### **NEGATIVE DECLARATION**

FILE	:: CUP23-0004					
PRO	JECT NAME: Plea	sant Valley Monopin	е			
NAM	IE OF APPLICANT	: Assurance Develo	pment agents for	Vertical Bridge		
ASS	ESSOR'S PARCE	L NO.: 098-100-083	SECTION	N: 32&33 <b>T</b> : 10N	N <b>R:</b> 11E, MDM	
LOC		ct is located on the r ion with Knollwood D			pproximately 500	feet north of the
	GENERAL PLAN	AMENDMENT:	FROM:	TO:		
	REZONING:	FROM:	TO:			
	TENTATIVE PAR	CEL MAP 🗌 SUBI	DIVISION:			
	SUBDIVISION (N	AME):				
	The monopine is promicrowave dish anto	ERMIT TO ALLOW: oposed to include twelvenna, one (1) GPS anted disconcrete pad within a	re (12) antennas, s enna, required ante	ix (6) remote radio enna cabling, and t	units (RRU), one	(1) 2-foot
	OTHER:					
REA	SONS THE PROJ	ECT WILL NOT HAV	'E A SIGNIFICAN	IT ENVIRONME	NTAL IMPACT:	
	NO SIGNIFICANT	ENVIRONMENTAL	CONCERNS W	ERE IDENTIFIE	DURING THE	INITIAL STUDY.
	MITIGATION HAS	S BEEN IDENTIFIED	WHICH WOULD	REDUCE POT	ENTIALLY SIGN	IIFICANT
	OTHER:					
Guide the p the F filing to ac	elines, and El Dorado roject and determine Planning Department this negative declara tion on the project by	authority and criteria o County Guidelines for d that the project will r hereby prepares this N tion will be provided to y COUNTY OF EL DO c, 2850 Fairlane Court,	the Implementation of have a significated that the significate of the signification in the signification in the signification of the signification in the signification in the signification of the signification in the si	on of CEQA, the Co ant impact on the RATION. A period ew of the project s the project specifi	ounty Environmen environment. Bas l of twenty (20) da pecifications and t	tal Agent analyzed sed on this finding, ys from the date of his document prior
This	Negative Declaration	was adopted by the	hearing bo	ody on	date	
Exec	cutive Secretary					

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

# INITIAL STUDY ENVIRONMENTAL CHECKLIST

Project Title: CUP23-0004/Pleasant Valley Monopine

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

Contact Person: Timothy Pitt, Senior Planner Phone Number: (530) 621-6565

Applicant's Name and Address: Assurance Development agents for Vertical Bridge, 1499 Huntington Dr.

Suite 305, South Pasadena, CA 91030

Owner's Name and Address: Dallas and Susan Olson, 1550 Pleasant Valley Road, Placerville, CA 95667 Project Engineer's Name and Address: Assurance Development, 1499 Huntington Dr. Suite 305, South

**Project Location:** West side of Pleasant Valley Road, approximately 380-feet south of the intersection with Ponderhill Way in the Diamond Springs area.

Assessor's Parcel Number: 098-100-083 Acres: 10.01-acres

Sections: Sec.32&33 T: 10N R: 11E

General Plan Designation: Low Density Residential (LDR)

**Zoning:** Residential Estate – 5-acre Minimum (RE-5)

**Description of Project:** A request for a Conditional Use Permit for the construction and ongoing operation of a new 100-foot-tall monopine. The monopine is proposed to include twelve (12) antennas, six (6) remote radio units (RRU), one (1) 2-foot microwave dish antenna, one (1) GPS antenna, required antenna cabling, and two (2) ground mounted radio cabinets on a raised concrete pad within a 40'x40' fenced lease area. No water or sewer service would be required for the proposed project as it is an unmanned facility. Electricity will be provided by Pacific Gas & Electric (PG&E). The project is proposing a new encroachment from Pleasant Valley Road to access the site which will be in addition to the existing encroachment from Pleasant Valley Road located at the northeast edge of the subject parcel. No trees are proposed for removal and the proposed project would require minimal grading.

### Surrounding Land Uses and Setting:

1								
	Zoning	General Plan	Land Use/Improvements					
Site	Residential Estate - 5-Acre Minimum (RE-5)	Low Density Residential (LDR)	Single-Family Dwelling and Associated Outbuildings					
North	Residential Estate - 5-acre Minimum (RE-5)	Low Density Residential (LDR)	Single-Family Dwelling					
South	Rural Lands – 10- Acre Minimum (RL-10)	Rural Residential (RR)	Single-Family Dwelling					
East	Residential Estate - 5-Acre Minimum (RE-5)	Low Density Residential (LDR)	Single-Family Dwelling/Fruit Stand					

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West	Residential Estate – 5-Acre Minimum (RE-5)	Low Density Residential (LDR)	Single-Family Dwelling
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Briefly describe the environmental setting: The project site is a 1600-square-foot lease area within a parcel totaling 10.01-acres located in the western slope of the Sierra Nevada Mountains at an elevation of approximately 2070-feet above mean sea level. The topography of the subject parcel is primarily flat and the primary vegetation on the parcel consists of grass and pine trees. There are no rare plant or special species known to be on the site. The subject property is on the west side of Pleasant Valley Road in the Diamond Springs area. The site is currently developed with a single-family residence and various outbuildings associated with the residence. According to the USDA Natural Resources Conservation Service Web Soil Survey Map, the predominant soil type for the subject parcel is Mariposa gravelly silt loam. According to the U.S. Fish and Wildlife Service National Wetlands Inventory, a seasonal wetland is located on the subject parcel, however the proposed project site is not located within or near the watershed of the seasonal wetland.

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

- Community Development Services: Planning and Building Department Building Services (Building and Grading Permits)
- 2. El Dorado County Fire District (Building and Grading Permits)
- 3. El Dorado County Air Quality Management District (Building and Grading Permits)
- 4. El Dorado County Department of Transportation (Encroachment Permit)
- 5. El Dorado County Environmental Health Department (Building Permit)

Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?

At the time of the application request, seven tribes had requested to be notified of proposed projects for consultation in the project area: Colfax-Todds Valley Consolidated Tribe, Ione Band of Miwok Indians, Nashville-El Dorado Miwok-Maidu-Nishinam Tribe, Shingle Springs Band of Miwok Indians, United Auburn Indian Community of the Auburn Rancheria, Washoe Tribe of California and Nevada, and T'si-Akim Maidu. Certified letters were mailed to these seven tribes on April 7, 2023. No tribes responded with the request to consult on the project. Further discussion is contained in the Tribal Cultural Resources section of this Initial Study.

### 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
Biological Resources		Cultural Resources		Energy
Geology and Soils		Greenhouse Gas Emissions		Hazards and Hazardous Materials
Hydrology and Water Quality		Land Use and Planning		Mineral Resources
Noise		Population and Housing		Public Services
Recreation		Transportation		Tribal Cultural Resources
Utilities and Service Systems		Wildfire		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.							
		that the proposed project MAY has RONMENTAL IMPACT REPORT is re		gnificant effect on the environment, and an			
	mitigate docume the ear	ed" impact on the environment, but at lea ent pursuant to applicable legal standards;	and 2) ha	gnificant impact" or "potentially significant unless cct: 1) has been adequately analyzed in an earlier s been addressed by Mitigation Measures based on n ENVIRONMENTAL IMPACT REPORT is be addressed.			
	potentia DECLA earlier	ally significant effects: a) have been ARATION, pursuant to applicable standa	analyzed rds; and b ncluding r	ignificant effect on the environment, because all adequately in an earlier EIR or NEGATIVE ) have been avoided or mitigated pursuant to that evisions or Mitigation Measures that are imposed			
		/ / /					
Signa	ture:	TACIN	Date:	6/29/23			
Printe	ed Name:	Timothy Pitt, Senior Planner	For:	El Dorado County			
Signa	iture:	RPA	Date:	6/29/23			
Printe	ed Name:	Rob Peters, Deputy Director of Planning	For:	El Dorado County			

#### PROJECT DESCRIPTION

Throughout this Initial Study, please reference the following Attachments:

Attachment 1: Location Map Attachment 2: Aerial Photo

Attachment 3: Assessor's Parcel Map

Attachment 4: General Plan Land Use Map

Attachment 5: Zoning Map

Attachment 6: Site Plan Attachment 7: Photosimulations

Attachment 8: Radio Frequency (RF) Report

Attachment 9: Application Packet

#### 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.

#### **Project Description**

The project would allow the construction and ongoing operation of a new 100-foot-tall telecommunications facility with a stealth monopine design. The monopine is proposed to include twelve (12) antennas, six (6) remote radio units (RRU), one (1) 2-foot microwave dish antenna, one (1) GPS antenna, required antenna cabling, and two (2) ground mounted radio cabinets on a raised concrete pad within a 40'x40'fenced lease

#### Project Location and Surrounding Land Uses

As noted above, the property is located on the west side of Pleasant Valley Road, approximately 380-feet south of the intersection with Ponderhill Way. The parcels surrounding the subject parcel are primarily rural residential in nature with Residential Estate – 5-Acre Minimum (RE-5) zoning to the west, northwest, east, and northeast of the parcel. To the southeast of the subject parcel is a larger parcel zoned Rural Lands – 10-Acre Minimum (RL-10). These surrounding parcels are currently developed for residential use and some light agricultural use.

### Project Characteristics

### 1. Transportation/Circulation/Parking

The primary access to the proposed project site would be created by a new encroachment from Pleasant Valley Road. The new encroachment would be in addition to an existing encroachment from Pleasant Valley Road at the northeast corner of the subject parcel.

### 2. Utilities and Infrastructure

No water or sewer service would be required for the proposed project as it is an unmanned facility. Electric service already exists on the parcel and is provided by Pacific Gas & Electric (PG&E). There is no proposal for stormwater collection.

#### 3. Construction Considerations

Construction of a 100-foot-tall monopine is proposed as part of the project. The project would maintain the current zoning designation of Residential Estate – 5-Acre Minimum (RE-5) and development would require conformance with any applicable agency requirements and would be subject to building permits from El Dorado County Building Services. The proposed development

is designed to be in conformance with the development standards for Communications Facilities. The applicant is not requesting any modifications to any development standards.

#### Project Schedule and Approvals

This Initial Study and proposed Negative Declaration (IS/ND) is being circulated for public and agency review for a minimum 20-day period. Written comments on the IS/ND should be submitted to the project planner indicated in the Summary section, above. Following the close of the written comment period, the IS/ND will be considered by the Lead Agency, El Dorado County, in a public meeting and will be adopted 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 would not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 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.
- 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.

- 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.

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### ENVIRONMENTAL IMPACTS

I.	AESTHETICS. Would the project:				
		Potentially Significant Impact	Less than Significant with Mitigation	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.

### 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.

Visual resources are classified as 1) scenic resources or 2) scenic views. Scenic resources include specific features of a viewing area (or viewshed) such as trees, rock outcroppings, and historic buildings. They are specific features that act as the focal point of a viewshed and are usually foreground elements. Scenic views are elements of the broader viewshed such as mountain ranges, valleys, and ridgelines. They are usually middle ground or background elements of a viewshed that can be seen from a range of viewpoints, often along a roadway or other corridor.

A list of the county's scenic views and resources is presented in Table 5.3-1 of the *El Dorado County General Plan Draft EIR* (p. 5.3-3). This list includes areas along highways where viewers can see large water bodies (e.g., Lake Tahoe and Folsom Reservoir), river canyons, rolling hills, forests, or historic structures or districts that are reminiscent of El Dorado County's heritage.

Several highways in El Dorado County have been designated by the California Department of Transportation (Caltrans) as State Scenic Highways or are eligible for such designation. These include U.S. 50 from the eastern limits of the Government Center interchange (Placerville Drive/Forni Road) in Placerville to South Lake Tahoe, all of State Route (SR) 89 within the county, and those portions of SR 88 along the southern border of the county. While a portion of U.S. 50 is a designated State Scenic Highway, the project site is located approximately 10 miles west of the western boundary of the designated stretch.

Rivers in El Dorado County include the American, Cosumnes, Rubicon, and Upper Truckee rivers. A large portion of El Dorado County is under the jurisdiction of the U.S. Forest Service (USFS), which oversees rivers or river sections identified as Wild and Scenic under the Wild and Scenic Rivers Act. To date, no river sections in El Dorado County have been nominated for or granted Wild and Scenic River status.

<u>Discussion</u>: A substantial adverse effect related to aesthetics would result from the introduction of physical features that are not characteristic of the surrounding development, substantial changes the natural landscape, or obstruction of an identified public scenic vista.

- a-b. The project site is not located near a scenic vista, nor is the site visible from an officially designated State Scenic Highway. The existing visual character of the site is that of a residentially developed parcel with a single-family dwelling and common associated outbuildings surrounded by primarily rural residential uses. There would be no impact to scenic vistas or scenic resources as a result of the project.
- c. Visual Character: Photosimulations of the proposed monopine (Attachment 7) have been included with the project application. The proposed 100-foot-tall monopine tower is proposing visual concealments including full radius pine branches and natural foliage colored antenna and associated equipment. The lease area will be surrounded by an 8-foot chain-link fence and is further concealed by existing dense natural foliage and thick vegetation located on the proposed site. The tall pine trees along Pleasant Valley Road and elevation of the proposed structure above the road level will help conceal the proposed monopine from traffic in the immediate vicinity. The project site is surrounded by parcels with similar foliage and vegetation. Any potential impacts would be less than significant.
- d. Light and Glare: The proposed project does not include any new light sources. Any potential light sources would be required to comply with the County lighting ordinance, including the shielding of lights to avoid potential glare, during the building permit process, there would be no impact associated with light and glare as a result of project approval.

**<u>FINDING</u>**: As conditioned and with adherence to El Dorado County Code of Ordinances (County Code), for this Aesthetics category, any potential impacts would be **less than significant**.

II. AGRICULTURE AND FORESTRY 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 Department 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 Forest Protocols adopted by the California Air Resources Board. Would the project:

		Potentially Significant Impact	Less than Significant with Mitigation	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 forestry 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 4 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 4 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 4 years before the FMMP's mapping data.

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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. Farmland Mapping and Monitoring Program: The site is zoned as Residential Estate- 5-Acre Minimum (RE-5). The subject parcel is not located in, or adjacent to, any agricultural district. The subject parcel is mapped as farmland of local importance and is surrounded on three sides with similarly mapped parcels. Directly across Pleasant Valley Road to the east, there is a parcel mapped as unique farmland. The present state of the project area is vacant and grass covered and is not being used as productive farmland. The conversion of the proposed 1,600-suare-foot area for the project to a non-agricultural use would have no impact on the productivity of the parcel as an agricultural use and any other potential impacts would be less than significant.
- b. Agricultural Uses: The site is not located within a Williamson Act Contract and is not adjacent to any agricultural districts. There would be no impact as a result of project approval.
- 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 as a result of project approval.
- e. Conversion of Prime Farmland or Forest Land: The project is not within an agricultural district or located on forest land and would not convert Farmland or forest land to non-agriculture use. There would be no impact as a result of project approval.

**FINDING:** For this Agriculture category, the thresholds of significance have not been exceeded, and any potential impacts are anticipated to be **less than significant** as a result of the project.

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III	III. AIR QUALITY. Would the project:						
		Potentially Significant Impact	Less than Significant with Mitigation	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 (USEPA) 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 (PM<sub>10</sub>), particulate matter of aerodynamic radius of 2.5 micrometers or less (PM<sub>2.5</sub>), carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), 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, The El Dorado County AQMD manages air quality for attainment and permitting purposes within the west slope portion of El Dorado County.

USEPA and CARB regulate various stationary sources, area sources, and mobile sources. USEPA 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, USEPA 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.

Air quality in the project area is regulated by the El Dorado County AQMD. CARB and local air districts are responsible for overseeing stationary source emissions, approving permits, maintaining emissions inventories, maintaining air quality stations, overseeing agricultural burning permits, and reviewing air quality-related sections of environmental documents required to comply with CEQA. 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 Environmental Protection Agency and State of California, respectively, for each criteria pollutant: ozone, particulate matter, carbon monoxide, nitrogen dioxide, and sulfur dioxide.

The Environmental Protection Agency and State also designate regions as "attainment" (within standards) or "nonattainment" (exceeds standards) based on the ambient air quality. The County is in nonattainment status for both federal and state ozone standards and for the state PM10 standard and is in attainment or unclassified status for other pollutants (California Air Resources Board 2008). County thresholds are included in the chart below.

Criteria Pollutant	El Dorado County Threshold					
Reactive Organic Gasses (ROG)	82 lbs/day					
Nitrogen Oxides (NO <sub>X</sub> )	82 lbs/day					
Carbon Monoxide (CO)	8-hour average: 6 parts per million (ppm)	1-hour average: 20 ppm				
Particulate Matter (PM <sub>10</sub> ):	Annual geometric mean: 30 μg/m <sup>3</sup>	24-hour average: 50 μg/m <sup>3</sup>				
Particulate Matter (PM <sub>2.5</sub> ):	Annual arithmetic mean: 15 μg/m <sup>3</sup>	24-hour average: 65 μg/m <sup>3</sup>				
Ozone	8-hour average: 0.12 ppm	1-hour average: .09				

El Dorado County AQMD's guide to air quality assessment includes a table listing project types with potentially significant emissions (El Dorado County AQMD 2002:Table 5.2). 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, El Dorado County AQMD assumes that exhaust emissions of other air pollutants from the operation of equipment and vehicles are also not significant.

For fugitive dust  $(PM_{10})$ , 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,  $PM_{2.5}$ ,  $SO_2$ ,  $NO_2$ , sulfates, lead, and  $H_2S$ , 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 standard(s).

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).

**<u>Discussion</u>**: The El Dorado CountyAQMD has developed a *Guide to Air Quality Assessment* (2002) to evaluate project specific impacts and help determine if air quality mitigation measures are needed, or if potentially significant impacts could result. A substantial adverse effect on air quality would occur if:

- Emissions of ROG and NO<sub>X</sub> will result in construction or operation emissions greater than 82 lbs/day (Table 3.2);
- Emissions of PM<sub>10</sub>, CO, SO<sub>2</sub> and NO<sub>X</sub>, 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 and funding transportation contract measures to limit mobile source emissions. The project would not conflict with or obstruct implementation of either plan. Per standard County requirements, any activities associated with plans for grading and/or construction would require a Fugitive Dust Mitigation Plan (FDMP) for grading and construction activities. Such a plan would address grading measures and operation of equipment to minimize and reduce the level of defined particulate matter exposure and/or emissions to a less than significant level. This plan is a requirement for all developments. Any potential impacts would be less than significant.
- b-c. Air Quality Standards and Cumulative Impacts: The proposed project consists of the development and ongoing operation of a 100-foot-tall monopine cellular facility. Although this project would contribute air pollutants due to construction, and possible additional vehicle trips to and from the site these impacts would be minimal. 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. Any potential 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 that would be anticipated to affect sensitive receptors would be emitted by the proposed project during construction or following construction. Any potential impacts would be less than significant.
- e. Objectionable Odors: Objectionable Odors: Table 3-1 of the Guide to Air Quality Assessment (AQMD, 2002) does not list the proposed use of the parcel for a monopine as a use known to create objectionable odors. The request to construct and operate a 100-foot-tall monopine would not be a source of objectionable odors. There would be no impact for objectionable odors as a result of project approval.

**FINDING:** The proposed project would not affect the implementation of regional air quality regulations or management plans. The proposed project would not be anticipated to cause substantial adverse effects to air quality, nor exceed established significance thresholds for air quality impacts. Any potential impacts would be **less than significant**.

IV	IV. BIOLOGICAL RESOURCES. Would the project:						
		Potentially Significant Impact	Less than Significant with Mitigation	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 Wildlife 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			

IV.	IV. BIOLOGICAL RESOURCES. Would the project:						
		Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact		
c.	Have a substantial adverse effect on state or federally protected wetlands (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

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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 CEOA 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 Plan 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. The El Dorado County General Plan designates the Important Biological Corridor (IBC) (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).

<u>Discussion</u>: 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:** The project site is not located within the El Dorado County Important Biological Corridor or Rare Plant Mitigation Areas, nor any other sensitive natural community of the County, State, or Federal agency, including but not limited to and Ecological preserve, or U.S. Fish and Wildlife Service (USFWS) Recovery Plan boundaries. Based on a review of the California Natural Diversity Database

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(CNDDB) and of the County Geographic Information System (GIS), there is little occurrence of protected, special status, or species of concern in the project area. The applicant provided a biological study from Lotis Environmental (Attachment 9) showing a determination of No Effect for critical habitats or any proposed endangered or threatened species. The project site is a 1,600-square-foot lease area within a parcel totaling 10.01-acres located on the western slope of the Sierra Nevada Mountains at an elevation of approximately 2070-feet above mean sea level. There are no documented finds of protected status species in the area of the subject parcel. The potential to find such species on the project site or in the area immediately surrounding the project site is low due to the disturbance of the natural environment, and the lack of undisturbed habitat. The vegetation on-site is primarily ruderal including annual California grassland and pine trees. Some small pine trees are proposed for removal and the subject parcel does not contain chaparral or oak woodlands that typically provide habitat. There will not be a substantial adverse effect on candidate, sensitive, or special status species. Any potential impacts would be **less than significant**.

- b-c. Riparian Habitat and Wetlands: Although delineated wetlands and potential riparian features do exist on the extreme western side of the subject parcel, the proposed project occupies a 1,600-square-foot portion of the extreme eastern side of a 10.01-acre parcel. Due to the proposed location of the project, the project would not have a substantial adverse effect on any riparian habitat or other sensitive community, nor would it have a substantial adverse effect on any federally protected wetlands or waters regulated under Section 404 of the Clean Water Act. Any potential impacts would be less than significant.
- d. Migration Corridors: Migratory Deer Herd Habitats occur within some areas of El Dorado County. The project site does not include, nor is it adjacent to, any migratory deer herd habitats as shown in the El Dorado County General Plan. The subject parcel is located adjacent to roadways, agricultural, and residential development. Any potential impacts would be less than significant.
- e. Local Policies: Local protection of biological resources includes oak woodland preservation, rare plants and special-status species, and wetland preservation with the goal to preserve and protect sensitive natural resources within the County. The project is not located in the IBC, as addressed above and only small pine trees are proposed to be removed from the subject parcel for the project. The project would not conflict with any local policies or ordinances protecting biological resources and would have no impact for this category.
- f. Adopted Plans: This project would not conflict with the provisions of an adopted Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. There would be no impact.

**<u>FINDING</u>**: No impacts to protected species, habitat, wetlands, or oak trees were identified for this project. For this biological resources category, any potential impacts would be **less than significant**.

V.	V. CULTURAL RESOURCES. Would the project:							
		Potentially Significant Impact	Less than Significant with Mitigation	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.	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 NRHP, including properties evaluated under Section 106 of the National Historic Preservation Act. The criteria for listing in the CRHR are similar to those of the NRHP and include resources that:

- 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;
- 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 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.

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 (NAHC).

Section 5097.98 of the California Public Resources Code stipulates that whenever NAHC 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 NAHC. 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;
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

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 a 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.

<u>Discussion</u>: 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 culturally 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-b. **Historic or Archeological Resources:** A complete records search of the California Historic Resources Information System (CHRIS) showed that the project site has moderate potential for locating indigenous-period/ethnographic-period cultural resources within the area and is potentially sensitive for cultural resources. A study conducted by Lotis Environmental (Attachment 9) citing the National Register of Historic Places (NRHP) did not identify any historic properties within the ½-mile radius of the area of potential effect. Further, Lotis Environmental submitted a project description to nine (9) nationally recognized tribes along with additional requested information and received clearance from all interested tribes. Any potential impacts would be **less than significant**.
- c. Human Remains: No human remains are known to exist within the project site. However, there is the possibility that subsurface construction activities associated with the proposed project, such as grading, could potentially damage or destroy previously uncovered human remains. However, if human remains should be discovered, implementation of standard conditions of approval to address discovery of human remains consistent with California Health and Safety Code Section 7050.5 would ensure that impacts on previously undiscovered human remains would be less than significant.

**FINDING:** No significant cultural resources have been identified on the project site. Standard conditions of approval would apply in the event of accidental discovery during any future construction. Any potential impacts would be **less than significant.** 

VI.	VI. ENERGY. Would the project:					
		Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact	
i	Result in potential significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X		
	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X		

### Regulatory Setting

#### Federal Energy Policy Act of 2005

The Federal Energy Policy Act of 2005 (EP Act) was intended to establish a comprehensive, long-term energy policy and is implemented by the U.S. Department of Energy (U.S. DOE). The EP Act addresses energy production in the U.S., including oil, gas, coal, and alternative forms of energy and energy efficiency and tax incentives. Energy efficiency and tax incentives programs include credits for the construction of new energy efficient homes, production or purchase of energy efficient appliances, and loan guarantees for entities that develop or use innovative technologies that avoid the production of greenhouse gases (GHG).

#### State Laws, Regulations, and Policies

California Building Standards Code (Title 24, California Code of Regulations), including Energy Code (Title 24, Part 6) and Green Building Standards Code (Title 24, Part 11)

California first adopted the California Buildings Standards Code in 1979, which constituted the nation's first comprehensive energy conservation requirements for construction. Since this time, the standards have been continually revised and strengthened. In particular, the California Building Standards Commission adopted the mandatory Green Building Standards Code (CALGreen [California Code of Regulations, Title 24, Part 11]) in January 2010. CALGreen applies to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure. The California Code of Regulations, Title 24, Part 6 (also known as the California Energy Code), and associated regulations in CALGreen were revised again in 2013 by the California Energy Commission (CEC). The 2013 Building Energy Efficiency Standards are 25% more efficient than previous standards for residential construction. Part 11 also establishes voluntary standards that became mandatory in the 2010 edition of the code, including planning and design for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. The standards offer builders better windows, insulation, lighting, ventilation systems, and other features that reduce energy consumption in homes and businesses. The latest update to the California Building Code was published on July 1, 2022, with an effective date of January 1, 2023. The California Building Code applies to all new development, and there are no substantive waivers available that would exempt development from its energy efficiency requirements. The California Building Code is revised on a regular basis, with each revision increasing the required level of energy efficiency.

#### Senate Bills 1078/107 and Senate Bill 2—Renewables Portfolio Standard

Senate Bill (SB) 1078 and SB 107, California's Renewables Portfolio Standard (RPS), obligates investor-owned utilities (IOUs), energy service providers (ESPs), and Community Choice Aggregations (CCAs) to procure an additional 1% of retail sales per year from eligible renewable sources until 20% is reached, no later than 2010. The California Public Utilities Commission (CPUC) and CEC are jointly responsible for implementing the program. SB 2 (2011) set forth a longer range target of procuring 33% of retail sales by 2020. Implementation of the RPS will conserve nonrenewable fossil fuel resources by generated a greater percentages of statewide electricity from renewable resources, such as wind, solar, and hydropower.

#### Assembly Bill (AB) 1881 (Chapter 559, Statutes of 2006)

Water conservation reduces energy use by reducing the energy cost of moving water from its source to its user. Assembly Bill (AB) 1881 (Chapter 559, Statutes of 2006) requires the Department of Water Resources (DWR) to adopt an Updated Model Water Efficient Landscape Ordinance (MWELO) and local agencies to adopt DWR's MWELO or a local water efficient landscape ordinance by January 1, 2010 and notify DWR of their adoption (Government Code Section 65595). The water efficient landscape ordinance would apply to sites that are supplied by public water as well as those supplied by private well. Local adoption and implementation of a water efficient landscape ordinance would reduce per capita water use from new development.

#### Senate Bill X7-7 (Chapter 4, Statutes of 2009)

SB X7-7 (Chapter 4, Statutes of 2009), the Water Conservation Act of 2009, establishes an overall goal of reducing statewide per capita urban water use by 20% by December 31, 2020 (with an interim goal of at least 10% by December 31, 2015). This statute applies to both El Dorado Irrigation District (EID) and the Georgetown Divide Public Utilities District (GDPUD). EID has incorporated this mandate into its water supply planning, as represented in its Urban Water Management Plan 2010 Update (El Dorado Irrigation District 2011) and all subsequent water supply plans. Reducing water use results in a reduction in energy demand that would otherwise be used to transport and treat water before delivery to the consumer.

#### Assembly Bill 2076, Reducing Dependence on Petroleum

The CEC and Air Resources Board (ARB) are directed by AB 2076 (passed in 2000) to develop and adopt recommendations for reducing dependence on petroleum. A performance-based goal is to reduce petroleum demand to 15% less than 2003 demand by 2020.

### Senate Bill 375—Sustainable Communities Strategy

SB 375 was adopted with a goal of reducing fuel consumption and GHG emissions from cars and light trucks. Each metropolitan planning organization (MPO) across California is required to develop a sustainable communities strategy (SCS) as part of their regional transportation plan (RTP) to meet the region's GHG emissions reduction target, as set by the California Air Resources Board. The Sacramento Area Council of Governments (SACOG) is the MPO for the Sacramento region, including the western slope of El Dorado County. SACOG adopted its current Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) on November 18, 2019.

Assembly Bill 1493—Pavley Rules (2002, Amendments 2009, 2012 rule-making)

AB 1493 required the ARB to adopt vehicle standards that will improve the efficiency of light duty autos and lower GHG emissions to the maximum extent feasible beginning in 2009. Additional strengthening of the Pavley standards (referred to previously as "Pavley II," now referred to as the "Advanced Clean Cars" measure) has been proposed for vehicle model years 2017–2025. Together, the two standards are expected to increase average fuel economy to roughly 54.5 miles per gallon by 2025. The improved energy efficiency of light duty autos will reduce statewide fuel consumption in the transportation sector.

### CEQA and CEQA Guidelines

Section 15126.2(b) of the CEQA Guidelines requires detailed analysis of a project's energy impacts. If analysis of the project's energy use reveals that the project may result in significant environmental effects due to wasteful, inefficient, or unnecessary use of energy, or wasteful use of energy resources, the environmental document shall prescribe mitigation for those impacts. This analysis should include the project's energy use for all project phases and components, including transportation-related energy, during construction and operation. In addition to building code compliance, other relevant considerations may include, among others, the project's size, location, orientation, equipment use and any renewable energy features that could be incorporated into the project.

#### CEQA Guidelines, Appendix F: Energy Conservation

CEQA requires EIRs to include a discussion of potential energy impacts and energy conservation measures. Appendix F, Energy Conservation, of the State CEQA Guidelines outlines energy impact possibilities and potential conservation measures designed to assist in the evaluation of potential energy impacts of proposed projects. Appendix F places "particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy," and further indicates this may result in an unavoidable adverse effect on energy conservation. Moreover, the State CEQA Guidelines state that significant energy impacts should be "considered in an EIR to the extent relevant and applicable to the project." Mitigation for potential significant energy impacts (if required) could include implementing a variety of strategies, including measures to reduce wasteful energy consumption and altering project siting to reduce energy consumption.

#### Local Laws, Regulations, and Policies

The County General Plan Public Services and Utilities Element includes goals, objectives, and policies related to energy conservation associated with the County's future growth and development. Among these is Objective 5.6.2 (Encourage Energy-Efficient Development) which applies to energy-efficient buildings, subdivisions, development and landscape designs. Associated with Objective 5.6.2 are two policies specifically addressing energy conservation:

Policy 5.6.2.1: Requires energy conserving landscaping plans for all projects requiring design review or other discretionary approval.

Policy 5.6.2.2: All new subdivisions should include design components that take advantage of passive or natural summer cooling and/or winter solar access, or both, when possible.

Further, the County has other goals and policies that would conserve energy even though not being specifically drafted for energy conservation purposes (e.g., Objective 6.7.2, Policy 6.7.2.3).

### **Discussion:**

- a. Unnecessary Consumption: Project-related construction and operation would be consistent with applicable energy legislation, policies, and standards for the purpose of reducing energy consumption and improving efficiency (i.e., reducing wasteful and inefficient use of energy) as described in the Regulatory Setting. The proposed project would conform to building codes and other state and local energy conservation measures described in the Regulatory Setting. With adherence to the above-mentioned codes and regulations, any potential impacts would be less than significant.
- b. Conflict with Energy Plans: Development of the project will be consistent with all applicable state and local plans for renewable energy or energy efficiency and will not obstruct implementation of applicable energy plans. Any potential impacts would be less than significant.

**FINDING:** The project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation. The project would be consistent with all applicable state and local plans for renewable energy or energy efficiency. For this energy category, any potential impacts would be anticipated to be **less than significant**.

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VI	VII.GEOLOGY AND SOILS. Would the project:					
		Potentially Significant Impact	Less than Significant with Mitigation	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:					
	<ol> <li>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.</li> </ol>				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	
f.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			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

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- others who play a role in planning and constructing buildings, bridges, structures, and critical infrastructure or "lifelines":
- 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 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 Seismic Hazards Mapping Act 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 Seismic Hazards Mapping Act, 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.

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: A substantial adverse effect on geology and soils 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:

- According to the California Department of Conservation Division of Mines and Geology, there are no Alquist-Priolo fault zones within El Dorado County (California Geological Survey 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. All structures would be built to meet the construction standards of the UBC for the appropriate seismic zone. Any potential impacts would be less than significant.
- El Dorado County is considered an area with low potential for seismic activity. There are no landslide, liquefaction, or fault zones (California Geological Survey 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: For development proposals, all grading activities onsite would comply with the El Dorado County Grading, Erosion and Sediment Control Ordinance including the implementation of pre- and post-construction Best Management Practices (BMPs). Implemented BMPs are required to be consistent with the County's California Stormwater Pollution Prevention Plan (SWPPP) issued by the State Water Resources Control Board to eliminate run-off and erosion and sediment controls. Any 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 County of El Dorado Grading, Erosion, and Sediment Control Ordinance. The project does propose a new encroachment from Pleasant Valley Road and the County Department of Transportation has conditioned the project to install culvert drainage to allow stormwater to flow beneath the proposed encroachment. As conditioned, any potential project 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 those areas prone to liquefaction and earthquake-induced landslides (California Geological Survey 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. Project 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, distortion of structures, and warping of doors and windows. The central portion of the county has a moderate expansiveness rating while the eastern and western portions have a low rating. Any potential impact would be less than significant.
- e. Septic Capability: No septic system is proposed as part of the project. There would be no impact.
- f. Paleontological Resources: The proposed project area is not located in an area that is considered likely to have paleontological resources present. Fossils of plants, animals, or other organisms of paleontological significance have not been discovered within the project area. In this context, the project would not result in impacts to paleontological resources or unique geologic features. In the event subsurface paleontological sites are disturbed during grading activities in the site, standard conditions of approval requiring that all work activities shall be stopped in the event of an unanticipated discovery would ensure that impacts are less than significant.

**FINDING:** A review of the soils and geologic conditions on 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. Future development would be required to comply with the Uniform Building Code which would address potential seismic related impacts. For this geology and soils category, any potential impacts would be **less than significant**.

VI	II. GREENHOUSE GAS EMISSIONS. Would the project:				
		Potentially Significant Impact	Less than Significant with Mitigation	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<sub>2</sub>), methane (CH<sub>4</sub>) and nitrous oxides (N<sub>2</sub>O). 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<sub>2</sub>e/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 EI Dorado County, the primary source of EI GHG is fossil fuel combustion mainly in the transportation sector (estimated at 70% of countywide EI 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.

#### State Laws, Regulations, and Policies

Executive Order (EO) S-3-5 (June 2005) established California's GHG emissions reductions targets and laid out responsibilities among the state agencies for implementing the EO and for reporting on progress toward the targets. This EO established the following targets:

- By 2010, reduce GHG emissions to 2000 levels
- By 2020, reduce GHG emissions to 1990 levels
- By 2050, reduce GHG emissions to 80% below 1990 levels

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<sub>2</sub> equivalent (MMTCO<sub>2</sub>e) while 1990 levels were estimated at 427 MMTCO<sub>2</sub>e. Setting 427 MMTCO<sub>2</sub>e 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

Impact Significance Criteria

CEQA does not provide clear direction on addressing climate change. It requires lead agencies identify project GHG emissions impacts and their "significance," but is not clear what constitutes a "significant" impact. As stated above, GHG impacts are inherently cumulative, and since no single project could cause global climate change, the CEQA test is if impacts are "cumulatively considerable." Not all projects emitting GHG contribute significantly to climate change. CEQA authorizes reliance on previously approved plans (i.e., a Climate Action Plan (CAP), etc.) and mitigation programs adequately analyzing and mitigating GHG emissions to a less than significant level. "Tiering" from such a programmatic-level document is the preferred method to address GHG emissions. El Dorado County does not have an adopted CAP or similar program-level document; therefore, the project's GHG emissions must be addressed at the project-level.

Unlike thresholds of significance established for criteria air pollutants in El Dorado County AQMD's Guide to Air Quality Assessment (February 2002) ("CEQA Guide"), the District has not adopted GHG emissions thresholds for land use development projects. In the absence of County adopted thresholds, EDCAQMD recommends using the adopted thresholds of other lead agencies which are based on consistency with the goals of AB 32. Since climate change is a global problem and the location of the individual source of GHG emissions is somewhat irrelevant, it's appropriate to use thresholds established by other jurisdictions as a basis for impact significance determinations. Projects exceeding these thresholds would have a potentially significant impact and be required to mitigate those impacts to a less than significant level. Until the County adopts a CAP consistent with CEQA Guidelines Section 15183.5, and/or establishes GHG thresholds, the El Dorado County AQMD has recommended the use of thresholds adopted by the Sacramento Metropolitan Air Quality Management District (SMAQMD). The thresholds of significance established by SMAQMD, and used by EDCAQMD, were developed to identify emissions levels for which a project would not be expected to substantially conflict with existing California legislation adopted to reduce statewide GHG emissions needed to move towards climate stabilization. Per the SMAQMD Thresholds of Significance Table, updated April 2020, if a proposed project results in emissions less than 1,100 MTCO2e/yr during either construction or operation, the proposed project would be anticipated to result in a less-than-significant impact related to GHG emissions.

#### Impact Discussion:

a-b. GHG Emissions: Emissions of greenhouse gas (GHG) contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on Earth. An individual project's GHG emissions are at a micro-scale level relative to global emissions and effects to global climate change; however, an individual project could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact. As such, impacts related to emissions of GHG are inherently considered cumulative impacts.

Implementation of the proposed project is not expected to cumulatively contribute to increases of GHG emissions. Estimated GHG emissions attributable to future development would be primarily associated with increases of carbon dioxide (CO<sub>2</sub>) and, to a lesser extent, other GHG pollutants, such as methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O) associated with area sources, mobile sources or vehicles, utilities (electricity and natural gas), water usage, wastewater generation, and the generation of solid waste. The primary source of GHG emissions for the project would be mobile source emissions. The common unit of measurement for GHG is expressed in terms of annual metric tons of CO<sub>2</sub> equivalents (MTCO<sub>2</sub>e/yr).

The El Dorado County AQMD has not formally adopted thresholds for evaluating GHG emissions, but has recommended the use of thresholds adopted by the SMAQMD. The thresholds of significance established by SMAQMD, and used by EDCAQMD, were developed to identify emissions levels for which a project would not be expected to substantially conflict with existing California legislation adopted to reduce statewide GHG emissions needed to move towards climate stabilization. Per the SMAQMD Thresholds of Significance Table, updated April 2020, if a proposed project results in emissions less than 1,100 MTCO<sub>2</sub>e/yr during either construction or operation, the proposed project would be anticipated to result in a less-than-significant impact related to GHG emissions.

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GHG emissions are quantified with CalEEMod using the same assumptions as presented in the Air Quality section above and compared to the thresholds of significance noted above. The proposed project's required compliance with the current California Building Energy Efficiency Standards Code would ensure the project meets current applicable requirements.

Construction-related GHG emissions are a one-time release and are, therefore, not typically expected to generate a significant contribution to global climate change, as global climate change is inherently a cumulative effect that occurs over a long period of time and is quantified on a yearly basis. However, the proposed project's construction GHG emissions are not expected to be a cumulatively considerable contribution to global climate change.

Operational GHG emissions at full buildout are not expected to exceed the applicable threshold of significance. Therefore, the proposed project would not result in a cumulatively considerable contribution to global climate change. Any potential impacts would be **less than significant**.

**FINDING:** The project would result in **less than significant** impacts to greenhouse gas emissions. For this greenhouse gas emissions category, there would be no significant adverse environmental effect as a result of the project.

IX.	IX. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
		Potentially Significant Impact	Less than Significant with Mitigation	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, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			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 El Dorado County AQMD.

#### 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.

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#### 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 or more percent of the applicable FCC exposure limits (47CFR 1.1307[b][3]).

#### Code of Federal Regulations (14 CFR) Part 77

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.

### 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. 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:

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- · 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 (CAL FIRE) 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, 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 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. The Fire Hazard Ordinance also establishes limits on campfires, fireworks, smoking, and incinerators for all discretionary and ministerial developments.

**<u>Discussion:</u>** 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-c. Hazardous Materials: The project would not involve the routine transportation, use, or disposal of hazardous materials such as construction materials, paints, fuels, landscaping materials, and household cleaning supplies. Project construction may involve some hazardous materials temporarily but on a limited scale. The proposed project does not include a back-up standby diesel-fuel generator. Any potential impacts would be less than significant.
- **d. Hazardous Sites:** The project site is not included on a list or near any hazardous material sites pursuant to Government Code section 65962.5 (DTSC 2015). There would be **no impact**.
- e-f. Aircraft Hazards, Private Airstrips: As shown on the El Dorado County Zoning Map, the project is not located within an Airport Safety District combining zone or near a public airport or private airstrip. There would be no impact.
- g. Emergency Plan: The project was reviewed by the County Department of Transportation (DOT) and the El Dorado County Fire Protection District (EDCFPD) for emergency circulation planning. The Traffic Impact Study (TIS) and Fire Safe Plan were both waived, and no further studies were required by either agency. DOT identified the need for improvements to the proposed new encroachment onto Pleasant Valley Road, however, those improvements would not conflict with the implementation of any emergency plans. The proposed project would not impair implementation of any emergency response plan or emergency evacuation plan. There would be no impact.

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h. Wildfire Hazards: According to the California Department of Forestry and Fire Protection (Cal Fire) Fire and Resource Assessment Program (FRAP) map of November 21, 2022, the subject parcel is in an area of high fire hazard severity zone in a State Responsibility Area (SRA). The majority of the subject parcel is already developed for residential use and is maintained to reduce wildland fire risks. The El Dorado County Fire Protection District has reviewed the project plans and has determined the design of the project site and access to the site are sufficient for fire protection needs. Any potential impacts would be less than significant.

<u>FINDING</u>: The proposed project would not expose the area to hazards relating to the use, storage, transport, or disposal of hazardous materials. As conditioned, any potential impacts would be **less than significant**.

X.	X. HYDROLOGY AND WATER QUALITY. Would the project:					
		Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact	
a.	Violate any water quality standards or waste discharge requirements?				X	
lov exi	Substantially deplete groundwater supplies or interfere substantially with undwater recharge such that there would be a net deficit in aquifer volume or a vering of the local groundwater table level (e.g., the production rate of presting nearby wells would drop to a level which would not support existing land s 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:** 

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#### 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.

Section 402-NPDES Permits for Stormwater Discharge

CWA Section 402 regulates construction-related stormwater discharges to surface waters through the National Pollutant Discharge Elimination System (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 Regional Water Quality Control Boards (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 acre 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 Stormwater Pollution Prevention Plan (SWPPP). 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 copermittees 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 (CVRWQCB) (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.

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

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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.

<u>Discussion</u>: 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: No waste discharge would occur as part of the proposed monopine project. Erosion control would be required as part of any future building or grading permit. Stormwater runoff from potential development would contain water quality protection features in accordance with a potential NPDES stormwater permit, as deemed applicable. The project would comply with County ordinances and standards regarding waste discharge. Therefore, the project would not be expected to violate water quality standards. There would be no impact.
- b. Groundwater Supplies: The geology of the Western Slope portion of El Dorado County is principally hard, crystalline, igneous, or metamorphic rock overlain with a thin mantle of sediment or soil. Groundwater in this region is found in fractures, joints, cracks, and fault zones within the bedrock mass. These discrete fracture

areas are typically vertical in orientation rather than horizontal as in sedimentary or alluvial aquifers. Recharge is predominantly through rainfall infiltrating into the fractures. Movement of this groundwater is very limited due to the lack of porosity in the bedrock. Wells are typically drilled to depths ranging from 80 to 300 feet in depth. There is no evidence that the project will substantially reduce or alter the quantity of groundwater in the vicinity, or materially interfere with groundwater recharge in the area of the proposed project. The project itself would not require any water for operational purposes and is not anticipated to affect potential groundwater supplies above pre-project levels. There would be **no impact**.

- c-f. Drainage Patterns: No adverse increase in overall runoff and flows from pre-development levels is anticipated from the post-development project design. The project would be required to conform to the El Dorado County Grading, Erosion Control, and Sediment Ordinance County Code Section 110.14. This includes the use of BMPs to minimize degradation of water quality during construction. Minimal grading is anticipated during project construction. Any potential impacts would be less than significant.
- g-j. Flood-related Hazards: The project site is not located within any mapped 100-year flood areas as shown on Firm Panel Number 06017C0175E, revised September 26, 2008, and would not result in the construction of any structures that would impede or redirect flood flows (FEMA 2008). No dams that 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.

**<u>FINDING</u>**: For this project, no significant hydrological impacts are expected with the development of the project either directly or indirectly. For this hydrology category, any potential impacts are anticipated to be **less than significant**.

XI. LAND USE AND PLANNING. Would the project:						
		Potentially Significant Impact	Less than Significant with Mitigation	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	

#### **Regulatory Setting:**

California State law requires that each City and County adopt a general plan "for the physical development of the 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 with amendments occurring in several times from adoption through 2019. The 2021-2029 Housing Element was adopted in 2021.

<u>Discussion</u>: 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;

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- 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 project is located withing the Diamond Springs Community Region. Community regions are defined as those areas which are appropriate for the highest intensity of self-sustaining compact urban-type development or suburban type development within the County based on the municipal spheres of influence, availability of infrastructure, public services, major transportation corridors and travel patterns, the location of major topographic patterns and features, and the ability to provide and maintain appropriate transitions at Community Region boundaries. The project site is surrounded by existing residential and agricultural development and would not result in the physical division of an established community or conflict with existing land use patterns. The project proposes a use that is compatible with surrounding uses and with the site's General Plan land use designation. There would be no impact.
- b. Land Use Consistency: The subject parcel has a General Plan land use designation of Low Density Residential (LDR) and is zoned Residential Estate 5-acre Minimum (RE-5). The purpose of the Residential Estate zone is to preserve the rural character of an area by providing for and regulating development of low density and rural residential development at a range of densities to include one dwelling unit per five acres and one dwelling unit per ten acres. The construction of a communication facility has been determined to be consistent in the Residential Estate zone with the approval of a Conditional Use Permit. There would be no impact.

**FINDING:** The proposed use of the land would be consistent with the Zoning Ordinance and General Plan. There would be **no impact** to land use goals or standards resulting from the project.

XII.MINERAL RESOURCES. Would the project:						
		Potentially Significant Impact	Less than Significant with Mitigation	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 California Geological Survey 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.

The California Mineral Land Classification System represents the relationship between knowledge of mineral deposits and their economic characteristics (grade and size). The nomenclature used with the California Mineral Land Classification System is important in communicating mineral potential information in activities such as mineral land classification, and usage of these terms are incorporated into the criteria developed for assigning mineral resource zones. Lands classified MRZ-2 are areas that contain identified mineral resources. Areas classified as MRZ-2a or MRZ-2b (referred to hereafter as MRZ-2) are considered important mineral resource areas.

#### Local Laws, Regulations, and Policies

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. Exhibit 5.9-6 of the *El Dorado County General Plan Draft EIR* (2003) shows the MRZ-2 areas within the county based on designated Mineral Resource (-MR) overlay areas. The -MR overlay areas are based on mineral resource mapping published in the mineral land classification reports referenced above. The majority of the county's important mineral resource deposits are concentrated in the western third of the county.

According to General Plan Policy 2.2.2.7, before authorizing any land uses within the -MR overlay zone that will threaten the potential to extract minerals in the affected area, the County shall prepare a statement specifying its reasons for considering approval of the proposed land use and shall provide for public and agency notice of such a statement consistent with the requirements of Public Resources Code section 2762. Furthermore, before finally approving any such proposed land use, the County shall balance the mineral values of the threatened mineral resource area against the economic, social, or other values associated with the proposed alternative land uses. Where the affected minerals are of regional significance, the County shall consider the importance of these minerals to their market region as a whole and not just their importance to the County.

Where the affected minerals are of Statewide significance, the County shall consider the importance of these minerals to the State and Nation as a whole. The County may approve the alternative land use if it determines that the benefits of such uses outweigh the potential or certain loss of the affected mineral resources in the affected regional, Statewide, or national market.

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 is not mapped as being within a Mineral Resource Zone (MRZ) by the State of California Division of Mines and Geology or in the El Dorado County General Plan. No impacts would be anticipated to occur. The Western portion of El Dorado County is divided into four, 15-minute quadrangles (Folsom, Placerville, Georgetown, and Auburn) mapped by the State of California Division of Mines and Geology showing the location of MRZs. Those areas which are designated MRZ-2a contain discovered mineral deposits that have been measured or indicate reserves calculated. Land in this category is considered to contain mineral resources of known economic importance to the County and/or State. Review of the mapped areas of the County indicates that this site does not contain any mineral resources of known local or statewide economic value. No impact would occur related to mineral resources.

**FINDING:** No impacts to mineral resources are expected either directly or indirectly. For this mineral resources category, there would be **no impacts**.

XIII. NOISE. Would the project result in:						
	Potentially Significant	Less than Significant with Mitigation	Less Than Significant Impact	No Impact		
Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable stands of other agencies?	ards		X			
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	r		X			
c. A substantial permanent increase in ambient noise levels in the project vicin above levels existing without the project?	nity			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 h 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 exportance people residing or working in the project area to excessive noise levels?	ose			X		

#### **Regulatory Setting:**

No federal or state laws, regulations, or policies for construction-related noise and vibration that 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 60dBA CNEL;
- Result in long-term operational noise that creates noise exposures in excess of 60 dBA CNEL at the adjoining
  property line of a noise sensitive land use and the background noise level is increased by 3dBA, 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.

TABLE 6-2 NOISE LEVEL PERFORMANCE PROTECTION STANDARDS FOR NOISE SENSITIVE LAND USES AFFECTED BY NON-TRANSPORTATION\* SOURCES

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Noise Level Descriptor	Daytin 7 a.m 7		Evening 7 p.m 10 p.m.		Night 10 p.m 7 a.m.		
	Community	Rural	Community	Rural	Community	Rural	
Hourly Leq, dB	55	50	50	45	45	40	
Maximum level, dB	70	60	60	55	55	50	

Each of the noise levels specified above shall be lowered by five dB for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings).

The County can impose noise level standards which are up to 5 dB less than those specified above based upon determination of existing low ambient noise levels in the vicinity of the project site.

In Community areas the exterior noise level standard shall be applied to the property line of the receiving property. In Rural Areas the exterior noise level standard shall be applied at a point 100' away from the residence. The above standards shall be measured only on property containing a noise sensitive land use as defined in Objective 6.5.1. This measurement standard may be amended to provide for measurement at the boundary of a recorded noise easement between all effected property owners and approved by the County.

\*Note: For the purposes of the Noise Element, transportation noise sources are defined as traffic on public roadways, railroad line operations and aircraft in flight. Control of noise from these sources is preempted by Federal and State regulations. Control of noise from facilities of regulated public facilities is preempted by California Public Utilities Commission (CPUC) regulations. All other noise sources are subject to local regulations. Non-transportation noise sources may include industrial operations, outdoor recreation facilities, HVAC units, schools, hospitals, commercial land uses, other outdoor land use, etc.

Source: El Dorado County 2003

- 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. Project construction may require the use of heavy trucks and other equipment, which may result in short-term noise impacts to surrounding neighbors. These activities would require grading and building permits and would be restricted to construction hours pursuant to the General Plan. There could be additional noise associated with any future modifications. Those potential impacts will be analyzed and addressed through the Conditional Use Permit revision process or review of building permits. As proposed, the project is not expected to generate noise levels exceeding the performance standards outlined in the County Zoning Ordinance. Any potential impacts would be less than significant.
- b. Groundborne Shaking: The closest land uses potentially impacted from groundborne vibration and noise (primarily from the use of heavy equipment during construction) are the residential structures located on the subject parcel and adjacent parcels. These impacts would be intermittent and would only occur during the construction phase of the project and would not be an ongoing impact. Any potential impacts would be less than significant.
- c. Permanent Noise Increases: The proposed project does not include a diesel-powered stand-by generator as a back-up option when the primary electrical source is inoperative. As such, the long-term noise associated with the communications facility would not be expected to exceed the noise standards outlined in the County General Plan. There would be no impact.
- d. Short Term Noise: Construction activities would increase noise levels temporarily in the vicinity of the project. Actual noise levels would depend on the type of construction equipment involved, distance to the source of the noise, weather, time of day, and other factors. However, these increases would be temporary. Construction activity would comply with noise standards for construction activities outlined in General Plan Policy 6.5.1.11. These activities would be restricted to construction hours. All construction and grading operations would be required to comply with the noise performance standards contained in the General Plan.

The project itself does not involve any outdoor activities or uses that would result in the increase of the ambient noise levels on a temporary or periodic basis. Any potential impacts from short term noise would be **less than significant**.

e-f. **Aircraft Noise:** The project site is not located within an airport land use plan or within two miles of a public airport or public use airport. There would be **no impact**.

**FINDING:** With adherence to County Code, no significant direct or indirect impacts to noise levels are expected. For this noise category, the thresholds of significance would not be exceeded. Any potential impacts would be **less than significant**.

XI	V. POPULATION AND HOUSING. Would the project:				
		Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a.	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, 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.

<u>Discussion</u>: 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. Population Growth: The subject parcel is zoned Residential Estate 5-acre Minimum and is intended to be used for residential purposes. The proposed project does not include the construction of any new homes. The proposed project is an unmanned facility, and the subject parcel is already developed with residential uses. As such, the project is unlikely to result in a demand for new housing or induce substantial population growth. There would be no impact.
- b. Housing Displacement: The proposed monopine communication facility would not cause the demolition or displacement of any existing housing stock as the proposed project site is undeveloped currently. There would be no impact.
- c. Replacement Housing: The project site is undeveloped, thus would not involve the displacement of any people. Therefore, the project would not necessitate the construction of any replacement housing. No impact would occur.

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**FINDING:** The project would not displace housing. There would be no potential for a significant impact due to substantial growth 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 impacts**.

XV.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	Less Than Significant Impact	No Impact		
a. Fire protection?			X			
b. Police protection?			X			
c. Schools?			X			
d. Parks?			X			
e. Other public facilities?			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 project was distributed to and reviewed by the El Dorado County Fire Protection District. The project site is located in a rural part of the County that currently receives fire service and is in a High Fire Hazard zone according to the California Department of Forestry and Fire Protection (Cal Fire) Fire and Resource Assessment Program (FRAP) map of November 21, 2022. While a new telecommunication facility could potentially require services, it is unlikely the approval of the project would result in the need for

new fire personnel or facilities. The Fire District would review improvement plans again at the time of grading and/or building permit submittal to ensure compliance with applicable fire safety requirements. With future review of improvement plans at time of building permit and/or grading permit submittal, any potential impacts would be **less than significant**.

- b. Police Protection: Police protection services would be provided by the El Dorado County Sheriff's Office. The proposed project is not anticipated to create a significant increase in demand of law enforcement protection. Any potential impacts would be less than significant.
- c-e. Schools, Parks, and Other Public Facilities: 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 public facilities that would result in the need for new or expanded facilities. Any potential impacts would be less than significant.

**FINDING:** The project would not result in a significant increase of public services to the project. Increased demand to services would be addressed through the payment of established impact fees and any future improvements to such facilities would be subject to CEQA review by the applicable Lead Agency. For this public services category, any potential impacts would be **less than significant**.

XV	I. RECREATION.				
		Potentially Significant Impact	Less than Significant with Mitigation	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:

- 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 along the western plan area boundary.
- 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 5 NRTs.

#### 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 16.12.090 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 Recreation Element describes the need for 1.5 acres of regional parkland, 1.5 acres of regional parkland, and 2 acres of neighborhood parkland per 1,000 residents.

<u>Discussion</u>: 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 proposed project consists of a monopine tower telecommunications facility on a residentially zoned parcel and would not increase the local population such that it would increase the use of existing neighborhood or regional parks causing substantial physical deterioration of those facilities. The proposed project would not require the construction of new or expansion of existing recreational facilities that could potentially have an adverse physical effect on the environment. There would be no impact.

**FINDING:** No significant impacts to open space or park facilities would result as part of the project and no new or expanded recreation facilities would be necessary as a result of project approval. For this recreation category, there would be **no impact**.

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XV	TRANSPORTATION. Would the project:				
		Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
a.	Conflict with an applicable program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			X	
b.	Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b) (Vehicle Miles Traveled)?			X	
c.	Substantially increase hazard due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
d.	Result in inadequate emergency access?			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 Policy TC-Xd in 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. 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.

<u>Discussion</u>: 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 to 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);
- 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. Conflicts with a Transportation Plan, Policy or Ordinance: No substantial traffic increases would result from the proposed project. Access to the proposed monopine tower would be from a proposed new encroachment from Pleasant Valley Road. County DOT reviewed the project and determined that a Transportation Impact Study (TIS) and On-Site Transportation review (OSTR) were not required and waived both components for this project. Trip generation for the subject parcel with a single-family residence using the ITE Trip Generation Manual, 11<sup>th</sup> Edition is less than 100 trips daily. This is presumed to have less than significant transportation impacts, per El Dorado County Resolution 141-2020. The project would not conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Any potential impacts would be less than significant.
- b. Vehicle Miles Traveled: The proposed project would develop a single monopine telecommunications facility. Trip generation from the property using the ITE Trip Generation Manual, 10<sup>th</sup> Edition is less than 100 trips daily. The monopine would result in regular maintenance trips, however these trips would be minimal and would be expected to have a less than significant impact on vehicle miles travelled, per El Dorado County Resolution 141-2020. Any potential impacts would be less than significant.
- c. Design Hazards: The proposed project site will include access which is anticipated to accommodate the circulation needs of all vehicle types, including fire and emergency vehicles. The project would utilize the proposed access encroachment from Pleasant Valley Road. No sharp curves or dangerous intersections exist on the subject parcel or in the vicinity of the proposed project. Any potential impacts would be less than significant.
- d. Emergency Access: Fire Safe Regulations state that on-site roadways shall "provide for safe access for emergency wildland fire equipment and civilian evacuation concurrently and shall provide unobstructed traffic circulation during wildfire emergency". As shown on the project site plan (Attachment 6), the project would accommodate the required fire access. As such, the proposed project is considered to allow for adequate access and on-site circulation for emergency vehicles. Any potential impacts would be less than significant.

**FINDING:** The project would not exceed the thresholds for transportation identified within the General Plan. For this transportation category, the thresholds of significance would not be exceeded, and any potential impacts would be **less than significant**.

XVII. TRIBAL CULTURAL RESOURCES. Would the project: Cause a substantial adverse change in the significance of a Tribal Cultural Resource as defined in Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>a.</b> Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or			X	
<b>b.</b> 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 Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American			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 effective 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:

- Sites, features, places, cultural landscapes, sacred places and objects with cultural value to a California Native American tribe that are either of the following:
  - Included or determined to be eligible for inclusion in the California Register of Historical Resources;
  - 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:

- b. 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
- c. 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-b. Tribal Cultural Resources. On [date], El Dorado County dispatched letters via certified mail to the seven Tribes that have previously requested to be notified of projects within the County. These Tribes include: Colfax-Todds Valley Consolidated Tribe, Ione Band of Miwok Indians, Nashville-El Dorado Miwok-Maidu-

Nishinam Tribe, Shingle Springs Band of Miwok Indians, United Auburn Indian Community of the Auburn Rancheria, Washoe Tribe of California and Nevada, and T'si-Akim Maidu. Consultation letters were sent to each consulting tribe on April 7, 2023 in accordance with the provisions of Assembly Bill 52. Staff did not receive a response from any of the consulting tribes within a 30-day period from the date of staff's consultation notice. As such, AB52 consultation has been closed. Pursuant to the records search conducted by the North Central Information Center on March 13, 2023, the proposed project area contains zero recorded indigenous-period/ethnographic-period resources and zero recorded historic-period cultural resources. In a study provided by Lotis Environmental (Attachment 9), nine (9) native tribes were consulted, and a project description and additional information was submitted to the tribes. After review, the project received clearance from all interested tribes. There is potential for discovering unknown resources, including human remains, during all project construction activities. The project has been conditioned with standard County conditions concerning the finding of tribal cultural resources, including human remains. As conditioned, any potential impacts would be less than significant.

**FINDING:** No significant TCRs are known to exist on the project site and conditions of approval have been included to ensure protection of TCRs if discovered during project construction activities. As a result, the proposed project would not cause a substantial adverse change to a TCR, and any potential impacts would be **less than significant**.

XI	XIX. UTILITIES AND SERVICE SYSTEMS. Would the project:					
		Potentially Significant Impact	Less than Significant with Mitigation	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

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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 2 years. 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. 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.

#### 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. The standards are updated on an approximately 3-year cycle. The latest update to the California Building Code was published on July 1, 2022, with an effective date of January 1, 2023.

#### 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 2.0-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).

<u>Discussion</u>: 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.
- Wastewater Requirements: The proposed project is an unmanned monopine telecommunications facility and would not require wastewater service. There would be no impact.
- b. Construction of New Facilities: Construction of the proposed monopine telecommunications facility would not require the construction of new utility facilities. There would be no impact.
- c. New Stormwater Facilities: the project does not propose any new drainage facilities. County DOT has conditioned the project to include a driveway culvert to maintain existing roadside drainage under the proposed new encroachment from Pleasant Valley Road. Any possible future drainage facilities serving the proposed project would be built in conformance with the County of El Dorado Drainage Manual, as determined by Development Services standards, during associated grading and building permit processes. Any potential impacts would be less than significant.
- d. Sufficient Water Supply: the proposed monopine telecommunication facility does not require water for ongoing operations. There would be no impact.
- e. Adequate Wastewater Capacity: The proposed project does not require wastewater service. As such, wastewater capacity would not have an impact on existing wastewater provider commitments. There would be no impact.
- f-g. Solid Waste Disposal and Requirements: El Dorado Disposal distributes municipal solid waste to Forward Landfill in Stockton and Kiefer Landfill in Sacramento. Pursuant to El Dorado County Environmental Management Solid Waste Division staff, both facilities have sufficient capacity to serve the County. Recyclable materials are distributed to a facility in Benicia and green wastes are sent to a processing facility in Sacramento. County Ordinance No. 4319 requires that new development provide areas for adequate, accessible, and convenient storing, collecting and loading of solid waste and recyclables. This project does not propose to add any activities that would generate additional solid waste. Any potential project impacts would be less than significant.

**FINDING:** No significant utility and service system impacts would be expected with the project, either directly or indirectly. For this utilities and service systems category, the thresholds of significance would not be exceeded. Any potential impacts would be **less than significant**.

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XX	<b>XX. WILDFIRE.</b> If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:						
		Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact		
a.	Substantially impair an adopted emergency response plan or emergency evacuation plan?				X		
b.	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				X		
c.	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?			X			
d.	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				X		

The project site is within a state responsibility area (SRA) and is within a high fire hazard severity zone according to the California Department of Forestry and Fire Protection (Cal Fire) Fire and Resource Assessment Program (FRAP) map of November 21, 2022.

#### Discussion:

- a. Emergency Response or Evacuation Plans: The project is surrounded by mixture of agricultural and residential parcels with existing agricultural and residential uses. Implementation of the proposed project would not alter any roadways, access points, or otherwise substantially hinder access to the area in such a way that would interfere with an emergency response or evacuation plan. There are no proposed residences associated with the project, and project operations would not notably increase the risk of wildfire on the project site. There would be no impact to any adopted emergency response plan or emergency evacuation plan.
- b. Exacerbate Wildfire Risks: Implementation of the proposed project would not expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. The project is required to adhere to all fire prevention and protection requirements and regulations of El Dorado County including the El Dorado County Fire Hazard Ordinance and the Uniform Fire Code, as applicable. Pertinent measures include, but are not limited to, the use of equipment with spark arrestors and non-sparking tools during project activities. The project applicant would also be required to develop the project structures to meet 'defensible space' requirements as specified under Objective 6.2.1 of the Safety Element of the El Dorado County General Plan. Because the project would be required to adhere to all requirements regarding fire prevention, the project would not exacerbate wildfire risk and there would be no impact.
- c. Installation or Maintenance of Associated Infrastructure: New infrastructure on the subject parcel would include new connections to PG&E service located near the project site located on the subject parcel. The project site is surrounded by residential and agricultural development and any new connections would not require major infrastructure development that would exacerbate fire risk or result in temporary or ongoing impacts to the environment. Any potential impacts would be less than significant.

d. Runoff, Post-Fire Slope Instability, or Drainage Changes: The proposed project would construct a 100-foot tall monopine telecommunication facility on a 10.01-acre parcel. The project has been reviewed by the El Dorado County Fire Protection District and is not anticipated to exacerbate wildfire risks. The project area is flat and does not have steep or sloping terrain that would expose people or structures to significant risk from downslope or downstream flooding or landslides as a result of runoff, post-fire slope instability, or drainage changes. There would be no impact.

**FINDING:** As conditioned and with adherence to El Dorado County Code of Ordinances, for this wildfire category, any potential impacts would be **less than significant**.

XI	XIX. MANDATORY FINDINGS OF SIGNIFICANCE. Does the project:						
		Potentially Significant Impact	Less than Significant with Mitigation	Less Than Significant Impact	No Impact		
a.	Have the potential to substantially 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, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?			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. As conditioned or mitigated, and with adherence to County permit requirements, this project would not 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, pre-history, or tribal cultural resources. Any potential impacts from the project would be less than significant due to the design of the project and required standards that would be implemented prior to issuance of a building permit and/or any required project specific improvements on the property.
- b. Cumulative impacts are defined in Section 15355 of the California Environmental Quality Act (CEQA) Guidelines as two or more individual effects, which when considered together, would be considerable or which would compound or increase other environmental impacts.

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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 would not be anticipated to contribute substantially to increased traffic in the area and the project 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 I through XX, there would be no significant impacts anticipated related to aesthetics, agriculture and forestry resources, air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, tribal cultural resources, utilities and service systems, or wildfire 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 would be anticipated.

As outlined and discussed in this document, as conditioned and with compliance with County Codes, this project would be anticipated to have a less than significant project-related environmental effect. Therefore, the project would not 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 any physical changes to the site, and all development would be required to be permitting through the County and other agencies as appropriate. Adherence to these standard conditions would be expected to reduce potential impacts to a less than significant level.

<u>FINDINGS</u>: It has been determined that the proposed project would not result in significant environmental impacts. The project would not exceed applicable environmental standards, nor significantly contribute to cumulative environmental impacts. Any potential impacts would be **less than significant**.

#### INITIAL STUDY ATTACHMENTS

Attachment 1: Location Map

Attachment 2: Aerial Map

Attachment 3: Assessor's Parcel Map

Attachment 4: General Plan Map

Attachment 5: Zoning Map

Attachment 6: Site Plan

Attachment 7: Photosimulations

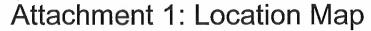
Attachment 8: Radio Frequency (RF) Report

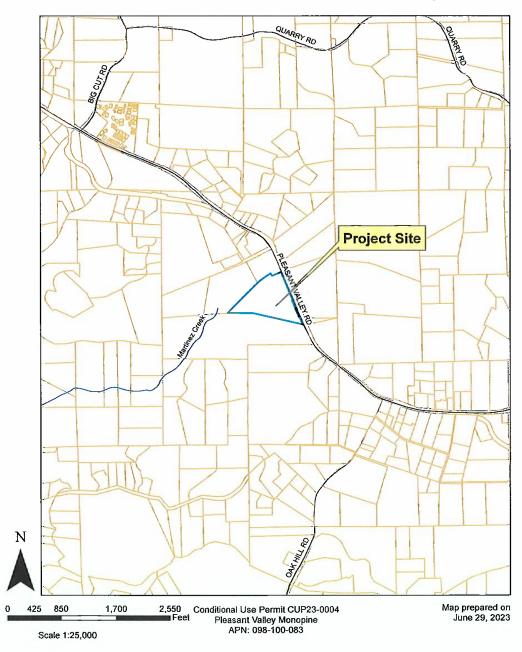
Attachment 9: Application Packet.

#### SUPPORTING INFORMATION SOURCE LIST

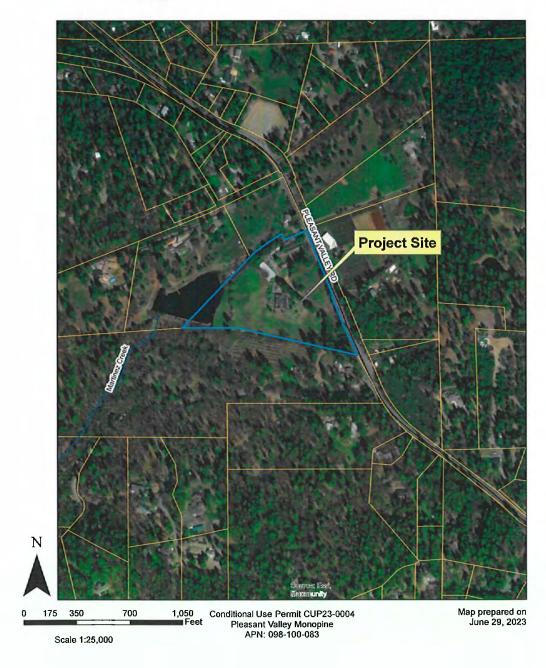
- California Air Resources Board (CARB). (2013). Climate Change Scoping Plan. Available at: <a href="http://www.arb.ca.gov/cc/scopingplan/document/adopted\_scoping\_plan.pdf">http://www.arb.ca.gov/cc/scopingplan/document/adopted\_scoping\_plan.pdf</a>
- California Attorney General's Office. (2010). Addressing Climate Change at the Project Level. Available at: <a href="http://ag.ca.gov/globalwarming/pdf/GW\_mitigation\_measures.pdf">http://ag.ca.gov/globalwarming/pdf/GW\_mitigation\_measures.pdf</a>
- California Department of Conservation (CDC). (2008). Farmland Mapping and Monitoring Program: El Dorado County Important Farmland 2008. Available at: <a href="ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2008/eld08.pdf">ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2008/eld08.pdf</a>.
- California Department of Conservation (CDC). (2013a). Important Farmland Categories webpage. Available online at: www.conservation.ca.gov/dlrp/fmmp/mccu/Pages/ map\_categories.aspx.
- California Department of Conservation (CDC). (2013b). The Land Conservation Act. Available online at: www.conservation.ca.gov/dlrp/lca/Pages/Index.aspx.
- California Department of Forestry and Fire Protection (CAL FIRE). May 2009. El Dorado County Fire Hazard Severity Zones Map. Scale 1:100,000.
- 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). (2015). Scenic Highway Program FAQs: Caltrans Landscape Architecture Program. Retrieved February 27, 2015 from www.dot.ca.gov/hq/ LandArch/scenic/faq.htm.
- 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 Office of Emergency Services. 2015. Business Plan/EPCRA 312. Available online at: www.caloes.ca.gov/for-businesses-organizations/plan-prepare/hazardousmaterials/hazmat-business-plan.

- 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: <a href="http://www.edcgov.us/Government/AirQualityManagement/Asbestos.aspx">http://www.edcgov.us/Government/AirQualityManagement/Asbestos.aspx</a>>.
- 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 from http://www.edcgov.us/Government/AirQualityManagement/Guide\_to\_Air\_Quality\_Assessment.aspx.
- 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.
- Federal Transit Administration. May 2006. Transit Noise and Vibration Impact Assessment.
- 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. <a href="http://www.opr.ca.gov/ceqa/pdfs/june08-ceqa.pdf">http://www.opr.ca.gov/ceqa/pdfs/june08-ceqa.pdf</a>.
- Governor's Office of Planning and Research. December 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA.
- Sacramento Metropolitan Air Quality Management District (SMAQMD). (2010). Construction GHG Emissions Reductions. Available at: http://airquality.org/ceqa/cequguideupdate/Ch6FinalConstructionGHGReductions.pdf
- State Water Resources Control Board (SWRCB). (2013). Storm Water Program, Municipal Program. Available online at: www.waterboards.ca.gov/water\_issues/programs/stormwater/municipal.shtml.
- National Earthquake Hazards Reduction Program (NEHRP). (2009). Background and History. Available online at: www.nehrp.gov/about/history.htm.
- 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 <a href="http://www.nrcs.usda.gov/Internet/FSE\_MANUSCRIPTS/california/el\_doradoCA1974/EDA.pdf">http://www.nrcs.usda.gov/Internet/FSE\_MANUSCRIPTS/california/el\_doradoCA1974/EDA.pdf</a>
- U.S. Environmental Protection Agency. (2014). Summary of the Energy Policy Act. Available online at: www2.epa.gov/laws-regulations/summary-energy-policy-act.
- U.S. Environmental Protection Agency. (2015). The Green Book Nonattainment Areas for Criteria Pollutants. Available online at: www.epa.gov/airquality/greenbook.
- U.S. Green Building Council (USGBC). (2014). LEED v4 for Building Design and Construction Addenda. Updated October 1, 2014. Available online at: www.usgbc.org/resources/leed-v4-building-design-and-construction-
- U.S. Green Building Council (USGBC). (2015). LEED Overview. Available online at: www.usgbc.org/leed.

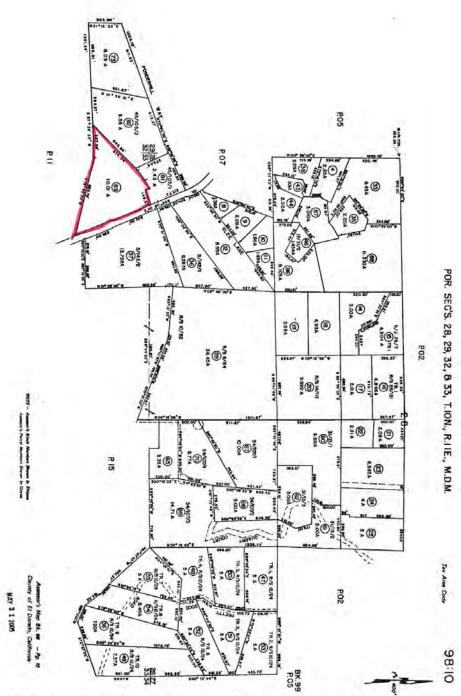




## Attachment 2: Aerial Photo

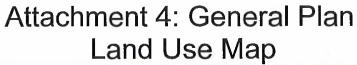


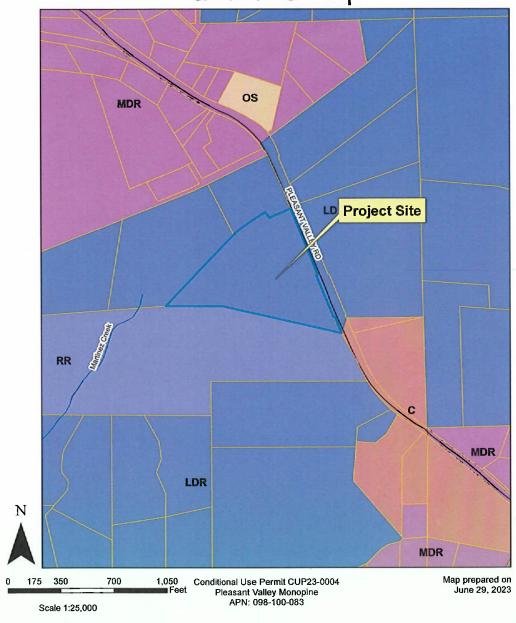
23-1513 E 59 of 77



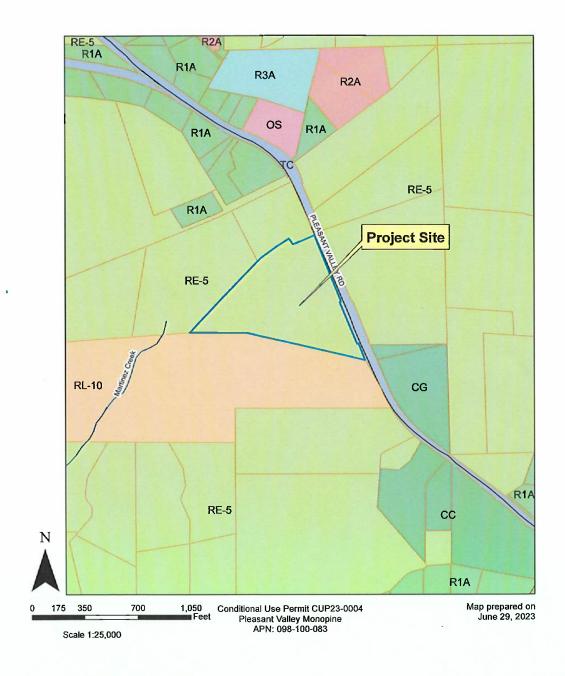
This map/plat is being furnished as an aid in locating the herein described Land in relation to adjoining streets, natural boundaries and other land, and is not a survey of the land depicted. Except to the extent a policy of title insurance is expressly modified by endorsement, if any, the Company does not insure dimensions, distances, location of easements, acreage or other matters shown thereon.

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## Attachment 5: Zoning Map



#### PROJECT DESCRIPTION:

CONSTRUCTION OF TELECOMMUNICATIONS AND PUBLIC UTILITY FACILITY, CONSISTING OF A 100'-0" MONOPINE WITH (12) 8' ANTENNAS, (6) RRUS, (1) 2' MICROWAVE, (1) (8PS ANTENNA, ANTENNAS, (6) RRUS, (1) 2' MICROWAVE, (1) (8PS ANTENNA, REQUIRED ANTENNA CABLING, HCS JUMPERS, (2) GROUND MOUNTED RADIO CABINETS, (1) RAISED CONCRETE PAD, CABLE ICE BRIDGE, UTILITY BACKBOARD AND MULTI-METER UTILITY SERVICE MOUNTED ON H-FRAME WITHIN A 40'x40' FENCED LEASE AREA. NO WATER OR SEWER SERVICE IS REQUIRED. THIS WILL BE AN UNMANNED FACILITY.

#### CODE COMPLIANCE:

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 CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

- . 2022 CALIFORNIA BUILDING CODE 2. 2022 CALIFORNIA TITLE 24
- 3. 2022 CALIFORNIA FIRE CODE 3. 2022 CALIFORNIA ELECTRIC CODE

- 5. 2022 CALIFORNIA ENERGY CODE
  5. 2022 CALIFORNIA MECHANICAL CODE
  6. TIA/EIA-222-H OR LATEST EDITION



VICINITY MAP PROJECT INFORMATION

SITE NAME:	DIAMOND SPRINGS
SITE NUMBER:	US-CA-7310
TENANT SITE ID:	SC60515A
SITE ADDRESS:	1550 PLEASANT VALLEY RD.
	PLACERVILLE, CA 95667
PARCEL #:	098-100-083-000
DEED REFERENCE:	N/A
ZONING CLASSIFICATION:	RESIDENTIAL ESTATE - 5 ACRES
ZONING JURISDICTION:	EL DORADO COUNTY
CONSTRUCTION TYPE:	V-B
OCCUPANCY:	U (UNMANNED TELECOM FACILITY)
NO. OF STORIES:	1 (ENCLOSURE ONLY)

SPRINKLER: NONE STRUCTURE TYPE: MONOPINE STRUCTURE HEIGHT: 100'-0" CONSTRUCTION AREA: 1,600 SQ. FT. GROUND ELEVATION: 2,076.97' (NAVD88) LATITUDE (NAD 83): LONGITUDE (NAD 83): 38.682694° (38° 40' 57.70" N) -120.776414° (120° 46' 35.09" W)



US-CA-7310 **DIAMOND SPRINGS** 1550 PLEASANT VALLEY RD. PLACERVILLE, CA 95667

100'-0" MONOPINE TENANT SITE ID: SC60515A

DRAWING INDEX			
DRWG.#	TITLE		
T-1	TITLE SHEET		
LS-1	TITLE SHEET		
LS-2	TOPOGRAPHIC SURVEY		
A-1	SITE PLAN		
A-2	ENLARGED COMPOUND PLAN		
A-3	EQUIPMENT AND ANTENNA PLAN		
Α-4	ELEVATIONS.		



APPROVAL BLOCK

DATE

DATE

DATE

DATE

DATE

VERTICAL BRIDGE

SITE ACQUISITION

PERMITTING

RF ENGINEERING

CONSTRUCTION MANAGER

APPROVED DISAPPROVED AS NOTED REVISE

## **LOCATION MAP**

	N.1.S.					
PROJECT DIRECTORY						
PROPERTY OWNER:	DALLAS OLSON 1550 PLEASANT VALLEY RD. PLACERVILLE, CA 95667					
APPLICANT:	VERTICAL BRIDGE 750 PARK OF COMMERCE DRIVE, SUITE 200 BOCA RATON, FL 33487					
CONTACT:	ASSURANCE DEVELOPMENT 1499 HUNTINGTON DR. #305 SOUTH PASADENA, CA 91030 CONTACT: BILL LEWIS PHONE: 626.765.5079					
POWER COMPANY:	PG&E					
TELCO COMPANY:	AT&T					

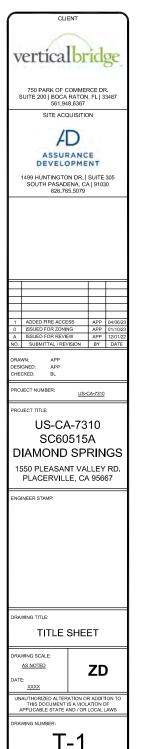
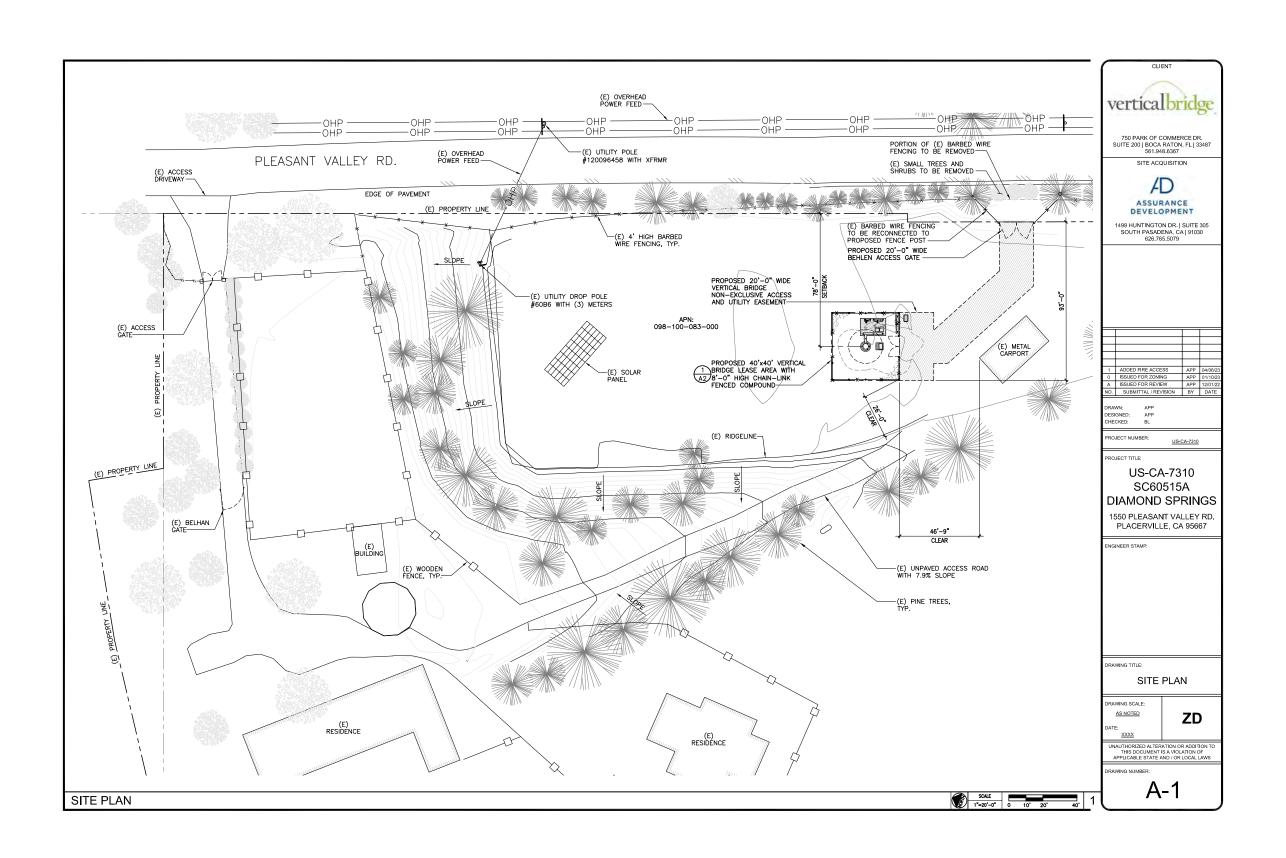
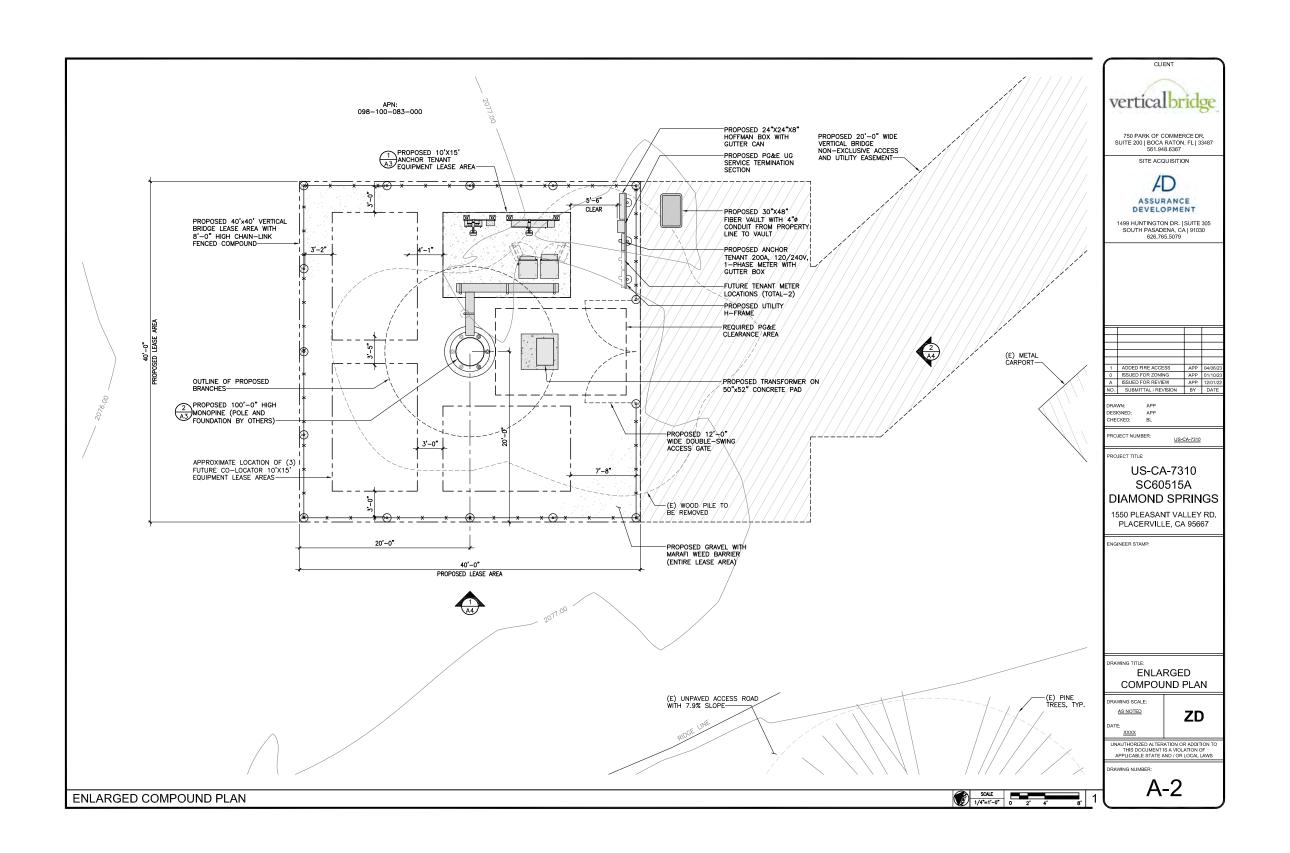


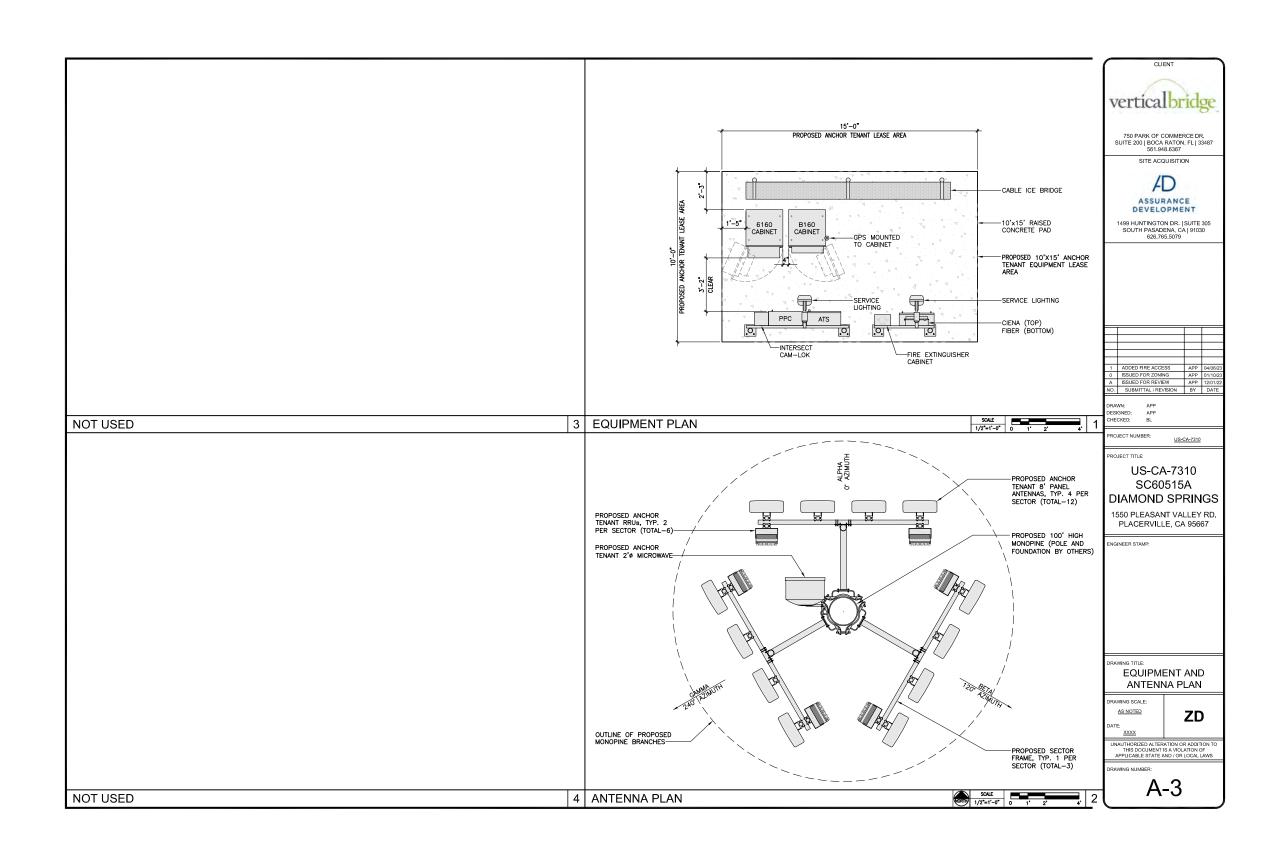




Exhibit H: Proposed Negative Declaration and Initial Study







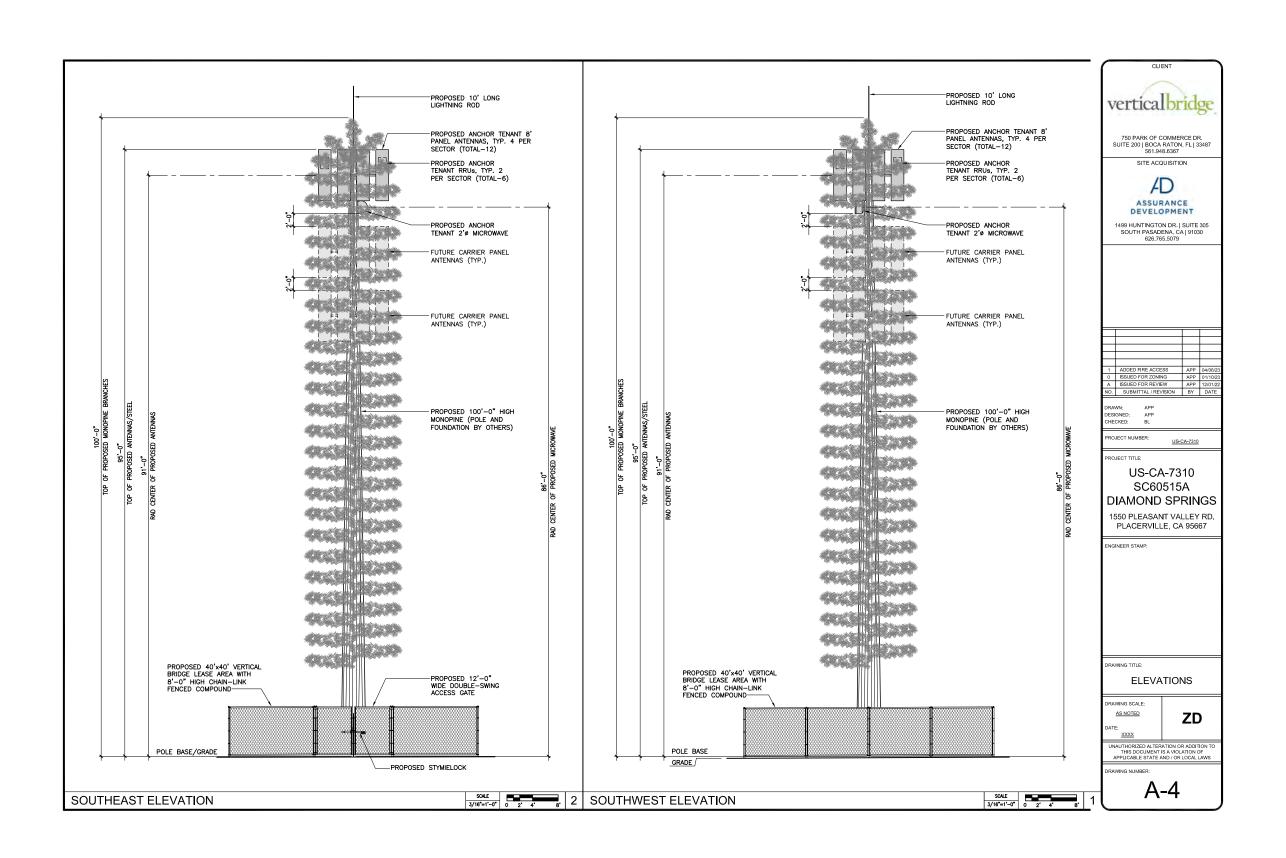
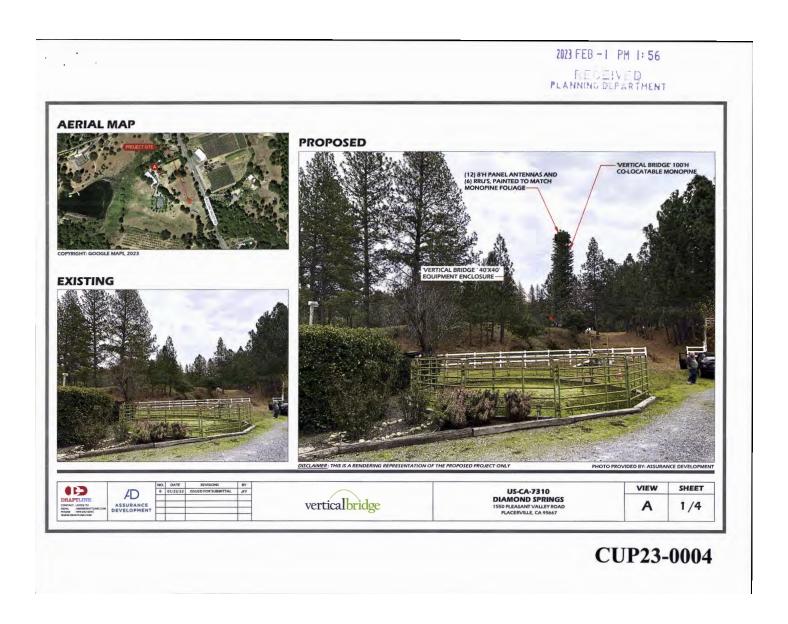
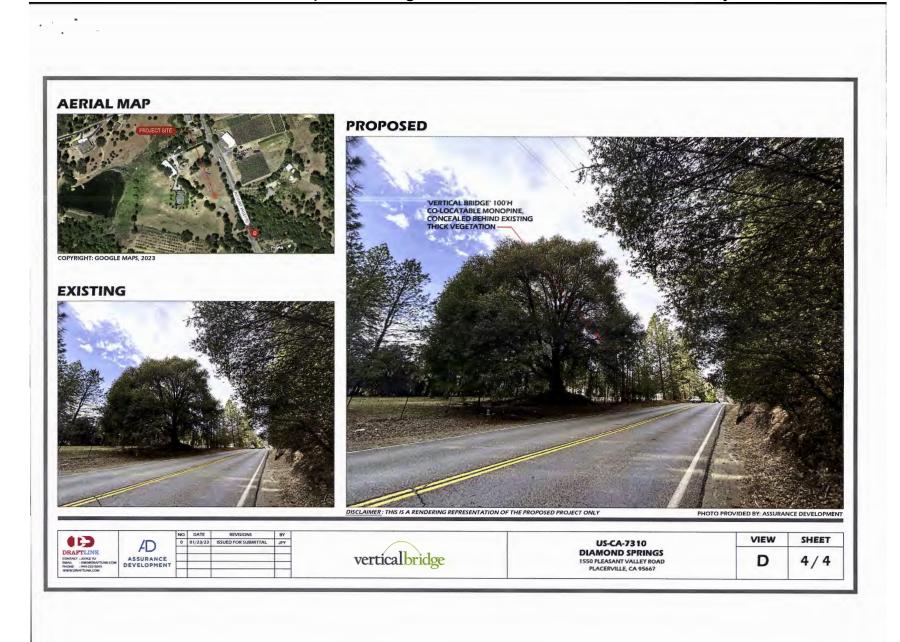


Exhibit H: Proposed Negative Declaration and Initial Study









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Vertical Bridge • Site No. US-CA-7310 T-Mobile West LLC • Proposed Base Station No. SC60515A 1550 Pleasant Valley Road • Placerville, California

#### Statement of Hammett & Edison, Inc., Consulting Engineers

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained by Vertical Bridge, a wireless telecommunications facilities provider, to evaluate the T-Mobile West LLC base station (Site No. SC60515A) proposed to be located at 1550 Pleasant Valley Road near Placerville, California, for compliance with appropriate guidelines limiting human exposure to radio frequency ("RF") electromagnetic fields.

#### **Executive Summary**

T-Mobile proposes to install directional panel antennas on a tall pole, configured to resemble a pine tree, to be sited at 1550 Pleasant Valley Road near Placerville. The proposed operation will comply with the FCC guidelines limiting public exposure to RF energy.

#### **Prevailing Exposure Standard**

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 limit for exposures of unlimited duration at several wireless service bands are as follows:

Wireless Service Band	Transmit Frequency	"Uncontrolled" Public Limit	Occupational Limit (5 times Public)	
Microwave (point-to-point)	1-80 GHz	1.0 mW/cm <sup>2</sup>	5.0 mW/cm <sup>2</sup>	
Millimeter-wave	24-47	1.0	5.0	
Part 15 (WiFi & other unlicensed)	2–6	1.0	5.0	
C-Band	3,700 MHz	1.0	5.0	
BRS (Broadband Radio)	2,490	1.0	5.0	
WCS (Wireless Communication)	2,305	1.0	5.0	
AWS (Advanced Wireless)	2,110	1.0	5.0	
PCS (Personal Communication)	1,930	1.0	5.0	
Cellular	869	0.58	2.9	
SMR (Specialized Mobile Radio)	854	0.57	2.85	
700 MHz	716	0.48	2.4	
600 MHz	617	0.41	2.05	
[most restrictive frequency range]	30-300	0.20	1.0	

#### **General Facility Requirements**

Base stations typically consist of two distinct parts: the electronic transceivers (also called "radios") that are connected to the traditional wired telephone lines, and the antennas that send the wireless signals



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AB1234

Conditional Use Permit CUP23-0004 Pleasant Valley Monopine APN: 098-100-083

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# Vertical Bridge • Site No. US-CA-7310 T-Mobile West LLC • Proposed Base Station No. SC60515A 1550 Pleasant Valley Road • Placerville, California

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

#### **Computer Modeling Method**

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

#### Site and Facility Description

Based upon information provided by Vertical Bridge, including zoning drawings by Assurance Development, dated December 14, 2022, T-Mobile proposes to install twelve directional panel antennas – three CommScope Model FFVV-65C-R3-V1, three Ericsson Model AIR6419, and six\* antennas for future operation – on a 95-foot steel pole, configured to resemble a pine tree,† to be sited about 220 feet to the east of the residence located at 1550 Pleasant Valley Road in unincorporated El Dorado County near Placerville. The CommScope and Ericsson antennas would employ 2° and up to 19° downtilt, respectively, would be mounted at an effective height of about 91 feet above ground, and would be oriented in identical groups of four at about 120° spacing, to provide service in all directions. The maximum effective radiated power in any direction would be 76,380 watts, representing simultaneous operation at 59,310 watts for BRS,‡ 6,200 watts for AWS, 5,430 watts for PCS, 1,900 watts for 700 MHz, and 3,540 watts for 600 MHz service. Also proposed to be located on the pole is a

<sup>&</sup>lt;sup>‡</sup> The manufacturer reports that the antenna transmits 75% of the time in this band; this factor is incorporated into the calculations.



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It is recommended that the RF exposure conditions be re-evaluated for compliance with FCC limits at such time as these antennas are to be put into service.

<sup>&</sup>lt;sup>†</sup> Foliage atop the pole puts the overall height at about 100 feet above ground.

## Vertical Bridge • Site No. US-CA-7310 T-Mobile West LLC • Proposed Base Station No. SC60515A 1550 Pleasant Valley Road • Placerville, California

microwave "dish" antenna, for interconnection of this site with others in the T-Mobile network. There are reported no other wireless telecommunications base stations at the site or nearby.

#### **Study Results**

For a person anywhere at ground, the maximum RF exposure level due to the proposed T-Mobile operation, including the contribution of the microwave dish, is calculated to be 0.055 mW/cm<sup>2</sup>, which is 5.9% of the applicable public exposure limit. The maximum calculated level at the second-floor elevation of the nearby residence is 7.3% 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 location and height, the T-Mobile antennas would not be accessible to unauthorized persons, and so no measures are necessary to comply with the FCC public exposure guidelines. It is presumed that T-Mobile 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 T-Mobile West LLC at 1550 Pleasant Valley Road near 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.



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# Vertical Bridge • Site No. US-CA-7310 T-Mobile West LLC • Proposed Base Station No. SC60515A 1550 Pleasant Valley Road • Placerville, California

#### **Authorship**

The undersigned author of this statement is a qualified Professional Engineer, holding California Registration Nos. E-13026 and M-20676, which expire on June 30, 2023. 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.

January 17, 2023

E-13028
M-20676
Exp. 6-30-2023
\*\*CTRICAL TOP CALIFORNICAL TOP CALIFORNICAL

William F. Hammett, P.E.

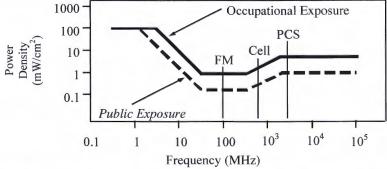
707/996-5200

#### **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 IEEE C95.1-2019, "Safety Levels with Respect to Human Exposure to Electric, Magnetic, and Electromagnetic Fields, 0 Hz 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	Electro	magnetic F	ields (f is fr	equency of	emission in	MHz)
Applicable Range (MHz)	Electric Field Strength (V/m)		Magnetic Field Strength (A/m)		Equivalent Far-Field Power Density (mW/cm <sup>2</sup> )	
0.3 - 1.34	614	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 <b>√</b> f	1.59√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. Hammett & Edison has incorporated conservative calculation formulas in the FCC Office of Engineering and Technology Bulletin No. 65 (August 1997) for projecting field levels in a computer program capable of calculating, at thousands of locations on an arbitrary grid, the total expected power density from any number of individual radio frequency sources. The program allows for the inclusion of uneven terrain in the vicinity, as well as any number of nearby buildings of varying heights, to obtain more accurate projections.



FCC Guidelines Figure 1

### RFE.CALC™ Calculation Methodology

### Assessment by Calculation of Compliance with FCC Exposure Guidelines

Hammett & Edison has incorporated the FCC Office of Engineering and Technology Bulletin No. 65 ("OET-65") formulas (see Figure 1) in a computer program that calculates, at millions of locations on a grid, the total expected power density from any number of individual radio frequency sources. The program uses the specific antenna patterns from the manufacturers and allows for the inclusion of uneven terrain in the vicinity, as well as any number of nearby buildings of varying heights, to obtain accurate projections of RF exposure levels. The program can account for spatial-averaging when antenna patterns are sufficiently narrow, and time-averaging is typically considered when operation is in single-frequency bands, which require time-sharing between the base station and the subscriber devices.

OET-65 provides this formula for calculating power density in the far-field from an individual RF source:

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

where ERP = total Effective Radiated Power (all polarizations), in kilowatts,

RFF = three-dimensional relative field factor toward point of calculation, and

D = distance from antenna effective height to point of calculation, in meters.

The factor of 2.56 accounts for the increase in power density due to reflections, assuming a reflection coefficient of  $1.6 (1.6 \times 1.6 = 2.56)$ . This factor is typically used for all sources unless specific information from FCC filings by the manufacturer indicate that a different reflection coefficient would apply. 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.

Because antennas are not true "point sources," their signal patterns may not be fully formed at close distances and so exposure levels may be lower than otherwise calculated by the formula above. OET-65 recommends the cylindrical model formula below to account for this "near-field effect":

power density 
$$S = \frac{180}{\theta_{\rm BW}} \times \frac{0.1 \times P_{\rm net}}{\pi \times D \times h} \quad \text{in mW/cm}^2$$

where  $P_{net}$  = net power input to antenna, in watts,

 $\theta_{\rm BW}$  = half-power beamwidth of antenna, in degrees,

D = distance from antenna effective height to point of calculation, in meters, and

h = aperture height of antenna, in meters.

The factor of 0.1 in the numerator converts to the desired units of power density.

OET-65 confirms that the "crossover" point between the near- and far-field regions is best determined by finding where the calculations coincide from the two different formulas, and the program uses both formulas to calculate power density.



Calculation Methodology Figure 2