Draft Environmental Impact Report for the

Ponte Palmero Project

SCH No. 2015082029

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EXHIBIT R

Ponte Palmero Project
Draft Environmental Impact Report

State Clearinghouse No.: 2015082029

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CHAPTER 1
INTRODUCTION

1.0 INTRODUCTION AND PROJECT BACKGROUND

This Environmental Impact Report (EIR) examines the reasonably foreseeable and potentially significant adverse effects on the environment of the proposed Ponte Palmero Project (proposed project). In 2006, El Dorado County (County) approved the Cameron Park Congregate Care project adjacent to the project Ponte Palmero project site, and adopted a Mitigated Negative Declaration (MND). The MND was subsequently challenged and found invalid by the Court of Appeal for the Third Appellate District. (*CNPS v. County of El Dorado* (2009) 170 Cal.App.4th 1026.) The parties entered into a settlement agreement in 2010 which included the donation of 23 acres of land to the Pine Hill Preserve, thereby fully mitigating for the impacts of the Cameron Park Congregate Care project. To assess the potential impacts associated with proposed project the County has prepared this EIR.

The proposed project consists of the following components:

- A 44 unit, 50,510 square-foot (sf) community care facility;
- A 46-unit, 53,690 sf assisted living facility;
- An 11,450 sf clubhouse with an indoor pool, activity room, library, kitchen, dining room, office space, and outdoor patio; and
- 205 parking spaces, an emergency access road, and landscaping.

1.1 PURPOSE AND INTENDED USE OF THIS EIR

The County of El Dorado (County) has prepared this EIR for the following purposes:

- To satisfy the requirements of the California Environmental Quality Act (CEQA) (Public Resources Code (PRC) Section 21000 et seq.), the CEQA Guidelines (California Code of Regulations (CCR), Title 14, Section 15000 et seq.), and the County's procedures for implementing CEQA.
- To inform the general public, the local community, responsible and interested public agencies, and the County's decision-making body (Planning Commission and Board of Supervisors) regarding the potential significant environmental effects resulting from implementation of the proposed project, as well as possible measures to mitigate those significant effects, and identify alternatives to the proposed project.
- To enable the County to consider the environmental consequences when deciding whether to approve the proposed project.

In summary, this document is intended to provide decision makers and the public with information that enables them to consider the environmental consequences of the proposed project. It identifies significant or potentially significant environmental effects ("impacts") and ways in which those impacts can be avoided or reduced to less-than-significant levels, whether through implementation of mitigation measures adopted by the lead agency or through the implementation of alternatives to the project. It also identifies impacts that are considered significant and unavoidable, despite the imposition of feasible mitigation measures. In a practical sense, an EIR functions as a method of fact-finding, allowing an applicant, the public, other public agencies, and agency staff an opportunity to collectively review and evaluate baseline conditions and project impacts through a process of full disclosure. Additionally, this EIR provides the primary source of environmental information for the lead agency to consider when exercising any permitting authority or approval power directly related to implementation of this project.

1.2 TYPE OF EIR

This EIR provides a project-level analysis for the proposed project "focusing primarily on the changes in the environment that would result from the development project" (CEQA Guidelines Section 15161). As further stated in Section 15161 of the CEQA Guidelines, a project-specific EIR "shall examine all phases of the project including planning, construction, and operation." The proposed project is expected to be constructed all at one time and not in phases.

1.3 LEAD, RESPONSIBLE, AND TRUSTEE AGENCIES

As required by CEQA, this EIR defines lead, responsible, and trustee agencies. El Dorado County is the lead agency for the project because it holds principal responsibility for approving the project. A responsible agency is a public agency other than the lead agency that has discretionary approval over the project. A trustee agency is defined as a state agency that has jurisdiction by law over natural resources that are held in trust for the people of the state. The California Department of Fish and Wildlife (CDFW) and Bureau of Land Management (BLM), for example, are trustee agencies with respect to this project.

1.4 SCOPE OF THE EIR

The scope of this EIR includes analysis of environmental issues identified as potentially significant in the Initial Study, comments on the Notice of Preparation (NOP), and meetings held with the public (see Appendix A for the NOP and comment letters in response to the NOP and Appendix B for the Initial Study). The Initial Study prepared for the project evaluated all the issue areas identified in the Environmental Checklist (Appendix G of the CEQA Guidelines). The Initial Study is a tool for the lead agency to use in order to determine where the project may result in potentially significant impacts. Here, the Initial Study identified

potentially significant impacts in the following issue areas associated with the construction and/or operation of the project:

- Aesthetics
- Air Quality
- Biological Resources
- Greenhouse Gas Emissions
- Land Use/Planning
- Noise
- Transportation and Traffic

The Initial Study (see Appendix B) found there would be no impact or less-than-significant impacts in the following issue areas:

- Agriculture and Forestry Resources
- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Mineral Resources
- Population and Housing
- Public Services Recreation
- Utilities

This EIR evaluates the direct impacts, reasonably foreseeable indirect impacts, and cumulative impacts resulting from planning, construction, and operation of the proposed project using the most current information available and in accordance with the provisions set forth in CEQA and the CEQA Guidelines. In addition, the EIR recommends potentially feasible mitigation measures, where possible, and project alternatives that would reduce or eliminate significant adverse environmental effects.

The alternatives chapter of the EIR (Chapter 6, Project Alternatives) was prepared in accordance with Section 15126.6 of the CEQA Guidelines. The alternatives analyzed in this EIR in addition to the proposed project are:

Alternative 1: No Project/No Development Alternative. This alternative assumes no development would occur and the site would remain in its current undeveloped condition.

Alternative 2: No Project/Existing Zoning Alternative. This alternative assumes development would be consistent with currently allowable land uses, zoning, and maximum development intensities.

Alternative 3: Reduced Site Layout Alternative. This alternative assumes the Community Care facility would be combined with the Assisted Living facility in one four-story building. The Clubhouse would still be developed under this alternative.

Alternative 4: **Reduced Density Alternative.** This alternative assumes the Clubhouse building would not be constructed. The rest of the project elements would be the same as the proposed project.

1.5 ENVIRONMENTAL REVIEW PROCESS

This EIR has been prepared to meet all of the substantive and procedural requirements of CEQA. As the lead agency, El Dorado County has primary responsibility for conducting the environmental review and approving or denying the project.

As a first step in complying with the procedural requirements of CEQA, the County examined whether or not any aspect of the project, either individually or cumulatively, may cause a significant effect on the environment. For this project, the Initial Study indicated those issue areas where potentially significant impacts could occur, thus requiring preparation of an EIR to analyze the impacts.

The NOP was released on August 15, 2015, for a 30-day public review period that closed on September 13, 2015. A public scoping meeting was held on August 26, 2015 to hear concerns from the public and local agencies on the scope of the environmental analysis. Nine comment letters were received during the scoping period. Issues raised in the scoping comments are disclosed in the introduction to each impact discussion in Chapter 4 (and are available in Appendix A). No verbal comments were received at the scoping meeting.

Agencies or interested persons who did not respond during the public review period for the NOP will have an opportunity during the 45-day public review period for the Draft EIR, as well as at public hearings on the project. A summary of the comments received during the Draft EIR public review, and the responses to environmental issues raised in the comments, will be incorporated into the Final EIR.

For those projects where significant impacts will be lessened or avoided by mitigation measures, the lead agency must prepare a mitigation monitoring and reporting program (MMRP), to be

adopted at the same time the lead agency decision-making body makes its "CEQA Findings" addressing the disposition of all significant environmental effects disclosed in an EIR (see PRC 21081.6 (a)(1) and CEQA Guidelines, Section 15091). The purpose of the MMRP is to ensure compliance with required mitigation during implementation of the project.

This Draft EIR is being circulated for public review and comment for a period of 45 days. During this period, the general public, organizations, and public agencies can submit comments to the lead agency on the Draft EIR's accuracy and completeness. Release of this Draft EIR marks the beginning of a 45-day public review period pursuant to CEQA Guidelines Section 15105. The 45-day public review period for the Draft EIR will be from Tuesday, January 17, 2017, through Friday, March 3, 2017. The public can review the Draft EIR at the following address during normal business hours (Monday through Friday, 8 a.m. to 4 p.m.) or on the County's website at http://www.edcapps.edcgov.us/Planning/ProjectInquiryDisplay.asp?ProjectID=20149.

Community Development Agency
2850 Fairlane Court, Building C
Placerville, California 95667

The County encourages all comments on the Draft EIR be submitted in writing. All comments or questions regarding the Draft EIR should be addressed to:

County of El Dorado Community Development Agency, Planning Services
Attention: Jennifer Franich
2850 Fairlane Court
Placerville, California 95667
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530.621.6591

1.5.1 EIR Adequacy

The level of detail contained throughout this EIR is consistent with Section 15151 of the CEQA Guidelines, which states the following:

> An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of the environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.

1.6 DOCUMENT ORGANIZATION

This EIR has been designed for easy use and reference. To help the reader locate information of particular interest, a brief summary of the contents of each section of the EIR is provided. This report includes six principal parts:

- **Introduction (Chapter 1)** - Provides a brief background description for the project and description of the EIR, including its purpose, intended use, type, scope, and standards for adequacy; and identification of lead, responsible, and trustee agencies; a description of the environmental review process; and a summary of how the document is organized.
- **Executive Summary (Chapter 2)** - Includes a brief project overview and a summary of impacts and mitigation measures proposed by the project in a table format.
- **Project Description (Chapter 3)** - Includes a discussion of the project site; a statement of project objectives; a general description of the project site's environmental characteristics, including proposed plans for development; and required agency approvals.
- **Environmental Analysis (Chapter 4)** - Includes a topic-by-topic analysis of baseline environmental conditions without the project and impacts that would or could result from development of the project. It also identifies potentially feasible mitigation measures that, if adopted, would reduce the level of significance of environmental impacts. The results of field visits, and data collection, and the findings of technical reports are included in the analysis.
- **CEQA Considerations (Chapter 5)** - Includes a discussion of additional issues required by CEQA, including significant unavoidable adverse impacts, irreversible environmental changes, and growth inducement. The analysis of cumulative impacts is included in the technical analysis contained in Chapter 4.
- **Project Alternatives (Chapter 6)** - Includes an assessment of alternative methods for accomplishing most of the basic objectives of the proposed project while avoiding or substantially lessening at least one significant impact of the project. This assessment provides information for decision makers to make a reasoned choice among potentially feasible alternatives based on comparing the impacts of the alternatives to the impacts of the proposed project.
- **Appendices** - Contains reference items and reports providing support and documentation of the analysis performed in the EIR.

CHAPTER 2
EXECUTIVE SUMMARY

2.0 PROJECT UNDER REVIEW

This Environmental Impact Report (EIR) evaluates the environmental impacts of the proposed Ponte Palmero Project (proposed project) in El Dorado County (County). The proposed project includes development of the Ponte Palmero retirement community on 9.11 acres within the unincorporated community of Cameron Park in western El Dorado County (County). The project includes a total of 90 units in a community care facility and an assisted living facility, and a clubhouse for a project total of 115,650 square-feet (sf). The project also includes 205 surface parking spaces and an emergency access road. A detailed description of the project is contained in Chapter 3, Project Description.

2.1 SUMMARY OF IMPACTS

This Executive Summary chapter provides an overview of the technical analysis contained in Sections 4.1 through 4.7 in Chapter 4, Environmental Analysis. This summary also includes discussions of: (a) effects found to be less than significant, (b) comments received in response to the Notice of Preparation (NOP), (c) potential areas of controversy, (d) significant and unavoidable impacts and mitigation measures to avoid or reduce identified significant impacts, and (e) alternatives to the proposed project.

2.2 EFFECTS FOUND TO BE LESS THAN SIGNIFICANT

Due to certain aspects of the project, project characteristics, or existing regulatory requirements, the project is not anticipated to have significant impacts on agricultural and forest resources, cultural resources, geology, soils and mineral resources, hazards and hazardous materials, hydrology and water quality, population and housing, public services, recreation, or utilities. The Initial Study included in Appendix B provides an analysis of all the effects found to be less than significant.

2.3 COMMENTS RECEIVED IN RESPONSE TO THE NOTICE OF PREPARATION

During the NOP comment period, nine comment letters were received. Agency comments include letters received from the California Department of Transportation (Caltrans), California Department of Fish and Wildlife (CDFW), Bureau of Land Management (BLM) Pine Hill Preserve, Cameron Park Fire Department (CPFD), El Dorado Irrigation District (EID), Pacific Gas and Electric Company (PG&E), Regional Water Quality Control Board (RWQCB), and the U.S. Army Corps of Engineers (Corps). Only one comment letter was received from the public. All of the comments raised in the NOP comment letters are addressed in the technical sections contained in Chapter 4. A copy of the NOP and comments received is included in Appendix A. A

public scoping meeting was also held on August 26, 2015. No one who attended the scoping meeting opposed the project.

A summary of the written NOP comment letters is included below.

Caltrans

Caltrans noted that, should impacts to US Highway 50 be identified in the traffic impact analysis, the developer contribute to the El Dorado County Traffic Impact Mitigation (TIM) Fee Program for the planned improvements on the Cameron Park Drive/US 50 interchange.

California Department of Fish and Wildlife

The CDFW letter states that state-listed rare plants are known to occur on or adjacent to the project site. The take of state-listed rare plants that may occur as a result of the project may only be permitted through an incidental take permit or other authorization issued by CDFW. CDFW requests they are contacted early if any state -listed plants appear in the vicinity of the project. Further, CDFW recommends the Draft EIR discuss and provide adequate mitigation measures for five listed concerns. These concerns reference the project's potential impacts upon wildlife and their habitat, impacts to special-status species, cumulative impacts upon wildlife and vegetation resources, requirement to provide an analysis of specific alternatives which reduce impacts on wildlife, and inclusion of an evaluation of the project's consistency with land use, or species recovery plans.

BLM Pine Hill Preserve

Comments received from the manager of the Pine Hill Preserve request that the Draft EIR take into account information from the draft conservation strategy currently under preparation by the County. The commenter further suggests that the design of the open space area address potential effects of habitat fragmentation, connectivity with existing conservation project, and long term management implications.

Cameron Park Fire Department

The CPFD references the requirement that a Wildfire Safety Plan is required for the project to address evacuation and safety protocols in the event of a wildfire. The project applicant has prepared a Wildfire Safety Plan included as an Appendix to the Initial Study (see Appendix B).

El Dorado Irrigation District

EID requests that the EIR include a review of both off-site and on-site water and sewer facilities that may be constructed by this project and that an updated Facility Improvement Letter (FIL) be provided to EID for review. An updated FIL is included as an Appendix to the Initial Study (see Appendix B).

Pacific Gas and Electric Company

PG&E notes that it operates and maintains electrical underground facilities within the proposed project area. In order to promote safe and reliable maintenance operations the California Public Utilities Commission (CPUC) has mandated specific clearance requirements between utility facilities and surrounding objects or construction activities. PG&E asks that the project applicant coordinate with them in order to ensure compliance with these standards.

Regional Water Quality Control Board

The RWQCB provided an overview of the various regulations pertaining to surface water and groundwater quality.

U.S. Army Corps of Engineers

The Corp letter reiterates their jurisdiction under the Clean Water Act for any discharge of dredge or fill material into waters of the United States. The Corps requests a wetland delineation be prepared for any wetlands on site and further requests that the range of project alternatives include alternatives to avoid impacts to wetlands or other waters of the United States.

Shirley Gosser

The commenter is concerned about heavy two-way traffic creating an unsafe condition to turn left onto Cameron Park Drive. She also wants to know how the County plans to address current congested road conditions in the area.

2.4 POTENTIAL AREAS OF CONTROVERSY

The primary issue of concern for this project is the loss of special-status plant species (Pine Hill plants) and the Gabbro soil habitat which supports the species and which is located on the project site.

2.5 SIGNIFICANT AND UNAVOIDABLE IMPACTS AND MITIGATION MEASURES

Two significant and unavoidable impacts were identified after mitigation associated with short-term construction noise.

4.6-1: The proposed project would expose people to construction noise levels in excess of standards established in the County's general plan.

4.3-5: The proposed project could result in a cumulatively considerable contribution to the loss of special-status plants and their habitat, and animals, natural communities and wildlife corridors.

2.6 ALTERNATIVES TO THE PROPOSED PROJECT

CEQA requires that the lead agency adopt mitigation measures or alternatives, where feasible, to substantially lessen or avoid significant environmental impacts that would otherwise occur. Project modification or alternatives are not required, however, where significant environmental impacts will not occur.

The EIR evaluates the following alternatives to the proposed project:

Alternative 1: No Project/No Development Alternative, which assumes no development would occur and the site would remain in its current undeveloped condition.

Alternative 2: No Project/Existing Zoning Alternative, assumes development would be consistent with currently allowable land uses, zoning, and maximum development intensities.

Alternative 3: Revised Site Layout Alternative, assumes the Assisted Living and Community Care facilities would be combined into one four-story building, the Assisted Living building.

Alternative 4: Reduced Density Alternative, which assumes the proposed project would be developed on the same site, but would not include the 11,450 sf Clubhouse building.

2.7 SUMMARY TABLE

Information in Table 2-1, Summary of Impacts and Mitigation Measures, has been organized to correspond with environmental issues discussed in Chapter 4. The summary table is arranged in four columns and organized as follows:

- Environmental impacts;
- Level of significance prior to mitigation;
- Applicable mitigation; and
- The level of significance after implementation of mitigation.

Following Table 2-1 is information on impacts associated with the project alternatives evaluated. Table 6-2 in Chapter 6 shows the severity of the impacts as compared to the proposed project.

Table 2-1
Summary of Impacts and Mitigation Measures

Environmental Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.1 Aesthetics			
4.1-1: Implementation of the proposed project may degrade the existing visual character or quality of the site and the surrounding area.	Less than Significant	None required	Less than Significant
4.1-2: Implementation of the proposed project may create new sources of light that could adversely affect nighttime views in the area.	Less than Significant	None required	Less than Significant
4.1-3: The proposed project could contribute to cumulative changes in the existing visual character of the area.	Less than Significant	None required	Less than Significant
4.1-4: The proposed project could contribute to a cumulative increase in nighttime light in the area.	Less than Significant	None required	Less than Significant
4.2 Air Quality			
4.2.1: The proposed project would not conflict with or obstruct implementation of the applicable air quality plan.	Less than Significant	None required	Less than Significant
4.2-2: The proposed project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation.	Less than Significant	None required	Less than Significant

Table 2-1
Summary of Impacts and Mitigation Measures

Environmental Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.2-3: The proposed project would not expose sensitive receptors to substantial pollutant concentrations.	Less than Significant	None required	Less than Significant
4.2-4: The proposed project would not 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).	Less than Significant	None required	Less than Significant
4.3 Biological Resources			
4.3-1: Construction of the proposed project could have a substantial adverse impact on special-status plants.	Significant	4.3-1(a): *Special-Status Plant Salvage, Seed Collection and Propagation*. (i) <u>*Calystegia stebbinsii*</u>: The applicant shall conduct pre-construction surveys and transplant any *Calystegia stebbinsii* found within the developable footprint of the project site and including the emergency vehicle access (EVA) road, to the previously established (.385 acre) *Calystegia stebbinsii* Preserve established as per Phase I, Condition 8 (as illustrated in the Mitigation Monitoring and Reporting Program adopted forthe Congregate Care facility) and consistent with past transplantation methods. The applicant shall monitor the transplanted plants bi-annually for three years and submit an annual monitoring report to El Dorado County and the California Department of Fish and Wildlife. If dead *Calystegia stebbinsii* plants are found during the monitoring and reporting period, the same number of plants shall be propagated and planted by a qualified nursery, thus ensuring "no net loss" in the number of individual plants. (ii) <u>*Ceanothus roderickii*</u>: The applicant shall hire a qualified nursery, landscape	Less than Significant

Table 2-1
Summary of Impacts and Mitigation Measures

Environmental Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		contractor or consultant to take cuttings from the existing 3,119 *Ceanothus roderickii* plants in the project area. The cuttings of *Ceanothus roderickii* shall be propagated in a commercial nursery consistent with past practices for Phase I. The applicant shall then plant a minimum of 3,119 cuttings in the previously established 5.96 acre preserve. The *Ceanothus roderickii* plants shall be monitored bi-annually for at least three years by a qualified biologist and an annual monitoring report shall be prepared and submitted to El Dorado County and DFW. If dead *Ceanothus roderickii* plants are found during the monitoring and reporting period, the same number of plants that perished shall be planted thus ensuring "no net loss" in the number of individual plants. 4.3-1(b): *Payment of the Ecological Preserve Fee (Chapter 130.71).* The El Dorado County Ecological Preserve fee structure for Zone 1 is $0.59 per square foot of commercial/industrial development. For the project, and pursuant to the Code, the applicant is required to pay $68,233.50 to mitigate for the loss of 9.11 acres of gabbro soil habitat. 4.3-1(c): *Preservation of Habitat for Special-Status Plants.* Consistent with the terms of the County Code and the 2010 Settlement Agreement in the matter of CNPS v. County of El Dorado, the applicant shall: (i) pay $68,233.50 as the appropriate fee in lieu of Ecological Preserve Mitigation as required by Section 130.71.050 of the County Code; (ii) donate 10.64 acres of land in perpetuity to the Bureau of Land Management (BLM) for inclusion in the Pine Hill Preserve or, alternatively, to a signatory to the Pine Hill Preserve Cooperative Agreement for incorporation into the Pine Hill Preserve system for the purpose of Pine Hill Plant conservation; and (iii) donate $50,000 to CNPS for conservation studies and/or conservation activities as deemed appropriate by CNPS.	
4.3-2: Construction and operation of the proposed project could have a substantial adverse impact on special-status animals.	Significant	4.3-2(a): *Blainville's Horned Lizard Pre-Construction Surveys and Exclusion Fencing.* Exclusion fencing shall be installed prior to construction activities to prevent Blainville's horned lizard from entering the project site. Pre-construction clearance surveys shall be performed at the beginning of each day by a qualified biologist to prevent the take of any Blainville's horned lizards. If any lizards are observed during surveys, they shall be relocated outside of the project boundary and project activities shall resume upon clearance by the designated biologist.	Less than Significant

Table 2-1
Summary of Impacts and Mitigation Measures

Environmental Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		4.3-2(b): *Biological Monitor.* During project construction, the project site shall be surveyed weekly by a qualified biologist to determine if any active nests occur within or adjacent to the project site. The monitor shall have the authority to immediately stop any activity that is likely to impact special-status species or order any reasonable measure to avoid or minimize impacts to wildlife resources. If any previously unknown special-status species are found within the project area during the work period, the monitor shall inform the USFWS and/or CDFW within 1 day, as appropriate for the species. 4.3-2(c): *Workers Environmental Awareness Program.* All construction workers shall receive worker environmental awareness training (WEAP) conducted by a qualified biologist or an environmentally trained foreman. WEAP may also be conducted through a video created by a qualified biologist specifically for this project. WEAP shall instruct workers to recognize all special-status species potentially present within the project site and identify their habitat on or adjacent to the project site, identify sensitive habitats found on and adjacent to the project site and be aware of project boundaries so that impacts to these habitats are limited to within project boundaries, and the nature and purpose of protective measures including best management practices (BMPs) and other required mitigation measures. 4.3-2(d): *Nesting Bird Avoidance.* If construction is proposed during the breeding season (February 1-September 30), a pre-construction nesting bird survey shall be conducted within two weeks prior to the beginning of construction activities by a qualified biologist in order to identify active nests in the project site vicinity. If no active nests are found during the pre-construction survey, no further mitigation is required. If active nests are found, a temporary buffer shall be established, depending on nest location, species, and construction activities in the vicinity of the nest and the nest will be flagged or protected with high-visibility fencing. Additionally, the designated biologist shall be on-site daily while construction related activities are taking place near active nests and shall have the authority to stop work if birds are exhibiting agitated behavior. Any trees containing nests that must be removed as a result of project implementation shall be removed during the non-breeding season (October 1-January 30).	

Table 2-1
Summary of Impacts and Mitigation Measures

Environmental Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.3-3: Construction and operation of the proposed project could have a substantial adverse effect on a sensitive natural community.	Significant	4.3-3: Implement Mitigation Measures 4.3-1(b) or 4.3-1(c)	Less than Significant
4.3-4: Construction and operation of the proposed project could interfere with an established migratory wildlife corridors or nursery site.	Significant	4.3-4: *Wildlife Movement Corridor Protection*. To the extent feasible, construction shall be designed to minimize the restriction of wildlife (e.g., deer, mountain lions, coyotes, etc.) movement through the Pine Hill Preserve adjacent to the project site. Noise associated with construction activities shall be kept to a minimum as much as possible and construction shall be avoided at night. Idling of trucks and heavy equipment shall be limited to five minutes. All outdoor lighting associated with project operation shall be designed to minimize light pollution into the open space or adjoining undeveloped land per the County's outdoor lighting ordinance (130.14.170), except where necessary for public safety or security. Minimization measures may include light fixture placement (e.g., as low to the ground as possible), lamp designs (e.g., shielding, low glare, or no lighting), directing light away from the Preserve, or other means to avoid or minimize light pollution.	Less than Significant
4.3-5: The proposed project could result in a cumulatively considerable contribution to the loss of special-status plants and their habitat, and animals, natural communities and wildlife corridors. This would be a significant impact.	Significant	4.3-5: Implement Mitigation Measures 4.3-1(a), 4.3-2(a) through 4.3-2(d), and 4.3-3.	Significant and unavoidable

Table 2-1
Summary of Impacts and Mitigation Measures

Environmental Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.4 Greenhouse Gas Emissions			
4.4-1: The proposed project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.	Less than Significant	None required	Less than significant
4.4-2: The proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.	Less than Significant	None required	Less than significant
4.5 Land Use and Planning			
4.5-1: Implementation of the proposed project would not conflict with any applicable land use, plan, policy or regulation.	Less than Significant	None required	Less than significant
4.6-2: Implementation of the proposed project would not include placing incompatible land uses adjacent to existing uses.	Less than Significant	None required	Less than Significant

Table 2-1
Summary of Impacts and Mitigation Measures

Environmental Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.6 Noise			
4.6-1: The proposed project would expose people to construction noise levels in excess of standards established in the County's general plan.	Significant	4.6-1: The project contractor shall adhere to the following during project construction: (a) Staging and lay-down areas shall be located as far as possible from the residences. For equipment that would be operated for extended periods at staging or lay-down areas, portable construction noise barriers shall be installed, where reasonable and feasible; (b) All equipment shall be fitted with factory equipped mufflers; (c) All equipment shall be in good working order; (d) Construction equipment shall be turned off when not in use.	Significant and unavoidable
4.6-2: The proposed project would not expose people to excessive groundborne vibration or groundborne noise levels.	Less than Significant	None required	Less than Significant
4.6-3: The proposed project would not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.	Less than Significant	None required	Less than Significant
4.6.4: The proposed project would not result in a cumulative contribution to any existing cumulative noise effects.	Less than Significant	None required	Less than Significant
4.7 Transportation and Circulation			
4.7-1: Under Existing Plus Project conditions the proposed project would not cause an intersection to operate an unacceptable levels.	Less than Significant	None required	Less than Significant

Table 2-1
Summary of Impacts and Mitigation Measures

Environmental Impact	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.7-2: Under Existing Plus Project conditions the proposed project would not conflict with alternative transportation or adversely impact bicycle or pedestrian conditions.	Less than Significant	None required	Less than Significant
4.7-3:.Under cumulative conditions the proposed project would not cause an intersection to operate an unacceptable levels.	Less than Significant	None required	Less than Significant

CHAPTER 3
PROJECT DESCRIPTION

3.0 INTRODUCTION

Cameron Park Senior Living, LLC (project applicant) requests approval of various discretionary entitlements in support of the proposed Ponte Palmero Project (proposed project), the reasonably foreseeable and potentially significant adverse environmental effects of which are evaluated in this Environmental Impact Report (EIR). Consistent with CEQA Guidelines Section 15124, this chapter includes: the location and boundaries of the proposed project as shown on a project location map and on a regional map; a statement of the objectives sought by the proposed project; a general description of the project's technical and environmental characteristics, and supporting public service facilities; and a statement briefly describing the intended uses of the EIR, including a list of the agencies that are expected to use the EIR in their decision making, and a list of permits and other approvals required to implement the project.

Information has been provided by the project applicant and El Dorado County (County) staff. The following project description serves as the basis for the environmental analysis contained in this EIR. The County will serve as the lead agency with final authority to approve the proposed project.

3.1 PROJECT SITE

Location and Surrounding Land Uses

The project site is located north of U.S. Route 50 on the west side of Ponte Morino Drive approximately 0.2 of a mile north of the intersection with Palmer Drive, within the unincorporated community of Cameron Park in western El Dorado County (see Figure 3-1, Regional Location). The proposed project would result in the development of 9.11-acres (including a 0.29 acre emergency evacuation road), mostly undisturbed, area within the eastern portion of the approximately 19.8 acre site.

The project site (APN 083-350-57) is adjacent to the existing Cameron Park Congregate Care facility to the east, commercial development to the south, residential development to the west, and the Bureau of Land Management's (BLM) Pine Hill Preserve to the north (see Figure 3-2, Project Location). Thus, existing urban development surrounds the project site on three sides, including Palmer Drive, the Marshal Medical Center, Eskaton senior assisted living facility, medical office buildings, and a local retail shopping center.

The Pine Hill Preserve includes more than 4,000 acres dedicated to protecting the rare and endangered plants that grow within the Gabbro soils of western El Dorado County. Two plant

species that occur on-site, Pine Hill ceanothus and Stebbins morning glory, are listed by the U.S. Fish and Wildlife Service as endangered. An additional three plant species, El Dorado County mule ears, Bisbee Peak rush rose and Red Hills soaproot are noted in the Recovery Plan for Gabbro Soil Plants of the Central Sierra Nevada Foothills (USFWS 2002) as species of concern. Figure 3-3 shows the underlying vegetation communities on the project site.

Project Background

In 2006, El Dorado County approved the Cameron Park Congregate Care project after adopting a Mitigated Negative Declaration (MND). The existing senior living center is located on approximately 26 acres to the southeast of the project site and includes a 140-unit congregate senior care facility, a 35-room Alzheimer's care unit, 64 duplex cottages and an 8,000 square foot (sf) clubhouse. The adequacy of the MND was challenged by the California Native Plant Society (CNPS) on the grounds that the County had violated CEQA by not providing adequate mitigation to avoid or substantially lessen impacts to protected plant species. In 2008, the trial court ruled in favor of the County. CNPS appealed and the Third District Court of Appeal reversed, deeming the MND inadequate. (*CNPS v. County of El Dorado* (2009) 170 Cal.App.4th 1026.)

The parties subsequently entered into a Settlement Agreement that included various commitments related to development of the Cameron Park Congregate Care project and also addressed future development of the land located to the northwest (Ponte Palmero site) should development be proposed and approved. As part of the Settlement Agreement relative to the existing congregate care facility, the project applicant executed an irrevocable offer of dedication for 23 acres of land to be donated to the BLM for inclusion in the Pine Hill Preserve. . The dedication of the 23 acres to the BLM was completed in early 2016 (including 20.94 acres from Parcel 1 [Assessor's Parcel No. 083-350-55] and 2.06 acres from Parcel 2 [APN 083-350-53]).

Through the Settlement Agreement, the Parties also agreed that if the project applicant proposed future development of land to the northwest (owned by the applicant), and the County approved the project and no litigation was filed, an additional 10.64 acres of land would be voluntarily donated to the BLM or a signatory to the Pine Hill Preserve Cooperative Agreement, amended in 2006, for inclusion in the Pine Hill Preserve for the purpose of plant conservation, for a total of approximately 33.64 acres.[1] Under this scenario (approval of the proposed project without legal challenge), the project applicant also committed to donate $50,000 dollars to CNPS to be used for conservation studies and/or other conservation activities at the discretion of CNPS.

[1] The proposed project meets the 10.64 acre mitigation requirement of the Settlement Agreement. Based on the Tentative Map, up to 10.76 acres is available for dedication, which is 0.12 acre above the commitment made in the Settlement Agreement. However, the acreage of dedication reflected on the recorded Final Map will not be less than 10.64 acres.

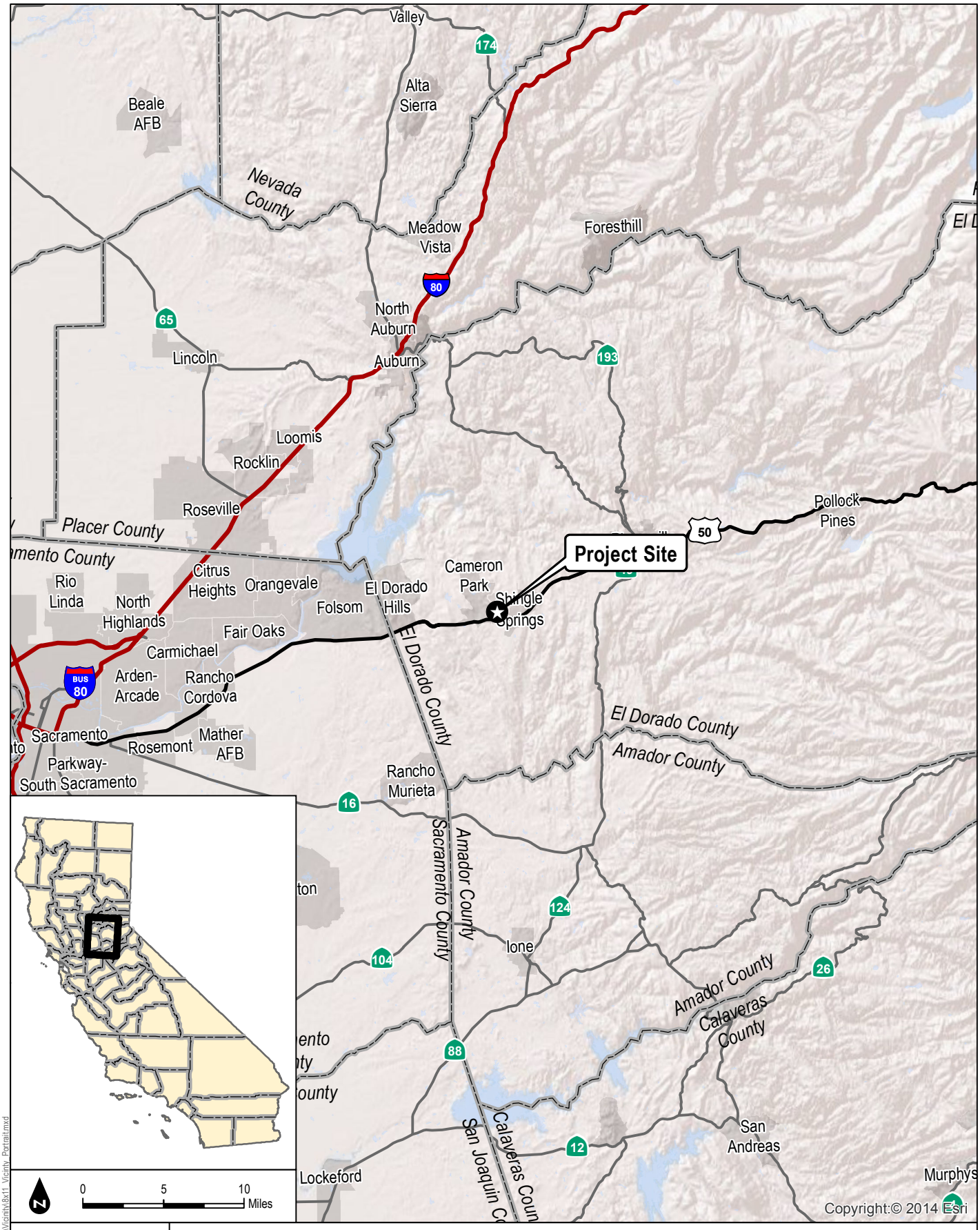

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FIGURE 3-1

Regional Map

Ponte Palmero

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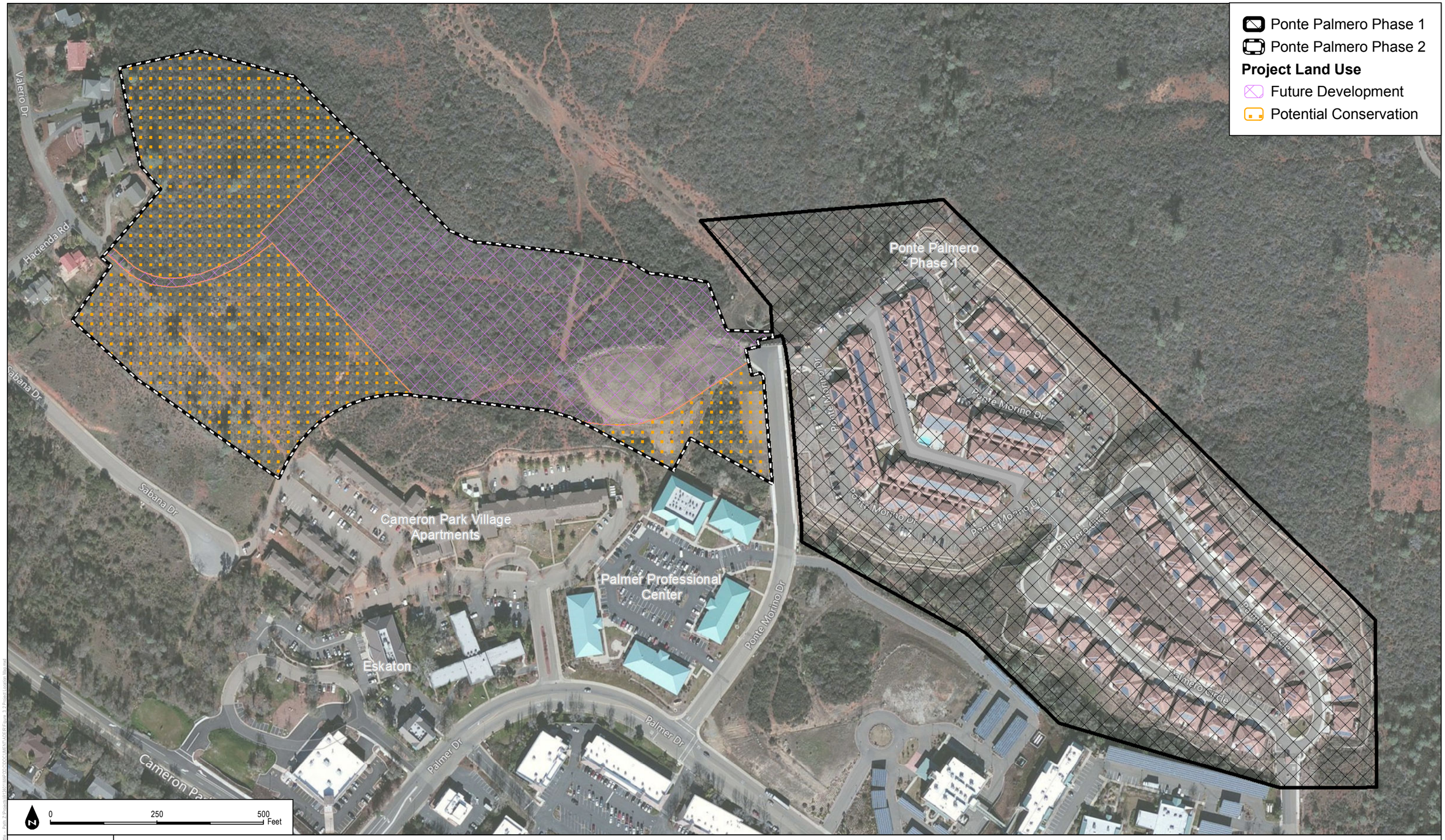

SOURCE: Bing Maps, 2015

FIGURE 3-2

Project Location Map

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Ponte Palmero

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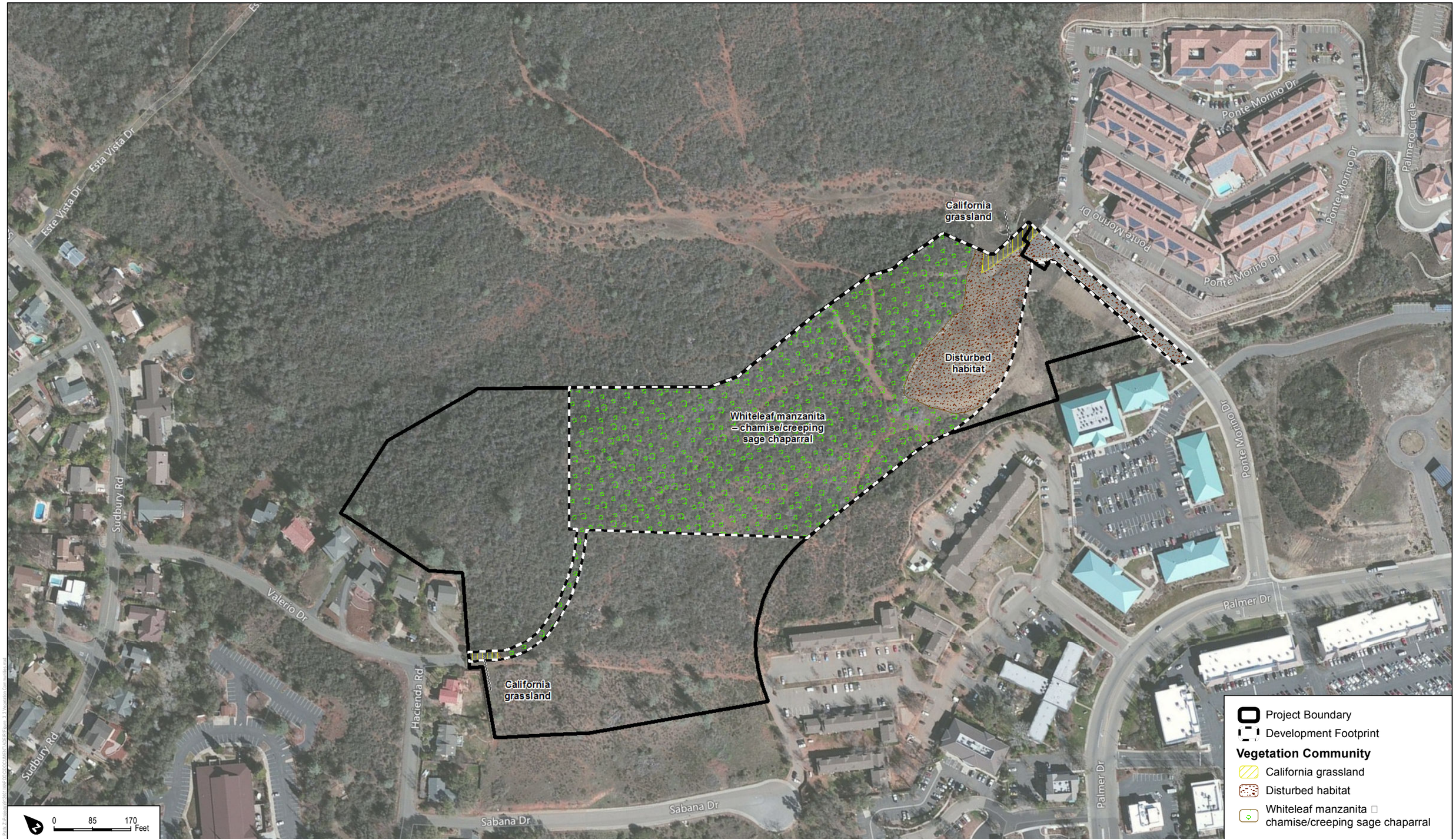

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SOURCE: Bing Maps 2015, DUDEK 2015

Ponte Palmero

FIGURE 3-3

Vegetation Communities

17-1209 E 32 of 271

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Site Characteristics

Existing Uses and On-Site Characteristics

The project site is dominated by undeveloped, natural chaparral vegetation, including whiteleaf manzanita, with the exception of a small graded/disturbed area at the southeastern corner of the site. The graded area is primarily barren, with sporadic regrowth of weedy, herbaceous plant species. An intermittent stream passes through a culvert at the eastern entrance of the project site at Ponte Morino Road, and contains a narrow riparian corridor.

The topography of the project site generally consists of gentle to moderately steep slopes of varying aspects, with a dominant aspect facing southwest. Elevations within the project site range from approximately 1,345 feet above mean sea level (msl) to a high of 1,430 feet msl.

General Plan and Zoning Designations

The project site is currently designated for Multifamily Residential (MFR) and High Density Residential (HDR) in the County's General Plan and zoned Community Commercial-Planned Development (CC-PD), Single Unit Residential – Planned Development (R1-PD), and Multi-Unit Residential-Planned Development (RM-PD), as shown on Figure 3-4, Existing and Proposed Land Use Designations.

The project applicant is requesting a General Plan Amendment to re-designate 9.11acres of MFR and HDR to Commercial (C) and 10.76 acres to Open Space (OS) with a minimum of 10.64 acres to be dedicated to the Pine Hill Preserve pursuant to the terms of the Settlement Agreement. The project is also requesting a re-zone of 9.11 acres to Limited Commercial-Planned Development (CL-PD) and 10.76 acres to Open Space (OS), as shown on Figure 3-5, Existing and Proposed Zoning.

3.2 PROJECT OBJECTIVES

CEQA requires an EIR to include a statement of objectives for the project, including the underlying purpose of the project. These objectives help the lead agency determine the alternatives to evaluate in the EIR. (CEQA Guidelines, Section 15124, subd. (a).) The fundamental underlying purpose of the proposed project is to develop a facility that complements the existing adjacent Cameron Park Congregate Care facility by providing a full range of congregate senior living options, thereby allowing residents to transition to different care levels as their needs change while maintaining social connections and friendships. The following is a list of objectives for the proposed project that supports the fundamental underlying purpose:

1. Realize a comprehensive senior living facility, consistent with the vision and objectives of the El Dorado County General Plan Housing Element (2013-2021), including Goal HO-4

(recognize and meet the housing needs of special groups of county residents, including a growing senior population), and Policy HO-4.1 (encouraging development of congregate care facilities).

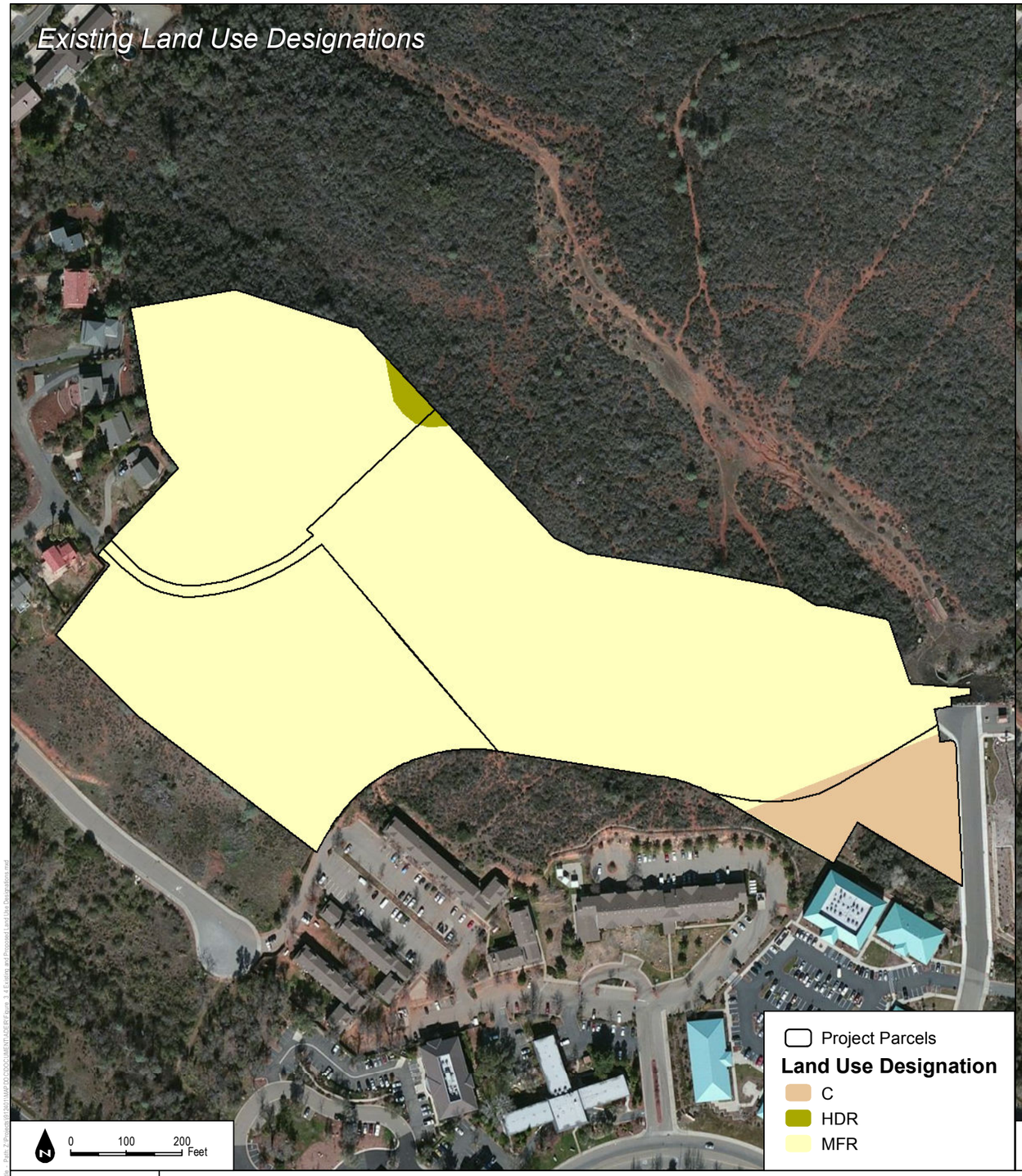
2. Develop a senior living facility that compliments the existing mix of senior living options and services available by providing additional levels of care.
3. Ensure the ability to provide residents with high quality meals, housekeeping services, shopping and shuttle services, access to on-site health care, and a club house with amenities and activity programs.
4. Protect and enhance natural resources, including habitat preservation for protected gabbro soil plant species consistent with the terms of the 2010 Settlement Agreement in *CNPS v. County of El Dorado*.
5. Provide a compact development that minimizes the overall facility footprint.
6. Provide a connected, walkable, development for residents and guests.
7. Construct a facility with sufficient size and diversity of senior care services to serve the County's growing senior population while being economically sustainable.
8. Provide a facility that can fund the required infrastructure improvements, public services improvements, and other municipal costs associated with the project.

3.3 PROPOSED PROJECT

The project applicant proposes to develop the Ponte Palmero retirement village which would include the following three buildings: a community care facility, an assisted living facility, and a clubhouse. The 44 unit, 50,510 square foot (sf) community care facility includes 22 one bedroom units on the first floor and 22 two bedroom units on the second floor. The two-story, 46-unit, 53,690 sf assisted living facility includes 32 one bedroom units and 14 two bedroom units. The overall project density is 10 dwelling units/acre. The project would accommodate an estimated total of 144 residents.[2]

The 11,450 sf clubhouse would include a number of amenities including an indoor pool, activity room, library, kitchen, dining room, office space, and outdoor patio. The project includes 205 surface parking spaces and an emergency vehicle access road connecting to Valerio Drive. Primary access would be from Ponte Morino Drive (see Figure 3-6, Site Plan).

[2] The County's persons per household (pph) assumption in unincorporated areas of the County is 2.59 pph. It is assumed that congregate care units do not have children and for the purposes of this analysis a pph of 1.6 is assumed.



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SOURCE: Bing Maps, 2016; County of El Dorado, 2016

FIGURE 3-4

Existing and Proposed Land Use Designations

Ponte Palmero

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Existing Zoning

Proposed Zoning

Zoning Designation
- CC - Commercial
- R1 - Single unit res
- RM - Multi unit res

Zoning Designation
- CC - Commercial
- OS - Open space

0 100 200 Feet

SOURCE: County of El Dorado, 2016

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FIGURE 3-5
Existing and Proposed Zoning

Ponte Palmero

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SOURCE: Borges Architectual Group, 2015

FIGURE 3-6
Site Plan

Ponte Palmero

17-1209 E 40 of 271

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The design of the buildings would be similar to the adjacent congregate care facility. The building rooflines would range from 10 feet to 39 feet in height. Building materials include stone veneer, fabric awnings, and stucco. Figures 3-7 through 3-9 show illustrative building designs.

The project would feature a number of energy efficiency and sustainable building practices. The buildings themselves would feature continuous insulation to minimize thermal bridging, dual pane windows, high efficiency HVAC units at common areas and individually controlled air conditioning units at each residential unit, LED lighting with occupancy sensors, low flow plumbing fixtures, and low VOC finish materials in compliance the Air District's rules for architectural coatings to ensure healthy air quality in the buildings. In addition, the proposed project does not include wood burning fireplaces. Fireplaces in the common areas would be approved by the Environmental Protection Agency and use natural gas or propane. The site has also been designed to meet current LID (low impact development) standards for storm water on the site; and project landscaping would include a high proportion of low water (drought tolerant) plantings and efficient irrigation minimizing the potable water used for landscaping. The project's Tentative Map is shown on Figure 3-10.

Landscaping/Exterior Improvements

The project's landscaping plan is designed to maximize communal outdoor space using drought-tolerant, low-water usage plants in compliance with the California Code of Regulations, Chapter 2.7, Model Water Efficient Landscape Ordinance. The project's landscape plan would be similar to the landscaping in Phase 1. The landscape plan includes a mix of trees, shrubs, groundcover, perennials, annual grasses and wildflowers. Trees include Red Maple, fruitless olive, Western Redbud, Valley Oak, Interior Live Oak, Italian Cypress, and Chinese Pistache. Shrubs and perennial plants include manzanita, rockrose, California lilac, lavender and California Buckwheat. Landscaping and irrigation plans would be approved by the County's Water Agency, prior to the issuance of building permits for the project.

A retaining wall is proposed around the perimeter of the developed portion of the site. This retaining wall would range in height from two-feet to 38-feet and would be designed as a "rock" wall. The maximum height of a single rock wall for this project is 12-feet. Therefore, along the steeper portions of the site on the north and south sides, the retaining walls would be tiered to achieve retaining heights in excess of 12 feet. The project's preliminary grading and drainage plan is shown on Figure 3-11.

Lighting

Limited safety and security lighting and indirect shielded lighting would be provided on the buildings, parking areas, project entry, and walkways where appropriate. Outdoor lighting would be in conformance with Chapter 130.34 of the County's Zoning Code.

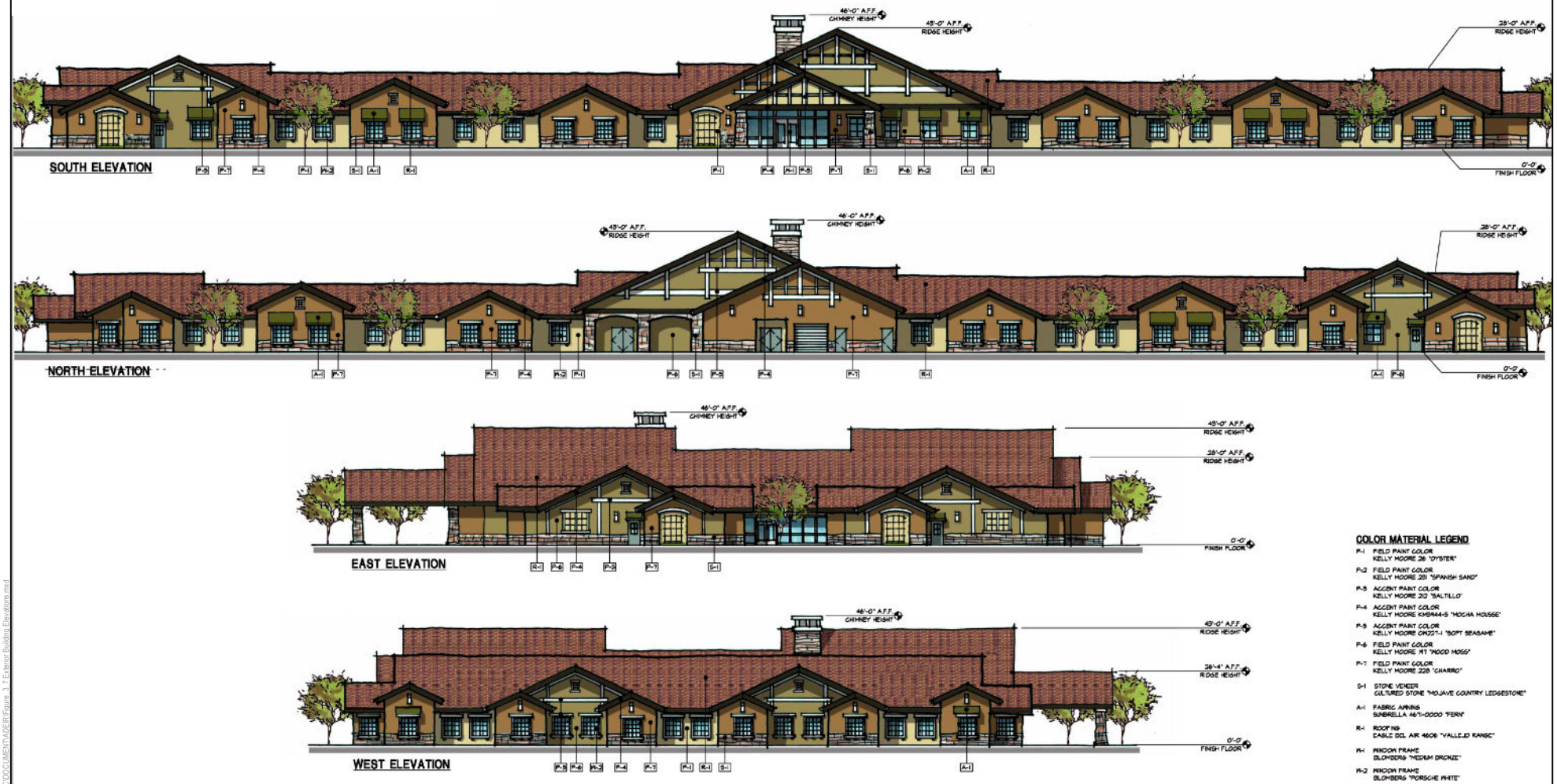
Circulation, Infrastructure Improvements and Solid Waste Disposal

Primary access to the project site would be from Ponte Morino Drive that also provides access to the existing congregate care facility. Internal project circulation would be provided around the perimeter of the site with a private emergency access only road (approximately 20 feet wide) that would connect to Valerio Drive in the northwest portion of the site. On-site sidewalks would provide pedestrian circulation throughout the site to serve residents and visitors.

Water and wastewater services in the region of the proposed project are provided by the El Dorado Irrigation District (EID). The proposed project would include new water, sewer, and storm drain infrastructure on site to serve the residential development designed in compliance with the County's specifications. The project's on-site water, sewer, and storm drain lines are proposed to be located within the road/driveway rights-of-way within the project site. EID has indicated adequate water supply and sewer treatment and pipeline capacity is available to serve the project (EID, 2016). Figure 3-12 shows the project's preliminary Water and Sewer Plan.

The project includes a connection to an existing 16-inch water line in in Ponte Morino Drive and a 12-inch water line near the northern boundary of the project site, if needed. A series of 12-inch water lines would provide service to the buildings.

The on-site sewer lines for the project would tie into an existing 8-inch sewer line within Ponte Morino Drive. Individual service would be provided to each building via 8-inch sewer lines. A new 8-inch EID-maintained sewer main would be constructed as part of the project connecting to the existing sewer main in Ponte Morino Drive. New sewer services for each parcel would connect to this new 8-inch EID sewer main.



SOURCE: Borges Architectual Group, 2014

FIGURE 3-7

Exterior Building Elevations

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Ponte Palmero

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COLOR MATERIAL LEGEND

- P-1 FIELD PAINT COLOR KELLY MOORE 26 "OYSTER"
- P-2 FIELD PAINT COLOR KELLY MOORE 231 "SPANISH SAND"
- P-3 ACCENT PAINT COLOR KELLY MOORE 212 "SALTILLO"
- P-4 ACCENT PAINT COLOR KELLY MOORE KM3444-5 "MOCHA MOUSSE"
- P-5 ACCENT PAINT COLOR KELLY MOORE KM221-1 "SOFT SEASAME"
- P-6 FIELD PAINT COLOR KELLY MOORE 117 "MOOD MOSS"
- P-7 FIELD PAINT COLOR KELLY MOORE 228 "CHARRO"
- S-1 STONE VENEER CULTURED STONE "MOJAVE COUNTRY LEDGESTONE"
- A-1 FABRIC AWNING SUNBRELLA 4611-0000 "FERN"
- R-1 ROOFING EAGLE BEL AIR 4606 "VALLEJO RANGE"
- M-1 WINDOW FRAME BLOMBERG "MEDIUM BRONZE"
- M-2 WINDOW FRAME BLOMBERG "PORSCHE WHITE"

SOURCE: Borges Architectual Group, 2014

FIGURE 3-8

Club House Building Exterior

Ponte Palmero

17-1209 E 46 of 271

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NORTH ELEVATION

SOUTH ELEVATION

EAST ELEVATION

WEST ELEVATION

INTERIOR ELEVATION

COLOR MATERIAL LEGEND

P-1 FIELD PAINT COLOR
KELLY MOORE 36 "OYSTER"

P-2 FIELD PAINT COLOR
KELLY MOORE 231 "SPANISH SAND"

P-3 ACCENT PAINT COLOR
KELLY MOORE 312 "SALTILLO"

P-4 ACCENT PAINT COLOR
KELLY MOORE KM5944-5 "MOCHA MOUSSE"

P-5 ACCENT PAINT COLOR
KELLY MOORE KM5221-1 "SOFT SEASAME"

P-6 FIELD PAINT COLOR
KELLY MOORE 197 "WOOD MOSS"

P-7 FIELD PAINT COLOR
KELLY MOORE 228 "CHARRO"

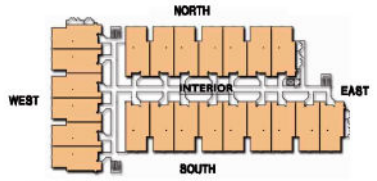
S-1 STONE VENEER
CULTURED STONE "MOJAVE COUNTRY LEDGESTONE"

A-1 FABRIC AWNING
SUNBRELLA 4671-0000 "FERN"

R-1 ROOFING
EAGLE BEL AIR 4606 "VALLEJO RANGE"

W-1 WINDOW FRAME
BLOMBERG "MEDIUM BRONZE"

W-2 WINDOW FRAME
BLOMBERG "PORSCHE WHITE"



KEY PLAN

Date: 1/5/2017 - Last saved by: cbattle - Path: Z:\Projects\912901\MAP\DOC\DOCUMENTA\DER\Figure_3-9 Community Care Facility Building Elevations.mxd

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SOURCE: Borges Architectual Group, 2014

FIGURE 3-9

Community Care Facility Building Elevations

Ponte Palmero

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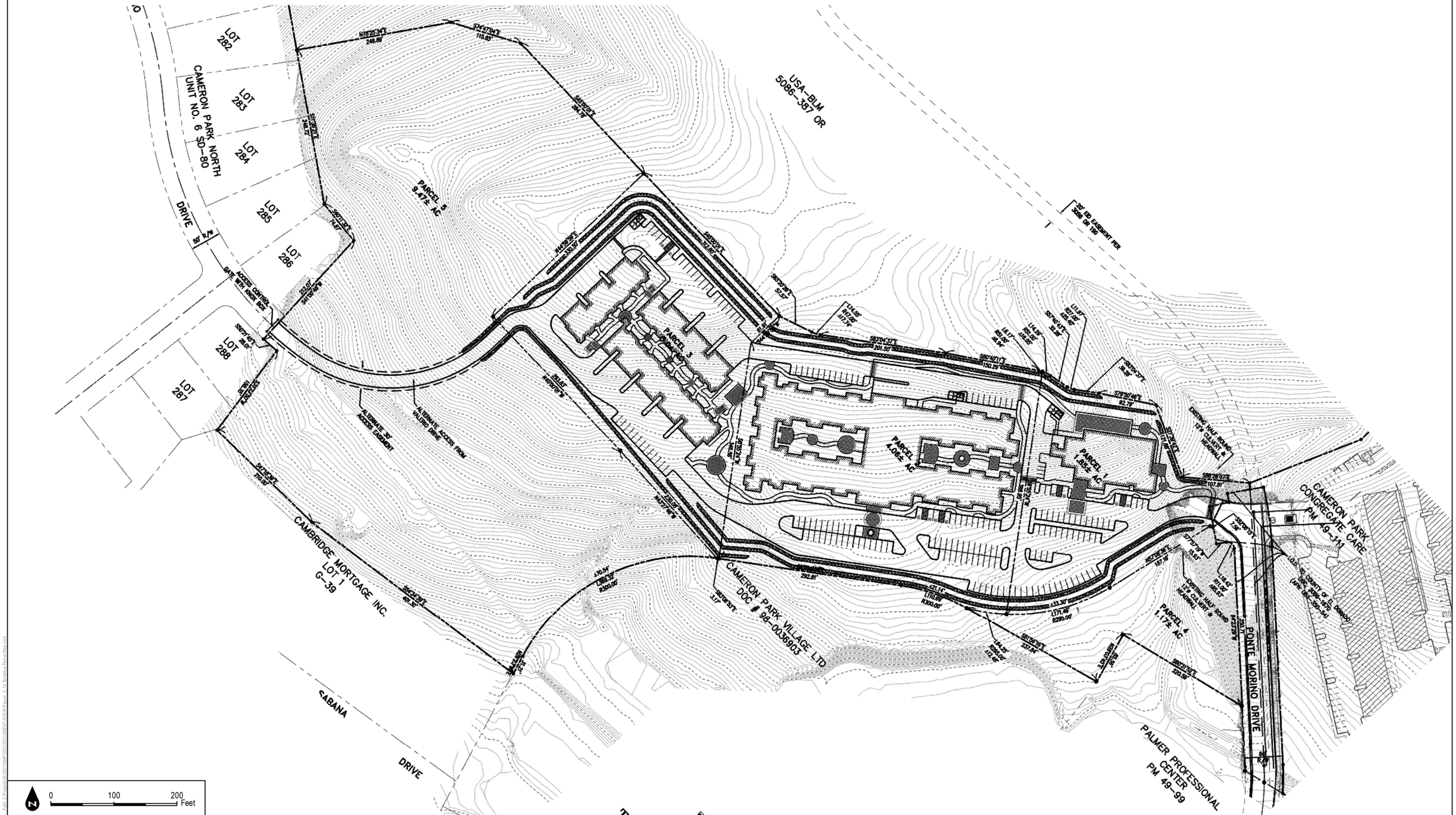

SOURCE: Cartwrite Engineers, 2016

FIGURE 3-10

Tentative Parcel Map

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Ponte Palmero

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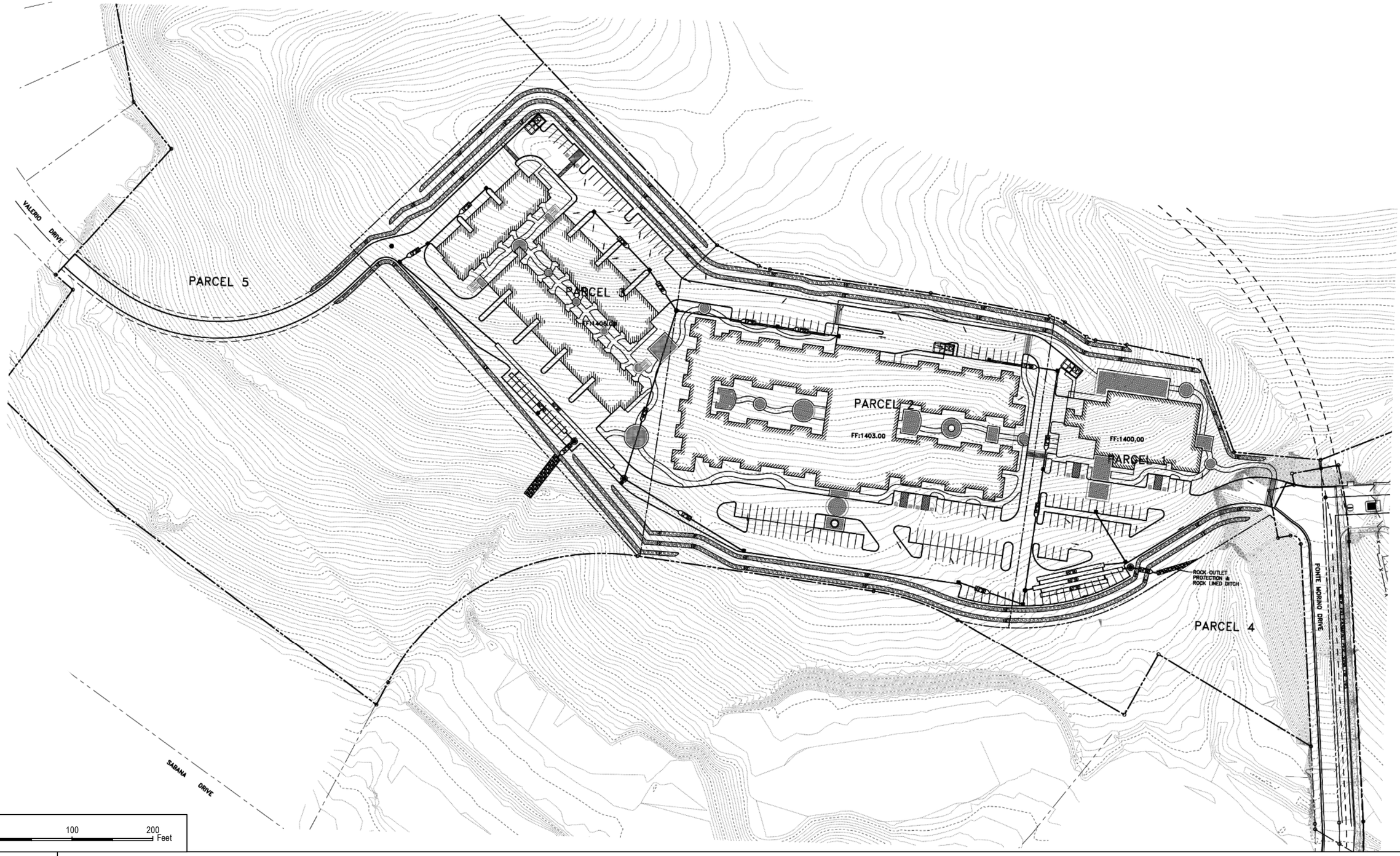

SOURCE: Cartwrite Engineers, 2016

FIGURE 3-11

Preliminary Grading and Drainage Plan

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Ponte Palmero

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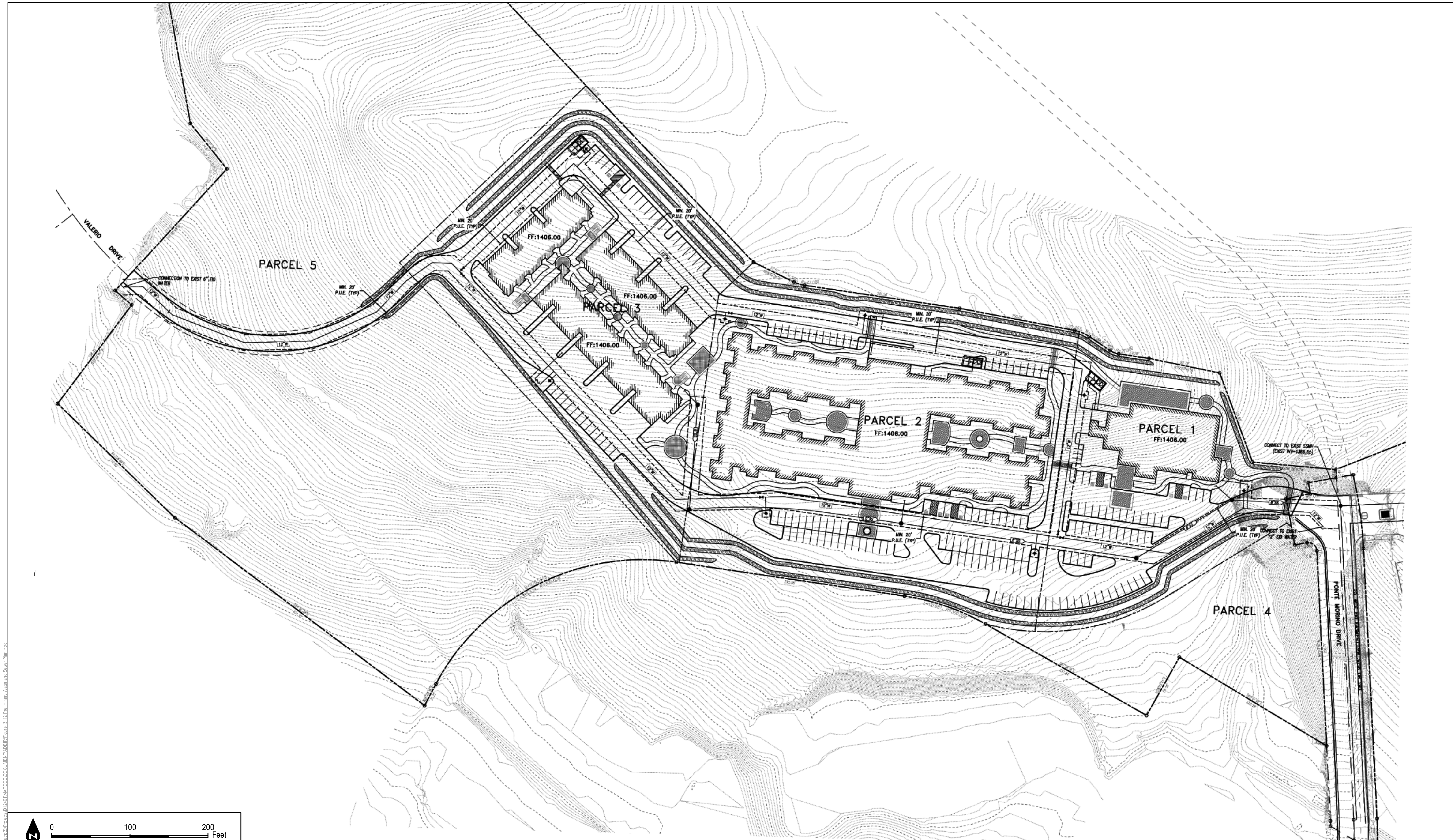

SOURCE: Cartwrite Engineers, 2016

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Ponte Palmero

FIGURE 3-12

Preliminary Water and Sewer Plan

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The project's storm drain infrastructure would be designed to current County standards and would include post-construction storm water design elements per the County's Site Design Measures Manual for El Dorado County Post-Construction Storm Water Requirements. The project would be a "regulated project" pursuant to the County's MS4 Permit and the project applicant is required to address storm water runoff both during construction and after construction occurs. The proposed project is subject to the following NDPES Permit requirements:

- Implement and direct water to one or more Site Design Measures. Site Design Measures include:
    - Rooftop and Impervious Area Disconnection, Porous Pavement, Rain Barrels and Cisterns, Vegetated Swales, Bioretention Facilities, and Green Roofs.
- Following implementation of the Site Design Measures, remaining runoff from the 85th percentile 24-hour storm event (~1 inch of water) shall be directed to one or more Storm Water Treatment and Baseline Hydromodification Measures using volumetric and/or flow-based sizing criteria
- Identify potential sources of pollutants and implement corresponding source control measures.
- Provide ongoing maintenance of water retention and treatment facilities.

Project construction would disturb more than one acre; therefore, the project applicant is required to obtain a Construction General Permit, which pertains to pollution from grading and project construction. Compliance with the permit requires the project applicant to file a Notice of Intent with the State Water Resources Control Board (SWRCB) and prepare a Stormwater Pollution Prevention Plan (SWPPP) prior to construction. The SWPPP would incorporate best management practices (BMPs) in order to prevent, or reduce to the greatest feasible extent, adverse impacts to water quality from erosion and sedimentation. In addition, the project would be required to comply with the County's Stormwater Quality Ordinance No. 5022, which requires specific BMPs be employed during construction to minimize pollutants entering any water sources. A Preliminary Drainage Report prepared for the project further describes the measures envisioned and is included as an Appendix to the Initial Study provided in Appendix B.

Most residents and businesses in western El Dorado County are served by Waste Management, Inc. (also known as El Dorado Disposal Service, Inc.). Solid waste generated by the project would be taken to the materials recovery facility (MRF) (or transfer station) at Diamond Springs. From the MRF, unrecyclable solid waste is taken to Forward Landfill in Stockton, and the Sacramento County Landfill (Keifer Landfill).

The project also includes natural gas, electrical, cable television, and telephone to serve the project site. Each of these utilities would connect to existing infrastructure along Ponte Morino Drive.

No off-site improvements would be required for the project.

Construction Details, Phasing and Timeline

If approved, project construction is anticipated to commence in Spring 2017. The first phase of construction would include site clearing, grading, and trenching for utilities. This is estimated to take three months to complete. Building construction would begin after site clearing and is estimated to take eight to nine months to complete the entire project, including landscaping. Construction staging and parking for construction workers would be provided on-site within the area to be developed.

Grading would balance the soils on site and would not require the export or import of soils. In conjunction with the issuance of a Building Permit, the project applicant/contractor would be required to prepare a debris recycling acknowledgement, per Chapter 8.43 of the County's Code of Ordinances that requires preparation of a debris recycling report that validates that the permittee either reduced, recycled, and/or reused on site at a minimum 50% by weight of the total debris generated by the project.

3.4 DISCRETIONARY ACTIONS AND USE OF THIS EIR

As part of the approval process, the El Dorado County Board of Supervisors would be required to exercise their independent review and discretion in determining whether to certify the EIR as adequate under CEQA and approve the project. The project approvals required from the County for this project include the following:

- General Plan Amendment to re-designate Multifamily Residential (MFR) and High Density Residential (HDR) to Commercial (C) (Parcels 1, 2, and 3: 9.11 acres) and Open Space (OS) (Parcels 4 and 5: 10.76 acres) land use designations;
- Zone change from Community Commercial-Planned Development (CC-PD), Single Unit Residential – Planned Development (R1-PD), and Multi-Unit-Planned Development (RM-PD) to Limited Commercial – Planned Development (CL-PD) (Parcels 1, 2, and 3: 9.11 acres) and Open Space-Planned Development (OS-PD) (Parcels 4 and 5: 10.76 acres) zone districts;
- Tentative parcel map creating 5 lots ranging in size from 1.17 acres to 9.47 acres from a 19.87 acre site; and a
- Development Plan for proposed Phase 2 of the Ponte Palmero retirement village.

Responsible and Trustee Agencies

The EIR prepared for the proposed project would be used by responsible agencies and trustee agencies that may have some approval authority over the proposed project (i.e., to issue a permit). The project applicant would obtain all permits, as required by law. The following

agencies have been identified as having potential discretionary authority over approval of certain project elements, or alternatively, may serve in a ministerial capacity:

- El Dorado Irrigation District
- California Department of Fish and Wildlife
- Central Valley Regional Water Quality Control Board; and
- El Dorado County Air Quality Management District.

3.5 REFERENCES

El Dorado County. 2004. El Dorado County General Plan, El Dorado County Planning Department, Placerville, California. Adopted July 19, 2004. Last amended December 15, 2015.

US Fish and Wildlife Service (USFWS). 2002. Recovery Plan for Gabbro Soil Plants of the Central Sierra Nevada Foothills. Portland, Oregon. 2002.

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CHAPTER 4
ENVIRONMENTAL ANALYSIS

4.0.1 SCOPE OF THE EIR ANALYSIS

This chapter of the Draft Environmental Impact Report (EIR) discusses the environmental and regulatory setting, impacts, and mitigation measures for each of the following technical issue areas (Sections 4.1 through 4.7):

4.1 Aesthetics
4.2 Air Quality
4.3 Biological Resources
4.4 Greenhouse Gas Emissions
4.5 Land Use and Planning
4.6 Noise
4.7 Transportation and Circulation.

The Initial Study prepared for the project (see Appendix B), determined that a number of technical issue areas would not result in any impacts; therefore, these issue areas are not included in the EIR. Please see the Initial Study for additional information.

4.0.2 ENVIRONMENTAL SETTING

According to subdivision (a) of Section 15125 of the California Environmental Quality Act (CEQA) Guidelines, an EIR must include a description of the existing physical environmental condition in the vicinity of the project as they exist at the time when the Notice of Preparation (NOP) is published. This "environmental setting" will normally constitute the "baseline condition" against which project-related impacts are compared. Therefore, the baseline conditions for this EIR, unless noted otherwise, are based on conditions that existed in August 2015, when the NOP was published. The CEQA Guidelines recognize that the data for establishing an environmental baseline cannot be rigid. Because physical environmental conditions may vary over a range of time, the use of environmental baselines that differ from the date of the NOP is reasonable and appropriate in certain circumstances when doing so results in a more accurate or conservative environmental analysis.

For analytical purposes, project-specific impacts associated with implementation of the proposed Ponte Palmero Project (proposed project) are compared against the existing conditions at the time the NOP was published (August 2015). The EIR analysis also includes consideration of cumulative impacts, and whether the proposed project would cause a significant cumulative impact to result, or whether the project's incremental contribution to an existing significant cumulative impact would be considerable, as set forth in CEQA Guidelines section 15130.

In determining the level of significance of environmental impacts associated with the proposed project, the analysis in this EIR assumes that the proposed project would comply with relevant federal, state, and regional/local laws and regulations, County General Plan policies, ordinances, and other adopted County documents, unless otherwise noted. Therefore, such mandatory policies, ordinances, and standards are not identified as mitigation measures, but rather are discussed as part of the "Regulatory Setting" governing the proposed project.

4.0.3 SECTION FORMAT

Each technical section contained in Chapter 4 begins with a description of the project's **environmental setting** followed by a description of the **regulatory setting** and **impact analysis** as it pertains to a particular issue.

The **environmental setting** describes the conditions as they exist on the project site relevant to the particular issue area. In some cases this includes a description of the underlying designation of the site as it pertains to the soil types, land use capability, etc.

The **regulatory setting** provides a summary of applicable federal, state, and local regulations, plans, policies, and laws that are relevant to each issue area. The regulatory setting description is followed by a discussion of the impact analysis with project-level impacts evaluated first followed by an analysis of the cumulative impacts. This section addresses what the project's incremental contribution to cumulatively significant impacts would be and identifies mitigation measures if required. The impact portion of each section includes an impact statement, prefaced by a number for ease of identification. An explanation of each impact and an analysis of its significance follow each impact statement. All **mitigation measures** are identified at the end of each section and include the impact number so it is clear which impact the mitigation is referencing. The degree to which the identified mitigation measure(s) would reduce the impact is also described. Compliance with applicable laws, policies, and County regulations is assumed and will be identified in the impact analysis. In many cases, compliance with applicable laws, policies, or regulations would reduce the significance of an impact.

An example of an impact statement is shown below.

> **4.1-1: Implementation of the proposed project may degrade the existing visual character or quality of the site and the surrounding area. The impact is less than significant.**
>
> A discussion of potential impacts of the proposed project is presented in paragraph form. The project-specific impacts associated with construction and operation of the project are evaluated and compared to the threshold of significance for the particular impact. The analysis discusses the applicable local, state, and federal laws and regulations that would reduce impacts, and

assumes that the project would comply with applicable laws, ordinances, and regulations, and that the project applicant would obtain all necessary permits and comply with all required conditions of those permits. In many instances, the actions that are necessary to reduce a project impact are already required by existing laws or requirements. The impact analysis concludes with a determination of the impact's significance in **bold type** (e.g., **significant impact/significant and unavoidable impact/potentially significant impact/less-than-significant impact/results in no impact)**.

4.0.4 CUMULATIVE ANALYSIS

An analysis of cumulative impacts follows the evaluation of project impacts in each section in Chapter 4. As defined in CEQA Guidelines, Section 15355, cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project together with other past, present, and reasonably foreseeable projects causing related impacts. An introductory statement that defines the cumulative analysis methodology and the cumulative context being analyzed for respective sections (e.g., buildout of the County's General Plan, development within the Sacramento Valley Air Basin) is included under the "Cumulative Analysis" discussion. In some instances, a project-specific impact may be considered less than significant, but would be considered potentially significant in combination with other development within the surrounding area. Or, in some instances, a potentially significant impact could result on a project level, but would not result in a cumulatively considerable impact. The cumulative impacts analysis is presented in the same format as the impacts section, shown above.

4.0.5 MITIGATION MEASURES

At the end of each section is a discussion of the applicable mitigation measures identified to avoid or reduce the significance of an impact.

In Chapter 4, this section includes a statement indicating whether the mitigation measure would reduce the impact to a **less-than-significant level**. A discussion of how the mitigation would reduce the impact is included before the mitigation measure.

Mitigation measures, if applicable, are numbered and presented in the following format.

4.X-X: Statement of what, if any, mitigation measures are required.

Note that CEQA Guidelines, Section 15370, defines mitigation as:

- Avoiding the impact altogether by not taking a certain action or parts of an action;
- Minimizing impacts by limiting the degree of magnitude of the action and its implementation;
- Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and
- Compensating for the impact by replacing or providing substitute resources or environments.

In addition, provided there is a "reasonable plan for mitigation" and contributions are "sufficiently tied to the actual mitigation" of the project's impacts, a commitment to contribute a fair share to such a program discharges an agency's mitigation duty under CEQA. CEQA Guidelines, Section 15130, subd. (a)(3) states that recognizing that a project's contribution to a cumulative impact may be less than cumulatively considerable where "the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact".

References used to prepare the analysis are sourced at the end of each chapter and section of the EIR.

4.0.6 TERMINOLOGY USED IN THE EIR

This Draft EIR uses the following terminology to describe environmental effects of the proposed project:

- **Thresholds of Significance:** A set of criteria used by the lead agency to determine at what level or "threshold" an impact would be considered significant. Thresholds of significance used in this EIR include those set forth in CEQA Guidelines Section 15065 (Mandatory Findings of Significance) and those derived from questions set forth in Appendix G to the CEQA Guidelines; criteria based on regulatory standards of local, state, and federal agencies; and criteria based on goals and policies identified in the 2004 El Dorado County General Plan. In fashioning criteria based on these sources, County staff have also relied on their own professional judgment and experience in some instances. In determining the level of significance, the analysis assumes that the proposed project would comply with relevant federal, state, and local regulations and ordinances.
- **Less-than-Significant Impact:** A project impact is considered less than significant when it does not reach the standard of significance, indicating that there would be no substantial change in the environment. No mitigation is required for less-than-significant impacts.

- **Potentially Significant Impact:** A potentially significant impact is an environmental effect that could cause a substantial adverse change in the environment; however, additional information is needed regarding the extent of the impact to make the determination of significance. For CEQA purposes, a potentially significant impact is treated as if it were a significant impact.
- **Significant Impact:** A project impact is considered significant if it results in a substantial adverse change in the physical conditions of the environment. Significant impacts are identified by the evaluation of project effects in the context of specified significance criteria. When available, potentially feasible mitigation measures and/or project alternatives are identified to reduce these effects to the environment.
- **Cumulative Impacts:** According to CEQA, "cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines, Section 15355). CEQA requires that cumulative impacts be discussed when the "project's incremental effect is cumulatively considerable" (CEQA Guidelines, Section 15130 (a)).

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4.1 AESTHETICS

4.1.1 Introduction

This section of the Environmental Impact Report (EIR) evaluates the potential changes to the existing visual characteristics of the project site and vicinity that could result from future development of the proposed Ponte Palmero Project (proposed project). The analysis focuses on the change in visual character, visual compatibility with surrounding uses, and the potential for sensitive receptors (e.g., adjacent residential land uses) to be disturbed by light generated by proposed new uses.

No comments regarding aesthetics or visual quality were received in response to the Notice of Preparation (NOP). A copy of the NOP and comments received is included in Appendix A.

4.1.2 Environmental Setting

This section describes the existing setting in the project area and the built environment. Photographs are used to illustrate views and visual characteristics included in this discussion. Photographs were taken during a site visit in September 2015. The points from which these photographs were taken are shown on Figure 4.1-1. Views from and of the project site from specific locations are discussed in more detail below. Due to the terrain and lack of public access within the Pine Hill Preserve no photographs are available from the northern portion of the site.

Existing Site

The project site is vacant and undeveloped. The topography of the project ranges from a flat, previously-graded area at the southeastern edge of the site to the remainder of the site which ranges from gentle to moderately steep slopes that generally trend to the southwest. Elevations range from approximately 1,430 feet above mean sea level (msl) in the western portion to approximately 1,345 feet above msl along the eastern edge.

Existing vegetation in the previously graded area consists of ruderal, mostly nonnative species such as rose clover, hairy vetch, Italian ryegrass, and Spanish clover. The remainder of the site is dominated by shrubs and mixed chaparral including white leaf manzanita and chamise.

Surrounding development includes the Cameron Park Congregate Care facility located to the southeast, a small commercial center (Palmer Professional Center), apartments (Cameron Park Villages), Eskaton Lodge, and undeveloped land located to the south and southwest. The project's proposed open space surrounds the proposed area of development along the southwestern boundary of the site essentially limiting views from or of the project site from those areas. The Pine Hill Preserve is adjacent to the northern boundary of the site.

Views of the Project Site from the Surrounding Area

Only a few locations in the surrounding area have views into the project site. In part, this is due to the fact that the project site slopes towards the north and northwest and as noted previously, the Pine Hill Preserve surrounds the proposed area of development along the northern boundary of the site. Open space proposed as part of the project forms the southwestern boundary of the site. Views of the project site from developed areas to the west, south, and southeast are also blocked in some areas due to the dense barrier of manzanita bushes. Other views primarily from the west include an open field surrounded by trees in the background. Views from the adjacent congregate care facility are the most unobstructed, as shown in Figures 4.1-2 through 4.1-5 which depict views of the site and the existing visual characteristics of the area.

Views from the Project Site

Views from the project site are also limited due to the dense covering of manzanita bushes and sloped topography. Views looking to the southeast are the most unobstructed and include the backside of the congregate care buildings and on-site landscaping. Views looking to the south are somewhat limited due to on-site vegetation, but overhead power lines and the roofs of the commercial buildings are visible in the middle ground. Views looking to the north and west show only manzanita bushes and vegetation within the Pine Hill Preserve. The residential neighborhoods to the northwest are not visible due to the existing vegetation in the preserve area. Figures 4.1-2 through 4.1-5 illustrate views from the project site.

Existing Sources of Light

Nighttime lighting is necessary to provide and maintain safe, secure, and attractive environments. Light that falls beyond the intended area of illumination is referred to as “light trespass.” Types of light trespass include spillover light and glare. Spillover light, which is light that illuminates surfaces beyond the intended area, is typically caused by artificial lighting sources, such as from building security lighting, signs, parking lot lights, roadway lights, and stadium lights on playing fields. Spillover light can adversely affect light-sensitive uses, such as residential neighborhoods at nighttime. Because light dissipates as it moves farther from its source, the intensity of the lighting source is often increased to compensate for dissipating light, which can increase the amount of light that illuminates adjacent uses. The type of light fixture determines the extent to which light will spill over onto adjacent properties and/or be visible from far away. Modern, energy-efficient fixtures that face downward, such as cutoff-type fixtures and shielded light fixtures, are less obtrusive than light fixtures that have been used in the past.

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SOURCE: Bing Maps, 2015

Ponte Palmero

FIGURE 4.1-1
Viewpoint Locations

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Photo 1: View of the Project Site Looking West

Photo 2: View from the Project Site Looking East

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Photo 3: View from the Project Site looking East of Ponte Palmero Phase I

Photo 4: View from the Project Site looking South of the Palmer Professional Center

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Photo 5: View of the Project Site from the Parking Lot of Residences to the South

Photo 6: View of the Project Site from Sidewalk of Residences to the South

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FIGURE 4.1-4

Project Site from Existing Residences

Ponte Palmero

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Photo 7: View of the Project Site from Palmer Professional Center to the South

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FIGURE 4.1-5

Project Site from Existing Businesses

Ponte Palmero

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As discussed previously, the project site consists of undeveloped land. There are no sources of light currently on the project site.

Adjacent uses, such as the existing residential neighborhood to the south and the congregate care facility to the southeast, as well as commercial development to the south and southeast of the project site, contain various lighting sources for building security and parking lots as well as minimal street lighting for nighttime safety. Lights from the residential neighborhood to the northwest are not visible due to distance, topography, and vegetation.

4.1.3 Regulatory Setting

Federal Regulations

There are no specific federal or state regulations pertaining to visual quality or aesthetics.

State Regulations

The California State Department of Transportation (Caltrans) identifies a state system of eligible and designated scenic highways that, if designated, are subject to various controls intended to preserve their scenic quality. There are no state-eligible or state-designated scenic highways within the viewshed of the proposed project.

Local Regulations

El Dorado County General Plan

The 2004 El Dorado County General Plan (El Dorado County 2015) contains goals and policies for enhancement and protection of visual quality. The following policies from the Land Use Element are applicable to the visual characteristics of new development.

Goal 2.3 Natural Landscape Features. Maintain the characteristic natural landscape features unique to each area of the County.

Objective 2.3.1: Topography and Native Vegetation. Provide for the retention of distinct topographical features and conservation of the native vegetation of the County.

> **Policy 2.3.1.1** The County shall continue to enforce the tree protection provisions in the Grading Erosion and Sediment Control Ordinance and utilize the hillside road standards.
>
> **Policy 2.3.1.2** The Zoning Ordinance shall include consideration of a standard for parking lot shading and provision of street trees in all new development projects.

Policy 2.3.2.1 Disturbance of slopes thirty (30) percent or greater shall be discouraged to minimize the visual impacts of grading and vegetation removal.

Goal 2.8: Lighting. Elimination of high intensity lighting and glare consistent with prudent safety practices.

Policy 2.8.1.1 Development shall limit excess nighttime light and glare from parking area lighting, signage, and buildings. Consideration will be given to design features, namely directional shielding for street lighting, parking lot lighting, sport field lighting, and other significant light sources, that could reduce effects from nighttime lighting. In addition, consideration will be given to the use of automatic shutoffs or motion sensors for lighting features in rural areas to further reduce excess nighttime light.

Code of Ordinances

The County's Zoning Ordinance includes a provision for outdoor lighting (130.14.170) that specifies that any commercial project is required to submit plans for outdoor lighting and all outdoor lighting is required to meet the following standards:

1. All outdoor lighting, including residential outdoor lighting, shall be hooded or screened as to direct the source of light downward and focus onto the property from which it originates and shall not negatively impact adjacent properties or directly reflect upon any adjacent residential property.
2. Parking lot and other security lighting shall be top and side shielded to prevent the light pattern from shining onto adjacent property or roadways, excluding lights used for illumination of public roads (see diagram attached to Ordinance No. 4564).
3. External lights used to illuminate a sign or the side of a building or wall shall be shielded to prevent the light from shining off of the surface intended to be illuminated.
4. Lights that shine onto a road in a manner which causes excessive glare and may be considered to be a traffic hazard shall be prohibited.
5. Outdoor floodlights shall not project above 20 degrees below the horizontal plane (see diagram attached to Ordinance No. 4564).

Community Design Guide

The County's Community Design Guide (El Dorado County 1981), provides general guidance on site planning and design, building design, landscaping, use of screening and buffering between land uses, signage, and parking.

4.1.4 Impacts

Methods of Analysis

The value attached to changes in visual character is largely subjective. This EIR does not assign a judgment of "good" or "bad" to a proposed change; rather, it identifies any "substantial adverse effect," as defined below, as a significant environmental impact.

A description of the project site and the surrounding area is derived from a site visit in September 2015 and photographs taken of the site and the surrounding area. The County's General Plan was reviewed to determine what visual elements have been deemed valuable by the community. The impact analysis focuses on the manner in which development could alter the visual elements or features that exist in or near the project area.

This analysis assumes that development of the project site would comply with the County's General Plan goals and policies, and Community Design standards; therefore, such policies and standards are not specifically identified as mitigation.

Issues Addressed in the Initial Study

The project site is not defined by the County as a scenic resource and does not contain any natural or manmade elements that could qualify as scenic resources. In addition, the project site is not considered part of a scenic vista. The site does not contain any elements that would qualify the site as being a scenic vista. In addition, glare is not addressed in this section because due to the location of the proposed buildings and the building materials, the project would not create a source of glare within the project area. Therefore, these issues are not addressed in the impact analysis. Please see the Initial Study included in Appendix B of this Draft EIR for more information.

Thresholds of Significance

Consistent with Appendix G of the CEQA Guidelines, the County's General Plan, and professional judgment, a significant impact would occur if development of the proposed project would do any of the following:

- Substantially degrade the existing visual character or quality of the site and its surroundings; or
- Create a new source of substantial light that would adversely affect nighttime views in the area.

Impacts and Mitigation Measures

4.1-1: Implementation of the proposed project may degrade the existing visual character or quality of the site and the surrounding area. This would be a less-than-significant impact.

Development of the project site would convert approximately 9.11 acres of the approximately 19.8 acre site from undeveloped land to urban uses. The remaining acres would remain undeveloped. As discussed previously, views of the project site vary depending on location and topography. The perimeter road around the adjacent congregate care site and the rear of the existing buildings would have the most direct views of the proposed project looking west and northwest, although views would be partially obscured by trees and vegetation once the project was completed and the vegetation matures. The project would introduce urban-style development onto a site that is currently undeveloped, but is surrounded by a mix of existing development to the south, west, and southeast.

The project proposes to construct three buildings that would be no taller than two stories and would be designed to complement the existing congregate care facility, as shown in Figures 3-4 through 3-6 in Chapter 3, Project Description. The new buildings would be located on 8.82 acres in the southeastern portion of the site, immediately adjacent to Ponte Marino Drive, as shown in Figure 3-3 in Chapter 3, Project Description (the 0.29 acre emergency evacuation road would be located further to the west). The most direct views of the site would be limited to cars driving north on Ponte Marino Drive to access the Ponte Palermo project site and from the perimeter road and backside of the congregate care buildings looking west and northwest. In addition, the backside of the buildings located south of the project site (Palmer Professional Center and Cameron Park Villages), would also have limited views of the project site. The project includes retaining walls around the perimeter of the site that may be the most visible element along the southern boundary of the site due to the steeper slopes in this area.

Project construction would require mass grading of the site. Because the site does not contain any mature trees, scenic vegetation, or structures, grading would not significantly change the visual character of the site.

The project has been designed consistent with the County's General Plan and is proposing development that is consistent with the scale and density of surrounding uses. The project site does not contain a high level of existing visual quality because it does not contain any scenic resources. The change in visual character due to implementation of the proposed project would result in a **less-than-significant impact.**

4.1-2: Implementation of the proposed project may create new sources of light that could adversely affect nighttime views in the area. This would be a less-than-significant impact.

The majority of the project site is undeveloped and currently does not contain any source of lighting. Ambient nighttime light emanates from the nearby neighborhoods and commercial areas to the south, west, and southeast. Adjacent neighborhoods have interior and exterior lighting on individual homes, parking lot lighting at commercial uses, and lighting at the adjacent congregate care site.

The proposed project would introduce new sources of light into the area, including security lighting, building lights, landscape lighting, car headlights, and light emitted from the interior of the buildings through windows. Views into the project site at night would be altered by these sources of artificial light. In addition, lighting introduced by the proposed project could be an annoyance if it spills into backyards or homes, because it could interfere with sleeping or other activities. The project would also contribute additional cars to local roadways during the nighttime hours, but traffic on local roads would not increase significantly relative to what exists today. Within the project site, light and glare from car headlights would be limited to people parking and driving along internal roadways within the project.

As discussed previously, project lighting would be shielded and focused downward to avoid spillover light and glare in compliance with County policy 2.8.1.1, which requires new development to limit excess nighttime light and glare from parking area lighting, signage, and buildings. In addition, the County's Zoning Ordinance requires outdoor lighting "shall be hooded or screened as to direct the source of light downward and focus onto the property from which it originates and shall not negatively impact adjacent properties or directly reflect upon any adjacent residential property" (130.14.170).

The proposed landscaping throughout the site and along the site perimeter would also serve to shield light from the proposed buildings and from vehicles traveling along internal roadways. Light fixtures that are screened to direct light onto specific areas and prevent it from spilling over onto areas where it is not required would minimize the contribution of light. For example, with cutoff fixtures, a security light can be directed entirely toward the parking area and cut off at the fence line. Potential impacts related to spillover lighting would be reduced to a less-than-significant level by complying with Policy 2.8.1.1 and the County's Zoning Ordinance which would require lighting to be shielded. Compliance with these requirements would reduce the impact on nighttime views and light associated with the project that could be disruptive to adjacent areas to a **less-than-significant level.**

4.1.5 Cumulative Impacts

The geographic scope of the cumulative impact analysis varies depending on the specific environmental issue area being analyzed. The scope of the cumulative impact analysis for aesthetics includes buildout of the Shingle Springs and Cameron Park Region of the General Plan. This cumulative impact analyses does not rely on any list of specific pending, reasonably foreseeable development proposals in the general vicinity of the proposed project.

The cumulative context for light would be other development in the surrounding area and within the Shingle Springs/Cameron Park Region that could affect the same area as that affected by project-generated light.

As discussed previously, the proposed project would not alter scenic vistas or resources or contribute glare because there are no designated scenic vistas or scenic resources in the area. The cumulative change in scenic vistas or scenic resources is a local effect of the project and not cumulatively considerable because there are no scenic vistas or resources in the immediate project vicinity. Therefore, these issues are not discussed in the cumulative analysis.

4.1-3: The proposed project could contribute to cumulative changes in the existing visual character of the area. This would be a less-than-significant impact.

The project site is located in unincorporated El Dorado County, adjacent to developed uses to the south, southeast and west with an undeveloped preserve area (Pine Hill Preserve) located to the north.

As discussed under Impact 4.1-1, the proposed project would alter the existing visual character of the project site by developing buildings on land that is currently undeveloped. However, the change in visual character is not considered a significant impact. The General Plan EIR found the change in visual character within the western portion of the county could be more dispersed and could substantially reduce the amount and quality of contiguous open space and scenic views and resources in the County. This was determined to be a significant impact. The primary view shed that would be affected by the proposed project is the view of the site from the adjacent congregate care facility, which is the most unobstructed. No public view sheds would be affected and the project site is not a key element in other views within the project area. The project's contribution to cumulative visual changes in the area would not be considerable and the project's impact would be **less than significant.**

4.1-4: The proposed project could contribute to a cumulative increase in nighttime light in the area. This would be a less-than-significant impact.

Current development within the surrounding area has introduced artificial lighting into the area, including building lighting and street lighting from adjacent residential and commercial uses to the east, southeast and west, as well as from car headlights along local roadways in the area. Most of the past and present development has been designed to minimize lighting impacts. Future development would also be required to comply with County requirements that require new projects to minimize obtrusive light by limiting outdoor lighting that is misdirected, excessive, or unnecessary (Policy 2.8.1.1). The cumulative light impact of the proposed project, together with future buildout of the Shingle Springs Region, is less than significant.

As discussed in Impact 4.1-2, development of the proposed project would introduce new sources of light. The proposed project would contribute to the existing ambient light in the area by introducing exterior building lights, interior-building light emitted through the windows, street lights, and car headlights. However, project light sources would be shielded and downward focus to minimize any spillover light to the south, east, or west. The project's incremental contribution to the increase in light would not be considerable, because the cumulative impact is less than significant. Therefore, the impact would be **less than significant**.

4.1.6 Mitigation Measures

None required.

4.1.7 References

County of El Dorado. 2004. General Plan. Adopted July 19, 2004, last amended December 15, 2015.

El Dorado County. 2015. Targeted General Plan Amendment & Zoning Ordinance Update Title 130: Zoning Ordinance. El Dorado County Code of Ordinances. https://www.edcgov.us/Government/LongRangePlanning/LandUse/TGPA-ZOU_ZOU_Adopted_12-15-15.aspx

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4.2 AIR QUALITY

4.2.1 Introduction

This section includes a description of existing air quality conditions, a summary of applicable regulations, and analyses of potential short-term and long-term air quality impacts of the Ponte Palmero Project (proposed project).

No comments relative to air quality were received in response to the NOP. See Appendix A for a copy of the NOP and comments received in response to the NOP.

Materials reviewed include the *2004 El Dorado County General Plan*, as amended December 2015; *Guide to Air Quality Assessment – Determining Significance of Air Quality Impacts Under the California Environmental Quality Act*, El Dorado County Air Quality Management District 2002; the *Traffic Impact Analysis*, Pacific Oak Development (included in Appendix F); and Emission calculations and CalEEMod outputs (included in Appendix C).

4.2.2 Environmental Setting

The proposed project is located within the Mountain Counties Air Basin (MCAB) portion of El Dorado County. The MCAB comprises the mountainous area of the central and northern Sierra Nevada Mountains, from Plumas County to Mariposa County. Elevations within MCAB range from several hundred feet above mean sea level (amsl) in the foothills to over 10,000 feet amsl along the Sierra Crest. The general climate of the MCAB varies considerably with elevation and proximity to the Sierra Crest. The variation in topography causes a wide variation in rainfall, temperature, and localized winds (El Dorado 2002).

Transport is the term used to describe the movement of air pollutants by wind flow from one geographic area to another. There are three regions identified by the California Air Resources Board (CARB) with upwind areas that contribute pollutants to the MCAB: the Broader Sacramento Area (BSA), the San Joaquin Valley Air Basin (SJVAB), and the San Francisco Bay Area Air Basin (SFBAAB). In the summer, a strong up-valley wind flows from the BSA into the northern and central portions of MCAB. The BSA includes the metropolitan portion of southern Sacramento Valley Air Basin and extends just east of Placerville within El Dorado County.

CARB characterizes the transport of ozone from BSA and SJVAB into MCAB as "overwhelming", meaning that the emissions from upwind areas independently resulted in a violation of the ozone standard in the downwind area. As such, the upwind area bears the responsibility for the violation. CARB concluded in its 2001 Transport Assessment that all violations of the ozone standard in the central portion of the MCAB were due to overwhelming transport of pollutants from upwind areas. CARB's analysis suggests that locally produced

MCAB ozone precursor emissions were not significant enough to cause a local exceedance of the ozone standards and that the region relies on emission reductions from the upwind areas (CARB 2001).

Inversions are also an important component of regional air quality. In general, air temperature decreases with distance from the earth's surface, creating a gradient between warmer air near the ground and cooler air at elevation. Under normal circumstances, the air close to the earth warms as it absorbs surface heat and begins to rise. Wind occurs when cooler air rushes in to take the place of the rising warm air. The wind and upward movement of air causes "mixing" in the atmosphere and can carry away diluted pollution. Inversions occur when a layer of warm air sits over cooler air, trapping the cooler air beneath. These inversions trap pollutants from dispersing vertically and the mountainous terrain of MCAB traps the pollutants from dispersing horizontally. There are two main ways that inversions affect the area's air quality. First, localized nighttime inversions that occur in the winter can trap pollutants, including smoke from wood stoves and fireplaces. Second, strong regional inversions in the adjacent SJVAB are known to form with a mixing height (cap of the inversion) between 2,000 to 2,500 feet amsl during the summer, and at 500 to 1,000 feet amsl during the winter. The proposed project site is located approximately 1,410 feet amsl and thus may be affected by SJVAB inversions.

Air Pollutants and Ambient Air Quality Standards

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. The federal and state standards have been set, with an adequate margin of safety, at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive people from illness or discomfort. Pollutants of concern include ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), particulate matter with an aerodynamic diameter equal to or less than 10 microns (PM_{10}), particulate matter with an aerodynamic diameter equal to or less than 2.5 microns ($PM_{2.5}$), and lead (Pb). These pollutants are discussed in more detail below.[1] In California, sulfates, vinyl chloride, hydrogen sulfide, and visibility-reducing particles are also regulated as criteria air pollutants.

Ozone. O_3 is a colorless gas that is formed in the atmosphere when volatile organic compounds (VOCs), sometimes referred to as reactive organic gases, and oxides of nitrogen (NO_x) react in the presence of ultraviolet sunlight. O_3 is not a primary pollutant; it is a secondary pollutant formed by complex interactions of two pollutants directly emitted into the atmosphere. The

[1] The descriptions of health effects for each of the criteria air pollutants associated with proposed project construction and operation are based on the EPA's Six Common Air Pollutants (EPA 2015a) and the CARB Glossary of Air Pollutant Terms (CARB 2014b).

primary sources of VOCs and NO_x, the precursors of O_3, are automobile exhaust and industrial sources. Meteorology and terrain play major roles in O_3 formation, and ideal conditions occur during summer and early autumn on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. Short-term exposures (lasting for a few hours) to O_3 at high levels can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes.

Nitrogen Dioxide. Most NO_2, like O_3, is not directly emitted into the atmosphere but is formed by an atmospheric chemical reaction between nitric oxide (NO) and atmospheric oxygen. NO and NO_2 are collectively referred to as NO_x and are major contributors to O_3 formation. High concentrations of NO_2 can cause breathing difficulties and result in a brownish-red cast to the atmosphere, causing reduced visibility. There is some indication of a relationship between NO_2 and chronic pulmonary fibrosis, and some increase in bronchitis in children (2 and 3 years old) has also been observed at concentrations below 0.3 parts per million by volume (ppm).

Carbon Monoxide. CO is a colorless and odorless gas formed by the incomplete combustion of fossil fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas, automobile exhaust accounts for the majority of CO emissions. CO is a non-reactive air pollutant that dissipates relatively quickly; therefore, ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. CO concentrations are influenced by local meteorological conditions primarily wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions. The highest levels of CO typically occur during the colder months of the year when inversion conditions are more frequent. In terms of health, CO competes with oxygen, often replacing it in the blood, thus reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can be dizziness, fatigue, and impairment of central nervous system functions.

Sulfur Dioxide. SO_2 is a colorless, pungent gas formed primarily by the combustion of sulfur-containing fossil fuels. The main sources of SO_2 are coal and oil used in power plants and industries; as such, the highest levels of SO_2 are generally found near large industrial complexes. In recent years, SO_2 concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO_2 and limits placed on the sulfur content of fuels. SO_2 is an irritant gas that attacks the throat and lungs, and can cause acute respiratory symptoms and diminished ventilator function in children. SO_2 can also yellow plant leaves and erode iron and steel.

Particulate Matter. Particulate matter pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter

can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. $PM_{2.5}$ and PM_{10} represent fractions of particulate matter. Fine particulate matter, or $PM_{2.5}$, is roughly 1/28 the diameter of a human hair. $PM_{2.5}$ results from fuel combustion (e.g., motor vehicles, power generation, and industrial facilities), residential fireplaces, and woodstoves. In addition, $PM_{2.5}$ can be formed in the atmosphere from gases such as sulfur oxides (SO_x), NO_x, and VOCs. Inhalable or coarse particulate matter, or PM_{10}, is about 1/7 the thickness of a human hair. Major sources of PM_{10} include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood-burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions.

$PM_{2.5}$ and PM_{10} pose a greater health risk than larger-size particles. When inhaled, these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tract. $PM_{2.5}$ and PM_{10} can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances such as lead, sulfates, and nitrates can cause lung damage directly or be absorbed into the bloodstream, causing damage elsewhere in the body. Additionally, these substances can transport absorbed gases, such as chlorides or ammonium, into the lungs, also causing injury. Whereas PM_{10} tends to collect in the upper portion of the respiratory system, $PM_{2.5}$ is so tiny that it can penetrate deeper into the lungs and damage lung tissues. Suspended particulates also damage and discolor surfaces on which they settle, as well as producing haze and reducing regional visibility.

Lead. Lead in the atmosphere occurs as particulate matter. Sources of lead include leaded gasoline; the manufacturing of batteries, paint, ink, ceramics, ammunition, and secondary lead smelters. Prior to 1978, mobile emissions were the primary source of atmospheric lead. Between 1978 and 1987, the phase-out of leaded gasoline reduced the overall inventory of airborne lead by nearly 95%. With the phase-out of leaded gasoline, secondary lead smelters, battery recycling, and manufacturing facilities are becoming lead-emission sources of greater concern.

Prolonged exposure to atmospheric lead poses a serious threat to human health. Health effects associated with exposure to lead include gastrointestinal disturbances, anemia, kidney disease, and in severe cases, neuromuscular and neurological dysfunction. Of particular concern are low-level lead exposures during infancy and childhood. Such exposures are associated with decrements in neurobehavioral performance, including intelligence quotient performance, psychomotor performance, reaction time, and growth.

Toxic Air Contaminants. A substance is considered toxic if it has the potential to cause adverse health effects in humans, including increasing the risk of cancer upon exposure or acute and/or chronic noncancer health effects. A toxic substance released into the air is

considered a toxic air contaminant (TAC). Examples include certain aromatic and chlorinated hydrocarbons, certain metals, and asbestos. TACs are generated by a number of sources, including stationary sources, such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources, such as automobiles; and area sources, such as landfills. Adverse health effects associated with exposure to TACs may include carcinogenic (i.e., cancer-causing) and noncarcinogenic effects. Noncarcinogenic effects typically affect one or more target organ systems and may be experienced either on short-term (acute) or long-term (chronic) exposure to a given TAC.

Asbestos is listed as a TAC by CARB and as a Hazardous Air Pollutant (HAP) by the EPA. It is of a special concern in El Dorado County because it occurs naturally in surface deposits of several types of rock formations. Asbestos most commonly occurs in ultramafic rock that has undergone partial or complete alteration to serpentine rock (serpentinite) and often contains chrysotile asbestos. In addition, another form of asbestos, tremolite, can be found associated with ultramafic rock, particularly near faults. Crushing or breaking these rocks, through construction or other means, can release asbestos to form fibers into the air. Asbestos emissions can result from the sale or use of asbestos-containing materials, road surfacing with such materials, grading activities, and surface mining. The risk of disease is dependent upon the intensity and duration of exposure. When inhaled, asbestos fibers may remain in the lungs and with time may be linked to such diseases as asbestosis, lung cancer, and mesothelioma.

Attainment Status and Ambient Air Quality

An area is designated as “in attainment” when it is in compliance with the federal and/or state standards. These standards are set by the EPA or CARB for the maximum level of a given air pollutant that can exist in the outdoor air without unacceptable effects on human health or public welfare with a margin of safety.

The criteria pollutants of primary concern considered in this air quality assessment include O_3, NO_2, CO, SO_2, PM_{10}, $PM_{2.5,}$ and lead. Although there are no ambient air quality standards for ROG or NO_x, they are important because they are precursors to O_3. The attainment classifications for the criteria pollutants are outlined in Table 4.2-1, El Dorado County Attainment Classification.

In summary, the El Dorado County portion of the MCAB is designated as a nonattainment area for both federal and state O_3 standards. The El Dorado County portion of the MCAB is designated as a nonattainment area for the state PM_{10} standard. El Dorado County is designated “unclassified” or “attainment” for all other criteria air pollutants. Notably, “unclassified” areas cannot be classified, based on available information, as meeting or not meeting the national primary or secondary ambient air quality standard for the pollutant.

Table 4.2-1
El Dorado County Attainment Classification

Pollutant	Averaging Time	Designation/Classification
Federal Standards		
O_3	8 hours	Nonattainment/Severe
NO_2	1 hour	Unclassifiable/attainment
	Annual arithmetic mean	Attainment
CO	1 hour; 8 hours	Unclassifiable/attainment
SO_2	24 hours; annual arithmetic mean	Attainment
PM_{10}	24 hours	Unclassifiable/attainment
$PM_{2.5}$	24 hours; annual arithmetic mean	Unclassifiable/attainment
Pb	Quarter	Unclassifiable/attainment
	3-month average	Attainment
State Standards		
O_3	1 hour; 8 hours	Nonattainment
NO_2	1 hour; annual arithmetic mean	Attainment
CO	1 hour; 8 hours	Unclassified
SO_2	1 hour; 24 hours	Attainment
PM_{10}	24 hours; annual arithmetic mean	Nonattainment
$PM_{2.5}$	Annual arithmetic mean	Unclassified
Pb[a]	30-day average	Attainment
Sulfates (SO_4)	24 hours	Attainment
Hydrogen sulfide (H_2S)	1 hour	Unclassified
Vinyl chloride[1]	24 hours	Unclassified
Visibility-reducing particles	8 hours (10:00 a.m.–6:00 p.m.)	Unclassified

Sources: EPA 2015b (federal); CARB 2014a (state).
Notes: O_3 = ozone; NO_2 = nitrogen dioxide; CO = carbon monoxide; SO_2 = sulfur dioxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; Pb = lead.
1 CARB has identified lead and vinyl chloride as TACs with no threshold level of exposure for adverse health effects determined.

CARB operates an existing monitoring station located at 3111 Gold Nugget Way, Placerville, California which is approximately 8.9 miles southwest of the proposed project site. The data collected at this station are considered representative of the air quality experienced in the proposed project's vicinity. Air quality data from 2012 through 2014 for the Placerville-Gold Nugget Way Monitoring Station are provided in Table 4.2-2, Ambient Air Quality Data. Because PM_{10}, $PM_{2.5}$, NO_2, CO, and SO_2 levels were not monitored at the Placerville-Gold Nugget Way Monitoring Station, reported values were taken from the San Andreas-Gold Strike Road Monitoring Station, located within the MCAB approximately 35.5 miles south of the proposed project or from the Sacramento-Del Paso Manor Monitoring Station, located approximately 21.7 miles west of the project site.

Table 4.2-2
Ambient Air Quality Data
(ppm unless otherwise indicated)

Pollutant	Averaging Time	2012	2013	2014	Most Stringent Ambient Air Quality Standard	Monitoring Station
O_3	1 hour	0.108	0.097	0.104	0.09	Placerville-Gold Nugget Way[1]
	State exceedances	*6*	*1*	*1*	—	
	8 hours	0.096	0.084	0.090	0.070	
	Federal exceedances	*20*	*11*	*12*	—	
	State exceedances	*50*	*21*	*36*	—	
PM_{10}	24 hours	44.6 µg/m³	102.1 µg/m³	287.0 µg/m³	50 µg/m³	San Andreas-Gold Strike Road[2]
	Federal exceedances	*0*	*0*	*6.6*	—	
	State exceedances	*0*	*12.2*	*6.5*	—	
	Annual	13.7 µg/m³	17.3 µg/m³	17.1 µg/m³	20 µg/m³	
$PM_{2.5}$	24 hours	44.8 µg/m³	51.8 µg/m³	79.7 µg/m³	35 µg/m³	San Andreas-Gold Strike Road[2]
	Federal exceedances	*0*	*3.2*	*39.5*	—	
	Annual	7.0 µg/m³	9.1 µg/m³	15.6 µg/m³	12 µg/m³	
NO_2	1 hour	0.051	0.045	0.043	0.100	Sacramento-Del Paso Manor[3]
	Annual	0.009	N/A	0.006	0.030	
CO	1 hour	2.16	N/A	N/A	20	Sacramento-Del Paso Manor[3]
	8 hours	1.51	N/A	N/A	9.0	
SO_2	1 hour	N/A	N/A	N/A	0.25	Sacramento-Del Paso Manor[3]
	24 hours	0.002	0.002	N/A	0.040	

Sources: CARB 2014b; EPA 2015c.
Notes:
ppm = parts per million; O_3 = ozone; PM_{10} = coarse particulate matter; µg/m3 = micrograms per cubic meter; $PM_{2.5}$ = fine particulate matter; NO_2 = nitrogen dioxide; N/A = not available; CO = carbon monoxide; SO_2 = sulfur dioxide.
Data were taken from CARB iADAM (2015; http://www.arb.ca.gov/adam) or EPA AirData (2015; http://www.epa.gov/airdata/) and represent the highest concentrations experienced over a given year. Exceedances of federal and state standards are only shown for ozone and particulate matter. Daily exceedances for particulate matter are estimated days because PM_{10} and $PM_{2.5}$ are not monitored daily. All other criteria pollutants did not exceed either federal or state standards during the years shown. There is no federal standard for 1-hour ozone, annual PM_{10}, or 24-hour $S0_2$, nor is there a state 24-hour standard for $PM_{2.5}$.
1 Placerville-Gold Nugget Way Monitoring Station is located at 3111 Gold Nugget Way Placerville, California.
2 San Andreas-Gold Strike Road Monitoring Station is located at 501 Gold Strike Road, San Andreas, California.
3 Sacramento-Del Paso Manor Monitoring Station is located at 2701 Avalon Drive, Sacramento, California.

Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others, due to the types of population groups or activities involved. Children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the effects of air pollution. Accordingly,

land uses that are typically considered sensitive receptors include residences, schools, day care centers, playgrounds, and medical facilities. For analysis purposes, the Cameron Park Congregate Care retirement community adjacent to the eastern boundary of the site, as well as the Marshall Medical Center which is further southeast of the site would be considered the closest sensitive receptors.

4.2.3 Regulatory Setting

Regulatory oversight for air quality in the MCAB is maintained by the EPA at the federal level, CARB at the state level, and by the El Dorado County Air Quality Management District (EDCAQMD) at the local level. Applicable laws, regulations, and standards of these three agencies are described in the following subsections.

Federal Regulations

Criteria Pollutants

The federal Clean Air Act (CAA), passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. The EPA is responsible for implementing most aspects of the CAA, including the setting of National Ambient Air Quality Standards (NAAQS) for major air pollutants, hazardous air pollutant standards, approval of state attainment plans, motor vehicle emission standards, stationary source emission standards and permits, acid rain control measures, stratospheric O_3 protection, and enforcement provisions. NAAQS are established for criteria pollutants under the CAA, which are O_3, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and lead.

The NAAQS describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation. The NAAQS (other than for O_3, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. NAAQS for O_3, NO_2, SO_2, PM_{10}, and $PM_{2.5}$ are based on statistical calculations over 1- to 3-year periods, depending on the pollutant. The CAA requires the EPA to reassess NAAQS at least every 5 years to determine whether adopted standards are adequate to protect public health based on current scientific evidence. Current NAAQS are depicted in Table 4.2-3, Ambient Air Quality Standards.

States with areas that exceed the NAAQS must prepare a State Implementation Plan (SIP) that demonstrates how those areas will attain the standards within mandated time frames. If the EPA determines a SIP to be inadequate, it may prepare a Federal Implementation Plan (FIP) for the nonattainment area and may impose additional control measures. Failure to submit an approvable SIP or to implement the plan within mandated timeframes can result in sanctions being applied to transportation funding and stationary air pollution sources in the air basin.

Hazardous Air Pollutants

The 1977 federal Clean Air Act Amendments (CAAA) required the EPA to identify National Emission Standards for Hazardous Air Pollutants (NESHAPs) to protect public health and welfare. HAPs include certain volatile organic chemicals, pesticides, herbicides, and radionuclides that present a tangible hazard, based on scientific studies of exposure to humans and other mammals. Under the 1990 federal CAAA, which expanded the control program for HAPs, 189 substances and chemical families were identified as HAPs.

Table 4.2-3
Ambient Air Quality Standards

Pollutant	Average Time	California Standards[a]	National Standards[b]	
		Concentration[c]	*Primary*[c,d]	*Secondary*[c,e]
O_3	1 hour	0.09 ppm (180 μg/m³)	—	Same as Primary Standard[f]
	8 hours	0.070 ppm (137 μg/m³)	0.070 ppm (137 μg/m³)[f]	
NO_2[g]	1 hour	0.18 ppm (339 μg/m³)	0.100 ppm (188 μg/m³)	Same as Primary Standard
	Annual Arithmetic Mean	0.030 ppm (57 μg/m³)	0.053 ppm (100 μg/m³)	
CO	1 hour	20 ppm (23 mg/m³)	35 ppm (40 mg/m³)	None
	8 hours	9.0 ppm (10 mg/m³)	9 ppm (10 mg/m³)	
SO_2[h]	1 hour	0.25 ppm (655 μg/m³)	0.075 ppm (196 μg/m³)	—
	3 hours	—	—	0.5 ppm (1,300 μg/m³)
	24 hours	0.04 ppm (105 μg/m³)	0.14 ppm (for certain areas)[g]	—
	Annual	—	0.030 ppm (for certain areas)[g]	—
PM_{10}[i]	24 hours	50 μg/m³	150 μg/m³	Same as Primary Standard
	Annual Arithmetic Mean	20 μg/m³	—	
$PM_{2.5}$[i]	24 hours	No Separate State Standard	35 μg/m³	Same as Primary Standard
	Annual Arithmetic Mean	12 μg/m³	12.0 μg/m³	15.0 μg/m³
Lead[j,k]	30-day Average	1.5 μg/m³	—	—
	Calendar Quarter	—	1.5 μg/m³ (for certain areas)[k]	Same as Primary Standard
	Rolling 3-Month Average	—	0.15 μg/m³	
Hydrogen sulfide	1-hour	0.03 ppm (42 μg/m³)	—	—
Vinyl chloride[j]	24-hour	0.01 ppm (26 μg/m³)	—	—
Sulfates	24-hour	25 μg/m³	—	—

Table 4.2-3
Ambient Air Quality Standards

Pollutant	Average Time	California Standards[a]	National Standards[b]	
		Concentration[c]	*Primary*[c,d]	*Secondary*[c,e]
Visibility reducing particles	8-hour (10:00 a.m. to 6:00 p.m. PST)	Insufficient amount to produce an extinction coefficient of 0.23 per kilometer due to particles when the relative humidity is less than 70%	—	—

Source: CARB 2014b.

Notes: ppm = parts per million by volume; μg/m^3 = micrograms per cubic meter; mg/m^3= milligrams per cubic meter.

a California standards for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, suspended particulate matter—PM_{10}, $PM_{2.5}$, and visibility-reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. CAAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

b National standards (other than O_3, NO_2, SO_2, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The O_3 standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 micrograms per cubic meter (μg/m^3) is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard.

c Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

d National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

e National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

f On October 1, 2015, the EPA Administrator signed the notice for the final rule to revise the primary and secondary NAAQS for O_3. The EPA is revising the levels of both standards from 0.075 ppm to 0.070 ppm, and retaining their indicators (O_3), forms (fourth-highest daily maximum, averaged across three consecutive years) and averaging times (eight hours). The EPA is in the process of submitting the rule for publication in the Federal Register. The final rule will be effective 60 days after the date of publication in the Federal Register. The lowered national 8-hour standards are reflected in the table.

g To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (ppb). Note that the national 1-hour standard is in units of ppb. California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

h On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated nonattainment of the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

i On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 μg/m^3 to 12.0 μg/m^3. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 μg/m^3, as was the annual secondary standard of 15 μg/m^3. The existing 24-hour PM_{10} standards (primary and secondary) of 150 μg/m^3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

j CARB has identified lead and vinyl chloride as TACs with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

k The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 μg/m^3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

State Regulations

Criteria Pollutants

CARB, which became part of the California Environmental Protection Agency in 1991, is responsible for ensuring implementation of the California Clean Air Act (CCAA) of 1988, responding to the CAA, and regulating emissions from motor vehicles and consumer products.

CARB has established California Ambient Air Quality Standards (CAAQS), which are generally more restrictive than the NAAQS. Air quality is considered "in attainment" if pollutant levels are continuously below the CAAQS and violate the standards no more than once each year. The CAAQS for O_3, CO, SO_2 (1 hour and 24 hours), NO_2, PM_{10}, and $PM_{2.5}$ and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. The CAAQS are presented in Table 4.2-3.

The CAA delegates the regulation of air pollution control and the enforcement of the NAAQS to the states. In California, the task of air quality management and regulation has been legislatively granted to the CARB, with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels.

Toxic Air Contaminants

The State Air Toxics Program was established in 1983 under Assembly Bill (AB) 1807 (Tanner). The California TAC list identifies more than 700 pollutants, of which carcinogenic and non-carcinogenic toxicity criteria have been established for a subset of these pollutants pursuant to the California Health and Safety Code. In accordance with AB 2728, the state list includes the (federal) HAPs.

The Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588) seeks to identify and evaluate risk from air toxics sources; however, AB 2588 does not regulate air toxics emissions. TAC emissions from individual facilities are quantified and prioritized. "High-priority" facilities are required to perform a health risk assessment and, if specific thresholds are exceeded, are required to communicate the results to the public in the form of notices and public meetings.

CARB recommends that proximity to sources of DPM emissions be considered in the siting of new sensitive land uses. In April 2005, CARB published *Air Quality and Land Use Handbook: a Community Health Perspective*. This handbook is intended to give guidance to local governments in the siting of sensitive land uses near sources of air pollution. Recent studies have shown that public exposure to air pollution can be substantially elevated near freeways and certain other facilities such as ports, rail yards, and distribution centers. Specifically, the

document focuses on risks from emissions of DPM, a known carcinogen, and establishes recommended siting distances of sensitive receptors. With respect to roadways, the recommendations of the report are: "Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with more than 100,000 vehicles per day or rural roads with 50,000 vehicles/day" (CARB 2005). CARB notes that these recommendations are advisory and should not be interpreted as defined "buffer zones," and that local agencies must balance other considerations, including transportation needs, the benefits of urban infill, community economic development priorities, and other quality of life issues. With careful evaluation of exposure, health risks, and affirmative steps to reduce risk where necessary, CARB's position is that infill development, mixed use, higher density, transit-oriented development, and other concepts that benefit regional air quality can be compatible with protecting the health of individuals at the neighborhood level (CARB 2005).

Local Regulations

El Dorado County Air Quality Management District

The EDCAQMD is the regional agency responsible for the regulation and enforcement of federal, state, and local air pollution control regulations in the MCAB, where the proposed project is located. The MCAB portion of El Dorado County lies within the area designated by the EPA as the Sacramento Federal Ozone Nonattainment Area (SFONA), comprised of Sacramento and Yolo counties, and parts of El Dorado, Solano, Placer, and Sutter counties.

The clean air strategy of the EDCAQMD includes the preparation of plans for the attainment of ambient air quality standards, adoption and enforcement of rules and regulations concerning sources of air pollution, issuance of permits for stationary sources of air pollution, inspection of stationary sources of air pollution and response to citizen complaints, monitoring of ambient air quality and meteorological conditions, and implementation of programs and regulations required by the CAA and CCAA.

The federal attainment plan for the Sacramento Region is the 1997 *Sacramento Area Regional 8-Hour Ozone Attainment Plan.* The air districts of the Sacramento Region adopted a Rate of Progress Plan for the federal 8-hour ozone standard in 2006. In addition, the air districts adopted the 2011 *Reasonable Further Progress Plan* (RFP) for the 8-hour federal ozone standard in April 2008. The 2011 RFP Plan showed that the Sacramento region could not meet the June 15, 2013 attainment deadline. On February 14, 2008, CARB, on behalf of the air districts submitted a letter to EPA requesting a voluntary reclassification of the Sacramento Federal Nonattainment Area from a "serious" to a "severe" 8-hour ozone nonattainment area with an extension until June 15, 2019 to meet attainment. The 2013 SIP Revisions to the 2011 RFP Plan was updated on November 21, 2013. The 2013 update to the RFP Plan identifies

Motor Vehicle Emission Budgets (MVEBs) for the Sacramento Metro nonattainment area for NOx and VOCs for 2014, 2017, and 2018. CARB determined that the MVEBs are consistent with the requirements to attain the 1997 8-hour ozone NAAQS by the June 15, 2019 deadline.

The EDCAQMD has adopted rules and regulations as a means of implementing the air quality plans for El Dorado County and has also prepared the *Guide to Air Quality Assessment: Determining Significance of Air Quality Impacts Under the California Environmental Quality Act* (Guide), which provides quantitative emission thresholds and established protocols for the analysis of air quality impacts from project and plans. The Guide outlines quantitative and qualitative significance criteria, methodologies for the estimation of construction and operational emissions and mitigation measures to reduce significant impacts.

Emissions that would result from stationary and area sources during operation under the proposed project would be subject to EDCAQMD rules and regulations. The EDCAQMD rules applicable to the proposed project include the following:

Rule 205 – Nuisance. This rule prohibits the discharge from any source such as quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons, or to the public, or which endanger the comfort, repose, health or safety of any such persons, or the public, or which cause to have a natural tendency to cause injury or damage to business or property.

Rule 215 – Architectural Coatings. This rule requires manufacturers, distributors, and users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of use of these coatings by placing limits on the VOC content of various coating categories.

Rule 223 – Fugitive Dust. This rule governs the amount of particulate matter entrained in the ambient air as a result of anthropogenic (man-made) fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions. It applies to any construction or construction related activities including but not limited to, land clearing, grubbing, scraping, travel on site, and travel on access roads.

Rule 223-1 – Fugitive Dust – Construction. This rule requires a Fugitive Dust Control Plan be submitted to the Air Pollution Control Officer prior to the start of any construction activity for which a grading permit was issued by El Dorado County.

Rule 223-2 – Fugitive Dust – Asbestos Hazard Mitigation. This rule reduces the amount of asbestos particulate matter that may be released as a result from construction related activities through the use of required actions or mitigation.

Rule 224 – Cutback and Emulsified Asphalt Paving Materials. This rule governs the use of asphalt and limits the VOC content in asphalt.

Rule 239 – Natural Gas-Fired Residential Water Heaters. This rule limits the amount of NO_x emission that may be generated from natural gas-fired residential water heaters.

2004 El Dorado County General Plan

The following are applicable goals and policies from the Public Health, Safety, and Noise Element of the General Plan (County of El Dorado 2015). The County's General Plan was updated in December 2015. The most recent goals and policies are listed below.

Goal 6.3 Geological and Seismic Hazards. Minimize the threat to life and property from seismic and geological hazards.

Policy 6.3.1.1. The County shall require that all discretionary projects and all projects requiring a grading permit, or a building permit that would result in earth disturbance, that are located in areas likely to contain naturally occurring asbestos (based on mapping developed by the California Department of Conservation [DOC]) have a California-registered geologist knowledgeable about asbestos-containing formations inspect the project area for the presence of asbestos using appropriate test methods. The County shall amend the Erosion and Sediment Control Ordinance to include a section that addresses the reduction of thresholds to an appropriate level for grading permits in areas likely to contain naturally occurring asbestos (based on mapping developed by the DOC). The Department of Transportation and the County Air Quality Management District shall consider the requirement of posting a warning sign at the work site in areas likely to contain naturally occurring asbestos based on the mapping developed by the DOC.

Goal 6.7 Air Quality Maintenance. Strive to achieve and maintain ambient air quality standards established by the EPA and CARB and minimize public exposure to toxic or hazardous air pollutants and air pollutants that create unpleasant odors.

Policy 6.7.4.6. The County shall regulate wood-burning fireplaces and stoves in all new development. Environmental Protection Agency (EPA)-approved stoves and fireplaces burning natural gas or propane are allowed. The County shall discourage the use of non-certified wood heaters and fireplaces during periods of unhealthy air quality.

Policy 6.7.6.1 Ensure that new facilities in which sensitive receptors are located (e.g., schools, child care centers, playgrounds, retirement homes, and hospitals) are sited away from significant sources of air pollution.

Policy 6.7.6.2 New facilities in which sensitive receptors are located (e.g., residential subdivisions, schools, childcare centers, playgrounds, retirement homes, and hospitals) shall be sited away from significant sources of air pollution.

Policy 6.7.7.1 The County shall consider air quality when planning the land uses and transportation systems to accommodate expected growth, and shall use the recommendations in the most recent version of the El Dorado County Air Quality Management (AQMD) Guide to Air Quality Assessment: Determining Significance of Air Quality Impacts Under the California Environmental Quality Act, to analyze potential air quality impacts (e.g., short-term construction, long-term operations, toxic and odor-related emissions) and to require feasible mitigation requirements for such impacts. The County shall also consider any new information or technology that becomes available prior to periodic updates of the Guide. The County shall encourage actions (e.g., use of light-colored roofs and retention of trees) to help mitigate heat island effects on air quality.

4.2.4 Impacts

Methods of Analysis

Air quality impacts fall into two categories: short-term emissions due to construction and long-term impacts due to project operation. Impacts in each category can be classified as having effects on a regional or local scale. As noted in the Project Description (Chapter 3), the proposed project does not include any wood burning fireplaces or wood stoves. Any fire places included within the project would use natural gas or propane and would be meet current EPA standards. In addition, all architectural coatings would be low VOC and would be in compliance with EDCAQMD's Rule 15.

The proposed project's short-term construction-related and long-term operational emissions were estimated using the California Emissions Estimator Model (CalEEMod) Version 2013.2.2, available online (http://www.caleemod.com), which is a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions from land use projects. The model applies inherent default values for various land uses, including trip generation rates based on the Institute of Transportation Engineers *Trip Generation Manual* (ITE 2008), vehicle mix, trip length, average speed, etc. However, where project-specific data was available, such data were input into the model (e.g., construction phases and timing, estimated daily project trips, energy and water use). It should be noted that the default construction equipment mix used for estimating the construction emissions of the proposed project was altered for the grading phase and is based on information provided by the applicant. Results from CalEEMod, including details of the emission calculations from construction and operation, are provided in Appendix C.

Construction Emissions

Construction of the proposed project is anticipated to begin in September 2016 and be completed by August 2017. For purposes of estimating proposed construction emissions, the analysis is based on the following assumptions (duration of phases is approximate):

- Grading: September 2016 through November 2016 (10 days)
- Building construction: November 2016 through July 2017 (175 days)
- Paving: July 2017 through August 2017 (10 days)
- Architectural coating: August 2017 (10 days)

The construction equipment mix and estimated hours of equipment operation per day used for the air emissions modeling of the proposed project are shown in Table 4.2-4. For this analysis, it was assumed that heavy construction equipment would operate 5 days a week during project construction. Table 4.2-4 also presents the number of workers anticipated for each construction phase. To estimate motor vehicle emissions generated by worker vehicles (i.e., light-duty trucks and automobiles), it was assumed that each worker would generate two one-way trips per day. The project applicant provided worker trips for grading and building construction phases; however, worker trips and trip distances were estimated using CalEEMod defaults for the paving and architectural coating phases. In addition to construction equipment operation and worker trips, emissions from haul trucks and vendor trucks were estimated. Haul truck trips were assumed to be required during the grading phase, and vendor trucks transporting construction materials were assumed to be required during the grading, building construction, and paving phases. The lengths of these trips were estimated using CalEEMod defaults. Since soils would be balanced on-site, the hauling trip length for the grading phase was estimated to be 0.25 mile to account for soils transport on-site. Project construction is anticipated to involve the movement of approximately 90,000 cubic yards of soil on-site.

Table 4.2-4
Construction Equipment and On-Road Vehicles

Construction Phase	One Way Worker Trips	One-way Vendor Truck Trips	One-way Haul Truck Trips	Equipment	Quantity	Hours/Day
Grading	36	2	11,250	Roller	1	8
				Rubber-tired dozers	1	8
				Scrapers	1	8
				Tractors/loaders/backhoes	2	8
Building construction	36	2	0	Cranes	1	7
				Forklifts	3	8

Table 4.2-4
Construction Equipment and On-Road Vehicles

Construction Phase	One Way Worker Trips	One-way Vendor Truck Trips	One-way Haul Truck Trips	Equipment	Quantity	Hours/Day
				Generator sets	1	8
				Tractors/loaders/backhoes	3	7
				Welders	1	8
Paving	15	2	0	Pavers	2	8
				Paving equipment	2	8
				Rollers	2	8
Architectural coating	21	0	0	Air compressors	1	6

Source: CalEEMod 2015.

In the *California Building Industry Association* (CBIA) *v. Bay Area Air Quality Management District* (BAAQMD), the California Supreme Court held that the California Environmental Quality Act (CEQA) generally does not require analysis or mitigation of the impact of existing environmental conditions on a project, including a project's future users or residents. The impacts discussed in this section related to Toxic Air Contaminants associated with the existing U.S. Highway 50 and other operations are effects on users of the project and structures in the project of preexisting environmental hazards, as explicitly found by the court in the CBIA decision, “agencies subject to CEQA generally are not required to analyze the impact of existing environmental conditions on a project’s future users or residents. But when proposed project risks exacerbating those environmental hazards or conditions that already exist, an agency must analyze the potential impact of such hazards on future residents or users.” In addition, the County has the authority to require specific measures be adopted to protect public health and safety and there are other laws and regulations that protect public health and safety, as well as the environment. Nonetheless, an evaluation of the environment's impacts on the project consistent with the current version of Appendix G, including mitigation recommendations to reduce or avoid these impacts where feasible is provided for informational purposes.

Issues Addressed in the Initial Study

Based on the Initial Study prepared for the project, operation of a congregate care facility does not typically generate objectionable odors (see Appendix B). Therefore, this impact is considered less than significant and is not further analyzed.

Thresholds of Significance

Consistent with Appendix G of the CEQA Guidelines, an air quality impact is considered significant if implementation of the proposed project would do any of the following:

- Conflict with or obstruct implementation of an applicable air quality plan;
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- 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); or
- Expose sensitive receptors to substantial pollutant concentrations.

Significance Criteria for Criteria Air Pollutants

In addition, Appendix G of the CEQA Guidelines indicates that, where available, the significance criteria established by the applicable air quality management district or pollution control district may be relied upon to determine whether the proposed project would have a significant impact on air quality. The EDCAQMD Guide provides quantitative emission thresholds and established protocols for the analysis of air quality impacts from projects and plans. Project related air quality impacts estimated in this environmental analysis would be considered significant if any of the applicable significance thresholds presented in Table 4.2-5, EDCAQMD Air Quality Significance Thresholds, are exceeded.

A project would result in a substantial contribution to an existing air quality violation of the NAAQS or CAAQS for O_3 (see Table 4.2-3), which is a nonattainment pollutant, if the project's construction or operational emissions would exceed the EDCAQMD ROG or NO_x thresholds shown in Table 4.2-5. These emission-based thresholds for O_3 precursors are intended to serve as a surrogate for an "ozone significance threshold" (i.e., the potential for adverse O_3 impacts to occur) because O_3 itself is not emitted directly (see the previous discussion of O_3 and its sources), and the effects of an individual project's emissions of O_3 precursors (ROG and NO_x) on O_3 levels in ambient air cannot be determined through air quality models or other quantitative methods. According to the EDCAQMD, if ROG and NO_x are less than significant during construction, then exhaust CO and PM_{10} would also be less than significant. During operation, if ROG and NO_x are less than significant, then exhaust CO, NO_2, SO_2, and PM_{10} would also be less than significant.

Table 4.2-5

EDCAQMD Air Quality Significance Thresholds

Pollutant	Construction	Operation
Criteria Pollutants Mass Daily Thresholds		
ROG	82 lbs/day	82 lbs/day
NO_x	82 lbs/day	82 lbs/day

Source: EDCAQMD 2002.
Notes:
Construction Screening: If ROG and NO_x are less than significant during construction, then exhaust CO and PM_{10} would also be less than significant.
Operational Screening: If ROG and NO_x are less than significant during operation, then exhaust CO, NO_2, SO_2, and PM_{10} would also be less than significant.
EDCAQMD = El Dorado County Air Quality Management District; lb/day = pounds per day; ROG = Reactive Organic Gases; NO_2 = nitrogen oxides; NO_2 = nitrogen dioxide; CO = carbon monoxide; SO_2 = sulfur dioxide; PM_{10} = coarse particulate matter.

For the other criteria pollutants, including CO, PM_{10}, SO_2, NO_2, sulfates, lead, and hydrogen sulfide (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). (See Table 4.2-3 for a list of the federal and state standards.) The determination of whether emissions of these pollutants from a project would cause or contribute to a violation of an applicable air quality standard will be done in accordance with the methods laid out in the Guide.

Significance Criteria for Toxic Air Contaminants

For TACs, the following two alternative significance criteria from the EDCAQMD are used. Exceeding either of these criteria will lead to a conclusion that a project has a significant impact with respect to TACs:

1. The lifetime probability of contracting cancer is greater than one in one million (ten in one million if T-BACT is applied); or
2. The ground-level concentration of non-carcinogenic toxic air contaminants would result in a Hazard Index of greater than 1.

Significance Criteria for Determining Cumulative Impacts

A proposed project is considered cumulatively significant if one or more of the following conditions is met:

- The project requires a change in the existing land use designation (i.e., general plan amendment, rezone), and projected emissions (ROG, NOx, CO, or PM10) are greater than the emissions anticipated for the site if developed under the existing land use designation.
- The project would individually exceed any significance criteria in the Guide.

- For impacts that are determined to be significant under the Guide, the lead agency for the project does not require the project to implement the emission reduction measures contained in and/or derived from the air quality management plan.
- The project is located in a jurisdiction that does not implement the emission reduction measures contained in and/or derived from the air quality management plan.

Impacts and Mitigation Measures

4.2-1: The proposed project would not conflict with or obstruct implementation of the applicable air quality plan. This would be a less-than-significant impact.

The MCAB is currently non-attainment for ozone (state and federal ambient standards) and particulate matter (PM_{10}) (state ambient standard). While an air quality plan exists for ozone, none currently exists for particulate matter. The Reasonable Further Progress (RFP) Plan for the 8-hour federal ozone was developed for application within the Sacramento region which includes the MCAB portion of El Dorado County. If a project can demonstrate consistency with the RFP Plan for ROG and NO_x emissions, it would be determined that it would not have a significant cumulative impact with respect to ozone.

Development projects in the MCAB portion of the county must demonstrate RFP Plan consistency with the following four indicators:

1. The project does not require a change in the existing land use designation (e.g., a general plan amendment or rezone), or projected emissions of ROG and NO_x from a project are equal to or less than the emissions anticipated for the site if development under the existing land use designation;
2. The project does not exceed the “project alone” significance criteria;
3. The lead agency for the project requires the project to implement any applicable emission reduction measures contained in and/or derived from the AQAP; and
4. The project complies with all applicable district rules and regulations.

The first way to assess project compliance with the RFP Plan assumptions is to ensure that the population density and land use are consistent with the growth assumptions used in the plans for the MCAB. As noted in Chapter 3, Project Description, the proposed project would require a General Plan Amendment to re-designate 9.11 acres of the project site from Multifamily Residential (MFR) and High Density Residential (HDR) to Commercial (C) with the remaining acres re-designated to Open Space (OS). Changing the designation to Commercial permits development of a sole residential use if that residential use is a community care facility or part of an approved mixed use development. With approval of the General Plan Amendment and

amendment to the Zoning Ordinance, the proposed project would propose to develop a community amenity that is less intense than what could be developed on the project site. Therefore, projected emissions of ROG and NO_x generated by the proposed project would be less than what could be generated at the project site, which would satisfy the first criterion.

The second criterion assesses project's contribution to existing air quality violations. As discussed in Impact 4.2-2, it was determined that the proposed project would not contribute to an air quality violation because it does not exceed the EDCAQMD thresholds of significance for ROG or NO_x emissions during construction and operation.

The third criterion is compliance with control measures in the RFP Plan. The RFP Plan contains control measures aimed at reducing air pollution in the Sacramento region. The non-regulatory control measures include; on-road and off-road mobile incentive programs, and an emerging/voluntary urban forest development program. These are followed by the regulatory control measures which include; indirect source rules and a variety of stationary and area-wide source control measures (CARB 2008). CARB's strategy for reducing mobile source emissions include the following: new engine standards, reduce emissions from in-use fleet, require the use of cleaner fuels, support the use of alternative fuels, and the pursuit of long-term advanced technology measures. The proposed project would indirectly comply with the vehicle control measures established by CARB.

Relative to the EDQAQMD measures contained in the AQAP, the proposed project would be consistent with most of the applicable control measures while the degreasing/solvent cleaning measure is not applicable to the proposed project. The control measures are as follows:

- **Architectural Coatings.** This control measure regulates the volatile organic compound (VOC) content in coatings applied to stationary structures and their appurtenances. The control measure also regulates the sale of coatings within the EDCAQMD by prohibiting suppliers and manufacturers from selling the coatings which do not comply with the strategy.
- **Natural Gas-Fired Water Heaters.** This control measure regulates NO_x limits for all new boilers and water heaters within a heat input range of less than 1,000,000 British thermal unit (Btu)/hour (hr). The EDCAQMD sets NO_x emission standards for water heaters with rated capacities of less than 75,000 Btu/hr.
- **Coatings of Miscellaneous Metal Parts.** This control measure regulates the VOC content in coatings applied to metal parts and projects by setting specific limits for coatings on metals which mirror the Control Techniques Guidelines (CTG).

In summary, the proposed project would meet all of the applicable control measures outlined for the EDCAQMD contained in the AQAP; and therefore, would be consistent with the third criterion.

The final criterion is compliance with district rules and regulations. The EDCAQMD includes rules designed specifically to address a variety of air quality impacts through measures that construction and operational related air quality emissions. A list of rules that would reduce air pollutant emissions and are applicable to the proposed project is provided below. Notably, the project would comply with all required EDCAQMD rules and regulations.

- Rule 210 related to the discharge of air contaminants
- Rule 215 related to architectural coatings
- Rule 223 related to fugitive dust
- Rule 223-1 related to construction related fugitive dust
- Rule 223-2 related to asbestos
- Rule 224 related to the use of asphalt
- Rule 239 related to water heaters

As shown above, the proposed project does not conflict with the land use or zoning designation, does not exceed the EDCAQMD significance thresholds, would be consistent with all control measures of the AQAP and would comply with EDCAQMD district rules. This impact would be **less than significant**.

4.2-2: The proposed project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. This would be a less-than-significant impact.

Construction and operation of the proposed project would result in emissions of criteria air pollutants from mobile, area, and energy sources, which may cause an exceedance of federal and state ambient air quality standards or contribute to existing nonattainment of ambient air quality standards. The following discussion identifies potential short- and long-term construction impacts that would result from implementation of the proposed project. Feasible mitigation measures to reduce or avoid any potential significant impacts, as appropriate, are proposed.

Construction Emissions

Construction of the proposed project would result in the addition of pollutants to the local air shed caused by soil disturbance, fugitive dust emissions, and combustion pollutants from on-site construction equipment, as well as from off-site trucks hauling construction materials. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and for dust, the prevailing weather conditions. Therefore, such emission levels can only be estimated, with a corresponding uncertainty in precise ambient

air quality impacts. Fugitive dust (PM_{10} and $PM_{2.5}$) emissions would primarily result from grading activities. NO_x and CO emissions would primarily result from the use of construction equipment and motor vehicles.

The proposed project involves the construction of the following three buildings: a 44 unit, 50,510 square foot (sf) community care facility; a 46-unit, 53,690 sf assisted living facility; and an 11,450 sf clubhouse. In addition, the proposed project would also include a total of 205 surface parking spaces and an emergency access road.

Construction activities for the proposed project would generate construction-related air pollutant emissions from entrained dust, equipment and vehicle exhaust emissions, asphalt off-gassing and architectural coatings. Entrained dust results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in PM_{10} and $PM_{2.5}$ emissions. Exhaust from internal combustion engines used by construction equipment, haul trucks, vendor trucks, and worker vehicles would result in emissions of NO_x, ROG, CO, PM_{10}, and $PM_{2.5}$. Architectural coatings (such as exterior/interior paint and other finishes) and asphalt would also produce ROG emissions. Notably, the contractor is required to comply with the VOC limits for architectural coatings per the requirements of the 2013 California Green Building Standards Code (CalGreen).

The proposed project would be required to comply with all EDCAQMD rules and regulations for construction including the following:

- Rule 210 related to the discharge of air contaminants
- Rule 215 related to architectural coatings
- Rule 223 related to fugitive dust
- Rule 223-1 related to construction related fugitive dust
- Rule 223-2 related to asbestos
- Rule 224 related to the use of asphalt

Table 4.2-6 presents the estimated maximum unmitigated daily construction emissions generated during construction of the proposed project in each year. The values shown are the maximum summer or winter daily emissions (i.e., worst-case) results from CalEEMod. Details of the emission calculations are provided in Appendix C. As shown in Table 4.2-6, the construction emissions generated by the proposed project are below the EDCAQMD project-specific thresholds of 82 lbs/day for ROG and NO_x. In addition, according to the EDCAQMD, if ROG and NO_x are less than significant during construction, then exhaust CO and PM_{10} would

also be less than significant. Therefore, the proposed project would result in a **less-than-significant** impact in regards to construction emissions of criteria air pollutants.

Table 4.2-6
Maximum Unmitigated Project Construction-Related Emissions

Pollutant	Project Emissions (lb/day)	EDCAQMD Significance Threshold (lb/day)
ROG	71.83	82.0
NO_x	46.20	82.0

Notes: See Appendix C for detailed results.

Operational Emissions

Operational emissions of ROG, NO_x, CO, and PM_{10} would be generated by the proposed project from mobile, area, and stationary sources. Vehicle trips to and from the project site which includes employees, visitors, and deliveries would make up the majority of the emissions. Emissions would occur from area and stationary sources such as natural gas combustion from heating mechanisms, landscape maintenance equipment exhaust, and consumer products (e.g., deodorants, cleaning products, spray paint).

As stated above, the proposed project is required to comply with all EDCAQMD rules and regulations, such as those listed previously for construction, as well as the following for operations:

- Rule 239 related to water heaters.

As previously noted above, the proposed project would use only low-VOC paints, in accordance with CalGreen and EDCAQMD rules and regulations. In addition the proposed project would incorporate numerous sustainability features which cannot be represented in the CalEEMod modeling such as, continuous insulation, dual pane glazing, high efficiency HVAC, and LED lighting. Emissions associated with project-generated daily traffic were modeled using trip-generation rates from the traffic impact analysis report (KD Anderson and Associates, Inc. 2015; Appendix F). According to the traffic impact analysis report the proposed project would generate 249 daily trips. The estimated operational emissions for the proposed project are presented in Table 4.2-7. As shown in Table 4.2-7, the operational emissions generated by the proposed project are below EDCAQMD project-specific thresholds of 82 lbs/day for ROG and NO_x. According to the EDCAQMD, during operation, if ROG and NO_x are less than significant, then exhaust CO, NO_2, SO_2, and PM_{10} would also be less than significant. The proposed project would result in a **less-than-significant impact** in regards to operational emissions of criteria air pollutants.

Table 4.2-7
Maximum Unmitigated Project Operational-Related Emissions

Pollutant	Project Emissions (lbs/day)	EDCAQMD Significance Threshold (lbs/day)
ROG	6.34	82.0
NO_x	2.21	82.0

Notes: See Appendix C for detailed results.

4.2-3: The proposed project would not expose sensitive receptors to substantial pollutant concentrations. This would be a less-than-significant impact.

Sensitive receptors are those more susceptible to the effects of air pollution than are the population at large. People most likely to be affected by air pollution include children, the elderly, and people with cardiovascular and chronic respiratory diseases. According to the EDCAQMD, sensitive receptors may include hospitals, schools, and convalescent facilities.

Two scenarios have the potential for exposing sensitive receptors to TACs. The first is when a project includes a new or modified source of TACs and would be located near an existing or proposed sensitive receptor. The second scenario involves a sensitive receptor being proposed near an existing or planned source of TACs. As a congregate senior care facility, the proposed project is a sensitive receptor. Additional sensitive receptors near the project site include the congregate care facility adjacent to the eastern boundary of the site, as well as the Marshall Medical Center which is further southeast of the site.

Asbestos

The EDCAQMD does not have an adopted regulation governing asbestos. A county-wide ordinance (Ordinance 4548) was adopted on January 4, 2000, adopting the CARB asbestos content level as a "permissible asbestos content level." The ordinance requires compliance with the level in the sale and use of asbestos-containing materials. The ordinance also requires any grading, excavation, and construction activities within the County to implement an Asbestos Dust Mitigation Plan within areas identified as to potentially contain any naturally occurring asbestos (NOA). The County requires an Asbestos Dust Mitigation Plan to be prepared when more than 20 cubic yards of earth is moved at a site found within an Asbestos Review Area. The project site is not in an area known likely to contain any NOA and is not within a review area (USGS 2011).

Carbon Monoxide

The proposed project includes the development of a congregate senior care facility center. As discussed under Impact 4.2-3, CO emissions were determined to be insignificant because ROG and NO_x emissions would be less than the air district's thresholds during both construction and

operation of the proposed project. Emissions of CO result from the incomplete combustion of carbon-containing fuels such as gasoline or wood and are particularly related to traffic levels. As older, more polluting vehicles are retired and replaced with newer, cleaner vehicles, the overall rate of CO emissions for the vehicle fleet throughout the state has been, and is expected to continue, decreasing. Therefore, emissions of CO would likely decrease over the lifetime of the proposed project. The surrounding area roadway network would support project traffic and, according to the transportation impact analysis report prepared for the proposed project, implementation of the proposed project would not cause any unacceptable levels of service on any nearby roadways or intersections. Thus, substantial levels of CO at surrounding intersections are not expected to occur and the proposed project would not generate or expose residents to localized concentrations of CO that would exceed standards.

Prescribed Burning

Prescribed burning is the intentional use of fire to reduce wildfire hazards, clear downed trees, control plant diseases, improve rangeland and wildlife habitats, and restore natural ecosystems. However, prescribed burning produces smoke which can be a nuisance and adversely affect the health of nearby residents and businesses. Smoke from burning wood and other vegetation contains a hazardous mixture of chemical substances such as CO, NO_x, VOCs, dioxins, polycyclic aromatic hydrocarbons (PAHs) and particulate matter. Some of the VOCs and PAHs are irritating, toxic, and/or cancer causing. The chemical makeup and total amount of these pollutants produced from burning depends on how the vegetation is burned. Smoke from prescribed burning, contains PM_{10} and $PM_{2.5}$ which can cause numerous negative human health effects. In addition, smoke generated by the burning of wood are composed of various tars, gases, soot, and ashes. Breathing PM_{10} and $PM_{2.5}$ can lead to bronchitis, chronic respiratory issues and heart disease.

The proposed project is located to the south of the Bureau of Land Management's (BLM) Pine Hill Preserve. BLM maintains the preserve and does periodic burning. BLM is required and has a burn permit and Smoke Management Plan (SMP) filed with EDCAQMD. The SMP specifies the "smoke prescription," which presents prerequisites before burning may take place which includes air quality, meteorological, and fuel conditions needed. In addition, before a prescribed burning would be undertaken, BLM is required to provide public meetings and information kiosks on site to avoid impacts to the community. According to the BLM Pine Hill Reserve Burn Map, the proposed project site is outside the probable minor to moderate impact zone for smoke travel. Therefore, impacts from prescribed burning would be **less than significant.**

Toxic Air Contaminants

TACs are a category of environmental concern as well. As indicated above, the CARB *Air Quality and Land Use Handbook* is used to qualitatively evaluate the potential for adverse health effects. CARB has identified DPM from diesel-fueled engines as a TAC; thus, freeways and high-traffic roads, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic are identified as having the highest associated health risks from DPM. Health risks from TACs are a function of both the concentration of emissions and the duration of exposure. Health-related risks associated with DPM in particular are primarily associated with long-term exposure and associated risk of contracting cancer.

CARB provides a list of recommendations that address the issue of siting "sensitive land uses" near specific sources of air pollution which includes:

- High traffic freeways and surface streets
- Distribution centers
- Rail yards
- Ports
- Refineries
- Chrome plating facilities
- Dry cleaners
- Large gas dispensing facilities

The proposed project does not involve long-term operation of any stationary diesel engines or other major on-site stationary source of TACs. The CARB *Air Quality and Land Use Handbook* recommends avoiding new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles per day, or rural roads with 50,000 vehicles per day. Any project placing sensitive receptors within 500 feet of a major roadway or freeway may have the potential to expose residents to TACs. Epidemiological studies indicate that the distance from the roadway and truck traffic densities were key factors in the correlation of health effects, particularly in children. The proposed project is located more than 1,882 feet from the edge of the nearest travel lane on U.S. Route 50. No local roads near the project site have average daily traffic levels exceeding 50,000 vehicles per day (KD Anderson and Associates, Inc. 2015 [Appendix F]). Consequently, the proposed project would not be expected to expose any sensitive receptors to a significant increase in individual cancer risk from DPM, and a detailed, site-specific health risk assessment is not warranted.

CARB also recommends avoiding siting new sensitive land uses within 1,000 feet of a distribution center with associated diesel truck trips of more than 100 trucks per day as a source of substantial TAC emissions. The proposed project is not located within 1,000 feet of a distribution center.

CARB recommends avoiding new sensitive land uses within 300 feet of a large fueling station (a facility with a throughput of 3.6 million gallons per year or greater). CARB recommends a 50-foot separation is recommended for typical gas dispensing facilities. The nearest gas station is the Cameron Park Valero located on Cameron Park Drive, approximately 1,451 feet south of the project site. Therefore, the proposed project would not be affected by TAC emissions associated with a large or typical gas dispensing facility.

CARB recommends avoiding siting new sensitive land uses within 300 feet of any dry cleaning operation that uses perchloroethylene. For operations with two or more machines, CARB recommends a buffer of 500 feet. For operations with three or more machines, CARB recommends consultation with the local air district. The nearest dry cleaning operation is Classic Cleaners located approximately 1,241 feet south of the project site. Therefore, the proposed project would not be affected by TAC emissions associated with a dry cleaner operation.

Because the proposed project is located beyond the CARB-recommended setbacks from high traffic freeways and roads, existing distribution centers, gas dispensing facilities, and nearby dry cleaner operations, the proposed project would not expose sensitive receptors to significant levels of pollutant concentrations, impacts related to substantial pollutant exposure to sensitive receptors would be **less than significant.**

4.2.5 Cumulative Impacts

The geographic scope of the area for the proposed project cumulative analysis includes El Dorado County and surrounding areas within the Sacramento Federal Nonattainment Area for ozone. The Sacramento Federal Nonattainment Area includes the counties of Sacramento, Yolo, Solano (partial), Sutter (partial), Placer (except Lake Tahoe Air Basin), and El Dorado (except Lake Tahoe Air Basin).

Emissions of TACs are normally localized and not region-wide. EDCAQMD considers implementation of “project alone” mitigation requirements, and compliance with all applicable emission limits and mitigation measures required by EPA, CARB, EDCAQMD rules and regulations, and local ordinances sufficient for a finding of not significant for cumulative impacts of TACs. Therefore, there is not existing cumulative impact and as stated in Impact 4.2-4, the proposed project would not construct a source of TACs or expose sensitive receptors to significant sources of TACs. Therefore, the proposed project would have a less-than-significant impact.

4.2-4: The proposed project would not 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). This would be a less-than-significant impact.

Non-attainment pollutants of concern include O_3 and PM_{10}. If a project exceeds the identified thresholds of significance, its emissions would result in significant adverse air quality impacts to the region's existing air quality conditions. The analysis considers construction and operation period impacts separately, as described below.

Construction Emissions

The EDCAQMD provides preliminary screening thresholds within their Guide used for determining significance of construction-related impacts associated with ROG and NO_x. As determined in Impact 4.2-2, the proposed project would not exceed the EDCAQMD significance threshold of 82 lb/day for either O_3 precursor. Therefore, the proposed project would have a **less-than-significant impact** in regards to construction related criteria pollutants and precursors.

Operational Emissions

The EDCAQMD provides preliminary screening thresholds within their Guide used for determining significance of operational-related impacts associated with ROG and NO_x. As determined in Impact 4.2-2, the proposed project would not exceed the EDCAQMD significance threshold of 82 lb/day for either O_3 precursor. Therefore, the proposed project would have a **less-than-significant impact** in regards to operational related criteria pollutants and precursors.

Other Criteria Pollutant Emissions

CO, PM_{10}, and other pollutants are evaluated for significance by comparison against the applicable national and state AAQS. A project would be considered significant if it is projected to cause a violation of any national or state AAQS. MCAB portion of El Dorado County are classified as attainment (or unclassified) for all national and state AAQS for CO, $PM_{2.5}$, NO_2, SO_2, sulfates, lead, and H_2S. The MCAB portion of the County is classified as nonattainment for the state 24-hour PM_{10} standard.

Emissions of CO, PM_{10}, and other pollutants generated from operation of the proposed project are significant if:

1. The project's contribution by itself would cause a violation of the AAQS; or

2. The project's contribution plus the background level would result in a violation of the AAQS and either
    a. A sensitive receptor is located within a quarter-mile of the project, or
    b. The project's contribution exceeds five percent of the AAQS.

The EDCAQMD considers development projects that fall below the significance levels, depicted in Table 4.2-2, for ROG and NO_x emissions also to be insignificant for CO, NO_2, PM_{10}, and SO_2. As determined in Impact 4.2-2, the proposed project is below the thresholds of significance for both ROG and NO_x during construction and operation. Therefore, CO, NO_2, PM_{10}, and SO_2 emissions are considered to be **less than significant**.

The EDCAQMD considers lead, sulfates, and H_2S to be less than significant except from industrial sources that results in these pollutants being directly emitted. The project would not include these sources and thus any potential emissions of lead, sulfates, and H_2S would be **less than significant**.

The EDCAQMD assumes that visibility impacts from development projects in the MCAB portion of the County would have an insignificant impact. Visibility impacts are controlled through state and national regulatory programs which govern vehicle emissions, and through mitigation required for O_3 precursors and particulate matter. Therefore, the proposed project would result in a **less than significant impact** on visibility impacts.

Overall, the proposed project would not result in cumulatively considerable emissions of criteria air pollutants and this impact would be **less than significant**.

4.2.6 Mitigation Measures

None required.

4.2.7 References

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4.3 BIOLOGICAL RESOURCES

4.3.1 Introduction

This section describes the existing biological setting within the project site, summarizes applicable regulations, and evaluates the potential effects that the proposed Ponte Palmero Project (proposed project) could have on biological resources, specifically special-status plant species present on the site.

The United States Fish and Wildlife Service (USFWS), U.S. Army Corps of Engineers (Corps), and the Bureau of Land Management (BLM), Pine Hill Preserve Manager all provided comments in response to the Notice of Preparation (NOP – see Appendix A). The USFWS requested the EIR evaluate the project's potential impact on wildlife and their habitat, impacts to special-status species, cumulative impacts, provide an analysis of alternatives that reduce impacts to biological resources, and an evaluation of the project's consistency with relevant land use or species recovery plans. The Corps requested a wetland delineation be prepared for the project site and a range of alternatives to avoid impacts to wetlands and waters of the U.S. be included in the EIR. The portion of the project site slated for development does not contain any wetlands or waters of the U.S.; therefore, a wetland delineation is not required (see the Biological Resources Technical Reports in Appendix D). The BLM Pine Hill Preserve Manager recommended that information currently included in the County's draft conservation strategy be reviewed to analyze impacts to protected plant species. The document referenced in the comment has not yet been approved by the County and is not available for preparation of this section. The commenter also requested the open space portion of the project site evaluate effects of habitat fragmentation, connectivity with existing conservation projects and management implications (including the current practice of burning fuel) be considered. All of these concerns are addressed in this section. A copy of the NOP and comment letters received in response to the NOP is included in Appendix A.

Information referenced to prepare this section includes the following sources: an Arborist Report, a Biological Resources Evaluation and Jurisdictional Resources Report, and a Botanical Inventory Report, all prepared by Sycamore Environmental Consultants; and a Biological Resources Technical Memorandum prepared by Dudek. The biological resource reports are all available for review in Appendix D.

4.3.2 Environmental Setting

This section describes the existing habitats in the project area and also identifies the sensitive habitats that could be affected by development of the project site. Special-status species with the potential to occur in habitats found within the project site are also described.

Physical Setting

The proposed project site encompasses 19.87 acres of land (Assessor's Parcel No. 083-350-57) located within the unincorporated community of Cameron Park in western El Dorado County (project area). The proposed project development (development area) is planned on 9.11-acres (including the 0.29 acre emergency access road) within the eastern portion of the project site while the remainder of the property is proposed for preservation (preservation area). The project is bounded by the existing Cameron Park Congregate Care project to the east, commercial development to the south, residential development to the west, and the Bureau of Land Management's (BLM's) Pine Hill Preserve (open space) to the north.

The project is located within Township 9 North, Range 9 East of Section 3 of the Shingle Springs U.S. Geological Survey (USGS) 7.5 minute quadrangle (quad). The center of the property is located at the following decimal degree coordinates: 38.6660 N, -120.9700 W. Elevation ranges throughout the site from 1,340 feet above mean sea level (AMSL) to 1,470 feet AMSL.

Soils

Soils at the project area are generally rocky. There are three soil types mapped within the project area: Rescue extremely stony sandy loam, 3 to 50 percent slopes, eroded; Rescue sandy loam, 2 to 9 percent slopes; and, Rescue very stony sandy loam, 3 to 15 percent slopes. These soils generally correspond to gabbroic soils with which many El Dorado County rare plants are associated (NRCS 1974) (see Figure 4.3-1).

Vegetation

The study area is composed mostly of chaparral with species such as oak (*Quercus* sp.), chamise (*Adenostoma fasciculatum*), and whiteleaf manzanita (*Arctostaphylos viscida*) making up the overstory. Understory vegetation is comprised of species such as Sonoma sage (*Saliva sonomensis*), and holly-leaved redberry (*Rhamnus ilicifolia*). Vegetation communities are described by species composition and correspond to the list of California terrestrial natural communities recognized by the California Department of Fish and Wildlife (CDFW) and the El Dorado County General Plan EIR. Three land cover types/vegetation communities were identified within the project area during the follow-up survey by a Dudek botanist on September 8, 2015. These were California chaparral, California Annual and Perennial Grassland, and disturbed/developed. In addition, information from the Botanical Inventory Report for the Ponte Palmero Phase II Project, prepared by Sycamore Environmental Consultants, Inc., December 2015, was referenced. Habitat surrounding the project area includes trees and non-native vegetation in the congregant care development to the east, and commercial and residential development to the south and southwest. The Pine Hill Preserve to the west and north includes native chaparral habitat and a several scattered pine (*Pinus sabiniana*) trees. These trees could potentially provide nesting habitat for native birds protected by the federal Migratory Bird Treaty Act (MBTA) and California Fish and Game Code 3503.5, including raptors.

SOURCE: Bing Maps 2015, USDA Soils

FIGURE 4.3-1

Soils Map

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Table 4.3-1 provides acreages of each land cover type.

Table 4.3-1
Land Cover Types within the Ponte Palmero Project Site

Macrogroup	Scientific Name	El Dorado County Major Habitat Type	Acres	% of Site
MG043. California Chaparral	*Arctostaphylos viscida - Adenostoma fasciculatum / Salvia sonomensis* (Whiteleaf manzanita – chamise/creeping sage chaparral	Mixed Chaparral	7.72	84.7%
Disturbed/Developed	N/A	Urban	1.40	15.3%
		Total	**9.11**	**100.0%**

Source: Biological Resources Technical Memo, Appendix D.

California Chaparral

California Chaparral *(*whiteleaf manzanita – chamise/creeping sage chaparral*)* generally has a continuous or intermittent shrub canopy less than 7 feet in height with a variable ground layer. The whiteleaf manzanita – chamise/creeping sage chaparral alliance is described by Sawyer, et al. (2009). The dominant shrub species are whiteleaf manzanita and chamise. Other shrub species common in this shrubland include redbud (*Cercis occidentalis*), hoary coffeeberry (*Rhamnus tomentella* ssp. *tomentella*), holly-leaved redberry, poison oak (*toxicodendron diverilobum*), california lilac (*Ceanothus lemonii*), toyon (*Heteromeles arbutifolia*), and pitcher sage (*Lepichinia calycina*). The dominant species in the herbaceous understory is Sonoma (or creeping) sage; however, Red Hills soaproot (*Chlorogalum grandiflorum*), and a newly described species of sedge (*Carex xerophila*) are also prevalent in the understory of the chaparral. Foothill pine trees (*Pinus sabiniana*) occur sporadically in the project area and are generally around 20 feet in height at most. This land cover type corresponds to gabbroic northern mixed chaparral, as described by Holland and it is considered a special-status community by CDFW.

California Annual and Perennial Grassland

Several small areas of annual grassland occur within the project area, primarily at the far western and eastern portion of the site. This community is generally characterized by a lack of shrub and tree cover and a prevalence of non-native, annual grass species such as soft brome (*Bromus hordeaceous*) and wild oat (*Avena* sp.*)* which dominate the majority of the project area.

Disturbed/Developed

Disturbed/Developed land cover is located primarily in the eastern portion of the area proposed for development. Based on a field visit, land in this area appears to have been previously graded as part of a prior road improvement that included installation of a culvert where Ponte Morino Drive and the unnamed tributary to Deer Creek meet the eastern boundary of the

project. This graded area is dominated by non-native herbaceous species such as Italian ryegrass (*Festuca perenne*), soft brome, rose clover (*Trifolium hirtum*), and Spanish lotus (*Acmispon americanus*). Some shrubby species, including Yerba Santa (*Eriodictyon* spp.) and deerweed (*Acmispon glaber*), have begun to grow along the perimeter of this graded area.

Representative photos of the project site are included in an appendix to the Biological Resources Technical Memorandum in Appendix D. For a list of plant species observed on the project site during the field survey, please see Appendix D.

Common Wildlife

Important habitat for a variety of wildlife species is found throughout the county. Large contiguous blocks of land that contain several habitat types have the potential to support the high numbers of species and a large amount of diversity. Common wildlife species occur in both all sizes of habitat blocks, while most large mammals and species that have large home ranges are usually found within large undisturbed parcels. In general, a smaller diversity of native species would be expected to occur in densely urbanized areas.

Chaparral scrub communities, such as those located throughout much of the project area, are important for animal cover and provide high quality foraging and nesting opportunities for songbirds and shelter for numerous mammals and reptiles. The few trees found on the site provide good nesting habitat for raptors (birds of prey) such as red-tailed hawk (*Buteo jamacensis*) and smaller passerine species such as oak titmouse (*Baeolophus inornatus*).

The site provides suitable cover and foraging habitat for several common wildlife species that are accustomed to a high level of noise, traffic and other human disturbance that is associated with urban developed areas adjacent to undeveloped land. Examples of common wildlife species expected to use the site include raccoon (*Procyon lotor*), Virginia opossum (*Didelphis virginianus*), coyote (*Canis latrans*), black-tailed jackrabbit (*Lepus californicus*), gray fox (*Urocyon cinereoargenteus*), wild turkey (*Meleagris gallopavo*) and mule deer (*Odocoileus hemionus*).

SOURCE: Sourcing Information

FIGURE 4.3-2

CNDDB 1/2-Mile Map

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Special-Status Species

A list of species with potential to occur on the project site was generated based on the results of a California Natural Diversity Database (CNDDB), USFWS, and California Native Plant Society (CNPS) records and literature review, as well as previous occurrence data, suitable habitat, elevation, and soils at the project site. Special-status species recorded within 5 miles and one-half mile of the project area are shown in Figure 4.3-2. A total of 12 special-status plant species, one special-status bird, one special-status mammal and one special-status reptile have the potential to occur within or adjacent to the project area, as shown in Table 4.3-2. Special-status species for which there was very low or no potential to occur at the project area due to lack of suitable habitat or distributional constraints and were therefore removed from consideration are discussed below.

Species were considered to have special status if they met at least one of the following criteria:

- Listed, candidate, or proposed for listing under the federal Endangered Species Act (ESA) or the California Endangered Species Act (CESA);
- Listed as a species of special concern (SSC) by CDFW;
- Listed as fully protected by the CDFW;
- Identified as a watch list species by the CDFW;
- Listed by the CNPS as California Rare Plant Ranks 1A (presumed extinct in California and rare/extinct elsewhere), 1B (rare, threatened, and endangered in California and elsewhere), 2A (presumed extinct in California, but more common elsewhere), or 2B (rare, threatened, or endangered in California, but more common elsewhere); or
- California Rare Plant Ranks 3 (plants for which more information is needed), or 4 (plants of limited distribution).

Plants

The portion of the project site adjacent to the Pine Hill Preserve, an area of more than 4,000 acres dedicated to protect the rare and endangered plants that grow on the Gabbro soils of western El Dorado County, contain several special-status plant species. A total of 28 special-status plant species that could potentially occur in the vicinity of the project site were revealed during the CNDDB and CNPS searches. Of these, 16 were removed from consideration due to lack of suitable habitat or soil types: Jepson's onion (*Allium jepsonii*), Congdon's onion (*Allium sanbornii* var. *congdonii*), and Sanborn's onion (*Allium sanbornii* var. *sanbornii*) all require volcanic or serpentine soils, which do not exist on the site. True's manzanita (*Arctostaphylos mewukka* ssp. *truei*), Brewer's calandrinia (*Calandrinia breweri*), Jepson's woolly sunflower (*Eriophyllum jepsonii*), and Humboldt lily (*Lilium humboldtii* ssp. *humboldtii*), are not known from gabbro soils, which dominate the site. The site is outside of the known elevation range of

Nissenan manzanita (*Arctostaphylos nissenana*), Van Zuuk's morning glory (*Calystegia vanzuukiae*), Fresno ceanothus (*Ceanothus fresnensis*), and starved daisy (*Erigeron miser*). No suitable habitat associations are available for streambank spring beauty (*Claytonia parviflora* ssp. *grandiflora*), Ewan's larkspur (*Delphinium hansenii* ssp. *ewanianum*), or Tuolumne button-celery (*Eryngium pinnatisectum*). No aquatic habitat (marsh or swamp) exists for Sanford's arrowhead (*Sagittaria sanfordii*) on the project site. Hernandez bluecurls (*Trichostema rubisepalum*) is typically found in mesic habitats. The remaining 12 special-status plant species were identified as having moderate to high potential to occur within the project area, or were observed during field visits (Table 4.3-2). Species for which suitable habitat is available on site are discussed further, below. All special-status plant species with the potential to occur on the project site are discussed in more detail in the Biological Resources Technical Memorandum prepared by Dudek and the Botanical Inventory Report for the Ponte Palmero Project prepared by Sycamore Environmental Consultants, Inc., included in Appendix D to this Draft EIR. Based on a plant survey performed by Sycamore Environmental Consultants in June 2015, the approximate number of plants on the project site (including the 10.64 acre mitigation area) and acreage is shown in Table 4.3-3.

During the survey, a newly described species of sedge (*Carex xerophila*) was prevalent in the understory of the chaparral on the project site. At the time of this writing, this species does not have special-status under CDFW, USFWS or CNPS regulations. However, should this species acquire special-status during the environmental review period for this project, protection of and/or mitigation for this species may need to be addressed in the future.

Table 4.3-2
Special-Status Plant Species with the Potential to Occur on the Ponte Palmero Project Site

Special-Status Plant Species	Common Name	Federal Status[1]	State Status[1]/CNPS[2]	Source[3]	Observed on the Project Site
Balsamorhiza macrolepis	Big-scale balsamroot	--	--/1B.2	2	No
Calystegia stebbinsii	Stebbins' morning-glory	E	E/1B.1	1,2	Yes
Calystegia vanzuukiae	Van Zuuk's morning-glory	--	--/1B.3	2	No
Carex xerophila	Chaparral sedge	--	--/--	3	Yes
Ceanothus roderickii	Pine Hill ceanothus	E	R/1B.1	1,2	Yes
Chlorogalum grandiflorum	Red Hills soaproot	--	--/1B.2	2	Yes
Crocanthemum (=Helianthemum) suffrutescens	Bisbee Peak rush-rose	--	--/3.2	2	Yes
Fremontodendron decumbens	Pine Hill flannelbush	E	R/1B.2	1,2	No
Galium californicum ssp. *sierrae*	El Dorado bedstraw	E	R/1B.2	1,2	No
Packera (=Senecio) layneae	Layne's butterweed	T	R/1B.2	1,2	Yes

Table 4.3-2
Special-Status Plant Species with the Potential to Occur on the Ponte Palmero Project Site

Special-Status Plant Species	Common Name	Federal Status[1]	State Status[1]/CNPS[2]	Source[3]	Observed on the Project Site
Viburnum ellipticum	Oval-leaved viburnum	--	--/2B.3	2	No
Wyethia reticulata	El Dorado County mule ears	--	--/1B.2	2	Yes
Sensitive Natural Communities					
Gabbroic Northern Mixed Chaparral		--	--	3	Yes
Channels		--	--	3	Yes

Source: Appendix D

Notes:

1. Listing Status**:** Federal status determined from USFWS (2015) letter. State status determined from CDFW (2015). Codes used in table are: **E** = Endangered; **T** = Threatened; **P** = Proposed; **C** = Candidate; **R** = California Rare.
2. Other Codes: CNPS codes used in table are as follows: **CNPS Rank** (plants only): **1A** = Presumed Extinct in CA; **1B** = Rare or Endangered (R/E) in CA and elsewhere; **2** = R/E in CA and more common elsewhere; **3** = Need more information; **4** = Plants of limited distribution **CNPS Rank Decimal Extensions: .1** = Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat); **.2** = Fairly endangered in CA (20–80% of occurrences threatened); **.3 =** Not very endangered in CA (< 20% of occurrences threatened or no current threats known).
3. Sources: **1** From USFWS (2015) letter. **2** = From CNDDB (CDFW 2015) and/or CNPS (2015). **3** = Observed or included by Sycamore Environmental.

Table 4.3-3
Estimate of Pine Hill Plants Observed on the Ponte Palmero Project Site and Proposed Mitigation Area

Special-Status Plant Species	Common Name	Project Site (Impacts)		Proposed Mitigation Area (Avoided)	
		Estimated No. of Plants	*Area Occupied (ac)*	*Estimated No. of Plants*	*Area Occupied (ac)*
Calystegia stebbinsii	Stebbins' morning-glory[1]	9	0.008	48	0.059
Carex xerophila	Chaparral sedge[3]	17	0.032	212	0.257
Ceanothus roderickii	Pine Hill ceanothus	3,119	1.354	2,886	1.542
Chlorogalum grandiflorum	Red Hills soaproot	1,000+[2]	--	1,000+[2]	--
Crocanthemum (=Helianthemum) suffrutescens	Bisbee Peak rush-rose	53	0.405	223	1.796
Packera (=Senecio) layneae	Layne's butterweed	2	0.006	0	0
Wyethia reticulata	El Dorado County mule ears	165	0.018	3,026	0.152

Source: Sycamore Environmental Consultants, Inc., June 23, 2016 memorandum.

Notes:

1 The current estimate of Stebbins' morning-glory at the site is much less than in previous years. See the 2015 botanical survey for further discussion (Sycamore Environmental, December 2015-Appendix D). In either case, there is much more Stebbins' morning-glory in the mitigation area.

2 The entire project area, except for the disturbed/developed area, contains Red Hills soaproot at varying densities. Thus, discrete polygons were not mapped. It is estimated that thousands of Red Hills soaproot plants occur in the project area.

3. This species was newly described by Zika *et al.* (2014).

Wildlife

A total of 25 special-status wildlife species that could potentially occur in the vicinity of the project site were revealed during the CNDDB and USFWS searches. One reptile, Blainville's horned lizard (*Phrynosoma blainvillii*), and one bird, white-tailed kite (*Elanus leucurus*) were identified as having moderate to high potential to occur within the project area (Table 4.3-4). The remaining 23 species were removed from consideration due to lack of suitable habitat within or adjacent to the project site, or the species range being exclusive of the site location. A lack of vernal pool or other seasonally ponded areas precludes vernal pool fairy shrimp (*Branchinecta lynchi*) from being present on the site. No suitable aquatic habitat exists on the site for California red-legged frog (*Rana draytonii*), foothill yellow-legged frog (*Rana boylii*), steelhead trout (*Oncorhynchus mykiss irideus,* six distinct population segments), or giant gartersnake (*Thamnophis gigas*). Burrowing owl (*Athene cunicularia*), grasshopper sparrow (*Ammodramus savannarum*) and Swainson's hawk (*Buteo swainsoni*) prefer open habitats for foraging and/or nesting which do not occur on site. Suitable wetland or riparian habitat with emergent vegetation used for nesting by tricolored blackbird (*Agelaius tricolor*), great blue heron (*Ardea herodias*), and great egret (*Ardea alba*) are not present within the project area. Suitable nesting habitat (i.e., cliffs or tall trees) for bald eagle (*Haliaeetus leucocephalus*), golden eagle (*Aquila chrysaetos*) and bank swallow (*Riparia riparia*) are not present on or immediately adjacent to the project site. The absence of mature mixed conifer or old growth forest precludes northern goshawk (*Accipiter gentilis*), silver haired bat (*Lasionycteris noctivagans*) and fisher (*Pekania pennanti*) from using the site. Species for which suitable habitat exists on the site are discussed further, below. All special-status wildlife species with potential to occur on the project site are discussed in more detail in Appendix D.

Table 4.3-4
Special-Status Animal Species with Moderate to High Potential to Occur Within the Project Area

Common Name	Scientific Name	Status (Federal/ State)	Habitat	Potential to Occur
Reptiles				
Blainville's horned lizard	*Phrynosoma blainvillii*	None/ SSC	Open areas of sandy soil in valleys, foothills and semi-arid mountains including coastal scrub, chaparral, valley-foothill hardwood, conifer, riparian, pine-cypress, juniper and annual grassland.	**Observed.** The project site provides suitable chaparral habitat for this species and it was observed less than 0.2 miles to the east of the project area in 2005.

Table 4.3-4
Special-Status Animal Species with Moderate to High Potential to Occur Within the Project Area

Common Name	Scientific Name	Status (Federal/ State)	Habitat	Potential to Occur
Birds				
white-tailed kite	*Elanus leucurus* (nesting)	None/ FP	Nests in woodland, riparian, and individual trees near open lands; forages opportunistically in grassland, meadows, scrubs, agriculture, emergent wetland, savanna, and disturbed lands.	**Moderate potential to occur.** Suitable nesting and foraging habitat is present on and adjacent to the site.

Status Abbreviations
SSC: California Species of Special Concern
FP: California Fully Protected Species
Source: Appendix D.

Sensitive Natural Communities

Two sensitive natural communities were documented in the project site during the 2015 botanical survey completed by Sycamore Environmental Consultants: (1) gabbroic northern mixed chaparral (approximately 17.85 acres; discussed above) and (2) channels (0.05 acre). Two channels were mapped by Sycamore Environmental Consultants during a formal wetland delineation prepared in 2005 (Sycamore Environmental 2005). Channel 1 flows into the project site at its northeast corner, through an existing culvert, south through a ravine just west of Ponte Morino Drive, and then east under Ponte Morino Drive at the southeast corner of the site. The second ephemeral channel begins in the south-central portion of the site and flows southwest leaving the project site. No riparian vegetation was identified along the channels and both channels are surrounded by upland vegetation. These two channels are sensitive natural communities and were considered potentially jurisdictional under Section 404 of the Clean Water Act in the wetland delineation (Sycamore Environmental 2005). The Corps of Engineers promulgated a new federal rule defining “waters of the U.S.” in August 2015 (33 CFR 328.3). As of October 2015, per a federal court ruling, the rule is temporarily “stayed.” However, the project is designed to avoid any direct or indirect impacts to the channels (Sycamore 2015).

4.3.3 Regulatory Setting

Federal Regulations

Federal Endangered Species Act

The federal Endangered Species Act (FESA) of 1973 (16 U.S.C. 1531 et seq.), as amended, is administered by USFWS for most plant and animal species, and by the National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service for certain marine species. This legislation is intended to provide a means to conserve the ecosystems upon which endangered and threatened species depend and provide programs for the conservation of those species, thus preventing extinction of plants and wildlife. FESA defines an endangered species as "any species that is in danger of extinction throughout all or a significant portion of its range." A threatened species is defined as "any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." Under FESA, it is unlawful to take any listed species, and "take" is defined as, "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct."

FESA allows for the issuance of incidental take permits for listed species under Section 7, which is generally available for projects that also require other federal agency permits or other approvals, and under Section 10, which provides for the approval of habitat conservation plans (HCPs) on private property without any other federal agency involvement. Upon development of an HCP, USFWS can issue incidental take permits (ITPs) for listed species.

Clean Water Act

Pursuant to Section 404 of the Clean Water Act (CWA), the ACOE regulates the discharge of dredged and/or fill material into "waters of the United States." The term "waters of the United States" (waters) is defined in the "Definition of Waters of the United States" in Corps regulations (33 CFR 328.3(a)) as (1) all waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; (2) all interstate waters including interstate wetlands; (3) all other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect foreign commerce; (4) all impoundments of waters otherwise defined as waters of the United States under the definition; (5) tributaries of waters identified in paragraphs (a) (1) through (4) of this section; and (6) wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a)(1) through (6) of this section.

The term “wetlands” (a subset of waters) is defined in 33 CFR 328.3(b) as “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.”

The discharge of dredge or fill material into waters, including wetlands, requires authorization from the Corps prior to impacts. For impacts to wetlands or waters under ACOE jurisdiction, either an Individual Permit or a Nationwide Permit (NWP) would be required in accordance with Section 404 of the CWA. If a project fails to comply with the terms and regulations specified in the NWP guidelines, then an Individual Permit to ACOE must be prepared. No jurisdictional wetlands are present on the project site.

Pursuant to Section 401 of the federal CWA, the Central Valley Regional Water Quality Control Board (RWQCB) regulates discharging waste, or proposing to discharge waste, within any region that could affect a “water of the state” (California Water Code, Section 13260(a)), pursuant to provisions of the Porter–Cologne Water Quality Control Act. Waters of the state are defined as “any surface water or groundwater, including saline waters, within the boundaries of the state” (California Water Code, Section 13050(e)). Before the Corps will issue a CWA Section 404 permit, applicants must receive a CWA Section 401 Water Quality Certification from the RWQCB. If a CWA Section 404 permit is not required for the project, the RWQCB may still require a permit (i.e., Waste Discharge Requirement) for impacts to waters of the state under the Porter–Cologne Water Quality Control Act.

Section 402 under the CWA establishes the National Pollutant Discharge Elimination System (NPDES), a permitting system for the discharge of any pollutant (except for dredged or fill material) into waters of the United States. This permit program is administered by the State Water Resources Control Board (SWRCB). The NPDES program regulates municipal and industrial stormwater discharges under the requirements of the CWA. California is authorized to implement a state industrial stormwater discharge permitting program, with the SWRCB and the RWQCB as the permitting agencies.

The County must comply with the requirements of the NPDES permit for Discharges of Storm Water Runoff associated with Construction Activity. This permit (i.e., the Construction General Permit) regulates discharges from construction sites that disturb one acre or more of total land area. By law, all stormwater discharges associated with construction activity where clearing, grading, and excavation results in soil disturbance must comply with the provisions of this NPDES permit. The permitting process requires the applicant to prepare and implement an effective Storm Water Pollution Prevention Plan (SWPPP). The project applicant must submit a Notice of Intent (NOI) to the CVRWQCB to be covered by a NPDES permit and prepare the

SWPPP prior to the beginning of construction. Please see also Appendix B for more information specific to hydrology and water quality in the Initial Study.

Migratory Bird Treaty Act

The MBTA was originally passed in 1918 as four bilateral treaties, or conventions, for the protection of a shared migratory bird resource. The primary motivation for the international negotiations was to stop the "indiscriminate slaughter" of migratory birds by market hunters and others. Each of the treaties protects selected species of birds and provides for closed and open seasons for hunting game birds. The MBTA protects over 800 species of birds.

State Regulations

California Endangered Species Act

The California Endangered Species Act (CESA) defines an endangered species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease." CESA defines a threatened species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the Commission as rare on or before January 1, 1985, is a threatened species." A candidate species is defined as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the California Fish and Game Commission (Commission) has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the Commission has published a notice of proposed regulation to add the species to either list." CESA does not list invertebrate species.

CDFW administers CESA which prohibits the "take" of species designated by the Fish and Game Commission as endangered or threatened in the state of California. Under CESA Section 86, take is defined as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA Section 2053 stipulates that state agencies may not approve projects that will "jeopardize the continued existence of any endangered species or threatened species, or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available consistent with conserving the species or its habitat which would prevent jeopardy."

CESA authorizes the taking of threatened, endangered or candidate species if take is incidental to an otherwise lawful activity and if specific criteria are met. These provisions also require CDFW to coordinate consultations with USFWS for actions involving federally listed species that are also state-listed species. In certain circumstances, CESA allows CDFW to adopt a CESA incidental take authorization based on a finding that the federal permit adequately protects the species and is consistent with state law.

California Environmental Quality Act

Although threatened and endangered species are protected by specific federal and state statutes, Section 15380(b) of the CEQA Guidelines provides that a species not listed on the federal or state list of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria. These criteria have been modeled after definitions in FESA and the section of the California Fish and Wildlife Code dealing with rare or endangered plants and animals. CEQA Guidelines Section 15380(b) requires public agencies to undertake reviews to determine if projects would result in significant effects on species that are not listed by either the USFWS or CDFW (i.e., candidate species). Thus, CEQA provides an agency with the discretion and ability to determine impacts to be significant, and to require mitigation if significant impacts would occur, until the respective government agencies have an opportunity to designate the species as protected, if warranted.

California Fish and Game Code Sections 3503, 3503.5, and 3513

Fish and Game Code Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nests or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Fish and Game Code Section 3503.5 protects all birds of prey (raptors) and their eggs and nests. Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the MBTA. These regulations could require that elements of the proposed project (particularly vegetation removal or construction near nest trees) be reduced or eliminated during critical phases of the nesting cycle unless surveys by a qualified biologist demonstrate that nests, eggs, or nesting birds will not be disturbed, subject to approval by CDFW and/or USFWS.

California Fish and Game Code Sections 3511, 4700, 5050, and 5515

Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish) of the California Fish and Game Code designate certain species as “fully protected.” Fully protected species, or parts thereof, may not be taken or possessed at any time except as part of an approved Natural Community Conservation Plan (NCCP) that treats such species as “covered species” or in connection with statutory-specified actions pursuant to the “Quantification Settlement Agreement” involving water transfer from the Imperial Irrigation District to the

Metropolitan Water District of Southern California. The only fully protected species with some potential to occur on the project site is white-tailed kite, discussed in detail above. The California Fish and Game Commission may authorize the collecting of such species for necessary scientific research. Legally imported and fully protected species or parts thereof may be possessed under a permit issued by CDFW.

California Native Plant Society

Policy on Mitigation Guidelines Regarding Impacts to Rare, Threatened, and Endangered Plants

The policy of the CNPS is that all potential direct, indirect, and cumulative impacts to rare, threatened, or endangered plants and their habitats must be assessed and that appropriate measures be implemented to prevent such impacts resulting from projects. The policy of the CNPS is also that environmental documents and mitigation plans be based on complete, accurate and current scientific information. Viability of rare, threatened, or endangered plants and their habitats takes precedence over economic or political expediency. Because of the tremendous diversity of rare plant habitats in California, and the dependence of rare plants on their local habitats, it is imperative that mitigation measures be developed on a site specific basis. Local environmental conditions, species biology, land use patterns and other factors must be incorporated into the design of mitigation plans (CNPS 1998).

CNPS endorses the mitigation concepts in the CEQA, Statutes and Guidelines (1986) because they may be applied specifically to rare plants. The types of mitigation for environmental impacts that are listed in CEQA (Section 15370) are:

1. Avoiding the impact altogether by not taking a certain action.
2. Minimizing impacts by limiting the degree or magnitude of the action.
3. Rectifying the impact by repairing, rehabilitating or restoring the impacted environment.
4. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the project.
5. Compensating for the impact by replacing or providing substitute resources or environments.

Mitigation measures should be developed on a site specific basis in consultation with appropriate resources agencies. Under existing laws, a project applicant or a local lead agency may have the responsibility of consulting with public regulatory agencies on matters relating to project impacts on rare species.

CNPS fully endorses only avoiding the impact. Measures to minimize, to rectify, or to reduce or eliminate the impact over time are recognized by CNPS as partial mitigation. In addition, CNPS does not recognize off-site compensation as mitigation. For the complete policy, please see Appendix D.

Local Regulations

El Dorado County General Plan

The Conservation and Open Space Element in the County's General Plan includes a number of goals, objectives and policies applicable to the proposed project. Applicable goals, objectives and policies are listed below. Please note, the project site is not located on the Important Biological Resources Map, identified in Policy 7.4.2.1. The County has initiated proposed amendments to several General Plan objectives, policies, and implementation measures to address the County's need for a clear, defensible, feasible, and reasonable approach to managing biological resource impacts, primarily focused on impacts to oak trees and oak woodland resources included in the Conservation and Open Space Element. No changes are proposed to the Pine Hill plant species. The County adopted amendments to its General Plan in December 2015. The goals and policies below reflect the amended December 2015 plan. The County is in the process of revising goals and policies that address oak woodlands and other biological resources, including updating the Integrated Natural Resources Management Plan. The County does not anticipate taking action on this project until sometime in 2017.

Goals and Policies

Goal ER 7.4 Wildlife and Vegetation Resources. Identify, conserve, and manage wildlife, wildlife habitat, fisheries, and vegetation resources of significant biological, ecological, and recreational value.

Objective 7.4.1 Rare, Threatened and Endangered Species. The County shall protect State and Federally recognized rare, threatened, or endangered species and their habitats consistent with Federal and State laws.

> **Policy 7.4.1.1** The County shall continue to provide for the permanent protection of the eight sensitive plant species known as the Pine Hill endemics and their habitat through the establishment and management of ecological preserves consistent with County Code Chapter 130.71 and the USFWS's *Gabbro Soil Plants for the Central Sierra Nevada Foothills Recovery Plan* (USFWS 2002).
>
> **Policy 7.4.1.2** Private land for preserve sites will be purchased only from willing sellers.

Policy 7.4.1.3 Limit land uses within established preserve areas to activities deemed compatible. Such uses may include passive recreation, research and scientific study, and education. In conjunction with use as passive recreational areas, develop a rare plant educational and interpretive program.

Policy 7.4.1.5 Species, habitat, and natural community preservation/conservation strategies shall be prepared to protect special status plant and animal species and natural communities and habitats when discretionary development is proposed on lands with such resources unless it is determined that those resources exist, and either are or can be protected, on public lands or private Natural Resource lands.

Policy 7.4.1.6 All development projects involving discretionary review shall be designed to avoid disturbance or fragmentation of important habitats to the extent reasonably feasible. Where avoidance is not possible, the development shall be required to fully mitigate the effects of important habitat loss and fragmentation. Mitigation shall be defined in the Integrated Natural Resources Management Plan (INRMP) (see Policy 7.4.2.8 and Implementation Measure CO-M).

The County Agricultural Commission, Plant and Wildlife Technical Advisory Committee, representatives of the agricultural community, academia, and other stakeholders shall be involved and consulted in defining the important habitats of the County and in the creation and implementation of the INRMP.

Objective 7.4.2 Identify and Protect Resources. Identification and protection, where feasible, of critical fish and wildlife habitat including deer winter, summer, and fawning ranges; deer migration routes; stream and river riparian habitat; lake shore habitat; fish spawning areas; wetlands; wildlife corridors; and diverse wildlife habitat.

Policy 7.4.2.1 To the extent feasible in light of other General Plan policies and to the extent permitted by State law, the County of El Dorado will protect identified critical fish and wildlife habitat, as identified on the Important Biological Resources Map maintained at the Planning Department, through any of the following techniques: utilization of open space, Natural Resource land use designation, clustering, large lot design, setbacks, etc.

Policy 7.4.2.2 Where critical wildlife areas and migration corridors are identified during review of projects, the County shall protect the resources from degradation by requiring all portions of the project site that contain or influence said areas to be retained as non-disturbed natural areas through mandatory clustered development on suitable portions of the project site or other means such as density transfers if clustering cannot be achieved. The setback distance for designated or protected migration corridors shall be determined as part of the project's environmental analysis. The intent and emphasis of

the Open Space land use designation and of the non-disturbance policy is to ensure continued viability of contiguous or interdependent habitat areas and the preservation of all movement corridors between related habitats. The intent of mandatory clustering is to provide a mechanism for natural resource protection while allowing appropriate development of private property. Horticultural and grazing projects on agriculturally designated lands are exempt from the restrictions placed on disturbance of natural areas when utilizing "Best Management Practices" (BMPs) recommended by the County Agricultural Commission and adopted by the Board of Supervisors when not subject to Policy 7.1.2.7.

Pine Hill Preserve Management Plan

The Pine Hill Preserve Management Plan (CNPS 2008) was prepared "to ensure that habitat for eight rare plant species growing on gabbro soils at western El Dorado County (EDC) would be protected from factors threatening their survival and recovery." The mission of the Pine Hill Preserve is to conserve in perpetuity the rare plant species and plant communities of the western EDC gabbro soil formation. Based on information provided by BLM, the Preserve provides protection and management for 4,809 acres of rare plant habitat, 3,339 of which lie within a USFWS 5,001-acre area designated for the recovery of the federally listed rare plants (Graciela Henshaw, personal comm. 2016).

The Pine Hill Preserve Management Plan includes goals and objectives that establish fuel management (including prescribed burns) as an important preserve strategy for both preserved habitat and adjacent human communities, as follows:

> **Preserve Goal 3:** Manage vegetation to maintain adequate fuel loads, provide functional habitat for the rare gabbro soil plant species, and reduce the risks of wildfire damage to human life and property in areas adjacent to the Preserve.
>
> **Management Objective D:** Institute a fire/fuels and vegetation management program to promote the viability of the rare plant species at the Preserve, reduce the threat of wildfire, and increase the protection of properties and structures adjacent to the Preserve.

The project site is located the El Dorado County rare plant mitigation area 1 and is classified as a 'Commercial/ Industrial' development for the purposes of calculating the Rare Plant Mitigation fee (pers. comm. A. Mount). This area is subject to payment of fees for any impacts to Pine Hill plants or their habitat.

Recovery Plan for Gabbro Soil Plants

A Recovery Plan for Gabbro Soil Plants of the Central Sierra Nevada Foothills was prepared by the USFWS (2002). Conversion of habitat to urban and industrial uses has extirpated occurrences of several listed species in El Dorado County that require gabbroic soils due to degradation of their habitat. The gabbro habitat located in the southern portion of the Pine Hill formation is especially fragmented. Suitable "pristine" habitat remaining for a preserve system is limited, particularly in the southern portion of the Pine Hill formation. This plan was created to detail the actions necessary to achieve self-sustaining, wild populations of listed plant species so they will no longer require protection under the Endangered Species Act. Recovery objectives include stabilizing and protecting populations, conducting research necessary to refine reclassification and recovery criteria, and reclassifying to threatened (*i.e.*, downlisting) *Calystegia stebbinsii* and *Ceanothus roderickii*, species currently federally listed as endangered. The ultimate goals are to (1) protect and restore sufficient habitat and numbers of populations and (2) ameliorate both the threats v that caused five of the gabbro soil plants to be listed and any other newly identified threats in order to (3) delist *Calystegia stebbinsii*, *Ceanothus roderickii*, and *Senecio layneae*, and downlist of *Fremontodendron californicum* ssp. *decumbens*, and *Galium californicum* ssp. *sierrae*, and (4) ensure the long-term conservation of *Wyethia reticulata*. *Fremontodendron californicum* ssp. *decumbens* and *Galium californicum* ssp. *sierrae* are not currently considered delistable.

Methods discussed in the recovery plan to achieve these goals include habitat protection, monitoring and research programs, and habitat management techniques.

El Dorado County Ordinance No. 4500- Resolution 205-98

As of July 1998, a Rare Plant Mitigation ordinance was established by the County to offset impacts to rare plants from development projects codified in chapter 17.71 of the County Code. Mitigation fees are broken into three different categories: Single Family Residential, Multi-Family Residential, and Commercial and Industrial. Mitigation fees within each category differ depending on which Rare Plant Mitigation Area the project is in. Mitigation Area 0 includes lands within Ecological Preserves, Mitigation Area 1 includes Rare Plant Soils Study Areas, and Mitigation Area 2 includes the El Dorado Irrigation District (EID) service area (El Dorado County, 2016). The fee for this project, which is a commercial/industrial project in Mitigation Area 1, is $0.59 per square foot.

Payment of the fee (and other sources) helps fund the acquisition of land and management of the five unit Pine Hill Preserve System (USFWS, 2002). The County adopted the Ecological Preserve in-lieu fee program, in part, to reduce the often fragmented, small, and isolated mitigation areas that result from project by project mitigation, to streamline the environmental review process and to

ensure developers that the impacts of their projects would be mitigated to less than significant levels (Economic & Planning Systems, Inc., 1997). In 1997, prior to formal adoption of the fee program, California Department of Fish and Game Regional Manager, Banky Curtis commented that the in-lieu fee program would be sufficient mitigation for the Pine Hill endemic plants, and that the Department would not require additional mitigation from developers for the "take" of those plant species (Department of Fish and Game, 1997). As of 2002, "slightly more than 2,900 acres of rare plant habitat had been protected" within the Pine Hill Preserve. The General Plan acknowledges that the Recovery Plan goal was to acquire 5,000–plus acres.

In 2008 and again in 2009, Graciela Henshaw, Preserve Manager prepared a Rare Plant Survey Activity Report of the for the U.S. Fish & Wildlife Service, which describe the effectiveness of the Pine Hill Preserve system in ensuring the propagation of the Pine Hill endemic plant species (Pine Hill Preserve, 2008, 2009). The first report noted expansive growth of the Stebbins' morning-glory in particular (Pine Hill Preserver, 2008). Also in 2008, Sycamore Environmental Consultants, Inc. prepared an Annual Monitoring Report of the Mitigation Measures included in the adjacent congregate care facility, which documents the successful transplanting of Stebbins' morning-glory and other Pine Hill endemic plant species (Sycamore Environmental Consultants, 2008). Pine Hill Ceanothus has also been successfully transplanted in other parts of El Dorado County (Ruth Willson, personal comm. 2007).

El Dorado County Code

Chapter 130.71 of the El Dorado County Code establishes the ecological preserve and outlines the fee payment and fee program and addresses the eight special-status plants collectively known as the "Pine Hill Plants." The eight Pine Hill Plants are Stebbins' morning-glory (*Calystegia stebbinsii*); Pine Hill ceanothus (*Ceanothus roderickii*); Red Hills soaproot (*Chlorogalum grandiflorum*); Pine Hill flannelbush (*Fremontodendron californium* ssp. *decumbens*); El Dorado bedstraw (*Galium californicum* ssp. *sierrae*); Bisbee Peak rush-rose(*Helianthemum suffrutescens*); Layne's butterweed (*Packera layneae*); and El Dorado County mule ears (*Wyethia reticulata*).

4.3.4 Impacts

Methods of Analysis

Dudek conducted a biological survey on September 8, 2015, of the project site and prepared a Biological Resources Technical Memorandum (see Appendix D). The purpose of the reconnaissance survey was to verify information provided in prior biological reports prepared by Sycamore Environmental Consultants, Inc., (see Appendix D) to identify and characterize the biological communities present on and immediately adjacent to the project site, record plant and animal species observed on the site, and to evaluate the site for its potential to support sensitive biological resources. Potential sensitive biological resources include special-status plant and

animal species and any other resources considered sensitive by local, state, and/or federal resource agencies that could potentially be impacted by development of the project site. Special-status plant species observed during field surveys include: Stebbins' morning-glory (*Calystegia stebbinsii*), Pine Hill ceanothus (*Ceanothus roderickii*), Red Hills soaproot (*Chlorogalum grandiflorum*), Bisbee Peak rush-rose (*Crocanthemum suffrutescens*), and El Dorado County mule-ears (*Wyethia reticulata*). The site is comprised mostly of gabbroic soils which typically support a variety of special-status plant species.

The biological survey included a query of the CNDDB as well as a field survey. The CNDDB was queried for any reported occurrences of special-status species in El Dorado County's Shingle Springs USGS 7.5' quadrangle including all elevations within the quad. Additionally, a list of plants from the Shingle Springs and eight surrounding USGS topographic quadrangles from the CNPS Inventory of Rare and Endangered Plants of California was reviewed prior to the survey. Finally, a USFWS list for El Dorado County was also queried to ensure complete consideration of special-status species with the potential to occur. Prior to the field survey, a review of soils reports, aerial photos, and online resources also contributed to development of the list of special-status species with the potential to occur on site. A results summary of the CNDDB, CNPS and USFWS records search is included in Appendix D.

As noted earlier, the County is in the process of amending several General Plan objectives, policies, and implementation measures included in the Conservation and Open Space Element. The proposed amendments would not change the findings of the impact analysis below. The proposed amendments have not yet been adopted by the County.

Issues Addressed in the Initial Study

As evaluated in the Initial Study prepared for the proposed project (see Appendix B), the proposed project would have no impact with respect to conflicting with provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan. There are no plans applicable to the project site; therefore this issue is not further analyzed in this Draft EIR.

There are no jurisdictional wetlands on the project site that would be impacted by the proposed project as discussed in the Initial Study; therefore, an analysis of wetlands is not included below.

Thresholds of Significance

Consistent with Appendix G of the CEQA Guidelines, the County's General Plan, and professional judgment, a significant impact is assumed to occur if development of the proposed project would do any of the following:

- 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;

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;
- 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 wildlife nursery sites; or
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Impacts and Mitigation Measures

4.3-1: Construction of the proposed project could have a substantial adverse impact on special-status plants. This would be a significant impact.

Botanical surveys of the project area were conducted in 2015 by Sycamore Environmental Consultants and Dudek (September 2015). Several special-status plant species exist on the project site or have the potential to occur on the project site. Special-status plant species observed on the site include Stebbins' morning-glory (*Calystegia stebbinsii*), Pine Hill ceanothus (*Ceanothus roderickii*), Red Hills soaproot (*Chlorogalum grandiflorum*), Bisbee Peak rush-rose (*Crocanthemum suffrutescens*),Layne's butterweed (*Packera layneae*), chaparral sedge (*Carex xerophila*), and El Dorado County mule-ears (*Wyethia reticulata*). No other special-plant species were observed during the 2015 botanical surveys.

The Phase 2 development footprint includes 9.11 acres and a majority of this land contains gabbroic soils and Pine Hill plants. The proposed project would result in impacts to approximately 0.01 acre of land occupied by federal- and state-endangered Stebbins' morning-glory; 1.35 acre of federal-endangered and state-rare Pine Hill ceanothus; 0.02 acre of El Dorado County mule ears (on CNPS List 1B); and Red Hills soaproot plants (on CNPS List 1B), scattered throughout the project site. Plants impacted by development of the project are shown in Table 4.3-5.

Table 4.3-5
Ponte Palmero Project Impacts to Pine Hill Plants

Species	Estimated Number of Plants	Acreage	Federal Status	State Status/CNPS List
Stebbins' morning-glory (*Calystegia stebbinsii*)	9	0.01	Endangered	Endangered/CNPS Rank 1B.1
Pine Hill ceanothus (*Ceanothus roderickii*)	3,119	1.35	Endangered	Rare/CNPS Rank 1B.1

Table 4.3-5
Ponte Palmero Project Impacts to Pine Hill Plants

Species	Estimated Number of Plants	Acreage	Federal Status	State Status/CNPS List
Red Hills soaproot (*Chlorogalum grandiflorum*)	1,000+[1]	--[1]	None	--/CNPS Rank 1B.2
El Dorado County mule-ears (*Wyethia reticulata*)	165	0.02	None	--/CNPS Rank 1B.2
Layne's butterweed (*Packera layneae*)	2	0.01	Threatened	Rare/CNPS Rank 1B.2
Bisbee Peak rush-rose (*Crocanthemum suffrutescens*)	53	0.40	None	--/CNPS Rank 3.2
Chaparral sedge (*Carex xerophila*)	17	0.03	None	None/Newly described

Source: Sycamore Environmental Consultants, Inc., June 23, 2016 memorandum.
Note:
[1] The entire project area, except for the disturbed/developed area, contains Red Hills soaproot at varying densities. Thus, discrete polygons were not mapped. It is estimated that thousands of Red Hills soaproot plants occur in the project area.

Consistent with the approach taken on the previously constructed Cameron Park Congregate Care facility, the applicant intends to submit a 2081(b) incidental take permit application to CDFW for the "take" of certain plants that would be affected by the project.

The adequacy of the Mitigated Negative Declaration (MND) that was adopted for the Cameron Park Congregate Care facility project was challenged by the CNPS on the grounds that the County had violated CEQA by not providing adequate mitigation to substantially lessen or avoid impacts to protected plant species. In 2008, the trial court ruled in favor of the County. CNPS appealed and the Third District Court of Appeal reversed, ruling the MND was inadequate. (*CNPS v. County of El Dorado* (2009) 170 Cal.App.4th 1026.)

A subsequent Settlement Agreement was entered into by the County, the applicant and the CNPS which included various commitments related to development of the congregate care facility and future development of the project site, should development of this site be proposed and approved. As part of the Settlement Agreement, the project applicant executed an irrevocable offer of dedication for 23 acres of land to be donated to the BLM for inclusion in the Pine Hill Preserve. The conveyance was finalized with BLM via a lot line adjustment, including 20.94 acres from Parcel 1 (Assessor's Parcel No. 083-350-55) and 2.06 acres from Parcel 2 (Assessor's Parcel No. 083-350-53). The dedication of the 23 acres from both parcels to the BLM was completed in early 2016.

Table 4.3-6 provides an overview of the project history for the Congregate Care facility and mitigation requirements, as set forth in the Settlement Agreement.

Table 4.3-6
Cameron Park Congregate Care Development and Mitigation Areas

Project Component	Acres	Area Available for Mitigation (ac)
Original Project Parcel (includes the congregate care facility and the project site)		67.39
Project Footprint and Mitigation	12.08	
Ponte Marino Dr. (north and southbound lanes)	0.68	
Development Area	11.76	
Mitigation per the Settlement Agreement	23.00	
Project Footprint and Mitigation (subtotal)	*47.52*	*19.87*
Ponte Palmero Project Footprint		
Development Area	8.82	
EVA driveway	0.29	
Ponte Palmero Project Footprint (subtotal)	*9.11*	*10.76*
Mitigation Requirement, per Settlement Agreement	10.64	

Source: Sycamore Environmental Consultants, Inc., June 23, 2016 memorandum.

As provided in the Settlement Agreement, if the applicant proposed development of the project site, and the County approved the project and no litigation was filed, the project applicant voluntarily agreed that an additional 10.64 acres of land would be dedicated to the Pine Hill Preserve to be preserved in perpetuity for these rare plant species. Under this scenario, the applicant also committed to pay CNPS $50,000 dollars to be used for conservation studies and/or other conservation activities at the discretion of CNPS. More details about the Settlement Agreement are available in Chapter 3, Project Description. The dedication of 10.64 acres of land to the Pine Hill Preserve, in the event that another lawsuit is not filed, would reduce impacts to the special-status plant species located within the 9.11 acres designated for development to **less than significant.**

In the event the project is challenged via another petition for writ of mandate and the EIR mitigation reverts back to consisting solely of payment of the County's rare plant mitigation fee and the transplanting of certain plants, a direct **significant impact** to special-status plants would result, as would an indirect **significant impact** from the loss of gabbro soil habitat.

4.3-2: Construction and operation of the proposed project could have a substantial adverse impact on special-status animals. This would be a significant impact.

Based on the CNDDB, Blainville's horned lizard (*Phrynosoma blainvillii*) and white-tailed kite (*Elanus leucurus*) were identified as having a moderate to high potential to occur within the project area. A Blainville's horned lizard was observed less than 0.2 of a mile to the east of the project site in 2005. Since the project site provides suitable habitat for this species and there are occurrences near the site, there is a high potential for Blainville's horned lizard to occur on the project site. However, none

were observed during the September 2015 field survey. Take of any Blainville's horned lizards due to construction activities would be considered a **significant impact.**

Construction activities could also disturb breeding and nesting special-status bird species such as white-tailed kite, that could nest in the trees adjacent to the project site, as well as common raptor and passerine species protected by the MBTA and California Fish and Game Code 3503.5 (which specifically prohibits take of any active raptor nest). If construction occurs during the typical breeding season (February 1 through September 30) and take or disturbance of any native nesting bird species occurs due to project activities, this would be considered a **significant impact**.

4.3-3: Construction and operation of the proposed project could have a substantial adverse effect on a sensitive natural community. This would be a significant impact.

The majority of the project site contains soils that support California chaparral vegetation community, which is considered a sensitive vegetation community by CDFW and includes whiteleaf manzanita and chamise/creeping sage (*Arctostaphylos viscida -Adenostoma fasciculatum / Salvia sonomensis*).

If the County approves the project and no litigation is filed, an additional 10.64 acres of land would be voluntarily included into the Pine Hill Preserve, discussed above in Impact 4.3-1. By doing this, 10.64 acres of sensitive habitat would be preserved in perpetuity and the impact, from direct loss of plants and indirect loss of habitat, would be less than significant because little over 1 acre of land would be preserved in perpetuity for every acre developed (1:1). However, if the County approves the proposed project and litigation is filed, preservation of 10.64 acres of habitat would not occur, therefore, impacts to California chaparral vegetation community would be considered **significant**.

4.3-4: Construction and operation of the proposed project could interfere with an established migratory wildlife corridors or nursery site. This would be a significant impact.

The project site is not part of an established migratory or regional wildlife corridor and is surrounded on three sides by urban development; however, it is directly connected to a larger area of contiguous habitat (Pine Hill Preserve) that could function as part of a terrestrial wildlife corridor that links larger portions of open space areas or adjacent corridors to the east and west of the project site. Project activities such as lighting and noise could impede or alter wildlife movement through the Pine Hill Preserve, as it is immediately adjacent to the northern and northeastern boundary of the project site. This is considered a **significant impact.**

Cumulative Impacts

The geographical cumulative context for the evaluation of cumulative impacts on biological resources includes the areas contained within the Sacramento Valley. The area includes western Placer County and portions of the California Central Valley that to the north of the San Joaquin-Sacramento Delta, south of Redding, east of various Northern Coast Ranges, and west of the Northern Sierra. Regional development, including development in western El Dorado County which includes buildout of the County's General Plan and approved development in western El Dorado County.

4.3-5: The proposed project could result in a cumulatively considerable contribution to the loss of special-status plants and their habitat, and animals, natural communities and wildlife corridors. This would be a significant impact.

Over the past few decades, tens of thousands of acres of land have been developed or designated for development in El Dorado County. Development has occurred in and around the communities of Shingle Springs, Cameron Park, and El Dorado Hills and the City of Placerville. Development has also occurred further west in the City of Folsom, including in the surrounding areas. Future development within these areas would result in the further decline of native plant communities including habitat that supports sensitive species that thrive in gabbroic soils. The proximity of urban development would also contribute to the introduction of non-native plant and wildlife species, which would further degrade the habitat and available niches for native species in the surrounding region. The gabbro soil formation surrounding the Pine Hill Ecological Reserve encompasses approximately 30,000 acres. The potential loss of this soil formation due to future development within the County is considered a significant cumulative impact.

Construction and implementation of the proposed project would contribute to the urbanization and fragmentation of habitat within the County. As discussed above, the project site contains habitat for special-status species and other protected resources such as gabbro soil formation that supports California chaparral vegetation communities that would be lost with implementation of the project. The 9.11 acre (0.03%) loss of this habitat would be very small; however, the site also provides habitat for two special-status wildlife species, as well as other nesting bird species protected by the MBTA and California Fish and Game Code 3503.5. Therefore, the project's contribution to the existing cumulative impact would be considerable resulting in a **significant impact**.

4.3.5 Mitigation Measures

Mitigation Measure 4.3-1(a) is recommended to ensure preservation of special-status plants, specifically Stebbins' morning-glory (*Calystegia stebbinsii*), Pine Hill ceanothus (*Ceanothus roderickii*), Red Hills soaproot (*Chlorogalum grandiflorum*), Bisbee Peak rush-rose (*Crocanthemum*

suffrutescens), and El Dorado County mule-ears (*Wyethia reticulata*) present in the area to be disturbed by construction of the project. Mitigation Measure 4.3-1(b) specifies payment of fees as required by the El Dorado County Ecological Reserve fee structure for Zone 1.

Mitigation Measure 4.3-1(c) applies if the proposed project is approved by the County and litigation is filed, in which case donation of the additional land and payment of $50,000 to the CNPS would not be required. Instead, under this scenario, the applicant would be required to pay the fee required by the El Dorado County Ecological Reserve fee structure for Zone 1 described in Mitigation Measure 4.3-1(b). Under either scenario (litigation or no litigation), implementation of these mitigation measures would reduce direct and cumulative impacts to **less than significant**. If the County approves the project and a petition for writ of mandate is filed by CNPS or any of their individual members, past or present, challenging approval of the project under CEQA, the Planning and Zoning Law or other related statutes, the following mitigation shall apply.

Alternatively, if no petition for writ of mandate is filed, Mitigation Measure 4.3-1(c) shall be implemented instead of Mitigation Measures 4.3-1(a)-(b), in addition to payment of the fee ($68,233.50) required by Chapter 130.71, section 130.71.050 of the County Code.

4.3-1(a): Special-Status Plant Conservation, Salvage, Seed Collection or Propagation

(i) <u>*Calystegia stebbinsii*</u>: The applicant shall conduct pre-construction surveys and transplant any *Calystegia stebbinsii* found within the developable footprint of the project site and including the emergency vehicle access (EVA) road, to the previously established (.385 acre) *Calystegia stebbinsii* Preserve established as per Phase I, Condition 8 (as illustrated in the Mitigation Monitoring and Reporting Program adopted forthe Congregate Care facility) and consistent with past transplantation methods.

The applicant shall monitor the transplanted plants bi-annually for three years and submit an annual monitoring report to El Dorado County and the California Department of Fish and Wildlife. If dead *Calystegia stebbinsii* plants are found during the monitoring and reporting period, the same number of plants shall be propagated and planted by a qualified nursery, thus ensuring “no net loss” in the number of individual plants.

(ii) <u>*Ceanothus roderickii*</u>: The applicant shall hire a qualified nursery, landscape contractor or consultant to take cuttings from the existing 3,119 *Ceanothus roderickii* plants in the project area. The cuttings of *Ceanothus roderickii* shall be propagated in a commercial nursery consistent with past practices for Phase I. The applicant shall then plant a minimum of 3,119 cuttings in the previously established 5.96 acre preserve.

The *Ceanothus roderickii* plants shall be monitored bi-annually for at least three years by a qualified biologist and an annual monitoring report shall be prepared and submitted to El Dorado County and DFW. If dead *Ceanothus roderickii* plants are found during the monitoring and reporting period, the same number of plants that perished shall be planted thus ensuring "no net loss" in the number of individual plants.

4.3-1(b): Payment of the Ecological Preserve Fee (Chapter 130.71)

The El Dorado County Ecological Preserve fee structure for Zone 1 is $0.59 per square foot of commercial/industrial development. For the project, and pursuant to the Code, the applicant is required to pay $68,233.50 to mitigate for the loss of 9.11 acres of gabbro soil habitat.

4.3-1(c): Preservation of Habitat for Special-Status Plants

Consistent with the terms of the County Code and the 2010 Settlement Agreement in the matter of *CNPS v. County of El Dorado*, the applicant shall: (i) pay $68,233.50 as the appropriate fee in lieu of Ecological Preserve Mitigation as required by Section 130.71.050 of the County Code; (ii) donate 10.64 acres of land in perpetuity to the Bureau of Land Management (BLM) for inclusion in the Pine Hill Preserve or, alternatively, to a signatory to the Pine Hill Preserve Cooperative Agreement for incorporation into the Pine Hill Preserve system for the purpose of Pine Hill Plant conservation; and (iii) donate $50,000 to CNPS for conservation studies and/or conservation activities as deemed appropriate by CNPS.

Impacts to the Blainville's horned lizard would be significant because take of individual Blainville's horned lizards could occur during project construction by the use of heavy equipment or vehicle traffic. Additionally, the loss of habitat for Blainville's horned lizard could be potentially significant. Implementing Mitigation Measure 4.3-2(a) would reduce impacts to Blainville's horned lizard by surveying for the presence of any lizards on a daily basis. This would reduce impacts to less than significant. Potential impacts to special-status wildlife species and sensitive habitats on site could also occur due to construction activities such as lighting, noise, and direct take by heavy equipment and vehicle traffic. Implementation of Mitigation Measures 4.3-2(b) and 4.3-2(c), impacts to special-status species and sensitive habitats would be reduced to **less than significant**.

4.3-2(a): Blainville's Horned Lizard Pre-Construction Surveys and Exclusion Fencing

Exclusion fencing shall be installed prior to construction activities to prevent Blainville's horned lizard from entering the project site. Pre-construction clearance

surveys shall be performed at the beginning of each day by a qualified biologist to prevent the take of any Blainville's horned lizards. If any lizards are observed during surveys, they shall be relocated outside of the project boundary and project activities shall resume upon clearance by the designated biologist.

4.3-2(b): Biological Monitor

During project construction, the project site shall be surveyed weekly by a qualified biologist to determine if any active nests occur within or adjacent to the project site. The monitor shall have the authority to immediately stop any activity that is likely to impact special-status species or order any reasonable measure to avoid or minimize impacts to wildlife resources. If any previously unknown special-status species are found within the project area during the work period, the monitor shall inform the USFWS and/or CDFW within 1 day, as appropriate for the species.

4.3-2(c): Workers Environmental Awareness Program

All construction workers shall receive worker environmental awareness training (WEAP) conducted by a qualified biologist or an environmentally trained foreman. WEAP may also be conducted through a video created by a qualified biologist specifically for this project. WEAP shall instruct workers to recognize all special-status species potentially present within the project site and identify their habitat on or adjacent to the project site, identify sensitive habitats found on and adjacent to the project site and be aware of project boundaries so that impacts to these habitats are limited to within project boundaries, and the nature and purpose of protective measures including best management practices (BMPs) and other required mitigation measures.

4.3-2(d): Nesting Bird Avoidance

If construction is proposed during the breeding season (February 1-September 30), a pre-construction nesting bird survey shall be conducted within two weeks prior to the beginning of construction activities by a qualified biologist in order to identify active nests in the project site vicinity. If no active nests are found during the pre-construction survey, no further mitigation is required. If active nests are found, a temporary buffer shall be established, depending on nest location, species, and construction activities in the vicinity of the nest and the nest will be flagged or protected with high-visibility fencing. Additionally, the designated biologist shall be on-site daily while construction related activities are taking place near active nests and shall have the authority to

stop work if birds are exhibiting agitated behavior. Any trees containing nests that must be removed as a result of project implementation shall be removed during the non-breeding season (October 1-January 30).

The loss of 9.11 acres of sensitive habitat is considered a significant impact. Mitigation Measures 4.3-1 (a) through (c) specifies what steps the applicant would be required to take under either scenario (litigation or no litigation) to ensure impacts would be reduced to **less than significant**.

Construction activities related to the proposed project could restrict or impede wildlife movement through the adjacent Pine Hill Preserve. This would be a significant impact because movement corridors are an important biological component for wildlife cover, foraging and breeding activities. Implementation of Mitigation Measure 4.3-4 would reduce this to a **less-than-significant impact** by minimizing intrusion from lights and noise during both construction and operation.

4.3-4: Wildlife Movement Corridor Protection

To the extent feasible, construction shall be designed to minimize the restriction of wildlife (e.g., deer, mountain lions, coyotes, etc.) movement through the Pine Hill Preserve adjacent to the project site. Noise associated with construction activities shall be kept to a minimum as much as possible and construction shall be avoided at night. Idling of trucks and heavy equipment shall be limited to five minutes.

All outdoor lighting associated with project operation shall be designed to minimize light pollution into the open space or adjoining undeveloped land per the County's outdoor lighting ordinance (130.14.170), except where necessary for public safety or security. Minimization measures may include light fixture placement (e.g., as low to the ground as possible), lamp designs (e.g., shielding, low glare, or no lighting), directing light away from the Preserve, or other means to avoid or minimize light pollution.

Cumulative impacts to special-status species and sensitive habitats from construction of the proposed project could be significant because direct loss of sensitive habitats or protected special-status plant and wildlife species combined with take from other projects within the Sacramento Valley, including western Placer County could impact special-status species population range and distribution as a whole. Even with implementation of Mitigation Measures 4.3-1(a) through 4.3-3 the cumulative loss of gabbro soil formation that supports California chaparral vegetation communities would be a significant and unavoidable impact .

4.3-5: Implement Mitigation Measures 4.3-1(a), 4.3-2(a) through 4.3-2(d), and 4.3-3.

4.3.6 References

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4.4 GREENHOUSE GAS EMISSIONS

4.4.1 Introduction

This section describes the potential greenhouse gas (GHG) emissions associated with the Ponte Palmero Project (proposed project), and the potential effects of climate change on the project.

No comments were received relative to GHG emissions or climate change in response to the Notice of Preparation (NOP). A copy of the NOP and comment letters received in response to the NOP is included in Appendix A.

Information provided in this section was obtained from review of the *2004 El Dorado County General Plan*, last amended December 2015; the Sacramento Metropolitan Air Quality Management District *CEQA Guide to Air Quality Assessment*, revised June 2015; and emissions calculations and California Emissions Estimator Model (CalEEMod) outputs (included in Appendix C).

4.4.2 Environmental Setting

Climate change refers to any significant change in measures of climate, such as temperature, precipitation, or wind, lasting for an extended period (decades or longer). Gases that trap heat in the atmosphere are often called GHGs. The greenhouse effect traps heat in the troposphere through a threefold process: short-wave radiation emitted by the Sun is absorbed by the Earth, the Earth emits a portion of this energy in the form of long-wave radiation, and GHGs in the upper atmosphere absorb this long-wave radiation and emit it into space and back toward the Earth. This trapping of the long-wave (thermal) radiation emitted back toward the Earth is the underlying process of the greenhouse effect.

Principal GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), ozone (O_3), and water vapor (H_2O). Some GHGs, such as CO_2, CH_4, and N_2O, can occur naturally and are emitted into the atmosphere through natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Emissions of CO_2 are largely byproducts of fossil-fuel combustion, whereas CH_4 results mostly from off-gassing associated with agricultural practices and landfills. Human-caused GHGs, which are produced by certain industrial products and processes, have a much greater heat-absorption potential than CO_2. They include fluorinated gases, such as hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3) (CAT 2006).

The greenhouse effect is a natural process that contributes to regulating the Earth's temperature. Without it, the temperature of the Earth would be about 0 degrees Fahrenheit (°F) (−18 degrees

Celsius (°C)) instead of its current 57°F (14°C). Global climate change concerns are focused on whether human activities are leading to an enhancement of the greenhouse effect.

The effect each GHG has on climate change is measured as a combination of the mass of its emissions and the potential of a gas or aerosol to trap heat in the atmosphere, known as its global warming potential (GWP). The GWP varies between GHGs; for example, the GWP of CH_4 is 21, and the GWP of N_2O is 310. Total GHG emissions are expressed as a function of how much warming would be caused by the same mass of CO_2. Thus, GHG gas emissions are typically measured in terms of tons or metric tons (MT) of CO_2 equivalent (CO_2E).[1]

Contributions to Greenhouse Gas Emissions

In 2013, the United States produced 6,673 million metric tons (MMT) of CO_2E. The primary GHG emitted by human activities in the United States was CO_2. This primary GHG represented approximately 82.5% of total GHG emissions. The largest source of CO_2, and of overall GHG emissions, was fossil-fuel combustion, which accounted for approximately 77% of CO_2 emissions (EPA 2015).

According to the 2013 GHG inventory data compiled by the California Air Resources Board (CARB) for the California Greenhouse Gas Inventory for 2000–2013, California emitted 459 MMT CO_2E of GHGs, including emissions resulting from out-of-state electrical generation (CARB 2015). The primary contributors to GHG emissions in California are transportation, industry, electric power production from both in-state and out-of-state sources, agriculture, and other sources, which include commercial and residential activities. These primary contributors to California's GHG emissions and their relative contributions in 2013 are presented in Table 4.4-1, GHG Sources in California (2013).

Table 4.4-1
GHG Sources in California (2013)

Source Category	Annual GHG Emissions (MMT CO_2E)	Percent of Total[1]
Transportation	169.02	37%
Industrial Uses	92.68	20%

[1] The CO_2E for a gas is derived by multiplying the mass of the gas by the associated GWP, such that metric tons of CO_2E = (metric tons of a GHG) × (GWP of the GHG). CalEEMod assumes that the GWP for CH_4 is 21, which means that emissions of 1 metric ton of CH_4 are equivalent to emissions of 21 metric tons of CO_2, and the GWP for N_2O is 310, based on the Intergovernmental Panel on Climate Change (IPCC) Second Assessment Report. The IPCC has released subsequent Assessment Reports with updated GWPs, and CARB reporting and other statewide documents are beginning to transition to the use of the GWPs in the IPCC Fourth Assessment Report. Furthermore, the use of the different GWPs will not substantially change the overall project GHG emissions, which are primarily CO_2. As such, it is appropriate to use the hardwired GWP values in CalEEMod from the IPCC Second Assessment Report.

Table 4.4-1
GHG Sources in California (2013)

Source Category	Annual GHG Emissions (MMT CO_2E)	Percent of Total[1]
Electricity Generation	90.45[2]	20%
Residential and Commercial uses	43.54	9%
Agriculture	36.21	8%
High Global Warming Potential Substances	18.5	4%
Recycling and Waste	8.87	2%
Totals	**459.28**	**100%**

Source: CARB 2015.
Notes:
1 Percentage of total has been rounded.
2 Includes emissions associated with imported electricity, which account for 39.99 MMT CO_2E annually.

Potential Effects of Human Activity on Climate Change

Globally, climate change has the potential to impact numerous environmental resources though uncertain impacts related to future air temperatures and precipitation patterns. In California, climate change impacts have the potential to affect sea-level rise, agriculture, snowpack and water supply, forestry, wildfire risk, public health, and electricity demand and supply (CCCC 2006). The primary effect of global climate change has been a rise in average global tropospheric temperature of 0.2°C (0.36°F) per decade; this was determined from meteorological measurements worldwide between 1990 and 2005. Scientific modeling predicts that continued emissions of GHGs at or above current rates would induce more extreme climate changes during the twenty-first century than were observed during the twentieth century. A warming of approximately 0.36°F (0.2°C) per decade is projected, and there are identifiable signs that global warming could be taking place, including substantial ice loss in the Arctic (IPCC 2007).

Although climate change is driven by global atmospheric conditions, climate change impacts are felt locally. Climate change is already affecting California: average temperatures have increased, which has led to more extreme hot days and fewer cold nights; shifts in the water cycle have been observed, with less winter precipitation falling in the form of snow, and both snowmelt and rainwater running off earlier in the year; sea levels have risen; and wildland fires are becoming more frequent and intense due to dry seasons that start earlier and end later (CAT 2010a). Climate change modeling using emission rates from 2000 shows that further warming would occur, which would induce further changes in the global climate system during the current century. Changes to the global climate system and ecosystems and to California would include but would not be limited to the following:

- The loss of sea ice and mountain snowpack, which results in higher sea levels and higher sea surface evaporation rates, with a corresponding increase in tropospheric

water vapor due to the atmosphere's ability to hold more water vapor at higher temperatures (IPCC 2007)

- A rise in global average sea level, primarily due to thermal expansion and melting of glaciers and ice caps and the Greenland and Antarctic ice sheets (IPCC 2007)
- Changes in weather that include widespread changes in precipitation, ocean salinity, and wind patterns. These change also include more energetic aspects of extreme weather, including droughts, heavy precipitation, heat waves, extreme cold, and intensity of tropical cyclones (IPCC 2007)
- A decline of Sierra snowpack, which accounts for approximately half of the surface water storage in California, by 30% to as much as 90% over the next 100 years (CAT 2006)
- An increase in the number of days conducive to O3 formation by 25% to 85% (depending on the future temperature scenario) in high-O3 areas of Los Angeles and the San Joaquin Valley by the end of the twenty-first century (CAT 2006)
- A high potential for erosion of California's coastlines and seawater intrusion into the delta and levee systems due to the rise in sea level (CAT 2006).

4.4.3 Regulatory Setting

Federal Regulations

Federal Clean Air Act

On April 2, 2007, in *Massachusetts v. U.S. Environmental Protection Agency*, the U.S. Supreme Court directed the U.S. Environmental Protection Agency (EPA) administrator to determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In making these decisions, the EPA administrator is required to follow the language of Section 202(a) of the Clean Air Act. On December 7, 2009, the administrator signed a final rule with two distinct findings regarding GHGs under Section 202(a) of the Clean Air Act:

- The elevated concentrations of GHGs—CO_2, CH_4, N_2O, hydrofluorocarbons, perfluorocarbons, and SF6—in the atmosphere threaten the public health and welfare of current and future generations. This is referred to as the "endangerment finding."
- The combined emissions of GHGs—CO_2, CH_4, N_2O, and hydrofluorocarbons—from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare. This is referred to as the "cause or contribute finding."

These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the Clean Air Act.

Energy Independence and Security Act

On December 19, 2007, President George W. Bush signed the Energy Independence and Security Act of 2007. Among other key measures, the act would do the following to aid in the reduction of national GHG emissions:

1. Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel by 2022.
2. Set a target of 35 miles per gallon (mpg) for the combined fleet of cars and light trucks by model year 2020 and direct the National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
3. Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances

EPA and NHTSA Joint Final Rule for Vehicle Standards

On April 1, 2010, the EPA and NHTSA announced a joint final rule to establish a national program consisting of new standards for light-duty vehicles model years 2012 through 2016 (EPA 2010). The joint rule is intended to reduce GHG emissions and improve fuel economy. The EPA approved the first-ever national GHG emissions standards under the Clean Air Act, and NHTSA approved Corporate Average Fuel Economy standards under the Energy Policy and Conservation Act (75 FR 25324–25728). The final rule became effective on July 6, 2010.

The EPA's GHG standards require new passenger cars, light-duty trucks, and medium-duty passenger vehicles to meet an estimated combined average emissions level of 250 grams of CO2 per mile in model year 2016, which is equivalent to 35.5 mpg if the automotive industry were to meet this CO_2 level through fuel economy improvements alone. The Corporate Average Fuel Economy standards for passenger cars and light trucks will be phased in between 2012 and 2016, with the final standards equivalent to 37.8 mpg for passenger cars and 28.8 mpg for light trucks, resulting in an estimated combined average of 34.1 mpg (75 FR 25324–25728). The rules will simultaneously reduce GHG emissions, improve energy security, increase fuel savings, and provide clarity and predictability for manufacturers.

In August 2012, the EPA and NHTSA approved a second round of GHG and Corporate Average Fuel Economy standards for model years 2017 and beyond (77 FR 62624–63200). These standards will reduce motor vehicle GHG emissions to 163 grams of CO_2 per mile, which is equivalent to 54.5 mpg if this level were achieved solely through improvements in fuel efficiency, for cars and light-duty trucks by model year 2025. A portion of these improvements, however, will likely be made through reductions in air conditioning leakage and through use of alternative refrigerants, which would not contribute to fuel economy. The regulations also include targeted incentives to encourage early adoption and introduction into the marketplace of advanced technologies to dramatically improve vehicle performance, including the following:

- Incentives for electric vehicles, plug-in hybrid electric vehicles, and fuel-cell vehicles
- Incentives for hybrid technologies for large pickup trucks and for other technologies that achieve high fuel economy levels on large pickup trucks
- Incentives for natural gas vehicles
- Credits for technologies with potential to achieve real-world GHG reductions and fuel economy improvements that are not captured by the standard test procedures

State Regulations

California Code of Regulations - Title 24

Title 24 of the California Code of Regulations was established in 1978, and serves to enhance and regulate California's building standards. While not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically establishes energy efficiency standards for residential and non-residential buildings constructed in the State of California in order to reduce energy demand and consumption. Part 6 is updated periodically to incorporate and consider new energy efficiency technologies and methodologies. The most recent amendments, referred to as the 2013 standards, will become effective on July 1, 2014. Buildings constructed in accordance with the 2013 standards will use 25% less energy for lighting, heating, cooling, ventilation, and water heating than the 2008 standards. Additionally, the standards will save 200 million gallons of water per year and avoid 170,500 tons of GHG emissions per year (CEC 2012).

Title 24 also includes Part 11, known as California's Green Building Standards (CALGreen). The CALGreen standards took effect in January 2011, and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential and state-owned buildings, as well as schools and hospitals. The mandatory standards require:

- 20% mandatory reduction in indoor water use.

- 50% of construction and demolition waste must be diverted from landfills.
- Mandatory inspections of energy systems to ensure optimal working efficiency.
- Low-pollutant emitting exterior and interior finish materials, such as paints, carpets, vinyl flooring and particle boards.

The CALGreen standards also include voluntary efficiency measures that are provided at two separate tiers and implemented at the discretion of local agencies and applicants. CALGreen's Tier 1 standards call for a 15% improvement in energy requirements; stricter water conservation; 65% diversion of construction and demolition waste; 10% recycled content in building materials; 20% permeable paving; 20% cement reduction; and cool/solar-reflective roofs. CALGreen's more rigorous Tier 2 standards call for a 30% improvement in energy requirements; stricter water conservation; 75% diversion of construction and demolition waste; 15% recycled content in building materials; 30% permeable paving; 30% cement reduction; and cool/solar-reflective roofs.

Assembly Bill 1493

In response to the transportation sector accounting for more than half of California's CO_2 emissions, AB 1493 (Pavley) was enacted on July 22, 2002. AB 1493 required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles determined by CARB to be vehicles whose primary use is noncommercial personal transportation in the state. The bill required that CARB set GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. CARB adopted the standards in September 2004. When fully phased in, the near-term (2009–2012) standards will result in a reduction of about 22% in GHG emissions compared to the emissions from the 2002 fleet, while the mid-term (2013–2016) standards will result in a reduction of about 30%. Before these regulations could go into effect, the EPA had to grant California a waiver under the federal Clean Air Act, which ordinarily preempts state regulation of motor vehicle emission standards. The waiver was granted on June 30, 2009. On March 29, 2010, CARB approved revisions to the motor vehicle GHG standards to harmonize the state program with the national program for 2012–2016 model years (see EPA and NHTSA Joint Final Rules for Vehicle Standards). The revised regulations became effective April 1, 2010.

Executive Order S-3-05

In June 2005, Governor Schwarzenegger established California's GHG emission reduction targets in Executive Order S-3-05. The executive order established the following goals: GHG emissions should be reduced to 2000 levels by 2010, GHG emissions should be reduced to 1990 levels by 2020, and GHG emissions should be reduced to 80% below 1990 levels by 2050. The CalEPA secretary is required to coordinate efforts of various agencies to collectively

and efficiently reduce GHGs. The Climate Action Team (CAT) is responsible for implementing global warming emission reduction programs. Representatives from several state agencies compose the CAT. Under the executive order, the CalEPA secretary is directed to report biannually on progress made toward meeting the GHG targets and the impacts to California due to global warming, including impacts to water supply, public health, agriculture, the coastline, and forestry. The CAT fulfilled its initial report requirements through the 2006 *Climate Action Team Report to Governor Schwarzenegger and the Legislature* (CAT 2006).

The 2009 *Climate Action Team Biennial Report* (CAT 2010a), published in April 2010, expands on the policy outlined in the 2006 assessment. The 2009 report provides new information and scientific findings regarding the development of new climate and sea level projections using new information and tools that have recently become available. It also evaluates climate change within the context of broader social changes, such as land use changes and demographics. The 2009 report also identifies the need for additional research in several different aspects that affect climate change in order to support effective climate change strategies. The aspects of climate change determined to require future research include vehicle and fuel technologies, land use and smart growth, electricity and natural gas, energy efficiency, renewable energy and reduced carbon energy sources, low GHG technologies for other sectors, carbon sequestration, terrestrial sequestration, geologic sequestration, economic impacts and considerations, social science, and environmental justice.

The 2010 *Climate Action Team Report to Governor Schwarzenegger and the California Legislature* (CAT 2010b) reviews past Climate Action Milestones including voluntary reporting programs, GHG standards for passenger vehicles, the Low Carbon Fuel Standard, a statewide renewable energy standard, and the cap-and-trade program. Additionally, the 2010 report includes a cataloguing of recent research and ongoing projects; mitigation and adaptation strategies identified by sector (e.g., agriculture, biodiversity, electricity, and natural gas); actions that can be taken at the regional, national, and international levels to mitigate the adverse effects of climate change; and today's outlook on future conditions.

Assembly Bill 32

In furtherance of the goals established in Executive Order S-3-05, the legislature enacted AB 32 (Núñez and Pavley), the California Global Warming Solutions Act of 2006, which Governor Schwarzenegger signed on September 27, 2006. The GHG emissions limit is equivalent to the 1990 levels, which are to be achieved by 2020.

CARB has been assigned to carry out and develop the programs and requirements necessary to achieve the goals of AB 32. Under AB 32, CARB is also responsible for adopting regulations requiring the reporting and verification of statewide GHG emissions to monitor and enforce

compliance with the established standards. AB 32 allows CARB to adopt market-based compliance mechanisms to meet the specified requirements. Finally, CARB is ultimately responsible for monitoring compliance and enforcing any rule, regulation, order, emission limitation, emission reduction measure, or market-based compliance mechanism adopted.

The first action under AB 32 resulted in the adoption of a report listing early-action GHG emission reduction measures on June 21, 2007. The early actions include three specific GHG control rules. On October 25, 2007, CARB approved an additional six early-action GHG reduction measures under AB 32. The three original early-action regulations meeting the narrow legal definition of "discrete early action GHG reduction measures" consist of the following:

1. A low-carbon fuel standard to reduce the "carbon intensity" of California fuels
2. Reduction of refrigerant losses from motor vehicle air conditioning system maintenance to restrict the sale of "do-it-yourself" automotive refrigerants
3. Increased methane capture from landfills to require broader use of state-of-the-art methane capture technologies

The additional six early-action regulations, which were also considered "discrete early action GHG reduction measures," consist of the following:

1. Reduction of aerodynamic drag, and thereby fuel consumption, from existing trucks and trailers through retrofit technology
2. Reduction of auxiliary engine emissions of docked ships by requiring port electrification
3. Reduction of PFC emissions from the semiconductor industry
4. Reduction of propellants in consumer products (e.g., aerosols, tire inflators, and dust removal products)
5. Requirements that all tune-up, smog check, and oil change mechanics ensure proper tire inflation as part of overall service in order to maintain fuel efficiency
6. Restriction on the use of SF_6 from non-electricity sectors if viable alternatives are available

As required under AB 32, on December 6, 2007, CARB approved the 1990 GHG emissions inventory, thereby establishing the emissions limit for 2020. The 2020 emissions limit was set at 427 million metric tons (MMT) of CO_2E. In addition to the 1990 emissions inventory, CARB also adopted regulations requiring mandatory reporting of GHGs for the large facilities that account for 94% of GHG emissions from industrial and commercial stationary sources in California. About 800 separate sources fall under the new reporting rules and include electricity generating facilities, electricity retail providers and power marketers, oil refineries,

hydrogen plants, cement plants, cogeneration facilities, and other industrial sources that emit CO_2 in excess of specified thresholds.

On December 11, 2008, CARB approved the *Climate Change Scoping Plan: A Framework for Change* (Scoping Plan) (CARB 2008) to achieve the goals of AB 32. The Scoping Plan establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. The Scoping Plan evaluates opportunities for sector-specific reductions, integrates all CARB and CAT early actions and additional GHG reduction measures by both entities, identifies additional measures to be pursued as regulations, and outlines the role of a cap-and-trade program.

The key elements of the Scoping Plan include the following:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards
- Achieving a statewide renewable energy mix of 33%
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85% of California's GHG emissions
- Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets
- Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard
- Creating targeted fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation

An update to the Scoping Plan was adopted in May 2014 (CARB 2014). Based on updated information, the Scoping Plan Update revises the 2020 emissions target to 431 MMT CO_2E (based on updated GWPs for GHGs) and also builds upon the initial Scoping Plan with new strategies and recommendations. The Scoping Plan Update identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. The Scoping Plan Update defines CARB's climate change priorities for the next 5 years and sets the groundwork to reach California's long-term climate goals set forth in Executive Orders S-3-05 and B-16-2012. Executive Order B-16-2012 directed state entities under the governor's direction and control to support and facilitate development and distribution of zero-emission vehicles (ZEVs). The Governor's executive order sets a long-

term target of reaching 1.5 million ZEVs on California's roadways by 2025. On a statewide basis, the executive order also establishes a target reduction of GHG emissions from the transportation sector equaling 80% less than 1990 levels by 2050.

The Scoping Plan Update highlights California's progress toward meeting the 2020 GHG emission reduction goals defined in the initial Scoping Plan. These efforts were pursued to achieve the near-term 2020 goal, and have created a framework for ongoing climate action that can be built upon to maintain and continue economic sector-specific reductions beyond 2020, as required by AB 32. The Scoping Plan Update identified nine key focus areas, including energy, transportation, agriculture, water, waste management, and natural and working lands, along with short-lived climate pollutants, green buildings, and the cap-and-trade program. The update also recommends that a statewide mid-term target and mid-term and long-term sector targets be established toward meeting the 2050 goal established by Executive Order S-3-05 to reduce California's GHG emissions to 80% below 1990 levels, although no specific recommendations are made.

Senate Bill 1368

In September 2006, Governor Schwarzenegger signed SB 1368, which requires the California Energy Commission (CEC) to develop and adopt regulations for GHG emission performance standards for the long-term procurement of electricity by local publicly owned utilities. These standards must be consistent with the standards adopted by the California Public Utilities Commission (CPUC). This effort will help protect energy customers from financial risks associated with investments in carbon-intensive generation by allowing new capital investments in power plants whose GHG emissions are as low as or lower than new combined-cycle natural gas plants by requiring imported electricity to meet GHG performance standards in California and by requiring that the standards be developed and adopted in a public process.

Executive Order S-1-07

Issued on January 18, 2007, Executive Order S-1-07 sets a declining Low Carbon Fuel Standard for GHG emissions measured in CO_2E grams per unit of fuel energy sold in California. The target of the Low Carbon Fuel Standard is to reduce the carbon intensity of California passenger vehicle fuels by at least 10% by 2020. The carbon intensity measures the amount of GHG emissions in the lifecycle of a fuel, including extraction/feedstock production, processing, transportation, and final consumption, per unit of energy delivered. CARB adopted the implementing regulation in April 2009. The regulation is expected to increase the production of biofuels, including those from alternative sources, such as algae, wood, and agricultural waste. In addition, the Low Carbon Fuel Standard would drive the availability of plug-in hybrid, battery

electric, and fuel-cell power motor vehicles. The Low Carbon Fuel Standard is anticipated to lead to the replacement of 20% of the fuel used in motor vehicles with alternative fuels by 2020.

Senate Bill 97

In August 2007, the California State Legislature enacted SB 97 (Dutton), which directs the Governor's Office of Planning and Research (OPR) to develop guidelines under CEQA for the mitigation of GHG emissions. The OPR was to develop proposed guidelines by July 1, 2009, and the Natural Resources Agency was directed to adopt the guidelines by January 1, 2010.

On June 19, 2008, OPR issued a technical advisory as interim guidance regarding the analysis of GHG emissions in CEQA documents (OPR 2008). The advisory indicated that a project's GHG emissions, including those associated with vehicular traffic, energy consumption, water usage, and construction activities, should be identified and estimated. The advisory further recommended that the lead agency determine significance of the impacts and impose all mitigation measures necessary to reduce GHG emissions to a level that is less than significant.

The Natural Resources Agency adopted the CEQA Guidelines amendments on December 30, 2009, and transmitted them to the Office of Administrative Law on December 31, 2009. On February 16, 2010, the Office of Administrative Law completed its review and filed the amendments with the secretary of state. The amendments became effective on March 18, 2010. The amended guidelines establish several new CEQA requirements concerning the analysis of GHGs, including the following:

- Requiring a lead agency to "make a good faith effort, based to the extent possible on scientific and factual data, to describe, calculate, or estimate the amount of greenhouse gas emissions resulting from a project" (Section 15064(a))
- Providing a lead agency with the discretion to determine whether to use quantitative or qualitative analysis or performance standards to determine the significance of GHG emissions resulting from a particular project (Section 15064.4(a))
- Requiring a lead agency to consider the following factors when assessing the significant impacts from GHG emissions on the environment:
    - The extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting
    - Whether the project emissions exceed a threshold of significance that the Lead Agency determines applies to the project
    - The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. (Section 15064.4(b))

- Allowing lead agencies to consider feasible means of mitigating the significant effects of GHG emissions, including reductions in emissions through the implementation of project features or off-site measures, including offsets that are not otherwise required (Section 15126.4(c)).

The amended guidelines also establish two new guidance questions regarding GHG emissions in the environmental checklist set forth in CEQA Guidelines Appendix G:

- Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
- Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The adopted amendments do not establish a GHG emission threshold, instead allowing a lead agency to develop, adopt, and apply its own thresholds of significance or those developed by other agencies or experts. The California Natural Resources Agency (CNRA) also acknowledges that a lead agency may consider compliance with regulations or requirements implementing AB 32 in determining the significance of a project's GHG emissions (CNRA 2009a).

Senate Bill 375

In August 2008, the legislature passed, and on September 30, 2008, Governor Schwarzenegger signed, SB 375 (Steinberg), which addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. Regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035, as determined by CARB, are required to consider the emission reductions associated with vehicle emission standards (see SB 1493), the composition of fuels (see Executive Order S-1-07), and other CARB-approved measures to reduce GHG emissions. Regional metropolitan planning organizations will be responsible for preparing a Sustainable Communities Strategy (SCS) within their Regional Transportation Plan. The goal of the SCS is to establish a development plan for the region, which, after considering transportation measures and policies, will achieve, if feasible, the GHG reduction targets. If an SCS is unable to achieve the GHG reduction target, a metropolitan planning organization must prepare an alternative planning strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies. SB 375 provides incentives for streamlining CEQA requirements by substantially reducing the requirements for "transit priority projects," as specified in SB 375, and eliminating the analysis of the impacts of certain residential projects on global warming and the growth-inducing impacts of those projects when the projects are consistent with the SCS or alternative planning strategy.

The Sacramento Area Council of Governments (SACOG) Board, which is the local metropolitan planning organization which covers six-counties in the Sacramento Region, including El Dorado County, adopted the Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) in February 2016. The MTP/SCS is a long-range plan for transportation projects within the planning area and focuses on cost-effective operational improvements to preserve the existing and expanded regional transportation system through 2035. The 2016 update to the MTP/SCS focused on refinement of and addressing implementation challenges to the previous (2012) plan. The SACOG Board of Directors has adopted five guiding policy themes including, land use forecast, transportation funding, investment strategy, investment timing, and plan effects which provide direction for the plan update.

Executive Order S-13-08

Governor Schwarzenegger issued Executive Order S-13-08 on November 14, 2008. The executive order is intended to hasten California's response to the impacts of global climate change, particularly sea-level rise. It directs state agencies to take specified actions to assess and plan for such impacts. It directs the California Natural Resources Agency, in cooperation with the California Department of Water Resources, CEC, California's coastal management agencies, and the Ocean Protection Council, to request that the National Academy of Sciences prepare a Sea Level Rise Assessment Report by December 1, 2010. The Ocean Protection Council, California Department of Water Resources, and CEC, in cooperation with other state agencies, are required to conduct a public workshop to gather information relevant to the Sea Level Rise Assessment Report. The Business, Transportation, and Housing Agency was ordered to assess within 90 days of issuance of the executive order the vulnerability of the state's transportation systems to sea-level rise. The Governor's Office of Planning and Research and the California Natural Resources Agency are required to provide land use planning guidance related to sea-level rise and other climate change impacts. The order also requires the other state agencies to develop adaptation strategies by June 9, 2009, to respond to the impacts of global climate change that are predicted to occur over the next 50 to 100 years. A discussion draft adaptation strategies report was released in August 2009, and the final *2009 California Climate Adaptation Strategy* report was issued in December 2009 (CNRA 2009b). To assess the state's vulnerability, the report summarizes key climate change impacts to the state for the following areas: public health, ocean and coastal resources, water supply and flood protection, agriculture, forestry, biodiversity and habitat, and transportation and energy infrastructure. The report then recommends strategies and specific responsibilities related to water supply, planning and land use, public health, fire protection, and energy conservation.

Senate Bill X1 2

On April 12, 2011, Governor Jerry Brown signed SB X1 2 in the First Extraordinary Session, which expands the Renewable Portfolio Standard by establishing a goal of 20% of the total electricity sold to retail customers in California per year by December 31, 2013, and 33% by December 31, 2020. Under the bill, a renewable electrical generation facility is one that uses biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation of 30 megawatts or less, digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current. A renewable electrical generation facility under this bill would also meet other specified requirements with respect to its location. In addition to the retail sellers covered by SB 107, SB X1 2 adds local publicly owned electric utilities to the Renewable Portfolio Standard. By January 1, 2012, the CPUC is required to establish the quantity of electricity products from eligible renewable energy resources to be procured by retail sellers in order to achieve targets of 20% by December 31, 2013; 25% by December 31, 2016; and 33% by December 31, 2020. The statute also requires that the governing boards for local publicly owned electric utilities establish the same targets and that the governing boards be responsible for ensuring compliance with these targets. The CPUC will be responsible for enforcement of the Renewable Portfolio Standard for retail sellers, while the CEC and CARB will enforce the requirements for local publicly owned electric utilities.

Executive Order B-16-12

Governor Brown issued Executive Order B-16-12 on March 23, 2012. The Executive Order requires that state entities under the governor's direction and control support and facilitate the rapid commercialization of zero-emission vehicles. It orders CARB, the CEC, the CPUC, and other relevant agencies work with the Plug-in Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to help achieve the following by 2015:

- The state's major metropolitan areas will be able to accommodate zero-emission vehicles, each with infrastructure plans and streamlined permitting.
- The state's manufacturing sector will be expanding zero-emission vehicle and component manufacturing.
- The private sector's investment in zero-emission vehicle infrastructure will be growing.
- The state's academic and research institutions will be contributing to zero-emission vehicle research, innovation and education.

CARB, the CEC, and CPUC, are also directed to establish benchmarks to help achieve the following goals by 2020:

- The state's zero-emission vehicle infrastructure will be able to support up to one million vehicles.
- The costs of zero-emission vehicles will be competitive with conventional combustion vehicles.
- Zero-emission vehicles will be accessible to mainstream consumers.
- There will be widespread use of zero-emission vehicles for public transportation and freight transport.
- Transportation sector GHG emissions will be falling as a result of the switch to zero emission vehicles.
- Electric vehicle charging will be integrated into the electricity grid.
- The private sector's role in the supply chain for zero-emission vehicle component development and manufacturing will be expanding.

Benchmarks are also to be established to help achieve the following goals by 2025:

- Over 1.5 million zero-emission vehicles will be on California roads and their market share will be expanding.
- Californians will have easy access to zero-emission vehicle infrastructure.
- The zero-emission vehicle industry will be a strong and sustainable part of California's economy.
- California's clean, efficient vehicles will annually displace at least 1.5 billion gallons of petroleum fuels.

On a statewide basis, the Executive Order establishes a target reduction of GHG emissions from the transportation sector equaling 80 percent less than 1990 levels by 2050.

Executive Order B-18-12

Governor Brown issued Executive Order B-18-12 on April 25, 2012. This Executive Order directs state agencies, departments, and other entities under the governor's executive authority to take actions to reduce entity-wide GHG emissions by at least 10 percent by 2015 and 20 percent by 2020, as measured against a 2010 baseline. To accomplish these goals with respect to construction of new buildings or major renovations, the Executive Order further orders state agencies to implement the following measures:

- All new state buildings and major renovations beginning design after 2025 will be

constructed as Zero Net Energy facilities with an interim target for 50 percent of new facilities beginning design after 2020 to be Zero Net Energy.

- Any proposed new or major renovation of state buildings larger than 10,000 square feet use clean, on-site power generation, such as solar photovoltaic, solar thermal and wind power generation, and clean back-up power supplies, if economically feasible.
- New or major renovated state buildings and build-to-suit leases larger than 10,000 square feet obtain LEED "Silver" certification or higher.
- New buildings incorporate building commissioning to facilitate improved and efficient building operation.
- State agencies identify and pursue opportunities to provide electric vehicle charging stations, and accommodate future charging infrastructure demand, at employee parking facilities in new buildings.

The Executive Order also established goals for existing state buildings for reducing grid-based energy purchases and water use.

Senate Bill 605

On September 21, 2014, Governor Jerry Brown signed SB 605, which requires CARB to complete a comprehensive strategy to reduce emissions of short-lived climate pollutants in the state no later than January 1, 2016. As defined in the statute, short-lived climate pollutant means "an agent that has a relatively short lifetime in the atmosphere, from a few days to a few decades, and a warming influence on the climate that is more potent than that of carbon dioxide." SB 605, however, does not prescribe specific compounds as short-lived climate pollutants or add to the list of GHGs regulated under AB 32. In developing the strategy, the CARB must complete an inventory of sources and emissions of short-lived climate pollutants in the state based on available data, identify research needs to address any data gaps, identify existing and potential new control measures to reduce emissions, and prioritize the development of new measures for short-lived climate pollutants that offer co-benefits by improving water quality or reducing other air pollutants that impact community health and benefit disadvantaged communities. The draft strategy released by CARB in September 2015, focuses on methane, black carbon, and fluorinated gases, particularly hydrofluorocarbons, as important short-lived climate pollutants. The draft strategy recognizes emission reduction efforts implemented under AB 32 (e.g., refrigerant management programs) and other regulatory programs (e.g., in-use diesel engines, solid waste diversion) along with additional measures to be developed.

Senate Bill 350

Governor Jerry Brown signed SB 350 on October 7, 2015, which expands the Renewable Portfolio Standard by establishing a goal of 50 percent of the total electricity sold to retail customers in California per year by December 31, 2030. In addition, SB 350 includes the goal to double the energy efficiency savings in electricity and natural gas final end uses (such as heating, cooling, lighting, or class of energy uses upon which an energy efficiency program is focused) of retail customers through energy conservation and efficiency. The bill also requires the CPUC, in consultation with the CEC, to establish efficiency targets for electrical and gas corporations consistent with this goal. SB 350 also provides for the transformation of the California Independent System Operator into a regional organization to promote the development of regional electricity transmission markets in the western states and to improve the access of consumers served by the California Independent System Operator to those markets, pursuant to a specified process.

Executive Order B-30-15

On April 29, 2015, Governor Jerry Brown issued an executive order that identified an interim GHG reduction target in support of targets previously identified under S-3-05 and AB 32. Executive Order B-30-15 set an interim target goal of reducing GHG emissions to 40 percent below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing GHG emissions to 80 percent below 1990 levels by 2050, as set forth in Executive Order S-3-05. To facilitate achievement of this goal, Executive Order B-30-15 calls for an update to CARB's Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent. The executive order also calls for state agencies to continue to develop and implement GHG emission reduction programs in support of the reduction targets. Sector-specific agencies in transportation, energy, water, and forestry will be required to prepare GHG reduction plans by September 2015, followed by a report on actions taken in relation to these plans in June 2016. The executive order does not require local agencies to take any action to meet the new interim GHG reduction threshold. It is important to note that Executive Order B-30-15 was not adopted by a public agency through a public review process that requires analysis pursuant to CEQA Guidelines Section 15064.4 and that it has not been subsequently validated by a statute as an official GHG reduction target of the State of California. The executive order itself states it is "not intended to, and does not, create any rights or benefits, substantive or procedural, enforceable at law or in equity, against the State of California, its agencies, departments, entities, officers, employees, or any other person."

California Air Pollution Control Officers Association (CAPCOA)

CAPCOA is the association of air pollution control officers representing all 35 air quality agencies throughout California. CAPCOA is not a regulatory body, but it has been an active organization in providing guidance in addressing the CEQA significance of GHG emissions and climate change as well as other air quality issues. The GHG analysis set forth in this report has been informed, in part, by the expertise and methodologies described in the following documents published by CAPCOA: (1) *CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act* (CAPCOA 2008) and (2) *Quantifying Greenhouse Gas Mitigation Measures: A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures* (CAPCOA 2010).

Local Regulations

El Dorado County Air Quality Management District (EDCAQMD)

California has 35 Air Pollution Control Districts (APCD) and Air Quality Management Districts (AQMD), many of which are currently addressing climate change issues by developing significance thresholds, performance standards, and mitigation measures. At this time, there are no adopted quantitative federal or state guidelines for GHG emission impacts. EDCAQMD was part of the committee of air districts in the Sacramento Region involved in the development of GHG thresholds of 1,100 metric tons CO_2E per year for the construction phase of projects or the operational phase of land use development projects, or 10,000 direct metric tons CO_2E per year from stationary source projects. If a project exceeds this threshold, the level of mitigation is based on demonstrating consistency with CARB's Climate Change Scoping Plan and the AB 32 State goals for reducing GHG emissions, which is currently 21.7 percent reduction from 2020 "no action taken" emissions (Sacramento Metropolitan Air Quality Management District [SMAQMD] 2014).

2016 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS)

In February 2016, SACOG, the designated metropolitan planning organization (MPO) for the Sacramento region that covers the six-county area, adopted a Metropolitan Transportation Plan/Sustainable Communities Strategy for 2036 (2016 MTP/SCS) (SACOG 2016). Building on prior plans including the Blueprint Growth Strategy discussed below and the 2008 MTP and the 2012 MTP/SCS, the 2016 MTP/SCS accommodates future growth through a more compact land use pattern largely within the region's current development footprint, emphasizes operational improvements over new roadway capacity projects, and reflects other factors that have tended to reduce motor vehicle use. Since the 2016 MTP/SCS is a refinement of the (2012) plan, the policies and strategies of the prior plan were largely transferable to the 2016 MTP/SCS.

2004 El Dorado County General Plan

The following goals and policies from the 2004 General Plan Housing Element, Public Services and Utilities Element, and Conservation and Open Space Element are applicable to the proposed project. The County recently amended its General Plan in December 2015. The most up-to-date goals and policies are listed below.

Housing Element

Goal HO-5 Energy Conservation. To increase the efficiency of energy and water use in new and existing homes.

> **Policy HO-5.2**. New land use development standards and review processes should encourage energy and water efficiency, to the extent feasible.

Public Services and Utilities Element

Goal 5.2: Water Supply The development or acquisition of an adequate water supply consistent with the geographical distribution or location of future land uses and planned developments.

> **Policy 5.2.1.10** The County shall support water conservation and recycling programs and projects that can reduce future water demand consistent with the policies of this General Plan. The County will develop and implement a water use efficiency program for existing and new residential, commercial/industrial, and agricultural uses. The County will also work with each of the county's water purveyors to develop a list of the type of uses that must utilize reclaimed water if feasible. The feasibility of using reclaimed water will be defined with specific criteria developed with public input and with the assistance of the El Dorado Irrigation District (EID), and will be coordinated with their ongoing reclaimed water (also referred to as recycled water) planning and implementation process. The County shall encourage all water purveyors to implement the water conservation-related Best Management Practices already implemented by EID and in compliance with the related criteria established by USBR.

Goal 5.5 Solid Waste A safe, effective and efficient system for the collection and processing of recyclable and transformable materials and for the disposal of residual solid wastes which cannot otherwise be recycled or transformed.

> **Policy 5.5.2.1.** Concurrent with the approval of new development, evidence will be required that capacity exists within the solid waste system for the processing, recycling, transformation, and disposal of solid waste.

Goal 5.6 Gas, Electric, and Other Utility Services Sufficient utility service availability consistent with the needs of a growing community.

Policy 5.6.2.1 Require 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.

Conservation and Open Space Element

Goal 7.3 Water Quality and Quantity Conserve, enhance, and manage water resources and protect their quality from degradation.

Policy 7.3.1.2 Establish water conservation programs that include drought tolerant landscaping and efficient building design requirements as well as incentives for the conservation and wise use of water.

Policy 7.3.5.1 Drought-tolerant plant species, where feasible, shall be used for landscaping of commercial development. Where the use of drought tolerant native plant species is feasible, they should be used instead of non-native plant species.

Policy 7.3.5.4 Require efficient water conveyance systems in new construction. Establish a program of ongoing conversion of open ditch systems shall be considered for conversion to closed conduits, reclaimed water supplies, or both, as circumstances permit.

4.4.4 Impacts and Mitigation Measures

Methods of Analysis

To inform the evaluation of the proposed project's GHG impacts, additional CEQA-related guidance prepared by California agencies was reviewed.

The California Office of Planning and Research's Technical Advisory titled *CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review* states that "public agencies are encouraged but not required to adopt thresholds of significance for environmental impacts. Even in the absence of clearly defined thresholds for GHG emissions, the law requires that such emissions from CEQA projects must be disclosed and mitigated to the extent feasible whenever the lead agency determines that the project contributes to a significant, cumulative climate change impact" (OPR 2008). Furthermore, the advisory document states that "in the absence of regulatory standards for GHG emissions or other scientific data to clearly define what constitutes a 'significant impact,' individual lead

agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice."

Section 15064.4 of the CEQA Guidelines, "Determining the Significance of Impacts from Greenhouse Gas Emissions," states the following:

A. The determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in section 15064. A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to:

    i. Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use. The lead agency has discretion to select the model or methodology it considers most appropriate provided it supports its decision with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use; and/or

    ii. Rely on a qualitative analysis or performance based standards.

B. A lead agency should consider the following factors, among others, when assessing the significance of impacts from greenhouse gas emissions on the environment:

    i. The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;

    ii. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.

    iii. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project (14 CCR 15064.4).

Global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. There are currently no established thresholds for assessing whether the GHG emissions of a project would be considered a cumulatively considerable contribution to global climate change; however, all reasonable efforts should be made to minimize a project's contribution to global climate change.

While the project would result in emissions of GHGs during construction and operation, no guidance exists to indicate what level of GHG emissions would be considered substantial enough to result in a significant adverse impact on global climate. However, it is generally believed that an individual project is of insufficient magnitude by itself to influence climate change or result in a substantial contribution to the global GHG inventory as scientific uncertainty regarding the significance a project's individual and cumulative effects on global climate change remains.

Thus, GHG impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective (CAPCOA 2008). This approach is consistent with that recommended by the CNRA, which noted in its public notice for the proposed CEQA amendments that the evidence before it indicates that in most cases, the impact of GHG emissions should be considered in the context of a cumulative impact, rather than a project-level impact (CNRA 2009c). Similarly, the *Final Statement of Reasons for Regulatory Action on the CEQA Amendments* confirm that an EIR or other environmental document must analyze the incremental contribution of a project to GHG levels and determine whether those emissions are cumulatively considerable (CNRA 2009a).

The proposed project's short-term construction-related and long-term operational GHG emissions were estimated using the CalEEMod software. The model quantifies direct GHG emissions from construction and operation (including vehicle use), as well as indirect GHG emissions, such as GHG emissions from energy use, solid waste disposal, and water use. Emissions are expressed in annual metric tons of CO_2 equivalent units of measure (i.e., MT CO_2E), based on the global warming potential of the individual pollutants.

Thresholds of Significance

Consistent with Appendix G of the CEQA Guidelines, EDCAQMD's guidance, and professional judgment, a GHG impact is considered significant if implementation of the proposed project would result in, or potentially result in, the creation of any of the following:

- 1,100 metric tons CO_2E per year for the construction phase of projects or the operation phase of land use development projects, or

- 10,000 direct metric tons CO_2E per year from stationary source projects.

Impacts and Mitigation Measures

4.4-1: The proposed project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. This would be a less-than-significant impact.

Construction Emissions

Construction of the proposed project would result in GHG emissions that are primarily associated with use of off-road construction equipment and on-road construction and worker vehicles. CalEEMod was used to calculate the annual GHG emissions based on the construction scenario described in Section 4.2, Air Quality.

On-site sources of GHG emissions include off-road equipment and haul trucks for soil transport within the project area; off-site sources include vendor (delivery) trucks and worker vehicles. Emissions from on-site and off-site sources are combined for the purposes of this analysis; a breakdown of emissions by source is provided in Appendix C. Table 4.4-2, Construction GHG Emissions, presents the proposed project-generated construction emissions from years 2016 to 2017.

Table 4.4-2
Construction GHG Emissions

Year	MT CO_2	MT CH_4	MT N_2O	MT CO_2E
2016	149.53	0.04	0.00	150.31
2017	211.22	0.05	0.00	212.23
Total	**360.75**	**0.10**	**0.00**	**362.54**

Notes:
See Appendix C for detailed results.
MT = metric tons; CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2E = carbon dioxide equivalent

As shown in Table 4.4-2, estimated annual proposed project-generated GHG emissions would be approximately 360.75 MT CO_2E per year as a result of construction activities, which is less than the EDCAQMD recommended threshold of 1,100 MT CO_2E per year. Therefore, GHG emissions generated by construction activities for proposed project would have a **less-than-significant impact**.

Operational Emissions

Operation of the proposed project would result in GHG emissions through energy use (natural gas and generation of electricity consumed by the proposed project); motor vehicle trips to the

proposed project; operation of on-site equipment; generation of electricity associated with water supply, treatment, and distribution and wastewater treatment; and solid waste disposal. Annual GHG emissions from these sources were estimated using CalEEMod.

Emissions associated with proposed project-generated daily traffic were modeled using trip-generation rates from the traffic impact analysis report (KD Anderson and Associates, Inc. 2015; Appendix C). According to the traffic impacts analysis report, the proposed project would generate 249 daily trips during weekdays. CalEEMod weekday trip rates were adjusted to match the traffic report, and Saturday and Sunday trip rates were adjusted based on the default model ratio of weekday to weekend trip rates. CalEEMod default vehicle fleet mixes and trip lengths were used when modeling vehicle emissions.

CalEEMod was used to estimate emissions from the proposed project area sources, which include gasoline-powered landscape maintenance equipment.

Emissions from energy sources, which include natural gas appliances, space and water heating, and building electricity, were also estimated using CalEEMod. Default values for electricity consumption (through Title 24 electricity energy intensity, non-Title 24 electricity energy intensity, and lighting energy intensities) were adjusted to match total consumption (1,300,000 kWh per year) information provided by the client. CalEEMod default values were used for natural gas consumption (Title 24 and non-Title 24 natural gas energy intensities). In addition, default values for indoor and outdoor water use were adjusted to reflect information provided by the client. The proposed project would use a total of 8,400,000 gallons of water per year, which was distributed into indoor and outdoor water use. The proposed project would also incorporate several other energy reducing features that are not reflected within the CalEEMod modeling, such as continuous insulation, dual pane glazing, high efficiency HVAC, and use of LED lighting.

Table 4.4-3, Operational GHG Emissions, presents estimated project-generated GHG emissions from area sources, energy sources, motor vehicles, solid waste generation, water consumption, and wastewater treatment. Additional details regarding these calculations are provided in Appendix C.

Table 4.4-3
Operational GHG Emissions

	MT CO_2/year	MT CH_4/year	MT N_2O/year	MT CO_2E/year
Area	10.55	<0.01	<0.01	10.63
Energy (natural gas and electricity)	376.46	0.02	<0.01	378.09
Mobile sources	257.29	0.01	0.00	257.52
Solid waste	9.34	0.55	0.00	20.92

Table 4.4-3
Operational GHG Emissions

	MT CO_2/year	MT CH_4/year	MT N_2O/year	MT CO_2E/year
Water supply and wastewater	12.11	0.17	<0.01	16.91
Total	**665.75**	**0.75**	**<0.01**	**684.07**

Notes:
See Appendix C for detailed results.
MT = metric tons; CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2E = carbon dioxide equivalent

As shown in Table 4.4-3, estimated annual proposed project-generated GHG emissions would be approximately 684.07MT CO_2E per year as a result of proposed project operations, which is less than the EDCAQMD recommend threshold of 1,100 MT CO_2E per year. Therefore, operational GHG impacts for the proposed project would be **less than significant**.

4.4-2: The proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. This would be a less-than-significant impact.

El Dorado County does not have a Climate Action Plan or GHG reduction strategy; therefore, the 2012 RTP/SCS and Scoping Plan was used to determine whether the proposed project would conflict with an applicable plan or policy. The Scoping Plan approved by CARB on December 12, 2008, provides a framework for actions to reduce California's GHG emissions and requires CARB and other state agencies to adopt regulations and other initiatives to reduce GHGs. As such, the Scoping Plan is not directly applicable to specific projects. Moreover, the Final Statement of Reasons for the amendments to the CEQA Guidelines reiterates the statement in the Initial Statement of Reasons that "[t]he Scoping Plan may not be appropriate for use in determining the significance of individual projects because it is conceptual at this stage and relies on the future development of regulations to implement the strategies identified in the Scoping Plan" (CNRA 2009). Under the Scoping Plan, however, there are several state regulatory measures aimed at the identification and reduction of GHG emissions. CARB and other state agencies have adopted many of the measures identified in the Scoping Plan. Most of these measures focus on area source emissions (e.g., energy usage, high-GWP GHGs in consumer products) and changes to the vehicle fleet (hybrid, electric, and more fuel-efficient vehicles) and associated fuels (e.g., LCFS), among others. While state regulatory measures will ultimately reduce GHG emissions associated with the proposed project through their effect on these sources, no statewide plan, policy, or regulation would be specifically applicable to reductions in GHG emissions from the proposed project.

The 2016 MTP/SCS does not contain any specific policies related to the proposed project. However, SACOG provides a description on the MTP/SCS consistency process in Chapter 3 and is as follows:

> Although this MTP/SCS has no regulatory authority over local land use decisions, it provides information about the SCS so that local jurisdictions can determine whether a project is consistent with the SCS, and therefore, eligible for the CEQA benefits based on consistency with the SCS. To determine a project's consistency with the SCS, a jurisdiction must find it consistent with the general land use density, intensity and any applicable land use policies of the SCS. Additional information by jurisdiction and community type is provided in Appendix E-3. SACOG provides assistance to a local jurisdiction in making this determination if the local jurisdiction requests such assistance (SACOG 2016, p. 49).

Appendix E-3 of the MTP/SCS forecasts 10,984 new housing units and 18,706 job openings in unincorporated El Dorado County by 2036. While the Center and Corridor Communities will experience growth to capacity, most of the growth by 2036 within the unincorporated County will occur within Established Communities. The proposed project is located within the Established Communities area within the County. New housing growth would range from very low density to medium-high density. Therefore the MTP/SCS recognizes that the projected development in the County would be accommodated in part on the project site. The population growth and housing associated with the proposed project is assumed to be in line with the forecast projections of the MTP/SCS.

The MTP/SCS also identifies various performance measures, intended to measure the effectiveness of the MTP/SCS. While these performance measures were not expressly intended to define consistency of a project with the MTP/SCS, a project that would implement any of the performance measures would assist in achieving attainment of the MTP/SCS goals for the area. Most of the performance measures are not applicable to the proposed project. However, the proposed project would satisfy a couple of goals within the MTP/SCS. As previously stated, the proposed project would be developed in Established Communities as a means to reduce urban sprawl and in order to maintain compact development patterns. Therefore, the proposed project would help promote strategies of the MTP/SCS.

Furthermore, EDCAQMD has not adopted any GHG reduction measures that would apply to the GHG emissions associated with the proposed project. The General Plan establishes goals and policies related to the reduction of GHG emissions. New development within the County, such as the proposed project would be required to comply with the General Plan policies HO-5.2, 5.5.2.1, 5.6.2.1, 5.6.2.2, 7.3.1.1, and 7.3.5.4. These policies encourage energy and water efficiency for new development and waste reduction. In addition, as determined in Impact 4.4-1,

the proposed project would not exceed the EDCAQMD recommended thresholds for construction or operation. No other mandatory GHG regulations or finalized agency guidelines would apply to implementation of this proposed project, and no conflict would occur. Therefore, this impact would be **less than significant**.

4.4.5 Mitigation Measures

None required.

4.4.6 References

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4.5 LAND USE AND PLANNING

4.5.1 Introduction

This section describes the existing land use designations and zoning for the project site and evaluates the potential effects on land use compatibility and consistency with the 2004 El Dorado County General Plan (El Dorado County 2015a) goals and policies and zoning associated with development of the Ponte Palmero Project (proposed project). New development adjacent to existing land uses, particularly if it is more intensive or involves operations or activities whose effects extend beyond the property, may create land use incompatibilities through changes in air quality, increased noise, or increased traffic. These potential impacts are analyzed in other technical sections of this Draft Environmental Impact Report (Draft EIR) (see Sections 4.2, Air Quality*;* 4.6, Noise; and 4.7, Traffic and Circulation).

The California Environmental Quality Act (CEQA) does not treat project consequences relating solely to land use, socioeconomic or population, employment, or housing issues as direct physical impacts to the environment. An EIR must include, as part of the environmental setting, a discussion of any inconsistencies between the proposed project and applicable general plans, specific plans, and regional plans. The impact assessment in this section focuses on changes in land use, use compatibility, and General Plan consistency, to the extent that potential General Plan conflicts may lead to physical impacts on the environment. Physical effects on the environment that could result from implementation of the proposed project are addressed in the appropriate technical sections of Chapter 4 of this Draft EIR.

Only one comment letter received in response to the Notice of Preparation (NOP) requested that the EIR evaluate the project's consistency with applicable land use planning documents, including pertinent El Dorado County (County) General Plan goals and policies. To the extent that the comments are related to policy inconsistencies and general land use compatibility with existing plans, these issues are addressed in this section. Potential land use compatibility concerns regarding consistency with applicable species recovery plans are addressed in section 4.3, Biological Resources of this Draft EIR. A copy of the NOP and comment letters received in response to the NOP is included in Appendix A.

Information reviewed to prepare this section includes the *2004 El Dorado County General Plan*, as amended December 2015.

4.5.2 Environmental Setting

This section describes the existing setting in the project area and identifies the site's current General Plan land use designation and zoning. Land use policies are examined here, policies related to specific environmental resources are discussed in their respective sections.

The CEQA Guidelines, state that the environmental setting of an EIR must discuss "any inconsistencies between the proposed project and applicable general plans, specific plans, and regional plans." An inconsistency with a general plan or other policy would not necessarily create an environmental impact. In some cases, a general plan policy lays out the standard by which an environmental impact is judged to be significant or less than significant. For example, the County's General Plan identifies acceptable noise levels for various land uses. The noise analysis in Section 4.6 of this Draft EIR evaluates environmental effects associated with a potential increase in noise and uses the County's General Plan noise thresholds to determine whether noise levels would be acceptable (Section 15125(d) (found in 14 CCR 15000 et seq.).

The determination of project consistency with the County's General Plan must be made by the County Board of Supervisor's (Board). The information provided in this section is meant to inform that decision.

Existing Land Uses/Designations

The approximately 19.8 acre project site is dominated by well-developed whiteleaf manzanita chaparral with a small area that has been cleared and graded in the southeast corner of the site. The graded area is primarily barren, with sporadic regrowth of weedy, herbaceous plant species. The topography consists of gentle to moderately steep slopes of varying aspects, with a dominant aspect facing southeast. An intermittent stream passes through a culvert at the eastern entrance of the project site at Ponte Morino Road; and contains a narrow riparian corridor.

The project site straddles the boundary between the Shingle Springs Community Region and the Cameron Park Community Region on the County's General Plan Land Use map (County of El Dorado 2015). The project site is designated for Multifamily Residential (MFR) and High Density Residential (HDR) in the County's 2004 General Plan and zoned Community Commercial-Planned Development (CC-PD), Single Unit Residential-Planned Development (R1-PD), and Multi-Unit-Planned Development (RM-PD). A description of Community Regions, the MFR/HDR land use designations and current zoning is provided below.

Current General Plan Land Use Designations and Zoning

Community Regions

The County's General Plan defines the objective of a Community Region as providing opportunities that allow for continued population growth and economic expansion by emphasizing both the natural setting and built design elements which contribute to the quality of life and economic health of the County. Multifamily residential, high, medium and low-density residential, commercial, research and development, industrial, open space, public facilities and tourist recreational are all allowable land uses within Community Regions (Table 2-1, El Dorado County 2015a).

Multi-family and High-Density Residential

The County General Plan defines Multi-family residential areas as suitable for high-density, single family and multifamily structures such as apartments, single-family attached dwelling units and small-lot single-family detached dwellings subject to the standards set for in the Zoning Ordinance and which meet the minimum allowable density. Densities of five to a maximum of twenty-four dwelling units per acre are permitted within the MFR designation. This designation is considered appropriate only within Community Regions and Rural Centers (El Dorado County 2015a).

Zoning Designations

The El Dorado County's Zoning Ordinance specifies building setbacks, building height, building density, and site coverage to ensure that the public's health, welfare, and safety would be protected and that development occurs in a planned, logical fashion.

The County's Planned Development (–PD) Combining Zone implements the General Plan by providing innovative planning and development techniques that allow the use of flexible development standards; provide for a combination of different land uses which are complimentary, but may not in all aspects conform to the existing zoning regulations; allow clustering of intensive land uses to minimize impacts on various natural resources; avoid cultural resources where feasible; promote more efficient utilization of land; reflect the character, identity and scale of local communities; protect suitable land for agricultural uses; and minimize use compatibility issues and environmental impacts (El Dorado County Code 130.28.010).

Community Commercial-Planned Development

The Community Commercial Zone provides for the retail sales, office, and service needs of the residents residing within the surrounding community and accommodates the commercial and service needs of visitors to the County. Mixed use development compatible with General Plan densities is appropriate in this zone (El Dorado County Code 130.22.010).

Single Unit Residential –Planned Development

The Single-unit Residential Zone is used to promote and regulate the development of higher density, single-unit dwellings, and accessory structures and uses. Minimum lot size designations of R1 and R20K are applied to this zone based on surrounding use compatibility, and physical and infrastructural constraints. Said designations represent the minimum lot size of 6,000 and 20,000 square feet (sf), respectively. This zone is applicable to lands designated as HDR in the General Plan (El Dorado County Code 130.24.010).

Multi-Unit Residential Planned Development

The Multi-unit Residential Zone identifies those lands which are most capable of supporting the highest density of development within the County, based on topography, infrastructure, and circulation availabilities and constraints, as well as proximity to employment centers, public facilities, recreation, and shopping. It is applied to regulate and promote the development of multi-unit dwellings, including apartments, condominiums, and townhouses, while ensuring compatibility with surrounding lower density residential neighborhoods. Detached or attached residential dwellings are allowed in accordance with the standards set forth in this Chapter, and providing the minimum density of at least 5 dwelling units per acre is met. This zone is used in Community Regions and Rural Centers to meet affordable housing goals identified in the Housing Element of the General Plan. This zone is also applicable to lands designated as MFR in the General Plan (El Dorado County Code 130.24.010).

Proposed Land Use Designations and Zoning

The project applicant is requesting a General Plan Amendment to re-designate 9.11 acres of MFR and HDR to Commercial (C) with the remaining 10.76[1] acres re-designated Open Space (OS). The project is also requesting a re-zone of 9.11 acres of CC-PD, R1-PD and RM-PD to Limited Commercial-Planned Development (CL-PD) and 10.76 acres to OS-PD. The project's density would be 10 dwelling units per acre. A description of Commercial and Open Space land use designations, as well as Limited Commercial-Planned Development and Open Space zoning is provided below.

General Plan Land Use Designations

Commercial

The County's General Plan states the purpose of Commercial areas is to provide a full range of commercial retail, office, and service uses to serve residents, businesses, and visitors of El Dorado County. This designation permits mixed use development of commercial lands, which combines commercial and residential uses, within Community Regions. The General Plan allows for a commercial parcel to be developed with a sole residential use if that residential use is a community care facility or part of an approved mixed use development. Commercially designated parcels shall not be developed with a residential use as the sole use of the parcel unless the residential use is either (1) a community care facility as described in goal HO-4 or (2) part of an approved mixed use development as allowed by Policy 2.1.1.3 and 2.1.2.5, within an area zoned to allow for a mix of uses (El Dorado County 2015a).

[1] The project meets the 10.64 acre mitigation requirement of the Settlement Agreement. Based on the Tentative Map, up to 10.76 acres is available for dedication, which is 0.12 acre above the commitment made in the Settlement Agreement. The acreage of dedication reflected on the recorded Final Map will not be less than 10.64 acres.

Open Space

The OS land use category can designate public lands under government title (County, State Parks, BLM, U.S. Bureau of Reclamation, U.S. Forest Service, etc.), where no development other than that specifically needed for government-related open space uses is desired. State parks, ecological preserves, and public lands acquired specifically for open space uses are included in this land use designation. Where a General Plan amendment is processed, this land use designation may also be used to maintain natural features within clustered development on private lands. Open space is a land use permitted within Community Regions (El Dorado County 2015).

Zoning Designations

Limited Commercial-Planned Development

The CL, Limited Commercial Zone, designates areas suitable for lower intensity retail sales, office and service needs of the surrounding area while minimizing conflicts with the residential uses and outside traffic into the area. Mixed use development compatible with surrounding uses would also be appropriate (El Dorado County Code 130.22.010).

Open Space

Open space land is defined as parcels or areas of land which are generally unimproved and devoted to the preservation of natural resources, agricultural production, recreational enjoyment, critical wildlife and biotic habitat, and the protection of scenic values, public health, safety and welfare (El Dorado County Code 130.68.020).

Agricultural Lands

The most recent California Department of Conservation Important Farmland Maps for El Dorado County designates the site as Other Land. Other Land is land not included in any other mapping category and is generally defined as undeveloped land not suitable for agricultural purposes. Vacant and nonagricultural land that is greater than 40 acres and is surrounded on all sides by urban development is mapped as Other Land (DOC 2012). This site does not contain soils that meet the definition of Prime, Unique, or Farmland of Statewide Importance.

Surrounding Land Uses

Surrounding land uses within the Shingle Springs and Cameron Park Community Regions include the Cameron Park Congregate Care retirement community immediately southeast of the project site, and residential development adjacent to the western and southwestern border of the site. The Palmer Professional Center is located south of the project site and further to the

southeast is the Marshall Medical Center, offices, and other assisted living facilities. Further south, across Palmer Drive, is the Goldorado Shopping Center, composed of smaller commercial uses. North of the project site is the Cameron Park Unit of the Pine Hill Preserve. This is an area of more than 4,000 acres dedicated to protect the rare and endangered plants that grow on the Gabbro soils of western El Dorado County.

The General Plan land use designations and zoning for land surrounding the project site includes a mix of commercial, residential, and open space. The General Plan designates lands immediately east of the project site as Commercial. South of the project site land is also designated as Commercial with limited areas of MFR. Lands to the west of the project site are designated as HDR. North of the project site, which includes the Pine Hill Preserve, is designated as OS.

Zoning for areas immediately east, south, and southeast of the project site is "C". The Palmer Professional Center, Goldorado Shopping Center, Marshall Medical Center and western portion of the congregate care retirement community containing the community clubhouse, are located within this area. The congregate care independent living homes located on Palmero Circle, are zoned MFR. Limited areas south of the project site are also zoned for MFR uses. West of the project site is a residential neighborhood zoned LDR. North of the project site, the area designated as the Pine Hill Preserve is zoned as Residential ten-acre lots, RE-10-PD.

4.5.3 Regulatory Setting

Federal and State Regulations

There are no federal or state plans, policies, regulations, or laws applicable to the project.

Local Regulations

County of El Dorado General Plan

The 2004 County of El Dorado General Plan Land Use Element (last updated December 2015) includes goals and policies designed to guide intensity, location and distribution of land use. The following goals and policies are applicable to the project. In December 2015 the County adopted targeted amendments to certain General Plan policies and land use designations and also adopted a comprehensive update to the Zoning Ordinance. The applicable updated goals and policies are listed below. Following each policy is a review of the project's consistency with the applicable policy. These plans and policies include the County's General Plan and zoning ordinance that pertain to the unique setting of the project site.

The Planning Commission and Board of Supervisors will review the site plan and proposed project for its overall consistency with General Plan goals and policies, as well as conformance with the County's development guidelines and zoning.

Goal 2.1 Land Use.. Protection and conservation of existing communities and rural centers; creation of new sustainable communities; curtailment of urban/suburban sprawl; location and intensity of future development consistent with the availability of adequate infrastructure; and mixed and balanced uses that promote use of alternate transportation systems.

> **Policy 2.1.1.7** Development within Community Regions, as with development elsewhere in the County, may proceed only in accordance with all applicable General Plan Policies, including those regarding infrastructure availability as set forth in the Transportation and Circulation and the Public Services and Utilities Elements. Accordingly, development in Community Regions and elsewhere will be limited in some cases until such time as adequate roadways, utilities, and other public service infrastructure become available and wildfire hazards are mitigated as required by an approved Fire Safe Plan.

The project site straddles the boundary between the Shingle Springs Community Region and the Cameron Park Community Region, but is located within a Community Region. The project is located in an area where public infrastructure is available to serve the project site. The project applicant has prepared a wildfire hazard plan, in compliance with County policy. A copy of the plan is included in Appendix B. Generally, the project meets the intent of this policy.

Goal 2.2 Land Use Designations. A set of land use designations which provide for the maintenance of the rural and open character of County and maintenance of a high standard of environmental quality.

> **Policy 2.2.1.3** The General Plan shall provide for the following range of population densities in the respective land use designation based upon the permitted range of dwelling units per acre and number of persons per acre as shown in Table 2-2 below [Note: only information pertaining to Commercial uses is reprinted]. Commercial allows a maximum of 20 units/acre in Community Regions, 2.3 persons per household, which equates to 46 persons per acre.

The project proposes to develop 90 units on 8.82 acres with an average density of 10 units per acre (not including the 0.29 acre emergency access road). Because the project provides housing for seniors, the estimated persons per household (PPH) is less than 2.3 PPH. The estimate is 1.6 PPH for a population of 144 people. Generally, the project meets the intent of this policy.

> **Policy 2.2.1.5** Commercial districts must provide for a floor area ratio of 0.85.

The project includes three parcels where development would occur. The FAR per parcel is broken down as follows: Parcel 1 (clubhouse) .14 FAR; Parcel 2 (Assisted Living) .24 FAR; Parcel 3 (Community Care) .38 FAR. In accordance with this policy, the FAR for the total project is 0.76, 0.09 less than the 0.85 FAR required per this policy. The project is essentially consistent with the County's policy.

> **Policy 2.2.3.1** The Planned Development (-PD) Combining Zone District, to be implemented through the zoning ordinance, shall allow residential, commercial, and industrial land uses consistent with the density specified by the underlying zoning district with which it is combined. Primary emphasis shall be placed on furthering uses and/or design that (1) provide a public or common benefit on- or off-site, (2) cluster intensive land uses or lots to conform to the natural topography, (3) minimize impacts on various natural and agricultural resources, (4) avoid cultural resources where feasible, (5) minimize public health concerns, (6) minimize aesthetic concerns, and (7) promote the public health, safety, and welfare. A goal statement shall accompany each application specifically stating how the proposed project meets these criteria. Except as otherwise provided herein, residential Planned Developments shall include open space lands comprising at least 30 percent of the total site which may be owned in common, by easement or fee title, by the homeowners or may be dedicated to a public agency. The following are exempt from the open space requirement:
>
> A. Condominium conversions,
> B. Residential Planned Developments consisting of five or fewer lots or dwelling units,
> C. Infill projects within Community Regions and Rural Centers on existing sites 3 acres or less are exempt from the open space requirement,
> D. Multi-Family Residential developments, and
> E. Commercial/Mixed Use Developments.
>
> The common open space requirement may be reduced to 15% in High Density Residential (HDR) Planned Developments where the open space is improved for recreational purposes, or as landscaped buffers or green belts, and an additional 15% of the total site is devoted to open space areas reserved for the exclusive use of individual residents such as private yards. The commonly owned open space can be improved for recreational purposes such as parks, recreational facilities, ball fields, golf courses, or picnic areas, or may be retained in a natural condition. Both improved and natural open space may be incorporated into a single Residential Planned Development. Commonly

owned open space shall not include space occupied by infrastructure (e.g., roads, sewer and water treatment plants) except when multi-use trails are included within such space.

The proposed project is a senior housing project that would provide housing for seniors in need of care, which is a benefit to the community and to those families where care is required for aging relatives. The project has been designed to cluster the buildings together and to minimize the overall project footprint, due to the topography of the site and adjacent Pine Hill Preserve. The buildings have been designed to be compatible with the adjacent Congregate Care facility and surrounding development. Approximately 45% of the project site has been set aside as open space. Generally, the project meets the intent of this policy.

Policy 2.2.3.3 Where an application to apply the –PD combining zone district also includes a rezone request for the base zone district(s), said rezone shall not occur where land cannot support a higher density or intensity of land use due to infrastructure availability, physical and topographic constraints, or otherwise conform with Policy 2.2.5.3.

The proposed project meets the intent of Policy 2.2.5.3, as discussed below.

Policy 2.2.5.2 All applications for discretionary projects or permits including, but not limited to, General Plan amendments, zoning boundary amendments, tentative maps for major and minor land divisions, and special use permits shall be reviewed to determine consistency with the policies of the General Plan. No approvals shall be granted unless a finding is made that the project or permit is consistent with the General Plan. In the case of General Plan amendments, such amendments can be rendered consistent with the General Plan by modifying or deleting the General Plan provisions, including both the land use map and any relevant textual policies, with which the proposed amendments would be inconsistent.

The project is proposing to amend the underlying land use designation and zoning of the project site. Based on a review of the project's consistency with applicable general plan policies it appears the project is generally consistent, as described below.

Policy 2.2.5.3 The County shall evaluate future rezoning: (1) To be based on the General Plan's general direction as to minimum parcel size or maximum allowable density; and (2) To assess whether changes in conditions that would support a higher density or intensity zoning district. The specific criteria to be considered include, but are not limited to, the following: 1. Availability of an adequate public water source or an approved Capital Improvement Project to increase service for existing land use demands; 2. Availability and capacity of public treated water system; 3. Availability and capacity of public waste water treatment system; 4. Distance to and capacity of the serving elementary and high school; 5. Response time from nearest fire station handling

structure fires; 6. Distance to nearest Community Region or Rural Center; 7. Erosion hazard; 8. Septic and leach field capability; 9. Groundwater capability to support wells; 10. Critical flora and fauna habitat areas; 11. Important timber production areas; 12. Important agricultural areas; 13. Important mineral resource areas; 14. Capacity of the transportation system serving the area; 15. Existing land use pattern; 16. Proximity to perennial water course; 17. Important historical/archeological sites; and 18. Seismic hazards and present of active faults. 19. Consistency with existing Conditions, Covenants, and Restrictions.

The proposed project is requesting a rezone to Limited Commercial-Planned Development (CL-PD) and Open Space consistent with the change in land use designation to Commercial. The project site is located adjacent to public infrastructure and would tie into existing water, wastewater and storm drain connections. An existing road is immediately adjacent to the project site. In addition, due to the sensitivity of the project site relative to the protected Pine Hill plants in the adjacent Pine Hill Preserve, the project is dedicating approximately 45% of the site to open space to protect the plant community. The project generally meets the intent of this policy.

Policy 2.2.5.21 Development projects shall be located and designed in a manner that avoids incompatibility with adjoining land uses that are permitted by the policies in effect at the time the development project is proposed. Development projects that are potentially incompatible with existing adjoining uses shall be designed in a manner that avoids any incompatibility or shall be located on a different site.

The proposed project has been designed to be consistent with the adjacent Cameron Park Congregate Care project and includes building materials, colors and landscaping that ensures compatibility. In addition, the project would not be incompatible with the existing retail uses located south of the project site. The project generally meets the intent of this policy.

Goal 2.3 Natural Landscape Features. Maintain the characteristic natural landscape features unique to each area of the County.

Policy 2.3.2.1 Disturbance of slopes thirty (30) percent or greater shall be discouraged to minimize the visual impacts of grading and vegetation removal.

The topography of the project site generally consists of gentle to moderately steep slopes of varying aspects. Elevations within the project site range from approximately 1,345 feet above mean sea level (msl) to a high of 1,430 feet msl, a difference of 85 feet. The developed portion of the site is proposed in the area that is the most level in order to minimize grading. The project generally meets the intent of this policy.

Goal 2.4 Existing Community Identity. Maintain and enhance the character of existing rural and urban communities, emphasizing both the natural setting and built design elements which contribute to the quality of life, economic health, and community pride of County residents.

The project meets the intent of this goal by designing a project that contributes to the community by providing more housing options for seniors needing a higher level of care thereby improving the quality of life for the residents as well as for family members that live in the community or nearby.

Goal 2.5 Community Identity. Carefully planned communities incorporating visual elements which enhance and maintain the rural character and promote a sense of community.

> **Policy 2.5.1.1** Low intensity land uses shall be incorporated into new development projects to provide for the physical and visual separation of communities. Low intensity land uses may include any one or a combination of the following: parks and natural open space areas, special setbacks, parkways, landscaped roadway buffers, natural landscape features, and transitional development densities.

The proposed project includes approximately 45% of the project site in open space. The areas of open space provide a visual and physical separation with the adjacent Pine Hill Preserve to the northwest and land uses located to the southwest of the project site. The project generally meets the intent of this policy.

Goal 2.8 Lighting. Elimination of high intensity lighting and glare consistent with prudent safety practices.

Development shall limit excess nighttime light and glare from parking area lighting, signage, and buildings. Consideration will be given to design features, namely directional shielding for street lighting, parking lot lighting, sport field lighting, and other significant light sources, that could reduce effects from nighttime lighting. In addition, consideration will be given to the use of automatic shutoffs or motion sensors for lighting features in rural areas to further reduce excess nighttime light. All outdoor project lighting has been designed consistent with section 130.14.170 of the County's Zoning Ordinance. Therefore, the project generally meets the intent of this policy.

4.5.4 Impacts

Methods of Analysis

Existing land uses in the project vicinity were identified based on a site visit and information provided by the County. Proposed land uses for the project site were provided by the project applicant. The land use evaluation is based on a qualitative comparison of existing and proposed uses on the site and their compatibility with existing land uses and planned land uses

as defined in the County's General Plan, as well as other applicable local environmental and planning documents. The project is requesting an amendment to the General Plan to change the current land use designation and a rezone to change the underlying zoning.

Implementation of the proposed project would result in a change in land use as compared to existing conditions, but would generally be consistent with the underlying land use designation to develop the site. Changes in land use are regulated by the planning policies adopted by each local governmental jurisdiction in California. Therefore, this change in land use is evaluated in comparison to the planning goals and policies contained in the County's General Plan. General plans provide the long-term objectives, principles, and standards for development, and all development proposals must be generally consistent with the overall land use guidance provided in a general plan. More detailed regulation and land use control are applied through the County's zoning, subdivision, and grading requirements, as well as through other County regulations and ordinances. The project's consistency with applicable ordinances, as well as specific land use implications associated with development of the project, are discussed in this section and in other technical sections of this Draft EIR.

Case law interpreting the Planning and Zoning Law (Government Code 65000 et seq.) makes it clear that (i) the meaning of General Plan policies is to be determined by the Board, as opposed to County staff, EIR consultants, or members of the public; and (ii) the Board's interpretations of such policies will prevail if they are "reasonable," even though other reasonable interpretations are also possible. In light of these considerations, the discussions in this Draft EIR on the subject of General Plan consistency represent the best attempt of County staff to advise the Board of their opinions as to whether the proposed project is consistent with identified goals and policies of the County's General Plan. Under state law, a development project cannot be approved if it is inconsistent with the General Plan; therefore, the proposed project could not proceed if determined by the Board to be inconsistent. Based on the evaluations contained in the Draft EIR, the proposed project is generally consistent with the County's General Plan.

Issues Addressed in the Initial Study

As discussed in the Initial Study (see Appendix B), the project site does not contain any protected farmland or Williamson Act contracts; therefore, potential impacts associated with the conversion of farmland to non-agricultural uses will not be further addressed. In addition, potential impacts related to the dividing of established communities are not addressed further because no community would be divided by the proposed project, as the project site is comprised of vacant land. Lastly, the project site is not located within the boundary area of a habitat conservation plan or natural communities conservation plan; therefore, conflicts with a habitat conservation plan or natural communities conservation plan are not further addressed.

Thresholds of Significance

Consistent with Appendix G of the CEQA Guidelines, the County's General Plan, and professional judgment, a significant impact would occur if the proposed project would do any of the following:

- 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 or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; or
- Place incompatible land uses adjacent to existing land uses.

Impacts and Mitigation Measures

4.5-1: Implementation of the proposed project would not conflict with any applicable land use, plan, policy or regulation. The impact would be less than significant.

The project is proposing to develop a 90-unit congregate care facility along with a clubhouse, as described in detail in Chapter 3, Project Description. The project site is currently designated for multifamily and high density residential uses, MFR and HDR, and zoned for Community Commercial-Planned Development (CC-PD), Single Unit Residential-Planned Development (R1-PD), and Multi-Unit Residential-Planned Development (RM-PD). The proposed project is consistent with the County's desire to develop this area with residential uses.

The project applicant is requesting a General Plan Amendment to re-designate 9.11 acres of the project site from MFR and HDR to Limited Commercial-PD and 10.76 acres of MFR and HDR to OS. The project is also requesting a re-zone of 9.11 acres of CC-PD, R1-PD and RM-PD to Limited Commercial-Planned Development (CL-PD) and 10.76 acres to Open Space-Planned Development (OS-PD). Changing the designation to Commercial permits development of a sole residential use if that residential use is a community care facility or part of an approved mixed use development (per Policy 2.2.1.2). The remainder of the site is slated for OS-PD to protect the sensitive plant community unique to the soils in this area of the County. The change in land use designation and zoning would not result in any adverse changes to the permitted land uses. The potential environmental effects associated with changing the land use designation and zoning are evaluated in the technical sections contained in this Draft EIR (e.g., noise, traffic, air quality). County staff is responsible for reviewing project plans closely to ensure that the proposed use complies with the County policies and guidelines and the project is compatible with the adjacent residential and commercial uses.

With approval of the General Plan Amendment and re-zone, the project proposes to develop a community amenity that is less intense than what could be developed on the site (up to 24

dwelling units per acre [du/ac] could be developed under the R1 and RM zoning). Based on a review of General Plan goals and policies it appears the project meets the intent of the County's General Plan and complies with the County's Zoning Ordinance. This is considered a **less-than-significant impact.**

4.6-2: Implementation of the proposed project would not include placing incompatible land uses adjacent to existing uses. The impact would be less than significant.

The proposed project includes development of a congregate care facility with a density of approximately 10.2 du/ac. The construction phase of the proposed development would involve a short-term increase in noise and construction activity and dust over a period of months. Such activities could impact uses in the surrounding area. Once the proposed project is completed, the increase in traffic and noise associated with project operations could affect adjacent areas. Please see Sections 4.6, Noise, and 4.7, Transportation and Circulation, for an evaluation of potential impacts. In addition, the increase in air pollutants associated with project construction and operation is addressed in Section 4.2, Air Quality.

As mentioned earlier, the Cameron Park Congregate Care facility currently exists to the southeast of the project site along with other residential uses to the south, including Eskaton Lodge, an assisted care facility located to the southwest. A small commercial center is located south of the project site with the Marshall Medical Center, and offices located further to the south, southwest and southeast.

The proposed project is not expected to generate excessive noise, light, dust, odors, or air emissions that would be considered incompatible with adjacent uses. The residential uses proposed by the project are compatible with the existing land uses to the south, east, and west of the site. Therefore, there would not be any land use incompatibilities with surrounding uses and the impact is **less than significant.**

4.5.5 Cumulative Impacts

The land use analysis in an EIR does not typically include a discussion of cumulative impacts because the consistency analysis of applicable land use goals and policies and compatibility with existing adjacent uses is not an additive effect. Therefore a cumulative impact analysis is not included.

4.5.6 Mitigation Measures

None required.

4.5.7 References

14 CCR 15000-15387 and Appendix A-L. Guidelines for Implementation of the California Environmental Quality Act, as amended.

Department of Conservation. 2012. *El Dorado County Important Farmland 2012*. Farmland Mapping and Monitoring Program. 2012. Accessed December 4, 2015. ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2012/eld12.pdf

El Dorado County. 2015a. "Land Use Element" El Dorado County General Plan, El Dorado Planning Department, Placerville, California. Adopted July 19, 2004. Last amended December 2015.

El Dorado County. 2015b. Targeted General Plan Amendment & Zoning Ordinance Update Title 130: Zoning Ordinance. El Dorado County Code of Ordinances. https://www.edcgov.us/Government/LongRangePlanning/LandUse/TGPA-ZOU_ZOU_Adopted_12-15-15.aspx

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4.6 NOISE

4.6.1 Introduction

This section evaluates the potential noise impacts of the proposed Ponte Palmero Project (proposed project), describes the existing noise environment within the project area, and identifies noise levels expected to be generated by construction and operation of the proposed project. Receptors that may potentially be affected by noise are identified, as well as the criteria used to evaluate the effects of project-generated noise on the existing noise environment. The discussion also describes the fundamentals of acoustics, the results of sound level measurements, acoustical calculations, and assessment of potential noise impacts from construction and operation of the proposed project.

No comments regarding noise were received in response to the Notice of Preparation (NOP). A copy of the NOP and comment letters received in response to the NOP is included in Appendix A.

The information referenced to prepare this section is summarized from the *Ponte Palmero Phase 2 Environmental Noise Assessment*. A copy of this report is included in Appendix E.

4.6.2 Environmental Setting

Fundamentals of Noise

Acoustics is the science of sound. Sound may be thought of as mechanical energy of a vibrating object transmitted by pressure waves through a medium to human (or animal) ears. If the pressure variations occur frequently enough (at least 20 times per second), then they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second or Hertz (Hz).

Noise is a subjective reaction to different types of sounds. Noise is typically defined as (airborne) sound that is loud, unpleasant, unexpected or undesired, and may therefore be classified as a more specific group of sounds. Perceptions of sound and noise are highly subjective. Often, someone's music is described as noise by another. Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals), as a point of reference, defined as 0 dB. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in levels (dB) correspond closely to human perception of relative loudness.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by A-weighted sound levels. There is a strong correlation between A-weighted sound levels (expressed as dBA) and the way the human ear perceives sound. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels, but are expressed as dB, unless otherwise noted.

The decibel scale is logarithmic, not linear. In other words, two sound levels 10 dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic decibel is A-weighted, an increase of 10 dBA is generally perceived as a doubling in loudness. For example, a 70 dBA sound is half as loud as an 80 dBA sound, and twice as loud as a 60 dBA sound.

Effects of Noise on People

The effects of noise on people can be placed in three categories: (1) subjective effects of annoyance, nuisance, and dissatisfaction; (2) interference with activities such as speech, sleep, and learning; and (3) physiological effects such as hearing loss or sudden startling.

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the last category. There is no satisfactory way to measure the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists and different tolerances to noise tend to develop based on an individual's past experiences with noise. Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted: the so-called ambient noise level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it.

With regard to increases in A-weighted noise level, the following relationships occur:

- Except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived;
- Outside of the laboratory, a 3 dBA change is considered a just-perceivable difference;
- A change in level of at least 5 dBA is required before any noticeable change in
- human response would be expected; and
- A 10 dBA change is subjectively heard as approximately a doubling in loudness, and can cause an adverse response.

Stationary point sources of noise – including stationary mobile sources such as idling vehicles – attenuate (lessen) at a rate of approximately 6 dB per doubling of distance from the source, depending on environmental conditions (i.e., atmospheric conditions and either vegetative or manufactured noise barriers, etc.). Widely distributed noises, such as a large industrial facility spread over many acres, or a street with moving vehicles, would typically attenuate at a lower rate.

Noise Definitions and Criteria

Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (L_{eq}), which corresponds to a steady-state A-weighted sound level containing the same total energy as a time varying signal over a given time period (usually one hour). The L_{eq} is the foundation of the composite noise descriptor, L_{dn}, and shows very good correlation with community response to noise.

The day/night average level (L_{dn}) is based upon the average noise level over a 24-hour day, with a +10 decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because L_{dn} represents a 24-hour average, it tends to disguise short-term variations in the noise environment.

Several examples of the noise levels associated with common noise sources are listed in Table 4.6-1.

Table 4.6-1
Typical Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	--110--	Rock Band
Jet Fly-over at 300 m (1,000 ft)	--100--	
Gas Lawn Mower at 1 m (3 ft)	--90--	
Diesel Truck at 15 m (50 ft), at 80 km/hr (50 mph)	--80--	Food Blender at 1 m (3 ft) Garbage Disposal at 1 m (3 ft)
Noisy Urban Area, Daytime Gas Lawn Mower 30 m (100 ft)	--70--	Vacuum Cleaner at 3 m (10 ft)
Commercial Area Heavy Traffic at 90 m (300 ft)	--60--	Normal Speech at 1 m (3 ft)
Quiet Urban Daytime	--50--	Large Business Office Dishwasher in Next Room
Quiet Urban Nighttime	--40--	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	--30--	Library
Quiet Rural Nighttime	--20--	Bedroom at Night, Concert Hall (Background)
	--10--	Broadcast/Recording Studio
Lowest Threshold of Human Hearing	--0--	Lowest Threshold for Human Hearing

Source: Caltrans, Technical Noise Supplement, Traffic Noise Analysis Protocol, September 2013.

Construction Vibration

Human and structural response to different vibration levels is influenced by a number of factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration measures in terms of peak particle velocities in inches (p.p.v) per second. Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of peak particle velocities.

Vibration criteria developed by Caltrans indicate that the threshold for damage to structures ranges from 2 to 6 in/sec. One-half this minimum threshold or 1 in/sec p.p.v. is considered a safe criterion that would protect against architectural or structural damage. A person's perception to the vibration will depend on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating. The general threshold at which human annoyance could occur is 0.1 in/sec p.p.v. Vibration levels for various pieces of construction equipment is shown in Table 4.6-2.

Table 4.6-2
Vibration Levels for Varying Pieces of Equipment

Type of Equipment	Peak Particle Velocity at 25 feet	Approximate Velocity Level at 25 feet
Large Bulldozer	0.089 (inches/second)	87 (VdB)
Loaded Trucks	0.076 (inches/second)	86 (VdB)
Small Bulldozer	0.003 (inches/second)	58 (VdB)
Auger/Drill Rigs	0.089 (inches/second)	87 (VdB)
Jackhammer	0.035 (inches/second)	79 (VdB)
Vibratory Hammer	0.070 (inches/second)	85 (VdB)
Vibratory Compactor/Roller	0.210 (inches/second)	94 (VdB)

Source: Table 9, , j.c brennan & associates, Inc. 2016.

Existing Land Uses in the Project Vicinity

The project site is adjacent to the existing Cameron Park Congregate Care retirement community to the east, commercial development to the south, residential development to the west, and the Bureau of Land Management's Pine Hill Preserve to the north and northeast. Thus, existing urban development surrounds the project site on three sides, including Palmer Drive, the Marshal Medical Center, Eskaton senior assisted living facility, medical office buildings, and a local retail shopping center.

Existing Ambient Noise Environment

Noise Sources

Ambient noise in the project area is primarily generated by traffic along U.S. Highway 50 (Highway 50) and some traffic on local area roadways. Highway 50 is a major east-west route of the U.S. Highway system stretching from Ocean City, Maryland on the Atlantic Ocean to West Sacramento. Highway 50 is located 0.30 mile south of the project site. In the vicinity of the Cameron Park Community, Highway 50 is a four lane highway, two-lanes in each direction, with a posted speed limit of 65 miles per hour (mph). Due to the location of the project, and the distance to Cameron Park Drive, it is not expected that Cameron Park Drive is a significant noise source at the project site.

Other noise sources are considered secondary in importance, including aircraft flyover, dogs barking, and general human activity.

Exterior Noise Environment

To quantify the existing ambient noise environment continuous hourly noise measurements were conducted for a period of 24-hours at the project site on November 4 and 5, 2015. A Larson Davis Laboratories (LDL) Model 820 precision integrating sound level meter was used for the ambient noise level measurement survey. The meters were calibrated before and after use with an LDL Model CAL200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4).

The sound level meters were programmed to measure hourly noise levels. Each hourly interval included the maximum, median, and average noise levels at each site during the survey. The maximum value, denoted Lmax, represents the highest noise level measured. The average value, denoted L_{eq}, represents the hourly energy averages. The median value, denoted L_{50}, represents the sound level exceeded 50 percent of the time during the monitoring period. Additionally, a composite 24-hour average noise level (L_{dn}) was calculated from the hourly L_{eq} values. The calculated L_{dn} applies a +10 dBA penalty to all noise which occurs during the nighttime period, which is defined as the hours between 10:00 p.m. and 7:00 a.m. A summary of the ambient noise level measurement survey results are provided in Table 4.6-3. The noise measurement locations are shown on Figure 4.6-1.

Table 4.6-3
Summary of Existing Continuous Background Noise Measurement Data
November 2015

Site	Location	L_{dn}	Average Measured Hourly Noise Levels, dBA					
			Daytime (7am – 10pm)			Nighttime (10pm-7am)		
			L_{eq}	L_{50}	L_{max}	L_{eq}	L_{50}	L_{max}
Site A	Northeast portion of the project site	57 dBA	48	43	60	51	47	60

Source: Table 4, j.c brennan & associates, Inc. 2016

Short-term traffic noise level measurements were taken to on the project site and concurrent traffic counts of Highway 50. The purpose of the short-term traffic noise level measurements was to determine the accuracy of the FHWA model in describing the existing Highway 50 traffic noise levels at the project site, while accounting for shielding from excess ground attenuation, local topography, actual travel speeds, roadway grade, and shielding from intervening structures. Table 4.6-4 shows the results of the traffic noise calibrations.

Table 4.6-4
Comparison of FHWA Model to Measured Highway Traffic Noise Levels

Vehicles/ 15 Minute Period									
Site	*Time*	*Autos*	*Med. Trucks*	*Heavy Trucks*	*Speed (MPH)*	*Distance (feet)*	*Measured L_{eq}, dB*	*Modeled L_{eq}, dB*	*Difference dB*
U.S. Highway 50									
1	2:40 pm	650	68	22	65	2,000	53.0	55.1	-2.1

Source: Table 5, j.c. brennan & associates, Inc. 2016.

Based upon the calibration results, the FHWA Model was found to over-predict Highway 50 traffic noise levels at the noise measurement location by approximately 2 dB. The difference in measured to modeled noise levels is due to the following factors: excessive ground attenuation over a large distance, shielding from intervening buildings, and intervening topography. The remainder of the analysis applies a conservative -2 dB offset to the FHWA Model for the prediction of future Highway 50 traffic noise levels at the eastern portion on the project site.

4.6.3 Regulatory Setting

Federal Regulations

There are no federal regulations related to noise that apply to the proposed project.

DUDEK

SOURCE: Borges Architectual Group, 2015

FIGURE 4.6-1

Noise Measurement Locations

Ponte Palmero

17-1209 E 206 of 271

Date: 1/5/2017 Last saved by: cbattle Path: Z:\Projects\09\09018\MAPDOC\DOCUMENTADER\Figure 4.6-1 Noise Measurement Locations.mxd

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State Regulations

The state has established noise insulation standards for new multi-family residential units, hotels, and motels that would be subject to relatively high levels of transportation-related noise. These requirements are collectively known as the California Noise Insulation Standards (Title 24, California Code of Regulations). The noise insulation standards set forth an interior standard of L_{dn} 45 dBA in any habitable room. Typically buildings have an exterior to interior noise reduction of about 25 dB with the windows closed and approximately 15 dB with the windows open. Therefore, rooms exposed to an exterior community noise level greater than 60 dB could result in an interior community noise level greater than 45 dB. The California Building Code requires an acoustical analysis demonstrating how dwelling units have been designed to meet this interior standard where such units are proposed in areas subject to noise levels greater than L_{dn} 60 dBA. Title 24 standards are typically enforced by local jurisdictions through the building permit application process.

Local Regulations

El Dorado County General Plan

The Noise Element of the 2004 El Dorado County General Plan (County of El Dorado 2015a) provides the following goals and policies relative to noise. The County's General Plan was updated in December 2015. The most current goals and policies are listed below.

Goal 6.5 Acceptable Noise Levels. Ensure that County residents are not subjected to noise beyond acceptable levels.

> **Objective 6.5.1 Protection of Noise-sensitive Development.** Protect existing noise-sensitive developments (e.g., hospitals, schools, churches and residential) from new uses that would generate noise levels incompatible with those uses and, conversely, discourage noise-sensitive uses from locating near sources of high noise levels.
>
> **Policy 6.5.1.1** Where noise-sensitive land uses are proposed in areas exposed to existing or projected exterior noise levels exceeding the levels specified in Table 6-1 [included as Table 4.6-5] or the performance standards of Table 6-2 [included as Table 4.6-6], an acoustical analysis shall be required as part of the environmental review process so that noise mitigation may be included in the project design.
>
> **Policy 6.5.1.8** New development of noise sensitive land uses will not be permitted in areas exposed to existing or projected levels of noise from transportation noise sources which exceed the levels specified in Table 6-1 unless the project design includes effective

mitigation measures to reduce exterior noise and noise levels in interior spaces to the levels specified in Table 6-1 [included as Table 4.6-5].

Table 4.6-5
El Dorado County General Plan Noise Element Standards Applicable at Residential, Hospital and Nursing Homes Land Uses for Transportation Noise Sources

Land Use	Outdoor Activity Areas[1]	Interior Spaces
Residential	60 dB Ldn[2]	45 dB Ldn
Hospitals, Nursing Homes	60 dB Ldn[2]	45 dB Ldn

Notes:
1 In Communities and Rural Centers, where the location of outdoor activity areas is not clearly defined, the exterior noise level standard shall be applied to the property line of the receiving land use. For residential uses with front yards facing the identified noise source, an exterior noise level criterion of 65 dB Ldn shall be applied at the building facade, in addition to a 60 dB Ldn criterion at the outdoor activity area. In Rural Regions, an exterior noise level criterion of 60 dB Ldn shall be applied at a 100 foot radius from the residence unless it is within Platted Lands where the underlying land use designation is consistent with Community Region densities in which case the 65 dB Ldn may apply. The 100-foot radius applies to properties which are five acres and larger; the balance will fall under the property line requirement.
2 Where it is not possible to reduce noise in outdoor activity areas to 60 dB Ldn/CNEL or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB Ldn/CNEL may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.
Source: Table 6-1 of the El Dorado County General Plan, 2004.

Table 4.6-6
Noise Level Performance Standards for Noise Sensitive Land Uses Affected by Non-Transportation Noise Sources

Noise Level Descriptor	Daytime 7 a.m. – 7 p.m.		Evening 7 p.m. – 10 p.m.		Night 10 p.m. – 7 a.m.	
	Community	*Rural*	*Community*	*Rural*	*Community*	*Rural*
Hourly L_{eq} dB	55	50	50	45	45	40
L_{max} dB	70	60	60	55	55	50

Notes: Each of the noise levels specified above shall be lowered by five dB for simple 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 shall be applied at a point 100 feet 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: Table 6-2, of the El Dorado County General Plan, 2004.

Policy 6.5.1.9 Noise created by new transportation noise sources, excluding airport expansion but including roadway improvement projects, shall be mitigated so as not to

exceed levels specified in Table 6-1 [included as Table 4.6-5] at existing noise-sensitive land uses.

Note: Table 6-1 of the El Dorado County Noise Element establishes an exterior noise level criterion of 60 dB L_{dn} at the outdoor activity area of residential land uses impacted by transportation noise sources. Where it is not possible to reduce noise in outdoor activity areas to 60 dB L_{dn} or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB L_{dn} may be allowed provided that available exterior noise level reduction measures have been implemented. In addition, an interior noise level criterion of 45 dB L_{dn} is applied to all residential land uses.

Policy 6.5.1.11 The standards outlined in Tables 6-3, 6-4, and 6-5 shall not apply to those activities associated with actual construction of a project as long as such construction occurs between the hours of 7 a.m. and 7 p.m., Monday through Friday, and 8 a.m. and 5 p.m. on weekends, and on federally recognized holidays. Further, the standards outlined in Tables 6-3, 6-4, and 6-5 shall not apply to public projects to alleviate traffic congestion and safety hazards.

Policy 6.5.1.12 When determining the significance of impacts and appropriate mitigation for new development projects, the following criteria shall be taken into consideration:

A. Where existing or projected future traffic noise levels are less than 60 dBA L_{dn} at the outdoor activity areas of residential uses, an increase of more than 5 dBA L_{dn} cause by a new transportation noise source will be considered significant.

B. Where existing or projected future traffic noise levels range between 60 and 65 dBA L_{dn} at the outdoor activity areas of residential uses, an increase of more than 3 dBA L_{dn} cause by a new transportation noise source will be considered significant.

C. Where existing or projected future traffic noise levels are greater than 65 dBA L_{dn} at the outdoor activity areas of residential uses, an increase of more than 1.5 dBA L_{dn} cause by a new transportation noise source will be considered significant.

Policy 6.5.1.13 When determining the significance of impacts and appropriate mitigation to reduce those impacts for new development projects, including ministerial development, the following criteria shall be taken into consideration:

A. In areas in which ambient noise levels are in accordance with the standards in Table 6-2 (included as Table 4.6-5), increases in ambient noise levels caused by new non-transportation noise sources that exceed 5 dBA shall be considered significant; and

B. In areas in which ambient noise levels are not in accordance with the standards in Table 6-2 (included as Table 4.6-5), increases in ambient noise levels caused by new non-transportation noise sources that exceed 3 dBA shall be considered significant.

Title 130 Zoning Ordinance - Noise Standards

The following are pertinent sections of the El Dorado County Title 130 Zoning Ordinance, Chapter 130.37 Noise Standards (County of El Dorado 2015b). The noise level criteria contained in the Zoning Ordinance are consistent with those contained in the General Plan Noise Element. However, exemptions and exceptions specific for construction noise are contained in the Zoning Ordinance.

130.37.20 Exemptions

F. Noise sources associated with work performed by public or private utilities in the maintenance or modification of its facilities.

I. Construction (e.g., construction, alteration or repair activities) during the daylight hours provided that all construction equipment shall be fitted with factory installed muffling devices and maintained in good working order.

130.37.60 Noise Standards

The following standards shall apply to all development projects for which an acoustic analysis is required:

A. Noise sensitive land uses affected by non-transportation noise sources shall not exceed standards set forth in Table 130.37.060.1 (included as Table 4.6-7) below:

Table 4.6-7
Noise Level Performance Protection Standards For Noise Sensitive Land Uses Affected by Non-Transportation Noise Sources

Noise Level Descriptor	Daytime 7 a.m. – 7 p.m.		Evening 7 p.m. – 10 p.m.		Night 10 p.m. – 7 a.m.	
	Community	*Rural*	*Community*	*Rural*	*Community*	*Rural*
Hourly L_{eq} dB	55	50	50	45	45	40
L_{max} dB	70	60	60	55	55	50

Notes: Each of the noise levels specified above shall be lowered by five dB for simple tone noises, noises consisting of unamplified speech or music, or for recurring impulsive noises.
The Director 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.
The exterior noise level standard shall be applied as follows:
a. In Community Regions, at property line of the receiving property;

b. In Rural Centers and Regions, at a point 100 feet away from a sensitive receptor or, if the sensitive receptor is within the Platted Lands Overlay (-PL) where the underlying land uses designation is consistent with Community Region densities, at the property line of the receiving property or 100 feet away from the sensitive receptor, whichever is less; or
c. In all areas, at the boundary of a recorded noise easement between affected properties.

Source: Title 130 Zoning Ordinance, Chapter 130.37 Noise Standards

B. Transportation noise shall not exceed thresholds set forth in Table 130.37.060.2 (included as Table 4.6-8) below:

Table 4.6-8
Noise Level Standards for Noise-Sensitive Land Uses for Transportation Noise Sources

Land Use	Outdoor Activity Areas Ldn/CNEL, dB	Interior Spaces	
		Ldn/CNEL, dB	*Leq, dB*[1]
Residential	60	45	--
Transient Lodging	60	45	--
Hospitals, Nursing Homes	60	45	--
Theaters, Auditoriums, Music Halls	--	--	35
Churches, Meeting Halls, Schools	60	--	40
Office Buildings	--	--	40
Libraries, Museums	--	--	45
Playgrounds, Neighborhood Parks	70	--	45

Note:
[1] As determined for a typical worse-case hour during periods of use.
Source: Title 130 Zoning Ordinance, Chapter 130.37 Noise Standards

a. In Community Regions and Rural Centers:

1. Where the location of outdoor activity areas is not clearly defined, the exterior noise level standard shall be applied at the property line of the sensitive receptor.

2. For residential uses with front yards facing the identified noise source, an exterior noise level threshold of 65 dBA Ldn shall be applied at the dwelling facade in addition to the required threshold at the outdoor activity area.

b. In Rural Regions: an exterior noise level threshold of 60 dBA Ldn shall be applied at a 100 foot radius from the dwelling on lots five acres and larger. Those lots less than five acres shall have the noise level standards applied at the property line.

c. Where it is not possible to reduce noise levels in those outdoor activity areas limited to 60 dBA Ldn/CNEL thresholds using a practical application of the best available noise reduction measures, an exterior noise threshold of up to 65 ddBA Ldn/CNEL may be allowed provided that available exterior noise reduction measures have been implemented and interior noise levels are in compliance with this table.

C. Construction-related noise shall allow for exceptions to the evening and nighttime standards or other temporary exceedances of noise standards as may be approved by the Director, where necessary to alleviate traffic congestion and safety hazards, or where authorized by an approved permit.

4.6.4 Impacts

Methods of Analysis

Preparation of this analysis is based on the noise assessment prepared by j.c. brennan & associates included as Appendix E to this Draft EIR. The existing noise environment in the project area is defined primarily by traffic on Highway 50 to the south and some local traffic on area roadways.

To quantify the existing ambient noise environment in the project vicinity, continuous hourly noise level measurements were taken for a period of 24-hours on the project site. The noise level measurements were conducted on November 4 - 5, 2015. The noise level measurements were conducted to quantify the existing overall noise environment at the site, and for a comparison to any future noise levels (see Figure 4.6-1).

The El Dorado County Noise Element establishes an exterior residential noise level criterion of 60 dB L_{dn} at an outdoor activity area and an interior noise level criterion of 45 dB L_{dn} for all residential land uses impacted by transportation noise sources, shown in Table 4.6-6. Where it is not possible to reduce noise in outdoor activity areas to 60 dB L_{dn} or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB L_{dn} may be allowed provided that available exterior noise level reduction measures have been implemented.

The County's exterior noise level standards for non-transportation noise sources of 55 dB L_{eq} and 70 dB L_{max} is shown in Table 4.6-5.

Construction Noise

Construction noise impacts are generally short-term in nature and the County's Zoning Ordinance, Chapter 130.37, Noise Standards, provides an exception for construction activities providing they occur within during the daylight hours and all construction equipment is fitted with factory installed muffling devices and maintained in good working order. The County uses a maximum exterior noise level of 75 dBA, and an hourly average noise level of 55 dBA L_{eq} at the building facades of residential uses. Table 4.6-9 provides the maximum noise level for a variety of construction equipment at a distance of 50 feet. To determine the hourly L_{eq} noise levels at the nearest residences, j.c. brennan & associates, Inc., used the Federal Highway

Administration Roadway Noise Construction Model (RCNM) which assigns the average use of individual pieces of equipment and calculates the overall hourly L_{eq} of all sources.

Table 4.6-9
Typical Construction Equipment Noise Levels

Type of Equipment	Maximum Level (dB at 50 feet)
Backhoe	78
Compactor	83
Compressor (air)	78
Dozer	82
Dump truck	76
Excavator	81
Generator	81
Pneumatic tools	85

Source: Table 8, Environmental Noise Assessment, j.c. brennan & associates, 2016.

Vibration

The County does not have standards for evaluating vibration levels. Human and structural response to different vibration levels is influenced by a number of factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. Vibration criteria developed by Caltrans is used which includes the general threshold at which human annoyance could occur is 0.1 in/sec p.p.v. or architectural damage 1.0 in/sec p.p.v.

Cumulative Noise

Future Highway 50 traffic noise levels within the vicinity of the project site were determined using the FHWA Model. Future (Year 2035) average daily traffic (ADT) volumes for Highway 50 provided by K.D. Anderson traffic consultants (see Appendix F), as contained in the El Dorado County traffic model. The results of the FHWA traffic noise prediction model, shown in Table 4.6-10 include the -2 dB adjustment to the FHWA model as described above in Exterior Noise Environment.

Table 4.6-10
Predicted Future (2035) U.S. 50 Traffic Noise Levels at the Project Site

Location of Receiver	Predicted L_{dn} at Outdoor Activity Areas	Distance to Noise Contours		
		60 dB L_{dn}	*65 dB L_{dn}*	*70 dB L_{dn}*
Eastern Portion of Project Site	56 dB L_{dn}	1,111	516	239

Source: Table 6, Environmental Noise Assessment, j.c. brennan & associates, 2016.

Issues Addressed in the Initial Study

The Initial Study prepared for the proposed project (see Appendix B) determined because the project site is not located within 2 miles of a public or private airport and the project would not expose people working in the project area to excessive noise levels. Therefore, these issues are not further evaluated.

Thresholds of Significance

Consistent with Appendix G of the CEQA Guidelines, the County's General Plan, and professional judgment, impacts associated with noise are considered significant if the proposed project would:

- Expose persons to or generate noise levels in excess of standards established in the County's General Plan or noise ordinance, or applicable standards of other agencies;
- Expose persons to or generate excessive groundborne vibration or groundborne noise levels;
- Cause a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project; or
- Cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

Impacts and Mitigation Measures

4.6-1: The proposed project would expose people to construction noise levels in excess of standards established in the County's general plan. This would be a significant impact.

Construction

Construction of the proposed project would generate noise associated with use of construction equipment and increased truck traffic in the project vicinity. Construction activities are anticipated to take place over a period of approximately 11 months. Typical project construction activities would generate maximum noise levels, as indicated in Table 4.6-9, ranging from 76 to 85 dB at a distance of 50 feet. Construction activities would be temporary in nature and are anticipated to occur during normal daytime working hours.

The eastern edge of the project site is located approximately 270-feet from the nearest residences to the east (Congregate Care site). Based upon those distances, and the maximum noise levels shown in Table 4.6-7, the maximum noise levels at the residences closest to the project site are expected to range between 61 dBA and 70 dBA. It is anticipated construction would occur between 7 a.m. and 7 p.m., Monday through Friday, and 8 a.m. and 5 p.m. on weekends.

The hourly L_{eq} associated with the construction phase would be approximately 69 dBA, while all equipment is operating near the east side of the project site. Therefore, construction noise would exceed the El Dorado County noise level standard of 55 dBA L_{eq}. This is considered a **significant impact**.

Operation

As discussed above, a 15 dB reduction can be expected from the building exterior to interior with windows open and a 25 dB reduction with the windows closed. Any L_{dn} sound level greater than 60 dB would result in interior sound levels above the allowable 45 dB limit if windows and doors were open. The 2 dB adjustment to the FHWA model, as described above in Exterior Noise Environment, was assumed for the interior noise assessment.

The analysis indicates that the nearest building façade adjacent to Highway 50 would be exposed to noise levels of approximately 56 dB L_{dn}. Assuming an exterior to interior noise level reduction of 25 dB, with the windows in the closed position, interior traffic noise levels at unshielded first floor facades are predicted to comply with the County's 45 dB L_{dn} interior noise level criterion. Mechanical ventilation would be provided for the project, and would allow occupants to close windows and doors for the appropriate acoustical isolation.

Second floor facades are predicted to be exposed to traffic noise levels approximately 2 to 3 dB higher (59 dB L_{dn}). This is due to the fact that second floor facades would not benefit from any ground attenuation. Therefore, interior traffic noise levels at unshielded second floor facades are also predicted to comply with the 45 dB L_{dn} interior noise level criterion provided standard residential construction practices are followed.

Therefore, project operation would comply with the County's noise standards and the impact would be **less than significant**.

4.6-2: The proposed project would not expose people to excessive groundborne vibration or groundborne noise levels. This would be a less-than-significant impact.

Limited groundborne vibration may occur during project construction, but would not occur during project operation. Table 4.6-2 shows the typical vibration levels produced by construction equipment. The County does not contain standards for evaluating vibration levels. However, given the size of the buildings, construction would not require pile drivers or other activities that could generate substantial groundborne vibration. In addition, based on the distance to the closest residential use, it is not expected that construction-related vibration would result in human annoyance (0.1 in/sec p.p.v.) or architectural damage (1.0 in/sec p.p.v). This is considered a **less-than-significant impact.**

4.6-3: The proposed project would not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. This would be a less-than-significant impact.

Operation

The project does not include any exterior speakers, or outdoor activities that would generate an increase in ambient noise levels. The only noise associated with project operation would be an increase in traffic noise levels. The project would generate an increase in vehicles associated with people driving to and from the project site. The Environmental Noise Assessment determined the increase in traffic noise levels due to the project using the FHWA noise prediction model. Table 4.6-11 shows the changes in traffic noise levels based upon the Existing and Existing Plus Project traffic volumes.

Table 4.6-11
Analysis of Off-Site Traffic Noise Levels

Traffic Noise Levels (L_{dn})							
Roadway	*Segment*	*Existing*	*Existing With Project*	*Change*	*2035 No Project*	*2035 With Project*	*Change*
Cameron Park Dr.	North of Palmer	65 dBA	65 dBA	0	66 dBA	66 dBA	0
Cameron Park Dr.	South of Palmer	65 dBA	65 dBA	0	67 dBA	67 dBA	0
Palmer Dr.	Northeast Segment	61 dBA	61 dBA	0	63 dBA	63 dBA	0

Source: FHWA-77-108 with inputs from KD Anderson Associates and j.c. brennan & associates, Inc. 2016.

As shown in Table 4.6-11, the project would not result in an increase in traffic noise levels on area roadways. The increase in ambient noise resulting from project traffic would not exceed acceptable noise standards and the impact would be **less than significant.**

4.6.5 Cumulative Impacts

The existing ambient noise environment in the immediate project area is defined primarily by traffic on Highway 50. While it is difficult to project exactly how the ambient noise conditions within the area would change, it is known that traffic noise levels would increase due to the additional traffic generated by the proposed project and other development in the county and the region. In the cumulative scenario, ongoing development in the County and buildout of the County's General Plan would be expected to increase the ambient noise environment in the area as a result of increased traffic volumes and increased residential population and commercial activities. The cumulative context for noise is buildout of the County's General Plan.

Non-transportation noise sources (e.g., project operation) and construction noise impacts are typically project-specific and highly localized. Construction activities associated with anticipated development within the area would contribute to cumulative noise levels, but in a highly localized and transient manner. As other development occurs in the area, noise from different types of uses (e.g., traffic, aircraft, fixed noise sources) would continue to combine, albeit on a localized basis, to cause increases in overall background noise conditions within the area. As a result, such sources do not significantly contribute to cumulative noise impacts at distant locations and are not evaluated on a cumulative level.

4.6-4: The proposed project would not result in a cumulative contribution to any existing cumulative noise effects. This would be a less-than-significant impact.

Based upon the predicted future Highway 50 traffic noise levels shown in Table 4.6-11, the proposed project would comply with the County's General Plan Noise Element exterior noise level criterion for residential uses of 60 dBA L_{dn} at the project site and under 2035 conditions the impact would be less than significant without the project. As shown in the table, the project's contribution would be insignificant and would not change the 2035 no project noise levels. Thus, the project would not contribute to an existing cumulative contribution (because it does not exist) and the project's contribution would be **less than significant.**

4.6.6 Mitigation Measures

To minimize disturbance of nearby residential uses, Mitigation Measure 4.6-1 requires staging areas be located away from residential uses and equipment be in good working order. Compliance with this mitigation measure would help reduce construction noise; however short-term construction noise would still exceed the County's standard; therefore, the impact would remain **significant and unavoidable.**

4.6-1: The project contractor shall adhere to the following during project construction:

a. Staging and lay-down areas shall be located as far as possible from the residences. For equipment that would be operated for extended periods at staging or lay-down areas, portable construction noise barriers shall be installed, where reasonable and feasible;

b. All equipment shall be fitted with factory equipped mufflers;

c. All equipment shall be in good working order;

d. Construction equipment shall be turned off when not in use.

4.6.7 References

El Dorado County. 2015a. El Dorado County General Plan, El Dorado Planning Department, Placerville, California. Adopted July 19, 2004. Last amended December 2015.

El Dorado County. 2015b. Targeted General Plan Amendment & Zoning Ordinance Update Title 130: Zoning Ordinance. El Dorado County Code of Ordinances. https://www.edcgov.us/Government/LongRangePlanning/LandUse/TGPA-ZOU_ZOU_Adopted_12-15-15.aspx

j.c.brennan & associates. 2016. Ponte Palmero Phase 2 Environmental Noise Assessment. February 24, 2016.

4.7 TRANSPORTATION AND CIRCULATION

4.7.1 Introduction

This section describes the results of a transportation impact analysis conducted to evaluate potential transportation-related impacts of the proposed Ponte Palmero Project (proposed project) on roadways, intersections, transit, bicycle, and pedestrian movements.

Comments received in response to the Notice of Preparation (NOP) included a comment letter from the California Department of Transportation (Caltrans) requesting that if any impacts are identified to U.S. Highway 50 (US 50), the project applicant must contribute to the County's Traffic Impact Mitigation Fee Program. Because the project would add fewer than 10 peak hour trips to US 50, analysis of impacts to that facility was not required under the County's traffic study guidelines. A copy of the NOP and comments received is included in Appendix A.

Information contained in this section is primarily based on the *Traffic Impact Analysis for Ponte Palmero II* prepared by KD Anderson & Associates, Inc. (October 21, 2015). A copy of this report is included in Appendix F.

4.7.2 Environmental Setting

This section describes the proposed project study area, including the surrounding roadway network and bicycle, transit, and pedestrian facilities in the site vicinity. Traffic conditions are addressed at only one key intersection that provides access to the project site, Cameron Park Drive/Palmer Drive intersection. The study area limits were selected in consultation with El Dorado County staff and are considered appropriate for the anticipated trip generation of this project.

Study Area Roadways and Intersections

The following describes key roadways in the study area.

Cameron Park Drive is an arterial roadway that extends north from an interchange on US 50 to Green Valley Road. The segment of Cameron Park Drive near the US 50 interchange is a 4 lane facility, and the roadway narrows to a two-lane roadway in the area north of the Palmer Drive intersection. The posted speed limit on Cameron Park Drive in the immediate area of the project is 35 miles per hour (mph), and on-street parking is not allowed.

Palmer Drive is a Collector street that extends east from Cameron Park Drive to provide access to existing office uses and a retail center that adjoins the US 50 / Cameron Park Drive interchange. Palmer Drive is a two lane roadway with continuous Two-Way Left-Turn (TWLT) lane. Sidewalks are present on both sides of the street. On-street parking is permitted on Palmer Drive and the posted speed limit in the immediate vicinity of the project is 35 mph.

Ponte Morino Drive is a local street that extends north from an intersection on Palmer Drive to provide access to the Cameron Park Congregate Care facility. Ponte Morino Drive is a two lane street with on-street parking and sidewalks. The presumed or "prima facie" 25 mph speed limit applies.

The Cameron Park Drive / Palmer Drive intersection is a "tee" located roughly 500 feet from the US 50 interchange's westbound ramp intersection. The intersection is controlled by a traffic signal. Each Cameron Park Drive approach has two through travel lanes and a separate left turn lane. The northbound left turn lane accommodates U-turns originating in the adjoining retail center. The Palmer Drive approach has two left turn lanes and a separate right turn lane.

Level of Service Analysis

The Level of Service (LOS) analysis has been employed to provide a basis for describing existing traffic conditions and for evaluating the significance of project traffic impacts. LOS measures the *quality* of traffic flow and is represented by letter designations from "A" to "F", with a grade of "A" referring to the best conditions, and "F" representing the worst conditions. The guidelines and analysis methodologies used for this report follow El Dorado County standards. Local agencies adopt minimum LOS standards for their facilities, and the intersection LOS presented in this analysis are based on the weighted average total delay per vehicle for the intersection as a whole based on the thresholds shown in Table 4.7-1.

Table 4.7-1
Level of Service Definitions

Level of Service	Signalized Intersection	Unsignalized Intersection	Roadway (Daily)
A	Uncongested operations, all queues clear in a single-signal cycle. Delay < 10.0 sec	Little or no delay. Delay < 10 sec/veh	Completely free flow.
B	Uncongested operations, all queues clear in a single cycle. Delay > 10.0 sec and < 20.0 sec	Short traffic delays. Delay > 10 sec/veh and < 15 sec/veh	Free flow, presence of other vehicles noticeable.
C	Light congestion, occasional backups on critical approaches. Delay > 20.0 sec and < 35.0 sec	Average traffic delays. Delay > 15 sec/veh and < 25 sec/veh	Ability to maneuver and select operating speed affected.
D	Significant congestion of critical approaches but intersection functional. Cars required to wait through more than one cycle during short peaks. No long queues formed. Delay > 35.0 sec and < 55.0 sec	Long traffic delays. Delay > 25 sec/veh and < 35 sec/veh	Unstable flow speeds and ability to maneuver restricted.

Table 4.7-1
Level of Service Definitions

Level of Service	Signalized Intersection	Unsignalized Intersection	Roadway (Daily)
E	Severe congestion with some long standing queues on critical approaches. Blockage of intersection may occur if traffic signal does not provide for protected turning movements. Traffic queue may block nearby intersection(s) upstream of critical approach(es). Delay > 55.0 sec and < 80.0 sec	Very long traffic delays, failure, extreme congestion. Delay > 35 sec/veh and < 50 sec/veh	At or near capacity, flow quite unstable.
F	Total breakdown, stop-and-go operation. Delay > 80.0 sec	Intersection blocked by external causes. Delay > 50 sec/veh	Forced flow, breakdown.

Source: Appendix F**:** Table 1 p. 4

Existing Levels of Service

The existing intersection LOS and existing traffic volumes are shown on Figure 4.7-1, which presents the existing lane configurations and current peak hour traffic volumes at the Cameron Park Drive/Palmer Drive intersection. These volumes are the result of new traffic counts conducted on March 17, 2015.

Table 4.7-2 summarizes the current LOS at the study intersection during the a.m. and p.m. peak hours. As shown, the intersection operates at LOS B, which satisfies the El Dorado County minimum standard (i.e., LOS E).

Table 4.7-2
Existing Intersection Peak Hour LOS

Location	Control	AM Peak Hour		PM Peak Hour	
		LOS	*Average Delay*	*LOS*	*Average Delay*
Cameron Park Drive / Palmer Drive	Signal	B	10.8	B	19.5

Source: Appendix F: Table 2 p. 5

Vehicle Queuing

Vehicles queue on approaches to signalized intersections. For this analysis current queueing was estimated as a byproduct of the LOS analysis. El Dorado County's policy is to evaluate queueing at study intersections where queue spillback is anticipated based on the potential addition of more than 10 peak hour trips. The southbound left turn lane on Cameron Park Drive is 200 feet long, the northbound U-turn lane is 80 feet long and the westbound dual left turn

lanes on Palmer Drive are both 150 feet long. While the proposed project would be unlikely to add any traffic to the northbound U-turn lane, estimated vehicle queues have been identified.

Queue Length Calculation

Table 4.7-3 presents the queue estimates for turn lanes at the Cameron Park Drive/Palmer Drive intersection. As shown, the 95th percentile queues are all accommodated within existing left turn lanes.

Table 4.7-3
Existing 95th Percentile Queue

Location	Lane Length (ft)	Existing 95th Percentile Queue			
		AM		*PM*	
		Volume	*Queue (ft)*	*Volume*	*Queue (ft)*
Cameron Park Drive / Palmer Drive					
Northbound u-turn lane	80	18	30	53	66
Southbound left turn lane	200	91	130	131	158
Westbound left turn lanes (2)	150	104	40	391	137

Source: Appendix F: Table 3 p. 5

Public Transit

El Dorado Transit (EDT) operates buses throughout El Dorado County. In the vicinity of the site, Route 40 Cameron Park provides regular service along Palmer Drive on 60 minute headways.

Bicycle and Pedestrian Facilities

Currently, there are limited designated bicycle routes throughout El Dorado County due to the rural nature of the county, but bicycle lanes have been developed where new construction has occurred. In the project vicinity, bike lanes already exist along Cameron Park Drive north of Palmer Drive.

The available facilities for bicycles and pedestrians in the vicinity of the project were inventoried. Sidewalks are present along both sides of Palmer Drive and Ponte Morino Drive. Crosswalks are striped at the Ponte Morino Drive/Palmer Drive and Cameron Park Drive/Palmer Drive intersections. The latter intersection is equipped with pedestrian indications and push buttons.

Since preparation of the traffic report the project boundaries have been revised to address the transfer of land to the BLM.
This change does not affect the traffic analysis.

PROJECT SITE

1

Cameron Park Dr / Palmer Dr

38 (194)
104 (391)
(131) 91
(595) 767
181 (122)
400 (973)
18 (53)

Legend

XX AM Peak Hour Volume
(XX) PM Peak Hour Volume
Signalized Intersection

© 2015 Google

SOURCE: KD Anderson & Associates, Inc., 2015

Figure 4.7-1
Existing Traffic Volumes and Lane Configurations

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4.7.3 Regulatory Setting

Federal or State Regulations

There are no applicable federal or state standards that would directly affect the transportation and circulation aspects of the proposed project.

Regional and Local Regulations

El Dorado County Regional Transportation Plan (2015 Update)

As the Regional Transportation Planning Agency for El Dorado County, the El Dorado County Transportation Commission is responsible for the management and update of the County's regional transportation plan (RTP). The current RTP was adopted in in 2010 and the EDCTC recently adopted the *Final El Dorado County Transportation Plan 2015-2035*, in late 2015.

El Dorado County Bicycle Transportation Plan (2010 Update)

The El Dorado County Bicycle Transportation Plan includes a strategy to develop a safe, efficient, and convenient network of bicycle facilities that establish alternative transportation as a viable option in El Dorado County and neighboring regions (El Dorado County Transportation Commission 2010). Improving the bicycle transportation system will also help implement Caltrans' Deputy Directive DD-64-R1, a policy that recognizes bicycle, pedestrian, and transit modes as integral elements of the transportation system.

El Dorado County General Plan

The following goals and policies from the County's Transportation and Circulation Element of the General Plan are applicable to transportation. The County adopted an update to its General Plan in December 2015. Current goals and policies are listed as follows.

Goal TC-1: To plan for and provide a unified, coordinated, and cost-efficient countywide road and highway system that ensures the safe, orderly, and efficient movement of people and goods.

> **Policy TC-1w** New streets and improvements to existing rural roads necessitated by new development shall be designed to minimize visual impacts, preserve rural character, and ensure neighborhood quality to the maximum extent possible consistent with the needs of emergency access, on street parking, and vehicular and pedestrian safety.

Goal TC-X To coordinate planning and implementation of roadway improvements with new development to maintain adequate levels of service on County roads.

Policy TC-Xa The following policies shall remain in effect until December 31, 2018:

1. Traffic from single-family residential subdivision development projects of five or more parcels of land shall not result in, or worsen, Level of Service F (gridlock, stop-and-go) traffic congestion during weekday, peak-hour periods on any highway, road, interchange or intersection in the unincorporated areas of the county.

Policy TC-Xd 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 except as specified in Table TC-2 [see page 71 of the General Plan for Table TC-2]. The volume to capacity ratio of the roadway segments listed in Table TC-2 shall not exceed the ratio specified in that table. Level of Service will be as defined in the latest edition of the Highway Capacity Manual (Transportation Research Board, National Research Council) and calculated using the methodologies contained in that manual. Analysis periods shall be based on the professional judgment of the Department of Transportation which shall consider periods including, but not limited to, Weekday Average Daily Traffic (ADT), AM Peak Hour, and PM Peak hour traffic volumes.

Policy TC-Xe For the purposes of this Transportation and Circulation Element, "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 2 percent increase in traffic during the a.m. peak hour, p.m. peak hour, or daily, or
B. The addition of 100 or more daily trips, or
C. The addition of 10 or more trips during the a.m. peak hour or the p.m. peak hour.

Policy TC-Xg Each development project shall dedicate right-of-way and construct or fund improvements necessary to mitigate the effects of traffic from the project. The County shall require an analysis of impacts of traffic from the development project, including impacts from truck traffic, and require dedication of needed right-of-way and construction of road facilities as a condition of the development. For road improvements that provide significant benefit to other development, the County may allow a project to fund its fair share of improvement costs through traffic impact fees or receive reimbursement from impact fees for construction of improvements beyond the project's fair share. The amount and timing of reimbursements shall be determined by the County.

Policy TC-Xh All subdivisions shall be conditioned to pay the traffic impact fees in effect at the time a building permit is issued for any parcel created by the subdivision.

4.7.4 Impacts

Methods of Analysis

The traffic analysis evaluates the following conditions:

- Existing (Year 2015) Traffic Conditions
- Existing (Year 2015) Plus Project Conditions
- Year 2035 Cumulative Traffic Conditions without the Project
- Year 2035 Cumulative Plus Project Conditions.

Travel Characteristics

This section describes the project's expected travel characteristics including the number of trips it would generate, the distribution of those trips, and the resulting travel routes.

Trip Generation

Trip generation is determined by identifying the type and size of land use being developed. Recognized sources of trip generation data may then be used to calculate the total number of trip ends.

The project proposes two types of residential care, congregate care and assisted living. The trip generation estimate for the project was computed using trip generation rates published in *Trip Generation* (Institute of Transportation Engineers, 9th Edition, 2013) based on these uses. Table 4.7-4 displays the daily, a.m. peak hour, and p.m. peak hour trip generation rates that are applicable.

These rates have been applied to the project's residence inventory. As shown in Table 4.7-5, the project could generate 249 daily trips with 12 a.m. peak hour trips and 20 p.m. peak hour trips. Because the clubhouse would only cater to project residents or residents of the adjacent congregate care facility, no new trip generation is associated with that use.

Table 4.7-4
Trip Generation Rates

ITE Code	Description	Unit	Trips per Unit						
				AM Peak Hour			*PM Peak Hour*		
			Daily	*In*	*Out*	*Total*	*In*	*Out*	*Total*
253	Congregate Care	dwelling	2.02	59%	41%	0.06	55%	45%	0.17
254	Assisted Living	bed	2.66	65%	35%	0.14	44%	56%	0.22

Source: Appendix F: Table 4 p. 8

Table 4.7-5
Trip Generation Forecast

ITE Code	Description	Quantity	Trips						
				AM Peak Hour			PM Peak Hour		
			Daily	In	Out	Total	In	Out	Total
253	Congregate Care	44 du	89	2	1	3	4	4	8
254	Assisted Living	60 beds	160	6	3	9	5	7	12
		Total	**249**	**8**	**4**	**12**	**9**	**11**	**20**

Source: Appendix F: Table 5 p. 8

Trip Distribution and Assignment

The distribution of project traffic was developed based on a review of current travel patterns in this area. Table 4.7-6 identifies the directional distribution of project trips based on the pattern of traffic occurring today on Palmer Drive at the Cameron Park Drive intersection. Resulting Project Only traffic volumes are shown in Figure 4.7-2.

Table 4.7-6
Trip Distribution

Route	% of Total Trips	
	AM	PM
North on Cameron Park Drive	31%	45%
South on Cameron Park Drive	69%	55%
Total	**100%**	**100%**

Source: Appendix F: Table 6 p. 9

Existing Plus Project Methodology

The impacts of the proposed project have been identified by superimposing project traffic onto the existing background conditions. Figure 4.7-3 displays the "Existing Plus Project" condition for both a.m. and p.m. peak hours. Resulting intersection LOS were then calculated and used as the basis for evaluating potential project impacts.

Intersection Levels of Service

Table 4.7-7 compares existing peak hour LOS with and without the project. As indicated, while the length of average delays at the Cameron Park Drive/Palmer Drive intersection would increase slightly, the intersection would continue to operate with a LOS (i.e., LOS B) within the County's minimum standard (i.e., LOS E or better).

Table 4.7-7
Existing Plus Project Peak Hour Intersection LOS

Location	Control	Time Period	Existing		Existing Plus Project	
			LOS	*Average Delay*	*LOS*	*Average Delay*
Cameron Park Dr/Palmer Dr	Signal	AM Peak	B	10.8	B	11.4
		PM Peak	B	19.5	B	19.9

Source: Appendix F**:** Table 7 p. 11

Vehicle Queuing

As noted in Table 4.7-8, the proposed project would increase the volume of peak hour traffic in turn lanes at the Cameron Park Drive/Palmer Drive intersection. However, no appreciable change to the existing 95th percentile queues is forecast, and projected 95th percentile queues can still be accommodated in the available turn lanes.

Table 4.7-8
Existing Plus Project 95th Percentile Queues

Location	Lane Length (ft)	Time Period	Existing		Existing Plus Project	
			Volume	*Queue (ft)*	*Volume*	*Queue (ft)*
Cameron Park Dr/Palmer Dr		AM	18	30	18	30
Northbound U-turn lane	80		91	130	94	41
Southbound left turn lane	200		104	40	107	134
Westbound left turn lanes (2)	150	PM	53	66	53	66
			131	158	135	164
			391	137	397	140

Source: Appendix F: Table 8 p. 13

Cumulative Conditions (Year 2035) Methodology

The analysis of the long term cumulative impact analysis is intended to consider the impact of this project within the context of conditions occurring under the El Dorado County General Plan in the Year 2035.

Basis for Analysis - Regional Traffic Growth

The recently updated county-wide regional travel demand forecasting model was used as the basis for developing future volumes forecasts in the study area. Regional circulation system improvements are also included, including two new interchanges that will be completed to provide additional access to US 50. These are the US 50 / Silva Valley Road interchange that is currently under construction and the US 50/Empire Ranch Road interchange in the City of Folsom. With the

development of regional circulation system improvements the forecasting model suggests that traffic volumes in this area could be expected to increase moderately in the future.

The approach identified under El Dorado County traffic study guidelines was used to create turning movement forecasts at study intersections. Adjusted future and existing volumes were compared and used to create approach growth rates at the intersection, as noted in Table 9 included in the Traffic Impact Analysis for Ponte Palmero II (see Appendix F). The growth rates were applied to current a.m. and p.m. peak hour turning movements, and the results were balanced using the techniques contained in the Transportation Research Board's (TRB's) National Cooperative Highway Research Program (NCHRP) Report 255, *Highway Traffic Data for Urbanized Area Project Planning and Design*. The NCHRP 255 method applies the individual growth rates to the intersection turning movement volumes and uses an iterative process to balance and adjust the resulting forecasts to match total inbound and outbound flows.

The extent to which the proposed project can reasonably be assumed to be included in the county-wide traffic volume forecasts was determined through review of the model's land use files. The project area is included in land use TAZ 256. Comparison of Year 2010 and Year 2035 land use files for TAZ 238 indicate that by the year 2035 another 26 office and 25 medical employees can be anticipated with a daily traffic volume increase from the TAZ of 2,800 ADT. As this growth appreciably exceeds the assumptions for proposed project can reasonably be assumed to be in the regional model's forecasts.

Because the project is in the traffic model, future year turning movements developed from model results represent the "Plus Project" condition, while the "No Project" condition is created by subtracting project trips. Figure 4.7-4 presents Year 2035 No Project volumes, and Figure 4.7-5 indicates Year 2035 volumes with the project.

Year 2035 Intersection Levels of Service

Table 4.7-9 displays the a.m. and p.m. peak hour LOS for the Year 2035 conditions with and without the project. As indicated, while the average delay may be slightly greater with the project, the LOS is the same.

Table 4.7-9
Year 2035 Plus Project Peak Hour Intersection LOS

Location	Control	Time Period	Year 2035 No Project		Year 2035 Plus Project	
			LOS	*Average Delay*	*LOS*	*Average Delay*
Cameron Park Dr/ Palmer Dr	Signal	AM Peak	B	11.4	B	11.5
		PM Peak	C	33.6	C	34.6

Source: Appendix F: Table 10 p. 15

Since preparation of the traffic report the project boundaries have been revised to address the transfer of land to the BLM.
This change does not affect the traffic analysis.

PROJECT SITE

1

1

1 (5)
3 (6)
(4) 3
(0) 0
5 (5)
0 (0)
0 (0)
Cameron Park Dr

Cameron Park Dr / Palmer Dr

Legend

XX AM Peak Hour Volume
(XX) PM Peak Hour Volume
Signalized Intersection

© 2015 Google

SOURCE: KD Anderson & Associates, Inc., 2015

Figure 4.7-2
Project Only Traffic Volumes and Lane Configurations

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Since preparation of the traffic report the project boundaries have been revised to address the transfer of land to the BLM.
This change does not affect the traffic analysis.

PROJECT SITE

1

Cameron Park Dr / Palmer Dr

39 (199)
107 (397)
(135) 94
(595) 767
186 (127)
400 (973)
18 (53)

Legend

XX AM Peak Hour Volume
(XX) PM Peak Hour Volume
Signalized Intersection

© 2015 Google

SOURCE: KD Anderson & Associates, Inc., 2015

Figure 4.7-3
Existing Plus Project Traffic Volumes and Lane Configurations

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Since preparation of the traffic report the project boundaries have been revised to address the transfer of land to the BLM.
This change does not affect the traffic analysis.

PROJECT SITE

1

Cameron Park Dr / Palmer Dr

52 (206)
212 (545)
(162) 109
(740) 1207
292 (241)
570 (1458)
18 (53)

Legend

XX AM Peak Hour Volume
(XX) PM Peak Hour Volume
Signalized Intersection

© 2015 Google

SOURCE: KD Anderson & Associates, Inc., 2015

Figure 4.7-4

Year 2035 No Project Traffic Volumes and Lane Configurations

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Since preparation of the traffic report the project boundaries have been revised to address the transfer of land to the BLM.
This change does not affect the traffic analysis.

PROJECT SITE

1

Cameron Park Dr / Palmer Dr

53 (210)
215 (551)
(168) 112
(740) 1207
297 (246)
570 (1458)
18 (53)

Legend

XX AM Peak Hour Volume
(XX) PM Peak Hour Volume
Signalized Intersection

© 2015 Google

SOURCE: KD Anderson & Associates, Inc., 2015

Figure 4.7-5

Year 2035 With Project Traffic Volumes and Lane Configurations

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Vehicle Queuing

As noted in Table 4.7-10, the proposed project would increase the volume of peak hour traffic in turn lanes at the Cameron Park Drive / Palmer Drive intersection. In the p.m. peak hour the 95th percentile queue in each lane is expected to exceed the available storage with and without the project. Improvements to increase the available left turn lane storage have been considered. The northbound U-turn lane could be made longer by modifying the existing raised median on Cameron Park Drive. To lengthen the southbound left turn lane it would be necessary to widen Cameron Park Drive, which in turn would require acquiring right of way and reconstructing the retaining wall along the west side of the street. Lengthening the left turn lanes on Palmer Drive could be accomplished within the existing pavement section but would require eliminating the left turn access into Plaza Golderado Circle. The identified constraints may render these improvements in feasible.

Table 4.7-10
Year 2035 Plus Project 95th Percentile Queues

Location	Lane Length (ft)	Time Period	Existing		Existing Plus Project	
			Volume	*Queue (ft)*	*Volume*	*Queue (ft)*
Cameron Park Dr / Palmer Dr		AM	18	32	18	32
Northbound U-turn lane	80		109	108	112	111
Southbound left turn lane	200		212	78	215	80
Westbound left turn lanes (2)	150	PM	53	**86**	53	**86**
			162	**209**	168	**229**
			545	**328**	551	**333**

Source: Appendix F: Table 11 p. 16
Note: Bold indicates turn lane length exceeded

Issues Addressed in the Initial Study

As discussed in the Initial Study (see Appendix B), the project site is outside of the designated safety zones for the Cameron Airpark and would not change air traffic patterns, nor would the project include any design features that would increase any potentially hazardous conditions; therefore, these concerns are not further addressed. In addition, the project provides secondary access to Valerio Drive to insure adequate emergency access is provided in accordance with the Cameron Park Fire Department. This issue is not addressed further.

Thresholds of Significance

El Dorado County identifies LOS E as the acceptable Level of Service on roadways and state highways within the unincorporated areas of the County in the Community Regions and LOS D in the Rural Centers and Rural Regions except as specified in the General Plan. Fourteen roadway segments, none of which are part of this study, allow LOS F conditions through 2018.

The *2010 Highway Capacity Manual* was used to provide a basis for describing existing traffic conditions and for evaluating the significance of project traffic impacts.

The following thresholds of significance have been used to determine whether implementing the proposed project would result in a significant transportation or circulation impact. These thresholds of significance are derived from questions posed in Appendix G of the California Environmental Quality Act (CEQA) Guidelines, thresholds of significance adopted by the Count in the General Plan and previous environmental documents, and professional judgment.

For purposes of this Draft EIR, a significant impact would occur if the proposed project would:

- Cause an intersection to change from LOS E to LOS F or worsening of existing facilities already operating at unacceptable Levels of Service, as defined in General Plan Policy TC-Xe;
- Result in potential conflicts for bicyclists or pedestrians, or would adversely affect nearby bicycle or pedestrian facilities;
- Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bike racks); or
- Exacerbate a current unsafe bicycle or pedestrian condition in the project area.

Impacts and Mitigation Measures

4.7-1: Under Existing Plus Project conditions the proposed project would not cause an intersection to operate at an unacceptable level, or worsen the LOS of an existing intersection already operating at an unacceptable level. This would be a less-than-significant impact.

A shown in Table 4.7-7, the length of average delays at the Cameron Park Drive/Palmer Drive intersection would increase slightly, but the intersection would continue to operate with LOS B, which is within the County's minimum standard. Furthermore, the project would increase the volume of peak hour traffic in turn lanes at the Cameron Park Drive/Palmer Drive intersection. However, vehicle queues would still be accommodated in the available turn lanes and there would be no appreciable change to the County's existing 95th percentile vehicle queue standard. Thus, the project's impact is **less than significant.**

4.7-2: Under Existing Plus Project conditions the proposed project would not create a conflict with bicyclists or pedestrians, conflict with alternative transportation plans, policies or programs, or exacerbate a current unsafe bicycle or pedestrian condition in the area. This would be a less-than-significant impact.

Development of the proposed project may result in the addition of pedestrians or bicyclists traveling to the site, primarily employees. Sidewalks exist along both sides of Ponte Morino Drive and Palmer Drive allowing pedestrians to walk to/from the site to adjoining commercial areas. Bike lanes exist along Cameron Park Drive north of Palmer Drive and in the vicinity of the site, El Dorado Transit Route 40 provides regular service along Palmer Drive.

Adequate facilities are available to serve alternative transit, including pedestrians and the project would not conflict with any future plans to provide more opportunities for alternative transportation. In addition, the number of pedestrians and bicyclists attracted to the site is not considered high due to the type of project. Therefore; the project's impact on alternative transportation and pedestrian facilities is **less than significant**.

4.7.5 Cumulative Impacts

The cumulative analysis assesses whether cumulative impacts from past, present, and probable future projects, as well as the proposed project, are significant. If the cumulative impacts are not significant, this conclusion is presented. If the cumulative impacts are significant, a determination is then made as to whether the project's incremental contribution to those impacts is "cumulatively considerable" (that is, significant in and of itself).

There is no existing cumulative impact to transit, bicycles or pedestrians without the proposed project and the project's contribution would be minuscule; therefore, there would be no cumulative impact and this issue is not addressed further.

4.7-3: Under cumulative conditions the proposed project would not cause an intersection to operate at unacceptable levels. This would be a less-than-significant impact.

As shown in Table 4.7-9, the project's contribution to the a.m. and p.m. peak hour LOS under cumulative conditions would not change. The LOS would remain acceptable at LOS B. The average delay would be slightly greater with the project, but it would not change the LOS. There would be no cumulative impact at this intersection.

As noted in Table 4.7-10, the proposed project would increase the volume of peak hour traffic in turn lanes at the Cameron Park Drive / Palmer Drive intersection. In the p.m. peak hour the 95th percentile vehicle queue in each lane is expected to exceed the available storage with and

without the project. However, because the project does not result in any new location with a 95th percentile queue exceeding available storage, the project's contribution is not considerable and the impact is **less than significant** under the El Dorado County guidelines.

4.7.6 Mitigation Measures

None required.

4.7.7 References

County of El Dorado. 2004. General Plan. Adopted July 19, 2004 last amended December 15, 2015.

KD Anderson & Associates, Inc., Traffic Impact Analysis for Ponte Palmero II. October 21, 2015.

County of El Dorado. 2015. Regional Transportation Plan 2015-2035, September 3, 2015.

County of El Dorado. 2010. El Dorado County Bicycle Transportation Plan – 2010 Update, November 9, 2010.

CHAPTER 5
CEQA CONSIDERATIONS

5.1 INTRODUCTION

Section 15126 of the California Environmental Quality Act (CEQA) Guidelines requires that all aspects of a project must be considered when evaluating its impact on the environment, including planning, acquisition, development, and operation. As part of this analysis, the Environmental Impact Report (EIR) must also identify (1) significant environmental effects of the proposed project, (2) significant environmental effects that cannot be avoided if the proposed project is implemented, (3) significant irreversible environmental changes that would result from implementation of the proposed project, (4) growth-inducing impacts of the proposed project, and (5) alternatives to the proposed project (evaluated in Chapter 6, Project Alternatives).

5.2 SIGNIFICANT ENVIRONMENTAL EFFECTS

Chapter 2 of this EIR, Executive Summary, and Sections 4.1 through 4.7 provide a comprehensive identification of the proposed project's significant environmental effects, including the level of significance both before and after mitigation. The environmental effects of the proposed project on various aspects of the environment are discussed in detail in the technical sections contained in Chapter 4 of this EIR.

5.3 SIGNIFICANT AND UNAVOIDABLE IMPACTS

Section 15126.2(b) of the CEQA Guidelines requires that an EIR describe any significant impacts that cannot be avoided, even with the implementation of feasible mitigation measures. There was only one project-specific significant and unavoidable impact identified for the proposed project, associated with short-term construction noise that could not be mitigated to a less-than-significant level.

4.6-1: The proposed project would expose people to construction noise levels in excess of standards established in the County's general plan.

5.4 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL EFFECTS

Section 15126.2 (c) of the CEQA Guidelines requires a discussion of any significant irreversible environmental change that would be caused by the proposed project. Generally, a project would result in significant irreversible changes if:

- The primary and secondary impacts would generally commit future generations to similar uses (such as highway improvement that provides access to a previously inaccessible area);

- The project would involve a large commitment of nonrenewable resources (CEQA Guidelines Section 15126.2(c));
- The primary and secondary impacts would generally commit future generations to similar uses;
- The project would involve uses in which irreversible damage could result from any potential environmental accidents associated with the project;
- The project would involve a large commitment of nonrenewable resources; or
- The proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy).

Implementation of the proposed project would result in the long-term commitment of resources of the project site to urban land use. The development of the proposed project would likely result in or contribute to the following irreversible environmental changes:

- Conversion of existing undeveloped land. Over 8 acres of undeveloped land would be converted to urban uses, thus precluding other alternate land uses in the future.
- Conversion of existing plant and wildlife habitat (approximately 9 acres).
- Irreversible consumption of goods and services by the future population.
- Irreversible consumption of energy and natural resources associated with the future residential population.

Development of the proposed project would result in in the commitment of the project site to urban development, thereby precluding any other uses for the lifespan of the project. Restoration of the site to pre-developed conditions would not be feasible given the degree of disturbance, the urbanization of the area, and the level of capital investment.

Resources that would be permanently and continually consumed by project implementation (e.g., building heating, lighting, vehicle use) include water, electricity, natural gas, and fossil fuels. Construction activities related to the proposed project would also result in the irretrievable commitment of nonrenewable energy resources, primarily in the form of fossil fuels (including fuel oil), natural gas, diesel, and gasoline for automobiles and construction equipment, water, and electricity. The amount and rate of consumption of these resources would not necessarily result in the unnecessary, inefficient, or wasteful use of resources. With respect to operational activities, compliance with all applicable building codes, as well as mitigation measures, planning policies, and standard conservation features, would ensure that all natural resources are conserved relative to past practices. It is also possible that new technologies or systems

would emerge, or would become more cost-effective or user-friendly, to further reduce the reliance upon nonrenewable natural resources.

The CEQA Guidelines also require a discussion of the potential for irreversible environmental damage caused by environmental accidents associated with the project. The project does not include any uniquely hazardous uses that would require any special handling or storage. As discussed in Section 4.3, Biological Resources, the proposed project would result in the loss of plant and wildlife habitat. Over time, new technologies could result in reduced emissions. For example, mobile emissions associated with automobiles and trucks are anticipated to be less polluting in the future due to new technology designed to improve the efficiency of engines.

Implementation of the proposed project would result in the long-term commitment of resources to urban development. The most notable significant irreversible impacts are a reduction in natural vegetation and wildlife communities; and the short-term commitment of non-renewable and/or slowly renewable natural and energy resources, such as lumber and other forest products, mineral resources, and water resources during construction activities. Operations associated with future uses would also consume natural gas and electrical energy. These irreversible impacts, which are, as yet, unavoidable consequences of urban growth, are described in detail in the appropriate technical sections of this EIR (see Chapter 4) and in the Initial Study (see Appendix B).

5.5 GROWTH-INDUCING IMPACTS

As required by Section 15126.2(d) of the CEQA Guidelines, an EIR must discuss ways in which a proposed project could foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment. Also, the EIR must discuss the characteristics of the project that could encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. Growth can be induced in a number of ways, such as through the elimination of obstacles to growth, the stimulation of economic activity within the region, or the establishment of policies or other precedents that directly or indirectly encourage additional growth. Under CEQA, this growth is not to be considered necessarily detrimental, beneficial, or of significant consequence. Induced growth would be considered a significant impact if it can be demonstrated that the potential growth, directly or indirectly, significantly affects the environment.

In general, a project could foster spatial, economic, or population growth in a geographic area if the project removes an impediment to growth (e.g., the establishment of an essential public service, the provision of new access to an area, or a change in zoning or General Plan amendment approval), or economic expansion or growth occurs in an area in response to the

project (e.g., changes in revenue base, employment expansion). These circumstances are further described below.

- **Elimination of Obstacles to Growth:** This refers to the extent to which a proposed project removes infrastructure limitations or provides infrastructure capacity, or removes regulatory constraints that could result in growth unforeseen at the time of project approval.
- **Economic Effects:** This refers to the extent to which a proposed project could cause increased activity in the local or regional economy. Economic effects can include such effects as the "multiplier effect." A "multiplier" is an economic term used to describe interrelationships among various sectors of the economy. The multiplier effect provides a quantitative description of the direct employment effect of a project, as well as indirect and induced employment growth. The multiplier effect acknowledges that the on-site employment and population growth of each project is not the complete picture of growth caused by the project.

Elimination of Obstacles to Growth

The elimination of either physical or regulatory obstacles to growth is considered to be a growth-inducing effect, though not necessarily a significant one. A physical obstacle to growth typically involves the lack of public service infrastructure. The extension of public service infrastructure, including roadways, water mains, and sewer lines, into areas that are not currently provided with these services would be expected to support new development. Similarly, the elimination or change to a regulatory obstacle, including existing growth and development policies, could result in new growth.

Removal of Infrastructure Limitations or Provision of Capacity

The elimination of physical obstacles to growth is considered a growth-inducing effect, though not necessarily a significant one. There are no known physical constraints to growth in the vicinity of the project site.

The project site is immediately adjacent to the Cameron Park Congregate facility to the east, which would preclude development immediately east of the site; and the Bureau of Land Management's Pine Hill Preserve borders the project site to the north and northeast, which is land dedicated to protect rare and endangered plants that grow on the Gabbro soils of western El Dorado County. To the south and west, the project site is bordered by existing commercial and residential development. Development of on-site infrastructure to accommodate the project would not be considered growth inducing because the project is bound on all sides by either development or dedicated plant protection lands.

Economic Effects

The proposed project would affect the local economy by the construction of new congregate care housing opportunities whose residents would shop or need products obtained from businesses in El Dorado County and the Cameron Park community.

Additional local employment can be generated through the multiplier effect, as discussed previously in this chapter. The multiplier effect tends to be greater in regions with larger, diverse economies due to a decrease in the requirement to import goods and services from outside the region.

Two different types of additional employment are tracked through the multiplier effect. *Indirect* employment includes those additional jobs that are generated through the expenditure patterns of direct employment associated with the project. Indirect jobs tend to be in relatively close proximity to the places of employment and residence.

The multiplier effect also calculates *induced* employment. Induced employment follows the economic effect beyond the expenditures of the residents within the project area to include jobs created by the stream of goods and services necessary to support residences within the proposed project. When a manufacturer buys or sells products, the employment associated with those inputs or outputs are considered *induced* employment.

For example, when a resident of the project goes out to lunch, the person who serves the project resident lunch holds a job that is *indirectly* related to the proposed project. When the server then goes out and spends money in the economy, the jobs generated by this third-tier effect are considered *induced* employment.

The multiplier effect also considers the secondary effect of employee or resident expenditures. Thus, it includes the economic effect of the dollars spent by those employees and residents who support the employees of the project.

Increased future employment generated by the care required of the project residents and employee spending ultimately results in physical development of space to accommodate those employees. It is the characteristics of this physical space and its specific location that will determine the type and magnitude of environmental impacts of this additional economic activity. Although the economic effect can be predicted, the actual environmental implications of this type of economic growth are too speculative to predict or evaluate, since they can be spread throughout El Dorado County and beyond.

Impacts of Induced Growth

The growth induced directly and indirectly by the proposed project would contribute to the environmental impacts discussed in Chapter 4 in the El Dorado County, as well as the greater regional area.

Indirect and induced population growth would further contribute to the loss of open space because it would encourage the conversion of undeveloped land to urban uses for additional housing and infrastructure. However, it is assumed this new growth would be minimal and would occur within areas of the County slated for development. The construction of more roadways and infrastructure within this area of the County would help to promote growth in the area.

5.6 CUMULATIVE IMPACTS

CEQA requires that an EIR contain an assessment of the cumulative impacts that could be associated with the proposed project. This assessment involves examining project-related effects on the environment in the context of similar effects that have been caused by past or existing projects, and the anticipated effects of future projects. As indicated in the CEQA Guidelines, the discussion of cumulative impacts need not provide the same level of detail as project-related impacts. The discussion should be guided by "standards of practicality and reasonableness" (CEQA Guidelines, Section 15130(b)). Although project-related impacts can be individually minor, the cumulative effects of these impacts, in combination with the impacts of other projects, could be significant under CEQA and must be addressed (14 CCR 15130(a)). Where a lead agency concludes that the cumulative effects of a project, taken together with the impacts of other closely related past, present, and reasonably foreseeable probable future projects are significant, the lead agency then must determine whether the project's incremental contribution to such significant cumulative impact is "cumulatively considerable" (and thus significant in and of itself).

Cumulative impacts are evaluated in each technical section included in Chapter 4.

Cumulative Context

To ensure an adequate discussion of cumulative impacts is included in an EIR, CEQA allows the lead agency to use either a list of past, present, and probable future projects (including those projects outside of the control of the lead agency), or projections included in an adopted local, regional, or statewide plan like a general plan (CEQA Guidelines, Section 15130(b)(1)). The general cumulative impact context for evaluating cumulative impacts for the majority of the technical issue areas evaluated in Chapter 4 of this EIR considers buildout of the County's General Plan, or evaluates the potential loss of resources on a much broader, regional scale.

It is important to note that the basis of the cumulative analysis varies by technical area. For example, traffic and traffic-related air emissions and noise analyses assume development that is planned and/or anticipated in the County because each contributes to traffic on local and regional roadways that is quantifiable. Operational air quality impacts are evaluated against conditions in the Mountain Counties Air Basin. Other cumulative analyses, such as biological resources, consider the potential loss of resources in a broader, more regional context. The cumulative analysis in each of the technical sections evaluates the proposed project's contribution to the cumulative scenario. A description of the cumulative context for each issue area being evaluated is included in the cumulative impacts discussion at the end of each technical section of Chapter 4.

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CHAPTER 6
PROJECT ALTERNATIVES

6.1 INTRODUCTION

The primary intent of the alternatives evaluation in an Environmental Impact Report (EIR), as stated in Section 15126.6(c) of the California Environmental Quality Act (CEQA) Guidelines, is to ensure that the "range of potential alternatives to the proposed project shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects" identified under the proposed project. Pursuant to CEQA Guidelines, Section 15126.6, an analysis of alternatives is presented in this Draft EIR to provide the public and decision makers with a range of possible alternatives to consider. The CEQA Guidelines state that an EIR shall describe a *reasonable* range of alternatives that would avoid or substantially lessen any significant effects of the project, but need not consider every conceivable alternative. The CEQA Guidelines further state that "the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly" (CEQA Guidelines, Section 15126.6(b)). Therefore, an EIR must describe a range of reasonable alternatives to the proposed project (or to its location) that could feasibly attain most of the basic objectives of the project. The feasibility of an alternative may be determined based on a variety of factors, including, but not limited to, site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and site accessibility and control (CEQA Guidelines, Section 15126.6(f)(1)).

Alternatives in an EIR must be potentially feasible (CEQA Guidelines, Section 15126.6(a)). Agency decision makers ultimately decide what is "actually feasible." (*California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal. App. 4th 957, 981 (*CNPS*).) Under CEQA, "feasible" is defined as capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors (CEQA Guidelines, Section 15364). The concept of "feasibility" also encompasses the question of whether a particular alternative or mitigation measure promotes the underlying goals and objectives of a project. (*Sierra Club v. County of Napa* (2004) 121 Cal.App.4th 1490, 1506-1509; *CNPS*, *supra*, 177 Cal. App. 4th at p. 1001; *In re Bay-Delta Programmatic Environmental Impact Report Coordinated Proceedings* (2008) 43 Cal.4th 1143, 1165, 1166.) Moreover, "'feasibility' under CEQA encompasses 'desirability' to the extent that desirability is based on a reasonable balancing of the relevant economic, environmental, social, legal, and technological factors." (*City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 410, 417.)

An EIR need not evaluate the environmental effects of alternatives in the same level of detail as the proposed project, but must include enough information to allow meaningful evaluation, analysis, and comparison with the proposed project. The alternatives discussion is intended to focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives as listed in Chapter 3 (and in this chapter) of this Draft EIR.

The lead agency's decision making body, in this case the El Dorado County Board of Supervisors, has the discretion to select a project alternative in lieu of the project. If this were to occur, the County Board of Supervisors would need to ensure that the level of detail included in the alternatives analysis is adequate and that there would not be any new or significant impacts. The required Findings of Fact and Statement of Overriding Considerations and Mitigation Monitoring Plan would need to be prepared that identifies the alternative as the project selected for approval.

This chapter identifies the proposed project objectives, describes the project alternatives, and evaluates the comparative effects of the alternatives relative to the proposed project. As required under Section 15126.6(e) of the CEQA Guidelines, the environmentally superior alternative is identified and included at the end of this chapter.

Project Objectives

The proposed project includes the following project objectives.

1. Realize a comprehensive senior living facility, consistent with the vision and objectives of the El Dorado County General Plan Housing Element (2013-2021), including Goal HO-4 (recognize and meet the housing needs of special groups of county residents, including a growing senior population), and Policy HO-4.1 (encouraging development of congregate care facilities).
2. Develop a senior living facility that compliments the existing mix of senior living options and services available by providing additional levels of care.
3. Ensure the ability to provide residents with high quality meals, housekeeping services, shopping and shuttle services, access to on-site health care, and a club house with amenities and activity programs.
4. Protect and enhance natural resources, including habitat preservation for protected gabbro soil plant species consistent with the terms of the 2010 Settlement Agreement in *California Native Plant Society v. County of El Dorado*.
5. Provide a compact development that minimizes the overall facility footprint.

6. Provide a connected, walkable, development for residents and guests.
7. Construct a facility with sufficient size and diversity of senior care services to serve the County's growing senior population while being economically sustainable.
8. Provide a facility that can fund the required infrastructure improvements, public services improvements, and other municipal costs associated with the project.

Alternatives Evaluated but Dismissed

As noted previously, the purpose of an alternatives analysis is to develop alternatives to the proposed project that substantially lessen at least one of the significant environmental effects identified as a result of the project, while still meeting most, if not all, of the basic project objectives. The project was originally contemplated in 2010, and as described in the Settlement Agreement, if future development of the project site was contemplated to include approximately 99 skilled nursing care beds, 65 units of assisted living and an approximately 12,000 square foot (sf) clubhouse on ten acres. (See SA, p. 4.)

The first project application included a 108 bed Skilled Nursing Facility, a 63 unit Assisted Living Facility and an 18,530 sf clubhouse. This application was scaled back after realizing the acreage needed to accommodate the proposed uses exceeded what was available after the necessary land dedication, pursuant to the terms of the Settlement Agreement. As originally proposed, the parking, circulation roads and retaining walls required to develop the property encroached into the area of protected plants. After meeting with CNPS representatives the project was scaled back and revised to avoid and substantially lessen impacts to protected plants and their habitat.

Moreover, because the economic feasibility of a Skilled Nursing Facility would not work with a smaller facility, the project was further reduced to include only 46 units of Assisted Living, a 44 unit Community Care Facility and an 11,450 sf clubhouse. Other iterations of the project were considered, but not pursued in detail due to physical site constraints and financial feasibility concerns.

An alternative location was also considered but dismissed due to the proximity to the adjacent congregate care facility and the interconnectedness of various services and facilities. There are no other feasible sites in the immediate project vicinity that could accommodate the project and maintain connectivity withthe adjacent facility. Therefore, an off-site alternative location was determined infeasible and not evaluated.

The proposed project results in a short-term significant and unavoidable impact associated with construction noise and a potentially significant and unavoidable impact to special-status plant species if the EIR is litigated. Project alternatives that would reduce the size of

development on the site or change the mix of uses that would lessen the severity of impacts identified under the project are addressed below.

Significant Effects of the Proposed Project

The following project-specific significant and unavoidable impacts have been associated with the proposed project. All other project impacts were identified as less than significant or could be mitigated to a less-than-significant level with mitigation, with the exception of the impact listed below. Project construction would result in a short-term significant and unavoidable noise impact. Under Alternative 4 (Reduced Density) this construction noise impact could be reduced and possibly eliminated with Mitigation Measure 4.6-1.

4.6-1: The proposed project would expose people to construction noise levels in excess of standards established in the County's general plan.

4.3-5: The proposed project could result in a cumulatively considerable contribution to the loss of special-status plants and their habitat, and animals, natural communities and wildlife corridors.

6.2 ALTERNATIVES ANALYZED

This section provides a description of the alternatives to the proposed project analyzed in this Draft EIR and evaluates how specific impacts differ in severity from those associated with the project. There was one significant and unavoidable impact identified under the proposed project associated with short-term construction noise. The remaining impacts identified could all be mitigated to a less-than-significant level. The potentially significant impacts identified under the alternatives analysis can be fully mitigated through compliance with mitigation measures identified in Sections 4.1 through 4.7 included in Chapter 4, which contains the environmental analysis of the proposed project, with the exception of construction noise. Table 6-1 provides an overview of the elements of each alternative evaluated.

The project alternatives identified herein address the significant impacts (before mitigation) identified for the project including biological resources and noise associated with project construction and operation. Thus, the alternatives developed for the project contemplate a smaller project footprint to address these impacts. In many instances, the impacts are virtually identical to the proposed project and are described as such.

This Draft EIR has incorporated a reasonable range of project alternatives that attain a majority of the project objectives in a reasonable manner while reducing the severity of the significant impacts (before mitigation) identified under the proposed project.

The alternatives analysis evaluates each alternative compared to the proposed project and groups together those impacts that are similar to the proposed project, impacts that are considered less severe than the proposed project, and impacts considered more severe than the proposed project, as shown in Table 6-2 (included at the end of the chapter).

The alternatives to the proposed project analyzed in this Draft EIR are:

Alternative 1: No Project/No Development

Alternative 2: No Project/Existing Zoning

Alternative 3: Revised Site Layout

Alternative 4: Reduced Density

Table 6-1
Comparison of Development Assumptions for the Project Alternatives

	Total Number of Units	Rezone Required	Number of Residents	Project Components
Proposed Project	90	Yes	144	Community Care Assisted Living Clubhouse
Alternative 1: No Project/ No Development	0	No	0	None
Alternative 2: No Project/Existing Zoning	216	No	559	216 residential units
Alternative 3: Revised Site Layout	90	Yes	144	Community Care/ Assisted Living Clubhouse
Alternative 4: Reduced Density	90	Yes	144	Community Care Assisted Living

Alternative 1: No Project/No Development Alternative

Description

The No Project/No Development Alternative considers the effects of forgoing the project entirely, and leaving the project site in its current, vacant condition. The No Project/No Development Alternative thus allows decision-makers to compare the impacts of the proposed project to retaining the existing condition of the site. The No Project/No Development Alternative describes the environmental conditions that exist at the time that the environmental analysis commences (CEQA Guidelines, Section 15126.6 (e)(2)). “The purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of

approving the proposed project with the impacts of not approving the proposed project" (CEQA Guidelines, Section 15126.6(e)(1)).

Comparative Analysis of Environmental Effects

The No Project/No Development Alternative would produce no changes on the project site, because the site would remain in its current condition, effectively eliminating those project impacts discussed in this Draft EIR. There would be no change in the visual environmental and no air emissions associated with project construction and operation or cumulative contribution to global climate change. There would be no disturbance to existing plants and habitat present on the site and there would be no vehicles accessing the site and on area roadways and intersections. There would be no construction noise or operational impacts on the surrounding roadway network, or associated changes in ambient noise levels.

Relationship to Proposed Project Objectives

The No Project/No Development Alternative would not achieve any of the project objectives because it would not develop the site with a comprehensive senior living facility, consistent with the vision and objectives of the County's General Plan Housing Element, would include a facility with sufficient size and diversity of senior care services to serve the County's growing senior population while being economically sustainable, nor would a senior living facility that compliments the existing mix of senior living options and services available by providing additional levels of care would be provided.

Alternative 2: No Project/ Existing Zoning Alternative

Description

CEQA requires the evaluation of the comparative impacts of the "No Project" alternative (CEQA Guidelines, Section 15126.6(e)(1)). The No Project/Existing Zoning Alternative "shall discuss the existing conditions at the time the [NOP] is published, or if no notice of preparation is published, at the time environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services" (CEQA Guidelines, Section 15126.6(e)(2)).

For this EIR, the No Project/Existing Zoning Alternative assumes that the approximately 20-acre project site would ultimately be developed consistent with currently allowable land uses, zoning, and maximum development intensities. The project site is designated in the County's General Plan for Multi-family (MFR) and High Density Residential (HDR) uses. The site is zoned Community Commercial-Planned Development (CC-PD +/- 1 acre), Single Unit Residential-

Planned Development (R1-PD +/- .5 acre), and Multi-Unit Residential-Planned Development (RM-PD +/- 18 acres).The County allows for densities of 5 to 24 dwelling units per acre, but to ensure MFR land use is appropriately used, the County seeks to achieve MFR development at the middle to upper range of densities allowed. Based on the size of the parcel a total of 180 to 216 du (midrange of 10 to 12 dwelling units per acre) could be developed. It is assumed the 10.76 acres proposed as open space under the proposed project dedicated to preserving the Pine Hill Preserve plants would be developed, consistent with the underlying zoning. For the purposes of this analysis a total of 216 du is assumed with a population of 559 residents.[1]

Comparative Analysis of Environmental Effects

Impacts under the No Project/Existing Zoning Alternative would be greater and more intense than those of the proposed project, because 126 additional units would be developed, the population would increase by an additional 415 people, and approximately 10 additional acres would be developed that were designated OS under the proposed project as part of the Settlement Agreement with the California Native Plant Society (CNPS). Impacts associated with site disturbance would be greater than the proposed project because essentially the entire site would be cleared and graded.

Under this alternative, development would occur consistent with the existing General Plan and Zoning Ordinance. Under the proposed project, a General Plan Amendment (GPA) and rezone is requested for the entire 19.8acre site in order to develop the congregate care and assisted living units on 9.11 acres with the remainder redesignated and rezoned for OS. Under this alternative, a GPA and rezone is not required because development would occur consistent with the underlying land use designations and zoning.

Impacts Identified as Being the Same or Similar to the Proposed Project

The change in visual character associated with site clearing and grading and the introduction of lights in this area would be similar to the proposed project, but somewhat more intense because approximately 10 additional acres would be developed, compared to the proposed project. It is anticipated there would be a mix of one and two story residential units with the potential for attached units. Overall, building heights may be a little lower than the project (single story) and the mass of the buildings would be smaller; however, the change in visual character from an undeveloped area to a developed environment would be very similar as the project. It is assumed retaining walls would also be required due to the topography of the site, the same as the proposed project. Light and glare impacts under this alternative would also be similar to the proposed project because there would be building lights, the same as the proposed project.

[1] This assumes the County's pph of 2.59, whereas the project assumed a pph of 1.6 given the nature of the project that does not include families or children.

Compliance with County policy 2.8.1 would ensure the impact would be less than significant, the same as the project.

Development of residential uses on this site would be compatible with surrounding land uses, the same as the proposed project. Land use impacts would be less than significant, the same as the project.

Compared to the proposed project there would be an increase in the number of buildings constructed and the increase in greenhouse gas emissions would still be relatively small and would not result in an impact, the same as the project.

Impacts Identified as Being Less Severe than the Proposed Project

Under this alternative, development of the project site would be consistent with the land use designations and underlying zoning for a majority of the site. No GPA or re-zone would be required, compared to the proposed project.

Impacts Identified as Being More Severe than the Proposed Project

Under this alternative, impacts associated with air quality, biological resources, noise and traffic would be identified as being more severe than the proposed project.

Under this alternative, an additional 126 units would be constructed; therefore, construction-related air emissions (particulate matter less than 10 microns (PM_{10}), reactive organic gases, and NO_x would be greater than the proposed project. More grading would be required because an additional 10 acres of the project site would be cleared and developed under this alternative. The level of PM_{10}, NO_x and ROG emissions would be greater than the project which could result in impacts requiring mitigation. There are no air quality impacts under the proposed project and no mitigation was required.

The amount of land disturbance including site clearing and vegetation removal would increase by approximately 10 acres under this alternative. This would create greater impacts to the Pine Hill plant species and other protected species compared to the proposed project. Mitigation measures 4.3-1(a) and (c), 4.3-2(a) through (d), and 4.3-4, would all be required. Compliance with the mitigation measures identified for the project would reduce impacts to less than significant, but overall the intensity of the impact would be greater than the project.

Noise associated with project construction would exceed the County's thresholds, the same as the proposed project. Mitigation Measure 4.6-1 would still be required. However, because construction activities would occur over a longer time frame, adjacent sensitive receptors, primarily adjacent

residents in the congregate care facility would be subjected to an increase in annoyance due to construction activities.

The increase in residential units that would not be restricted to older residents would significantly increase the number of average daily vehicle trips with higher peak hour (a.m., p.m.) and daily trips than the proposed project. The existing level of service at the Cameron Park/Palmer Drive intersection during the a.m. and p.m. peak hours currently operates at LOS B, which satisfies the El Dorado County minimum LOS E standard. The increase in traffic under this alternative would not exceed the County's acceptable LOS; therefore, the impact would remain less than significant. Under this alternative it is not anticipated that the increase in vehicles would create a conflict with bicyclists or pedestrians, conflict with alternative transportation plans, policies or programs, or exacerbate a current unsafe bicycle or pedestrian conditions in the area. It is anticipated impacts would be less than significant, the same as the project. However, there would be significant increase in vehicle traffic in and around the area if the site was developed consistent with the underlying land use designation and zoning.

Relationship to Proposed Project Objectives

If the proposed project were not approved and development were to occur consistent with the County's General Plan land use designations and zoning, the proposed project under the No Project/Existing Zoning Alternative would essentially not meet most of the project objectives. Under this alternative, it would not be consistent with the policies contained in the County's Housing Element supporting development of more senior living alternatives (objective 1), nor would it meet objectives 2 or 7 which provides for development of a senior living facility that compliments the existing mix of senior living options available and provides for a diversity of senior care services. Because this alternative would have a larger footprint it would also not meet objectives 4 or 5 which call for preserving gabbro soil plant species and providing a compact development that minimizes the overall project footprint.

Alternative 3: Revised Site Layout Alternative

Description

Under this alternative, the Assisted Living and Community Care would be combined into one building, the Assisted Living building. The footprint of this building would not change and the need to provide a secondary access connection to Valero Drive would not change. The club house would still be constructed as part of this alternative. The inclusion of the Community Care facilities into the Assisted Living building would necessitate construction of a minimum four-story building, which would be two stories higher than the proposed project. The building would be approximately 100,000 square feet. The same uses would be accommodated in the new building and the number of assisted living and community care units would not change. The

same number of parking spaces would still be required. Combining the uses into one building would disturb a smaller area of the project site. This portion of the site would be left in undeveloped open space, which would aid in the preservation of the federally protected special-status plant species; Pine Hill ceanothus and Stebbins morning glory. It is assumed the terms of the Settlement Agreement with CNPS would still be in place under this alternative and any remaining undeveloped land on the project site would be left as open space. This alternative would reduce the severity of impacts to the Pine Hill plants and habitat for the Blainville's Horned Lizard.

Comparative Analysis of Environmental Effects

Impacts under the Revised Site Layout Alternative would be similar to those of the proposed project but less intense because the approximately 50,500 sf Community Care Facility would not be developed. Impacts associated with site disturbance would be less severe than the proposed project because this alternative would have a smaller footprint and would develop less impervious surface area compared to the proposed project. This alternative would still require a GPA and rezone, the same as the proposed project.

Impacts Identified as Being the Same or Similar to the Proposed Project

The project's contribution to greenhouse gas emissions and climate change would essentially be the same as the proposed project.

Under this alternative lighting would comply with County policy 2.8.1, which would ensure the impact would be less than significant, the same as the project. There would be fewer lights because one building would not be constructed, but overall effects on nighttime light would be the same as the project.

Under this alternative a GPA and rezone would still be required the same as the project and there would be no impacts associated with incompatible uses, the same as the project.

Vehicle trips associated with project operation would be the same as the proposed project because the uses and the number of units would not change.

Impacts Identified as Being Less Severe than the Proposed Project

Air quality and noise impacts associated with construction activities would be similar to the proposed project, but overall less intense. The length of construction would be shorter because one building would not be constructed generating less air particulates. It is anticipated construction noise, although less because of the shorter construction schedule, would remain a significant and unavoidable impact even with Mitigation Measure 4.6-1.

Impacts to biological resources would be somewhat less severe than the proposed project because a smaller footprint would be disturbed. The same as the project it is assumed the terms of the Settlement Agreement with the CNPS would still be in place, but if for some reason CNPS challenges the project the project applicant would be subject to paying the required fees under the County's ecological reserve fee for Zone 1. It is assumed land not developed or designated under the Settlement Agreement would be left in open space. Compliance with the mitigation measures identified for the project would reduce impacts to less than significant the same as the project (Mitigation Measures 4.3-1(a) through (c)). In addition, even though a smaller area would be disturbed there still would be impacts to special-status animal species, sensitive natural communities and wildlife corridors. Mitigation Measures 4.3-2(a) through (d), and 4.3-4 would still be required to ensure impacts would be reduced to less than significant.

Vehicle trips associated with project construction would be slightly less than the proposed project because one building would not be constructed. Impacts to level of service at the Cameron Park/Palmer Drive intersection would be the same as the project, less than significant.

Impacts Identified as Being More Severe than the Proposed Project

The Revised Site Layout Alternative requires construction of only the Assisted Living Facility and the Club House buildings, eliminating the Community Care Facility. This would require the Assisted Living Facility building be increased to four stories or approximately 45-feet in height. This would change the visual character of the area and views of the site from cars driving north on Ponte Marino Drive to access the project site and from the perimeter road and backside of the adjacent congregate care buildings looking west and northwest. In addition, views of the site from the backside of buildings located south of the project site (Palmer Professional Center and Cameron Park Villages), would also change. Development of a building this tall would be greater than the scale and density of existing surrounding uses. It is not anticipated this would result in an impact, but the overall character of the area would change if a four-story building was constructed.

From a planning and land use perspective, development of this alternative could potentially conflict with the County's height restrictions for Commercial land uses necessitating a variance. It may also not fit within the existing mass, and scale of the surrounding neighborhood resulting in a potential impact.

Relationship to Proposed Project Objectives

The Revised Site Layout Alternative would generally meet all of the project objectives. However, it would not generally meet the intent of objective 6 which calls for a walkable development for residents and guests. Combining everything into one building would not encourage residents to

walk between buildings on the site. It would create a more internal living environment that may not be conducive to residents getting outside to walk between buildings.

Alternative 4: Reduced Density Alternative

Description

This alternative assumes the proposed project would be developed on the same site, but would not include the 11,450 sf Clubhouse resulting in a smaller project footprint. Based on the County's parking requirements the number of parking spaces would not change with the removal of the Clubhouse. The location, height and design of the Assisted Living and Community Care buildings would not change under this alternative. This alternative would address construction noise by removing the building located closest to the Cameron Park Congregate Care project residents.

Comparative Analysis of Environmental Effects

Impacts under the Reduced Footprint Alternative would be similar to those of the proposed project, but less intense because it would develop a smaller project footprint, generate a small reduction in vehicle trips, and decrease in air emissions and construction noise. Impacts associated with site disturbance would be slightly less because an area less than 9.11 acres would be disturbed associated with site clearing, grading and construction of a new building. However, given that the Clubhouse is located in the eastern portion of the site closest to Ponte Palmero Drive it is anticipated this area may be used for construction staging resulting in a short-term disturbance.

The change in visual character is also assumed to be similar to the proposed project because under this alternative the Assisted Care and Community Care buildings along with surface parking, and landscaping would still be developed. The clubhouse building would not be constructed, but given its size relative to the other buildings the change in visual character would essentially be the same as the project. Under this alternative there would be fewer lights on the site which would result in a slight reduction in light visible from the surrounding area. However, compliance with County policy 2.81 would ensure impacts due to lights would be less than significant, the same as the project. In addition, the change in the ambient noise environment would be slightly less than under this alternative because the overall amount of traffic accessing the site would be slightly less than the project.

Impacts Identified as Being the Same or Similar to the Proposed Project

Impacts associated with project construction and development would be the same or similar to the proposed project. Under this alternative, potential impacts to air quality and greenhouse gases, aesthetics, land use, and traffic, would remain less than significant, the same as the project.

The project's contribution to an increase in greenhouse gas emissions would essentially be the same or similar to the proposed project, and would remain less than significant.

Impacts Identified as Being Less Severe than the Proposed Project

Overall, the project would be 11,450 sf smaller compared to the proposed project and would include fewer amenities; therefore, the number of vehicles accessing the site would be slightly reduced compared to the project. It is assumed most of the trips would come from residents the adjacent congregate care facility to access the Clubhouse for a variety of events and activities. Although no traffic impacts were identified under the proposed project, under this alternative there would be slight reduction in vehicle trips accessing the project site.

Under this alternative air emissions associated with project construction and operation would be slightly less than the proposed project because there would be less construction equipment required and slightly fewer vehicle trips.

It is assumed under this alternative impacts associated with short-term construction noise and biological resources would also be slightly less than the proposed project. Mitigation identified for the project to address potential impacts to noise associated with project construction (Mitigation Measure 4.6-1), and biological resources (Mitigation Measures 4.3-1(a) and (c), 4.3-2(a) through (d) and 4.3-4) associated with site disturbance and project construction would still be required. However, the construction schedule would be shorter and because the clubhouse would not be constructed, which is located the closest to the adjacent congregate care facility it is anticipated noise associated with project construction would result in slightly less of an annoyance to residents.

Impacts Identified as Being More Severe than the Proposed Project

No impacts were identified as being potentially more severe than the proposed project.

Relationship to Proposed Project Objectives

The Reduced Density Alternative would generally meet all of the project objectives with the exception of objective 3, which notes including a clubhouse with amenities and activity programs. This alternative will not include the Clubhouse so it does not fully meet this objective.

Environmentally Superior Alternative

An EIR is required to identify the environmentally superior alternative from among the range of reasonable alternatives that are evaluated. Section 15126.6(e)(2) of the CEQA Guidelines requires that an environmentally superior alternative be designated and states that if the environmentally superior alternative is the "No Project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.

From the alternatives evaluated for the project, the environmentally superior alternative would be Alternative 1, No Project/No Development Alternative. This alternative would avoid all significant impacts associated with the proposed project. However, in accordance with the CEQA Guidelines, if the No Project Alternative is identified as the environmentally superior alternative, an environmentally superior alternative must then be selected from the remaining alternatives.

From the alternatives evaluated for the project, the environmentally superior alternative would be Alternative 4, the Reduced Density Alternative. Under this alternative, noise associated with project construction would be reduced compared to the project along with a reduction in the severity of impacts to biological resources, specifically Pine Hill plants and habitat for the Blainville's Horned Lizard.

Table 6-2
Comparison of Project Impacts by Alternative

Impact	Proposed Project	Alternative 1 No Project/ No Development	Alternative 2 No Project/ Existing Zoning	Alternative 3 Revised Site Layout	Alternative 4 Reduced Density
Aesthetics					
4.1-1: Implementation of the proposed project may degrade the existing visual character or quality of the site and the surrounding area.	LS	NI	LS+	LS+	LS
4.1-2: Implementation of the proposed project may create new sources of light that could adversely affect nighttime views in the area..	LS	NI	LS	LS	LS
4.1-3: The proposed project could contribute to cumulative changes in the existing visual character of the area.	LS	NI	LS+	LS+	LS
4.1-4: The proposed project could contribute to a cumulative increase in nighttime light in the area.	LS	NI	LS	LS	LS
Air Quality					
4.2-1: The proposed project would not conflict with or obstruct the implementation of an applicable air quality plan.	LS	NI	LS	LS	LS
4.2-2: The proposed project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation.	LS	NI	LS+	LS-	LS-
4.2-3: The proposed project would not expose sensitive receptors to substantial pollutant concentrations.	LS	NI	LS+	LS-	LS-
4.2-4: The proposed project would not 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).	LS	NI	LS+	LS	LS
Biological Resources					
4.3-1: Construction of the proposed project could have a substantial adverse impact on special-status plants.	LS/M	NI	LS/M+	LS/M-	LS/M-

Table 6-2
Comparison of Project Impacts by Alternative

Impact	Proposed Project	Alternative 1 No Project/ No Development	Alternative 2 No Project/ Existing Zoning	Alternative 3 Revised Site Layout	Alternative 4 Reduced Density
4.3-2: Construction and operation of the proposed project could have a substantial adverse impact on special-status animals.	LS/M	NI	LS/M+	LS/M-	LS/M-
4.3-3: Construction and operation of the proposed project could have a substantial adverse effect on a sensitive natural community.	LS/M	NI	LS/M+	LS/M-	LS/M-
4.3-4: Construction and operation of the proposed project could interfere with an established migratory wildlife corridors or nursery site.	LS/M	NI	LS/M+	LS/M-	LS/M-
4.3-5: The proposed project could contribute to cumulative impacts to special-status plants and animals, natural communities and wildlife corridors.	LS/M	NI	LS/M+	LS/M-	LS/M-
Greenhouse Gas Emissions					
4.4-1: The proposed project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.	LS	NI	LS	LS	LS
4.4-2: The proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.	LS	NI	LS	LS	LS
Land Use and Planning					
4.5-1: Implementation of the proposed project would not conflict with any applicable land use, plan, policy or regulation.	LS	NI	LS-	LS+	LS
4.5-2: Implementation of the proposed project would not include placing incompatible land uses adjacent to existing uses.	LS	NI	LS	LS	LS
Noise					
4.6-1: The proposed project would expose people to construction noise levels in excess of standards established in the County's general plan.	SU/M	NI	SU/M+	SU/M-	SU/M-

Table 6-2
Comparison of Project Impacts by Alternative

Impact	Proposed Project	Alternative 1 No Project/ No Development	Alternative 2 No Project/ Existing Zoning	Alternative 3 Revised Site Layout	Alternative 4 Reduced Density
4.6-2: The proposed project would not expose people to excessive groundborne vibration or groundborne noise levels.	LS	NI	LS	LS	LS
4.6-3: The proposed project would not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.	LS	NI	LS	LS	LS-
4.6-4: The proposed project would not result in a cumulative contribution to any existing cumulative noise effects.	LS	NI	LS	LS	LS
Transportation and Circulation					
4.7-1: Under Existing Plus Project conditions the proposed project would not cause an intersection to operate an unacceptable levels.	LS	NI	LS+	LS	LS-
4.7-2: Under Existing Plus Project conditions the proposed project would not conflict with alternative transportation or adversely impact bicycle or pedestrian conditions.	LS	NI	LS	LS	LS
4.7-3: Under cumulative conditions the proposed project would not cause an intersection to operate an unacceptable levels.	LS	NI	LS	LS	LS

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CHAPTER 7
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