENTATIVE PARCEL MAP** ☐
SUBDIVISION (NAME):

☒ **SPECIAL USE PERMIT TO ALLOW:** the construction of a wireless telecommunication facility consisting of a 75 foot co-locatable monopine tower with six antennas, a 194 square foot equipment shelter, and a 30 Kw standby generator all within an approximately 1,024 square foot chain link with vinyl slats fenced lease area. A new 435 foot long access drive (90 feet paved up to 19% slope, the rest graveled up to 15% slope) will be built to access the facility.

☐ **OTHER:**

REASONS THE PROJECT WILL NOT HAVE A SIGNIFICANT ENVIRONMENTAL IMPACT:

☐ **NO SIGNIFICANT ENVIRONMENTAL CONCERNS WERE IDENTIFIED DURING THE INITIAL STUDY.**

☒ **MITIGATION HAS BEEN IDENTIFIED WHICH WOULD REDUCE POTENTIALLY SIGNIFICANT IMPACTS.**

☐ **OTHER:**

In accordance with the authority and criteria contained in the California Environmental Quality Act (CEQA), State Guidelines, and El Dorado County Guidelines for the Implementation of CEQA, the County Environmental Agent analyzed the project and based on the Initial Study, conditions have been added to the project to avoid or mitigate to a point of insignificance the potentially significant effects of the project. It has been determined that the project will not have a significant impact on the environment. Based on this finding, Planning Services hereby prepares this MITIGATED NEGATIVE DECLARATION. A period of thirty (30) days from the date of filing this Mitigated Negative Declaration will be provided to enable public review of the project specifications and this document prior to action on the project by EL DORADO COUNTY. A copy of the project specifications is on file at El Dorado County Planning Services, 2850 Fairlane Court, Placerville, CA 95667.

This Mitigated Negative Declaration was adopted by the Planning Commission on November 12, 2015.

_____
Executive Secretary

EXHIBIT H

COUNTY OF EL DORADO PLANNING SERVICES
2850 FAIRLANE COURT
PLACERVILLE, CA 95667

INITIAL STUDY
ENVIRONMENTAL CHECKLIST FORM

Project Title: S15-0007 – Indian Creek Verizon Wireless

Lead Agency Name and Address: County of El Dorado, 2850 Fairlane Court, Placerville, CA 95667

Contact Person: Joe Prutch, Project Planner | **Phone Number:** (530) 621-5355

Property Owner's Name and Address: Brooks Mitchell, 6521 Green Valley Rd., Placerville, CA 95667

Project Applicant's Name and Address: Alan Heine, 8230 Finisterre Ct., Fair Oaks, CA 95628

Project Agent's Name and Address: Alan Heine, 8230 Finisterre Ct., Fair Oaks, CA 95628

Project Location: North side of Green Valley Road, approximately 750 feet east of the intersection with Mortara Circle in the Placerville area. 6521 Green Valley Rd.

Assessor's Parcel Number(s): 317-250-56

Zoning: RE-5 (Residential Estate, Five-Acre Minimum)

Section: 16 **T:** 10N **R:** 10E

General Plan Designation: LDR w/IBC (Low-Density Residential with Important Biological Corridor overlay)

Description of Project: Special Use Permit to allow the construction of a wireless telecommunication facility consisting of a 75 foot co-locatable monopine tower with six antennas, a 194 square foot equipment shelter, and a 30 Kw standby generator all within an approximately 1,024 square foot chain link with vinyl slats fenced lease area. A new 435 foot long access drive (90 feet paved up to 19% slope, the rest graveled up to 15% slope) will be built to access the facility.

Surrounding Land Uses and Setting:

	Zoning	General Plan	Land Use (e.g., Single Family Residences, Grazing, Park, School)
Site:	RE-5	LDR/IBC	Single Family Residence
North:	RE-5 RE-10 PA-20	LDR/IBC	Single Family Residences
South:	RE-5	LDR	Green Valley Rd. and Single Family Residences
East:	RE-5 PA-20	LDR/IBC	Single Family Residences
West:	RE-5	LDR/IBC	Vacant Lot and Single Family Residences

Briefly describe the environmental setting: The cell tower facility sits at an elevation of 1,530 feet above mean sea level on a 16.26 acre property with an elevation range of 1,465 to 1,600 feet that slopes significantly down to the southwest. Heavy vegetation consists mostly of oak trees and some pine trees, with a relatively open understory with various grasses and forbs. The rear half of the lot has a creek with pond and more dense trees. There is a house with paved driveway and various gravel driveways leading to barns.

Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.):

CDA Building Services and Environmental Management

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

	Aesthetics		Agriculture and Forestry Resources		Air Quality
X	Biological Resources		Cultural Resources		Geology / Soils
	Greenhouse Gas Emissions		Hazards & Hazardous Materials		Hydrology / Water Quality
	Land Use / Planning		Mineral Resources		Noise
	Population / Housing		Public Services		Recreation
	Transportation/Traffic		Tribal Cultural Resources		Utilities / Service Systems
	Mandatory Findings of Significance				

DETERMINATION

On the basis of this initial evaluation:

☐ I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.

☒ I find that 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.

☐ I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

☐ I find that 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 in attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.

☐ I find that 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.

Signature: _____ Date: 10/7/2015

Printed Name: Joseph Prutch, Associate Planner For: El Dorado County

Signature: _____ Date: 10/07/15

Printed Name: Tiffany Schmid, Principal Planner For: El Dorado County

PROJECT DESCRIPTION

Introduction

This Initial Study has been prepared in accordance with the California Environmental Quality Act (CEQA) to evaluate the potential environmental impacts resulting from the proposed project. The project would allow the construction of a wireless telecommunications facility.

Project Description

In accordance with Section 130.14.210(D)(5a) of the County of El Dorado Code of Ordinances (New Towers and Monopoles) and applicable standards under Section 130.14.210.E-J, this special use permit request would allow the construction of a wireless telecommunications facility consisting of a 70 foot monopine with six Verizon Wireless antennas mounted at the 67-foot pole height, and a 17 by 11.5 foot equipment shelter within a 32 by 32 foot lease area enclosed with a 8.5 foot fence with vinyl slats. With manufactured pine tree branches atop the pole the monopine will have an ultimate height of 75 feet and is tall enough to accommodate two additional carriers. The wireless facility has been designed as a monopine with foliage to match the existing surrounding vegetation. The antennas would be painted green and covered with antennas socks and the pole would be painted to simulate a natural brown bark.

Access to the site would be provided by a 435 foot (90 feet paved up to 19% slope, the rest graveled up to 15% slope) 15 foot wide non-exclusive access easement off the existing driveway located on Green Valley Road. The access road terminates at the proposed facility with a hammerhead design to accommodate vehicular turnaround. A number of oak trees are located along the access easement, however the project is designed in such a way that no trees will be impacted or are required to be removed.

Project Location and Surrounding Land Uses

The project site is located in the Placerville area adjacent on Green Valley Road, within a rural residential district. Rural residences surround the project site on all sides. An elementary school and Folsom Lake College are located along Green Valley Road approximately ½ mile east for the project site.

Project Characteristics

1. Transportation/Circulation/Parking

Access to the equipment and tower would be provided by a 12-foot wide, non-exclusive access easement off the existing paved driveway. The access road terminates at the proposed facility with hammerhead design to accommodate vehicular turnaround and meet Fire Safe standards. The first 90 feet of the proposed access road would be paved and the remainder would be graveled. The site does not include a parking space.

2. Utilities and Infrastructure

Verizon Wireless proposes to utilize the current feeds at an existing service pole at Green Valley Road approximately 110 feet from the existing driveway. The service is pole is located approximately 550 feet away from the tower site. The connections will be made underground via borings. No other utilities will be required to operate the site.

3. Construction Considerations

Minor lease area site construction, grading, and extension of existing utilities will be required for the project. Grading would include interior site preparation including surface grading, tower and equipment enclosure structures, foundations and concrete flooring, and overall site surfacing preparation. A 435-foot paved and graveled access drive with erosion controls will be installed. The telecommunications line and power will be installed within the proposed utilities easement and the access easement. All of these activities will take approximately 60 days. Verizon Wireless will have personnel on site daily during this construction period.

Project Schedule and Approvals

This Initial Study is being circulated for public and agency review for a 30 day period. Written comments on the Initial Study should be submitted to the project planner indicated in the Summary section, above. Following the close of the written comment period, the Initial Study will be considered by the Lead Agency in a public meeting and will be certified if it is determined to be in compliance with CEQA. The Lead Agency will also determine whether to approve the project.

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. If the lead agency has determined that a particular physical impact may occur, the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is a fair argument that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of Mitigation Measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the Mitigation Measures, and briefly explain how they reduce the effect to a less than significant level.

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration (Section 15063(c)(3)(D)). In this case, a brief discussion should identify the following:

   a. Earlier Analysis Used. Identify and state where they are available for review.
   b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
   c. Mitigation Measures. For effects that are "Less Than Significant With Mitigation Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. Supporting Information Sources: A source list should be attached, and other sources used, or individuals contacted should be cited in the discussion.

8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9. The explanation of each issue should identify:

   a. the significance criteria or threshold, if any, used to evaluate each question; and
   b. the mitigation measure identified, if any, to reduce the impact to less than significant.

ENVIRONMENTAL IMPACTS

1. AESTHETICS. *Would the project:*	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?			X	
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c. Substantially degrade the existing visual character quality of the site and its surroundings?			X	
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

Regulatory Setting:

Federal Laws, Regulations, and Policies

No federal regulations are applicable to aesthetics in relation to the Proposed Project.

State Laws, Regulations, and Policies

In 1963, the California State Legislature established the California Scenic Highway Program, a provision of the Streets and Highways Code, to preserve and enhance the natural beauty of California (Caltrans, 2015). The state highway system includes designated scenic highways and those that are eligible for designation as scenic highways. Highway 89 is an officially designated state scenic corridor in the vicinity of the project site.

Local Laws, Regulations, and Policies

The County has several standards and ordinances that address issues relating to visual resources. Many of these can be found in the County Zoning Ordinance (Title 130 of the County Code). The Zoning Ordinance consists of descriptions of the zoning districts, including identification of uses allowed by right or requiring a special-use permit and specific development standards that apply in particular districts based on parcel size and land use density. These development standards often involve limits on the allowable size of structures, required setbacks, and design guidelines. Included are requirements for setbacks and allowable exceptions, the location of public utility distribution and transmission lines, architectural supervision of structures facing a state highway, height limitations on structures and fences, outdoor lighting, and wireless communication facilities. Scenic views and resources of significance in El Dorado County include Highway 50 east of Placerville, among others.

Discussion: A substantial adverse effect to Visual Resources would result in the introduction of physical features that are not characteristic of the surrounding development, substantially change the natural landscape, or obstruct an identified public scenic vista.

a. **Scenic Vista:** The project site is located in the County's rural region surrounded by other rural large lot single family residences. No scenic vistas, as designated by the County General Plan, are located in the vicinity of the site (El Dorado County, 2003, p. 5.3-3 through 5.3-5). However, a 75 foot monopine would be highly visible from Green

Valley Road and neighboring residences. The proposed stealth components of the project would camouflage the tower and make it appear to be a pine tree from areas with a direct line-of-site to the facility. Oak trees in front of the tower would obscure the view of the monopine from Green Valley Road. Similarly, the ground equipment lease area would be blocked from view by the trees and fencing with vinyl slats. Impacts would be less that significant.

b. **Scenic Resources:** The project site is not visible from an officially designated State Scenic Highway or County-designated scenic highway, or any roadway that is part of a corridor protection program (CalTrans, 2013). There are no views of the site from public parks or scenic vistas. Though there are many trees in the project vicinity, there are no trees or historic buildings that have been identified by the County as contributing to exceptional aesthetic value at the project site. There would be no impact.

c. **Visual Character:** The proposed tower, fencing, and ground equipment would be visible from some adjacent neighbors and passersby on Green Valley Road. Some of the views from Green Valley Road are obstructed by oak trees. The site plans and photo simulations show the tower and ground equipment to be designed to meet the wireless communications facilities standards of Zoning Ordinance Section 130.14.210.

The tower itself would be visible from various points in the surrounding area, including adjacent neighbors and passersby on Green Valley Road. The tower is designed as a monopine to camouflage the facility components and to blend in with the surrounding landscape. The antennas would be covered with faux pine tree branches, pine needle socks would be placed over the antennas and microwave dishes, and the tower pole would be painted brown to resemble a pine tree. The fencing surrounding the lease area is also designed to blend with the visual character of the area with brown vinyl slats. With these design features, the facility will not significantly degrade the existing visual character and quality of the site and its surroundings. Impacts would be less than significant.

d. **Light and Glare:** The proposed project does not include any light sources and all components of the facility would be constructed from non-reflective materials. There would be no impact.

FINDING: As conditioned and with adherence to El Dorado County Ordinances, for this Aesthetics category, impacts would be less than significant.

2. AGRICULTURE AND FOREST RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by California Department of forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forrest Protocols adopted by the California Air Resources Board. *Would the project:*	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or Locally Important Farmland (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b. Conflict with existing zoning for agricultural use, or a Williamson Act Contract?				X
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X
d. Result in the loss of forest land or conversion of forest land to non-forest use?				X

e.	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?			X

Regulatory Setting:

Federal Laws, Regulations, and Policies

No federal regulations are applicable to agriculture and forest resources in relation to the Proposed Project.

State Laws, Regulations, and Policies

Farmland Mapping and Monitoring Program

The Farmland Mapping and Monitoring Program (FMMP), administered by the California Department of Conservation (CDC), produces maps and statistical data for use in analyzing impacts on California's agricultural resources (CDC 2008). FMMP rates and classifies agricultural land according to soil quality, irrigation status, and other criteria. Important Farmland categories are as follows (CDC 2013a):

Prime Farmland: Farmland with the best combination of physical and chemical features able to sustain long-term agricultural production. These lands have the soil quality, growing season, and moisture supply needed to produce sustained high yields. Prime Farmland must have been used for irrigated agricultural production at some time during the four years before the FMMP's mapping date.

Farmland of Statewide Importance: Farmland similar to Prime Farmland, but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Farmland of Statewide Importance must have been used for irrigated agricultural production at some time during the four years before the FMMP's mapping date.

Unique Farmland: Farmland of lesser quality soils used for the production of the state's leading agricultural crops. These lands are usually irrigated but might include non-irrigated orchards or vineyards, as found in some climatic zones. Unique Farmland must have been cropped at some time during the four years before the FMMP's mapping date.

Farmland of Local Importance: Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.

California Land Conservation Act of 1965 (Williamson Act)

The California Land Conservation Act of 1965 (commonly referred to as the Williamson Act) allows local governments to enter into contracts with private landowners for the purpose of preventing conversion of agricultural land to non-agricultural uses (CDC 2013b). In exchange for restricting their property to agricultural or related open space use, landowners who enroll in Williamson Act contracts receive property tax assessments that are substantially lower than the market rate.

Z'berg-Nejedly Forest Practice Act

Logging on private and corporate land in California is regulated by the 1973 Z'berg-Nejedly Forest Practice Act. This Act established the Forest Practice Rules (FPRs) and a politically-appointed Board of Forestry to oversee their implementation. The California Department of Forestry (CALFIRE) works under the direction of the Board of Forestry and is the lead government agency responsible for approving logging plans and for enforcing the FPRs.

Discussion: A substantial adverse effect to Agricultural Resources would occur if:

- There is a conversion of choice agricultural land to nonagricultural use, or impairment of the agricultural productivity of agricultural land;

- The amount of agricultural land in the County is substantially reduced; or
- Agricultural uses are subjected to impacts from adjacent incompatible land uses.

a. **Conversion of Agricultural Land:** The site is not located within an Agricultural District or being used for agricultural purposes. Review of the soil data for El Dorado County, developed under the Farmland Mapping and Monitoring Program, indicates that the project site contains Placer Diggings and Boomer gravelly loam. These soil types are not classified as unique, soils of local importance, prime farmland, or statewide important farmland. There would be no impact.

b. **Zoning and Williamson Act:** The project site is not within an Agricultural District and is not designated by the General Plan for agricultural uses. The property is not within an area that is under Williamson Act Contract and would not affect any properties under a Williamson Act Contract. There would be no impact.

c-d. **Loss of Forest land or Conversion of Forest land:** The site is not designated as Timberland Preserve Zone (TPZ) or other forestland according to the General Plan and Zoning Ordinance. No trees are proposed for removal as part of the project. There would be no impact.

e. **Conversion of Prime Farmland or Forest Land:** The proposed facility characteristics and scale are such that there would be no change to the existing environment that would result in the conversion of farmland, agricultural land, or forestland. There would be no impact.

FINDING: For this Agriculture category, the thresholds of significance have not been exceeded and no impacts would result from the project.

3. **AIR QUALITY.** *Would the project:*	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?			X	
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			X	
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			X	
d. Expose sensitive receptors to substantial pollutant concentrations?			X	
e. Create objectionable odors affecting a substantial number of people?				X

Regulatory Setting:

Federal Laws, Regulations, and Policies

The Clean Air Act is implemented by the U.S. Environmental Protection Agency (EPA) and sets ambient air limits, the National Ambient Air Quality Standards (NAAQS), for six criteria pollutants: particulate matter of aerodynamic radius of 10 micrometers or less (PM10), particulate matter of aerodynamic radius of 2.5 micrometers or less (PM2.5), carbon monoxide

(CO), nitrogen dioxide (NO2), ground-level ozone, and lead. Of these criteria pollutants, particulate matter and ground-level ozone pose the greatest threats to human health.

State Laws, Regulations, and Policies

The California Air Resources Board (CARB) sets standards for criteria pollutants in California that are more stringent than the NAAQS and include the following additional contaminants: visibility-reducing particles, hydrogen sulfide, sulfates, and vinyl chloride. The Proposed Project is located within the Mountain Counties Air Basin, which is comprised of seven air districts: the Northern Sierra Air Quality Management District (AQMD), Placer County Air Pollution Control District (APCD), Amador County APCD, Calaveras County APCD, the Tuolumne County APCD, the Mariposa County APCD, and a portion of the El Dorado County AQMD, which consists of the western portion of El Dorado County. The El Dorado County Air Pollution Control District manages air quality for attainment and permitting purposes within the west slope portion of El Dorado County.

EPA and CARB regulate various stationary sources, area sources, and mobile sources. EPA has regulations involving performance standards for specific sources that may release toxic air contaminants (TACs), known as hazardous air pollutants (HAPs) at the federal level. In addition, EPA has regulations involving emission criteria for off-road sources such as emergency generators, construction equipment, and vehicles. CARB is responsible for setting emission standards for vehicles sold in California and for other emission sources, such as consumer products and certain off-road equipment. CARB also establishes passenger vehicle fuel specifications. Airborne Toxic Control Measures (ATCMs), including the following relevant measures, are implemented to address sources of TACs:

- ATCM for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater
- ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- ATCM to Reduce Particulate Emissions from Diesel-Fueled Engines Standards for Non-vehicular Diesel Fuel
- ATCM for Stationary Compression Ignition Engines
- ATCM for Emissions of Chlorinated Toxic Air Contaminants from Automotive Maintenance and Repair Activities

The AQMD regulates air quality through the federal and state Clean Air Acts, district rules, and its permit authority. National and state ambient air quality standards (AAQS) have been adopted by the EPA and State of California, respectively, for each criteria pollutant: ozone, particulate matter, carbon monoxide, nitrogen dioxide, and sulfur dioxide. The El Dorado County AQMD Guide to Air Quality Assessment (2002) specifies significance criteria and quantitative thresholds for daily emissions resulting from construction and project operations. If emissions exceed 82 pounds per day for ROG or NOx, they have the potential to result in a significant air quality impact. The guide includes a Table (Table 5.2) listing project types with potentially significant emissions, though there is no listing for parks, trail heads, or recreational facilities. ROG and NOx emissions may be assumed to not be significant if:

- The project encompasses 12 acres or less of ground that is being worked at one time during construction;
- At least one of the recommended mitigation measures related to such pollutants is incorporated into the construction of the project;
- The project proponent commits to pay mitigation fees in accordance with the provisions of an established mitigation fee program in the district (or such program in another air pollution control district that is acceptable to District); or
- Daily average fuel use is less than 337 gallons per day for equipment from 1995 or earlier, or 402 gallons per day for equipment from 1996 or later

If the project meets one of the conditions above, APCD assumed that exhaust emissions of other air pollutants from the operation of equipment and vehicles are also assumed to not be significant. For Fugitive dust (PM10), if dust suppression measures will prevent visible emissions beyond the boundaries of the project, further calculations to determine PM emissions are not necessary. For the other criteria pollutants, including CO, PM10, SO2, NO2, sulfates, lead, and H2S, a project is considered to have a significant impact on air quality if it will cause or contribute significantly to a violation of the applicable national or state ambient air quality standards.

Mandatory AQMD rule include Rule 223 regarding fugitive dust, Rule 215 regarding the application of architectural coatings, and Rule 224 regarding cutback and emulsified asphalt paving materials. Projects in the County also analyze

potential air quality impacts through the use of the El Dorado County AQMD Guide to Air Quality Assessment: Determining Significance of Air Quality Impacts under the California Environmental Quality Act (APCD CEQA Guide).

Naturally occurring asbestos (NOA) is also a concern in El Dorado County because it is known to be present in certain soils and can pose a health risk if released into the air. The AQMD has adopted an El Dorado County Naturally Occurring Asbestos Review Area Map that identifies those areas more likely to contain NOA (El Dorado County 2005).

Discussion: According to the El Dorado County Air Quality Management District (AQMD) Guide to Air Quality Assessment (2002) substantial adverse effect on air quality would occur if:

- Emissions of ROG and No_x will result in construction or operation emissions greater than 82lbs/day (Table 3.2);
- Emissions of PM_{10}, CO, SO_2 and No_x, as a result of construction or operation emissions, will result in ambient pollutant concentrations in excess of the applicable National or State Ambient Air Quality Standard (AAQS). Special standards for ozone, CO, and visibility apply in the Lake Tahoe Air Basin portion of the County; or
- Emissions of toxic air contaminants cause cancer risk greater than 1 in 1 million (10 in 1 million if best available control technology for toxics is used) or a non-cancer Hazard Index greater than 1. In addition, the project must demonstrate compliance with all applicable District, State and U.S. EPA regulations governing toxic and hazardous emissions.

a. **Air Quality Plan:** El Dorado County has adopted the Rules and Regulations of the El Dorado County Air Quality Management District (2000) establishing rules and standards for the reduction of stationary source air pollutants (ROG/VOC, NOx, and O3). The EDC/State Clean Air Act Plan has set a schedule for implementing transportation contract measures to limit mobile source emissions. The project would not conflict with or obstruct implementation of either plan. Therefore, the potential impacts of the project would be less than significant.

b, c. **Air Quality Standards and Cumulative Impacts:** The El Dorado County AQMD reviewed the application materials for this project and determined that by implementing typical conditions including Rule 215 (Architectural Coating) and 501 and 523 (New Paint Source), which will be included in the project conditions of approval, the project would have a less than significant impact in this category. The conditions would be implemented, reviewed, and approved by the AQMD prior to and concurrently with the grading, improvement, and/or building permit approvals. With full review, impacts would be less than significant.

The project would create air quality impacts during construction and when testing the generator on a weekly basis, which may contribute to an existing or projected air quality violation. Construction activities associated with the project include grading and site improvements for utilities, driveway, monopine installation, graveling, and associated on-site activities. Construction related activities would generate PM10 dust emissions that could exceed either the state or federal ambient air quality standards for PM10. However, existing regulations implemented at issuance of building and grading permits would ensure that any construction related PM10 dust emissions would be reduced to acceptable levels. Adherence to the limitations of construction and to the AQMD standards would ensure impacts are less than significant.

Operational air quality impacts would be minor, and are anticipated to cause an insignificant contribution to existing or projected air quality violations. Impacts would be less than significant.

d. **Sensitive Receptors:** The CEQA Guidelines (14 CCR 15000) identify sensitive receptors as facilities that house or attract children, the elderly, people with illnesses, or others that are especially sensitive to the effects of air pollutants. Hospitals, schools, and convalescent hospitals are examples of sensitive receptors. No sources of substantial pollutant concentrations will be emitted by the cell tower facility, and no sensitive receptors are near the proposed facility. An elementary school and small college are located approximately ½ mile to the east of the project site, far enough away to not be impacted by the tower. Impacts would be less than significant.

e. **Objectionable Odors:** Table 3-1 of the Guide to Air Quality Assessment (AQMD, 2002) does not list the proposed cellular communications facility use as a use known to create objectionable odors. There would be no impact.

FINDING: The proposed project would not affect the implementation of regional air quality regulations or management plans. The project would result in small increases in emissions due to construction and operation; however existing regulations would reduce these impacts to a less than significant level. As conditioned and with adherence to County Code, the proposed project would not cause substantial adverse effects to air quality, nor exceed established significance thresholds for air quality impacts.

4. **BIOLOGICAL RESOURCES** *Would the project:*	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				X
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			X	
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			X	
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?		X		
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X

Regulatory Setting:

Federal Laws, Regulations, and Policies

Endangered Species Act

The Endangered Species Act (ESA) (16 U.S. Code [USC] Section 1531 *et seq.*; 50 Code of Federal Regulations [CFR] Parts 17 and 222) provides for conservation of species that are endangered or threatened throughout all or a substantial portion of their range, as well as protection of the habitats on which they depend. The U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) share responsibility for implementing the ESA. In general, USFWS manages terrestrial and freshwater species, whereas NMFS manages marine and anadromous species.

Section 9 of the ESA and its implementing regulations prohibit the "take" of any fish or wildlife species listed under the ESA as endangered or threatened, unless otherwise authorized by federal regulations. The ESA defines the term "take" to mean

"harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct" (16 USC Section 1532). Section 7 of the ESA (16 USC Section 1531 *et seq.*) outlines the procedures for federal interagency cooperation to conserve federally listed species and designated critical habitats. Section 10(a)(1)(B) of the ESA provides a process by which nonfederal entities may obtain an incidental take permit from USFWS or NMFS for otherwise lawful activities that incidentally may result in "take" of endangered or threatened species, subject to specific conditions. A habitat conservation plan (HCP) must accompany an application for an incidental take permit.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 USC, Chapter 7, Subchapter II) protects migratory birds. Most actions that result in take, or the permanent or temporary possession of, a migratory bird constitute violations of the MBTA. The MBTA also prohibits destruction of occupied nests. USFWS is responsible for overseeing compliance with the MBTA.

Bald and Golden Eagle Protection Act

The federal Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c), first enacted in 1940, prohibits "taking" bald eagles, including their parts, nests, or eggs. The Act provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof." The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." The definition for "Disturb" includes injury to an eagle, a decrease in its productivity, or nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior. In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present.

Clean Water Act

Clean Water Act (CWA) section 404 regulates the discharge of dredged and fill materials into waters of the U.S., which include all navigable waters, their tributaries, and some isolated waters, as well as some wetlands adjacent to the aforementioned waters (33 CFR Section 328.3). Areas typically not considered to be jurisdictional waters include non-tidal drainage and irrigation ditches excavated on dry land, artificially irrigated areas, artificial lakes or ponds used for irrigation or stock watering, small artificial waterbodies such as swimming pools, vernal pools, and water-filled depressions (33 CFR Part 328). Areas meeting the regulatory definition of waters of the U.S. are subject to the jurisdiction of U.S. Army Corps of Engineers (USACE) under the provisions of CWA Section 404. Construction activities involving placement of fill into jurisdictional waters of the U.S. are regulated by USACE through permit requirements. No USACE permit is effective in the absence of state water quality certification pursuant to Section 401 of CWA.

Section 401 of the CWA requires an evaluation of water quality when a proposed activity requiring a federal license or permit could result in a discharge to waters of the U.S. In California, the State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCBs) issue water quality certifications. Each RWQCB is responsible for implementing Section 401 in compliance with the CWA and its water quality control plan (also known as a Basin Plan). Applicants for a federal license or permit to conduct activities that may result in the discharge to waters of the U.S. (including wetlands or vernal pools) must also obtain a Section 401 water quality certification to ensure that any such discharge will comply with the applicable provisions of the CWA.

State Laws, Regulations, and Policies

California Fish and Game Code

The California Fish and Game Code includes various statutes that protect biological resources, including the Native Plant Protection Act of 1977 (NPPA) and the California Endangered Species Act (CESA). The NPPA (California Fish and Game Code Section 1900-1913) authorizes the Fish and Game Commission to designate plants as endangered or rare and prohibits take of any such plants, except as authorized in limited circumstances.

CESA (California Fish and Game Code Section 2050–2098) prohibits state agencies from approving a project that would jeopardize the continued existence of a species listed under CESA as endangered or threatened. Section 2080 of the California Fish and Game Code prohibits the take of any species that is state listed as endangered or threatened, or designated as a candidate for such listing. California Department of Fish and Wildlife (CDFW) may issue an incidental take permit authorizing the take of listed and candidate species if that take is incidental to an otherwise lawful activity, subject to specified conditions.

California Fish and Game Code Section 3503, 3513, and 3800 protect native and migratory birds, including their active or inactive nests and eggs, from all forms of take. In addition, Section 3511, 4700, 5050, and 5515 identify species that are fully protected from all forms of take. Section 3511 lists fully protected birds, Section 5515 lists fully protected fish, Section 4700 lists fully protected mammals, and Section 5050 lists fully protected amphibians.

Streambed Alteration Agreement

Sections 1601 to 1606 of the California Fish and Game Code require that a Streambed Alteration Application be submitted to CDFW for any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake. As a general rule, this requirement applies to any work undertaken within the 100-year floodplain of a stream or river containing fish or wildlife resources.

California Native Plant Protection Act

The California Native Plant Protection Act (California Fish and Game Code Section 1900–1913) prohibits the taking, possessing, or sale of any plants with a state designation of rare, threatened, or endangered (as defined by CDFW). The California Native Plant Society (CNPS) maintains a list of plant species native to California that has low population numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Plants of California (CNPS 2001). Potential impacts to populations of CNPS-listed plants receive consideration under CEQA review.

Forest Practice Act

Logging on private and corporate land in California is regulated by the Z'Berg-Nejedly Forest Practices Act (FPA), which took effect January 1, 1974. The act established the Forest Practice Rules (FPRs) and a politically-appointed Board of Forestry to oversee their implementation. The California Department of Forestry (CALFIRE) works under the direction of the Board of Forestry and is the lead government agency responsible for approving logging plans and for enforcing the FPRs. A Timber Harvest Plan (THP) must be prepared by a Registered Professional Forester (RPF) for timber harvest on virtually all non-federal land. The FPA also established the requirement that all non-federal forests cut in the State be regenerated with at least three hundred stems per acre on high site lands, and one hundred fifty trees per acre on low site lands.

Local Laws, Regulations, and Policies

The County General Plans also include policies that contain specific, enforceable requirements and/or restrictions and corresponding performance standards that address potential impacts on special-status plant species or create opportunities for habitat improvement.

Setting: Describe the setting based on ag assessment, biological features on site, plant or animal communities, etc.

- Serpentine Rock or Gabbro soils that contain certain rare plants. Further, the project site is not located within a Rare Plant Mitigation area. County Geographic Information System (GIS) soil data
- Located within a sensitive natural community of the county, state, or federal agency, including but not limited to an Ecological Preserve or U.S. Fish and Wildlife Service (USFWS) Recovery Plan boundaries.
- Important biological corridor (IBC) according to the El Dorado County General Plan Draft EIR Exhibits 5.12-14, 5.12-5 and 5.12-7 (El Dorado County, 2003).

Lands located within the overlay district are subject to the following provisions, given that they do not interfere with agricultural practices:

- Increased minimum parcel size;
- Higher canopy-retention standards and/or different mitigation standards/thresholds for oak woodlands;
- Lower thresholds for grading permits;
- Higher wetlands/riparian retention standards and/or more stringent mitigation requirements for wetland/riparian habitat loss;
- Increased riparian corridor and wetland setbacks;
- Greater protection for rare plants (e.g., no disturbance at all or disturbance only as recommended by U.S. Fish and Wildlife Service/California Department of Fish and Wildlife);
- Standards for retention of contiguous areas/large expanses of other (non-oak or non-sensitive) plant communities;
- Building permits discretionary or some other type of "site review" to ensure that canopy is retained;
- More stringent standards for lot coverage, floor area ratio (FAR), and building height; and
- No hindrances to wildlife movement (e.g., no fences that would restrict wildlife movement).

Discussion: A substantial adverse effect on Biological Resources would occur if the implementation of the project would:

- Substantially reduce or diminish habitat for native fish, wildlife or plants;
- Cause a fish or wildlife population to drop below self-sustaining levels;
- Threaten to eliminate a native plant or animal community;
- Reduce the number or restrict the range of a rare or endangered plant or animal;
- Substantially affect a rare or endangered species of animal or plant or the habitat of the species; or
- Interfere substantially with the movement of any resident or migratory fish or wildlife species.

a. **Special Status Species**: A Biological Resources Study and Important Habitat Mitigation Plan was prepared for the project by Natural Investigations Company on May 25, 2015. No special status species were detected in the field survey, and none were ranked by the study with a moderate or high potential of occurrence within the project area. No impacts to special-status species should occur with project development. There would be no impact.

b, c. **Riparian Habitat, Wetlands, Potentially Jurisdictional Waters of the U.S.:** The project area contains no sensitive natural communities. The project area has upland features and contains no water features and no waters of the US or waters of the State, although the rear half of the property, not impacted by this project, has a creek and pond. Project construction would not directly impact any surfaced water bodies. Therefore, no Clean Water Act permits are expected to be necessary. Since the area of disturbance is less than one acre, enrollment in the State Water Quality Control Board's Construction General Permit prior to the initiation of construction is not necessary. Impacts would be less than significant.

d. **Migration Corridors:** The Biological Study noted that various special-status species were reported outside of, but within a 5-mile radius of, the project area by the California Natural Diversity Database (CNDDB). The project area, and adjacent trees and utility poles, contain suitable nesting habitat for various bird species. No nests were observed during their field study. However, if construction activities occur during the nesting season, nesting birds could be directly impacted by tree removal, which is not occurring, and indirectly impacted by noise, vibration, and other construction-related disturbances. Therefore, project construction is considered a potentially significant adverse impact to nesting birds.

The following mitigation measure is recommended to reduce biological impacts to less than significant levels:

MM BIO 1: If construction activities will occur during the 2016 nesting season (March to September 2016), a pre-construction survey for the presence of special-status bird species or any nesting bird species shall be conducted by a qualified biologist within 500 feet of the proposed construction areas. If active nests are identified in these areas, CDFW and/or USFWS shall be contacted to develop measures to avoid "take" of active nests prior to the initiation

of any construction activities. Avoidance measures may include establishment of a buffer zone using construction fencing or the postponement of vegetation removal until after the nesting season, or until after a qualified biologist has determined the young have fledged and are independent of the nest site.

Monitoring Responsibility: The applicant shall conduct all construction activities outside the nesting season or perform a pre-construction survey and perform the necessary avoidance measures prior to initiation of construction activities. This mitigation measure shall be noted on the grading plans.

Monitoring Requirement: California Department of Fish and Wildlife (CDFW) and El Dorado County Development Services Division.

e. **Local Biological Resources Policies:** Local protection of biological resources includes protection of rare plants, avoidance of riparian areas, and mitigation of impacted oak woodlands. The lease area and access road are not located adjacent to any riparian areas and do not include any areas of rare plants. Construction would require trenching and grading within the access easement, but no oak trees are to be impacted. No oak trees or other trees are proposed for removal, but may need to be pruned for vertical clearance. Impacts would be less than significant.

f. **Adopted Plans**: This project, as designed, does not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. There would be no impact.

FINDING: No jurisdictional wetlands or riparian areas are present at the project site. There are no special status species detected at the project site. Although no nests were found in the project area, there is the potential of nesting birds at the site during nesting season. Implementation of the above nesting bird mitigation measure would ensure that impacts to migration corridors are reduced to a less than significant level.

5. CULTURAL RESOURCES. *Would the project:*	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?			X	
b. Cause a substantial adverse change in the significance of archaeological resource pursuant to Section 15064.5?			X	
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	
d. Disturb any human remains, including those interred outside of formal cemeteries?			X	

Regulatory Setting:

Federal Laws, Regulations, and Policies

The National Register of Historic Places

The National Register of Historic Places (NRHP) is the nation's master inventory of known historic resources. The NRHP is administered by the National Park Service and includes listings of buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the national, state, or local level. The criteria for listing in the NRHP include resources that:

A. Are associated with events that have made a significant contribution to the broad patterns of history (events);
B. Are associated with the lives of persons significant in our past (persons);
C. Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction (architecture); or
D. Have yielded or may likely yield information important in prehistory or history (information potential).

State Laws, Regulations, and Policies

California Register of Historical Resources

Public Resources Code Section 5024.1 establishes the California Register of Historical Resources (CRHR). The register lists all California properties considered to be significant historical resources. The CRHR includes all properties listed as or determined to be eligible for listing in the National Register of Historic Places (NRHP), including properties evaluated under Section 106 of the National Historic Preservation Act. The criteria for listing are similar to those of the NRHP. Criteria for listing in the CRHR include resources that:

1. Are associated with the events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Are associated with the lives of persons important in our past;
3. Embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important creative individual, or possess high artistic values; or
4. Have yielded, or may be likely to yield, information important in prehistory or history.

The regulations set forth the criteria for eligibility as well as guidelines for assessing historical integrity and resources that have special considerations.

The California Register of Historic Places

The California Register of Historic Places (CRHP) program encourages public recognition and protection of resources of architectural, historical, archeological and cultural significance, identifies historical resources for state and local planning purposes, determines eligibility for state historic preservation grant funding and affords certain protections under the California Environmental Quality Act. The criteria for listing in the CRHP include resources that:

A. Are associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.
B. Are associated with the lives of persons important to local, California or national history.
C. Embody the distinctive characteristics of a type, period, region or method of construction or represents the work of a master or possesses high artistic values.
D. Have yielded, or have the potential to yield, information important to the prehistory or history of the local area, California or the nation.

The State Office of Historic Preservation sponsors the California Historical Resources Information System (CHRIS), a statewide system for managing information on the full range of historical resources identified in California. CHRIS provides an integrated database of site-specific archaeological and historical resources information. The State Office of Historic Preservation also maintains the CRHR, which identifies the State's architectural, historical, archeological and cultural resources. The CRHR includes properties listed in or formally determined eligible for the National Register and lists selected California Registered Historical Landmarks.

Public Resources Code (Section 5024.1[B]) states that any agency proposing a project that could potentially impact a resource listed on the CRHR must first notify the State Historic Preservation Officer, and must work with the officer to ensure that the project incorporates "prudent and feasible measures that will eliminate or mitigate the adverse effects."

California Health and Safety Code Section 7050.5 requires that, in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined that the remains are not subject to the provisions of Section 27491 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of any death. If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.

Section 5097.98 of the California Public Resources Code stipulates that whenever the commission receives notification of a discovery of Native American human remains from a county coroner pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, it shall immediately notify those persons it believes to be most likely descended from the deceased Native American. The decedents may, with the permission of the owner of the land, or his or her authorized representative, inspect the site of the discovery of the Native American remains and may recommend to the owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The descendants shall complete their inspection and make their recommendation within 24 hours of their notification by the Native American Heritage Commission. The recommendation may include the scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

CEQA and CEQA Guidelines

Section 21083.2 of CEQA requires that the lead agency determine whether a project may have a significant effect on unique archaeological resources. A unique archaeological resource is defined in CEQA as an archaeological artifact, object, or site about which it can be clearly demonstrated that there is a high probability that it:

- Contains information needed to answer important scientific research questions, and there is demonstrable public interest in that information;
- Has a special or particular quality, such as being the oldest of its type or the best available example of its type; or
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.
- Although not specifically inclusive of paleontological resources, these criteria may also help to define "a unique paleontological resource or site."

Measures to avoid, conserve, preserve, or mitigate significant effects on these resources are also provided under CEQA Section 21083.2.

Section 15064.5 of the CEQA Guidelines notes that "a project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment." Substantial adverse changes include physical changes to the historic resource or to its immediate surroundings, such that the significance of the historic resource would be materially impaired. Lead agencies are expected to identify potentially feasible measures to mitigate significant adverse changes in the significance of an historic resource before they approve such projects. Historic resources are those that are:

- listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR) (Public Resources Code Section 5024.1[k]);
- included in a local register of historic resources (Public Resources Code Section 5020.1) or identified as significant in an historic resource survey meeting the requirements of Public Resources Code Section 5024.1(g); or
- determined by a lead agency to be historically significant.

CEQA Guidelines Section 15064.5 also prescribes the processes and procedures found under Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.95 for addressing the existence of, or probable likelihood of, Native

American human remains, as well as the unexpected discovery of any human remains within the project site. This includes consultation with the appropriate Native American tribes.

CEQA Guidelines Section 15126.4 provides further guidance about minimizing effects to historical resources through the application of mitigation measures. Mitigation measures must be legally binding and fully enforceable.

The lead agency having jurisdiction over a project is also responsible to ensure that paleontological resources are protected in compliance with CEQA and other applicable statutes. Paleontological and historical resource management is also addressed in Public Resources Code Section 5097.5, "Archaeological, Paleontological, and Historical Sites." This statute defines as a misdemeanor any unauthorized disturbance or removal of a fossil site or remains on public land and specifies that state agencies may undertake surveys, excavations, or other operations as necessary on state lands to preserve or record paleontological resources. This statute would apply to any construction or other related project impacts that would occur on state-owned or state-managed lands. The County General Plan contains policies describing specific, enforceable measures to protect cultural resources and the treatment of resources when found.

Discussion: In general, significant impacts are those that diminish the integrity, research potential, or other characteristics that make a historical or cultural resource significant or important. A substantial adverse effect on Cultural Resources would occur if the implementation of the project would:

- Disrupt, alter, or adversely affect a prehistoric or historic archaeological site or property that is historically or cultural significant to a community or ethnic or social group; or a paleontological site except as a part of a scientific study;
- Affect a landmark of cultural/historical importance;
- Conflict with established recreational, educational, religious or scientific uses of the area; or
- Conflict with adopted environmental plans and goals of the community where it is located.

a-c. **Historic Resource, Archaeological Resource, Paleontological Resource**: An Archaeological Survey Report was performed by EBI Consulting on April 24, 2015. The results of the Study indicated that there is a low to moderate potential for locating significant precontact and/or historical archaeological resources. It is unlikely that significant below-grade cultural resources exist. No historic properties were identified within the project area. No further archaeological testing is recommended for this project. Standard conditions of approval would apply during all grading activities to address accidental discovery of historic, archaeological, and/or paleontological resources. Impacts would be less than significant.

d. **Human Remains:** There is a low likelihood of human remains discovery on the project site. Standard conditions of approval would apply during all grading activities to address accidental discovery of human remains. Therefore, impacts will be less than significant.

FINDING: No significant historic, archaeological, or paleontological resources have been identified on the project site. Standard conditions of approval would apply in the event of accidental discovery of cultural resources or human remains during project construction. This project would have less than significant impacts within the Cultural Resources category.

6. **TRIBAL CULTURAL RESOURCES.** *Would the project:*	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a Tribal Cultural Resource as defined in Section 21074?			X	

Regulatory Setting:

Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies apply to Tribal Cultural Resources (TCRs) and the Proposed Project.

State Laws, Regulations, and Policies

Assembly Bill (AB) 52

AB 52, which was approved in September 2014 and went into effect on July 1, 2015, requires that CEQA lead agencies consult with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of a proposed project, if so requested by the tribe. The bill, chaptered in CEQA Section 21084.2, also specifies that a project with an effect that may cause a substantial adverse change in the significance of a TCR is a project that may have a significant effect on the environment.

Defined in Section 21074(a) of the Public Resources Code, TCRs are:

1. Sites, features, places, cultural landscapes, sacred places and objects with cultural value to a California Native American tribe that are either of the following:
    a. Included or determined to be eligible for inclusion in the California Register of Historical Resources; or
    b. Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

TCRs are further defined under Section 21074 as follows:

a. A cultural landscape that meets the criteria of subdivision (a) is a TCR to the extent that the landscape is geographically defined in terms of the size and scope of the landscape; and
b. A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a TCR if it conforms with the criteria of subdivision (a).

Mitigation measures for TCRs must be developed in consultation with the affected California Native American tribe pursuant to newly chaptered Section 21080.3.2, or according to Section 21084.3. Section 21084.3 identifies mitigation measures that include avoidance and preservation of TCRs and treating TRCs with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource.

Discussion:

In general, significant impacts are those that diminish the integrity, research potential, or other characteristics that make a TCR significant or important. To be considered a TCR, a resource must be either: (1) listed, or determined to be eligible for listing, on the national, state, or local register of historic resources, or: (2) a resource that the lead agency chooses, in its discretion, to treat as a TCR and meets the criteria for listing in the state register of historic resources pursuant to the criteria set forth in Public Resources Code Section 5024.1(c). A substantial adverse change to a TCR would occur if the implementation of the project would:

- Disrupt, alter, or adversely affect a TCR such that the significance of the resource would be materially impaired

a. **Tribal Cultural Resources.** At the time this project was deemed complete and CEQA was initiated, the County had not received any requests for consultation under AB52 by a California Native American Tribe. Further, the geographic area of the project site is not known to contain any TCRs.

FINDING: No significant TCRs are known to exist on the project site. As a result, the proposed project would not cause a substantial adverse change to a TCR and there would be no impact.

7. **GEOLOGY AND SOILS.** *Would the project:*	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				X
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?				X
iv) Landslides?				X
b. Result in substantial soil erosion or the loss of topsoil?			X	
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994) creating substantial risks to life or property?			X	
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X

Regulatory Setting:

Federal Laws, Regulations, and Policies

National Earthquake Hazards Reduction Act

The National Earthquake Hazards Reduction Act of 1977 (Public Law 95-124) and creation of the National Earthquake Hazards Reduction Program (NEHRP) established a long-term earthquake risk-reduction program to better understand, predict, and mitigate risks associated with seismic events. The following four federal agencies are responsible for coordinating activities under NEHRP: USGS, National Science Foundation (NSF), Federal Emergency Management Agency (FEMA), and National Institute of Standards and Technology (NIST). Since its inception, NEHRP has shifted its focus from earthquake prediction to hazard reduction. The current program objectives (NEHRP 2009) are to:

1. Develop effective measures to reduce earthquake hazards;
2. Promote the adoption of earthquake hazard reduction activities by federal, state, and local governments; national building standards and model building code organizations; engineers; architects; building owners; and others who play a role in planning and constructing buildings, bridges, structures, and critical infrastructure or "lifelines";
3. Improve the basic understanding of earthquakes and their effects on people and infrastructure through interdisciplinary research involving engineering; natural sciences; and social, economic, and decision sciences; and
4. Develop and maintain the USGS seismic monitoring system (Advanced National Seismic System); the NSF-funded project aimed at improving materials, designs, and construction techniques (George E. Brown Jr. Network for Earthquake Engineering Simulation); and the global earthquake monitoring network (Global Seismic Network).

Implementation of NEHRP objectives is accomplished primarily through original research, publications, and recommendations and guidelines for state, regional, and local agencies in the development of plans and policies to promote safety and emergency planning.

State Laws, Regulations, and Policies

Alquist–Priolo Earthquake Fault Zoning Act

The Alquist–Priolo Earthquake Fault Zoning Act (Public Resources Code Section 2621 *et seq.*) was passed to reduce the risk to life and property from surface faulting in California. The Alquist–Priolo Act prohibits construction of most types of structures intended for human occupancy on the surface traces of active faults and strictly regulates construction in the corridors along active faults (earthquake fault zones). It also defines criteria for identifying active faults, giving legal weight to terms such as "active," and establishes a process for reviewing building proposals in and adjacent to earthquake fault zones. Under the Alquist-Priolo Act, faults are zoned and construction along or across them is strictly regulated if they are "sufficiently active" and "well defined." Before a project can be permitted, cities and counties are required to have a geologic investigation conducted to demonstrate that the proposed buildings would not be constructed across active faults.

Historical seismic activity and fault and seismic hazards mapping in the project vicinity indicate that the area has relatively low potential for seismic activity (El Dorado County 2003). No active faults have been mapped in the project area, and none of the known faults have been designated as an Alquist-Priolo Earthquake Fault Zone.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (SHMA) of 1990 (Public Resources Code Sections 2690–2699.6) establishes statewide minimum public safety standards for mitigation of earthquake hazards. While the Alquist–Priolo Act addresses surface fault rupture, the SHMA addresses other earthquake-related hazards, including strong ground shaking, liquefaction, and seismically induced landslides. Its provisions are similar in concept to those of the Alquist–Priolo Act. The state is charged with identifying and mapping areas at risk of strong ground shaking, liquefaction, landslides, and other seismic hazards, and cities and counties are required to regulate development within mapped seismic hazard zones. In addition, the act addresses not only seismically induced hazards but also expansive soils, settlement, and slope stability.

Mapping and other information generated pursuant to the SHMA is to be made available to local governments for planning and development purposes. The State requires: (1) local governments to incorporate site-specific geotechnical hazard investigations and associated hazard mitigation, as part of the local construction permit approval process; and (2) the agent for a property seller or the seller if acting without an agent, must disclose to any prospective buyer if the property is located within a Seismic Hazard Zone. Under the SHMA, cities and counties may withhold the development permits for a site within seismic hazard zones until appropriate site-specific geologic and/or geotechnical investigations have been carried out and measures to reduce potential damage have been incorporated into the development plans.

California Building Standards Code

Title 24 CCR, also known as the California Building Standards Code (CBC), specifies standards for geologic and seismic hazards other than surface faulting. These codes are administered and updated by the California Building Standards

Commission. CBC specifies criteria for open excavation, seismic design, and load-bearing capacity directly related to construction in California.

Discussion: A substantial adverse effect on Geologic Resources would occur if the implementation of the project would:

- Allow substantial development of structures or features in areas susceptible to seismically induced hazards such as groundshaking, liquefaction, seiche, and/or slope failure where the risk to people and property resulting from earthquakes could not be reduced through engineering and construction measures in accordance with regulations, codes, and professional standards;
- Allow substantial development in areas subject to landslides, slope failure, erosion, subsidence, settlement, and/or expansive soils where the risk to people and property resulting from such geologic hazards could not be reduced through engineering and construction measures in accordance with regulations, codes, and professional standards; or
- Allow substantial grading and construction activities in areas of known soil instability, steep slopes, or shallow depth to bedrock where such activities could result in accelerated erosion and sedimentation or exposure of people, property, and/or wildlife to hazardous conditions (e.g., blasting) that could not be mitigated through engineering and construction measures in accordance with regulations, codes, and professional standards.

a. **Seismic Hazards:**
i) According to the California Department of Conservation Division of Mines and Geology, there are no Alquist-Priolo fault zones within El Dorado County (DOC, 2007). The nearest such faults are located in Alpine and Butte Counties. There would be no impact.

ii) The potential for seismic ground shaking in the project area would be considered remote for the reason stated in Section i) above. Any potential impacts due to seismic impacts would be addressed through compliance with the Uniform Building Code (UBC). All structures would be built to meet the construction standards of the UBC for the appropriate seismic zone. Impacts would be less than significant.

iii) El Dorado County is considered an area with low potential for seismic activity. There are no landslide, liquefaction, or fault zones (DOC, 2007). There would be no impact.

iv) All grading activities onsite would be required to comply with the El Dorado County Grading, Erosion Control and Sediment Ordinance. There would be no impact.

b. **Soil Erosion:** The site contains Placer Diggings and Boomer gravelly loam in the proposed lease area and access easement area. For Placer Diggings soil, natural drainage varies from place to place. Boomer gravelly loam is a well-drained soil that has a moderate erosion hazard with medium surface runoff. There would be the potential for erosion, changes in topography, and unstable soil conditions, however, these concerns would be addressed during the grading permit process. All grading activities exceeding 250 cubic yards of graded material or grading completed for the purpose of supporting a structure must meet the provisions contained in the Grading, Erosion, and Sediment Control, County Code Chapter 110.14. This ordinance is designed to limit erosion, control the loss of topsoil and sediment, limit surface runoff, and ensure stable soil and site conditions for the intended use in compliance with the El Dorado County General Plan. Impacts would be less than significant.

c. **Geologic Hazards:** Based on the Seismic Hazards Mapping Program administered by the California Geological Survey, no portion of El Dorado County is located in a Seismic Hazard Zone or in areas prone to liquefaction and earthquake-induced landslides (DOC, 2013). Therefore, El Dorado County is not considered to be at risk from liquefaction hazards. Lateral spreading is typically associated with areas experiencing liquefaction. Because liquefaction hazards are not present in El Dorado County, the county is not at risk for lateral spreading. All grading activities would comply with the El Dorado County Grading, Erosion Control and Sediment Ordinance. Impacts would be less than significant.

d. **Expansive Soils:** Expansive soils are those that greatly increase in volume when they absorb water and shrink when they dry out. When buildings are placed on expansive soils, foundations may rise each wet season and fall each dry season. This movement may result in cracking foundations and distortion of structures. The central portion of the

county has a moderate expansiveness rating while the eastern and western portions have a low rating. Linear extensibility is used to determine the shrink-swell potential of soils. No structures for human occupancy would be constructed as part of the proposed project. Prior to construction, a grading plan will be required to be approved in accordance with the El Dorado County Grading, Erosion Control and Sediment Ordinance. Impacts would be less than significant.

e. **Septic Capability:** The project would not require the installation or use of a septic system. There would be no impact.

FINDING: A review of the soils and geologic conditions at the project site determined that the project would not result in a substantial adverse effect. All grading activities would be required to comply with the El Dorado County Grading, Erosion Control and Sediment Ordinance which would address potential impacts related to soil erosion, landslides and other geologic impacts. Facility development would be required to comply with the UBC which would address potential seismic related impacts. For this Geology and Soils category, impacts would be less than significant.

8. GREENHOUSE GAS EMISSIONS. *Would the project:*	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

Background/Science

Cumulative greenhouse gases (GHG) emissions are believed to contribute to an increased greenhouse effect and global climate change, which may result in sea level rise, changes in precipitation, habitat, temperature, wildfires, air pollution levels, and changes in the frequency and intensity of weather-related events. While criteria pollutants and toxic air contaminants are pollutants of regional and local concern (see Section III. Air Quality above); GHG are global pollutants. The primary land-use related GHG are carbon dioxide (CO_2), methane (CH_4) and nitrous oxides (N_2O). The individual pollutant's ability to retain infrared radiation represents its "global warming potential" and is expressed in terms of CO_2 equivalents; therefore CO_2 is the benchmark having a global warming potential of 1. Methane has a global warming potential of 21 and thus has a 21 times greater global warming effect per metric ton of CH_4 than CO_2. Nitrous Oxide has a global warming potential of 310. Emissions are expressed in annual metric tons of CO_2 equivalent units of measure (i.e., $MTCO_2e/yr$). The three other main GHG are Hydroflourocarbons, Perflourocarbons, and Sulfur Hexaflouride. While these compounds have significantly higher global warming potentials (ranging in the thousands), all three typically are not a concern in land-use development projects and are usually only used in specific industrial processes.

GHG Sources

The primary man-made source of CO_2 is the burning of fossil fuels; the two largest sources being coal burning to produce electricity and petroleum burning in combustion engines. The primary sources of man-made CH_4 are natural gas systems losses (during production, processing, storage, transmission and distribution), enteric fermentation (digestion from livestock) and landfill off-gassing. The primary source of man-made N_2O is agricultural soil management (fertilizers), with fossil fuel combustion a very distant second. In El Dorado County, the primary source of GHG is fossil fuel combustion mainly in the transportation sector (estimated at 70% of countywide GHG emissions). A distant second are residential sources (approximately 20%), and commercial/industrial sources are third (approximately 7%). The remaining sources are waste/landfill (approximately 3%) and agricultural (<1%).

Regulatory Setting:

Federal Laws, Regulations, and Policies

At the federal level, USEPA has developed regulations to reduce GHG emissions from motor vehicles and has developed permitting requirements for large stationary emitters of GHGs. On April 1, 2010, USEPA and the National Highway Traffic Safety Administration (NHTSA) established a program to reduce GHG emissions and improve fuel economy standards for new model year 2012-2016 cars and light trucks. On August 9, 2011, USEPA and the NHTSA announced standards to reduce GHG emissions and improve fuel efficiency for heavy-duty trucks and buses.

Federal Laws, Regulations, and Policies

In September 2006, Governor Arnold Schwarzenegger signed Assembly Bill (AB) 32, the *California Climate Solutions Act of 2006* (Stats. 2006, ch. 488) (Health & Safety Code, Section 38500 et seq.). AB 32 requires a statewide GHG emissions reduction to 1990 levels by the year 2020. AB 32 requires the California Air Resources Board (CARB) to implement and enforce the statewide cap. When AB 32 was signed, California's annual GHG emissions were estimated at 600 million metric tons of CO_2 equivalent ($MMTCO_2e$) while 1990 levels were estimated at 427 $MMTCO_2e$. Setting 427 $MMTCO_2e$ as the emissions target for 2020, current (2006) GHG emissions levels must be reduced by 29%. CARB adopted the AB 32 Scoping Plan in December 2008 establishing various actions the state would implement to achieve this reduction (CARB, 2008). The Scoping Plan recommends a community-wide GHG reduction goal for local governments of 15%.

In June 2008, the California Governor's Office of Planning and Research's (OPR) issued a Technical Advisory (OPR, 2008) providing interim guidance regarding a proposed project's GHG emissions and contribution to global climate change. In the absence of adopted local or statewide thresholds, OPR recommends the following approach for analyzing GHG emissions: Identify and quantify the project's GHG emissions, assess the significance of the impact on climate change; and if the impact is found to be significant, identify alternatives and/or Mitigation Measures that would reduce the impact to less than significant levels (CEC, 2006).

Discussion: The prominent GHGs contributing to the greenhouse effect as specifically listed in Assembly Bill AB 32, the California Global Warming Solutions Act of 2006, are carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. In California, the transportation sector is the largest emitter of GHGs, followed by electricity generation (California Energy Commission, 2006). No project alone would contribute to a noticeable incremental change to the global climate. However, AB 32 and executive order S-3-05 have established a statewide context for GHG emissions, and an enforceable statewide cap on GHG emissions.

The Governor's Office of Planning and Research (OPR) issued a technical advisory (OPR, 2008) to provide interim guidance regarding the basis for determining the proposed project's contribution of greenhouse gas emissions and the project's contribution to global climate change. In the absence of adopted local or statewide thresholds, OPR recommends the following approach for analyzing greenhouse gas emissions: Identify and quantify the project's greenhouse gas emissions; assess the significance of the impact on climate change; and if the impact is found to be significant, identify alternatives and/or mitigation measures that would reduce the impact to less than significant levels.

a. The proposed project would generate GHG emissions primarily as a result of facility construction in the form of construction equipment exhaust. The proposed project anticipates a construction period of approximately 45 to 60 days. During this time, a small net increase in GHG emissions would result from various construction activities. Construction-related GHG emissions would be associated with engine exhaust from heavy-duty construction equipment, transport trucks hauling materials, and worker commute trips. Construction-related traffic would be spread over the duration of the construction schedule and therefore, would be minimal on a daily basis. After completion of construction, all construction emissions would cease. Operation of the facility would not require the use of water or require a substantial amount of electricity. The project would be required to incorporate modern construction and design features that reduce energy consumption to the extent feasible. Implementation of these features would help reduce potential GHG emissions resulting from the development of the proposed project. The

project would generate a negligible amount of GHG emissions as a result of infrequent maintenance vehicle trips and back-up generator operations. Therefore, the proposed project would have a negligible contribution towards statewide GHG inventories and would have a less than significant impact.

b. Because construction-related emissions would be temporary and below the minimum standard for reporting requirements under AB 32, the proposed project's GHG emissions would have a negligible cumulative contribution towards statewide and global GHG emissions. The proposed project would not conflict with the objectives of AB 32 or any other applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions. Impacts would be less than significant.

FINDING: The project would result in less than significant impacts to GHG emissions because of the project size and inclusion of design features to address the emissions of GHG. For this Greenhouse Gas Emissions category, impacts would be less than significant.

9. **HAZARDS AND HAZARDOUS MATERIALS.** *Would the project:*	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			X	

Regulatory Setting:

Hazardous materials and hazardous wastes are subject to extensive federal, state, and local regulations to protect public health and the environment. These regulations provide definitions of hazardous materials; establish reporting requirements; set guidelines for handling, storage, transport, and disposal of hazardous wastes; and require health and safety provisions for workers and the public. The major federal, state, and regional agencies enforcing these regulations are USEPA and the Occupational Safety and Health Administration (OSHA); California Department of Toxic Substances Control (DTSC); California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA); California Governor's Office of Emergency Services (Cal OES); and EDCAPCD.

Federal Laws, Regulations, and Policies

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, also called the Superfund Act; 42 USC Section 9601 *et seq.*) is intended to protect the public and the environment from the effects of past hazardous waste disposal activities and new hazardous material spills. Under CERCLA, USEPA has the authority to seek the parties responsible for hazardous materials releases and to ensure their cooperation in site remediation. CERCLA also provides federal funding (through the "Superfund") for the remediation of hazardous materials contamination. The Superfund Amendments and Reauthorization Act of 1986 (Public Law 99-499) amends some provisions of CERCLA and provides for a Community Right-to-Know program.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act of 1976 (RCRA; 42 USC Section 6901 *et seq.*), as amended by the Hazardous and Solid Waste Amendments of 1984, is the primary federal law for the regulation of solid waste and hazardous waste in the United States. These laws provide for the "cradle-to-grave" regulation of hazardous wastes, including generation, transportation, treatment, storage, and disposal. Any business, institution, or other entity that generates hazardous waste is required to identify and track its hazardous waste from the point of generation until it is recycled, reused, or disposed of.

USEPA has primary responsibility for implementing RCRA, but individual states are encouraged to seek authorization to implement some or all RCRA provisions. California received authority to implement the RCRA program in August 1992. DTSC is responsible for implementing the RCRA program in addition to California's own hazardous waste laws, which are collectively known as the Hazardous Waste Control Law.

Energy Policy Act of 2005

Title XV, Subtitle B of the Energy Policy Act of 2005 (the Underground Storage Tank Compliance Act of 2005) contains amendments to Subtitle I of the Solid Waste Disposal Act, the original legislation that created the Underground Storage Tank (UST) Program. As defined by law, a UST is "any one or combination of tanks, including pipes connected thereto, that is used for the storage of hazardous substances and that is substantially or totally beneath the surface of the ground." In cooperation with USEPA, SWRCB oversees the UST Program. The intent is to protect public health and safety and the environment from releases of petroleum and other hazardous substances from tanks. The four primary program elements include leak prevention (implemented by Certified Unified Program Agencies [CUPAs], described in more detail below), cleanup of leaking tanks, enforcement of UST requirements, and tank integrity testing.

Spill Prevention, Control, and Countermeasure Rule

USEPA's Spill Prevention, Control, and Countermeasure (SPCC) Rule (40 CFR, Part 112) apply to facilities with a single above-ground storage tank (AST) with a storage capacity greater than 660 gallons, or multiple tanks with a combined capacity greater than 1,320 gallons. The rule includes requirements for oil spill prevention, preparedness, and response to prevent oil discharges to navigable waters and adjoining shorelines. The rule requires specific facilities to prepare, amend, and implement SPCC Plans.

Occupational Safety and Health Administration

OSHA is responsible at the federal level for ensuring worker safety. OSHA sets federal standards for implementation of workplace training, exposure limits, and safety procedures for the handling of hazardous substances (as well as other hazards). OSHA also establishes criteria by which each state can implement its own health and safety program.

Federal Communications Commission Requirements

There is no federally mandated radio frequency (RF) exposure standard; however, pursuant to the Telecommunications Act of 1996 (47 USC Section 224), the Federal Communications Commission (FCC) established guidelines for dealing with RF exposure, as presented below. The exposure limits are specified in 47 CFR Section 1.1310 in terms of frequency, field strength, power density, and averaging time. Facilities and transmitters licensed and authorized by FCC must either comply with these limits or an applicant must file an environmental assessment (EA) with FCC to evaluate whether the proposed facilities could result in a significant environmental effect.

FCC has established two sets of RF radiation exposure limits—Occupational/Controlled and General Population/Uncontrolled. The less-restrictive Occupational/Controlled limit applies only when a person (worker) is exposed as a consequence of his or her employment and is "fully aware of the potential exposure and can exercise control over his or her exposure," otherwise the General Population limit applies (47 CFR Section 1.1310).

The FCC exposure limits generally apply to all FCC-licensed facilities (47 CFR Section 1.1307[b][1]). Unless exemptions apply, as a condition of obtaining a license to transmit, applicants must certify that they comply with FCC environmental rules, including those that are designed to prevent exposing persons to radiation above FCC RF limits (47 CFR Section1.1307[b]). Licensees at co-located sites (e.g., towers supporting multiple antennas, including antennas under separate ownerships) must take the necessary actions to bring the accessible areas that exceed the FCC exposure limits into compliance. This is a shared responsibility of all licensees whose transmission power density levels account for 5.0 percent or more of the applicable FCC exposure limits (47CFR 1.1307[b][3]).

Code of Federal Regulations (14 CFR) Part 77

Code of Federal Regulations 14 CFR Part 77.9 is designed to promote air safety and the efficient use of navigable airspace. Implementation of the code is administered by the Federal Aviation Administration (FAA). If an organization plans to sponsor any construction or alterations that might affect navigable airspace, a Notice of Proposed Construction or Alteration (FAA Form 7460-1) must be filed. The code provides specific guidance regarding FAA notification requirements.

Any person/organization who/that intends to sponsor any of the following construction or alterations must notify the administrator of the FAA when:

- any construction or alteration exceeding 200 feet above ground level;
- any construction or alteration:
    - within 20,000 feet of a public use or military airport which exceeds a 100:1 surface from any point on the runway of each airport with its longest runway more than 3,200 feet;
    - within 10,000 feet of a public use or military airport which exceeds a 50:1 surface from any point on the runway of each airport with its longest runway no more than 3,200 feet;
    - within 5,000 feet of a public use heliport which exceeds a 25:1 surface;
- any highway, railroad or other traverse way whose prescribed adjusted height would exceed the above noted standards;
- when requested by the FAA; and
- any construction or alteration located on a public use airport or heliport regardless of height or location.

State Laws, Regulations, and Policies

Safe Drinking Water and Toxic Enforcement Act of 1986 – Proposition 65

The Safe Drinking Water and Toxic Enforcement Act of 1986, more commonly known as Proposition 65, protects the state's drinking water sources from contamination with chemicals known to cause cancer, birth defects, or other reproductive harm. Proposition 65 also requires businesses to inform the public of exposure to such chemicals in the products they purchase, in their homes or workplaces, or that are released into the environment. In accordance with Proposition 65, the California Governor's Office publishes, at least annually, a list of such chemicals. Office of Environmental Health Hazard Assessment (OEHHA), an agency under the California Environmental Protection Agency (CalEPA), is the lead agency for implementation of the Proposition 65 program. Proposition 65 is enforced through the California Attorney General's Office; however, district and city attorneys and any individual acting in the public interest may also file a lawsuit against a business alleged to be in violation of Proposition 65 regulations.

The Unified Program

The Unified Program consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of six environmental and emergency response programs. CalEPA and other state agencies set the standards for their programs, while local governments (CUPAs) implement the standards. For each county, the CUPA regulates/oversees the following:

- Hazardous materials business plans;
- California accidental release prevention plans or federal risk management plans;
- The operation of USTs and ASTs;
- Universal waste and hazardous waste generators and handlers;
- On-site hazardous waste treatment;
- Inspections, permitting, and enforcement;
- Proposition 65 reporting; and
- Emergency response.

Hazardous Materials Business Plans

Hazardous materials business plans are required for businesses that handle hazardous materials in quantities greater than or equal to 55 gallons of a liquid, 500 pounds of a solid, or 200 cubic feet (cf) of compressed gas, or extremely hazardous substances above the threshold planning quantity (40 CFR, Part 355, Appendix A) (Cal OES, 2015). Business plans are required to include an inventory of the hazardous materials used/stored by the business, a site map, an emergency plan, and a training program for employees (Cal OES, 2015). In addition, business plan information is provided electronically to a statewide information management system, verified by the applicable CUPA, and transmitted to agencies responsible for the protection of public health and safety (i.e., local fire department, hazardous material response team, and local environmental regulatory groups) (Cal OES, 2015).

California Occupational Safety and Health Administration

Cal/OSHA assumes primary responsibility for developing and enforcing workplace safety regulations in California. Cal/OSHA regulations pertaining to the use of hazardous materials in the workplace (CCR Title 8) include requirements for safety training, availability of safety equipment, accident and illness prevention programs, warnings about exposure to hazardous substances, and preparation of emergency action and fire prevention plans.

Hazard communication program regulations that are enforced by Cal/OSHA require workplaces to maintain procedures for identifying and labeling hazardous substances, inform workers about the hazards associated with hazardous substances and their handling, and prepare health and safety plans to protect workers at hazardous waste sites. Employers must also make material safety data sheets available to employees and document employee information and training programs. In addition, Cal/OSHA has established maximum permissible RF radiation exposure limits for workers (Title 8 CCR Section 5085[b]), and requires warning signs where RF radiation might exceed the specified limits (Title 8 CCR Section 5085 [c]).

California Accidental Release Prevention

The purpose of the California Accidental Release Prevention (CalARP) program is to prevent accidental releases of substances that can cause serious harm to the public and the environment, to minimize the damage if releases do occur, and to satisfy community right-to-know laws. In accordance with this program, businesses that handle more than a threshold quantity of regulated substance are required to develop a risk management plan (RMP). This RMP must provide a detailed analysis of potential risk factors and associated mitigation measures that can be implemented to reduce accident potential. CUPAs implement the CalARP program through review of RMPs, facility inspections, and public access to information that is not confidential or a trade secret.

California Department of Forestry and Fire Protection Wildland Fire Management

The Office of the State Fire Marshal and the California Department of Forestry and Fire Protection (CALFIRE) administer state policies regarding wildland fire safety. Construction contractors must comply with the following requirements in the Public Resources Code during construction activities at any sites with forest-, brush-, or grass-covered land:

- Earthmoving and portable equipment with internal combustion engines must be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (Public Resources Code Section 4442).
- Appropriate fire-suppression equipment must be maintained from April 1 to December 1, the highest-danger period for fires (Public Resources Code Section 4428).
- On days when a burning permit is required, flammable materials must be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor must maintain the appropriate fire suppression equipment (Public Resources Code Section 4427).
- On days when a burning permit is required, portable tools powered by gasoline fueled internal combustion engines must not be used within 25 feet of any flammable materials (Public Resources Code Section 4431).

California Highway Patrol (CHP)

CHP, along with Caltrans, enforce and monitor hazardous materials and waste transportation laws and regulations in California. These agencies determine container types used and license hazardous waste haulers for hazardous waste transportation on public roads. All motor carriers and drivers involved in transportation of hazardous materials must apply for and obtain a hazardous materials transportation license from CHP.

Local Laws, Regulations, and Policies

A map of the fuel loading in the County (General Plan Figure HS-1) shows the fire hazard severity classifications of the State Responsibility Areas (SRAs) in El Dorado County, as established by CDF. The classification system provides three classes of fire hazards: Moderate, High, and Very High. Fire Hazard Ordinance (Chapter 8.08) requires defensible space as described by the State Public Resources Code, including the incorporation and maintenance of a 30-foot fire break or vegetation fuel clearance around structures in fire hazard zones. The County's requirements on emergency access, signing and numbering, and emergency water are more stringent than those required by state law (Patton 2002). The Fire Hazard Ordinance also establishes limits on campfires, fireworks, smoking, and incinerators for all discretionary and ministerial developments.

Discussion: A substantial adverse effect due to hazards or hazardous materials would occur if implementation of the project would:

- Expose people and property to hazards associated with the use, storage, transport, and disposal of hazardous materials where the risk of such exposure could not be reduced through implementation of Federal, State, and local laws and regulations;
- Expose people and property to risks associated with wildland fires where such risks could not be reduced through implementation of proper fuel management techniques, buffers and landscape setbacks, structural design features, and emergency access; or
- Expose people to safety hazards as a result of former on-site mining operations.

a, b. **Hazardous Materials:** The Federal Communication Commission (FCC) prohibits local governments from denying a wireless facility project based on concerns about the dangers of exposure to radio frequency or electromagnetic fields (EMF). This is due to inconclusive evidence about the health risk of exposure to radio frequency EMF.

The Telecommunications Act of 1996 became effective on February 8, 1996. This act preserves the authority of the State or local government over decisions regarding the placement, construction, and modifications of personal wireless services, subject to two limitations. Section 704(7)B(iii) requires any denials to be in writing and supported by "substantial evidence." Section 704(7)B(iv) prohibits denial on the basis of radio frequency emissions if those emissions are compliant with Federal regulations.

The American National Standards Institute and the Institute of Electrical and Electronics Engineers (IEEE) have published a standard called ANSI/IEEE C95.1-1992, which until recently set recommended maximum power density levels for radio frequency (RF) energy originating from communications sites and other sources. The Federal Communications Commission (FCC) has also produced its own guidelines, which are more stringent and supersede the ANSI standard. The FCC rules categorically exclude certain transmitting facilities from routine evaluations for compliance with the RF emission guidelines if it can be determined that it is unlikely to cause workers or the general public to become exposed to emission that exceed the guidelines. The following table represents the FCC limits for both occupational and general population exposures to different radio frequencies:

Frequency Range (F) (MHz)	Limits for Occupational Exposure (mW/cm^2)*	Limits for General Public Exposure (mW/cm^2)
0.3-1.34	100	100
1.34-3.0	100	$180/F^2$
3.0—30	$900/F^2$	$180/F^2$
30-300	1.0	0.2
300-1,500	F/300	F/1500
1,500-100,000	5.0	1.0

*mW/cm^2=Milliwatt per square Centimeter

The RF analysis by Hammett & Edison, Inc., dated March 19, 2015, found that for accessible areas at ground level, the maximum predicted power density level is 0.75% of the applicable public exposure limits. At the second-floor elevation of any nearby building, the maximum predicted power density level is 0.57% of the public exposure limits. The nearest residential structure is located approximately 275 feet southwest of the proposed monopine. The nearest off-site residence is approximately 470 feet east of the tower. The highest calculated RF level in publicly accessible areas is much less than the prevailing standards allow for exposures of unlimited duration. The report validates the figures based on the FCC Regulations for measurements identifying quantitative standards for human exposure limits based on radio frequency emissions. Therefore, the risk of release of hazardous materials or emissions to the public is remote and impacts would be less than significant.

The project would not be anticipated to introduce, transport, store, or dispose of hazardous materials in such quantities that would create a hazard to people or the environment. The site is not located in an area of naturally occurring asbestos (El Dorado County, 2005). As such, impacts would be less than significant.

c. **Hazardous Materials near Schools:** No school sites exist within ¼ mile of the project location. There is an elementary school and small college over 1/2 mile from the project site. There would be no impact to schools.

d. **Hazardous Sites:** The project site is not included on a list of hazardous materials sites pursuant to Government Code section 65962.5 (DTSC, 2015). There would be no impact.

e. **Aircraft Hazards:** According to the El Dorado County Zoning Map, the project site is not within any airport safety zone or airport land use plan area. There would be no impact.

f. **Private Airstrips:** There are no private airstrips in the vicinity of the project site. There would be no impact.

g. **Emergency Plan:** The proposed project consists of installation of a wireless telecommunications facility which would not necessitate alterations to any street and would generate less than two vehicle trips per month. The project was reviewed by the Diamond Springs/El Dorado Fire Protection District and the Transportation Division. The project would not physically interfere with the implementation of the County adopted emergency response and/or evacuation plan for the project area. There would be no impact.

h. **Wildfire Hazards:** The project site is in an area of moderate hazard for wildland fire pursuant to Figure 5.8-4 of the 2004 General Plan Draft EIR. Diamond Springs/El Dorado Fire Protection District provided comments and conditions of approval, which include paving of access drive for steep slopes and turnout near facility, to be incorporated into the permit approvals. Implementation of the fire district standards and California Building Codes would reduce the impacts of wildland fire to a less than significant level.

FINDING: The project would not be anticipated to expose the area to significant hazards relating to the use, storage, transport, or disposal of hazardous materials. Any proposed future use of hazardous materials would be subject to review and approval of a Hazardous Materials Business Plan issued by the Environmental Management. For this Hazards and Hazardous Materials category, impacts would be less than significant.

10. HYDROLOGY AND WATER QUALITY. *Would the project:*	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements?			X	
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				X
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or -off-site?			X	
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?			X	
e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			X	
f. Otherwise substantially degrade water quality?			X	
g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				X

i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				X
j. Inundation by seiche, tsunami, or mudflow?				X

Regulatory Setting:

Federal Laws, Regulations, and Policies

Clean Water Act

The Clean Water Act (CWA) is the primary federal law that protects the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. The key sections pertaining to water quality regulation for the Proposed Project are CWA Section 303 and Section 402.

Section 303(d) — Listing of Impaired Water Bodies

Under CWA Section 303(d), states are required to identify "impaired water bodies" (those not meeting established water quality standards), identify the pollutants causing the impairment, establish priority rankings for waters on the list, and develop a schedule for the development of control plans to improve water quality. USEPA then approves the State's recommended list of impaired waters or adds and/or removes waterbodies to/from the list.

Section 402—NPDES Permits for Stormwater Discharge

CWA Section 402 regulates construction-related stormwater discharges to surface waters through the NPDES, which is officially administered by USEPA. In California, USEPA has delegated its authority to the State Water Resources Control Board (SWRCB), which, in turn, delegates implementation responsibility to the nine RWQCBs, as discussed below in reference to the Porter-Cologne Water Quality Control Act.

The NPDES program provides for both general (those that cover a number of similar or related activities) and individual (activity- or project-specific) permits. General Permit for Construction Activities: Most construction projects that disturb 1.0 or more acres of land are required to obtain coverage under SWRCB's General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order 2009-0009-DWQ as amended by 2010-0014-DWQ and 2012-0006-DWQ). The general permit requires that the applicant file a public notice of intent to discharge stormwater and prepare and implement a storm water pollution prevention plan (SWPPP). A SWPPP must include a site map and a description of the proposed construction activities, demonstrate compliance with relevant local ordinances and regulations, and present a list of Best Management Practices (BMPs) that will be implemented to prevent soil erosion and protect against discharge of sediment and other construction-related pollutants to surface waters. Permittees are further required to monitor construction activities and report compliance to ensure that BMPs are correctly implemented and are effective in controlling the discharge of construction-related pollutants.

Municipal Stormwater Permitting Program

SWRCB regulates stormwater discharges from municipal separate storm sewer systems (MS4s) through its Municipal Storm Water Permitting Program (SWRCB, 2013). Permits are issued under two phases depending on the size of the urbanized area/municipality. Phase I MS4 permits are issued for medium (population between 100,000 and 250,000 people) and large (population of 250,000 or more people) municipalities, and are often issued to a group of co-permittees within a metropolitan area. Phase I permits have been issued since 1990. Beginning in 2003, SWRCB began issuing Phase II MS4 permits for smaller municipalities (population less than 100,000).

El Dorado County is covered under two SWRCB Regional Boards. The West Slope Phase II Municipal Separate Storm Sewer Systems (MS4) NPDES Permit is administered by the Central Valley Regional Water Quality Control Board (RWQCB) (Region Five). The Lake Tahoe Phase I MS4 NPDES Permit is administered by the Lahontan RWQCB (Region

Six). The current West Slope MS4 NPDES Permit was adopted by the SWRCB on February 5, 2013. The Permit became effective on July 1, 2013 for a term of five years and focuses on the enhancement of surface water quality within high priority urbanized areas. The current Lake Tahoe MS4 NPDES Permit was adopted and took effect on December 6, 2011 for a term of five years. The Permit incorporated the Lake Tahoe Total Maximum Daily Load (TMDL) and the Lake Clarity Crediting Program (LCCP) to account for the reduction of fine sediment particles and nutrients discharged to Lake Tahoe.

On May 19, 2015 the El Dorado County Board of Supervisors formally adopted revisions to the Storm Water Quality Ordinance (Ordinance 4992). Previously applicable only to the Lake Tahoe Basin, the ordinance establishes legal authority for the entire unincorporated portion of the County. The purpose of the ordinance is to 1) protect health, safety, and general welfare, 2) enhance and protect the quality of Waters of the State by reducing pollutants in storm water discharges to the maximum extent practicable and controlling non-storm water discharges to the storm drain system, and 3) cause the use of Best Management Practices to reduce the adverse effects of polluted runoff discharges on Waters of the State.

National Flood Insurance Program

The Federal Emergency Management Agency (FEMA) administers the National Flood Insurance Program (NFIP) to provide subsidized flood insurance to communities complying with FEMA regulations that limit development in floodplains. The NFIP regulations permit development within special flood hazard zones provided that residential structures are raised above the base flood elevation of a 100-year flood event. Non-residential structures are required either to provide flood proofing construction techniques for that portion of structures below the 100-year flood elevation or to elevate above the 100-year flood elevation. The regulations also apply to substantial improvements of existing structures.

State Laws, Regulations, and Policies

Porter–Cologne Water Quality Control Act

The Porter–Cologne Water Quality Control Act (known as the Porter–Cologne Act), passed in 1969, dovetails with the CWA (see discussion of the CWA above). It established the SWRCB and divided the state into nine regions, each overseen by an RWQCB. SWRCB is the primary State agency responsible for protecting the quality of the state's surface water and groundwater supplies; however, much of the SWRCB's daily implementation authority is delegated to the nine RWQCBs, which are responsible for implementing CWA Sections 401, 402, and 303[d]. In general, SWRCB manages water rights and regulates statewide water quality, whereas RWQCBs focus on water quality within their respective regions.

The Porter–Cologne Act requires RWQCBs to develop water quality control plans (also known as basin plans) that designate beneficial uses of California's major surface-water bodies and groundwater basins and establish specific narrative and numerical water quality objectives for those waters. Beneficial uses represent the services and qualities of a waterbody (i.e., the reasons that the waterbody is considered valuable). Water quality objectives reflect the standards necessary to protect and support those beneficial uses. Basin plan standards are primarily implemented by regulating waste discharges so that water quality objectives are met. Under the Porter–Cologne Act, basin plans must be updated every 3 years.

Discussion: A substantial adverse effect on Hydrology and Water Quality would occur if the implementation of the project would:

- Expose residents to flood hazards by being located within the 100-year floodplain as defined by the Federal Emergency Management Agency;
- Cause substantial change in the rate and amount of surface runoff leaving the project site ultimately causing a substantial change in the amount of water in a stream, river or other waterway;
- Substantially interfere with groundwater recharge;
- Cause degradation of water quality (temperature, dissolved oxygen, turbidity and/or other typical stormwater pollutants) in the project area; or
- Cause degradation of groundwater quality in the vicinity of the project site.

a. **Water Quality Standards:** Erosion control would be required as part of the future grading and building permits. Adherence to County Code would not increase the level of sediment significantly above the current stormwater

discharge levels. Operation of the proposed project would not involve any uses that would generate wastewater. Stormwater runoff from potential development would be directed to an engineered drainage system and would contain water quality protection features in accordance with a potential National Pollutant Discharge Elimination System (NPDES) stormwater permit, as deemed applicable. The project is not anticipated to violate water quality standards. Impacts would be less than significant.

b. **Groundwater Supplies:** The project is not anticipated to affect potential groundwater supplies above pre-project levels. The project is of limited size and will not require water use for operation. There would be no impact.

c-f. **Drainage Patterns:** A grading permit through Building Services would be required to address grading, erosion and sediment control at the lease area and access road. Project related construction activities would be required to adhere to the El Dorado County Grading, Erosion Control and Sediment Ordinance. This includes the use of BMPs to minimize degradation of water quality during construction. Impacts would be less than significant.

g-j. **Flood-related Hazards:** The project site is not located within any mapped 100-year flood areas and would not result in the construction of any structures that would impede or redirect flood flows (FEMA, 2008). No dams which would result in potential hazards related to dam failures are located in the project area. The risk of exposure to seiche, tsunami, or mudflows would be remote. There would be no impact.

FINDING: The proposed project would require a site improvement and grading permit through the Building Services that would address any potentially applicable erosion and sediment control. No significant hydrological impacts are expected with the development of the project either directly or indirectly. For this hydrology category, impacts are anticipated to be less than significant.

11. LAND USE PLANNING. *Would the project:*	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Physically divide an established community?				X
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?			X	
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?				X

Regulatory Setting:

California State law requires that each county and city adopt a general plan "for the physical development of the county or city and any land outside its boundaries which bears relation to its planning." Typically, a general plan is designed to address the issues facing the city or county for the next 15-20 years. The general plan expresses the community's development goals and incorporates public policies relative to the distribution of future public and private land uses.

The El Dorado County General Plan was adopted in 2004. The 2013-2021 Housing Element was adopted in 2013.

Discussion: A substantial adverse effect on Land Use would occur if the implementation of the project would:

- Result in the conversion of Prime Farmland as defined by the State Department of Conservation;
- Result in conversion of land that either contains choice soils or which the County Agricultural Commission has identified as suitable for sustained grazing, provided that such lands were not assigned urban or other nonagricultural use in the Land Use Map;
- Result in conversion of undeveloped open space to more intensive land uses;
- Result in a use substantially incompatible with the existing surrounding land uses; or
- Conflict with adopted environmental plans, policies, and goals of the community.

a. **Established Community:** The adjoining parcels are designated for residential and agricultural land uses and are built out with rural residential uses. The project would provide improved wireless cellular telecommunications within the Placerville area. No new roadways, land divisions, rail lines, bridges or other improvements which would physically divide an established community are proposed. There would be no impact.

b. **Land Use Consistency:** The parcel is zoned Residential Estate, Five-Acre Minimum (RE-5) with a Low Density Residential general plan designation. Zoning Ordinance section 130.14.210.D.5.b permits wireless communication facilities in residential zone districts with approval of a Special Use Permit by the Planning Commission, pursuant to the development standards of 130.14.210.F. These standards include screening, compliance with setbacks, and proper maintenance. The applicant has provided a project narrative explaining the project details, potential benefits to the community, and site selection. The applicant has designed the wireless telecommunications facility in compliance with County regulations, addressing aesthetics and health and safety concerns. As conditioned, impacts would be less than significant.

c. **Habitat Conservation Plan:** The proposed project is not located in an area covered by a Habitat Conservation Plan or a Natural Community Conservation Plan. There would be no impact.

FINDING: The proposed use of the land would be consistent with the Zoning Ordinance and General Plan with the issuance of a Special Use Permit. There would be no significant impact to land use goals or standards resulting from the project. As conditioned, and with adherence to County Code, no significant impacts would be expected for the land use planning category.

12. MINERAL RESOURCES. *Would the project:*	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

Regulatory Setting:

Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies apply to mineral resources and the Proposed Project.

State Laws, Regulations, and Policies

Surface Mining and Reclamation Act

The Surface Mining and Reclamation Act of 1975 (SMARA) requires that the State Mining and Geology Board identify, map, and classify aggregate resources throughout California that contain regionally significant mineral resources. Designations of land areas are assigned by CDC and CGS following analysis of geologic reports and maps, field investigations, and using information about the locations of active sand and gravel mining operations. Local jurisdictions are required to enact planning procedures to guide mineral conservation and extraction at particular sites and to incorporate mineral resource management policies into their general plans.
El Dorado County in general is considered a mining region capable of producing a wide variety of mineral resources. Metallic mineral deposits, including gold, are considered the most significant extractive mineral resources. The project area, however, is not located in a Mineral Resource zone according to the General Plan.

Discussion: A substantial adverse effect on Mineral Resources would occur if the implementation of the project would:

- Result in obstruction of access to, and extraction of mineral resources classified MRZ-2x, or result in land use compatibility conflicts with mineral extraction operations.

a, b. **Mineral Resources:** The project site has not been delineated in the El Dorado County General Plan as a locally important mineral resource recovery site (2003, Exhibits 5.9-6 and 5.9-7). Review of the California Department of Conservation Geologic Map data showed that the project site is not within a mineral resource zone district. The project would construct the telecommunications facility within a 32 by 32 foot lease area. Because of the relatively small project footprint size, and the absence of any known important mineral resources, the proposed project is not anticipated to impact important mineral resources. There would be no impacts.

FINDING: No impacts to energy and mineral resources are expected with the development of the wireless telecommunications facility either directly or indirectly. For this mineral resources category, there would be no impacts.

13. **NOISE.** *Would the project:*	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			X	
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			X	

e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise level?				X
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X

Regulatory Setting:

No federal or state laws, regulations, or policies for construction-related noise and vibration apply to the Proposed Project. However, the Federal Transit Administration (FTA) Guidelines for Construction Vibration in Transit Noise and Vibration Impact Assessment state that for evaluating daytime construction noise impacts in outdoor areas, a noise threshold of 90 dBA Leq and 100 dBA Leq should be used for residential and commercial/industrial areas, respectively (FTA 2006).

For construction vibration impacts, the FTA guidelines use an annoyance threshold of 80 VdB for infrequent events (fewer than 30 vibration events per day) and a damage threshold of 0.12 inches per second (in/sec) PPV for buildings susceptible to vibration damage (FTA 2006).

Discussion: A substantial adverse effect due to Noise would occur if the implementation of the project would:

- Result in short-term construction noise that creates noise exposures to surrounding noise sensitive land uses in excess of 60 decibel (dB) Community Noise Level Equivalent (CNEL);
- Result in long-term operational noise that creates noise exposures in excess of 60 dB CNEL at the adjoining property line of a noise sensitive land use and the background noise level is increased by 3dB, or more; or
- Results in noise levels inconsistent with the performance standards contained in Table 6-1 and Table 6-2 in the El Dorado County General Plan.

a. **Noise Exposures:** The proposed project will not expose people to noise levels in excess of standards established in the General Plan or Zoning Ordinance. Short-term construction-related noise impacts are anticipated to occur weekdays only and would be required to comply with grading and construction permitting requirements and the noise performance standards contained in the General Plan. Noise would also result from the operation of the two air conditioning units and a 30 KW stand-by generator adjacent to the equipment shelter within the fenced lease area. According to Table 6-2 of the General Plan, non-transportation noise is limited to a time-averaged level of 50dB and maximum of 60dB in rural areas at a point 100 feet away from the nearest residence from 7am to 7pm. The noise levels for the air conditioning units would be below 30.0 dB at 100 feet from the off-site residence. The maximum noise level from the generator is 59.0 dB when measured at a distance of 23 feet, according to the sound level evaluation for this site and proposed equipment. The closest off-site residence is approximately 470 feet to the east and noise levels 100 feet from this residence are calculated at 29 dB, which is well within noise limits of the general plan. A standard condition limiting the days of the week and time of day for routine generator maintenance will further lessen this impact. The noise associated with the project would be less than significant.

b. **Groundborne Shaking:** The project may generate groundborne vibration or shaking events during project construction, which is anticipated to take approximately 45-60 days. These potential impacts would be limited to project construction during the day and for a short duration. Impacts would be less than significant.

c. **Permanent Noise Increases:** Routine maintenance visits would occur approximately once or twice a month. The vehicle noise from the addition of the maintenance visits would not be measurable and would not exceed the noise standards contained in the General Plan. The noise from the running of the generator once or twice a month meets the acceptable noise levels within the General Plan. Impacts would be less than significant.

d. **Short Term Noise:** Short-term construction-related noise impacts associated with excavation, grading, and construction activities would occur as part of the project. Construction of the facility would consist of extending the driveway to the lease area, minimal grading for the lease area, setting the tower, placing ground equipment within

the lease area, laying gravel, and installing a six-foot fence. These activities are anticipated to occur weekdays only over an approximately 45-60 day period during daylight hours and would only include minimal use of heavy equipment that would be a substantial source of noise or vibration to nearby residences. El Dorado County requires that all construction vehicles and equipment, fixed or mobile, be equipped with properly maintained and functioning mufflers. All construction and grading operations would be required to comply with the noise performance standards contained in the General Plan. According to Table 6-2 of the General Plan, non-transportation construction noise is limited to an hourly level of 50dB and maximum level of 60dB from 7am to 7pm. Therefore, impacts would be less than significant.

e-f. **Aircraft Noise:** There are no airstrips or airports within the project vicinity. There would be no impact.

FINDING: As conditioned, and with adherence to County Code, no significant direct or indirect impacts to noise levels are expected with the development of the wireless telecommunications facility either directly or indirectly. For this Noise category, the thresholds of significance would not be exceeded and impact would be less than significant.

14. POPULATION AND HOUSING. *Would the project:*	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Induce substantial population growth in an area, either directly (i.e., by proposing new homes and businesses) or indirectly (i.e., through extension of roads or other infrastructure)?				X
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X

Regulatory Setting:

No federal or state laws, regulations, or policies apply to population and housing and the Proposed Project.

Discussion: A substantial adverse effect on Population and Housing would occur if the implementation of the project would:

- Create substantial growth or concentration in population;
- Create a more substantial imbalance in the County's current jobs to housing ratio; or
- Conflict with adopted goals and policies set forth in applicable planning documents.

a-c. **Population Growth, Housing Displacement, and Replacement Housing:** The proposed project will not produce any housing, employment areas, roads or other infrastructure. The facility will require monthly maintenance and will be accessed by an access drive extending from the existing residential driveway. No housing or people would be displaced as a result of the proposed project. There would be no impact to Population and Housing.

FINDING: The project would not displace housing. There would be no potential for a significant impact due to substantial growth with the communications facility either directly or indirectly. For this Population and Housing category, the thresholds of significance would not be anticipated to be exceeded. There would be no impact.

15. PUBLIC SERVICES. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Fire protection?			X	
b. Police protection?				X
c. Schools?				X
d. Parks?				X
e. Other government services?				X

Regulatory Setting:

Federal Laws, Regulations, and Policies

California Fire Code

The California Fire Code (Title 24 CCR, Part 9) establishes minimum requirements to safeguard public health, safety, and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings. Chapter 33 of CCR contains requirements for fire safety during construction and demolition.

Discussion: A substantial adverse effect on Public Services would occur if the implementation of the project would:

- Substantially increase or expand the demand for fire protection and emergency medical services without increasing staffing and equipment to meet the Department's/District's goal of 1.5 firefighters per 1,000 residents and 2 firefighters per 1,000 residents, respectively;
- Substantially increase or expand the demand for public law enforcement protection without increasing staffing and equipment to maintain the Sheriff's Department goal of one sworn officer per 1,000 residents;
- Substantially increase the public school student population exceeding current school capacity without also including provisions to adequately accommodate the increased demand in services;
- Place a demand for library services in excess of available resources;
- Substantially increase the local population without dedicating a minimum of 5 acres of developed parklands for every 1,000 residents; or
- Be inconsistent with County adopted goals, objectives or policies.

a. **Fire Protection:** The parcel is within the Diamond Springs/El Dorado Fire Protection District service area. The new, unoccupied facility would represent a minimal increase in the demand for structural fire protection at the project site. Portions of the access road to the facility will need to be paved (for slopes over 15%) and a turnout near the facility will be required. The access road to the facility will be built at an acceptable slope (some stretches of the access drive may reach 19% slopes) to enable the Fire District to get a truck up to the facility in an emergency. The Fire District responded with recommendations for the project, including paving of the access drive where there is more than a 15% slope, which will be incorporated as project conditions of approval. Impacts would be less than significant.

b. **Police Protection:** Police services would continue to be provided by the El Dorado County Sheriff's Department. The facility will not be staffed and will be enclosed by a six-foot fence topped with barbed wire within a private residential property. No new or expanded law enforcement services would be required. There would be no impact.

c-e. **Schools, Parks and Government Services:** There are no components of operating the proposed project that would include any permanent population-related increases that would substantially contribute to increased demand on schools, parks, or other governmental services that could, in turn, result in the need for new or expanded facilities. There would be no impact.

FINDING: As discussed above, there would be no significant impacts to public services as a result of a wireless communication facility.

16. RECREATION.	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

Regulatory Setting:

National Trails System

The National Trails System Act of 1968 authorized the National Trails System (NTS) in order to provide additional outdoor recreation opportunities and to promote the preservation of access to the outdoor areas and historic resources of the nation. The Appalachian and Pacific Crest National Scenic Trails were the first two components, and the System has grown to include 20 national trails.

The National Trails System includes four classes of trails:

1. National Scenic Trails (NST) provide outdoor recreation and the conservation and enjoyment of significant scenic, historic, natural, or cultural qualities. The Pacific Coast Trail falls under this category. The PCT passes through the Desolation Wilderness area in the eastern portion of El Dorado County.
2. National Historic Trails (NHT) follow travel routes of national historic significance. The National Park Service has designated two National Historic Trail (NHT) alignments that pass through El Dorado County, the California National Historic Trail and the Pony Express National Historic Trail. The California Historic Trail is a route of approximately 5,700 miles including multiple routes and cutoffs, extending from Independence and Saint Joseph, Missouri, and Council Bluffs, Iowa, to various points in California and Oregon. The Pony Express NHT commemorates the route used to relay mail via horseback from Missouri to California before the advent of the telegraph.
3. National Recreation Trails (NRT) are in, or reasonably accessible to, urban areas on federal, state, or private lands. In El Dorado County there are five NRTs; Carson Emigrant Historic, Hawley Grade, Pony Express, Pope-Baldwin Bicycle, and Tahoe Rim Trail.

State Laws, Regulations, and Policies

The California Parklands Act

The California Parklands Act of 1980 (Public Resources Code Section 5096.141-5096.143) recognizes the public interest for the state to acquire, develop, and restore areas for recreation and to aid local governments to do the same. The California Parklands Act also identifies the necessity of local agencies to exercise vigilance to see that the parks, recreation areas, and recreational facilities they now have are not lost to other uses.

The California state legislature approved the California Recreational Trail Act of 1974 (Public Resources Code Section 2070-5077.8) requiring that the Department of Parks and Recreation prepare a comprehensive plan for California trails. The California Recreational Trails Plan is produced for all California agencies and recreation providers that manage trails. The Plan includes information on the benefits of trails, how to acquire funding, effective stewardship, and how to encourage cooperation among different trail users.

The 1975 Quimby Act (California Government Code Section 66477) requires residential subdivision developers to help mitigate the impacts of property improvements by requiring them to set aside land, donate conservation easements, or pay fees for park improvements. The Quimby Act gave authority for passage of land dedication ordinances to cities and counties for parkland dedication or in-lieu fees paid to the local jurisdiction. Quimby exactions must be roughly proportional and closely tied (nexus) to a project's impacts as identified through traffic studies required by CEQA. The exactions only apply to the acquisition of new parkland; they do not apply to the physical development of new park facilities or associated operations and maintenance costs.

The County implements the Quimby Act through Section 120.12.090 of the County Code. The County Code sets standards for the acquisition of land for parks and recreational purposes, or payments of fees in lieu thereof, on any land subdivision. Other projects, such as ministerial residential or commercial development, could contribute to the demand for park and recreation facilities without providing land or funding for such facilities.

Local Laws, Regulations, and Policies

The 2004 El Dorado County General Plan Parks and Recreation Element establishes goals and policies that address needs for the provision and maintenance of parks and recreation facilities in the county, with a focus on providing recreational opportunities and facilities on a regional scale, securing adequate funding sources, and increasing tourism and recreation-based businesses. The Parks and Recreation Element describes the need for 1.5 acres of regional parkland, 1.5 acres of community parkland, and 2 acres of neighborhood parkland per 1,000 residents. Another 95 acres of park land are needed to meet the General Plan guidelines.

Discussion: A substantial adverse effect on Recreational Resources would occur if the implementation of the project would:

- Substantially increase the local population without dedicating a minimum of 5 acres of developed parklands for every 1,000 residents; or
- Substantially increase the use of neighborhood or regional parks in the area such that substantial physical deterioration of the facility would occur.

a, b. **Parks and Recreational Services:** The project does not include any increase in permanent population that would contribute to increased demand on recreation facilities or contribute to increased use of existing facilities. There would be no impact.

FINDING: As discussed above, there would be no significant impacts to recreation as a result of a wireless communication facility.

17. **TRANSPORTATION/TRAFFIC.** *Would the project:*	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?			X	
b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?				X
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
e. Result in inadequate emergency access?			X	
f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?				X

Regulatory Setting:

Federal Laws, Regulations, and Policies

No federal laws, regulations, or policies apply to transportation/traffic and the Proposed Project.

State Laws, Regulations, and Policies

Caltrans manages the state highway system and ramp interchange intersections. This state agency is also responsible for highway, bridge, and rail transportation planning, construction, and maintenance.

Local Laws, Regulations, and Policies

According to the transportation element of the County General Plan, Level of Service (LOS) for County-maintained roads and state highways within the unincorporated areas of the county shall not be worse than LOS E in the Community Regions or LOS D in the Rural Centers and Rural Regions. Level of Service is defined in the latest edition of the Highway Capacity Manual (Transportation Research Board, National Research Council). There are some roadway segments that are excepted from these standards and are allowed to operate at LOS F, although none of these are impacted by the proposed project. According to Policy TC-Xe, "worsen" is defined as any of the following number of project trips using a road facility at the time of issuance of a use and occupancy permit for the development project:

A. A two percent increase in traffic during a.m., p.m. peak hour, or daily

B. The addition of 100 or more daily trips, or
C. The addition of 10 or more trips during the a.m. or p.m. peak hour.

The County Bikeway Master Plan provides for increased non-motorized transportation by outlining bikeways for connectivity between cities and the unincorporated areas, between El Dorado County and adjoining counties, and access to recreational areas, regional parks, and recreational bicycling routes.

Discussion: The Transportation and Circulation Policies contained in the County General Plan establish a framework for review of thresholds of significance and identification of potential impacts of new development on the County's road system. These policies are enforced by the application of the Transportation Impact Study (TIS) Guidelines, the County Design and Improvements Standards Manual, and the County Encroachment Ordinance, with review of individual development projects by the Transportation and Long Range Planning Divisions of the Community Development Agency. A substantial adverse effect on Traffic would occur if the implementation of the project would:

- Result in an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system;
- Generate traffic volumes which cause violations of adopted level of service standards (project and cumulative); or
- Result in, or worsen, Level of Service (LOS) F traffic congestion during weekday, peak-hour periods on any highway, road, interchange or intersection in the unincorporated areas of the county as a result of a residential development project of 5 or more units.

a. **Traffic Increases:** No substantial traffic increases would result from the proposed project, as the only added trips would result from monthly maintenance visits. Comments concerning the proposed facility were received from the Transportation Division and do not indicate that the LOS would be significantly impacted by the proposed project. Access to the site would be from an existing driveway onto Green Valley Road. Impacts would be less than significant.

b. **Levels of Service Standards:** The LOS established by the County would not be exceeded by the project, nor would the surrounding road circulation system be impacted. There would be no impact.

c. **Air Traffic:** The site is not located near an airport. The 75-foot height, similar to some of the trees in the area, would not create an air traffic hazard. There would be no impact.

d. **Design Hazards:** The design and location of the project is not anticipated to create any significant hazards. Any steep sections of the access drive will be built to Transportation Division and Diamond Springs/El Dorado Fire District standards, including turn radii, paved steep slopes, erosion control improvements, and turnouts. Impacts would be less than significant.

e. **Emergency Access:** The project would not result in inadequate emergency access as the access drive with turnaround near the facility will be built to Fire District standards. The project was reviewed by the Transportation Division and the Diamond Springs/El Dorado Fire Protection District to ensure that adequate access would be provided to meet County Fire Safe requirements and County Design Improvement Standards Manual criteria. With the inclusion of the Transportation Division and Fire District's conditions of approval, impacts would be less than significant.

f. **Alternative Transportation:** The project would not conflict with adopted plans, polices or programs relating to alternative transportation. There would be no impact.

FINDING: As discussed above, no significant traffic impacts are expected with the wireless telecommunications facility either directly or indirectly. For this Transportation/Traffic category, the thresholds of significance would not be exceeded and impacts would be less than significant.

18. UTILITIES AND SERVICE SYSTEMS. *Would the project:*	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				X
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				X
e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				X
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				X
g. Comply with federal, state, and local statutes and regulations related to solid waste?				X

Regulatory Setting:

Federal Laws, Regulations, and Policies

Energy Policy Act of 2005

The Energy Policy Act of 2005, intended to reduce reliance on fossil fuels, provides loan guarantees or tax credits for entities that develop or use fuel-efficient and/or energy efficient technologies (USEPA, 2014). The act also increases the amount of biofuel that must be mixed with gasoline sold in the United States (USEPA, 2014).

State Laws, Regulations, and Policies

California Integrated Waste Management Act of 1989

The California Integrated Waste Management Act of 1989 (Public Resources Code, Division 30) requires all California cities and counties to implement programs to reduce, recycle, and compost wastes by at least 50 percent by 2000 (Public Resources Code Section 41780). The state, acting through the California Integrated Waste Management Board (CIWMB), determines compliance with this mandate. Per-capita disposal rates are used to determine whether a jurisdiction's efforts are meeting the intent of the act.

California Solid Waste Reuse and Recycling Access Act of 1991

The California Solid Waste Reuse and Recycling Access Act of 1991 (Public Resources Code Sections 42900-42911) requires that all development projects applying for building permits include adequate, accessible areas for collecting and loading recyclable materials.

California Integrated Energy Policy

Senate Bill 1389, passed in 2002, requires the California Energy Commission (CEC) to prepare an Integrated Energy Policy Report for the governor and legislature every two years (CEC 2015a). The report analyzes data and provides policy recommendations on trends and issues concerning electricity and natural gas, transportation, energy efficiency, renewable energy, and public interest energy research (CEC 2015a). The 2014 Draft Integrated Energy Policy Report Update includes policy recommendations, such as increasing investments in electric vehicle charging infrastructure at workplaces, multi-unit dwellings, and public sites (CEC 2015b).

Title 24 Building Energy Efficiency Standards

Title 24 Building Energy Efficiency Standards of the California Building Code are intended to ensure that building construction, system design, and installation achieve energy efficiency and preserve outdoor and indoor environmental quality (CEC 2012). The standards are updated on an approximately three year cycle. The 2013 standards went into effect on July 1, 2014.

Urban Water Management Planning Act

California Water Code Sections 10610 *et seq.* requires that all public water systems providing water for municipal purposes to more than 3,000 customers, or supplying more than 3,000 acre-feet per year (AFY), prepare an urban water management plan (UWMP).

Other Standards and Guidelines

Leadership in Energy & Environmental Design

Leadership in Energy & Environmental Design (LEED) is a green building certification program, operated by the U.S. Green Building Council (USGBC) that recognizes energy efficient and/or environmentally friendly (green) components of building design (USGBC, 2015). To receive LEED certification, a building project must satisfy prerequisites and earn points related to different aspects of green building and environmental design (USGBC, 2015). The four levels of LEED certification are related to the number of points a project earns: (1) certified (40–49 points), (2) silver (50–59 points), (3) gold (60–79 points), and (4) platinum (80+ points) (USGBC, 2015). Points or credits may be obtained for various criteria, such as indoor and outdoor water use reduction, and construction and demolition (C&D) waste management planning. Indoor water use reduction entails reducing consumption of building fixtures and fittings by at least 20% from the calculated baseline and requires all newly installed toilets, urinals, private lavatory faucets, and showerheads that are eligible for labeling to be WaterSense labeled (USGBC, 2014). Outdoor water use reduction may be achieved by showing that the landscape does not require a permanent irrigation system beyond a maximum two year establishment period, or by reducing the project's landscape water requirement by at least 30% from the calculated baseline for the site's peak watering month (USGBC, 2014). C&D waste management points may be obtained by diverting at least 50% of C&D material and three material streams, or generating less than 2.5 pounds of construction waste per square foot of the building's floor area (USGBC, 2014). CHP, as a state agency, is required at a minimum to meet LEED silver requirement for new facilities [EO S-20-04].

Discussion: A substantial adverse effect on Utilities and Service Systems would occur if the implementation of the project would:

- Breach published national, state, or local standards relating to solid waste or litter control;

- Substantially increase the demand for potable water in excess of available supplies or distribution capacity without also including provisions to adequately accommodate the increased demand, or is unable to provide an adequate on-site water supply, including treatment, storage and distribution;
- Substantially increase the demand for the public collection, treatment, and disposal of wastewater without also including provisions to adequately accommodate the increased demand, or is unable to provide for adequate on-site wastewater system; or
- Result in demand for expansion of power or telecommunications service facilities without also including provisions to adequately accommodate the increased or expanded demand.

a. **Wastewater Requirements:** This project will have no use of water, associated plumbing, or wastewater systems. Construction and operation of the project would not involve discharges of untreated domestic wastewater that would violate water quality control board requirements. There would be no impact.

b. **Construction of New/Expansion of Existing Wastewater Treatment Facilities:** As mentioned above, this facility would not involve the use of water or the generation of wastewater. No new or expanded wastewater treatment facilities would be required for the proposed wireless communication monopine. There would be no impact.

c. **Construction of New/Expansion of Existing Stormwater Drainage Facilities:** All required drainage facilities for the project would be built in conformance with the County of El Dorado Drainage Manual, as determined by Development Services standards, during the grading and building permit processes. Impacts would be considered less than significant.

d. **Sufficient Water Supply:** As mentioned above, the proposed project would not require the use of water for operation, so no new entitlements would be needed. There would be no impact.

e. **Adequate Capacity:** The project does not involve the treatment of wastewater for operation. There would be no need to determine whether or not there would be adequate capacity. There would be no impact.

f, g. **Solid Waste Disposal and Solid Waste Requirements:** Operation and continued maintenance of the cell tower and ground equipment would not generate solid waste or affect recycling goals. There would be no impact.

FINDING: No significant utility and service system impacts would be expected with the wireless telecommunications facility either directly or indirectly. For this Utilities and Service Systems category, the thresholds of significance would not be exceeded and impacts would be less than significant.

19. MANDATORY FINDINGS OF SIGNIFICANCE. *Does the project:*	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. 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 or Native American history or prehistory?			X	
b. 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)?			X	
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

Discussion:

a. No substantial evidence contained in the project record has been found that would indicate that this project would have the potential to significantly degrade the quality of the environment when using thresholds pre-established as benchmarks. These benchmarks are established by General Plan Policies, the Grading and Drainage Ordinances, and in Zoning Ordinance Sections 130.28.200 C. and 130.14.210. As conditioned, and with adherence to County permit requirements, this project is not anticipated to have the potential to 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 California history or pre-history. A mitigation measure was included in the Biological Resources section to reduce any possible impacts to raptors if construction were to occur during nesting season. Any impacts from the project are anticipated to be less than significant, with mitigation incorporated, due to the design of the project and required standards that would be implemented by any required project specific improvements on the property.

b. The project would not involve development or changes in land use that would result in an excessive increase in population growth. Impacts due to increased demand for public services associated with the project would be offset by the payment of fees as required by service providers to extend the necessary infrastructure services. The project is not anticipated to contribute substantially to increased traffic in the area and would not require an increase in the wastewater treatment capacity of the County. Due to the small size of the proposed project, types of activities proposed, and site-specific environmental conditions, which have been disclosed in the Project Description and analyzed in Items 1 through 18, there would be no significant impacts related to agriculture resources, air quality, biological resources, cultural resources, tribal cultural resources, geology/soils, hazards/hazardous materials, hydrology/water quality, land use/planning, mineral resources, noise, population/housing, public services, recreation, traffic/transportation, or utilities/service systems that would combine with similar effects such that the project's contribution would be cumulatively considerable. For these issue areas, either no impacts, or less than significant impacts are anticipated. By conforming to Zoning Ordinance regulations as well as the inherent visual screening provided by the design of a monopine wireless communications tower, the visual impacts of the project would be less than significant. The cumulative contribution to the viewshed would be less than significant.

As outlined and discussed in this document, as conditioned, and with compliance with County Codes, this project is anticipated to have a less than significant project-related environmental effect which could cause substantial adverse effects on human beings, either directly or indirectly. Based on the analysis in this study, it has been determined that the project would have less than significant cumulative impacts.

c. Based on the discussion contained in this document, no potentially significant impacts to human beings are anticipated to occur with respect to potential project impacts. The project would include standard conditions of approval required for screening and buffering the ground equipment and monopine wireless communication tower with an appearance substantially consistent with the existing surrounding vegetation. Adherence to these standard conditions would reduce potential impacts to a less than significant level. As discussed in the Noise section, short term noise increases in the project area as a result of project construction and operation would be reduced by standard Conditions of Approval regarding hours and days of construction and operation. Any future development of the project by any potential future carriers would require environmental review through the Special Use Permit revision process or may be found to be exempt from the CEQA process. As conditioned, and with adherence to County Codes, impacts would be less than significant.

INITIAL STUDY ATTACHMENTS

Attachment 1 ..... Location Map
Attachment 2 ..... USGS 7.5 Minute Quadrangle
Attachment 3 ..... Site Plan and Site Topography, Sheet C-2, January 14, 2015
Attachment 4 ..... *RF Exposure Study*, Hammet and Edison, Inc., March 19, 2015
Attachment 5 ..... *Biological Resources Study and Important Habitat Mitigation Plan.* Natural Investigations Co., May 25, 2015.

SUPPORTING INFORMATION SOURCE LIST

California Department of Conservation. (2008). *Farmland Mapping and Monitoring Program: El Dorado County Important Farmland 2008*. Available at: ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2008/eld08.pdf.

California Department of Toxic Substances Control (DTSC). (2015). *DTSC's Hazardous Waste and Substances Site List - Site Cleanup (Cortese List)*. Retrieved April 15, 2015 from http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm.

California Energy Commission. (2006). *Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004, Staff Final Report*. Publication CEC-600-2006-013-SF.

California Department of Transportation (CalTrans). (2013). *California Scenic Highway Program, Officially Designated State Scenic Highways*. Retrieved April 8, 2015 from http://www.dot.ca.gov/hq/LandArch/scenic/schwy.htm.

California Geological Survey. (2007). Alquist-Priolo Earthquake Fault Zone Maps. Retrieved April 15, 2015 from http://www.quake.ca.gov/gmaps/WH/regulatorymaps.htm.

California Geological Survey. (2013). Seismic Hazards Zonation Program. Retrieved April 15, 2015 from http://www.conservation.ca.gov/cgs/shzp/Pages/affected.aspx.

California Code of Regulations. *Guidelines for Implementation of the California Environmental Quality Act.* Title 14, Section 15000, et seq. 14 CCR 15000

El Dorado County. (2003). *El Dorado County General Plan Draft Environmental Impact Report.* State Clearinghouse No. 2001082030. Placerville, CA: El Dorado County Planning Services.

El Dorado County. (2004, July 19). *El Dorado County General Plan: A Plan for Managed Growth and Open Roads; A Plan for Quality Neighborhoods and Traffic Relief.* Placerville, CA: El Dorado County Planning Services.

El Dorado County. (2005, July 21). Asbestos Review Areas, Western Slope, El Dorado County, California. Available at: < http://www.edcgov.us/Government/AirQualityManagement/Asbestos.aspx>.

El Dorado County Air Quality Management District (AQMD). (2000). *Rules and Regulations of the El Dorado County Air Quality Management District.* Retrieved April 15, 2015 from http://www.arb.ca.gov/DRDB/ED/CURHTML/R101.HTM.

El Dorado County Air Quality Management District (AQMD). (2002). *Guide to Air Quality Assessment: Determining the Significance of Air Quality Impacts Under the California Environmental Quality Act.* Retrieved April 7, 2015 from http://www.edcgov.us/Government/AirQualityManagement/Guide_to_Air_Quality_Assessment.aspx.\

El Dorado County Geographic Information System (GIS) Data. Placerville, CA: Esri ArcGIS. Available: El Dorado County controlled access data GISDATA\LIBRARIES.

Federal Emergency Management Agency (FEMA). (2008). FEMA Map Service Center, Current FEMA Issued Flood Maps: El Dorado County, California, unincorporated area, no. 06017C1025E. Available at: http://map1.msc.fema.gov/idms/IntraView.cgi?KEY=94926033&IFIT=1.

Governor's Office of Planning and Research (OPR). (2008, June 19). *Technical advisory: CEQA and climate change: Addressing climate change through California Environmental Quality Act Review.* Available at: Sacramento, CA. http://www.opr.ca.gov/ceqa/pdfs/june08-ceqa.pdf.

United States Department of Agriculture (USDA) Soil Conservation Service and Soil Service. (1974). *Soil Survey of El Dorado Area, California.* Retrieved April 10, 2015 from http://www.nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/california/el_doradoCA1974/EDA.pdf

EBI Consulting (2015, April 24). *Archaeological Survey Report Indian Creek/Ensite #23964 (295539).* Scottsdale, AZ

Hammett & Edison, Inc. (2015, March 19). *Verizon Wireless Proposed Base Station (Site No. 295539"Indian Creek") 6521 Green Valley Road, Placerville California, Statement of Hammett & Edison, Inc., Consulting Engineers.* San Francisco, CA

Natural Investigations Co. (2015, May 25). *Biological Resources Study and Important Habitat Mitigation Plan for the Verizon Project at 6521 Green Valley Road, Placerville, CA.* Citrus Heights, CA

Location Map

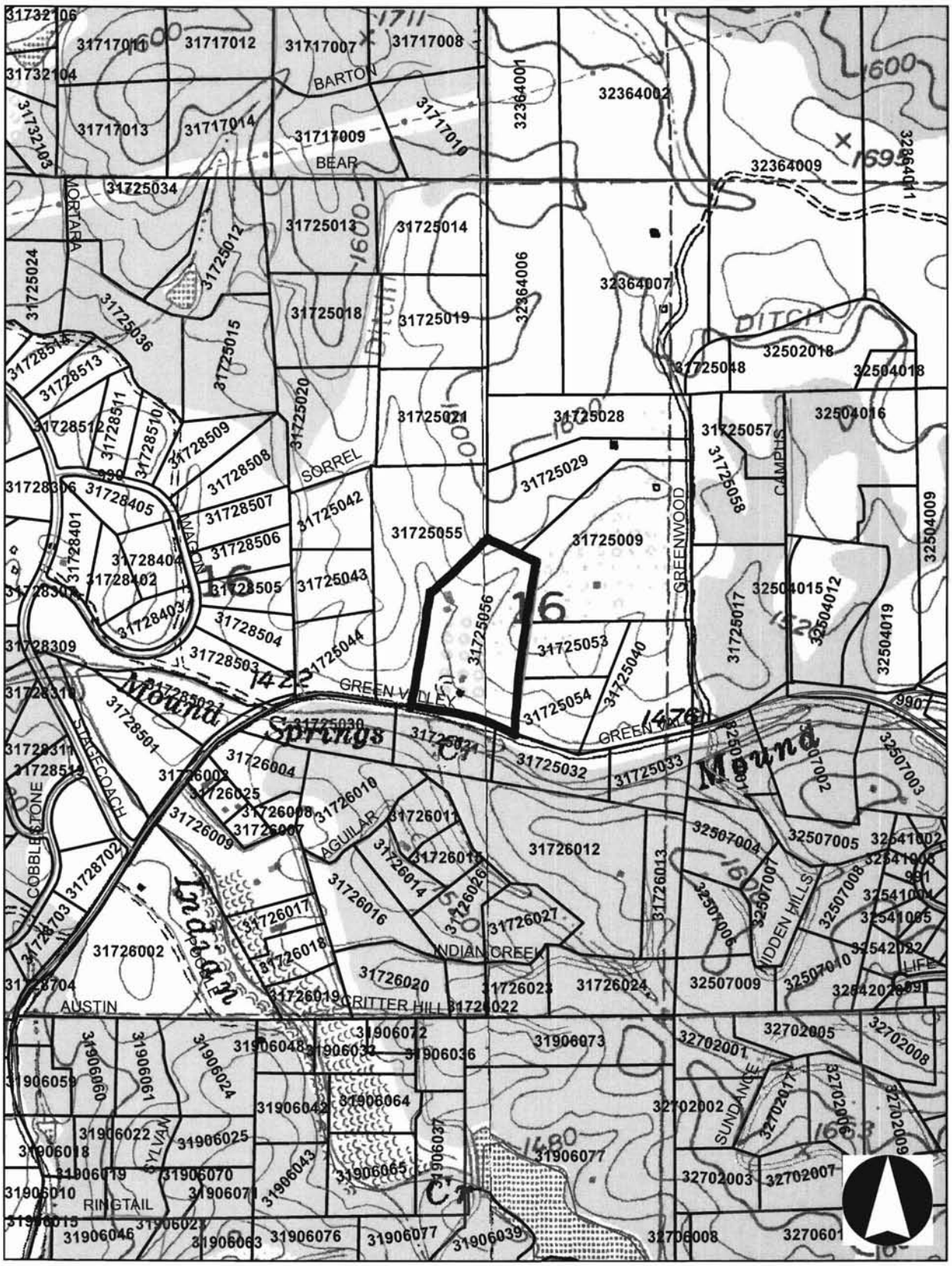
Indian Creek Verizon Wireless Facility
S15-0007

0 0.25 0.5 1
Miles

N
W E
S

Attachment 1

USGS 7.5 Minute Quadrangle



Indian Creek Verizon Wireless Facility
S15-0007

0 375 750 1,500 Feet

Attachment 2

PROJECT AREA ENLARGEMENT

BOUNDARY SHOWN IS BASED ON MONUMENTATION FOUND AND RECORD INFORMATION AS SHOWN ON BOUNDARY SURVEY. THIS IS A SPECIALIZED TOPOGRAPHIC MAP WITH PROPERTY LINES AND EASEMENTS COMPILED FROM VARIOUS SOURCES OF RECORD AND BASED ON INFORMATION GATHERED FROM THE FIELD SURVEY. NO EASEMENTS WERE RESEARCHED OR PLOTTED. PROPERTY LINES INVESTIGATED HEREIN ARE SURVEYED EXCEPT AS SHOWN ON THIS PLAN. NO PROPERTY MONUMENTS WERE SET.

THESE DRAWINGS AND/OR THE ACCOMPANYING SPECIFICATIONS ARE THE EXCLUSIVE PROPERTY OF GEIL ENGINEERING AND THEIR USE AND PUBLICATION IS RESTRICTED TO THE ORIGINAL PROJECT AND CARRIER FOR WHICH THEY ARE PREPARED. REUSE, REPRODUCTION OR PUBLICATION BY ANY METHOD IS PROHIBITED. TITLE TO PLANS AND/OR SPECIFICATIONS REMAINS WITH GEIL ENGINEERING AND VISUAL CONTACT WITH THEM SHALL CONSTITUTE PRIMA FACIE EVIDENCE OF ACCEPTANCE OF THESE RESTRICTIONS.

Sheet C-2

REVISIONS		
REV	09-30-14 JR	Drawing Submittal
REV	10-17-14 JR	Notes Added
REV	10-23-14 JR	Lease Area Mod.
REV	12-01-14 JR	Access Mod.
REV	01-14-15 JR	Redlines

INDIAN CREEK
6521 GREEN VALLEY ROAD
PLACERVILLE, CA 95667

PLOT PLAN AND SITE TOPO

verizon wireless

Surveyor
GEIL ENGINEERING
ENGINEERS • SURVEYORS • PLANNERS
1286 HIGH STREET
AUBURN, CALIFORNIA 95603
phone: (530) 885-5496
fax: (530) 823-1309

Attachment 3

Verizon Wireless • Proposed Base Station (Site No. 295539 "Indian Creek")
6521 Green Valley Road • Placerville, 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. 295539 "Indian Creek") proposed to be located at 6521 Green Valley 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 new tall pole, configured to resemble a pine tree, to be sited at 6521 Green Valley 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. 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 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 MT2 Telecom, LP, dated January 14, 2015, it is proposed to install six Andrew Model SBNHH-1D65B directional panel antennas on a new 70-foot pole, configured to resemble a pine tree, to be sited about 275 feet northeast of the residence located at 6521 Green Valley Road in Placerville. The antennas would be mounted with up to 4° downtilt at an effective height of about 67 feet above ground and would be oriented in pairs toward 90°T, 210°T, and 330°T. The maximum effective radiated power in any direction would be 6,000 watts, representing simultaneous operation at 4,620 watts for AWS and 1,380 watts for 700 MHz service; no transmissions in the cellular and PCS bands are proposed at this site. There are reported no other wireless telecommunications base stations at the site or nearby.

Study Results

For a person anywhere at ground, the maximum RF exposure level due to the proposed Verizon operation is calculated to be 0.0073 mW/cm^2, which is 0.75% of the applicable public exposure limit. The maximum calculated level at the second-floor elevation of any nearby building is 0.57% 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.

No 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. 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 6521 Green Valley 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 No. E-18063, which expires on June 30, 2015. 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.

Rajat Mathur, P.E.
707/996-5200

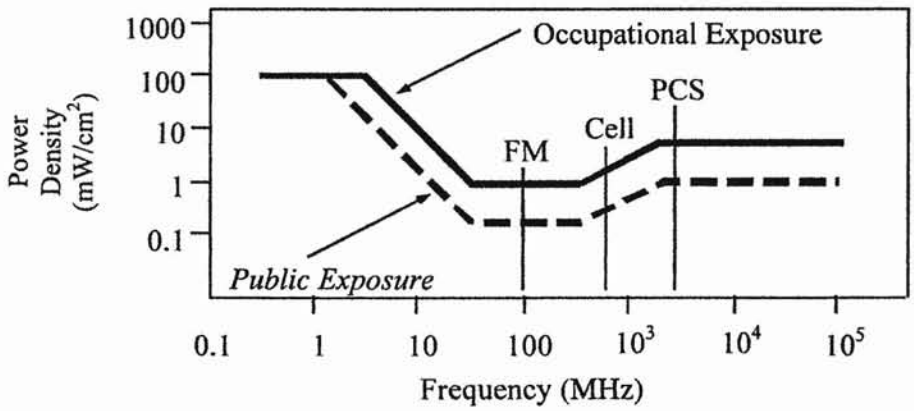
March 19, 2015

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.

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.

BIOLOGICAL RESOURCES STUDY AND IMPORTANT HABITAT MITIGATION PLAN FOR THE VERIZON PROJECT AT 6521 GREEN VALLEY ROAD, PLACERVILLE, CALIFORNIA

May 25, 2015

Prepared for:

ON LINE, LLC

and

VERIZON WIRELESS

Prepared by:

Natural Investigations Company
6124 Shadow Lane, Citrus Heights, CA 95621

NATURAL INVESTIGATIONS CO.
WWW.NATURALINVESTIGATIONS.COM

Attachment 5

TABLE OF CONTENTS

1. INTRODUCTION

1.1. PROJECT LOCATION AND DESCRIPTION

Natural Investigations Co. has prepared this assessment according to the County's Biological Resources Study and Important Habitat Mitigation Program Guidelines (Guidelines). This assessment inventoried the existing biological resources within the Project Area, analyzed any potential project-related impacts upon these resources, and identified mitigation measures to reduce these impacts. The proposed project is a Verizon Wireless tower, fenced compound, and access road. The Project Area is a portion of the property at 6521 Green Valley Road, Placerville, El Dorado County, CA (the Project Area) (Exhibit 1). The project area consist of a 15-foot wide access road (90 feet paved, the rest graveled) and turnout and a 32 x 32 foot Verizon fenced compound (Exhibit 1).

1.2. ENVIRONMENTAL SETTING

The Project Area is located within the Northern Sierra Nevada Foothills geographic subregion, which is contained within the Sierra Nevada geographic subdivision of the larger California Floristic Province (Hickman, 1993). The region is in climate Zone 7 – Gray Pine Belt, characterized by marked seasons of hot summers and moderately cold winters (Hickman, 1993; Brenzel 2001). The topography of the Project Area is relatively flat (Exhibit 2). The project area is located in annual grassland surrounded by mixed conifer/oak woodland habitat (Exhibit 3). The project area consists primarily of an existing road or firebreak and fields that are periodically mowed and/or grazed.

2. METHODOLOGY

Prior to conducting the field survey the following information sources were reviewed:

- Any readily-available previous biological resource studies pertaining to the Project Area or vicinity
- United States Geologic Service (USGS) 7.5 degree-minute topographic quadrangles of the Project Area and vicinity
- Aerial photography of the Project Area, and
- California Natural Diversity Database (CNDDB), electronically updated monthly by subscription to CDFW.

The purpose of the field survey was to gather biological information pertaining to the location and extent of natural communities, the presence of suitable habitat for any special-status species, a checklist of flora and fauna based upon visual observations, and any other important biological resources such as wetlands.

Chris Gray (Associate Biologist, Natural Investigations Co.) conducted the field survey on May 13, 2015. Conditions were cool (60s) and cloudy, with a slight wind. A complete coverage, variable-intensity pedestrian survey was performed of the Project Area. Survey efforts emphasized the search for any special-status species or habitats that had documented occurrences, in databases queried, within the Project Area or vicinity. Field glasses were used to assist in the ocular surveys. Wildlife sign—tracks, feathers and shedding, burrows, pellets—were interpreted to detect species not actually seen. All visible fauna and flora observed were recorded in a field notebook and identified to the lowest possible taxon; a hand lens was used where necessary. When a specimen could not be identified *in situ*, a photograph or voucher specimen (depending upon scientific permit requirements) was taken and identified later in the laboratory using a dissecting scope where necessary. Dr. Graening holds the following scientific collection permits: CDFW Scientific Collecting Permit No. SC-006802 and CDFW Plant Voucher Specimen Permit 09004. Taxonomic determinations and nomenclature followed these references:

- plants—Pavlik (1991), Hickman (1993), Brenzel (2001), Stuart and Sawyer (2001), Lanner (2002) Calflora (2010), University of California at Berkeley (2015a,b)

- reptiles and amphibians—Stebbins (2003), Nafis (2015)
- birds—Sibley (2003), and regional checklists
- mammals—Jameson Jr. and Peeters (2004)
- invertebrates—Powell and Hogue (1979), Thorp and Covich (2001), NatureServe (2015)

Where detected, the location of any special-status species was georeferenced with a geographic positioning system receiver with accuracy of 1 meter or better. Locations of any special-status habitat boundaries within the Project Area were recorded on color aerial photographs and then digitized to produce the final habitat maps. The boundaries of potentially jurisdictional water resources within the Project Area were identified and measured in the field and similarly digitized to calculate acreage and to produce informal delineation maps. Geographic analyses were performed using geographical information system software (ArcGIS 10, ESRI, Inc.). As needed, vegetation communities (assemblages of plant species growing in an area of similar biological and environmental factors), were classified by Vegetation Series (distinctive associations of plants, described by dominant species and particular environmental setting) using the CNPS Vegetation Classification system (Sawyer and Keeler-Wolf, 1995). As needed, wetlands and other aquatic habitats were classified using USFWS National Wetlands Inventory Classification System for Wetland and Deepwater Habitats, or "Cowardin class" (Cowardin et al., 1979; USFWS 2007). As needed, wildlife habitats were classified according to the CDFW's California Wildlife Habitat Relationships System (CDFW 2007c). Species' habitat requirements and life histories were identified using the following sources: Hickman (1993); CNPS (2015), Calflora (2015); CDFW (2015a,b,c); and University of California at Berkeley (2015a,b).

3. RESULTS

3.1. INVENTORY OF FLORA, FAUNA, AND HABITATS FROM FIELD SURVEYS

Very few native plant species were present because the majority of the project area is covered in non-native annual grassland or consist of dirt roads or cleared areas. Plants detected included: grasses include bromes (*Bromus*) and fescue (*Festuca*); cherry (*Prunus*); Sierra coffeeberry (*Rhamnus rubra*); bird's beak filaree (*Erodium botrys*); vetch (*Vicia*); dogbane (*Apocynum*); thistles (*Carduus*); star thistle (*Centaurea solstitialis*); horehound (*Marrubium vulgare*); California poppy (*Eschscholzia californica*); and Himalaya blackberry (*Rubus armeniacus*). Only a few wildlife species (or their signs) were detected during the field survey: turkey vulture (*Cathartes aura*); bumblebee (*Bombus*); ants (Formicidae); honey bee (*Apis*); tree swallow (*Tachycineta bicolor*); northern mockingbird (*Mimus polyglottos*); red-tailed hawk (*Buteo jamaicensis*); mourning dove (*Zenaida macroura*); starling (*Sturnus*); acorn woodpecker (*Melanerpes formicivorus*). No federally listed or state-listed species, or otherwise special-status species were detected in the Project Area during the field survey.

The Project Area currently contains 3 terrestrial vegetation community/habitat types: ruderal/disturbed; annual grassland; and mixed conifer/oak woodland.

An informal delineation of waters of the US within the Project Area was conducted concurrently with the field survey. The entire Project Area has upland features and contains no water features and no waters of the US or waters of the State. No vernal pools or other isolated wetlands were detected within the Project Area.

3.2. ANALYSIS OF SPECIAL-STATUS SPECIES AND HABITATS

A list of special-status species and habitats that historically occurred within the Project Area or vicinity was compiled based upon the following:

- Any previous and readily available biological resource studies pertaining to the Project Area;

- Informal consultation with USFWS by generating an electronic Species List (available on the applicable Field Office website); and
- A spatial query of the CNDDB.

The CNDDB was spatially queried and any reported occurrences of special-status species were plotted in relation to the Project Area boundary using GIS software (Exhibit 4). No records occur within the Project Area. Within a 5-mile radius of the Project Area boundaries, various special-status species occurrence records were returned (Table 2).

No special-status communities were reported by CNDDB within the Project Area (CDFW 2015). Three special-status communities were reported by CNDDB within a 5-mile radius of the Project Area: Central Valley Drainage Spring Stream; Central Valley Drainage Resident Rainbow Trout Stream; and Sacramento-San Joaquin Foothill/Valley Ephemeral Stream. These habitats do not occur within the Project Area.

The special-status species reported by CNDDB to occur in the vicinity were further assessed for their likelihood to occur within the Project Area based upon previously documented occurrences, field surveys, their habitat requirements, and the quality and extent of any suitable habitat within the Project Area.

Special-status species are not expected to thrive in the Project Area because of the preponderance of dominant vegetation (e.g. mountain misery) and pine duff, and habitat disturbance associated with road maintenance and field clearing.

Table 2. Special-status Species Reported in the Vicinity of the Project Area by the CNDDB (CDFW 2015)

Scientific Name	Common Name	Status
Agelaius tricolor	tricolored blackbird	State Threatened
Allium jepsonii	Jepson's onion	Species of Concern
Arctostaphylos nissenana	Nissenan manzanita	Species of Concern
Ardea alba	great egret	Species of Concern
Calystegia stebbinsii	Stebbins' morning-glory	Federal and State Endangered
Ceanothus roderickii	Pine Hill ceanothus	Federal Endangered
Chlorogalum grandiflorum	Red Hills soaproot	Species of Concern
Clarkia biloba ssp. brandegeeae	Brandegee's clarkia	Species of Concern
Cosumnoperla hypocrena	Cosumnes stripetail	Species of Concern
Crocanthemum suffrutescens	Bisbee Peak rush-rose	Species of Concern
Emys marmorata	western pond turtle	Species of Concern
Galium californicum ssp. *sierrae*	El Dorado bedstraw	Federal Endangered
Horkelia parryi	Parry's horkelia	Species of Concern
Lasionycteris noctivagans	silver-haired bat	Species of Concern
Packera layneae	Layne's ragwort	Federal Threatened
Pekania pennanti	fisher - West Coast DPS	Federal Candidate
Riparia riparia	bank swallow	State Threatened
Viburnum ellipticum	oval-leaved viburnum	Species of Concern
Wyethia reticulata	El Dorado County mule ears	Species of Concern

4. IMPACT ANALYSES AND MITIGATION MEASURES

This section establishes the impact criteria, then analyzes potential Project-related impacts upon the known biological resources within the Project Area, and then suggests mitigation measures to reduce these impacts to a less-than-significant level.

4.1. IMPACT SIGNIFICANCE CRITERIA

The significance of impacts to biological resources depends upon the proximity and condition of natural communities and wildlife habitats, the presence or absence of special-status species, and the effectiveness of measures implemented to protect these resources from Project-related impacts.

The Project's architectural design was overlaid on the known/mapped biological resources. The following discussion evaluates the potential for Project-related activities to adversely affect biological resources according to CEQA criteria.

Potential Impact # 1 – Potential Adverse Effects Upon Listed Species / Special-status Species

Various special-status species were reported outside of, but within a 5-mile radius of, the Project Area by the CNDDB. None of these species were detected in the field survey, and none were ranked by this assessment with a moderate or high potential of occurrence within the Project Area. No impact to special-status species should occur with project implementation.

Special-status bird species were reported in databases (CNDDB and USFWS) in the vicinity of the Project Area. The Project Area, and adjacent trees and utility poles, contain suitable nesting habitat for various bird species. However, no nests were observed during the field survey. If construction activities are conducted during the nesting season, nesting birds could be directly impacted by tree removal and indirectly impacted by noise, vibration, and other construction-related disturbance. Therefore, Project construction is considered a potentially significant adverse impact to nesting birds.

Recommended Mitigation Measures for Impact # 1

If construction activities will occur during the 2016 nesting season (March to September 2016), a pre-construction survey for the presence of special-status bird species or any nesting bird species should be conducted by a qualified biologist within 500 feet of proposed construction areas. If active nests are identified in these areas, CDFW and/or USFWS should be consulted to develop measures to avoid "take" of active nests prior to the initiation of any construction activities. Avoidance measures may include establishment of a buffer zone using construction fencing or the postponement of vegetation removal until after the nesting season, or until after a qualified biologist has determined the young have fledged and are independent of the nest site.

With the implementation of this mitigation measure, adverse impacts upon special-status bird species and nesting birds would be reduced to a less-than-significant level.

Potential Impact # 2 – Potential Adverse Effects Upon Wetlands, Riparian Habitat or Other Sensitive Natural Community

The Project Area contains no sensitive natural communities. The entire Project Area has upland features and contains no water features and no waters of the US or waters of the State. Project construction would not directly impact any surface water bodies. Therefore, no Clean Water Act permits (or state permits) are expected to be necessary. Since the area of disturbance is less than 1 acre, enrollment in the State Water Quality Control Board's Construction General Permit prior to the initiation of construction is not necessary. No mitigation is necessary.

Recommended Mitigation Measures for Impact # 2

No additional mitigation is necessary.

Potential Impact # 4 – Potential Conflicts with Policies or Ordinances Protecting Tree Resources

The proposed project was designed to avoid tree resources. Implementation of the proposed project will not require the removal of any trees. Light trimming of existing trees may be necessary for vertical clearance. Pruning of any oak trees should be performed by a certified arborist or other knowledgeable tree care professional.

Recommended Mitigation Measures for Impact # 4

No mitigation is necessary.

5. REFERENCES

Brenzel, K.N. 2001. Sunset Western Garden Book. Sunset Publishing Corporation, Menlo Park, California. 768 pp.

Calflora. 2015. Calflora, the on-line gateway to information about native and introduced wild plants in California. Internet database available at http://calflora.org/.

California Department of Fish and Wildlife. 2015a. RareFind 3.1.x, California Natural Diversity Data Base. Sacramento, California (updated monthly by subscription service).

California Department of Fish and Wildlife. 2015b. California's Plants and Animals. Habitat Conservation Planning Branch, California Department of Fish and Game, Sacramento, California. http://www.dfg.ca.gov/hcpb/species/search_species.shtml.

California Department of Fish and Wildlife. 2015c. California's Wildlife. California Wildlife Habitat Relationships System, Biogeographic Data Branch, California Department of Fish and Game. Internet database available at http://www.dfg.ca.gov/whdab/html/cawildlife.html.

California Native Plant Society. 2015. Inventory of Rare and Endangered Plants, 7th edition. Rare Plant Scientific Advisory Committee, David P. Tibor, convening editor. California Native Plant Society. Sacramento, California. Internet database available at http://cnps.web.aplus.net/cgi-bin/inv/inventory.cgi.

Cowardin, L.M., V. Carter, and E.T. LaRoe. 1979. Classification of wetlands and deepwater habitats of the United States. Office of Biological Services, U. S. Fish and Wildlife Service, Washington, District of Columbia.

Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1. U.S. Army Engineer Waterways Experiment Station. Vicksburg, Mississippi. 92 pp.

Hickman, J.C., editor. 1993. The Jepson Manual, Higher Plants of California. University of California Press, Berkeley, California. 1,400 pp.

Holland, R.F. 1986. Preliminary descriptions of the terrestrial natural communities of California. State of California, The Resources Agency, Nongame Heritage Program, Department of Fish and Game, Sacramento, California. 156 pp.

Jameson Jr., E.W., and H.J. Peeters. 2004. Mammals of California, revised edition. California Natural History Guides No. 66. University of California Press, Berkeley, California. 429 pp.

Lanner, R.M. 2002. Conifers of California. Cachuma Press, Los Olivos, California. 274 pp.

Mayer, K.E., and W.F. Laudenslayer, Jr, editors. 1988. A Guide to Wildlife Habitats of California. State of California, Resources Agency, Department of Fish and Game, Sacramento, California. 166 pp.

Nafis, G., editor. 2015. California Reptiles and Amphibians. Published by CaliforniaHerps.com. Internet website, http://www.californiaherps.com/index.html.

NatureServe. 2015. NatureServe Explorer: An online encyclopedia of life, Version 7.1. NatureServe, Arlington, Virginia. Internet database available at http://www.natureserve.org/explorer.

Pavlik, B.M., P.C. Muick, S.G. Johnson, and M. Popper. 1991. Oaks of California. Cachuma Press and the California Oak Foundation. Los Olivos, California. 184 pp.

Powell, J.A., and C.L. Hogue, 1979. California Insects. University of California Press, Berkeley, California. 388 pp.

Sawyer, J.O., and T. Keeler-Wolf. 1995. A manual of California vegetation. California Native Plant Society, Sacramento, California. Available electronically at http://davisherb.ucdavis.edu/cnpsActiveServer/index.html.

Sibley, D.A. 2003. The Sibley Field Guide to Birds of Western North America. Alfred A. Knopf, Inc., New York, New York.

Stebbins, R.C. 2003. A Field Guide to Western Reptiles and Amphibians, 3rd edition. Houghton-Mifflin Co., Boston, Massachusetts.

Stuart, J.D., and J.O. Sawyer. 2001. Trees and Shrubs of California. California Natural History Guides. University of California Press, Berkeley, California. 467 pp.

Thorp, J.H., and A.P. Covich. 2001. Ecology and classification of North American freshwater invertebrates, 2nd edition. Academic Press, San Diego, California. 1,056 pp.

United States Army Corps of Engineers. 2001. Final Summary Report: Guidelines for jurisdictional determinations for waters of the United States in the arid Southwest. South Pacific Division. 12 pp. Available electronically at http://www.spl.usace.army.mil/regulatory/.

United States Army Corps of Engineers and United States Environmental Protection Agency. 2007. 2007 Nationwide Permits, Conditions, Further Information, and Definitions (with corrections). Headquarters, US Army Corps of Engineers, Washington, D.C. 38 pp.

United States Environmental Protection Agency and United States Army Corps of Engineers. 2008. Revised Guidance on Clean Water Act Jurisdiction Following the Supreme Court Decision in Rapanos v. U.S. and Carabell v. U.S. Memorandum available online at http://www.usace.army.mil/cw/cecwo/reg/cwa_guide/cwa_juris_2dec08.pdf.

United States Fish and Wildlife Service. 2015. FWS Endangered and Threatened Species Critical Habitat Portal. Environmental Conservation Online System. Internet database available at http://criticalhabitat.fws.gov/

United States Fish and Wildlife Service. 2015. National Wetlands Inventory Program, Division of Habitat and Resource Conservation. Internet site at http://www.fws.gov/wetlands/.

University of California at Berkeley. 2015a. Jepson Online Interchange for California Floristics. Jepson Flora Project, University Herbarium and Jepson Herbarium, University of California at Berkeley. Internet database available at http://ucjeps.berkeley.edu/interchange.html.

University of California at Berkeley. 2015b. CalPhotos. Biodiversity Sciences Technology Group, University of California at Berkeley. Internet database available at http://calphotos.berkeley.edu/.

6. QUALIFICATIONS OF BIOLOGISTS

Dr. G.O. Graening

G. O. Graening holds a PhD in Biological Sciences and a Master of Science in Biological and Agricultural Engineering. Dr. Graening is an adjunct Professor at California State University at Sacramento, and is an active researcher in the area of conservation biology and groundwater ecology; his publication list is available online at http://www.csus.edu/indiv/g/graeningg/pubs.htm. Dr. Graening is also a Certified Arborist (ISA # WE-6725A) and a Certified Professional in Storm Water Quality. Dr. Graening has 13 years

of experience in environmental assessment, including independent contractual work as well as previous employment with *The Nature Conservancy*, Tetra Tech Inc., and CH2M Hill, Inc.

Chris Gray, B.S.
Mr. Gray obtained his Bachelor of Science in Biological Sciences from California State University Sacramento with an emphasis on ecology and conservation. Mr. Gray is knowledgeable in the ecology of the Channel Islands and has wide field experience throughout California.

7. EXHIBITS

verizon wireless

APPROVED BY		
APPROVAL:	SIGNATURE:	DATE:
LANDLORD:		
RF ENGINEER:		
LEASING MANAGER:		
ZONING MANAGER:		
CONSTRUCTION MANAGER:		
REAL ESTATE SPECIALIST:		
OPERATIONS MANAGER:		
TRANSPORT MANAGER:		

SITE NAME:

INDIAN CREEK

6521 GREEN VALLEY RD
PLACERVILLE, CA 95667
PSL#: 295539
PSP#: 20141069357

GENERAL NOTES

1. CONTRACTOR SHALL VERIFY ALL PLANS, EXISTING CONDITIONS, AND DIMENSIONS OF THE JOB SITE PRIOR TO STARTING WORK, IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK OR BE RESPONSIBLE FOR THE SAME.

2. FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.

3. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR WORK PROCEEDING IN A SAFE AND ORDERLY MANNER IN ACCORDANCE WITH THE APPLICABLE CODES AND REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION. CONTRACTOR AND/OR THEIR EMPLOYEES MUST IMMEDIATELY NOTIFY THE CONSTRUCTION MANAGER OF ANY NECESSARY CHANGES TO COMPLETE THE WORK/PROJECT AS DESCRIBED HEREIN.

4. ALL WORK PERFORMED AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. MECHANICAL AND ELECTRICAL SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.

5. THE SCOPE OF WORK SHALL INCLUDE FURNISHING ALL MATERIALS, EQUIPMENT, ALL OTHER MATERIALS AND LABOR DEEMED NECESSARY TO COMPLETE THE WORK/PROJECT AS DESCRIBED HEREIN.

6. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY INDICATED OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.

7. THE GENERAL CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK, USING THE BEST SKILLS AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT INCLUDING CONTACT AND COORDINATION WITH THE IMPLEMENTATION ENGINEER AND WITH THE LANDLORD'S AUTHORIZED REPRESENTATIVE.

8. KEEP GENERAL AREA CLEAN, HAZARD FREE, AND DISPOSE OF ALL DIRT, DEBRIS AND RUBBISH. REMOVE ALL EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY. LEAVE PREMISES IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST OR SMUDGES OF ANY NATURE.

9. CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, ETC., DURING CONSTRUCTION. UPON COMPLETION OF WORK CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.

10. THESE DRAWINGS ARE FORMATTED FOR 24"x36" (SIZE D). DO NOT SCALE OTHER SIZED VERSIONS OF THESE DRAWINGS.

11. THE FACILITY IS AN UNOCCUPIED DIGITAL TELECOMMUNICATION FACILITY.

12. PLANS ARE NOT TO BE SCALED AND ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY, UNLESS NOTED OTHERWISE. THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.

13. PRIOR TO THE SUBMISSION OF BIDS, THE CONTRACTORS SHALL VISIT THE JOB SITE AND BE RESPONSIBLE FOR ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS, AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE IMPLEMENTATION ENGINEER AND ARCHITECT/ENGINEER PRIOR TO PROCEEDING WITH THE WORK.

14. THE CONTRACTOR SHALL RECEIVE, IN WRITING, AUTHORIZATION TO PROCEED BEFORE STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED OR IDENTIFIED BY THE CONTRACT DOCUMENTS.

15. CONTRACTOR SHALL CONTACT USA BEFORE PROCEEDING WITH ANY EXCAVATION, SITE WORK OR CONSTRUCTION.

16. SEAL PENETRATIONS THROUGH FIRE RATED AREAS WITH U.L. LISTED AND FIRE CODE APPROVED MATERIALS.

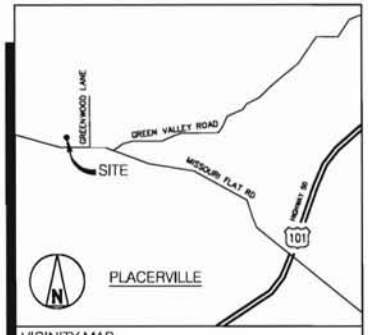
17. PROVIDE A PORTABLE FIRE EXTINGUISHER WITH A RATING OF NOT LESS THAN 2-A OR 2-A10BC WITHIN 75 FEET TRAVEL DISTANCE TO ALL PORTIONS OF THE PROJECT AREA DURING CONSTRUCTION.

18. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CHAPTER 23 OF THE UBC REGARDING EARTHQUAKE PIPING, LIGHT FIXTURES, CEILING GRID, INTERIOR PARTITIONS AND MECHANICAL EQUIPMENT. ALL WORK MUST BE IN ACCORDANCE WITH LOCAL EARTHQUAKE CODES AND REGULATIONS.

19. DETAILS ARE INTENDED TO SHOW END RESULT OF DESIGN. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS, AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE WORK.

20. REPRESENTATIONS OF TRUE NORTH, OTHER THAN THOSE FOUND ON THE PLOT OF SURVEY DRAWING (SHEET C-1), SHALL NOT BE USED TO IDENTIFY OR ESTABLISH THE BEARING OF TRUE NORTH AT THE SITE. THE CONTRACTOR SHALL RELY SOLELY ON THE PLOT OF SURVEY DRAWING AND ANY SURVEYOR'S MARKINGS AT THE SITE FOR THE ESTABLISHMENT OF TRUE NORTH, AND SHALL NOTIFY THE ARCHITECT/ENGINEER PRIOR TO PROCEEDING WITH THE WORK IF ANY DISCREPANCY IS FOUND BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND THE TRUE NORTH ORIENTATION AS DEPICTED ON THE CIVIL SURVEY. THE CONTRACTOR SHALL ASSUME SOLE LIABILITY FOR ANY FAILURE TO NOTIFY THE ARCHITECT/ENGINEER.

21. PENETRATIONS OF ROOF MEMBRANES SHALL BE PATCHED/FLASHED AND MADE WATERTIGHT USING LIKE MATERIALS IN ACCORDANCE WITH NRCA ROOFING STANDARDS AND DETAILS. CONTRACTOR SHALL OBTAIN DETAILING CLARIFICATION FOR SITE-SPECIFIC CONDITIONS FROM ARCHITECT/ENGINEER, IF NECESSARY, BEFORE PROCEEDING.



VICINITY MAP

255 PARKSHORE DR FOLSOM, CA 95630

GET ON US-50 E FROM PARKSHORE DR AND PRAIRIE CITY RD

FOLLOW US-50 E TO GREENSTONE RD IN EL DORADO COUNTY. TAKE THE GREENSTONE RD EXIT FROM US-50 E

DRIVE TO GREEN VALLEY RD

TURN RIGHT ONTO GREENSTONE RD

TURN RIGHT ONTO GREEN VALLEY RD

6521 GREEN VALLEY RD PLACERVILLE, CA 95667

DIRECTIONS

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

2013 CALIFORNIA ADMINISTRATIVE CODE (PART 1)	2012 INTERNATIONAL BUILDING CODE (IBC)
2013 CALIFORNIA BUILDING CODES (INCL TITLES 24 & 25)	2012 INTERNATIONAL FIRE CODE (IFC)
2013 CALIFORNIA MECHANICAL CODES	2012 UNIFORM PLUMBING CODE (UPC)
2013 CALIFORNIA PLUMBING CODES	2012 UNIFORM MECHANICAL CODE (UMC)
2013 CALIFORNIA ELECTRICAL CODES	LOCAL BUILDING CODES
ANSI / EIA-222 G	CITY / COUNTY ORDINANCES

ALONG WITH ANY OTHER APPLICABLE LOCAL AND STATE LAWS AND REGULATIONS.

APPLICABLE CODES

SITE NAME:	INDIAN CREEK
PSL#:	295539
PSP#:	20141069357
SITE ADDRESS:	6521 GREEN VALLEY RD PLACERVILLE, CA 95667
APPLICANT:	VERIZON WIRELESS 255 PARKSHORE DR FOLSOM, CA. 95630 PHONE: (916) 984-5924
PROPERTY OWNER:	BLAIR CLAPPIE & BROOKS MITCHELL 6521 GREEN VALLEY RD PLACERVILLE, CA 95667
VERIZON CONST. MNGR:	LARRY DORRIS PHONE: (916) 508-2020
VERIZON REAL ESTATE SPECIALIST:	JOANNA WANG PHONE: (925) 279-6781
VERIZON RF ENGINEER:	DOUG PICARD PHONE: (916) 357-2515
VENDOR CM:	ALAN HEINE PHONE: (916) 220-5814
SITE ACQ:	JENNIFER ROBISON PHONE: (775) 271-6475
A.P.N.:	317-250-56-100
CURRENT ZONING:	SFR
JURISDICTION:	EL DORADO COUNTY

PROJECT SUMMARY

ARCHITECTURAL/ENGINEERING/SURVEYING

MT2 TELECOM
3780 COMMERCE DR
WEST SACRAMENTO, CA. 95691
PH: 209-801-3781
FAX: 916-376-8559
CONTACT: SAL MARTINEZ

GILBERT LABRIE, AIA ARCHITECT
CA LIC. NO. C7880
EMAIL: architect@labrie.com

PROJECT TEAM

INSTALLATION OF A 11'-8" x 16'-10.5" FIBREBOND EQUIPMENT SHELTER, 30KW GENERAC GENERATOR ON A 7'-0" x 13'-0" CONCRETE SLAB, WAVEGUIDE BRIDGE WITH COAXIAL CABLES AND AN ANTENNA ARRAY CONSISTING OF (3) SECTORS, (2) ANTENNAS PER SECTOR, TOTAL OF (6) ANTENNAS, (9) RRHs AND (2) RAYCAPS ON A PROPOSED 75' MONOPINE, ALL ENCLOSED IN A PROPOSED 32'-0" x 32'-0" FENCED COMPOUND.

PROJECT DESCRIPTION

SHT. NO.	DESCRIPTION
T-1	TITLE SHEET
C-1	SITE SURVEY
C-2	SITE SURVEY
A-1	OVERALL SITE PLAN, ENLARGED SITE PLAN AND ANTENNA LAYOUT
A-2	ELEVATIONS

SHEET INDEX

MT2 TELECOM, LP
1015-B AIRPORT RD
PO BOX 456
RIO VISTA, CA 94571
PH: (707) 374-5075
FAX: (707) 374-8194

verizon wireless
255 PARKSHORE DR
FOLSOM, CA 95630
PHONE: (916) 984-5924

INDIAN CREEK
PSL#: 295539
PSP#: 20141069357

6521 GREEN VALLEY RD
PLACERVILLE, CA 95667
EL DORADO COUNTY

STAMP:

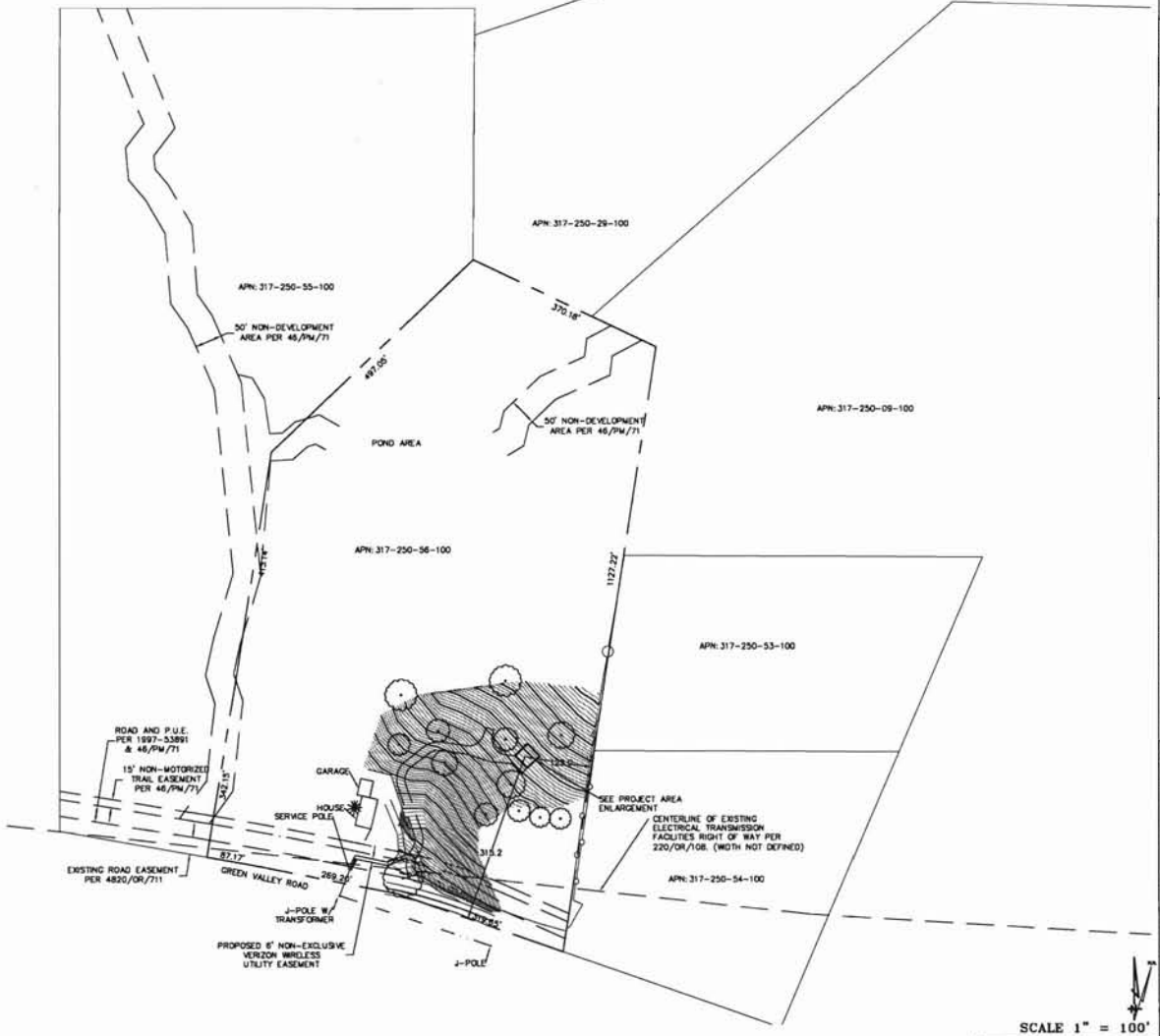
PROJECT NO:	PSL295539
DRAWN BY:	CNELSON
CHECKED BY:	SAL MTZ JR

NO	DATE	ISSUE
1	10.21.14	90% ZONING
2	10.25.14	95% ZONING
3	01.06.15	100% ZONING
4	01.14.15	100% ZONING

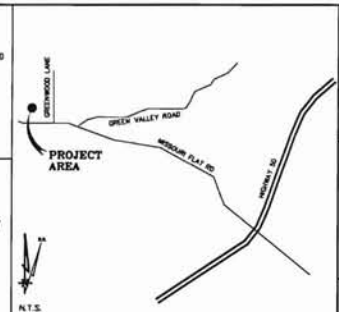
TITLE SHEET

SHEET NUMBER
T-1

COMPANY JOB NO.: WD4154



BOUNDARY SHOWN IS BASED ON MONUMENTATION FOUND AND RECORD INFORMATION. THIS IS NOT A BOUNDARY SURVEY. THIS IS A SPECIALIZED TOPOGRAPHIC MAP WITH PROPERTY LINES AND EASEMENTS BEING A GRAPHIC DEPICTION BASED ON INFORMATION GATHERED FROM VARIOUS SOURCES OF RECORD AND AVAILABLE MONUMENTATION FOUND DURING THE FIELD SURVEY. NO EASEMENTS WERE RESEARCHED OR PLOTTED. PROPERTY LINES AND LINES OF TITLE WERE NOT INVESTIGATED NOR SURVEYED EXCEPT AS SHOWN ON THIS PLAN. NO PROPERTY MONUMENTS WERE SET.



VICINITY MAP

DATE OF SURVEY: 09-29-14

SURVEYED BY OR UNDER DIRECTION OF: KENNETH D. GEIL, R.C.E. 14803

LOCATED IN THE COUNTY OF EL DORADO, STATE OF CALIFORNIA

BEARINGS SHOWN ARE BASED UPON MONUMENTS FOUND AND RECORD INFORMATION. THIS IS NOT A BOUNDARY SURVEY.

ELEVATIONS SHOWN ON THIS PLAN ARE BASED UPON U.S.G.S. N.A.V.D. 88 DATUM. ABOVE MEAN SEA LEVEL UNLESS OTHERWISE NOTED.

N.G.V.D. 1929 CORRECTION: SUBTRACT 2.89' FROM ELEVATIONS SHOWN.

CONTOUR INTERVAL: 1'

ASSESSOR'S PARCEL NUMBER(S): 317-250-56-100

OWNER(S): BLAIR CLARKE & BROOKS MITCHELL
6521 GREEN VALLEY ROAD
PLACERVILLE, CA 95667

Lease Area Description

All that certain lease area being a portion of Parcel 2 as is shown on that certain Parcel Map filed for record at Book 46 of Parcel Maps at Page 71, Official Records of El Dorado County, being located in the City of Placerville, County of El Dorado, State of California, being more particularly described as follows:

Commencing at a 3/4" Iron Pipe Stamped LS3884 set at the Northwest corner of Tract 1 as is shown on that certain Record of Survey filed for record at Book 17 of Surveys at Page 99, Official Records, from which a similar monument stamped RCE14747 set at the Southeast corner of the above referenced Tract 1 bears South 08°44'17" West 363.14 feet; thence from said point of commencement South 26°56'30" West 388.80 feet to the True Point of Beginning; thence from said point of beginning South 44°03'06" East 32.00 feet; thence South 45°56'54" West 32.00 feet; thence North 44°03'06" West 32.00 feet; thence North 45°56'54" East 32.00 feet to the point of beginning.

Together with a non-exclusive easement for access and utility purposes, fifteen feet in width, the centerline of which is described as follows: Beginning at a point which bears South 45°56'54" West 7.50 feet from the most Southerly corner of the above described lease area and running thence from said point of beginning North 44°03'06" West 29.18 feet; thence North 85°15'26" West 35.89 feet; thence North 73°48'16" West 22.05 feet to a point hereafter defined as Point "A"; thence continuing North 73°48'16" West 32.17 feet; thence North 80°57'56" West 42.68 feet; thence through a curve to the left having a radius of 37.50 feet, the chord of which bears South 75°40'16" West 29.74 feet, through an arc distance of 30.58 feet; thence South 52°18'27" West 40.33 feet; thence through a curve to the left having a radius of 37.50 feet, the chord of which bears South 16°54'03" West 43.45 feet, through an arc distance of 46.35 feet; thence South 18°30'20" East 91.56 feet; thence through a curve to the right having a radius of 37.50 feet, the chord of which bears South 09°38'52" West 35.39 feet, through an arc distance of 36.85 feet to a point hereafter defined as Point "B"; thence continuing through said curve to the right through an arc distance of 3.80 feet, the chord of which bears South 34°53'52" West 3.80 feet; thence through a curve to the left having a radius of 37.50 feet, the chord of which bears South 05°52'24" West 33.02 feet, through an arc distance of 34.19 feet; thence South 20°14'52" East 16.6 feet more or less to the public right of way more commonly known as Green Valley Road.

Also together with a non-exclusive easement for access purposes fifteen feet in width the centerline of which is described as follows: beginning at Point "A" as previously defined and running thence North 17°12'49" East 50.11 feet.

Also together with a non-exclusive easement for utility purposes, six feet in width, the centerline of which is described as follows: beginning at Point "B" as previously defined and running thence South 68°48'52" West 50.80 feet; thence North 78°20'45" West 59.35 feet; thence South 27°49'26" West 28 feet more or less to the existing utility pole.

Geil Engineering
Engineering * Surveying * Planning
1226 High Street
Auburn, California 95603-5015
Phone: (530) 885-0428 * Fax: (530) 823-1309

VERIZON WIRELESS

Project Name: INDIAN CREEK

Project Site Location: 6521 Green Valley Road
Placerville, CA 95667
El Dorado County

Date of Observation: 09-29-14

Equipment/Procedure Used to Obtain Coordinates: Trimble Geo XT post processed with Pathfinder Office software.

Type of Antenna Mount: Proposed Monopine

Latitude: 38° 43' 14.52"(NAD83) Latitude: 38° 43' 14.87"(NAD27)
Longitude: 120° 52' 32.19"(NAD83) Longitude: 120° 52' 28.41"(NAD27)

ELEVATION of Ground at Base of Structure (NAVD88) 1529' AMSL

CERTIFICATION: I, the undersigned, do hereby certify elevation listed above is based on a field survey done under my supervision and that the accuracy of those elevations meet or exceed 1-A Standards as defined in the FAA ASAC Information Sheet 91:003, and that they are true and accurate to the best of my knowledge and belief.

Kenneth D. Geil California R.C.E. 14803

Surveyor
GEIL ENGINEERING
ENGINEERING * SURVEYING * PLANNING
1226 HIGH STREET AUBURN, CA 95603
PHONE (530) 885-0428
FAX (530) 823-1309

verizon wireless

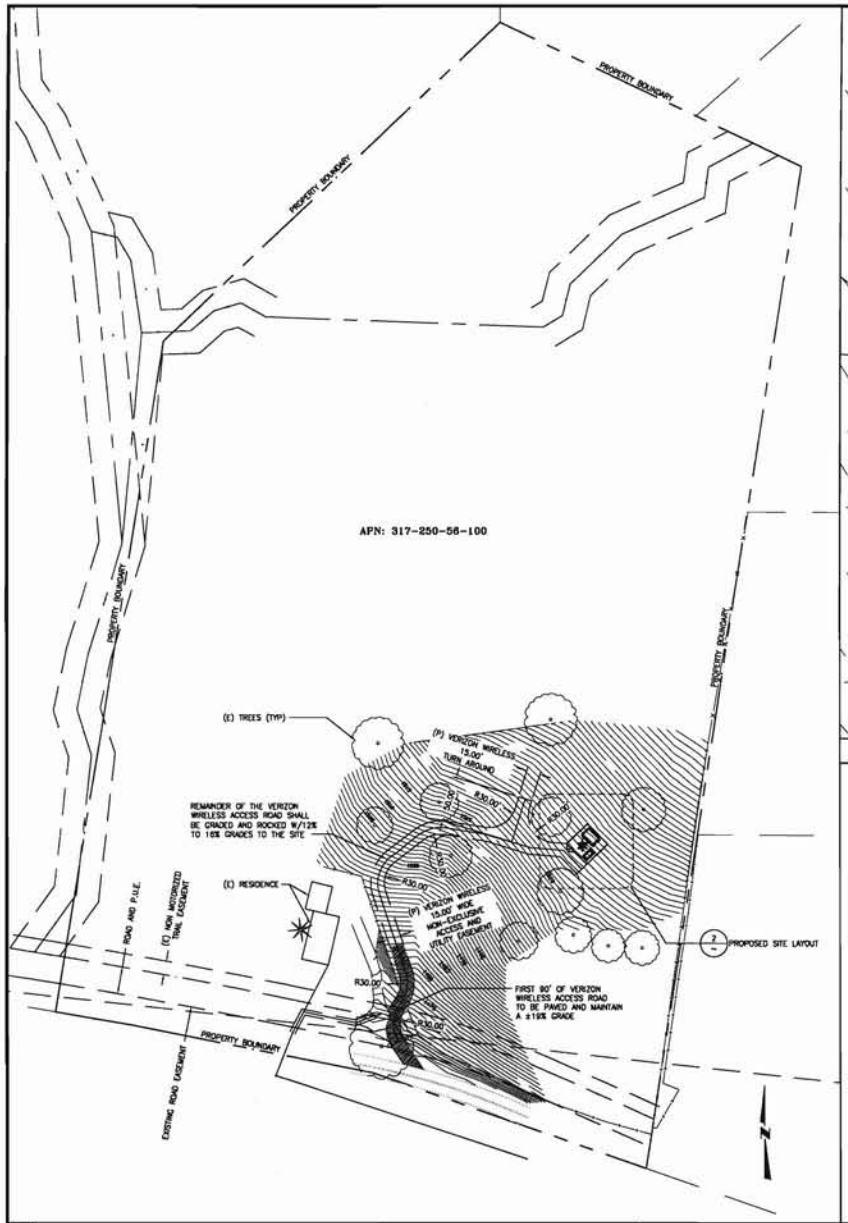
INDIAN CREEK
6521 GREEN VALLEY ROAD
PLACERVILLE, CA 95667

PLOT PLAN AND SITE TOPOGRAPHY

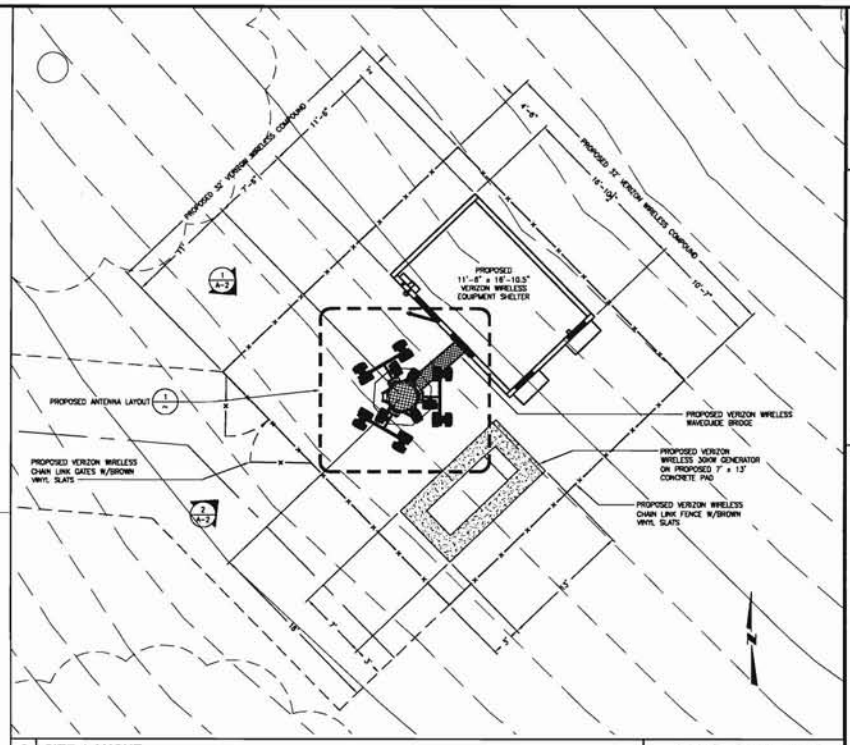
REVISIONS		
REV	09-30-14	Drawing Submittal
REV	10-17-14	Notes Added
REV	10-23-14	Lease Area Mod.
REV	12-30-14	Access Mod.
REV	01-14-15	Redlines

Sheet
C-1

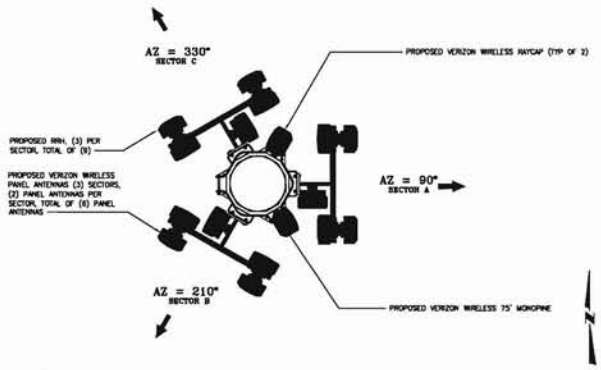
PROJECT AREA ENLARGEMENT
C-2
INDIAN CREEK
6521 GREEN VALLEY ROAD
PLACERVILLE, CA 95667
PLOT PLAN AND
SITE TOPOGRAPHY
verizonwireless
GEL ENGINEERING
SCALE 1" = 20'
FENCELINE
TOWER LOCATION
(P) VERIZON WIRELESS LEASE AREA
(P) 15' NON-EXCLUSIVE VERIZON WIRELESS ACCESS & UTILITY EASEMENT
15' NON-MOTORIZED TRAIL EASEMENT PER 46/PM/71
ROAD AND P.U.E. PER 1997-53881 & 46/PM/71
EXISTING ROAD EASEMENT PER 46/PM/71
PROPERTY BOUNDARY
TOP OF CONTOUR
PAVED DRIVEWAY
GARAGE
HOUSE
OVERHEAD UTILITIES
SERVICE POLE
7-POLE w/ TRANSFORMER
7-POLE



3 | OVERALL SITE PLAN | SCALE: 1" = 60'



2 | SITE LAYOUT | SCALE: 3/16" = 1'-0"



1 | ANTENNA LAYOUT | SCALE: 3/8" = 1'-0"

MT2 TELECOM, LP
1015-B AIRPORT RD
PO BOX 488
RIO VISTA, CA 94571
PH: (707) 374-5075
FAX: (707) 374-8194

verizon wireless
255 PARKSHORE DR
FOLSOM, CA 95630
PHONE: (916) 984-5924

INDIAN CREEK
PSL#: 295539
PSP#: 20141069357

6521 GREEN VALLEY RD
PLACERVILLE, CA 95667
EL DORADO COUNTY

STAMP:

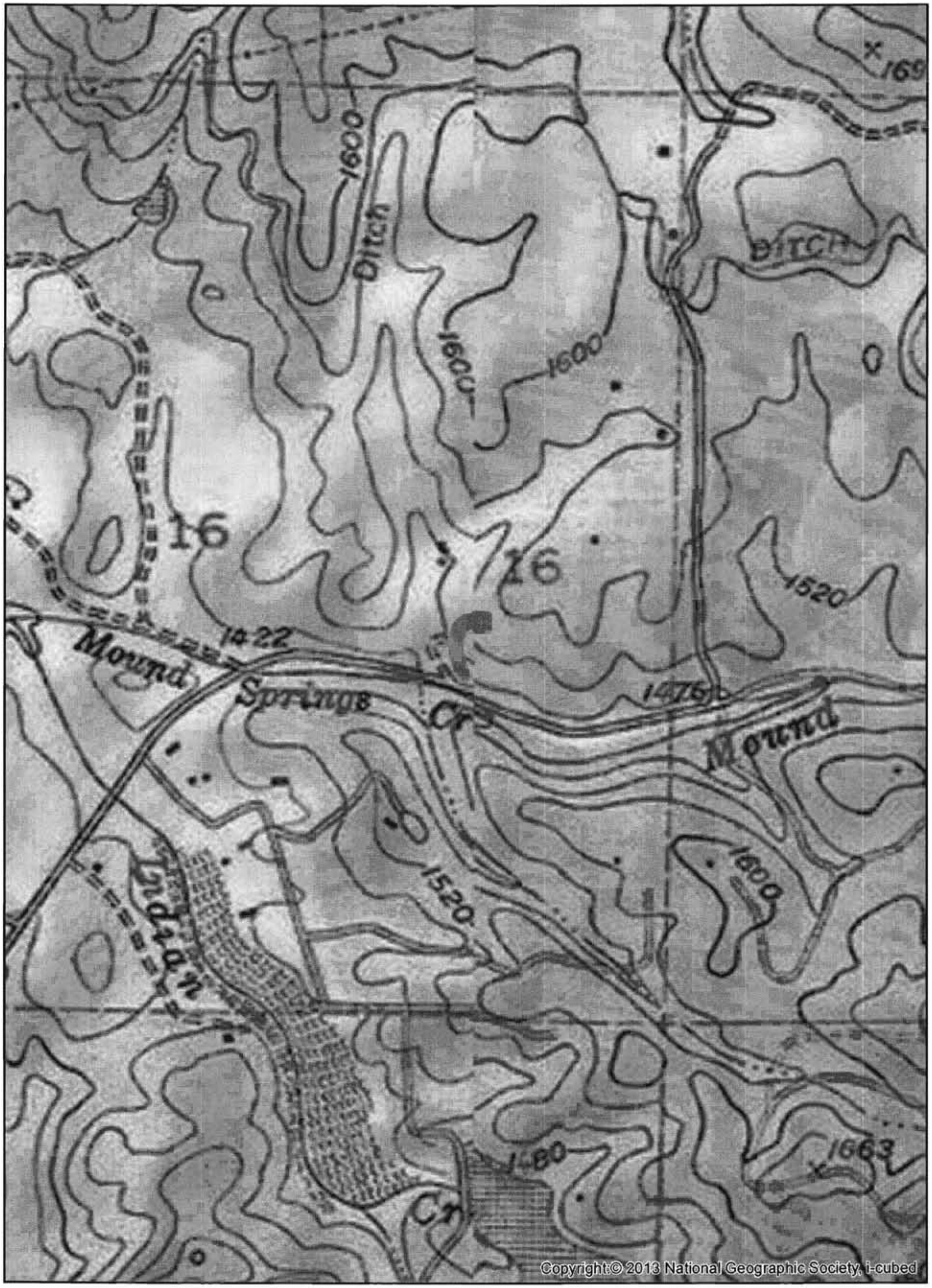
PROJECT NO:	PSL295539
DRAWN BY:	CNELSON
CHECKED BY:	SAL MTZ JR

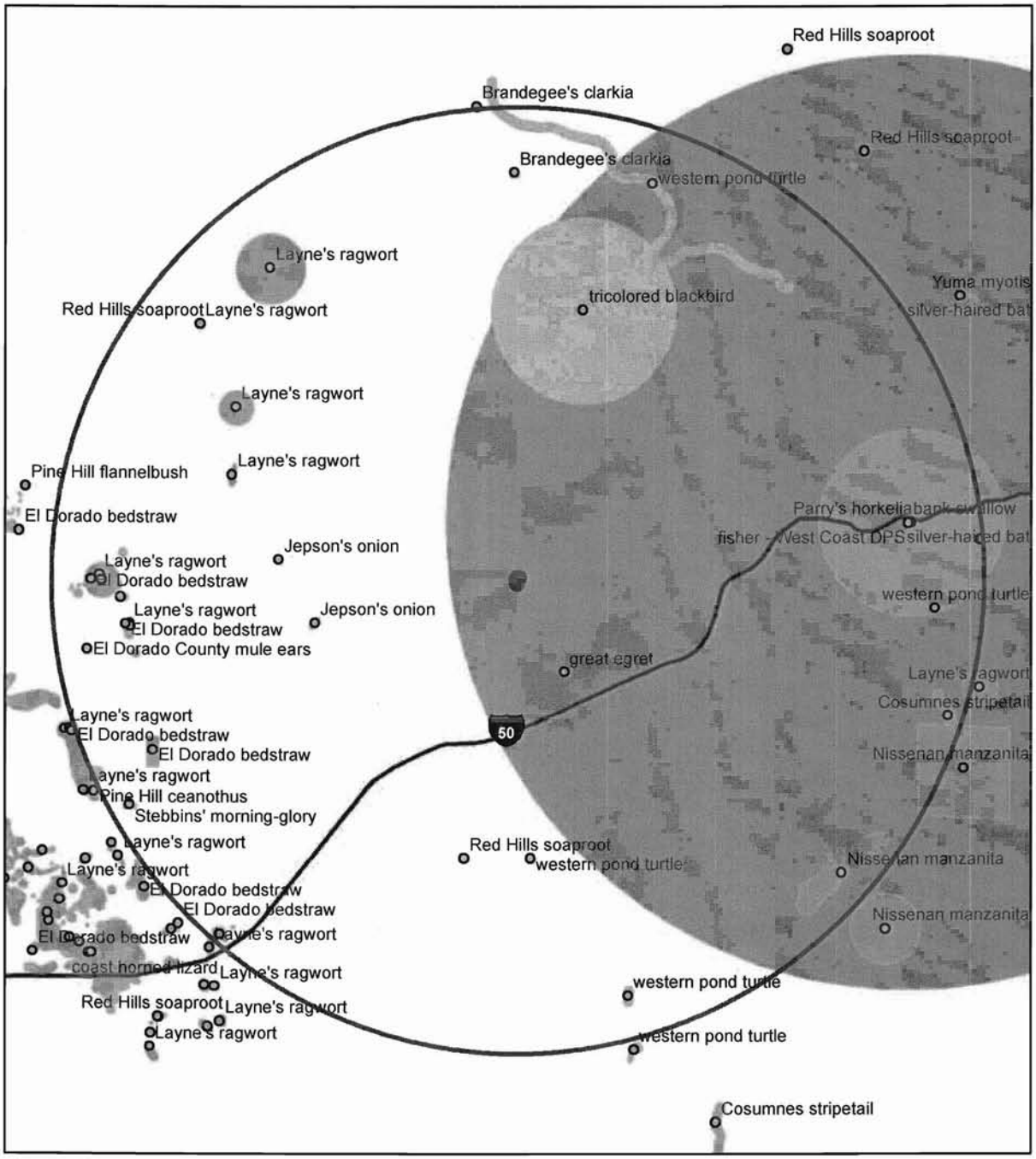
NO	DATE	ISSUE
1	10.21.14	90% ZONING
2	10.25.14	95% ZONING
3	01.06.15	100% ZONING
4	01.14.15	100% ZONING

OVERALL SITE PLAN, SITE LAYOUT AND ANTENNA LAYOUT

SHEET NUMBER
A-1

COMPANY JOB NO.: WD4154


Ditch
1600
Ditch
1600
1600
16
16
1520
1422
Mound
Springs
Cr
1476
Mound
Indian
1520
1600
1480
1663
Cr
Copyright © 2013 National Geographic Society, i-cubed


Red Hills soaproot
Brandegee's clarkia
Red Hills soaproot
Brandegee's clarkia
western pond turtle
Layne's ragwort
Yuma myotis
tricolored blackbird
silver-haired bat
Red Hills soaproot
Layne's ragwort
Layne's ragwort
Pine Hill flannelbush
Layne's ragwort
El Dorado bedstraw
Parry's horkelia
bank swallow
fisher - West Coast DPS
silver-haired bat
Jepson's onion
Layne's ragwort
El Dorado bedstraw
western pond turtle
Layne's ragwort
El Dorado bedstraw
Jepson's onion
El Dorado County mule ears
great egret
Layne's ragwort
Cosumnes stripetail
Layne's ragwort
El Dorado bedstraw
50
El Dorado bedstraw
Nissenan manzanita
Layne's ragwort
Pine Hill ceanothus
Stebbins' morning-glory
Layne's ragwort
Red Hills soaproot
western pond turtle
Nissenan manzanita
Layne's ragwort
El Dorado bedstraw
El Dorado bedstraw
Nissenan manzanita
El Dorado bedstraw
Layne's ragwort
coast horned lizard
Layne's ragwort
western pond turtle
Red Hills soaproot
Layne's ragwort
Layne's ragwort
western pond turtle
Cosumnes stripetail
Study Area
5-mile buffer







B.C. Ministry