Appendix A

Notice of Preparation and Comment Matrix

County of El Dorado

Notice of Preparation of a Draft Environmental Impact Report

and Notice of Public Scoping Meeting for the

Lime Rock Valley Specific Plan

Date: February 20, 2013

To: Interested Parties

From: Rommel (Mel) Pabalinas, Senior Planner, County of El Dorado

Subject: Notice of Preparation of a Draft Environmental Impact Report and Notice of Public Scoping Meeting for the Lime Rock Valley Specific Plan (File No. SP12-0001)

The County of El Dorado (County) will be the lead agency under the California Environmental Quality Act (CEQA) for preparation of an Environmental Impact Report (EIR) for the Lime Rock Valley Specific Plan in El Dorado County. The purpose of this 30-day Notice of Preparation (NOP) and notice of public scoping meeting is to solicit comments from public agencies and interested persons regarding the scope and content of the environmental information and analyses, including the significant environmental impacts, reasonable alternatives, and mitigation measures that should be included in the Draft EIR (pursuant to CEQA Guidelines Section 15082). The location, project description, proposed entitlement requests, and potential environmental effects of the proposed Lime Rock Valley Specific Plan are summarized in the attached materials.

Please provide written comments to **Mr. Rommel (Mel) Pabalinas, Senior Planner, at the address shown by 5:00 p.m. on March 22, 2013**. Keep in mind that there will be another opportunity to submit detailed comments when the Draft EIR is released for public review. Please mail, email or fax your comments to:

Rommel (Mel) Pabalinas, Senior Planner
El Dorado County Development Services Department, Planning Division
2850 Fairlane Court, Building C
Placerville, CA 95667
Email: rommel.pabalinas@edcgov.us
Fax: (530) 642-0508

The County will hold a public scoping meeting to provide additional information about the project and to receive verbal and written comments.

Date: Tuesday, March 12, 2013
Time: 6:30 p.m. to 8:30 p.m.
Where: Light of the Hills Lutheran Church, 3100 Rodeo Road, Cameron Park, CA 95682.

The scoping meeting format will be an open house; interested parties may arrive at any time during the 2-hour window to receive information on the project or provide comments.

NOTICE OF PREPARATION OF

A DRAFT ENVIRONMENTAL IMPACT REPORT (EIR)
AND NOTICE OF PUBLIC SCOPING MEETING
FOR THE
LIME ROCK VALLEY SPECIFIC PLAN

Project Information

Location: The proposed site for the Lime Rock Valley Specific Plan (LRVSP) (project) comprises approximately 740 acres located on the western slope of the unincorporated part of El Dorado County (County), California, south of U.S. Highway 50 (US 50), approximately 19 miles west of Placerville and 24 miles east of downtown Sacramento (Figure 1, Regional Location). The project location is shown on Figure 2, Project Location, and consists of Assessor Parcel Numbers (APNs) 109-010-09, 10, 13, & 14, and 109-020-01, 04, 05, 06 & 20.

The proposed project site is bounded on the north by Cameron Estates, on the east by the Sacramento-Placerville Transportation Corridor, on the south by Royal Equestrian Estates and on the west by the proposed Village of Marble Valley Specific Plan, and the Deer Creek Wastewater Treatment Plant.

Project Description: The proposed project would be a comprehensive planned residential community totaling approximately 740 acres with a variety of lot sizes and housing types, designed to ensure the preservation of significant historical sites and prominent natural features, including oak woodlands, steep slopes, streams, and wetlands, and to complement surrounding land uses. The plan would be a mix of low-density residential and open space uses. Specifically, the project would consist of up to 800 residential units on approximately 377 acres, a 15-acre neighborhood park with recreational amenities, and about 314 acres of public and private open space. The balance of the area would be comprised of roads and rights of way. Other features of the plan include a network of pedestrian trails and pathways that would connect to and enhance existing and proposed trails in the area, including the El Dorado Trail. Table 1 presents the proposed land use designations and proposed number of units. These designations are also shown in Figure 3, Proposed Land Use Designations.

Table 1. Proposed Land Use Summary

Land Use Designation	Area (Acres)	Percent of Total Area	Residential Units
Residential			
LDR - Low Density Residential (0.9-5.0 Du/Ac)	377	51%	800
Subtotal	*377*	*51%*	*800*
Public			
VP - Village Park	15	2%	NA
Subtotal	*15*	*2%*	NA
Open Space			
OS - Open Space	314	42%	NA
Subtotal	*314*	*42%*	NA
Road Impact Areas and Future Right-of-Way	34	5%	NA
Subtotal	*34*	*5%*	
Total	**740**	**100%**	**800**
Notes: DU/Ac = average dwelling units per acre NA = not applicable Source: G3 Enterprises, Inc., 2012			

Proposed Entitlement Requests: The proposed entitlements that would be required to implement the LRVSP include an amendment to the County general plan, rezoning and adoption and implementation of the LRVSP. In addition, the project would require the County's approval of a development agreement, financing plan, and subsequent development permits and entitlements including a Development Plan and Tentative Maps. Specifically, the entitlement requests for the proposed project are provided as follows.

- The proposed general plan amendment would expand the Community Region of El Dorado Hills to include the LRVSP area on the General Plan Land Use Map, and amend the General Plan Land Use Map designation of subject lands from Rural Residential (RR) (1 DU/10 to 160 acres) and Open Space (OS) to Adopted Plan-Lime Rock Valley Specific Plan (AP-LRVSP) and LRVSP land use designations Low-Density Residential (LDR) (0.9–5.0 DU/Ac), Village Park (VP), and Open Space (OS).

- The proposed rezoning would amend zone districts from Estate Residential Ten Acre-Planned Development (RE-10-PD), Residential Agricultural-20 and Residential Agricultural-40 Districts, and Open Space (OS) to LRVSP zone districts One-Acre Lot Residential-Planned Development (R1A-PD), 15,000 SF Lot Residential-Planned Development (R15-PD), 10,000 SF Lot Residential-Planned Development (R10-PD), 6,000 SF Lot Residential-Planned Development (R6-PD), Private Open Space-Planned Development (OS1-PD), Public Open Space-Planned Development (OS2-PD), and Preserve-Open Space Planned Development (OS3-PD).

- Specific Plan for the proposed LRVSP for the development of a 740-acre project site consisting of up to 800 dwelling units, a 15 acre public facility/recreational park use, 314 acres of open space, and the necessary roads, rights of way and associated project infrastructure required to implement the project.

Additionally, the proposed project will also require approvals by the El Dorado County Local Agency Formation Commission (LAFCO) to annex the LRVSP area into the EID service area for water, wastewater, and recycled water services, and to amend the El Dorado Hills Community Service District (EDHCSD) sphere of influence area to include the LRVSP area and annex the LRVSP area into the EDHCSD service area for parks and recreation.

Environmental Effects

Potential Environmental Effects: Based on a preliminary environmental analysis of the LRVSP, the County has determined that the full range of issues identified in the CEQA Guidelines, listed below, shall be addressed in the EIR.

- Air Quality
- Biological Resources
- Cultural Resources
- Geology, Soils, Minerals, and Paleontology
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology, Water Quality, and Water Resources
- Land Use Planning and Agricultural Resources
- Noise and Vibration
- Population and Housing
- Public Services and Utilities
- Recreation
- Traffic and Circulation
- Visual Resources

In addition to the above areas, the Draft EIR will also evaluate the potential cumulative and growth-inducing effects of the project, as required by CEQA. Reasonably foreseeable future projects will be considered in the Draft EIR, including, but not limited to, the proposed Village of Marble Valley Specific Plan, the proposed Dixon Ranch Residential Project and the Central El Dorado Hills Specific Plan. Applications have been submitted to the County for these two projects, and they are currently undergoing CEQA review.

Comments and suggestions are requested regarding the environmental issues that will be analyzed in the EIR during the 30-day public comment period for the NOP.

Potential Alternatives to be Addressed in the EIR: In accordance with Section 15126.6 of the State CEQA Guidelines, an EIR must "describe a range of reasonable alternatives to the Project, or to the location of the Project, which would feasibly attain most the basic objectives of the Project, but would avoid or substantially lessen any of the significant effects of the Project, and evaluate the comparative merits of the alternatives." As required by CEQA, the EIR will evaluate a no project alternative, which will assume development of the site under the currently adopted general plan and zoning designations. Aside from the no project alternative, the County has not yet determined what additional alternatives to the project will be evaluated in the EIR. These will be identified during the environmental review

process. Once selected, the alternatives will be analyzed at a qualitative level of detail for comparison against the impacts identified for the proposed project, consistent with the requirements of CEQA.

Public Scoping Meeting

The County will hold a public scoping meeting to provide additional information about the project and to receive verbal and written input on Tuesday, March 12, 2013 from 6:30 p.m. to 8:30 p.m. at Light of the Hills Lutheran Church, 3100 Rodeo Road, Cameron Park, CA 95682. The scoping meeting format will be an open house; interested parties may arrive at any time during the 2-hour window to receive information on the project or provide input.

Requests for Additional Information

If you have any questions, please contact Rommel (Mel) Pabalinas at the County of El Dorado, Development Services Department, Planning Division, 2850 Fairlane Court, Building C, Placerville, CA 95667, by telephone at (530) 621-5363, or by email to rommel.pabalinas@edcgov.us.

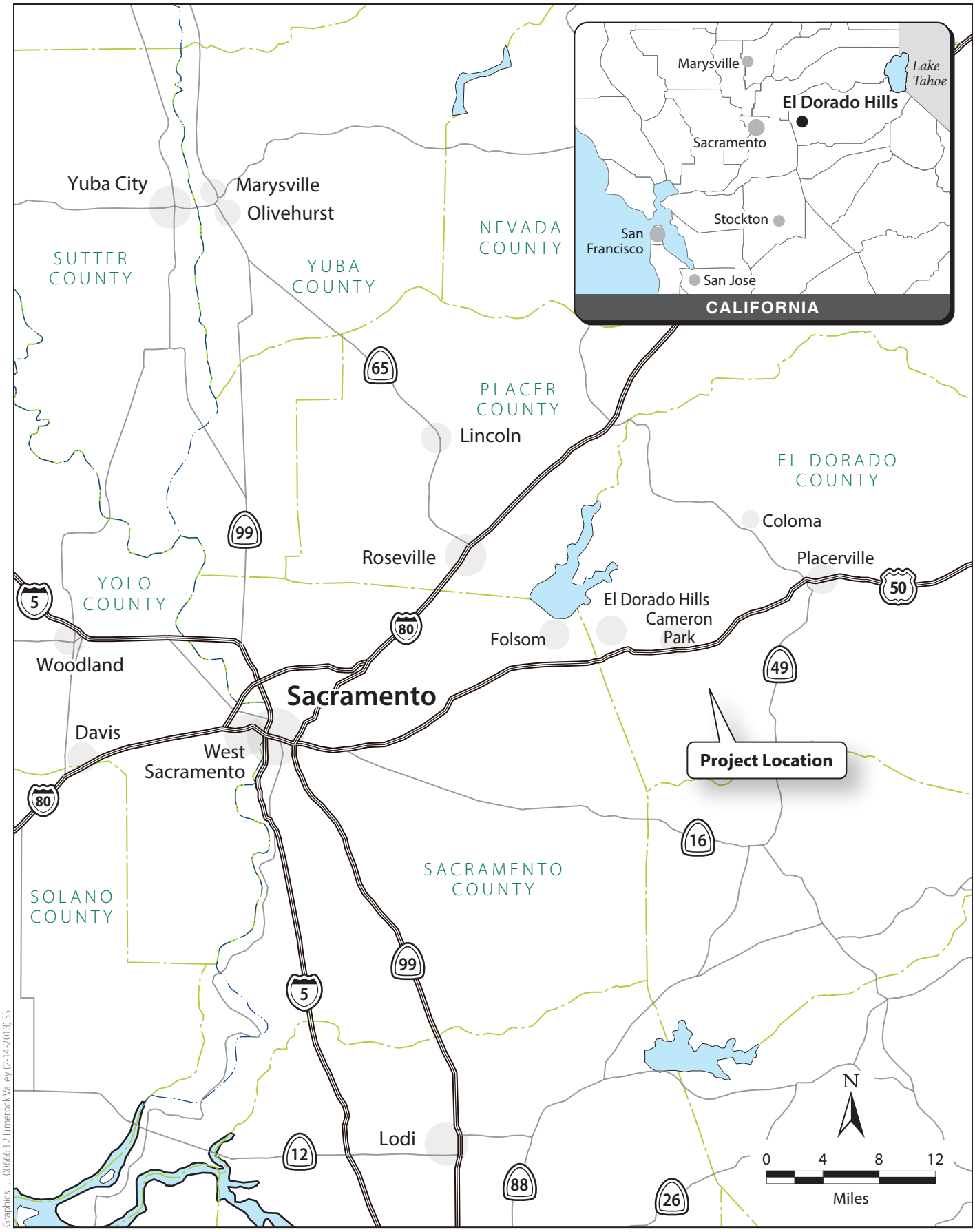

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Figure 1
Regional Location

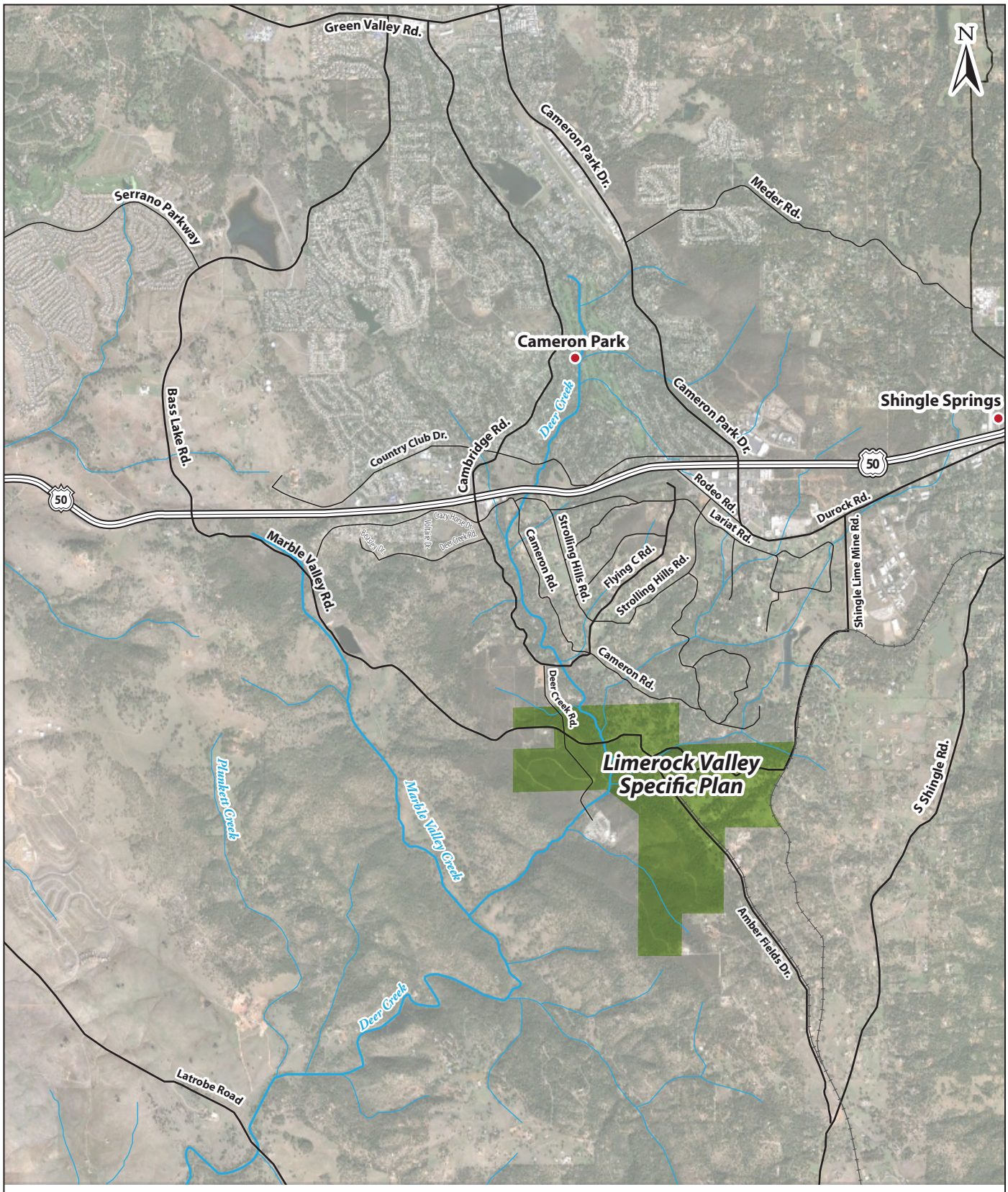

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Figure 2
Project Location

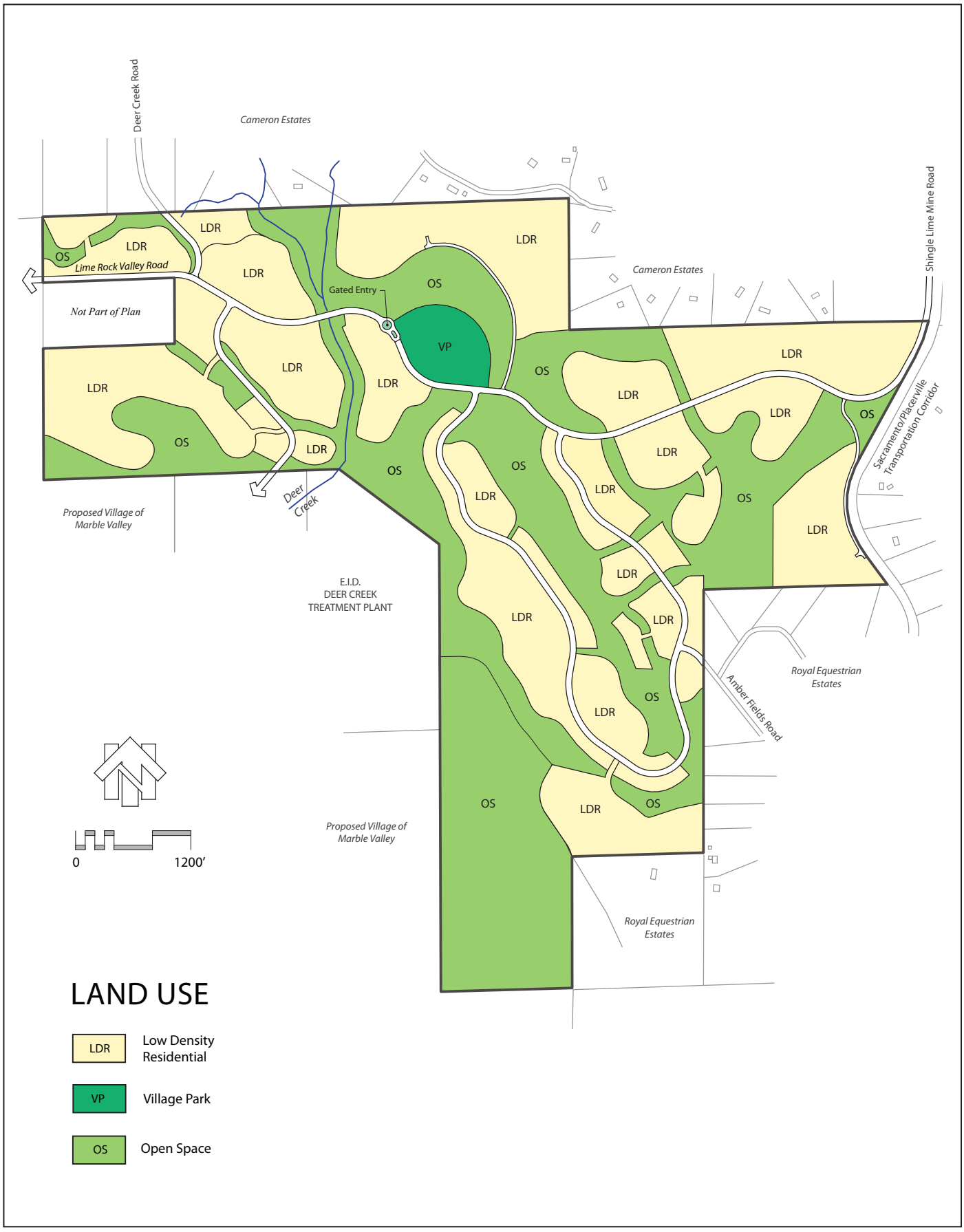

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Figure 3
Proposed Land Use Designations

Party Name (Last name, First name; Agency or Organization name)	**Date Received**	**Party Type/ Letter Number/ Comment Number**	**Federal, State, Local, Organization, Form, Individual**	**Comment Topic**	**Refined Topic**	**Section**	**Mitigation (if applicable)**
Blodget, James & Jill	11/23/2012	IP01	Individual	Design	proposed residential densities do not conform to GP which defines LDR as 1 dwelling/5 acres maximum; proposed project lots are 1/5 ot 1/2 acre in size	The proposed project would include an ammendment to the General Plan as discussed in **Section 3.9**, Land Use and Agricultural Resources (Impact LU-2). Residential densities for LRV are provided in Section 3 of the Specific Plan and the project description of this EIR.	
Deehan, Vicky	1/20/2013	IP02	Individual	Design	why increased LU density?	Not a CEQA issue; project design	
	1/20/2013	IP02	Individual	Transportation	no road for ingress and egress	Access to the project area would be via Lime Rock Valley Road. See **Chapter 2**, Project Description and **Section 3.14,** Traffic and Circulation.	
	1/20/2013	IP02	Individual	Utilities	source of water?	Water supply is addressed in **Section 3.12**, Public Services/Utilities, Impact PSU-5	
	1/20/2013	IP02	Individual	Biological Resources	loss of habitat=displaced animals; already having issues with rattlesnakes, coyotes/mtn lion sighting.	**Section 3.3**, Biological Resources discusses impacts on wildlife habitat.	
	1/20/2013	IP02	Individual	Design	wants map showing specifics to her property	Comment noted. The NOP includes a map and there are maps in the DEIR and specific plan for reference.	
Hovey, John & Linda	3/12/2013	IP03	Individual	Quality of Life	proposed city-sized lots are not in keeping with rural environment; proposed project will impact Q of L	Not a CEQA issue	
	3/12/2013	IP03	Individual	Zoning	opposes zoning amendment for higher denisty/smaller parcels; recommends parcels no smaller than 10 acres in southern portion of LRV	Comment noted. See analysis of No-Project Alternative in **Chapter 4**, which includes larger lots. The southernmost area of the LRVSP is proposed to be in Open Space.	
	3/12/2013	IP03	Individual	Haz/AQ	NOA	Addressed in **Section 3.2**, Air Quality (Impact AQ-4).	Mitigation Measure AQ-4b
	3/12/2013	IP03	Individual	Haz/AQ	Area adjacent to REE is "more likley" to contain asbestos (according to asbestos review); disturbing NOA is unacceptable and possibly a violation of CEQA	NOA is addressed in **Section 3.2**, Air Quality (Impact AQ-4). The intent of CEQA is to disclose impacts, see **Chapter 1** for discussion.	Mitigation Measure AQ-4b

Party Name (Last name, First name; Agency or Organization name)	Date Received	Party Type/ Letter Number/ Comment Number	Federal, State, Local, Organization, Form, Individual	Comment Topic	Refined Topic	Section	Mitigation (if applicable)
	3/12/2013	IP03	Individual	Zoning	All parcels in LRV PUD should be minimum of 5 acres; oppose rezoning of other parcels	Proposed parcel sizes and General Plan amendments are discussed in **Chapter 2**. Land use impacts are discussed in **Section 3.9**, Land Use Planning and Agricultural Resources (Impact LU-2).	
	3/12/2013	IP03	Individual		Would like to meet with County on site	Comment noted.	
Hanebutt, Michael	3/12/2013	IP04	Individual	Design/Zoning/Traffic	suggests lower density for consistency with existing community and reduction in traffic impacts	See **Chapter 4** for analysis of alternatives.	
	3/12/2013	IP04	Individual	Design	no gated entrance	Comment noted.	
	3/12/2013	IP04	Individual	Design	suggests Shingle Lime Mine Road be full access	Shingle Lime Mine Road will be available for emergency vehicle access only. See **Chapter 2**, Project Description and **Section 3.14**, Traffic and Circulation.	
	3/12/2013	IP04	Individual	Design Transportation	wants bicylcles/pedestrian consideration in road design	Pedestrian and bicycle circulation is addressed in **Section 3.14**, Traffic and Circulation (Impact TRA-1 and TRA-6). See also Section 4 of the Specific Plan.	
McCorckle, Stephanie	3/17/2013	IP05	Individual	Form Letter A			
Tucker, Michael	3/18/2013	IP06	Individual	Design	suggests 500-ft. buffer @ Cameron Estates boundary	See Section 3.1, Aesthetics for discussion of adjacent land uses and impacts on views.	
	3/18/2013	IP06	Individual	Recreation	suggests access to developed trails and regional parks	Features of the plan include a network of pedestrian trails and pathways that would connect and enhance existing and proposed trails in the area, including the El Dorado Trail. See Section 4 of the Specific Plan and **Section 3.14**, Traffic and Circulation in this document.	
Watley, Jennifer	3/25/2013	IP07	Individual	Form Letter B			
Hartnett, Robert	3/19/2013	IP08	Individual	Form Letter B			
Catania, Karen and Paul	3/19/2013	IP09	Individual	Form Letter B			
Pingle, Ray and Jana	3/20/2013	IP10	Individual	Form Letter B			

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Guthrie, Karen	3/25/2013	IP11	Individual	Design	inconsitent with surrounding neighborhoods	Proposed parcel sizes and General Plan amendments are discussed in **Chapter 2**. Impacts to aesthetic resources are discussed in Section 3.1, Aesthteics (Impact AES-4). Land use impacts are discussed in **Section 3.9**, and Land Use Planning and Agricultural Resources (Impact LU-2).	
	3/25/2013	IP11	Individual	Transportation	Marble Valley Drive w/800 additonal homes will be a traffic nighmare	Traffic impacts are addressed in **Section 3.14**, Traffic and Circulation (Impact TRA-2)	
	3/25/2013	IP11	Individual	Design	southern route parallel to Hwy 50 should be explored. Resulting traffic jams will cause residents to use alt routes through Cameron Park. Those residents pay for their road maintanence	Traffic impacts are addressed in **Section 3.14**, Traffic and Circulation (Impact TRA-1 and TRA-2). Alternate routes are outside the scope of this project.	
	3/25/2013	IP11	Individual	Design	Cameron Park has taken on more than its fair share of low-cost housing	Land use is discussed in **Section 3.9**, Land Use Planning and Agricultural Resources. The County doesn't have an affordable housing policy or ordinance.	
	3/25/2013	IP11	Individual	Specific Plan	"Proposed Entitlement Requests" touted as "expanding the Community Region of EDH" is untrue.	Comment noted. This is not a comment on the DEIR and is not a CEQA issue.	
Strohn, Leigh P.	3/22/2013	IP12	Individual	Design/LU	Requests a buffer zone between project and existing community	**Chapter 4** addresses alternatives analyzed.	
	3/22/2013	IP12	Individual	Transportation	concerned about increased trafic impacts on Hwy 50 and the fact there are only 2-3 entrances	Addressed in **Section 3.14**, Traffic and Circulation (Impact TRA-1 and TRA-2)	
	3/22/2013	IP12	Individual	Design/Recreation	would like to leverage the use of the planned trail system so all could use	The proposed project includes a network of pedestrian trails and pathways that would connect and enhance existing and proposed trails in the area, including the El Dorado Trail. See **Section 3.14**, Traffic and Circulation.	
	3/22/2013	IP12	Individual	Visual/Aesthetics	concerned about nighttime light pollution	Impacts related to light and glare are addressed in **Section 3.1,** Aesthetics (Impact AES-5)	Mitigation Measure AES-2
	3/22/2013	IP12	Individual	Design	why can't the project have fewer homes?	**Chapter 4** addresses alternatives analyzed.	

Party Name (Last name, First name; Agency or Organization name)	Date Received	Party Type/ Letter Number/ Comment Number	Federal, State, Local, Organization, Form, Individual	Comment Topic	Refined Topic	Section	Mitigation (if applicable)
Strohn, Robert	3/22/2013	IP13	Individual	Transportation	concerned about increased traffic impacts on Hwy 50 and the fact there are only 2-3 entrances	Addressed in **Section 3.14**, Traffic and Circulation (Impact TRA-1 and TRA-2)	
	3/22/2013	IP13	Individual	Design/LU	Requests a green belt between project and existing community	**Chapter 4** addresses alternatives analyzed.	
	3/22/2013	IP13	Individual	Design	Prefers a smaller development, fewer homes	**Chapter 4** addresses alternatives analyzed.	
	3/22/2013	IP13	Individual	Design/Recreation	would like to leverage the use of the planned trail system so all could use	The proposed project includes a network of pedestrian trails and pathways that would connect and enhance existing and proposed trails in the area, including the El Dorado Trail. See **Section 3.14**, Traffic and Circulation.	
Schelin, Christine	3/20/2013	IP14	Individual	Recreation/Design	suggests trail access from Cameron Estates through LRV to access MV and El Dorado trail	See Figure 4.25, **Section 4** of the Specific Plan.	
	3/20/2013	IP14	Individual	Design	requests 500-ft. buffer between cameron estates and LRV	**Chapter 4** addresses alternatives analyzed.	
	3/20/2013	IP14	Individual	Biological Resources	wildlife corridor	Impacts on wildlife corridors is discussed in **Section 3.3**, Biological Resources'	
	3/20/2013	IP14	Individual	Quality of Life	impact on "rural" culture	Not a CEQA issue.	
	3/20/2013	IP14	Individual	Transportation	public transit considerations	Public transit is addressed in **Section 3.14**, Traffic and Circulation	
	3/20/2013	IP14	Individual	WQ/Utilities	surprise inspection of EID plant due to foul smelling odor/poor WQ of Deer Creek	Impacts related to odors are addressed in **Section 3.2**, Air Quality (Impact AQ-5) and those related to water quality are address in **Section 3.8**, Hydrology, Water Quality, and Water Resources (Impacts WQ-1 and WQ-6).	
	3/20/2013	IP14	Individual	Visual/Aesthetics	light pollution	Impacts from light and glare are addressed in **Section 3.1**, Aesthetics (Impact AES-5)	Mitigation Measure AES-2
	3/20/2013	IP14	Individual	Transportation	traffic , especially Cambridge Road exit	Traffic impacts are addressed in **Section 3.14**, Traffic and Circulation (Impact TRA-1 and TRA-2)	

Party Name (Last name, First name; Agency or Organization name)	**Date Received**	**Party Type/ Letter Number/ Comment Number**	**Federal, State, Local, Organization, Form, Individual**	**Comment Topic**	**Refined Topic**	**Section**	**Mitigation (if applicable)**
Schelin, Paul	3/20/2013	IP15	Individual	Recreation	requests trail access from Cameron Estates through LRV to access MV and El Dorado trail	The proposed project includes a network of pedestrian trails and pathways that would connect and enhance existing and proposed trails in the area, including the El Dorado Trail. See **Section 3.14**, Traffic and Circulation.	
	3/20/2013	IP15	Individual	Design	requests 500-ft. buffer between cameron estates and LRV	**Chapter 4** addresses alternatives analyzed.	
Canup, Russell and Diane	3/20/2013	IP16	Individual	Form Letter A			
Hovey, John and Linda	3/22/2013	IP17	Individual	WQ/Hydro	concerns regarding groundwater recharge-covering large area with impervious surfaces will reduce groundwater recharge	Addressed in **Section 3.8,** Hydrology, Water Quality, and Water Resources (Impact WQ-2)	
	3/22/2013	IP17	Individual	WQ/Hydro/Haz-Mat	household chemicals and vehicle oils, solvents, etc., in groundwater due to increased homes	Addressed in **Section 3.8**, Hydrology, Water Quality, and Water Resources (Impacts WQ-1 and WQ-6)	
	3/22/2013	IP17	Individual	Alternative	offers alternative design	**Chapter 4** addresses alternatives analyzed.	
Cloutier, Christopher and Mandy	3/22/2013	IP18	Individual	Form Letter A			
McCorkle, Patrick	3/21/2013	IP19	Individual	Form Letter A			
Mitchell, Teresa and Giles; Santos, Mark and Lisa	3/22/2013	IP20	Individual	Quality of Life	proposed city-sized lots are not in keeping with rural environment; proposed project will impact Q of L	Not a CEQA issue.	
	3/22/2013	IP20	Individual	Design/Zoning	parcels should be minimum of 5 acres in PUD	**Chapter 4** addresses alternatives analyzed.	
	3/22/2013	IP20	Individual	Alternatives	offers various density alternatives	**Chapter 4** addresses alternatives analyzed.	
	3/22/2013	IP20	Individual	Transportation	traffic and circulation issues could impact private roads	Addressed in **Section 3.14**, Traffic and Circulation (Impact TRA-1 and TRA-2)	
	3/22/2013	IP20	Individual	WQ/Hydro	questions about annexation into EID servcie area and does EID have capacity? Will this affect wells?	Annexation into EID would be required; see Section 9 of the Specific Plan and **Chapter 2**, Project Description in this document. Water Supply Assessments have been conducted and are summarize in **Section 3.12**, Public Services and Utilities (Impact PSU-5).	
	3/22/2013	IP20	Individual	Haz/Mat	assess past mining impacts to groundwater and soils	Impacts related to hazardous materials and mining are discussed in **Section 3.7**, Hazardous Materials (Impact HAZ-4)	

Party Name (Last name, First name; Agency or Organization name)	Date Received	Party Type/ Letter Number/ Comment Number	Federal, State, Local, Organization, Form, Individual	Comment Topic	Refined Topic	Section	Mitigation (if applicable)
	3/22/2013	IP20	Individual	Cultural Resources	identify and preserve where possible	Native American representatives have been consulted regarding the project. Impact on cultural resources are addressed in **Section 3.4**, Cultural Resources (Impact CUL-1, CUL-2, and CUL-3)	Mitigation Measures CUL-1, CUL-2a, CUL-2b, CUL-2c, CUL-2d, CUL-3, CUL-4a, CUL-4b
	3/22/2013	IP20	Individual	Noise/Vibration	evaluate impacts related to increased density and visitor population	Addressed in **Section 3.10**, Noise and Vibration (Impact NOI-1 and NOI-3)	Mitigation Measures NOI-1a, NOI-1b, NOI-3
	3/22/2013	IP20	Individual	Biological Resources	wildlife displacement	Impacts on wildlife and their habitat are addressed in **Section 3.3**, Biological Resources.	
	3/22/2013	IP20	Individual	Visual/Aesthetics	viewshed impacts	Visual impacts during construction and operation of the project are addressed in **Section 3.1**, Aesthetics.	
Palmer, Steve	3/22/2013	IP21	Individual	Biological Resources	wildlife habitat/corridor impacts a concern	Impacts on wildlife and their habitat and wildlife movement corridors are addressed in **Section 3.3**, Biological Resources.	
	3/22/2013	IP21	Individual	Visual/Aesthetics	light pollution	Impacts from light and glare are addressed in **Section 3.1**, Aesthetics (Impact AES-5)	Mitigation Measure AES-2
	3/22/2013	IP21	Individual	Visual/Aesthetics	visual impacts	Visual impacts during construction and operation of the project are addressed in **Section 3.1**, Aesthetics.	
	3/22/2013	IP21	Individual	Transportation	Cambridge Road and other traffic issues	Traffic impacts are addressed in **Section 3.14**, Traffic and Circulation (Impact TRA-1 and TRA-2)	
Price, Lindell	3/22/2013	IP22	Individual	Transportation	assess potential of LRV to preclude future traffic connections, including cumulativ traffic impacts	Traffic impacts are addressed in **Section 3.14**, Traffic and Circulation (Impact TRA-1 and TRA-2). Cumulative impacts discussed in **Chapter 5**	

Party Name (Last name, First name; Agency or Organization name)	Date Received	Party Type/ Letter Number/ Comment Number	Federal, State, Local, Organization, Form, Individual	Comment Topic	Refined Topic	Section	Mitigation (if applicable)
	3/22/2013	IP22	Individual	Transportation	assess amounts of road pavement, air quality, GHG, traffic speeds, public safety related to different circulation routes	Traffic operations and safety are addressed in **Section 3.14,** Traffic and Circulation (Impact TRA-1). Air quality (**Section 3.2**) and GHG (**Section 3.6**) analyses are partially based on traffic and therefore include these factors. Amounts of road pavement are not considered; not a CEQA issue.	
	3/22/2013	IP22	Individual	Transportation	assess cumulative impacts of additonal traffic on ped/bike access to cambridge Rd.	Addressed in **Section 3.14**, Traffic and Circulation (Impact TRA-1 and TRA-6). Cumulative impacts discussed in **Chapter 5**	
	3/22/2013	IP22	Individual	Population/Housing	address job/housing balance	Employment for residents is not a CEQA issue. Traffic, air quality, GHG, and land use planning impacts are addressed in **Sections 3.14, 3.2, 3.6** and **3.9,** respectively.	
	3/22/2013	IP22	Individual	Transportation	will project components (services and retail) alleviate out-of-county travel?	Not a CEQA issue.	
	3/22/2013	IP22	Individual	Zoning	review expanding the Community Region of Cameron Park to include LRV instead of Community Region of EDH.	Comment noted.	
Price, Stanley	3/22/2013	IP23	Individual	Recreation	analyze equestrian trail…	The proposed project includes an equestrian trail leading to the proposed Village of Marble Valley and connecting to existing trails. See Figure 4.25 in the Specific Plan. Impacts are addressed in **Section 3.14**, Traffic and Circulation.	
	3/22/2013	IP23	Individual	Public Services/Utilities	water supply and sewer availability issues	Impacts related to water supply, sewer capacity and other such infrastructure are addressed in **Section 3.12**, Public Services and Utilities (Impact PSU-2, PSU-3, PSU-5 and PSU-6)	
	3/22/2013	IP23	Individual	Transportation	review pedestrian/bicycle/vehicle/trails circulation plan. Preliminary Trail Circulation Plan is not adequate.	See Figure 4.25, Section 4 of the Specific Plan - Community Trail Plan. Impacts related to pedestrian, bicycle, and vehicle circulation are addressed in **Section 3.14**, Traffic and Circulation.	

Party Name (Last name, First name; Agency or Organization name)	Date Received	Party Type/ Letter Number/ Comment Number	Federal, State, Local, Organization, Form, Individual	Comment Topic	Refined Topic	Section	Mitigation (if applicable)
	3/22/2013	IP23	Individual	Land Use/Planning	analyze how rezoning meets current Housing Element requirements as provided by the CA Dept. of Housing and Community Development	Land use is discussed in **Section 3.9**, Land Use Planning and Agricultural Resources. There is no affordable housing requirement in El Dorado County.	
	3/22/2013	IP23	Individual	Population/Housing	where will construction workers live and travel from?	Not a CEQA issue	
	3/22/2013	IP23	Individual	Population/Housing	where will VMVSP residents work and what transit options will there be?	Employment of residents is not a CEQA issue. Public transportation is addressed in **Section 3.14**, Traffic and Circulation (Impact TRA-1 and TRA-6).	
Riordan, James F.	5/1/2013	IP24	Individual	General	Upset that Cameron Park residents were last to be notified.	CEQA provides continuing opportunities for public review and input. See **Section 1.3**, Scoping and Public Involvemnt	
	5/1/2013	IP24	Individual	Traffic/Circulation	3 entrances to Hwy 50 already overtaxed-will get far worse	Traffic issues are addressed in **Section 3.14**, Traffic and Circulation (Impact TRA-1 and TRA-2)	Mitigation Measures TRA-1a, TRA-1b, TRA-1c
	5/1/2013	IP24	Individual	General	Comment on VMV - EDH receiving $, not Cameron Park	See VMV	
	5/1/2013	IP24	Individual	Design	Comment on VMV - Development will include high density areas that will attract people we wish would stay in Sacramento.	See VMV	
	5/1/2013	IP24	Individual	Design	Comment on VMV - Proposed Event Center will compete with existing Cameron Park	See VMV	
Robertson, Eva	5/1/2013	IP25	Individual	General	Asked to be included on mailing list	Included in mailing list.	
Cameron Estates Community Services District	3/22/2013	LO01	Local Organization	Design-Roads	Vehicle access into CECSD from LRV must be prohibited in order to properly mitigate impacts to CECSD	See **Section 4** of the Specific Plan; no access proposed.	
	3/22/2013	LO01	Local Organization	Traffic/Circulation	ingress and egress proposed to be thru VMV; concerns regarding traffic on roads and freeway intersections	Traffic related impacts are addressed in **Section 3.14**, Traffic and Circulation.	
	3/22/2013	LO01	Local Organization	General Plan	800 units is out of character/zoning with existing communities	A discussion of the general consistency of the proposed project with the policies of the General Plan is presented in Appendix B, Consistency with El Dorado County General Plan Policies.	
	3/22/2013	LO01	Local Organization	Design	requests 500-ft buffer zone & 5-acre parcels on perimeter	See **Chapter 4**, Alternatives for an analysis of alternatives and a discussion of alternatives dismissed from further review.	

Party Name (Last name, First name; Agency or Organization name)	**Date Received**	**Party Type/ Letter Number/ Comment Number**	**Federal, State, Local, Organization, Form, Individual**	**Comment Topic**	**Refined Topic**	**Section**	**Mitigation (if applicable)**
	3/22/2013	LO01	Local Organization	Biological Resources	wildlife corridors, preserving ponds/creeks	Impacts on wildlife corridors and wetlands are addressed in **Section 3.3**, Biological Resources. (multiple impact discussions)	
	3/22/2013	LO01	Local Organization	Biological Resources	Oracle oaks should be preserved	Impacts to oak woodlands are addressed in **Section 3.3**, Biological Resources (Impact Bio-1). Oracle oaks are not currently a protected species.	Mitgation Measures BIO-1a, BIO-1b, BIO-1c, BIO-1d, and BIO-1e
	3/22/2013	LO01	Local Organization	Visual Resources	lighting, light pollution	Impacts related to light and glare are addressed in **Section 3.1**, Aesthetics (Impact AES-5)	Mitigation Measure AES-2
	3/22/2013	LO01	Local Organization	Design/Recreation	requests non-vehicular access to trail system	This comment is about project desgin and is not a CEQA issue.	
	3/22/2013	LO01	Local Organization	AQ/Haz Mat	adequate mitigation should be in place to control dust and NOA	Dust and NOA during construction are addressed in **Section 3.2**, Air Quality (Impacts, AQ-2, AQ-4c)	Mitigation Measures AQ-2a, AQ-2b, AQ-4b
El Dorado Local Agency Formation Commission	4/2/2013	LO02	Local Organization	Land Use/Public Services	LAFCO approval is required inorder to amend the EDHCSD SOI to include LRVSP and annex the area for Parks & rec services and Water, wastewater services from EID	Comment noted. Approvals by the El Dorado County Local Agency Formation Commission (LAFCO) to annex the LRVSP area into the EID service area for water and wastewater are noted in **Section 2.4**, Required Approvals	
	4/2/2013	LO02	Local Organization	Cumulative	consider cumulative impacts based on other planned projects	**Chapter 5**, Other CEQA Considerations, addresses cumulative impacts.	
	4/2/2013	LO02	Local Organization	Recreation	should consider park/rec impacts as well as analyzing the annexation into the CPCSD as an alternative	Recreation impacts are addressed in **Section 3.13**, Recreation.	
	4/2/2013	LO02	Local Organization	Utilities	analyze water supply and water treatment issues	Water supply impacts are addressed in **Section 3.12**, Public Services and Utilities (Impact PSU-5)	
	4/2/2013	LO02	Local Organization	Utilities	wastewater treatment issues	Impacts related to wastewater treatment are addressed in **Section 3.12**, Public Services and Utilities (Impact PSU-2, PSU-3, and PSU-7)	

Party Name (Last name, First name; Agency or Organization name)	Date Received	Party Type/ Letter Number/ Comment Number	Federal, State, Local, Organization, Form, Individual	Comment Topic	Refined Topic	Section	Mitigation (if applicable)
	4/2/2013	LO02	Local Organization	Agricultural	address ag impacts	Impacts related to agricultural lands are addressed in **Section 3.9**, Land Use and Agriculture (Impacts LU-4, LU-5 and LU-8)	
	4/2/2013	LO02	Local Organization	Population/Housing/Growth	identify income category housing that will be provided and how that fits into the County's RHNa target	Identification and analysis of income category housing of the propoesd project is not required under CEQA. Regional Housing Needs Allocation is discussed in **Section 3.11**, Population and Housing.	
Cal Fire	2/25/2013	PA01	State	Fire Safety	ingress and egress requirements, road width requirements	LRVSP will meet these requirements. See **Section 4** of the Specific Plan.	
Caltrans	3/27/2013	PA02	State	Transportation	Caltrans anticipates impacts to Hwy 50 - should conduct Traffic Impact Study	Traffic Impact Study was conducted and result, including impacts and mitigation measures are addressed in **Section 3.14**, Traffic and Circulation.	
	3/27/2013	PA02	State	Transportation	address cumulative traffic impacts	Comment noted. Cumulative impacts are addressed in **Chapter 5**, Other CEQA Considerations.	
	3/27/2013	PA02	State	Transportation	would like county to address long-range plan for local employment and parallel facilities to Hwy 50	Comment noted.	
	3/27/2013	PA02	State	WQ/Hydro	specific hydro study suggetsions including a Master Drainage Plan	Impacts related to hydrology are discussed in **Section 3.8**, Hydrology, Water Quality and Water Resources. Drainage is to the south and will not affect Caltrans facilities.	
	3/27/2013	PA02	State	Transportation	anything affecting State highways should include transportation mgmt. plan	Comment noted	
	3/27/2013	PA02	State	Transportation	project may require a permit if oversized vehicles are used or oversized loads on State highways	Comment noted	
	3/27/2013	PA02	State	Transportation	an encroachment permit may be needed	Comment noted	
US Army Corps of Engineers	3/26/2013	PA03	Federal	WQ/Hydro	a 404 permit may be required	Comment noted. **Section 2.4**, Required Approvals, notes a Section 404 permit may be required	
	3/26/2013	PA03	Federal	Biological Resources	a wetland delineation may need to be prepared	Comment noted. A wetland delineation has been prepared and submitted to the USACE.	

Party Name (Last name, First name; Agency or Organization name)	Date Received	Party Type/ Letter Number/ Comment Number	Federal, State, Local, Organization, Form, Individual	Comment Topic	Refined Topic	Section	Mitigation (if applicable)
	3/26/2013	PA03	Federal	Alternatives	alts that do not impact wetlands should be considered	See Chapter 4, Alternatives for a discussion of the Wetlands-Avoidance Alternative	
Form Letter A				Design	requests a 500-ft. buffer @ Cameron Estates boudnary	See **Chapter 4**, Alternatives.	
				Quality of Life	protect rural quality of life	Not a CEQA issue	
				Biological Resources	wildlife impacts/migration corridor;suggests three-rail fencing so as not to impede wildlife access	Impacts on wildlife, their habitat, and migration corridors are addressed in **Section 3.3**, Biological Resource.	
				Visual/Aesthetics	suggests three-rail fencing for aesthetic reasons as well	Comment noted.	
				Biological Resources	wants oracle oaks protected	Oracle oaks are not a protected species. Impacts to oak woodlands are addressed in **Section 3.3**, Biological Resources (Impact BIO-1)	Mitigation Measures BIO-1a, BIO-1b, BIO-1c, BIO-1d, and BIO-1e.
				Visual/Aesthetics	concerned about light pollution from street lighting	Impacts related to light and glare are addressed in **Section 3.1**, Aesthetics (Impact AES-5)	Mitigation Measure AES-2
				AQ/Transportation	concerned about increased traffic and increased pollution	Traffic impacts are addressed in **Section 3.14**, Traffic and Circulation (Impacts TRA-1 and TRA-2). Air quality impacts are addressed in **Section 3.2** (Impact AQ-1 and AQ-2).	Mitigation Measure AQ-2a and AQ-2b AQ-2c
				Design/Zoning	suggests that some of these impacts could be mitigated by establishing 5-acre parcels against the 500-ft buffer - providing a transition from lower to higher density	See **Chapter 4**, Alternatives.	
Form Letter B				Design	PUD/PD made up of city-sized lots is objectionable	Comment noted. Comment on design/merits, not a CEQA issue.	

Party Name (Last name, First name; Agency or Organization name)	**Date Received**	**Party Type/ Letter Number/ Comment Number**	**Federal, State, Local, Organization, Form, Individual**	**Comment Topic**	**Refined Topic**	**Section**	**Mitigation (if applicable)**
				General Plan	project is inconsistent	The proposed project would include an ammendment to the General Plan as discussed in **Section 3.9**, Land Use Planning and Agricultural Resources (Impact LU-2)	
				Zoning	REE residents moved here because of current zoning	Comment noted.	
				Design	lots should be 5-ac. Minimum	See **Chapter 4**, Alternatives for analysis of alternatives.	
				General	requests a site visit to better explain/show their position	Comment noted.	

Appendix B

El Dorado County General Plan Policies and Lime Rock Valley Specific Plan Policies

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Policy Numbers	Policy	Project Consistency
AGRICULTURE AND FORESTRY ELEMENT		
Goal 8.1: Agricultural Land Conservation		
Objective 8.1.3: Protection of Agricultural Lands		
8.1.3.1	Agriculturally zoned lands including Williamson Act Contract properties shall be buffered from increases in density on adjacent lands by requiring a minimum of 10 acres for any parcel created adjacent to such lands. Parcels used to buffer agriculturally zoned lands should have a similar width to length ratio of other parcels when feasible.	The LRVSP has been amended so that any newly created parcel in an area zoned R5A-PD that is adjacent to agriculturally zoned lands shall be a minimum 10 acres in size and will have a similar width to length ration of the adjacent parcel, when feasible.
LAND USE ELEMENT		
Goal 2.1: Land Use		
Objective 2.1.1: Community Regions		
2.1.1.1	The Communities within the County are identified as: Camino/Pollock Pines, El Dorado Hills, Cameron Park, El Dorado, Diamond Springs, Shingle Springs, and the City of Placerville and immediate surroundings.	The project site is proposed to be included in the El Dorado Hills Community Region.
2.1.1.2	Establish Community Regions to define those areas which are appropriate for the highest intensity of self-sustaining compact urban-type development or suburban type development within the County based on the municipal spheres of influence, availability of infrastructure, public services, major transportation corridors and travel patterns, the location of major topographic patterns and features, and the ability to provide and maintain appropriate transitions at Community Region boundaries. These boundaries shall be shown on the General Plan land use map.	The project site is proposed to be included in the El Dorado Hills Community Region. Availability of infrastructure and public services is addressed in Section 3.12, and the availability of access to major transportation corridors is addressed in Section 3.14.
2.1.1.3	Mixed use developments which combine commercial and residential uses in a single project are permissible and encouraged within Community Regions. Within Community Regions, the mixed-uses may occur vertically and/or horizontally. In mixed use projects, the maximum residential density shall be 16 dwelling units per acre within Community Regions. The residential component of a mixed-use project may include a full range of single and/or multi-family design concepts. The maximum residential density of 20 dwelling units per acre may only be achieved where adequate infrastructure, such as water, sewer and roadway are available or can be provided concurrent with development.	The proposed project would consist of up to 800 single-family residential units on 358 acres, with a mix of low and medium densities, an 8-acre neighborhood park with recreational amenities, and about 335 acres of public and private open space. The project is not a mixed-use project.
2.1.1.4	Community Region boundaries shall generally be coterminous with the Sphere of Influence boundaries of incorporated cities. Community Region boundaries may extend beyond a city's sphere of influence to recognize existing and anticipated development patterns consistent with that of Community Regions. However, cities should be encouraged to expand their sphere of influence to be contiguous with Community Region boundaries.	The project site is not located near a city, however, the El Dorado Hills Community Region is an existing Community Region.
2.1.1.6	The boundaries of existing Community Regions may be modified through the General Plan amendment process.	A general plan amendment to modify the boundaries of the El Dorado Hills Community Region is a part of the proposed project.
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 proposed project includes a Specific Plan with a plan for provision of infrastructure and public services and preparation of a Wildfire Safety Plan.

	Policy Numbers	Policy	Project Consistency
Objective 2.2.5: General Policy Section			
	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 is similar in land uses and densities to the adjacent areas. Objective 3.3 of the Specific Plan calls for the project to integrate and organize land use types and patterns that are compatible with existing uses. For these reasons, the proposed Specific Plan is consistent with this policy.
Goal 2.3: Natural Landscape Features			
Objective 2.3.2: Hillsides and Ridgelines			
	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 proposed Specific Plan will be consistent with the General Plan in that building sites on parcels of greater than 30% slope may be limited to areas of the lot less than 30% natural slope.
Goal 2.5: Community Identity			
Objective 2.5.1: Physical and Visual Separation			
	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 Specific Plan includes open space, parks, natural landscape features and landscaped roadway buffers. The proposed Specific Plan is consistent with this policy.
	2.5.1.2	Greenbelts or other means of community separation shall be included within a specific plan and may include any of the following: preserved open space, parks, agricultural districts, wildlife habitat, rare plant preserves, riparian corridors, and designated Natural Resource areas.	The proposed project includes green belt buffers in the form of open space areas and 5-acre minimum lots between uses and around the west and south edges of the project site. The proposed Specific Plan is consistent with this policy.
Goal 2.6: Corridor Viewsheds			
Objective 2.6.1: Scenic Corridor Identification			
	2.6.1.5	All development on ridgelines shall be reviewed by the County for potential impacts on visual resources. Visual impacts will be assessed and may require methods such as setbacks, screening, low-glare or directed lighting, automatic light shutoffs, and external color schemes that blend with the surroundings in order to avoid visual breaks to the skyline.	Consistency with this policy is addressed in Section 3.1, *Aesthetics*, where a significant and unavoidable impact on scenic vistas is identified. Design review is required by the Specific Plan. Visual impacts have been assessed and a significant and unavoidable impact was identified, though applicable to very few viewers on adjacent properties with similar developments. Methods such as setbacks, screening, directed lighting and color schemes will be required to minimize impacts to the extent feasible, consistent with this policy.
	2.6.1.6	A Scenic Corridor (-SC) Combining Zone District shall be applied to all lands within an identified scenic corridor. Community participation shall be encouraged in identifying those corridors and developing the regulations.	As discussed in Section 3.1, *Aesthetics*, as shown on Figure 3.1-1, a portion of US 50 passing near the project site is considered a scenic corridor by the County for its views of Marble Valley. However, as described in Section 3.1, *Aesthetics*, US 50 passes approximately 1.6 miles northwest of the project site, and there are no views of the project site from US 50 and trees and terrain prevent views of the project site from US 50, including from the County designated scenic portions of this route.

	Policy Numbers	Policy	Project Consistency
Goal 2.8: Lighting			
Objective 2.8.1: Lighting Standards			
	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.	Specific Plan policies call for limiting street and other public lighting and shielding fixtures consistent with this policy. Specific Plan policies 5.21 and 7.19 address street lighting and lighting in public/common areas. The proposed Specific Plan is consistent with these policies.
TRANSPORTATION & CIRCULATION ELEMENT			
Roads and Highways			
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.			
	TC-1r	The County shall accept classified roads, as defined on Figure TC-1, into the County-maintained road system when constructed to County standards.	The proposed Specific Plan includes a definition of which roads will be County maintained and which roads will be maintained by the Homeowners Association. The proposed Specific Plan is consistent with this policy.
	TC-1s	Notwithstanding Policy TC-1r, the County shall only add new local roads into the existing County-maintained road system if maintenance for these local roads will be provided for through a County Service Area Zone of Benefit or other similar means acceptable to the Board of Supervisors.	The proposed project includes a Specific Plan with a plan for provision of and funding for infrastructure and public services. The proposed Specific Plan is consistent with this policy.
Levels of Service and Concurrency			
Goal TC-X: To coordinate planning and implementation of roadway improvements with new development to maintain adequate levels of service on County roads.			
	TC-Xa	Except as otherwise provided, the following TC-Xa policies shall remain in effect indefinitely, unless amended by voters: 1. Traffic from residential development projects of five or more units or 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. 2. The County shall not add any additional segments of U.S. Highway 50, or any other highways and roads, to the County's list of roads from the original Table TC-2 of the 2004 General Plan that are allowed to operate at Level of Service F without first getting the voters' approval. 3. intentionally blank (Resolution 125-2019, August 6, 2019) 4. intentionally blank (Resolution 159-2017, October 24, 2017) 5. The County shall not create an Infrastructure Financing District unless allowed by a 2/3rds majority vote of the people within that district. 6. intentionally blank (Resolution 159-2017, October 24, 2017) 7. Before giving approval of any kind to a residential development project of five or more units or parcels of land, the County shall make a finding that the project complies with the policies above. If this finding cannot be made, then the County shall not approve the project in order to protect the public's health and safety as provided by state law to assure that safe and adequate roads and highways are in place as such development occurs.	An evaluation of project impacts on transportation is provided in Section 3.14, *Transportation and Circulation*. The proposed Specific Plan is consistent with this 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. 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.	An evaluation of project impacts on transportation is provided in Section 3.14, *Transportation and Circulation*. The proposed Specific Plan is consistent with this 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	Consistency with this policy is addressed in Section 3.14, *Transportation and Circulation*. The proposed Specific Plan is consistent with this policy.

	Policy Numbers	Policy	Project Consistency
		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.	
	TC-Xf	At the time of approval of a tentative map for a single family residential subdivision of five or more parcels that worsens (defined as a project that triggers Policy TC-Xe [A] or [B] or [C]) traffic on the County road system, the County shall do one of the following: (1) condition the project to construct all road improvements necessary to maintain or attain Level of Service standards detailed in this Transportation and Circulation Element based on existing traffic plus traffic generated from the development plus forecasted traffic growth at 10-years from project submittal; or (2) ensure the commencement of construction of the necessary road improvements are included in the County's 10-year CIP. For all other discretionary projects that worsen (defined as a project that triggers Policy TC-Xe [A] or [B] or [C]) traffic on the County road system, the County shall do one of the following: (1) condition the project to construct all road improvements necessary to maintain or attain Level of Service standards detailed in this Transportation and Circulation Element; or (2) ensure the construction of the necessary road improvements are included in the County's 20-year CIP.	Consistency with this policy is addressed in Section 3.14, *Transportation and Circulation.* The proposed Specific Plan is consistent with this 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. This policy shall remain in effect indefinitely unless amended by voters.	Consistency with this policy is addressed in Section 3.14, *Transportation and Circulation.* The proposed Specific Plan is consistent with this policy.
Transportation Systems Management Goal TC-3: To reduce travel demand on the County's road system and maximize the operating efficiency of transportation facilities, thereby reducing the quantity of motor vehicle emissions and the amount of investment required in new or expanded facilities.			
	TC-3c	The County shall encourage new development within Community Regions and Rural Centers to provide appropriate on-site facilities that encourage employees to use alternative transportation modes. The type of facilities may include bicycle parking, shower and locker facilities, and convenient access to transit, depending on the development size and location.	Specific Plan policies 4.1, 4.6, 4.7, and 6.2 accommodate and encourage the use of alternate forms of transportation, including public transit, walking, and bicycling. Consistency with these policies is addressed in Section 3.14, *Transportation and Circulation,* Impact TRA-1 and TRA-5. The proposed Specific Plan is consistent with this policy.
Non-motorized Transportation Goal TC-4: To provide a safe, continuous, and easily accessible non-motorized transportation system that facilitates the use of the viable alternative transportation modes.			
	TC-4h	Where hiking and equestrian trails abut public roads, they should be separated from the travel lanes whenever possible by curbs and barriers (such as fences or rails), landscape buffering, and spatial distance. Existing public corridors such as power transmission line easements, railroad rights-of-way, irrigation district easements, and roads should be put to multiple use for trails, where possible.	The proposed Specific Plan includes a comprehensive bikeway and trail system separated from roadways. Specific Plan policies 3.10, 4.7, 5.42, and 6.2 encourage and provide guidance for trail development in the plan area. The proposed Specific Plan is consistent with this policy.
	TC-4i	Within Community Regions and Rural Centers, all development shall include pedestrian/bike paths connecting to adjacent development and to schools, parks, commercial areas and other facilities where feasible. In Rural Regions, pedestrian/bike paths shall be considered as appropriate.	The proposed Specific Plan includes a comprehensive bikeway and trail system connecting the different land uses within the project site. Specific Plan policies 3.10, 4.7, 5.42, and 6.2 encourage and provide guidance for trail development in the plan area. The proposed Specific Plan is consistent with this policy.

	Policy Numbers	Policy	Project Consistency
Goal TC-5: To provide safe, continuous, and accessible sidewalks and pedestrian facilities as a viable alternative transportation mode.			
	TC-5a	Sidewalks and curbs shall be required throughout residential subdivisions, including land divisions created through the parcel map process, where any residential lot or parcel size is 10,000 square feet or less.	Consistent with this policy, sidewalks and/or Class I multi-use paths are required by the Specific Plan on the majority of Plan Area streets.
	TC-5c	Roads adjacent to schools or parks shall have curbs and sidewalks.	The proposed Specific Plan roadway sections adjacent to parks include sidewalks and curbs. The proposed Specific Plan is consistent with this policy.
HOUSING ELEMENT			
General Housing Policies Goal HO-1: To provide for housing that meets the needs of existing and future residents in all income categories.			
	HO-1.1	When adopting or updating programs, procedures, or Specific Plans or other planning documents, the County shall ensure that the goals, policies, and implementation programs are developed with the consideration of achieving and maintaining the County's regional housing allocation.	The proposed Specific Plan provides low and medium density housing which helps to meet County RHNA goals. The proposed Specific Plan is consistent with this policy.
	HO-1.24	The County shall encourage 2nd Dwelling Units to provide housing that is affordable to very low, low and moderate income households.	Second dwelling units are allowed in select land use categories in the proposed Specific Plan. The proposed Specific Plan is consistent with this policy.
Goal HO-5: To increase the efficiency of energy and water use in new and existing homes.			
	HO-5.1	The County shall require all new dwelling units to meet current state requirements for energy efficiency and shall encourage the retrofitting of existing units.	The Specific Plan includes policies related to energy efficiency (Specific Plan policies 7.10 through 7.21). The proposed Specific Plan is consistent with this policy.
PUBLIC SERVICES & UTILITIES ELEMENT			
Goal 5.1: Provision of Public Services			
Objective 5.1.2: Concurrency			
	5.1.2.1	Prior to the approval of any discretionary development, the approving authority shall make a determination of the adequacy of the public services and utilities to be impacted by that development. Where, according to the purveyor responsible for the service or utility as provided in Table 5-1, demand is determined to exceed capacity, the approval of the development shall be conditioned to require expansion of the impacted facility or service to be available concurrent with the demand, mitigated, or a finding made that a CIP project is funded and authorized which will increase service capacity.	The impact analyses in Section 3.12, *Public Services and Utilities,* presents information supporting the type of finding required by this policy. The proposed Specific Plan is consistent with this policy.
	5.1.2.2	Provision of public services to new discretionary development shall not result in a reduction of service below minimum established standards to current users, pursuant to Table 5-1.	The impact analyses in Section 3.12, *Public Services and Utilities,* presents information supporting the type of finding required by this policy. The proposed Specific Plan is consistent with this policy.

	Policy Numbers	Policy	Project Consistency
Goal 5.2: Water Supply			
Objective 5.2.1: County-wide Water Resources Program			
	5.2.1.2	An adequate quantity and quality of water for all uses, including fire protection, shall be provided for with discretionary development.	A Water Supply Assessment was prepared for the proposed Specific Plan. The conclusion of the Water Supply Assessment was that water would be available as required. More information is provided in Section 3.12, *Public Services and Utilities*, Impacts PSU-3 and PSU-4. The proposed Specific Plan is consistent with this policy.
	5.2.1.3	All medium-density residential, high-density residential, multifamily residential, commercial, industrial and research and development projects shall be required to connect to public water systems when located within Community Regions and to either a public water system or to an approved private water systems in Rural Centers.	The proposed project is proposed to be connected to a public water system and would be served by the El Dorado Irrigation District. The proposed Specific Plan is consistent with this policy.
	5.2.1.4	Rezoning and subdivision approvals in Community Regions or other areas dependent on public water supply shall be subject to the availability of a permanent and reliable water supply.	A Water Supply Assessment was prepared for the proposed Specific Plan. The conclusion of the Water Supply Assessment was that water would be available as required. More information is provided in Section 3.12, *Public Services and Utilities,* Impact PSU-4. The proposed Specific Plan is consistent with this policy.
	5.2.1.6	Priority shall be given to discretionary developments that are infill or where there is an efficient expansion of the water supply delivery system.	As described in detail in Section 3.12, *Public Services and Utilities,* the project site is located near areas currently served by a public water system, and the proposed project is proposed to be connected to a public water system. The proposed Specific Plan is consistent with this policy.
	5.2.1.9	In an area served by a public water purveyor or an approved private water system, the applicant for a tentative map or for a building permit on a parcel that has not previously complied with this requirement must provide a Water Supply Assessment that contains the information that would be required if a water supply assessment were prepared pursuant to Water Code section 10910. In order to approve the tentative map or building permit for which the assessment was prepared the County must (a) find that by the time the first grading or building permit is issued in connection with the approval, the water supply from existing water supply facilities will be adequate to meet the highest projected demand associated with the approval on the lands in question; and (b) require that before the first grading permit or building permit is issued in connection with the approval, the applicant will have received a sufficient water meters or a comparable supply guarantee to provide adequate water supply to meet the projected demand associated with the entire approval. A water supply is adequate if the total entitled water supplies available during normal, single, dry, and multiple dry years within a 20-year projection will meet the highest projected demand associated with the approval, in addition to existing and 20-year projected future uses within the area served by the water supplier, including but not limited to, fire protection, agricultural, and industrial uses, 95% of the time, with cutbacks calculated not to exceed 20% in the remaining 5% of the time.	A Water Supply Assessment was prepared for the proposed Specific Plan. The conclusion of the Water Supply Assessment was that water would be available as required. More information is provided in Section 3.12, *Public Services and Utilities*, Impact PSU-4. The proposed Specific Plan is consistent with this policy.
	5.2.1.11	The County shall direct new development to areas where public water service already exists. In Community Regions, all new development shall connect to a public water system. In Rural Centers, all new development shall connect either to a public water system or to an approved private water system.	The proposed project is proposed to be connected to a public water system. The proposed Specific Plan is consistent with this policy.
	5.2.1.12	The County shall work with the El Dorado Irrigation District (EID) to support the continued and expanded use of recycled water, including wet-season use and storage, in new subdivisions served by the Deer Creek and El Dorado Hills Wastewater Treatment Plants. To avoid the construction impacts of installing recycled water facilities, the County shall encourage the construction of distribution lines at the same time as other utilities are installed. Facilities to consider are recycled water lines for residential landscaping, parks, schools, and other irrigation needs, and if feasible, wet-irrigation-season storage facilities.	The project may use recycled water. Consistency with this policy is addressed in Section 3.12, *Public Services and Utilities,* Impact PSU-4. The proposed Specific Plan is consistent with this policy.

	Policy Numbers	Policy	Project Consistency
Goal 5.3: Wastewater Collection and Treatment			
Objective 5.3.1: Wastewater Capacity			
	5.3.1.7	In Community Regions, all new development shall connect to public wastewater treatment facilities. In Community Regions where public wastewater collection facilities do not exist project applicants must demonstrate that the proposed wastewater disposal system can accommodate the highest possible demand of the project.	The project as proposed includes an extension of the El Dorado Hills Community Region and the plan area would be served by a public wastewater system. The proposed Specific Plan is consistent with this policy.
Goal 5.4: Storm Drainage			
Objective 5.4.1: Drainage and Flood Management Program			
	5.4.1.1	Require storm drainage systems for discretionary development that protect public health and safety, preserve natural resources, prevent erosion of adjacent and downstream lands, prevent the increase in potential for flood hazard or damage on either adjacent, upstream or downstream properties, minimize impacts to existing facilities, meet the National Pollution Discharge Elimination System (NPDES) requirements, and preserve natural resources such as wetlands and riparian areas.	The Specific Plan includes Policies 8.4 through 8.9 describe the stormwater quality protection requirements for the proposed project. As described in the LRVSP, the proposed stormwater system would consist of a balanced centralized and low impact development (LID) stormwater management system to capture and treat stormwater runoff. More information is provided in Section 3.8, *Hydrology, Water Quality, and Water Resources*. The proposed Specific Plan is consistent with this policy.
	5.4.1.2	Discretionary development shall protect natural drainage patterns, minimize erosion, and ensure existing facilities are not adversely impacted while retaining the aesthetic qualities of the drainage way.	The Specific Plan includes policies specifically directed to protecting natural drainage courses and riparian zones, including Policy 5.4, which requires that natural drainage courses shall be avoided and incorporated into the overall storm drainage system design, except where road, trail, or utility crossings would preclude this. More information is provided in Sections 3.3, *Biological Resources*, and 3.8, *Hydrology, Water Quality, and Water Resources*. The proposed Specific Plan is consistent with this policy.
Goal 5.5 Solid Waste			
Objective 5.5.2: Recycling, Transformation, and Disposal Facilities			
	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.	As described in detail in Section 3.12, *Public Services and Utilities*, Impact PSU-6, capacity exists to serve the proposed project. The proposed Specific Plan is consistent with this policy.
Goal 5.6: Gas, Electric, and Other Utility Services			
Objective 5.6.1: Provide Utility Services			
	5.6.1.1	Promote and coordinate efforts with utilities for the undergrounding of existing and new utility distribution lines in accordance with current rules and regulations of the California Public Utility Commission and existing overhead power lines within scenic areas and existing Community Regions and Rural Centers.	The proposed Specific Plan requires that all utility distribution lines be located underground and therefore, is consistent with this policy.
	5.6.1.2	Reserve adequate rights-of-way to facilitate expansion of services in a timely manner.	Irrevocable offers of dedication of right-of-way will be offered to the County after the proposed Specific Plan is approved. The Specific Plan is consistent with this policy.
Objective 5.6.2: Encourage Energy-Efficient Development			
	5.6.2.1	Require energy conserving landscaping plans for all projects requiring design review or other discretionary approval.	To save energy and water, the proposed Specific Plan requires the use of drought tolerant landscaping (Specific

	Policy Numbers	Policy	Project Consistency
			Plan Policy 7.40). The Specific Plan is consistent with this 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.	The proposed Specific Plan encourages passive natural summer cooling and winter solar access, or both, when feasible.
Goal 5.7: Emergency Services			
Objective 5.7.1: Fire Protection (Community Regions)			
	5.7.1.1	Prior to approval of new development, the applicant will be required to demonstrate that adequate emergency water supply, storage, conveyance facilities, and access for fire protection either are or will be provided concurrent with development.	The impact analyses in Section 3.12, *Public Services and Utilities,* presents information supporting the type of finding required by this policy. The proposed Specific Plan is consistent with this policy.
Objective 5.7.3: Law Enforcement			
	5.7.3.1	Prior to approval of new development, the Sheriff's Department shall be requested to review all applications to determine the ability of the department to provide protection services. The ability to provide protection to existing development shall not be reduced below acceptable levels as a consequence of new development. Recommendations such as the need for additional equipment, facilities, and adequate access may be incorporated as conditions of approval.	Section 3.12, *Public Services and Utilities* presents information on the Sheriff's department review of the ability to provide protection services. Impact PSU-1 notes that the project will not reduce protection levels. The proposed Specific Plan is consistent with this policy.
Objective 5.7.4: Medical Emergency Services			
	5.7.4.1	Prior to approval of new development, the applicant shall be required to demonstrate that adequate medical emergency services are available and that adequate emergency vehicle access will be provided concurrent with development.	Section 3.12, *Public Services and Utilities,* Impact PSU-1, presents information regarding the adequacy of emergency services. Specific Plan policies 4.2, 4.3, 4.4, 5.20, and 5.42 address emergency vehicle access. The proposed Specific Plan is consistent with this policy.
	5.7.4.2	Prior to approval of new development, the Emergency Medical Services Agency shall be requested to review all applications to determine the ability of the department to provide protection services. The ability to provide protection to existing development shall not be reduced below acceptable levels as a consequence of new development. Recommendations such as the need for additional equipment, facilities, and adequate access may be incorporated as conditions of approval.	Section 3.12, *Public Services and Utilities,* Impact PSU-1, presents information regarding the adequacy of emergency services. Objective 6.3 ensures that that adequate public services, such as law enforcement and fire protection exist to serve the plan area. The proposed Specific Plan is consistent with this policy.
Goal 5.8: School Services			
Objective 5.8.1: School Capacity			
	5.8.1.1	School districts affected by a proposed development shall be relied on to evaluate the development's adverse impacts on school facilities or the demand therefor. No development that will result in such impacts shall be approved unless: 1. To the extent allowed by State law, the applicant and the appropriate school district(s) have entered into a written agreement regarding the mitigation of impacts to school facilities; or 2. The impacts to school facilities resulting from the development are mitigated, through conditions of approval, to the greatest extent allowed by State law.	The impact analyses in Section 3.12, *Public Services and Utilities,* Impact PSU-1, presents information supporting the type of finding required by this policy. The proposed Specific Plan is consistent with this policy.

	Policy Numbers	Policy	Project Consistency
PUBLIC HEALTH, SAFETY & NOISE ELEMENT			
Goal 6.2: Fire Hazards			
Objective 6.2.2: Limitations to Development			
	6.2.2.1	Fire Hazard Severity Zone Maps shall be consulted in the review of all projects so that standards and mitigation measures appropriate to each hazard classification can be applied. Land use densities and intensities shall be determined by mitigation measures in areas designated as high or very high fire hazard.	The project site is located within designated high and very high fire hazard severity zones. Specific Plan policies 5.20-2, 5.47, and 6.18 address wildfire hazards. More information is provided in Section 3.7, *Hazards and Hazardous Materials*, Impact HAZ-8.
	6.2.2.2	The County shall preclude development in areas of high and very high wildland fire hazard or in areas identified as wildland-urban interface (WUI) communities within the vicinity of Federal lands that are a high risk for wildfire, as listed in the Federal Register Executive Order 13728 of May 18, 2016, unless such development can be adequately protected from wildland fire hazard, as demonstrated in a WUI Fire Safe Plan prepared by a qualified professional as approved by the El Dorado County Fire Prevention Officers Association. The WUI Fire Safe Plan shall be approved by the local Fire Protection District having jurisdiction and/or California Department of Forestry and Fire Protection. (Resolution 124-2019, August 6, 2019)	The project site is located within designated high and very high fire hazard severity zones. Specific Plan policy 5.47 requires preparation of a Wildfire Safety Plan to be reviewed and approved by CAL FIRE. More information is provided in Section 3.7, *Hazards and Hazardous Materials*.
Objective 6.2.3: Adequate Fire Protection			
	6.2.3.1	As a requirement for approving new development, the County must find, based on information provided by the applicant and the responsible fire protection district that, concurrent with development, adequate emergency water flow, fire access, and firefighting personnel and equipment will be available in accordance with applicable State and local fire district standards.	The impact analyses in Section 3.12, *Public Services and Utilities,* Impact PSU-1 and Section 3.7, *Hazards and Hazardous Materials*, HAZ-8, present information supporting the type of finding required by this policy. The proposed Specific Plan is consistent with this policy.
	6.2.3.2	As a requirement of new development, the applicant must demonstrate that adequate access exists, or can be provided to ensure that emergency vehicles can access the site and private vehicles can evacuate the area.	The proposed Specific Plan is consistent with this policy; a discussion is provided in Section 3.7, *Hazards and Hazardous Materials,* impact HAZ-7. The proposed Specific Plan circulation system provides adequate access for emergency vehicles
	6.2.3.4	All new development and public works projects shall be consistent with applicable State Wildland Fire Standards and other relevant State and federal fire requirements.	The proposed Specific Plan is consistent with this policy; a discussion is provided in Section 3.7, *Hazards and Hazardous Materials*, Impact HAZ-8.
Objective 6.2.4: Area-wide Fuel Management Program			
	6.2.4.1	Discretionary development within high and very high fire hazard areas shall be conditioned to designate fuel break zones that comply with fire safe requirements to benefit the new and, where possible, existing development.	The proposed Specific Plan is consistent with this policy; a discussion is provided in Section 3.7, *Hazards and Hazardous Materials*, Impact HAZ-8.
	6.2.4.2	The County shall cooperate with the California Department of Forestry and Fire Protection and local fire protection districts to identify opportunities for fuel breaks in zones of high and very high fire hazard either prior to or as a component of project review.	The proposed Specific Plan is consistent with this policy; a discussion is provided in Section 3.7, *Hazards and Hazardous Materials*, Impact HAZ-8.

	Policy Numbers	Policy	Project Consistency
Goal 6.3: Geologic and Seismic Hazards			
Objective 6.3.1: Building and Site Standards			
	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.	Specific Plan policy 5.1 requires that construction activities within an Asbestos Review Area adhere to El Dorado County AQMD Rule 223-2 – Fugitive Dust Asbestos Hazard Mitigation and Asbestos Hazard Mitigation and require preparation and approval of an Asbestos Dust Mitigation Plan prior to ground disturbing activities. Consistency with this policy is addressed in Section 3.2, *Air Quality*, Impact AQ-3b and mitigation measure AQ-3a, and Section 3.7, *Hazards and Hazardous Materials*, Impacts HAZ-2 and HAZ-9. The proposed Specific Plan is consistent with this policy.
Objective 6.3.2: County-wide Seismic Hazards			
	6.3.2.5	Applications for development of habitable structures shall be reviewed for potential hazards associated with steep or unstable slopes, areas susceptible to high erosion, and avalanche risk. Geotechnical studies shall be required when development may be subject to geological hazards. If hazards are identified, applicants shall be required to mitigate or avoid identified hazards as a condition of approval. If no mitigation is feasible, the project will not be approved.	A discussion is provided in Section 3.5, *Geology, Soils, Minerals, and Paleontological Resources*, Impacts GEO-3, GEO-4, and GEO-5. Implementation of Mitigation Measures GE0-3a, GEO-3b, GEO-3c, and GEO-4 will ensure that the proposed Specific Plan is consistent with this policy.
Goal 6.4: Flood Hazards			
Objective 6.4.1: Development Regulations			
	6.4.1.3	No new critical or high occupancy structures (e.g., schools, hospitals) shall be located in the 100-year floodplain of any river, stream, or other body of water.	No critical or high occupancy structures in the proposed Specific Plan area are proposed for areas within the 100-year flood plain. The proposed Specific Plan is consistent with this policy.
	6.4.1.4	Creation of new parcels which lie entirely within the 100-year floodplain as identified on the most current version of the flood insurance rate maps provided by FEMA or dam failure inundation areas as delineated in dam failure emergency response plans maintained by the County shall be prohibited.	The proposed Specific Plan is consistent with this policy; a discussion of floodplains and dam failure can be found in Section 3.8, Hydrology, *Water Quality, and Water Resources,* Impacts WQ-3iv and WQ-6.
	6.4.1.5	New parcels which are partially within the 100-year floodplain or dam failure inundation areas as delineated in dam failure emergency response plans maintained by the County must have sufficient land available outside the FEMA or County designated 100-year floodplain or the dam inundation areas for construction of dwelling units, accessory structures, and septic systems. Discretionary applications shall be required to determine the location of the designated 100-year floodplain and identified dam failure inundation areas on the subject property.	The proposed Specific Plan is consistent with this policy; a discussion is provided in Section 3.8, Hydrology, *Water Quality, and Water Resources,* Impacts WQ-3iv and WQ-6.
Objective 6.4.2: Dam Failure Inundation			
	6.4.2.1	Apply a zoning overlay for areas located within dam failure inundation zones as identified by the State Department of Water Resources Division of Safety of Dams.	As discussed in Section 3.8, *Hydrology, Water Quality, and Water Resources*, Deer Creek within the project area may be inundated in the event of failure of the dam at Cameron Park Lake. However, this reach is within an area that would remain as open space under the proposed project. Therefore, the Specific Plan is consistent with this policy.
Goal 6.5: Acceptable Noise Levels			
Objective 6.5.1: Protection of Noise-Sensitive Development			

	Policy Numbers	Policy	Project Consistency
	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 or the performance standards of Table 6-2, an acoustical analysis shall be required as part of the environmental review process so that noise mitigation may be included in the project design.	Noise mitigation design is addressed in Section 3.10, *Noise*, Impacts NOI-1a and NOI-1b. Implementation of mitigation measures NOI-1a and NOI-1b will ensure that the proposed Specific Plan is consistent with this policy.
	6.5.1.3	Where noise mitigation measures are required to achieve the standards of Tables 6-1 and 6-2, the emphasis of such measures shall be placed upon site planning and project design. The use of noise barriers shall be considered a means of achieving the noise standards only after all other practical design-related noise mitigation measures have been integrated into the project and the noise barriers are not incompatible with the surroundings.	Noise mitigation measures identified in Section 3.10, *Noise* include construction of solid noise barriers and/or landscaped earthen berms between noise sources and receivers where setbacks are not adequate with respect to reducing noise to acceptable levels. Implementation of mitigation measures NOI-1a and NOI-1b will ensure that the proposed Specific Plan is consistent with this policy.
	6.5.1.5	Setbacks shall be the preferred method of noise abatement for residential projects located along U.S. Highway 50. Noise walls shall be discouraged within the foreground viewshed of U.S. Highway 50 and shall be discouraged in favor of less intrusive noise mitigation (e.g., landscaped berms, setbacks) along other high volume roadways.	The proposed Specific Plan proposes no residential uses along US 50.
	6.5.1.6	New noise-sensitive uses shall not be allowed where the noise level, due to non-transportation noise sources, will exceed the noise level standards of Table 6-2 unless effective noise mitigation measures have been incorporated into the development design to achieve those standards.	As discussed in Section 3.10, *Noise*, implementation of proposed mitigation measures will ensure that noise sensitive uses proposed as a part of the project would not be exposed to noise above the standards. The proposed Specific Plan is consistent with this policy.
	6.5.1.7	Noise created by new proposed non-transportation noise sources shall be mitigated so as not to exceed the noise level standards of Table 6-2 for noise-sensitive uses.	Non-transportation noise source mitigation is addressed in Section 3.10, *Noise*, Impact NOI-1c. Implementation of mitigation measures NOI-1a, NOI-1b and NOI-1c will ensure that the proposed Specific Plan is consistent with this 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.	Project design noise mitigation measures are addressed in Section 3.10, *Noise,* Impact NOI-1b. Implementation of mitigation measure NOI-1b will ensure that the proposed Specific Plan is consistent with this 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 the levels specified in Table 6-1 at existing noise-sensitive land uses.	New transportation noise sources are addressed in Section 3.10, *Noise,* Impact NOI-1b. Implementation of mitigation measure NOI-1b will ensure that the proposed Specific Plan is consistent with this 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 Ldn at the outdoor activity areas of residential uses, an increase of more than 5 dBA Ldn caused 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 Ldn at the outdoor activity areas of residential uses, an increase of more than 3 dBA Ldn caused by a new transportation noise source will be considered significant; and C. Where existing or projected future traffic noise levels are greater than 65 dBA Ldn at the outdoor activity areas of residential uses, an increase of more than 1.5 dBA Ldn caused by a new transportation noise will be considered significant.	Mitigation determination is addressed in Section 3.10, *Noise,* Impact NOI-1b. Implementation of mitigation measure NOI-1b will ensure that the proposed Specific Plan is consistent with this 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, 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, increases in ambient noise levels caused by new non-transportation noise sources that exceed 3 dBA shall be considered significant.	Mitigation determination is addressed in Section 3.10, *Noise*, Impact NOI-1c. Implementation of mitigation measures NOI-1a, NOI-1b and NOI-1c will ensure that the proposed Specific Plan is consistent with this policy.

	Policy Numbers	Policy	Project Consistency
Goal 6.6: Management of Hazardous Materials			
Objective 6.6.1: Regulation of Hazardous Materials			
	6.6.1.2	Prior to the approval of any subdivision of land or issuing of a permit involving ground disturbance, a site investigation, performed by a Registered Environmental Assessor or other person experienced in identifying potential hazardous wastes, shall be submitted to the County for any subdivision or parcel that is located on a known or suspected contaminated site included in a list on file with the Environmental Management Department as provided by the State of California and federal agencies. If contamination is found to exist by the site investigations, it shall be corrected and remediated in compliance with applicable laws, regulations, and standards prior to the issuance of a new land use entitlement or building permit.	Site investigations of hazardous wastes is addressed in Section 3.7, *Hazards and Hazardous Materials*, Impact HAZ-2. Implementation of mitigation measure HAZ-2a will ensure that the proposed Specific Plan is consistent with this policy.
Goal 6.7: Air Quality Maintenance			
Objective 6.7.4: Project Design and Mixed Uses			
	6.7.4.2	Promote the development of new residential uses within walking or bicycling distance to the County's larger employment centers.	Bike paths are proposed in the Specific Plan to be provided. More discussion of this issue is provided in Section 3.14, *Transportation and Circulation*.
	6.7.4.4	All discretionary development applications shall be reviewed to determine the need for pedestrian/bike paths connecting to adjacent development and to common service facilities (e.g., clustered mail boxes, bus stops, etc.).	The proposed Specific Plan is consistent with this policy; more discussion of this issue is provided in Section 3.14, *Transportation and Circulation*, Impact TRA-1. Specific Plan policies 4.1, 4.6, 4.7, and 6.2 address use of pedestrian and bicycle paths and trails to connect common services and facilities.
	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.	The proposed Specific Plan is consistent with this policy; Specific Plan policies 7.45 and 7.46 regulate installation of wood-burning fireplaces.
Objective 6.7.6: Air Pollution-Sensitive Land Uses			
	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.	The proposed Specific Plan is consistent with this policy; a discussion is provided in Section 3.2, *Air Quality*, Impacts AQ-3a, AQ-3b, and AQ-3c, which concluded that impacts to sensitive receptors would be less than significant or less than significant after implementation of mitigation measures AQ-2a, AQ-2b, AQ-2c, AQ-2d, and AQ-3a.
	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.	A discussion is provided in Section 3.2, *Air Quality*. Impact AQ-3a concluded that impacts to sensitive receptors would be significant and unavoidable even with implementation of mitigation; and Impacts AQ-3b, AQ-3c, and AQ-5 would be less than significant after implementation of mitigation measures AQ-2a, AQ-2b, AQ-2c, and AQ-2d.
Objective 6.7.7: Construction Related, Short-Term Emissions			
	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.	The proposed Specific Plan is consistent with this policy. An evaluation of air emissions from the project is provided in Section 3.2, *Air Quality*. With implementation of Mitigation Measures AQ-2a, AQ-2b, and AQ-2c, the project would be consistent with EDCAQMD rules and regulations. The Specific Plan contains a number of policies related to reducing heat island effects, including use of cool pavement and retention of trees.

	Policy Numbers	Policy	Project Consistency
CONSERVATION & OPEN SPACE ELEMENT			
Goal 7.1: Soil Conservation			
Objective 7.1.1: Soils			
	7.1.1.1	Conserve and maintain important agricultural soils for existing and potential agricultural and forest uses by limiting non-agricultural/non-forestry development on those soils.	The proposed Specific Plan is consistent with this policy; as discussed in Section 3.9, *Land Use Planning and Agricultural* Resources, Impacts LU-4 and LU-5, the Specific Plan contains no important agricultural soils.
Objective 7.1.2: Erosion/Sedimentation			
	7.1.2.1	Development or disturbance of slopes over 30% shall be restricted. Standards for implementation of this policy, including but not limited to exceptions for access, reasonable use of the parcel, and agricultural uses shall be incorporated into the Zoning Ordinance.	The proposed Specific Plan is consistent with this policy; as discussed in Section 3.5, *Geology, Soils, Minerals, and Paleontological Resources*, non-development areas have been established where the slope is steeper than 30%.
	7.1.2.2	Discretionary and ministerial projects that require earthwork and grading, including cut and fill for roads, shall be required to minimize erosion and sedimentation, conform to natural contours, maintain natural drainage patterns, minimize impervious surfaces, and maximize the retention of natural vegetation. Specific standards for minimizing erosion and sedimentation shall be incorporated into the Zoning Ordinance.	The proposed Specific Plan is consistent with this policy; Specific Plan Policies 5.7 and 7.43 describe storm water best management practices and LID design strategies to prevent erosion and discussions of soil erosion and creation of a Stormwater Pollution Prevention Plan are provided in Section 3.5, *Geology, Soils, Minerals, and Paleontological Resources*, Impact GEO-2.
Goal 7.3: Water Quality and Quantity			
Objective 7.3.1: Water Resource Protection			
	7.3.1.1	Encourage the use of Best Management Practices, as identified by the Soil Conservation Service, in watershed lands as a means to prevent erosion, siltation, and flooding.	The Specific Plan is consistent with this policy; Specific Plan policies 5.5, 5.7 and 7.43 address means to prevent erosion and siltation. This is further discussed in Section 3.8, *Hydrology and Water Quality*.
Objective 7.3.2: Water Quality			
	7.3.2.1	Stream and lake embankments shall be protected from erosion, and streams and lakes shall be protected from excessive turbidity.	Impacts of erosion and water quality are described in Section 3.8, *Hydrology, Water Quality, and Water Resources*, Impacts WQ-3iii and WQ-6. The proposed Specific Plan is consistent with this policy with implementation of mitigation measures GEO-3d, BIO-1a, BIO-1b, BIO-1c, BIO-3a, BIO-3b, and BIO-4.
	7.3.2.2	Projects requiring a grading permit shall have an erosion control program approved, where necessary.	The Specific Plan is consistent with this policy; Specific Plan policies 5.5, 5.7 and 7.43 address means to prevent erosion and siltation. This is further discussed in Section 3.8, *Hydrology and Water Quality*. A Stormwater Pollution Prevention Plan will be prepared for the proposed Specific Plan.
	7.3.2.3	Where practical and when warranted by the size of the project, parking lot storm drainage shall include facilities to separate oils and salts from storm water in accordance with the recommendations of the Storm Water Quality Task Force's California Storm Water Best Management Practices Handbooks (1993).	The proposed Specific Plan is consistent with this policy; a discussion of a Stormwater Pollution Prevention Plan is provided in Section 3.5, *Geology, Soils, Minerals, and Paleontological Resources*.

	Policy Numbers	Policy	Project Consistency
Objective 7.3.3: Wetlands			
	7.3.3.1	For projects that would result in the discharge of material to or that may affect the function and value of river, stream, lake, pond, or wetland features, the application shall include a delineation of all such features. For wetlands, the delineation shall be conducted using the U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual.	Impacts to the function and value of waters are discussed in Section 3.3, *Biological Resources*, Impacts BIO-3 and BIO-4. The proposed Specific Plan is consistent with this policy with implementation of mitigation measures BIO-1a, BIO-1b, BIO-1c, BIO-3a, BIO-3b, and Bio-4.
	7.3.3.5	Rivers, streams, lakes and ponds, and wetlands shall be integrated into new development in such a way that they enhance the aesthetic and natural character of the site while disturbance to the resource is avoided or minimized and fragmentation is limited.	The proposed Specific Plan is consistent with this policy; preservation of wetlands is addressed in Specific Plan policy 5.9, preservation of Deer Creek is addressed in Specific Plan policy 5.14, and development integration is addressed in Specific Plan policies 5.11 and 5.12.
Objective 7.3.4: Drainage			
	7.3.4.1	Natural watercourses shall be integrated into new development in such a way that they enhance the aesthetic and natural character of the site without disturbance.	The proposed Specific Plan is consistent with this policy; preservation of Deer Creek is addressed in Specific Plan Policy 5.14 and development integration is addressed in Specific Plan policies 5.11 and 5.12.
	7.3.4.2	Modification of natural stream beds and flow shall be regulated to ensure that adequate mitigation measures are utilized.	The proposed Specific Plan is consistent with this policy; preservation of Deer Creek in its natural state is addressed in Specific Plan policy 5.14.
Objective 7.3.5: Water Conservation			
	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.	The proposed Specific Plan is consistent with this policy; Specific Plan policy 7.40 requires the use of drought tolerant and native plant species in a minimum of 75% of the Plan Area.
	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.	The proposed Specific Plan is consistent with this policy; Specific Plan policy 7.37 addresses creation of a backbone recycled water system for landscaping.
	7.3.5.5	Encourage water reuse programs to conserve raw or potable water supplies consistent with State Law.	The proposed Specific Plan is consistent with this policy; Specific Plan policy 7.37 addresses creation of a backbone recycled water system for parks, schools and landscaped corridors.
Goal 7.4: Wildlife and Vegetation Resources			
Objective 7.4.1: Rare, Threatened, and Endangered Species			
Objective 7.4.2: Identify and Protect Resources			
	7.4.2.3	Consistent with Policy 9.1.3.1 of the Parks and Recreation Element, low impact uses such as trails and linear parks may be provided within river and stream buffers if all applicable mitigation measures are incorporated into the design.	Relevant mitigation measures are presented in Section 3.3, Biological Resources Impact BIO-2 and Mitigation Measures BIO-1a, BIO-1b, and BIO-1c. Specific Plan policy 5.5 states: “Trails located within open space corridors and areas shall be designed to include soil erosion control measures to minimize sedimentation of nearby creeks and maintain the natural state of drainage courses” and Specific Plan policy 5.22 states: “Class I multi use paths and other paved and unpaved trails may be constructed near Deer Creek, including 100-year floodplain areas, in the OS1-PD and OS2-PD open space

	Policy Numbers	Policy	Project Consistency
			zones consistent with the Plan Area Open Space Management & Wildfire Protection Plan".
	7.4.2.4	Protect and preserve wildlife habitat corridors within public parks and natural resource protection areas to allow for wildlife use. Recreational uses within these areas shall be limited to those activities that do not require grading or vegetation removal.	Conservation of wildlife corridors is provided in Section 3.3, *Biological Resources*, Impact BIO-15. Implementation of mitigation measures BIO-1d, BIO-1e, and BIO-15 would ensure that the proposed Specific Plan would be consistent with this policy
	7.4.2.8	Conserve contiguous blocks of important habitat to offset the effects of increased habitat loss and fragmentation elsewhere in the County through a Biological Resource Mitigation Program (Program). The Program will result in the conservation of: 1. Habitats that support special status species; 2. Aquatic environments including streams, rivers, and lakes; 3. Wetland and riparian habitat; 4. Important habitat for migratory deer herds; and 5. Large expanses of native vegetation. A. Habitat Protection Strategy. The Program establishes mitigation ratios to offset impacts to special-status species habitat and special-status vegetation communities within the County. Special-status species include plants and animals in the following categories: • Species listed or proposed for listing as Threatened or Endangered under the federal Endangered Species Act (ESA) or the California Endangered Species Act (CESA); • Species considered as candidates for listing as Threatened or Endangered under ESA or CESA; • Wildlife species identified by California Department of Fish and Wildlife (CDFW) as Species of Special Concern; • Wildlife species identified by US Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) as Species of Concern; • Plants listed as Endangered or Rare under the California Native Plant Protection Act; • Animals fully protected under the California Fish and Game Code; • Plants that have a California Native Plant Society (CNPS) California Rare Plant Rank (CRPR) of 1A (plants presumed extirpated in California and either rare or extinct elsewhere), 1B (plants rare, threatened, or endangered in California and elsewhere), 2A (plants presumed extirpated in California, but more common elsewhere), or 2B (plants rare, threatened, or endangered in California, but more common elsewhere). The CNPS CRPRs are used by both CDFW and USFWS in their consideration of formal species protection under ESA or CESA. C. Biological Resources Assessment. A site-specific biological resources technical report will be required to determine the presence of special-status biological resources that may be affected by a proposed discretionary project. Vegetation communities and special-status plants shall be mapped and assessed in accordance with the CDFG 2009 Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities and subsequent updates, and the List of Vegetation Alliances and Associations (CDFG 2010) and subsequent updates. Any surveys conducted to evaluate potential presence of special-status wildlife species shall conform to practices recommended by CDFW and/or USFWS at the time of the surveys. The report will include an assessment of direct, indirect and cumulative impacts to biological resources, including vegetation communities, plant and wildlife species and wildlife movement. The report shall include recommendations for: • pre-construction surveys and avoidance/protection measures for nesting birds; • pre-construction surveys and avoidance/protection measures for roosting bats; • avoidance and minimization measures to reduce impacts related to entrapment, entanglement, injury, or poisoning of wildlife; and avoidance and minimization measures to reduce indirect impacts to wildlife in open space adjacent to a project site. The results of the biological resources technical report shall be used as the basis for establishing mitigation requirements in conformance with this policy and the Oak Resources Management Plan (ORMP, see General Plan Policy 7.4.4.4).	Conservation of wildlife corridors is provided in Section 3.3, *Biological Resources*, Impact BIO-15. Implementation of mitigation measures BIO-1d, BIO-1e, and BIO-15 would ensure that the proposed Specific Plan would be consistent with this policy. Discussions of specific species and habitat preservation strategies are provided in Section 3.3, *Biological Resources*, Impacts BIO-1, BIO-2, BIO-5, and BIO-6 through BIO-13. Implementation of mitigation measures identified in Section 3.3 would ensure that the proposed Specific Plan would be consistent with this policy.

	Policy Numbers	Policy	Project Consistency
Objective 7.4.4: Forest, Oak Woodland, and Tree Resources			
	7.4.4.2	Through the review of discretionary projects, the County, consistent with any limitations imposed by State law, shall encourage the protection, planting, restoration, and regeneration of native trees in new developments and within existing communities.	The proposed Specific Plan is consistent with this policy; Specific Plan Oak Woodland policies (Policies 5.30 through 5.35) require the conservation and protection in perpetuity of approximately 209 acres of existing oak woodlands and the preparation of an Oak Woodland Tree Preservation Plan.
	7.4.4.3	Utilize the clustering of development to retain the largest contiguous areas of forests and oak woodlands possible.	The proposed Specific Plan is consistent with this policy; the Specific Plan clusters development on the site and provides open space areas for the retention of oak woodlands.
	7.4.4.4	For all new development projects or actions that result in impacts to oak woodlands and/or individual native oak trees, including Heritage Trees, the County shall require mitigation as outlined in the El Dorado County Oak Resources Management Plan (ORMP). The ORMP functions as the oak resources component of the County's biological resources mitigation program, identified in Policy 7.4.2.8.	The proposed Specific Plan is consistent with this policy; Section 5 of the Specific Plan details how the plan is consistent with and complies with this policy. Project specific analysis is provided in Impact BIO-1 in Section 3.3, *Biological Resources*, of this EIR.
	7.4.4.5	Where existing individual or a group of oak trees are lost within a stand, a corridor of oak trees shall be retained that maintains continuity between all portions of the stand. The retained corridor shall have a tree density that is equal to the density of the stand.	The proposed Specific Plan is consistent with this policy; Section 5 of the Specific Plan details how the plan is consistent with and complies with this policy.
Goal 7.5: Cultural Resources			
Objective 7.5.1: Protection of Cultural Heritage			
	7.5.1.3	Cultural resource studies (historic, prehistoric, and paleontological resources) shall be conducted prior to approval of discretionary projects. Studies may include, but are not limited to, record searches through the North Central Information Center at California State University, Sacramento, the Museum of Paleontology, University of California, Berkeley, field surveys, subsurface testing, and/or salvage excavations. The avoidance and protection of sites shall be encouraged.	The proposed Specific Plan is consistent with this policy. Cultural resource studies have been prepared for the proposed Specific Plan. More information is provided in Section 3.4, *Cultural Resources*.
Objective 7.5.2: Visual Integrity			
	7.5.2.4	The County shall prohibit the modification of all National Register of Historic Places (NRHP)/California Register of Historical Resources (CRHR) listed properties that would alter their integrity, historic setting, and appearance to a degree that would preclude their continued listing on these registers. If avoidance of such modifications on privately owned listed properties is deemed infeasible, mitigation measures commensurate with NRHP/CRHR standards shall be formulated in cooperation with the property owner.	The proposed Specific Plan is consistent with this policy; Specific Plan policy 5.36 addresses development of avoidance and mitigation plans to prevent significant impacts to listed properties.
	7.5.2.5	In cases where the County permits the demolition or alteration of an historic building, such alteration or new construction (subsequent to demolition) shall be required to maintain the character of the historic building or replicate its historic features.	The proposed Specific Plan is consistent with this policy. It will preserve historic buildings located on the site where feasible, although some historic built environment elements will not be retained. More information is provided in Section 3.4, *Cultural Resources*.
Goal 7.6: Open Space Conservation			
Objective 7.6.1: Importance of Open Space			
	7.6.1.2	The County will provide for Open Space lands through: A. The designation of land as Open Space; B. The designation of land for low-intensity land uses as provided in the Rural Residential and Natural Resource land use designations; C. Local implementation of the Federal Emergency Management Agency's National Flood Insurance Program; D. Local implementation of the State Land Conservation Act Program; and E. Open space land set aside through Planned Developments (PDs).	The proposed Specific Plan is consistent with this policy. The Specific Plan includes designation of Open Space areas.

	Policy Numbers	Policy	Project Consistency
	7.6.1.4	The creation of new open space areas, including Ecological Preserves, common areas of new subdivisions, and recreational areas, shall include wildfire safety planning.	The proposed Specific Plan is consistent with this policy. It requires the preparation of an Open Space Management and Wildfire Protection Plan. More information is provided in Section 3.7, *Hazards and Hazardous Materials*, Impact HAZ-8.
PARKS & RECREATION ELEMENT			
Goal 9.1: Parks and Recreation Facilities			
Objective 9.1.1: Park Acquisition and Development			
	9.1.1.1	The County shall assist in the development of regional, community, and neighborhood parks, ensure a diverse range of recreational opportunities at a regional, community, and neighborhood level, and provide park design guidelines and development standards for park development. The following national standards shall be used as guidelines for the acquisition and development of park facilities: **Guidelines For Acquisition and Development of Park Facilities** Park Types — Developed Regional Parks — 1.5 ac/1,000 population Community Parks — 1.5 ac/1,000 population Neighborhood Parks — 2.0 ac/1,000 population *Specific Standards (Neighborhood and Community Parks)* Cameron Park Community Services District — 5.0 ac/1,000 population El Dorado Hills Community Services District — 5.0 ac/1,000 population Planned Communities — 5.0 ac/1,000 population The parkland dedication/in-lieu fees shall be directed towards the purchase and funding of neighborhood and community parks.	The proposed Specific Plan is consistent with this policy; a discussion of neighborhood and local parks that satisfy the dedication requirement of 5.0 acres park land per 1,000 population is provided in Section 3.13, *Recreation*, Impact REC-1.
	9.1.1.2	Neighborhood parks shall be primarily focused on serving walk-to or bike-to recreation needs. When possible, neighborhood parks should be adjacent to schools. Neighborhood parks are generally 2 to 10 acres in size and may include a playground, tot lot, turf areas, and picnic facilities.	Consistency with this policy is addressed in Section 3.13, *Recreation*. Implementation of Mitigation Measure REC-1 will ensure that the project is consistent with this policy.
	9.1.1.5	Parkland dedicated under the Quimby Act must be suitable for active recreation uses and: A. Shall have a maximum average slope of 10 percent; B. Shall have sufficient access for a community or neighborhood park; and C. Shall not contain significant constraints that would render the site unsuitable for development.	The proposed Specific Plan is consistent with this policy; park sites meet the criteria outlined in Policy 9.1.1.5. More discussion is provided in Section 3.13, *Recreation*.
Objective 9.1.2: County Trails			
	9.1.2.4	Evaluate every discretionary application as well as public facilities planning with regard to their ability to implement the *Hiking and Equestrian Trails Master Plan* and the *Bikeway Master Plan*.	The proposed Specific Plan is consistent with this policy: a discussion of proposed bicycle and pedestrian improvements is provided in Section 3.14, *Transportation and Circulation*, Impact TRA-1.
	9.1.2.8	Integrate and link, where possible, existing and proposed National, State, regional, County, city and local hiking, bicycle, and equestrian trails for public use.	The proposed Specific Plan is consistent with this policy; it provides an extensive trail system including Class I and II bikeways and paved and unpaved trails. More discussion of this issue is provided in Section 3.14, *Transportation and Circulation*.
Objective 9.1.3 Incorporation of Parks and Trails			
	9.1.3.1	Linear parks and trails may be incorporated along rivers, creeks, and streams wherever possible.	The proposed Specific Plan provides a trail system along Deer Creek.

	Policy Numbers	Policy	Project Consistency
Goal 9.2: Funding			
Objective 9.2.2: Quimby Act			
	9.2.2.2	New development projects creating community or neighborhood parks shall provide mechanisms (e.g., homeowners associations, or benefit assessment districts) for the ongoing development, operation, and maintenance needs of these facilities if annexation to an existing parks and recreation service district/provider is not possible.	The proposed Specific Plan is consistent with this policy; a Specific Plan homeowners association is proposed to be created.
Objective 9.2.3: Grants, Fees and Contributions			
	9.2.3.5	The County will encourage private sector development, operation, and maintenance of recreation facilities.	The proposed Specific Plan is consistent with this policy; the project includes development, operation, and maintenance of some recreation facilities.
ECONOMIC DEVELOPMENT ELEMENT			
Goal 10.1: Cooperation			
Objective 10.1.9: Jobs-Housing Relationship			
	10.1.9.2	Encourage specific plans and large planned developments in Community Regions and Rural Centers to include a broad mix of housing types and relate it to local wage structures to achieve balance with existing and forecasted resident household needs.	The proposed Specific Plan provides medium and low-density housing, as well as permitting for secondary units in all residential zones. As such, while high density housing is not proposed in this project, it is proposed in other areas of the county, and the project does provide a mix of housing types.
	10.1.9.3	The County shall actively promote job generating land uses while de-emphasizing residential development unless it is tied to a strategy that is necessary to attract job generating land uses.	The proposed Specific Plan is in close proximity to other job generating land uses in the region.
Goal 10.2: Public Services and Infrastructure			
Objective 10.2.1: Public and Civic Facilities Investment			
	10.2.1.4	Require new discretionary development to pay its fair share of the costs of all civic and public and community facilities it utilizes based upon the demand for these facilities which can be attributed to new development.	The proposed project is consistent with this policy; more discussion is provided in Section 3.12, *Public Services and Utilities*.
	10.2.1.5	A public facilities and services financing plan that assures that costs burdens of any civic, public, and community facilities, infrastructure, ongoing services, including operations and maintenance necessitated by a development proposal, as defined below, are adequately financed to assure no net cost burden to existing residents shall be submitted with the following development applications: A. Specific plans; and B. All residential, commercial, and industrial projects located within a Community Region or Rural Center which exceed the following thresholds: 1. Residential.....50 units 2. Commercial.....20 acres or 100,000 square feet 3. Industrial.....20 acres or 250,000 square feet	The proposed Specific Plan is consistent with this policy; the project includes a Specific Plan with a plan for provision of and funding for infrastructure and public services.

	Policy Numbers	Policy	Project Consistency
	10.2.1.6	Provision of new infrastructure and facilities shall be coordinated with existing infrastructure and facilities and shall maximize use of existing facilities capacity to the extent that any exists.	The proposed Specific Plan is consistent with this policy; the County has been in contact with and will coordinate with infrastructure providers (such as EID) to maximize use of existing capacity of facilities. Off-site infrastructure needs are addressed throughout the EIR.
Objective 10.2.2: Equitable Financing Methods for Public Improvements			
	10.2.2.2	Stress financing strategies that maximize the use of pay-as-you-go methods to gain the most benefit from available revenue without placing unreasonable burdens on new development. Program 10.2.2.2.1: When a project directly or indirectly impacts existing public services and/or infrastructure, it shall provide for and finance improvements consistent with the degree of impact to public services and/or infrastructure directly or indirectly attributed to the project. Cost to be borne by the project proponent shall be determined on the basis of the above described nexus and other pre-existing legally binding agreements such as development agreements.	The proposed Specific Plan is consistent with this policy; the project includes a Specific Plan with a plan for provision of and funding for infrastructure and public services.

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B

Site Design Standards

B.1 Overview

In addition to the General Development Standards outlined in Appendix A, the *Specific Plan* includes its own unique Site Design Standards that customize the requirements contained in the County of El Dorado Design and Improvement Standards Manual (including The Hillside Standards), the Grading Design Manual, the most recent MS4 Permit requirements, and the Land Development Manual (collectively referred to as the Manuals). The Site Design Standards contained herein are applicable for all *Specific Plan* discretionary development permits including, but not limited to, tentative maps, parcel maps, planned developments, conditional use permits, and design review. The Site Design Standards also apply to ministerial commercial and multi-unit residential projects. In any instance where the *Specific Plan* Site Design Standards conflict with the requirements of the Manuals, the *Specific Plan* provisions shall govern. Where the *Specific Plan* does not identify a particular standard, the Manuals shall govern. The County shall approve modifications to the standards contained in this section as a Design Exception (rather than a Design Waiver) upon the recommendation of a professional engineer.

B.2 Street Standards

The *Plan Area* streets shall comply with the street types identified in Section 4 (Circulation) and the criteria contained in this Appendix. Additionally, all roads must meet the current California Code of Regulations, Title 24, Part 9, Chapter 5, Section 503 and Title 14, California Code of Regulations, Division 1.5, Chapter 7, Subchapter 2, Article 2, Emergency Access, Section 1273.01 of the Fire Safe Regulations, as applicable.

B.2.1 Design Speeds

Applicants and the County shall use the following standards as guidelines, which are subject to change

B.2.2 Horizontal and Vertical Geometry

Applicants and the County shall use the following standards as guidelines, which are subject to change on a case-by-case basis where unique conditions dictate or revisions are warranted.

- The County shall allow roads on slopes in excess of 30 percent; however, consistent with the General Plan, the County shall prohibit development areas on slopes in excess of 30 percent. Areas of 30 percent and greater may occur within a lot or parcel, provided development footprints remain outside of such areas.
- Local streets may exceed 2,000 ADT upon the review and recommendation of a traffic engineer, without limitation to driveway placement or driveway ingress/egress. Applicants shall design local streets to minimize traffic speeds, utilizing traffic calming devices to be determined at the tentative map stage.
- Horizontal centerline curve radii:
  - Local Cul-de-Sac Streets: Not less than 75 feet
  - Local Streets: Not less than 100 feet
  - Collector Streets: Not less than 300 feet
  - Arterial Streets: Not less than 600 feet

- Street Intersection Offsets:
  - Local Streets: A minimum of 100 feet at street centerline
  - Collector Streets: A minimum of 200 feet at street centerline
  - Arterial Streets: A minimum of 500 feet
- Maximum Street Gradient:
  - Local Streets: 15% maximum
  - Collector Streets: 10% maximum
  - Arterial Streets: 8% maximum
- Curb and Gutter – Pavement Section
  - All local road curb and gutter radii shall be a minimum of 25' at face of curb
  - Project-specific geotechnical R-Value testing results shall determine minimum pavement sections on private local roads.
  - The County's Manuals shall determine minimum pavement sections on public arterial roads.

B.2.3 Dead End Streets

The County shall allow dead end streets not exceeding 2,640' with the following turnarounds:

Table B.1: Dead End Turnaround

Lot Size	Dead End Street Length	Minimum Road Width	Required Turnaround	Notes
0.00 - 0.99 ac.	0' - 800'	20' Minimum	80' Diameter (Figure 4.16)	Alt. Hammerhead or Y* (Figure 4.17)
1.00 - 4.99 ac.	801' – 1,320'	20' Minimum	80' Diameter (Figure 4.16)	Alt. Hammerhead or Y* (Figure 4.17)
5.00 - 19.99 ac.	1,321' – 2,640'	20' Minimum	80' Diameter (Figure 4.16)	Alt. Hammerhead or Y* (Figure 4.17) Intermediate turnaround required @ 1,320'

*As approved by the fire department

B.2.4 On-Street Parking

On-street parking is prohibited on Lime Rock Valley Road. On-street parking shall be allowed on local residential streets as described in Table B.2 (On-Street Parking). The CC&Rs of the Master Owners' Association shall establish restrictions for on-street parking to the satisfaction of the applicable Fire Department and shall enforce all parking restrictions.

Table B.2: On-Street Parking

Street Type or Name	Figure No.	No Parking Allowed	Parking Allowed One Side Street	Parking Allowed Both Sides of Street
Lime Rock Valley Road	4.2	✓		
44' Local Residential Street	4.3			✓
40' Local Residential Street	4.4			✓
44' Local Residential Street	4.5			✓
36' Local Residential Street	4.6			✓
37' Local Residential Street	4.7		✓	✓*
33' Local Residential Street	4.8		✓	✓*
37' Local Residential Street	4.9		✓	✓*
29' Local Residential Street	4.10		✓	✓*
33' LRS (Single Loaded)	4.11		✓	
37' LRS (Single Loaded)	4.12		✓	
29' LRS (Single Loaded)	4.13		✓	
29' Cul-de-Sac Street	4.14			✓
27' Residential Alley	4.15	✓		

* Parking allowed on both sides of street with approval of the responsible fire protection district.

As may be required, "no parking" signs may or may not be posted on both sides of Lime Rock Valley Road. Where on-street parking is prohibited, replacement parking shall be provided in parking bays positioned to take advantage of terrain features and minimize grading.

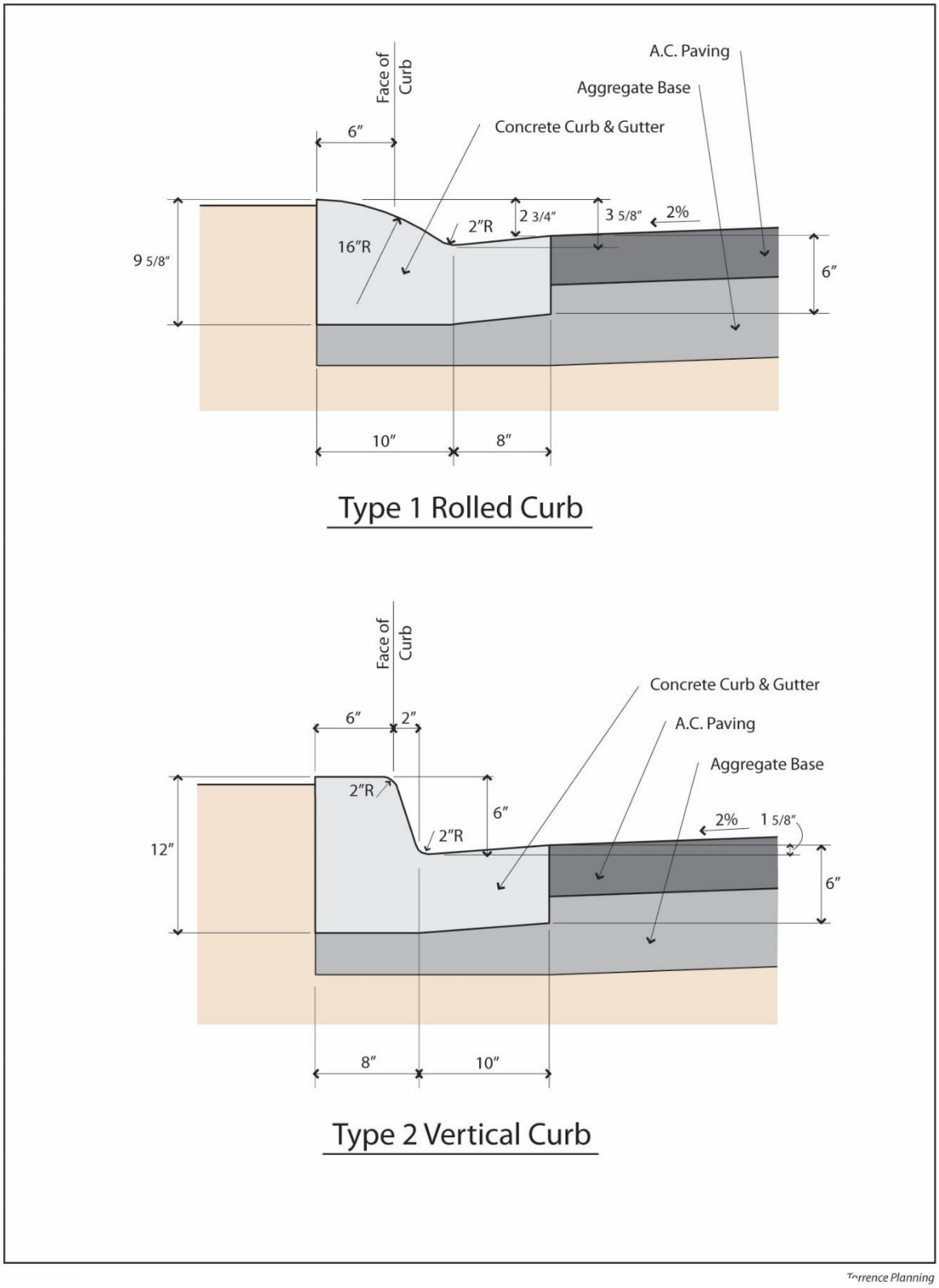
B.2.5 Curb and Gutter

Concrete curb and gutter is required on *Plan Area* streets, except for portions of the outside lanes of Lime Rock Valley Road as shown in the typical cross-sections in Chapter 4 (Circulation). Refer to Table B.3 (Curb and Gutter) for the type of curb and gutter required for each street type, and Figures B.2 (Type 1 Rolled Curb), B.3 (Type 2 Vertical Curb), B.4 (Roundabout/Roundabout Island Curb), and B.5 (Median Curb) for construction details.

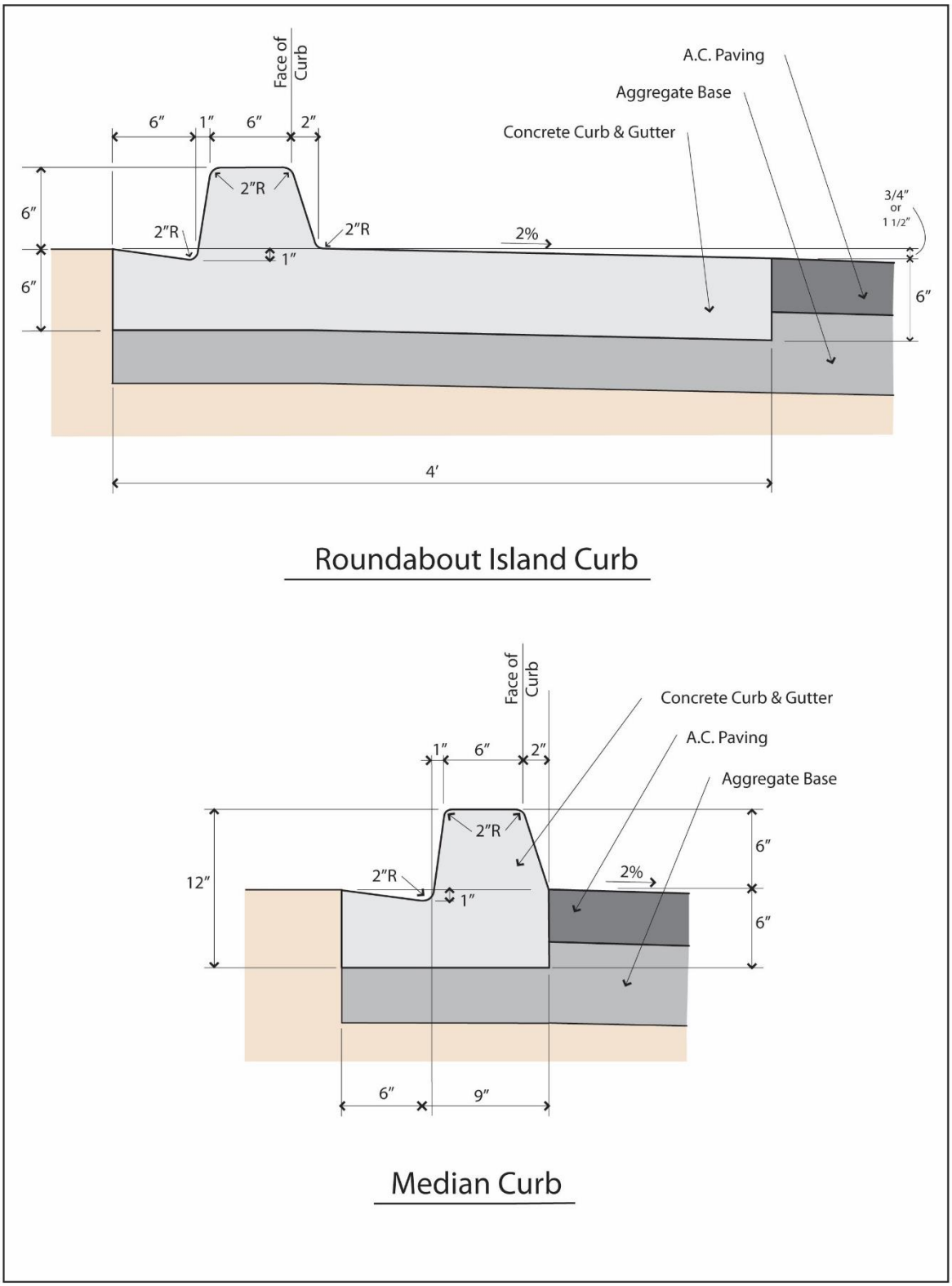
Table B.3: Curb & Gutter

Street Type or Name	Figure No.	Curb Type				
		None	Vertical (Fig. B.2)	Rolled (Fig. B.1)	Median (Fig. B.4)	Island (Fig. B.3)
Lime Rock Valley Road	4.2	✓			✓	
Traffic Circle Island	4.19					✓
44' Local Residential Street	4.3			✓		
40' Local Residential Street	4.4			✓		
44' Local Residential Street	4.5			✓		
36' Local Residential Street	4.6			✓		
37' Local Residential Street	4.7			✓		
33' Local Residential Street	4.8			✓		
37' Local Residential Street	4.9			✓		
29' Local Residential Street	4.10			✓		
33' LRS (Single Loaded)	4.11		✓*	✓		
37' LRS (Single Loaded)	4.12		✓*	✓		
29' LRS (Single Loaded)	4.13		✓*	✓		
29' Cul-de-Sac Street	4.14			✓		
27' Residential Alley	4.15			✓		

* Single Loaded Side of Street.



Figures B.1 & B.2 – Rolled & Vertical Curbs



Figures B.3 & B.4 – Island & Median Curbs

B.2.6 Street and Sidewalk Details

Sidewalks and/or Class I multi-use paths are required on the majority of the *Plan Area* streets. Refer to Table B.4 (Sidewalks & Multi-Use Paths) for required sidewalks for each street type.

Table B.4: Sidewalks & Multi-Use Paths

Street Type or Name	Figure No.	Sidewalk or Class I Multi-Use Path			
		4' Both Sides	4' One Side	8' One Side Multi-Use	None
Lime Rock Valley Road	4.2			✓	
44' Local Residential Street	4.3	✓			
40' Local Residential Street	4.4		✓		
44' Local Residential Street	4.5			✓	
36' Local Residential Street	4.6				✓
37' Local Residential Street	4.7	✓			
33' Local Residential Street	4.8		✓		
37' Local Residential Street	4.9			✓	
29' Local Residential Street	4.10				✓
33' LRS (Single Loaded)	4.11		✓		
37' LRS (Single Loaded)	4.12			✓	
29' LRS (Single Loaded)	4.13				✓
29' Cul-de-Sac Street	4.14				✓
27' Residential Alley	4.15				✓

B.2.7 Entry Streets and Gates

The County shall permit private gated entries and Emergency Vehicle Access (EVA) on non-County maintained roads, which are allowed to encroach into the public street right-of-way as shown in Figure B.6 (Gated Entry to Private Street). The County shall allow gates by right in the *Plan Area*, subject to the following provisions:

- Minimum unobstructed travel lane width of 14 feet for a divided street or 24 feet for an undivided street
- Automatic gates shall be equipped with the following:
  - A "Knox" emergency access override system that consists of a low security key activated switch located in accordance with fire district requirements.
  - The ability for all first responders to remotely open any private gated entry or Emergency Vehicle Access gate via telephone, cellular phone, or dispatch center.
  - A linear receiver device and transmitters approved by the responsible fire district to allow remote activation by emergency vehicles. The decision to require the installation of an "Opticom" receiver to open any gate will be at the discretion of the Fire Marshal.
  - A mechanical release device.
  - A loop system located on the inside portion of the gate to permit vehicular traffic to exit the gated area without any special knowledge, action, or codes and shall keep the gate open as long as traffic is passing through the gate.

- A means to automatically open and remain fully open during power failures.
- The ability to reach the fully open position with a total time not to exceed 1 second for each 1 foot of total width.
- A receiving device so the signal from the transmitter will open the gate approximately 25 feet from the gate location.
- Applicants shall equip all Emergency Vehicle Access (EVA) gates with manual overrides from both sides of the gate to allow for vehicles and pedestrians to open in case of emergencies. Applicants shall provide audible alarms with the overrides and an outside service shall monitor the manual override to minimize inappropriate use of this access.

- The gradient of the road for 30 feet on either side of the gate shall not exceed 10% to provide a relatively level landing area for emergency vehicle parking to manually operate a gate.
- Applicants shall provide a turnaround at the gate if the gate creates a dead-end road in excess of 150 feet.
- Direction limiting devices, such as fixed tire spikes, and devices that would delay emergency access, such as speed bumps, shall be prohibited.

B.2.8 Street Lighting

Applicants shall minimize street lighting along Lime Rock Valley Road to minimize light pollution. Applicants should only provide street lighting at key local public street intersections, particularly at all roundabouts or entrances to schools, commercial, office, and other similar uses. Applicants will determine the design, location, and construction of the street lighting, subject to the County's approval and any other appropriate public agency.

B.2.9 Street Signs

Applicants will determine the type and construction of street name signs, subject to County approval and any other appropriate public agency. Applicants shall place street signs at intersections along Lime Rock Valley Road, and at all private, local residential streets.

Traffic control signs shall be placed along Lime Rock Valley Road where designated by the County and shall comply with the California Manual of Uniform Traffic Control Devices. Applicants may place traffic control devices along private, local residential streets at locations determined by the project proponent, and subject to County and applicable Fire Department approvals.

B.2.10 Street Drainage

Applicants shall provide drainage improvements in the *Plan Area* according to the requirements of the adopted El Dorado County Drainage Manual, including curb and gutter as outlined in Table B.3 (Curb and Gutter) or well-defined roadside ditches or inlets directing surface water away from the street to an adequate drainage system or LID treatment feature. Water shall not cross the street surface, but shall be conveyed through culverts of adequate size to accommodate storm water without flooding the street. Roadside ditches may also be used for water quality devices and may be landscaped with appropriate types of low growing approved materials—any such use will be in compliance with applicable laws in effect at the time of design. Street flow is to be allowed and designed to accept 100-year flood events with appropriately designed and sized overland releases utilizing ditches or channels.

B.2.11 Cross Visibility Area

The definition of a cross visibility area (CVA) is as follows:

1. At a corner formed by any encroachment onto a road, a triangle having two sides 10 feet long, running along the driveway/encroachment edge and the road edge-of-pavement, said length beginning at their intersection, and the third side formed by a line connecting the two ends, as shown in the Figure B.5, or
2. On corner lots, a triangle having two sides 25 feet long, running along each right of way or road easement, said length beginning at their intersection, and the third side formed by a line connecting the two ends, as shown in Figure B.5.

The County shall permit fences, walls, and landscaping of any height in the CVA, so long as the improvement does not impede sight distance as recommended by the applicant's professional engineer.

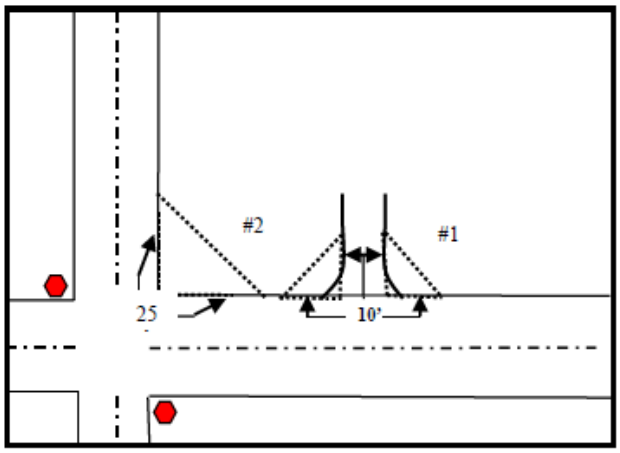


FIGURE B.5
CROSSS VISIBILITY AREA

B.3 General Lot Standards

B.3.1 Flag Lots

Flag lots are permitted in all PD zones, and on mass-pad graded and un-padded lots, provided they conform to the following standards:

- The lot's "flagpole" shall have a minimum width, at any point, of 25 feet, except when two flag lots are directly adjacent to one another as provided below.
- All cut or fill slope areas created by the driveway shall be contained within the flagpole or slope easements.
- Two adjacent flag shaped lots may use a common driveway provided the "flagpoles" are adjacent and meet the following:
  - The lot's flagpoles shall have minimum widths at any point of 12.5 feet

- The driveway is 20 feet wide and contains a turnaround if the flagpole is over 150 feet long
- An access and utility easement shall be provided to the use and benefit of both lots served

B.3.2 Lot Length to Width Ratio

The County shall allow lot length to width ratios greater than 3:1, where unusual natural or other unique field conditions or features occur.

B.3.3 Utility Easements

Side yard utility easements between residential lots shall be allowed, when necessary for both wet and dry utilities stating appropriate access needs, and defining the allowed surface improvements, limitations, and restrictions. Access will be limited to maintenance and replacement of the facilities. Easement areas may be fenced with approved surface improvements allowed, subject to disturbance or removal as required and defined in the easement document.

B.4 Hillside Standards

B.4.1 Applicability and Criteria

The Project Proponent has included hillside standards in the *Specific Plan* so that applicants plan, design, and construct residential building sites in hillside areas in a manner that preserves or enhances, to the greatest extent possible, physical features that optimize the aesthetic quality and public safety of the final built environment. Applicants shall use these hillside standards as a guide to encourage creative site planning, meeting the challenges of steep terrain and minimizing the effects of construction on the visual quality of natural hillsides. These standards, however, are not intended to inhibit or restrict development in the *Plan Area*.

The hillside standards apply only to the residential zoned R15-PD, R1A-PD, R2.5A-PD and R5A-PD parcels as a guide to be used under circumstances where the natural site cross-slope of parcels is 10 percent or greater. The hillside standards are not applicable for *Plan Area* parcels proposed for, or have the potential for mass pad grading in, sites zoned R4-PD, R6-PD and R10-PD.

Cross-slope shall be calculated by either dividing the vertical distance by the horizontal distance on a section drawn perpendicular to the contours for the full dimension of the proposed lot at 50 foot intervals with a minimum of two such sections per lot; or by making the same calculation between the highest and lowest point within the lot, whichever results in the highest average cross-slope. The cross-slope is then the average of the sections taken for each lot. Cross-slopes ending in one-half percent or more shall be rounded to the next highest whole number.

The County will consider alternative standards for R15-PD, R1A-PD, R2.5A-PD and R5A-PD parcels that will also require a site specific erosion and sediment control plan developed and certified by a Civil Engineer.

B.4.2 Hillside Lot Frontage

Table B.5 (Hillside Lot Frontage) shall be used only as a planning guide for determining recommended lot frontage width. However, depending on the average natural slope of the lot, the actual width versus depth, and other potential opportunities or constraints, the lot width may be less than the guide recommends.

Table B.5: Hillside Lot Frontage	
Natural Cross Slope Gradient	Minimum Lot Width
10 to 15%	75 Feet
16 to 20%	90 Feet
21 to 25%	105 Feet
26 to 30%	120 Feet
31 to 35%*	135 Feet
36 to 40%*	150 Feet

** Lots with natural slopes over 30% are permitted. However, building sites may be limited to areas of the lot less than 30% natural slope.*

B.4.3 Recommended Hillside Lot Size

For initial planning purposes, applicants shall use the recommended lot sizes based on natural cross slope gradient shown in Table B.6 (Recommended Lot Size) subject to the applicability criteria in Section B.3.1 (Applicability and Criteria). However, site specific characteristics, such as oak canopy, rock outcroppings, and any other special features of individual lots may dictate a larger or smaller lot size and may differ from those shown in Table B.6.

Table B.6: Recommended Lot Size (R15-PD, R1A-PD, R2.5A-PD & R5A-PD Lots Only)	
Natural Cross Slope Gradient	Recommended Minimum Lot Size
10%	10,000 Sq. Ft.
15%	15,000 Sq. Ft.
20%	20,000 Sq. Ft
25%	25,000 Sq.Ft
30%	30,000 Sq. Ft.
31%	32,000 Sq. Ft.
33%	36,000 Sq. Ft.
35%	40,000 Sq. Ft.
36%	50,000 Sq. Ft.
37%	60,000 Sq. Ft.
38%	70,000 Sq. Ft.
39%	80,000 Sq. Ft.
40%*	90,000 Sq. Ft.

** Any portion of a lot with slopes exceeding 40% shall not be*

considered as part of the required minimum lot area.

B.5 Grading

B.5.1 Purpose

The purpose of this section is to set forth the standards and procedures for *Plan Area* grading, to protect lives, property, and public improvements from damage due to unregulated grading, and to limit water quality, erosion, and sediment impacts. Except as otherwise noted in this section, the provisions of the currently adopted "Soils and Foundations" and "Grading Appendix" chapters of the California Building Code (CBC), shall apply. This Section is not intended to supersede or otherwise pre-empt any applicable local, State, or Federal law or regulation. Where conflicts may occur between this Section and the California Building Code or the adopted El Dorado County Grading Ordinance, the more restrictive requirements shall govern. Any requirement in this section may be modified if recommended in an acceptable Geologic Report or Geotechnical Report.

Applicants shall properly consider the site's natural terrain through careful site planning and grading that reflects the natural contours of the property, and steps up or down with the existing grade. Slope banks shall be rounded and blended to existing contours to create a natural appearance. Sharp and unnatural edges shall be avoided. Refer to Figure B.6 for a Contour Grading Example. Final drainage plans will be developed to manage runoff using site design measures, source controls and/or storm water treatment and baseline hydromodification measures to achieve LID standards, consistent with MS4 permit requirements.

B.5.2 Mass Pad Grading

Due to the hilly terrain in the county, grading may be required to create adequately drained, near-level building sites and to provide for adequate access to development areas. The volume of grading will be limited to that which is necessary to accomplish the proposed development. All grading will reflect, to the greatest extent possible, the natural gradient and contours of the site. Grading shall be designed to minimize the creation of extensive, artificial banks or terraces, which may be visible from public streets or other public views. Grading shall conform to the design standards provided in the Grading Design Manual adopted by the Board of Supervisors, unless demonstrated through adequate analysis and to the satisfaction of the Transportation Division that an alternate design can provide a stable slope that avoids severe erosion and other hazards. Mass pad grading, or the grading of any individual lot of a development parcel, shall be allowed by right in the R4-PD, R6-PD and R10-PD zones.

B.5.3 Contour Grading

Contour grading of cut and fill slopes should attempt, where possible, to be curvilinear in plan rather than linear. Transition zones and slope intersections are generally encouraged to have some rounding applied with the resultant pad configurations with the tops and toes of all slopes to be curvilinear (refer to Figure B.6 – Contour Grading Example). Within the *Plan Area*, contour grading shall occur in hillside graded slope transition areas as well as highly visible areas where visual aesthetics are an important consideration.

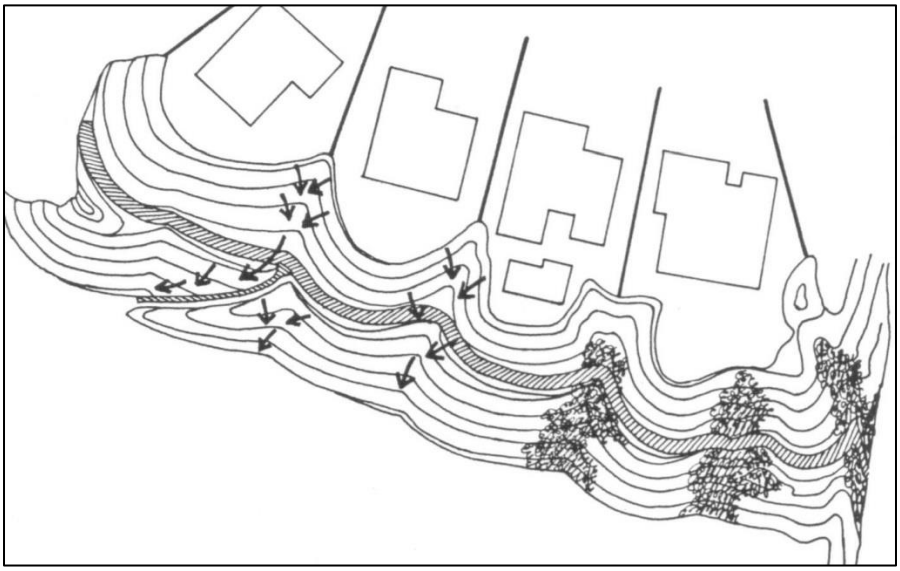


Figure B.6 – Contour Grading Example

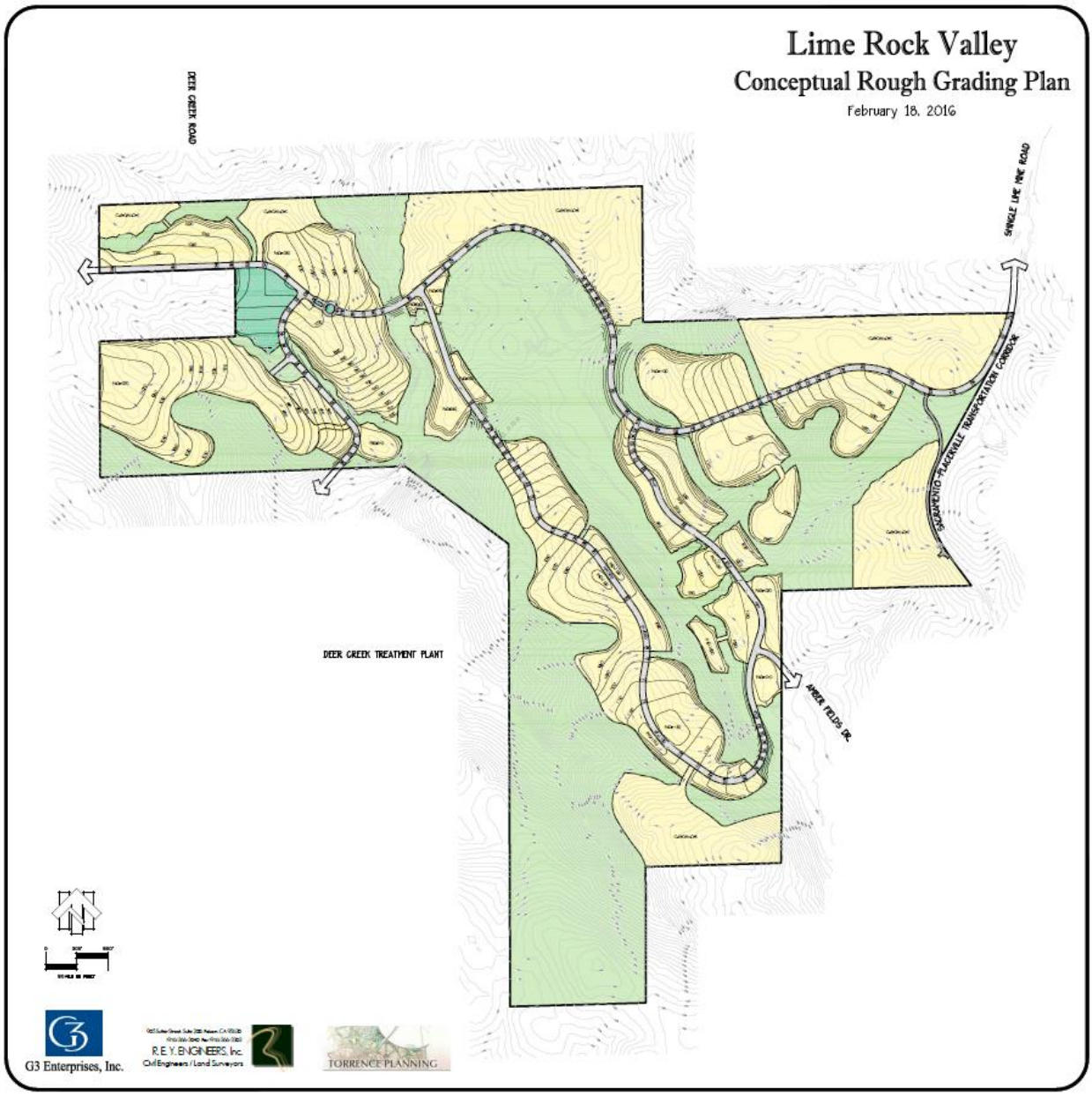


Figure B.7 – Conceptual Rough Grading Plan

In order to minimize a "stair step" effect on front yard streetscapes in padded lot areas, the transitional slope areas along the side lot lines in the front yards shall be softened by reducing the slope or by contouring the top and toe of the slope into the front yards of each unit. Applicants (merchant builders) are expected to install front yard landscaping in areas where mass pad grading is combined with a build-out program. To maximize usable rear yard space and to provide proper drainage between lots, contour grading shall not be required along rear lot lines nor alongside lot lines in those areas which are not visible from a public street.

B.5.4 Street Drainage

As will be established through the *Plan Area* recorded CC&Rs, the following standards shall apply to all private streets, drainage easements, and other drainage facilities within the private property:

A. Private streets, drainage easements and drainage facilities (other than drainage facilities accepted by the County of El Dorado) shall be offered to the Master Owners' Association or to a Village Association, as the case may be, simultaneously with the recordation of the final map providing for such streets, unless a particular map is recorded prior to the formation of the Master Association or the Village Association, as the case may be. In the latter event, such private streets, drainage easements, and drainage facilities shall be offered immediately after the formation of the Master Association or Village Association. Private streets and drainage facilities shall be offered in fee.
B. Public streets shall be offered to the County of El Dorado.
C. "Downhill" lots shall be designed to accept drainage from the "uphill" lots.

B.5.5 Cross Lot and Rear Lot Drainage

Cross lot or rear lot storm water runoff for each individual home site must be handled on site by properly contouring the grading so runoff can be directed from its natural drainage area to LID features or storm drainage facilities if they have been provided. Lots at lower elevations will likely be subject to drainage run-off originating from home sites or open space at higher elevations. Site drainage routes, and the collection and dissipation of the drainage, must be detailed on individual grading plans. The individual lot owner is fully responsible for water runoff and drainage control on their property and for drainage leaving their property. Landscaping may not be installed in any manner that interferes with developer-installed storm drainage improvements or easements, except as provided in approved plans. Irrigation runoff should not leave the property at any time. Site and drainage plans shall be closely studied to ensure that proper drain systems and/or diversion routes are designed to prevent runoff into sensitive areas or other home sites.

B.5.6 Retaining Walls

Retaining walls are allowed by right in the *Plan Area*, and their design and construction shall be designed in accordance with the applicable Chapters and Appendices of the latest edition of the CBC, in addition to the applicable provisions provided in this Section and Appendix A. All retaining walls requiring a permit shall consider earthquake loading in accordance with the applicable Chapters of the Building Code. All retaining walls located within a County-maintained road right-of-way, or immediately adjacent to a right-of-way and supporting or protecting a County maintained road, are subject to review and approval by the El Dorado County Department of Transportation (DOT). All retaining wall heights are measured from the bottom of the footing to the top of the wall.

Retaining walls on non-pad graded custom, semi-custom, or high-end production lots shall be installed no higher than 6 feet above natural grade when outside an established building envelope.

Retaining Wall Permits

Construction of retaining walls requires a permit from the County, and is regulated by County building codes and the *Specific Plan*. Walls retaining less than four feet of earth measured from the bottom of the footing, and that have a finish grade above and below the wall sloping less than 5:1 (five horizontal to one vertical) and do not impound Class I, II, or III-A liquids as those liquids are defined in the CBC, are exempt from permits. Walls built on a property line or within a perpendicular distance from the property line equal to the height of the exposed wall face shall not be constructed of wood.

Retaining Wall Types

Retaining walls may be of any height or configuration (e.g. one large wall or a series of smaller walls) as recommended by a professional engineer and approved by the Master Owners' Association Architectural Control Committee. Acceptable retaining walls shall include, but not be limited to, keystone, rockery, block masonry, and wood; however, wood retaining walls shall not exceed 4 feet in height.

B.5.7 Storm Water Management, Erosion and Sediment Control

Control of storm water, erosion, sediment, and other construction related pollutants is required for all *Plan Area* grading projects. The *Plan Area* storm water management, erosion and sediment control and drainage plan shall comply with the adopted Drainage Manual, Grading Design Manual, Storm Water Management Plan (SWMP) and current California State Water Resources Control Board's (SWRCB) Order(s) regulating construction activities (the current MS4 permit). Additionally, a Storm Water Pollution Prevention Plan (SWPPP) is required for grading projects exceeding one acre in area. Best Management Practices (BMPs) shall be utilized in all storm water, erosion, and sediment control plans.

B.5.8 Preliminary Landscape and Irrigation Plan

Applicants shall submit a preliminary landscaping and irrigation plan to the County to demonstrate consistency with El Dorado County Chapter 130 (Zoning Ordinance) and any discretionary approvals as may be required.

B.6 Building Standards

Buildings associated with the proposed project that are to be located in oak woodland and grassland areas will be designed to blend with the surrounding built and natural environments so that these structures complement the visual landscape. The U.S. Bureau of Land Management has conducted extensive research on color selection techniques illustrating the efficacy of color choice in reducing visual impacts in natural environments. Methods consistent with this study will be applied to design treatments for buildings within oak woodlands and grassland areas[1]. The following measures will be applied subject to County review and approval upon issuance of building permits.

- Roofing materials within oak woodlands and grasslands will be colored using a shade that is two to three shades darker than the general surrounding area.
- Building facades within oak woodlands will be painted in mid-range to darker earth tones to help buildings blend better within the oak canopy. Lighter beiges and tans, which would make buildings stand out and contrast against the oak canopy, will be avoided.

- Building facades within grasslands will be painted in mid-range earth tones to help buildings blend better within grassland areas. Very light off-whites, very light beiges, and very light tans, which would make buildings stand out and contrast against grassland areas, will be avoided.

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Appendix C

Air Quality Model Output (Construction Output/Emissions)

Construction CalEEMod

LRVSP Construction 2023 - El Dorado-Mountain County County, Summer

LRVSP Construction 2023
El Dorado-Mountain County County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	51.00	Dwelling Unit	23.00	91,800.00	146
City Park	5.00	Acre	5.00	217,800.00	0
Other Asphalt Surfaces	9.00	Acre	9.00	392,040.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2050
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity	641.35	**CH4 Intensity**	0.029	**N2O Intensity**	0.006

1.3 User Entered Comments & Non-Default Data

Land Use - Acres from project description
Construction Phase - Assumed construction schedule of one-year.
Off-road Equipment - Equipment per applicant.
Grading - Acres from project description.
Architectural Coating - all construction in EDCAQMD must apply coatings with VOC contents of 150 g/L or less, effective 1/1/2018

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	23,522.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblConstructionPhase	NumDays	55.00	14.00
tblConstructionPhase	NumDays	740.00	190.00

tblConstructionPhase	NumDays	75.00	19.00
tblConstructionPhase	NumDays	55.00	14.00
tblConstructionPhase	NumDays	30.00	8.00
tblConstructionPhase	PhaseEndDate	11/6/2026	12/28/2023
tblConstructionPhase	PhaseEndDate	6/5/2026	11/20/2023
tblConstructionPhase	PhaseEndDate	8/4/2023	2/7/2023
tblConstructionPhase	PhaseEndDate	8/21/2026	12/8/2023
tblConstructionPhase	PhaseEndDate	4/21/2023	1/11/2023
tblConstructionPhase	PhaseStartDate	8/22/2026	12/9/2023
tblConstructionPhase	PhaseStartDate	8/5/2023	2/28/2023
tblConstructionPhase	PhaseStartDate	4/22/2023	1/12/2023
tblConstructionPhase	PhaseStartDate	6/6/2026	11/21/2023
tblConstructionPhase	PhaseStartDate	3/11/2023	1/1/2023
tblGrading	AcresOfGrading	47.50	37.00
tblLandUse	LotAcreage	16.56	23.00
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.36	0.36
tblOffRoadEquipment	OffRoadEquipmentType	4	Excavators
tblOffRoadEquipment	OffRoadEquipmentType	2	Rubber Tired Loaders

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	123.5306	34.5550	28.6026	0.0752	18.2141	1.4256	19.4812	9.9699	1.3116	11.1356	0.0000	7,488.984	7,488.9848	1.9481	0.0000	7,506.473
Maximum	**123.5306**	**34.5550**	**28.6026**	**0.0752**	**18.2141**	**1.4256**	**19.4812**	**9.9699**	**1.3116**	**11.1356**	**0.0000**	**7,488.984**	**7,488.9848**	**1.9481**	**0.0000**	**7,506.473**

3.0 Construction Detail

Construction Phase

Phase	Phase Name	Phase Type	Start Date	End Date	Num Days	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2023	1/11/2023	5	8	
2	Grading	Grading	1/12/2023	2/7/2023	5	19	
3	Building Construction	Building Construction	2/28/2023	11/20/2023	5	190	
4	Paving	Paving	11/21/2023	12/8/2023	5	14	
5	Architectural Coating	Architectural Coating	12/9/2023	12/28/2023	5	14	
6	Utilities	Trenching	2/8/2023	2/27/2023	5	14	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 37

Acres of Paving: 9

Residential Indoor: 185,895; Residential Outdoor: 61,965; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Utilities	Excavators	4	8.00	158	0.38
Utilities	Rubber Tired Loaders	2	8.00	203	0.36
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor	Hauling
Utilities	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	274.00	105.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	55.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.308	3,687.3081	1.1926		3,717.121
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**18.0663**	**1.2660**	**19.3323**	**9.9307**	**1.1647**	**11.0954**		**3,687.308**	**3,687.3081**	**1.1926**		**3,717.121**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0818	0.0355	0.4963	1.3700e-	0.1479	1.0100e-	0.1489	0.0392	9.3000e-	0.0402		135.9662	135.9662	3.4300e-		136.0520
Total	**0.0818**	**0.0355**	**0.4963**	**1.3700e-**	**0.1479**	**1.0100e-**	**0.1489**	**0.0392**	**9.3000e-**	**0.0402**		**135.9662**	**135.9662**	**3.4300e-**		**136.0520**

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.0873	0.0000	8.0873	3.5332	0.0000	3.5332			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105		6,011.477	6,011.4777	1.9442		6,060.083
Total	**3.3217**	**34.5156**	**28.0512**	**0.0621**	**8.0873**	**1.4245**	**9.5118**	**3.5332**	**1.3105**	**4.8438**		**6,011.477**	**6,011.4777**	**1.9442**		**6,060.083**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0909	0.0394	0.5514	1.5200e-	0.1643	1.1200e-	0.1654	0.0436	1.0400e-	0.0446		151.0735	151.0735	3.8200e-		151.1689
Total	**0.0909**	**0.0394**	**0.5514**	**1.5200e-**	**0.1643**	**1.1200e-**	**0.1654**	**0.0436**	**1.0400e-**	**0.0446**		**151.0735**	**151.0735**	**3.8200e-**		**151.1689**

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209	2,555.2099	0.6079		2,570.406
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.209**	**2,555.2099**	**0.6079**		**2,570.406**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2720	9.1548	3.2580	0.0274	0.7065	0.0196	0.7261	0.2031	0.0187	0.2218		2,864.067	2,864.0679	0.0394		2,865.053
Worker	1.2448	0.5403	7.5547	0.0208	2.2509	0.0154	2.2663	0.5970	0.0142	0.6112		2,069.707	2,069.7070	0.0523		2,071.014
Total	**1.5168**	**9.6951**	**10.8127**	**0.0482**	**2.9574**	**0.0350**	**2.9923**	**0.8001**	**0.0329**	**0.8330**		**4,933.774**	**4,933.7749**	**0.0917**		**4,936.067**

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584	2,207.5841	0.7140		2,225.433
Paving	1.6843					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.7170**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.584**	**2,207.5841**	**0.7140**		**2,225.433**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0682	0.0296	0.4136	1.1400e-	0.1232	8.4000e-	0.1241	0.0327	7.8000e-	0.0335		113.3051	113.3051	2.8600e-		113.3767
Total	**0.0682**	**0.0296**	**0.4136**	**1.1400e-**	**0.1232**	**8.4000e-**	**0.1241**	**0.0327**	**7.8000e-**	**0.0335**		**113.3051**	**113.3051**	**2.8600e-**		**113.3767**

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	123.0891					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**123.2807**	**1.3030**	**1.8111**	**2.9700e-**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2499	0.1085	1.5165	4.1700e-	0.4518	3.0900e-	0.4549	0.1198	2.8500e-	0.1227		415.4521	415.4521	0.0105		415.7145
Total	**0.2499**	**0.1085**	**1.5165**	**4.1700e-**	**0.4518**	**3.0900e-**	**0.4549**	**0.1198**	**2.8500e-**	**0.1227**		**415.4521**	**415.4521**	**0.0105**		**415.7145**

3.7 Utilities - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Off-Road	1.3022	11.5614	16.1309	0.0334		0.4834	0.4834		0.4447	0.4447		3,227.602	3,227.6026	1.0439		3,253.699
Total	**1.3022**	**11.5614**	**16.1309**	**0.0334**		**0.4834**	**0.4834**		**0.4447**	**0.4447**		**3,227.602**	**3,227.6026**	**1.0439**		**3,253.699**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0682	0.0296	0.4136	1.1400e-	0.1232	8.4000e-	0.1241	0.0327	7.8000e-	0.0335		113.3051	113.3051	2.8600e-		113.3767
Total	**0.0682**	**0.0296**	**0.4136**	**1.1400e-**	**0.1232**	**8.4000e-**	**0.1241**	**0.0327**	**7.8000e-**	**0.0335**		**113.3051**	**113.3051**	**2.8600e-**		**113.3767**

LRVSP Construction 2024 - El Dorado-Mountain County County, Summer

LRVSP Construction 2024
El Dorado-Mountain County County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	51.00	Dwelling Unit	23.00	91,800.00	146

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2050
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity	641.35	**CH4 Intensity**	0.029	**N2O Intensity**	0.006

1.3 User Entered Comments & Non-Default Data

Land Use - Acres from project description
Construction Phase - Assumed construction schedule of one-year.
Off-road Equipment - Equipment per applicant.
Grading - Acres from project description.
Architectural Coating - all construction in EDCAQMD must apply coatings with VOC contents of 150 g/L or less, effective 1/1/2018

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblConstructionPhase	NumDays	35.00	19.00
tblConstructionPhase	NumDays	370.00	190.00
tblConstructionPhase	NumDays	20.00	14.00
tblConstructionPhase	NumDays	20.00	14.00
tblConstructionPhase	PhaseEndDate	2/9/2024	1/10/2024

tblConstructionPhase	PhaseEndDate	5/24/2024	2/6/2024
tblConstructionPhase	PhaseEndDate	3/26/2027	11/18/2024
tblConstructionPhase	PhaseEndDate	6/11/2027	12/6/2024
tblConstructionPhase	PhaseEndDate	8/27/2027	12/26/2024
tblConstructionPhase	PhaseStartDate	2/10/2024	1/11/2024
tblConstructionPhase	PhaseStartDate	5/25/2024	2/27/2024
tblConstructionPhase	PhaseStartDate	3/27/2027	11/19/2024
tblConstructionPhase	PhaseStartDate	6/12/2027	12/7/2024
tblGrading	AcresOfGrading	47.50	23.00
tblLandUse	LotAcreage	16.56	23.00
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.36	0.36
tblOffRoadEquipment	OffRoadEquipmentType	4	Excavators
tblOffRoadEquipment	OffRoadEquipmentType	2	Rubber Tired Loaders

2.0 Emissions Summarv

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	123.287	32.4126	28.2327	0.0635	18.2141	1.3365	19.4445	9.9699	1.2296	11.1018	0.0000	6,155.040	6,155.0406	1.9471	0.0000	6,203.718
Maximum	**123.287**	**32.4126**	**28.2327**	**0.0635**	**18.2141**	**1.3365**	**19.4445**	**9.9699**	**1.2296**	**11.1018**	**0.0000**	**6,155.040**	**6,155.0406**	**1.9471**	**0.0000**	**6,203.718**

3.0 Construction Detail

Construction Phase

Phase	Phase Name	Phase Type	Start Date	End Date	Num Days	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2024	1/10/2024	5	8	
2	Grading	Grading	1/11/2024	2/6/2024	5	19	
3	Building Construction	Building Construction	2/27/2024	11/18/2024	5	190	
4	Paving	Paving	11/19/2024	12/6/2024	5	14	
5	Architectural Coating	Architectural Coating	12/7/2024	12/26/2024	5	14	
6	Utilities	Trenching	2/7/2024	2/26/2024	5	14	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 23

Acres of Paving: 0

Residential Indoor: 185,895; Residential Outdoor: 61,965; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48
Utilities	Excavators	4	8.00	158	0.38
Utilities	Rubber Tired Loaders	2	8.00	203	0.36

Trips and VMT

Phase Name	Offroad Equipment	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor	Hauling
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	18.00	5.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	4.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Utilities	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.2 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310		3,688.010	3,688.0100	1.1928		3,717.829
Total	**2.6609**	**27.1760**	**18.3356**	**0.0381**	**18.0663**	**1.2294**	**19.2956**	**9.9307**	**1.1310**	**11.0617**		**3,688.010**	**3,688.0100**	**1.1928**		**3,717.829**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0772	0.0321	0.4589	1.3100e-	0.1479	9.8000e-	0.1489	0.0392	9.0000e-	0.0401		130.7627	130.7627	3.0900e-		130.8399
Total	**0.0772**	**0.0321**	**0.4589**	**1.3100e-**	**0.1479**	**9.8000e-**	**0.1489**	**0.0392**	**9.0000e-**	**0.0401**		**130.7627**	**130.7627**	**3.0900e-**		**130.8399**

3.3 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.3059	0.0000	7.3059	3.4488	0.0000	3.4488			0.0000			0.0000
Off-Road	3.2181	32.3770	27.7228	0.0621		1.3354	1.3354		1.2286	1.2286		6,009.748	6,009.7487	1.9437		6,058.340
Total	**3.2181**	**32.3770**	**27.7228**	**0.0621**	**7.3059**	**1.3354**	**8.6413**	**3.4488**	**1.2286**	**4.6774**		**6,009.748**	**6,009.7487**	**1.9437**		**6,058.340**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0858	0.0356	0.5099	1.4600e-	0.1643	1.0900e-	0.1654	0.0436	1.0100e-	0.0446		145.2919	145.2919	3.4300e-		145.3776
Total	**0.0858**	**0.0356**	**0.5099**	**1.4600e-**	**0.1643**	**1.0900e-**	**0.1654**	**0.0436**	**1.0100e-**	**0.0446**		**145.2919**	**145.2919**	**3.4300e-**		**145.3776**

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698	2,555.6989	0.6044		2,570.807
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**		**2,555.698**	**2,555.6989**	**0.6044**		**2,570.807**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0124	0.4231	0.1472	1.3000e-	0.0337	8.7000e-	0.0345	9.6700e-	8.3000e-	0.0105		135.7212	135.7212	1.7600e-		135.7651
Worker	0.0772	0.0321	0.4589	1.3100e-	0.1479	9.8000e-	0.1489	0.0392	9.0000e-	0.0401		130.7627	130.7627	3.0900e-		130.8399
Total	**0.0896**	**0.4552**	**0.6061**	**2.6100e-**	**0.1815**	**1.8500e-**	**0.1834**	**0.0489**	**1.7300e-**	**0.0506**		**266.4839**	**266.4839**	**4.8500e-**		**266.6049**

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547	2,207.5472	0.7140		2,225.396
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**		**2,207.547**	**2,207.5472**	**0.7140**		**2,225.396**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0644	0.0267	0.3824	1.0900e-	0.1232	8.2000e-	0.1240	0.0327	7.5000e-	0.0334		108.9689	108.9689	2.5700e-		109.0332
Total	**0.0644**	**0.0267**	**0.3824**	**1.0900e-**	**0.1232**	**8.2000e-**	**0.1240**	**0.0327**	**7.5000e-**	**0.0334**		**108.9689**	**108.9689**	**2.5700e-**		**109.0332**

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	123.0891					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**123.2698**	**1.2188**	**1.8101**	**2.9700e-**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Worker	0.0172	7.1200e-	0.1020	2.9000e-	0.0329	2.2000e-	0.0331	8.7200e-	2.0000e-	8.9200e-		29.0584	29.0584	6.9000e-		29.0755
Total	**0.0172**	**7.1200e-**	**0.1020**	**2.9000e-**	**0.0329**	**2.2000e-**	**0.0331**	**8.7200e-**	**2.0000e-**	**8.9200e-**		**29.0584**	**29.0584**	**6.9000e-**		**29.0755**

3.7 Utilities - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2351	10.3182	16.1325	0.0334		0.4343	0.4343		0.3996	0.3996		3,228.150	3,228.1502	1.0441		3,254.251
Total	**1.2351**	**10.3182**	**16.1325**	**0.0334**		**0.4343**	**0.4343**		**0.3996**	**0.3996**		**3,228.150**	**3,228.1502**	**1.0441**		**3,254.251**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0644	0.0267	0.3824	1.0900e-	0.1232	8.2000e-	0.1240	0.0327	7.5000e-	0.0334		108.9689	108.9689	2.5700e-		109.0332
Total	**0.0644**	**0.0267**	**0.3824**	**1.0900e-**	**0.1232**	**8.2000e-**	**0.1240**	**0.0327**	**7.5000e-**	**0.0334**		**108.9689**	**108.9689**	**2.5700e-**		**109.0332**

LRVSP Construction 2025 - El Dorado-Mountain County County, Summer

LRVSP Construction 2025
El Dorado-Mountain County County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	51.00	Dwelling Unit	23.00	91,800.00	146

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2050
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity	641.35	**CH4 Intensity**	0.029	**N2O Intensity**	0.006

1.3 User Entered Comments & Non-Default Data

Land Use - Acres from project description
Construction Phase - Assumed construction schedule of one-year.
Off-road Equipment - Equipment per applicant.
Grading - Acres from project description.
Architectural Coating - all construction in EDCAQMD must apply coatings with VOC contents of 150 g/L or less, effective 1/1/2018

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblConstructionPhase	NumDays	10.00	8.00
tblConstructionPhase	NumDays	35.00	19.00
tblConstructionPhase	NumDays	370.00	190.00
tblConstructionPhase	NumDays	20.00	14.00
tblConstructionPhase	NumDays	20.00	14.00

tblConstructionPhase	PhaseEndDate	1/14/2025	1/10/2025
tblConstructionPhase	PhaseEndDate	3/4/2025	2/6/2025
tblConstructionPhase	PhaseEndDate	3/4/2025	2/26/2025
tblConstructionPhase	PhaseEndDate	8/4/2026	11/19/2025
tblConstructionPhase	PhaseEndDate	9/1/2026	12/9/2025
tblConstructionPhase	PhaseEndDate	9/29/2026	12/29/2025
tblConstructionPhase	PhaseStartDate	1/15/2025	1/11/2025
tblConstructionPhase	PhaseStartDate	3/5/2025	2/7/2025
tblConstructionPhase	PhaseStartDate	3/5/2025	2/27/2025
tblConstructionPhase	PhaseStartDate	8/5/2026	11/20/2025
tblConstructionPhase	PhaseStartDate	9/2/2026	12/10/2025
tblGrading	AcresOfGrading	47.50	23.00
tblLandUse	LotAcreage	16.56	23.00
tblOffRoadEquipment	OffRoadEquipmentType	4	Excavators
tblOffRoadEquipment	OffRoadEquipmentType	2	Rubber Tired Loaders

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2025	123.2762	27.9752	26.8031	0.0635	18.2141	1.1320	19.3019	9.9699	1.0414	10.9706	0.0000	6,147.852	6,147.8526	1.9463	0.0000	6,196.510
Maximum	**123.2762**	**27.9752**	**26.8031**	**0.0635**	**18.2141**	**1.1320**	**19.3019**	**9.9699**	**1.0414**	**10.9706**	**0.0000**	**6,147.852**	**6,147.8526**	**1.9463**	**0.0000**	**6,196.510**

3.0 Construction Detail

Construction Phase

Phase	Phase Name	Phase Type	Start Date	End Date	Num Days	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2025	1/10/2025	5	8	
2	Grading	Grading	1/11/2025	2/6/2025	5	19	
3	Building Construction	Building Construction	2/27/2025	11/19/2025	5	190	
4	Utilities	Trenching	2/7/2025	2/26/2025	5	14	
5	Paving	Paving	11/20/2025	12/9/2025	5	14	
6	Architectural Coating	Architectural Coating	12/10/2025	12/29/2025	5	14	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 23

Acres of Paving: 0

Residential Indoor: 185,895; Residential Outdoor: 61,965; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48
Utilities	Excavators	4	8.00	158	0.38
Utilities	Rubber Tired Loaders	2	8.00	203	0.36

Trips and VMT

Phase Name	Offroad Equipment	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor	Hauling
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	18.00	5.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	4.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Utilities	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.2 Site Preparation - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.4727	25.2339	17.9118	0.0381		1.0868	1.0868		0.9999	0.9999		3,689.103	3,689.1037	1.1931		3,718.932
Total	**2.4727**	**25.2339**	**17.9118**	**0.0381**	**18.0663**	**1.0868**	**19.1531**	**9.9307**	**0.9999**	**10.9305**		**3,689.103**	**3,689.1037**	**1.1931**		**3,718.932**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0732	0.0291	0.4248	1.2600e-	0.1479	9.6000e-	0.1488	0.0392	8.8000e-	0.0401		125.6141	125.6141	2.7900e-		125.6838
Total	**0.0732**	**0.0291**	**0.4248**	**1.2600e-**	**0.1479**	**9.6000e-**	**0.1488**	**0.0392**	**8.8000e-**	**0.0401**		**125.6141**	**125.6141**	**2.7900e-**		**125.6838**

3.3 Grading - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Fugitive Dust					7.3059	0.0000	7.3059	3.4488	0.0000	3.4488			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404		6,008.281	6,008.2814	1.9432		6,056.861
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**7.3059**	**1.1309**	**8.4367**	**3.4488**	**1.0404**	**4.4893**		**6,008.281**	**6,008.2814**	**1.9432**		**6,056.861**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0813	0.0323	0.4720	1.4000e-	0.1643	1.0700e-	0.1654	0.0436	9.8000e-	0.0446		139.5712	139.5712	3.1000e-		139.6487
Total	**0.0813**	**0.0323**	**0.4720**	**1.4000e-**	**0.1643**	**1.0700e-**	**0.1654**	**0.0436**	**9.8000e-**	**0.0446**		**139.5712**	**139.5712**	**3.1000e-**		**139.6487**

3.4 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474	2,556.4744	0.6010		2,571.498
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.474**	**2,556.4744**	**0.6010**		**2,571.498**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0119	0.4115	0.1425	1.2900e-	0.0337	8.1000e-	0.0345	9.6700e-	7.8000e-	0.0105		135.1010	135.1010	1.6700e-		135.1428
Worker	0.0732	0.0291	0.4248	1.2600e-	0.1479	9.6000e-	0.1488	0.0392	8.8000e-	0.0401		125.6141	125.6141	2.7900e-		125.6838
Total	**0.0851**	**0.4406**	**0.5673**	**2.5500e-**	**0.1815**	**1.7700e-**	**0.1833**	**0.0489**	**1.6600e-**	**0.0506**		**260.7150**	**260.7150**	**4.4600e-**		**260.8266**

3.5 Utilities - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Off-Road	1.1257	8.6040	15.9806	0.0332		0.3644	0.3644		0.3353	0.3353		3,212.595	3,212.5952	1.0390		3,238.570
Total	**1.1257**	**8.6040**	**15.9806**	**0.0332**		**0.3644**	**0.3644**		**0.3353**	**0.3353**		**3,212.595**	**3,212.5952**	**1.0390**		**3,238.570**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0610	0.0242	0.3540	1.0500e-	0.1232	8.0000e-	0.1240	0.0327	7.4000e-	0.0334		104.6784	104.6784	2.3200e-		104.7365
Total	**0.0610**	**0.0242**	**0.3540**	**1.0500e-**	**0.1232**	**8.0000e-**	**0.1240**	**0.0327**	**7.4000e-**	**0.0334**		**104.6784**	**104.6784**	**2.3200e-**		**104.7365**

3.6 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.745	2,206.7452	0.7137		2,224.587
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9152**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**		**2,206.745**	**2,206.7452**	**0.7137**		**2,224.587**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0610	0.0242	0.3540	1.0500e-	0.1232	8.0000e-	0.1240	0.0327	7.4000e-	0.0334		104.6784	104.6784	2.3200e-		104.7365
Total	**0.0610**	**0.0242**	**0.3540**	**1.0500e-**	**0.1232**	**8.0000e-**	**0.1240**	**0.0327**	**7.4000e-**	**0.0334**		**104.6784**	**104.6784**	**2.3200e-**		**104.7365**

3.7 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	123.0891					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**123.2599**	**1.1455**	**1.8091**	**2.9700e-**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0163	6.4600e-	0.0944	2.8000e-	0.0329	2.1000e-	0.0331	8.7200e-	2.0000e-	8.9100e-		27.9142	27.9142	6.2000e-		27.9297
Total	**0.0163**	**6.4600e-**	**0.0944**	**2.8000e-**	**0.0329**	**2.1000e-**	**0.0331**	**8.7200e-**	**2.0000e-**	**8.9100e-**		**27.9142**	**27.9142**	**6.2000e-**		**27.9297**

LRVSP Construction 2026 - El Dorado-Mountain County County, Summer

LRVSP Construction 2026
El Dorado-Mountain County County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	51.00	Dwelling Unit	23.00	91,800.00	146

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2050
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity	641.35	**CH4 Intensity**	0.029	**N2O Intensity**	0.006

1.3 User Entered Comments & Non-Default Data

Land Use - Acres from project description
Construction Phase - Assumed construction schedule of one-year.
Off-road Equipment - Equipment per applicant.
Grading - Acres from project description.
Architectural Coating - all construction in EDCAQMD must apply coatings with VOC contents of 150 g/L or less, effective 1/1/2018

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tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblConstructionPhase	NumDays	10.00	8.00
tblConstructionPhase	NumDays	35.00	19.00
tblConstructionPhase	NumDays	370.00	190.00
tblConstructionPhase	NumDays	20.00	14.00
tblConstructionPhase	NumDays	20.00	14.00

tblConstructionPhase	PhaseEndDate	1/14/2026	1/12/2026
tblConstructionPhase	PhaseEndDate	3/4/2026	2/6/2026
tblConstructionPhase	PhaseEndDate	3/4/2026	2/26/2026
tblConstructionPhase	PhaseEndDate	8/4/2027	11/19/2026
tblConstructionPhase	PhaseEndDate	9/1/2027	12/9/2026
tblConstructionPhase	PhaseEndDate	9/29/2027	12/29/2026
tblConstructionPhase	PhaseStartDate	1/15/2026	1/13/2026
tblConstructionPhase	PhaseStartDate	3/5/2026	2/7/2026
tblConstructionPhase	PhaseStartDate	3/5/2026	2/27/2026
tblConstructionPhase	PhaseStartDate	8/5/2027	11/20/2026
tblConstructionPhase	PhaseStartDate	9/2/2027	12/10/2026
tblGrading	AcresOfGrading	47.50	23.00
tblLandUse	LotAcreage	16.56	23.00
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Loaders

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2026	123.2753	27.9723	26.7697	0.0634	18.2141	1.1319	19.3018	9.9699	1.0414	10.9706	0.0000	6,142.760	6,142.7607	1.9460	0.0000	6,191.411
Maximum	**123.2753**	**27.9723**	**26.7697**	**0.0634**	**18.2141**	**1.1319**	**19.3018**	**9.9699**	**1.0414**	**10.9706**	**0.0000**	**6,142.760**	**6,142.7607**	**1.9460**	**0.0000**	**6,191.411**

3.0 Construction Detail

Construction Phase

Phase	Phase Name	Phase Type	Start Date	End Date	Num Days	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2026	1/12/2026	5	8	
2	Grading	Grading	1/13/2026	2/6/2026	5	19	
3	Building Construction	Building Construction	2/27/2026	11/19/2026	5	190	
4	Utilities	Trenching	2/7/2026	2/26/2026	5	14	
5	Paving	Paving	11/20/2026	12/9/2026	5	14	
6	Architectural Coating	Architectural Coating	12/10/2026	12/29/2026	5	14	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 23

Acres of Paving: 0

Residential Indoor: 185,895; Residential Outdoor: 61,965; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48
Utilities	Excavators	4	8.00	158	0.38
Utilities	Rubber Tired Loaders	2	8.00	203	0.36

Trips and VMT

Phase Name	Offroad Equipment	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor	Hauling
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	18.00	5.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	4.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Utilities	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.2 Site Preparation - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000

Off-Road	2.4727	25.2339	17.9118	0.0381		1.0868	1.0868		0.9999	0.9999		3,689.103	3,689.1037	1.1931		3,718.932
Total	**2.4727**	**25.2339**	**17.9118**	**0.0381**	**18.0663**	**1.0868**	**19.1531**	**9.9307**	**0.9999**	**10.9305**		**3,689.103**	**3,689.1037**	**1.1931**		**3,718.932**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0693	0.0265	0.3947	1.2100e-	0.1479	9.2000e-	0.1488	0.0392	8.5000e-	0.0401		121.0313	121.0313	2.5300e-		121.0946
Total	**0.0693**	**0.0265**	**0.3947**	**1.2100e-**	**0.1479**	**9.2000e-**	**0.1488**	**0.0392**	**8.5000e-**	**0.0401**		**121.0313**	**121.0313**	**2.5300e-**		**121.0946**

3.3 Grading - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.3059	0.0000	7.3059	3.4488	0.0000	3.4488			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404		6,008.281	6,008.2814	1.9432		6,056.861
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**7.3059**	**1.1309**	**8.4367**	**3.4488**	**1.0404**	**4.4893**		**6,008.281**	**6,008.2814**	**1.9432**		**6,056.861**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0770	0.0294	0.4386	1.3500e-	0.1643	1.0300e-	0.1653	0.0436	9.5000e-	0.0445		134.4792	134.4792	2.8100e-		134.5495
Total	**0.0770**	**0.0294**	**0.4386**	**1.3500e-**	**0.1643**	**1.0300e-**	**0.1653**	**0.0436**	**9.5000e-**	**0.0445**		**134.4792**	**134.4792**	**2.8100e-**		**134.5495**

3.4 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474	2,556.4744	0.6010		2,571.498
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.474**	**2,556.4744**	**0.6010**		**2,571.498**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0115	0.4005	0.1385	1.2900e-	0.0337	7.5000e-	0.0344	9.6700e-	7.2000e-	0.0104		134.5449	134.5449	1.6000e-		134.5848
Worker	0.0693	0.0265	0.3947	1.2100e-	0.1479	9.2000e-	0.1488	0.0392	8.5000e-	0.0401		121.0313	121.0313	2.5300e-		121.0946
Total	**0.0808**	**0.4270**	**0.5332**	**2.5000e-**	**0.1815**	**1.6700e-**	**0.1832**	**0.0489**	**1.5700e-**	**0.0505**		**255.5762**	**255.5762**	**4.1300e-**		**255.6793**

3.5 Utilities - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Off-Road	1.1257	8.6040	15.9806	0.0332		0.3644	0.3644		0.3353	0.3353		3,212.595	3,212.5952	1.0390		3,238.570
Total	**1.1257**	**8.6040**	**15.9806**	**0.0332**		**0.3644**	**0.3644**		**0.3353**	**0.3353**		**3,212.595**	**3,212.5952**	**1.0390**		**3,238.570**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0578	0.0221	0.3289	1.0100e-	0.1232	7.7000e-	0.1240	0.0327	7.1000e-	0.0334		100.8594	100.8594	2.1100e-		100.9121
Total	**0.0578**	**0.0221**	**0.3289**	**1.0100e-**	**0.1232**	**7.7000e-**	**0.1240**	**0.0327**	**7.1000e-**	**0.0334**		**100.8594**	**100.8594**	**2.1100e-**		**100.9121**

3.6 Paving - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.745	2,206.7452	0.7137		2,224.587
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9152**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**		**2,206.745**	**2,206.7452**	**0.7137**		**2,224.587**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0578	0.0221	0.3289	1.0100e-	0.1232	7.7000e-	0.1240	0.0327	7.1000e-	0.0334		100.8594	100.8594	2.1100e-		100.9121
Total	**0.0578**	**0.0221**	**0.3289**	**1.0100e-**	**0.1232**	**7.7000e-**	**0.1240**	**0.0327**	**7.1000e-**	**0.0334**		**100.8594**	**100.8594**	**2.1100e-**		**100.9121**

3.7 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	123.0891					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**123.2599**	**1.1455**	**1.8091**	**2.9700e-**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0154	5.8800e-	0.0877	2.7000e-	0.0329	2.1000e-	0.0331	8.7200e-	1.9000e-	8.9000e-		26.8959	26.8959	5.6000e-		26.9099
Total	**0.0154**	**5.8800e-**	**0.0877**	**2.7000e-**	**0.0329**	**2.1000e-**	**0.0331**	**8.7200e-**	**1.9000e-**	**8.9000e-**		**26.8959**	**26.8959**	**5.6000e-**		**26.9099**

LRVSP Construction 2027 - El Dorado-Mountain County County, Summer

LRVSP Construction 2027
El Dorado-Mountain County County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	51.00	Dwelling Unit	23.00	91,800.00	146

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2050
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity	641.35	**CH4 Intensity**	0.029	**N2O Intensity**	0.006

1.3 User Entered Comments & Non-Default Data

Land Use - Acres from project description
Construction Phase - Assumed construction schedule of one-year.
Off-road Equipment - Equipment per applicant.
Grading - Acres from project description.
Architectural Coating - all construction in EDCAQMD must apply coatings with VOC contents of 150 g/L or less, effective 1/1/2018

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	8.00
tblConstructionPhase	NumDays	35.00	19.00
tblConstructionPhase	NumDays	370.00	190.00
tblConstructionPhase	NumDays	20.00	14.00
tblConstructionPhase	NumDays	20.00	14.00
tblConstructionPhase	PhaseEndDate	1/14/2027	1/12/2027
tblConstructionPhase	PhaseEndDate	3/4/2027	2/8/2027
tblConstructionPhase	PhaseEndDate	3/4/2027	2/26/2027
tblConstructionPhase	PhaseEndDate	8/3/2028	11/19/2027

tblConstructionPhase	PhaseEndDate	8/31/2028	12/9/2027
tblConstructionPhase	PhaseEndDate	9/28/2028	12/29/2027
tblConstructionPhase	PhaseStartDate	1/15/2027	1/13/2027
tblConstructionPhase	PhaseStartDate	3/5/2027	2/9/2027
tblConstructionPhase	PhaseStartDate	3/5/2027	2/27/2027
tblConstructionPhase	PhaseStartDate	8/4/2028	11/20/2027
tblConstructionPhase	PhaseStartDate	9/1/2028	12/10/2027
tblGrading	AcresOfGrading	47.50	23.00
tblLandUse	LotAcreage	16.56	23.00
tblOffRoadEquipment	OffRoadEquipmentType	4	Excavators
tblOffRoadEquipment	OffRoadEquipmentType	2	Rubber Tired Loaders

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2027	123.2744	27.9697	26.7385	0.0634	18.2141	1.1319	19.3018	9.9699	1.0413	10.9706	0.0000	6,138.217	6,138.2170	1.9457	0.0000	6,186.860
Maximum	**123.2744**	**27.9697**	**26.7385**	**0.0634**	**18.2141**	**1.1319**	**19.3018**	**9.9699**	**1.0413**	**10.9706**	**0.0000**	**6,138.217**	**6,138.2170**	**1.9457**	**0.0000**	**6,186.860**

3.0 Construction Detail

Construction Phase

Phase	Phase Name	Phase Type	Start Date	End Date	Num Days	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2027	1/12/2027	5	8	
2	Grading	Grading	1/13/2027	2/8/2027	5	19	
3	Building Construction	Building Construction	2/27/2027	11/19/2027	5	190	
4	Utilities	Trenching	2/9/2027	2/26/2027	5	14	
5	Paving	Paving	11/20/2027	12/9/2027	5	14	
6	Architectural Coating	Architectural Coating	12/10/2027	12/29/2027	5	14	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 23

Acres of Paving: 0

Residential Indoor: 185,895; Residential Outdoor: 61,965; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48
Utilities	Excavators	4	8.00	158	0.38
Utilities	Rubber Tired Loaders	2	8.00	203	0.36

Trips and VMT

Phase Name	Offroad Equipment	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor	Hauling
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	18.00	5.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	4.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Utilities	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.2 Site Preparation - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.4727	25.2339	17.9118	0.0381		1.0868	1.0868		0.9999	0.9999		3,689.103	3,689.1037	1.1931		3,718.932
Total	**2.4727**	**25.2339**	**17.9118**	**0.0381**	**18.0663**	**1.0868**	**19.1531**	**9.9307**	**0.9999**	**10.9305**		**3,689.103**	**3,689.1037**	**1.1931**		**3,718.932**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0653	0.0241	0.3667	1.1700e-	0.1479	8.7000e-	0.1487	0.0392	8.0000e-	0.0400		116.9420	116.9420	2.2900e-		116.9993
Total	**0.0653**	**0.0241**	**0.3667**	**1.1700e-**	**0.1479**	**8.7000e-**	**0.1487**	**0.0392**	**8.0000e-**	**0.0400**		**116.9420**	**116.9420**	**2.2900e-**		**116.9993**

3.3 Grading - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Fugitive Dust					7.3059	0.0000	7.3059	3.4488	0.0000	3.4488			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404		6,008.281	6,008.2814	1.9432		6,056.861
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**7.3059**	**1.1309**	**8.4367**	**3.4488**	**1.0404**	**4.4893**		**6,008.281**	**6,008.2814**	**1.9432**		**6,056.861**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0726	0.0268	0.4075	1.3000e-	0.1643	9.7000e-	0.1653	0.0436	8.9000e-	0.0445		129.9356	129.9356	2.5400e-		129.9992
Total	**0.0726**	**0.0268**	**0.4075**	**1.3000e-**	**0.1643**	**9.7000e-**	**0.1653**	**0.0436**	**8.9000e-**	**0.0445**		**129.9356**	**129.9356**	**2.5400e-**		**129.9992**

3.4 Building Construction - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474	2,556.4744	0.6010		2,571.498
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.474**	**2,556.4744**	**0.6010**		**2,571.498**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0112	0.3900	0.1353	1.2800e-	0.0337	7.0000e-	0.0344	9.6700e-	6.7000e-	0.0103		133.9881	133.9881	1.5400e-		134.0266
Worker	0.0653	0.0241	0.3667	1.1700e-	0.1479	8.7000e-	0.1487	0.0392	8.0000e-	0.0400		116.9420	116.9420	2.2900e-		116.9993
Total	**0.0765**	**0.4141**	**0.5020**	**2.4500e-**	**0.1815**	**1.5700e-**	**0.1831**	**0.0489**	**1.4700e-**	**0.0504**		**250.9302**	**250.9302**	**3.8300e-**		**251.0258**

3.5 Utilities - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Off-Road	1.1257	8.6040	15.9806	0.0332		0.3644	0.3644		0.3353	0.3353		3,212.595	3,212.5952	1.0390		3,238.570
Total	**1.1257**	**8.6040**	**15.9806**	**0.0332**		**0.3644**	**0.3644**		**0.3353**	**0.3353**		**3,212.595**	**3,212.5952**	**1.0390**		**3,238.570**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0544	0.0201	0.3056	9.8000e-	0.1232	7.3000e-	0.1240	0.0327	6.7000e-	0.0334		97.4517	97.4517	1.9100e-		97.4994
Total	**0.0544**	**0.0201**	**0.3056**	**9.8000e-**	**0.1232**	**7.3000e-**	**0.1240**	**0.0327**	**6.7000e-**	**0.0334**		**97.4517**	**97.4517**	**1.9100e-**		**97.4994**

3.6 Paving - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.745	2,206.7452	0.7137		2,224.587
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9152**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**		**2,206.745**	**2,206.7452**	**0.7137**		**2,224.587**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Worker	0.0544	0.0201	0.3056	9.8000e-	0.1232	7.3000e-	0.1240	0.0327	6.7000e-	0.0334		97.4517	97.4517	1.9100e-		97.4994
Total	**0.0544**	**0.0201**	**0.3056**	**9.8000e-**	**0.1232**	**7.3000e-**	**0.1240**	**0.0327**	**6.7000e-**	**0.0334**		**97.4517**	**97.4517**	**1.9100e-**		**97.4994**

3.7 Architectural Coating - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	123.0891					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**123.2599**	**1.1455**	**1.8091**	**2.9700e-**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0145	5.3600e-	0.0815	2.6000e-	0.0329	1.9000e-	0.0331	8.7200e-	1.8000e-	8.8900e-		25.9871	25.9871	5.1000e-		25.9998
Total	**0.0145**	**5.3600e-**	**0.0815**	**2.6000e-**	**0.0329**	**1.9000e-**	**0.0331**	**8.7200e-**	**1.8000e-**	**8.8900e-**		**25.9871**	**25.9871**	**5.1000e-**		**25.9998**

LRVSP Construction 2028 - El Dorado-Mountain County County, Summer

LRVSP Construction 2028
El Dorado-Mountain County County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	51.00	Dwelling Unit	23.00	91,800.00	146

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2050
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity	641.35	**CH4 Intensity**	0.029	**N2O Intensity**	0.006

1.3 User Entered Comments & Non-Default Data

Land Use - Acres from project description
Construction Phase - Assumed construction schedule of one-year.
Off-road Equipment - Equipment per applicant.
Grading - Acres from project description.
Architectural Coating - all construction in EDCAQMD must apply coatings with VOC contents of 150 g/L or less, effective 1/1/2018

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblConstructionPhase	NumDays	10.00	8.00
tblConstructionPhase	NumDays	35.00	19.00
tblConstructionPhase	NumDays	370.00	190.00
tblConstructionPhase	NumDays	20.00	14.00
tblConstructionPhase	NumDays	20.00	14.00

tblGrading	AcresOfGrading	47.50	23.00
tblLandUse	LotAcreage	16.56	23.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName	4	Utilities
tblOffRoadEquipment	PhaseName	2	Utilities

2.0 Emissions Summarv

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2028	123.2735	27.9673	26.7110	0.0633	18.2141	1.1318	19.3017	9.9699	1.0413	10.9705	0.0000	6,134.189	6,134.1892	1.9455	0.0000	6,182.827
Maximum	**123.2735**	**27.9673**	**26.7110**	**0.0633**	**18.2141**	**1.1318**	**19.3017**	**9.9699**	**1.0413**	**10.9705**	**0.0000**	**6,134.189**	**6,134.1892**	**1.9455**	**0.0000**	**6,182.827**

3.0 Construction Detail

Construction Phase

Phase	Phase Name	Phase Type	Start Date	End Date	Num Days	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2028	1/12/2028	5	8	
2	Grading	Grading	1/13/2028	2/8/2028	5	19	
3	Utilities	Trenching	2/9/2028	2/28/2028	5	14	
4	Building Construction	Building Construction	2/29/2028	11/20/2028	5	190	
5	Paving	Paving	11/21/2028	12/8/2028	5	14	
6	Architectural Coating	Architectural Coating	12/9/2028	12/28/2028	5	14	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 23

Acres of Paving: 0

Residential Indoor: 185,895; Residential Outdoor: 61,965; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40

Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Utilities	Excavators	4	8.00	158	0.38
Utilities	Rubber Tired Loaders	2	8.00	203	0.36
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor	Hauling
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	18.00	5.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Utilities	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	4.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.2 Site Preparation - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.4727	25.2339	17.9118	0.0381		1.0868	1.0868		0.9999	0.9999		3,689.103	3,689.1037	1.1931		3,718.932
Total	**2.4727**	**25.2339**	**17.9118**	**0.0381**	**18.0663**	**1.0868**	**19.1531**	**9.9307**	**0.9999**	**10.9305**		**3,689.103**	**3,689.1037**	**1.1931**		**3,718.932**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0611	0.0220	0.3420	1.1400e-	0.1479	8.1000e-	0.1487	0.0392	7.5000e-	0.0400		113.3169	113.3169	2.0800e-		113.3690
Total	**0.0611**	**0.0220**	**0.3420**	**1.1400e-**	**0.1479**	**8.1000e-**	**0.1487**	**0.0392**	**7.5000e-**	**0.0400**		**113.3169**	**113.3169**	**2.0800e-**		**113.3690**

3.3 Grading - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.3059	0.0000	7.3059	3.4488	0.0000	3.4488			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404		6,008.281	6,008.2814	1.9432		6,056.861
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**7.3059**	**1.1309**	**8.4367**	**3.4488**	**1.0404**	**4.4893**		**6,008.281**	**6,008.2814**	**1.9432**		**6,056.861**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0679	0.0244	0.3799	1.2600e-	0.1643	9.0000e-	0.1652	0.0436	8.3000e-	0.0444		125.9077	125.9077	2.3100e-		125.9656
Total	**0.0679**	**0.0244**	**0.3799**	**1.2600e-**	**0.1643**	**9.0000e-**	**0.1652**	**0.0436**	**8.3000e-**	**0.0444**		**125.9077**	**125.9077**	**2.3100e-**		**125.9656**

3.4 Utilities - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1257	8.6040	15.9806	0.0332		0.3644	0.3644		0.3353	0.3353		3,212.595	3,212.5952	1.0390		3,238.570
Total	**1.1257**	**8.6040**	**15.9806**	**0.0332**		**0.3644**	**0.3644**		**0.3353**	**0.3353**		**3,212.595**	**3,212.5952**	**1.0390**		**3,238.570**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0509	0.0183	0.2850	9.5000e-	0.1232	6.8000e-	0.1239	0.0327	6.2000e-	0.0333		94.4308	94.4308	1.7400e-		94.4742
Total	**0.0509**	**0.0183**	**0.2850**	**9.5000e-**	**0.1232**	**6.8000e-**	**0.1239**	**0.0327**	**6.2000e-**	**0.0333**		**94.4308**	**94.4308**	**1.7400e-**		**94.4742**

3.5 Building Construction - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474	2,556.4744	0.6010		2,571.498
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.474**	**2,556.4744**	**0.6010**		**2,571.498**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0109	0.3808	0.1329	1.2800e-	0.0337	6.6000e-	0.0343	9.6800e-	6.3000e-	0.0103		133.4799	133.4799	1.4900e-		133.5171
Worker	0.0611	0.0220	0.3420	1.1400e-	0.1479	8.1000e-	0.1487	0.0392	7.5000e-	0.0400		113.3169	113.3169	2.0800e-		113.3690
Total	**0.0720**	**0.4028**	**0.4749**	**2.4200e-**	**0.1815**	**1.4700e-**	**0.1830**	**0.0489**	**1.3800e-**	**0.0503**		**246.7968**	**246.7968**	**3.5700e-**		**246.8861**

3.6 Paving - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.745	2,206.7452	0.7137		2,224.587
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9152**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**		**2,206.745**	**2,206.7452**	**0.7137**		**2,224.587**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0509	0.0183	0.2850	9.5000e-	0.1232	6.8000e-	0.1239	0.0327	6.2000e-	0.0333		94.4308	94.4308	1.7400e-		94.4742
Total	**0.0509**	**0.0183**	**0.2850**	**9.5000e-**	**0.1232**	**6.8000e-**	**0.1239**	**0.0327**	**6.2000e-**	**0.0333**		**94.4308**	**94.4308**	**1.7400e-**		**94.4742**

3.7 Architectural Coating - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Archit. Coating	123.0891					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**123.2599**	**1.1455**	**1.8091**	**2.9700e-**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0136	4.8800e-	0.0760	2.5000e-	0.0329	1.8000e-	0.0330	8.7200e-	1.7000e-	8.8800e-		25.1815	25.1815	4.6000e-		25.1931
Total	**0.0136**	**4.8800e-**	**0.0760**	**2.5000e-**	**0.0329**	**1.8000e-**	**0.0330**	**8.7200e-**	**1.7000e-**	**8.8800e-**		**25.1815**	**25.1815**	**4.6000e-**		**25.1931**

LRVSP Construction 2029 - El Dorado-Mountain County County, Summer

LRVSP Construction 2029
El Dorado-Mountain County County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	9.00	Acre	22.00	392,040.00	0
Single Family Housing	50.00	Dwelling Unit	22.00	90,000.00	143

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2050
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity	641.35	**CH4 Intensity**	0.029	**N2O Intensity**	0.006

1.3 User Entered Comments & Non-Default Data

Land Use - Acres from project description
Construction Phase - Assumed construction schedule of one-year.
Off-road Equipment - Equipment per applicant.
Grading - Acres from project description.
Architectural Coating - all construction in EDCAQMD must apply coatings with VOC contents of 150 g/L or less, effective 1/1/2018

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	23,522.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblConstructionPhase	NumDays	30.00	8.00
tblConstructionPhase	NumDays	75.00	19.00

tblConstructionPhase	NumDays	740.00	190.00
tblConstructionPhase	NumDays	55.00	14.00
tblConstructionPhase	NumDays	55.00	14.00
tblConstructionPhase	PhaseEndDate	2/9/2029	1/10/2029
tblConstructionPhase	PhaseEndDate	5/25/2029	2/6/2029
tblConstructionPhase	PhaseEndDate	3/26/2032	11/19/2029
tblConstructionPhase	PhaseEndDate	6/11/2032	12/7/2029
tblConstructionPhase	PhaseEndDate	8/27/2032	12/27/2029
tblConstructionPhase	PhaseStartDate	2/10/2029	1/11/2029
tblConstructionPhase	PhaseStartDate	5/26/2029	2/27/2029
tblConstructionPhase	PhaseStartDate	3/27/2032	11/20/2029
tblConstructionPhase	PhaseStartDate	6/12/2032	12/8/2029
tblGrading	AcresOfGrading	47.50	44.00
tblLandUse	LotAcreage	9.00	22.00
tblLandUse	LotAcreage	16.23	22.00
tblOffRoadEquipment	LoadFactor	0.36	0.36
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType	4	Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType	2	Excavators

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2029	120.9628	27.9652	26.6854	0.0633	18.2141	1.1317	19.3017	9.9699	1.0412	10.9704	0.0000	6,130.628	6,130.6283	1.9453	0.0000	6,179.260
Maximum	**120.9628**	**27.9652**	**26.6854**	**0.0633**	**18.2141**	**1.1317**	**19.3017**	**9.9699**	**1.0412**	**10.9704**	**0.0000**	**6,130.628**	**6,130.6283**	**1.9453**	**0.0000**	**6,179.260**

3.0 Construction Detail

Construction Phase

Phase	Phase Name	Phase Type	Start Date	End Date	Num Days	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2029	1/10/2029	5	8	
2	Grading	Grading	1/11/2029	2/6/2029	5	19	
3	Building Construction	Building Construction	2/27/2029	11/19/2029	5	190	
4	Paving	Paving	11/20/2029	12/7/2029	5	14	
5	Architectural Coating	Architectural Coating	12/8/2029	12/27/2029	5	14	
6	Utilities	Trenching	2/7/2029	2/26/2029	5	14	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 44

Acres of Paving: 22

Residential Indoor: 182,250; Residential Outdoor: 60,750; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48
Utilities	Rubber Tired Loaders	2	8.00	203	0.36
Utilities	Excavators	4	8.00	158	0.38

Trips and VMT

Phase Name	Offroad Equipment	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor	Hauling
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	183.00	70.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	37.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Utilities	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.2 Site Preparation - 2029

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.4727	25.2339	17.9118	0.0381		1.0868	1.0868		0.9999	0.9999		3,689.103	3,689.1037	1.1931		3,718.932
Total	**2.4727**	**25.2339**	**17.9118**	**0.0381**	**18.0663**	**1.0868**	**19.1531**	**9.9307**	**0.9999**	**10.9305**		**3,689.103**	**3,689.1037**	**1.1931**		**3,718.932**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0567	0.0200	0.3189	1.1000e-	0.1479	7.5000e-	0.1486	0.0392	6.9000e-	0.0399		110.1121	110.1121	1.8900e-		110.1595
Total	**0.0567**	**0.0200**	**0.3189**	**1.1000e-**	**0.1479**	**7.5000e-**	**0.1486**	**0.0392**	**6.9000e-**	**0.0399**		**110.1121**	**110.1121**	**1.8900e-**		**110.1595**

3.3 Grading - 2029

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.4780	0.0000	8.4780	3.5754	0.0000	3.5754			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404		6,008.281	6,008.2814	1.9432		6,056.861
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**8.4780**	**1.1309**	**9.6089**	**3.5754**	**1.0404**	**4.6158**		**6,008.281**	**6,008.2814**	**1.9432**		**6,056.861**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0629	0.0223	0.3543	1.2300e-	0.1643	8.3000e-	0.1651	0.0436	7.7000e-	0.0444		122.3468	122.3468	2.1000e-		122.3994
Total	**0.0629**	**0.0223**	**0.3543**	**1.2300e-**	**0.1643**	**8.3000e-**	**0.1651**	**0.0436**	**7.7000e-**	**0.0444**		**122.3468**	**122.3468**	**2.1000e-**		**122.3994**

3.4 Building Construction - 2029

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474	2,556.4744	0.6010		2,571.498

Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.474**	**2,556.4744**	**0.6010**		**2,571.498**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1493	5.2055	1.8308	0.0178	0.4712	8.4100e-	0.4796	0.1355	8.0400e-	0.1435		1,862.367	1,862.3676	0.0202		1,862.871
Worker	0.5759	0.2037	3.2416	0.0112	1.5033	7.6400e-	1.5109	0.3988	7.0200e-	0.4058		1,119.473	1,119.4733	0.0193		1,119.954
Total	**0.7253**	**5.4092**	**5.0724**	**0.0291**	**1.9745**	**0.0161**	**1.9906**	**0.5342**	**0.0151**	**0.5493**		**2,981.841**	**2,981.8410**	**0.0394**		**2,982.826**

3.5 Paving - 2029

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.745	2,206.7452	0.7137		2,224.587
Paving	4.1171					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**5.0323**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**		**2,206.745**	**2,206.7452**	**0.7137**		**2,224.587**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0472	0.0167	0.2657	9.2000e-	0.1232	6.3000e-	0.1239	0.0327	5.8000e-	0.0333		91.7601	91.7601	1.5800e-		91.7996
Total	**0.0472**	**0.0167**	**0.2657**	**9.2000e-**	**0.1232**	**6.3000e-**	**0.1239**	**0.0327**	**5.8000e-**	**0.0333**		**91.7601**	**91.7601**	**1.5800e-**		**91.7996**

3.6 Architectural Coating - 2029

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Archit. Coating	120.6755					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**120.8464**	**1.1455**	**1.8091**	**2.9700e-**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1164	0.0412	0.6554	2.2700e-	0.3040	1.5400e-	0.3055	0.0806	1.4200e-	0.0820		226.3416	226.3416	3.8900e-		226.4389
Total	**0.1164**	**0.0412**	**0.6554**	**2.2700e-**	**0.3040**	**1.5400e-**	**0.3055**	**0.0806**	**1.4200e-**	**0.0820**		**226.3416**	**226.3416**	**3.8900e-**		**226.4389**

3.7 Utilities - 2029

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Off-Road	1.1313	8.6470	16.0605	0.0334		0.3663	0.3663		0.3370	0.3370		3,228.658	3,228.6582	1.0442		3,254.763
Total	**1.1313**	**8.6470**	**16.0605**	**0.0334**		**0.3663**	**0.3663**		**0.3370**	**0.3370**		**3,228.658**	**3,228.6582**	**1.0442**		**3,254.763**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0472	0.0167	0.2657	9.2000e-	0.1232	6.3000e-	0.1239	0.0327	5.8000e-	0.0333		91.7601	91.7601	1.5800e-		91.7996
Total	**0.0472**	**0.0167**	**0.2657**	**9.2000e-**	**0.1232**	**6.3000e-**	**0.1239**	**0.0327**	**5.8000e-**	**0.0333**		**91.7601**	**91.7601**	**1.5800e-**		**91.7996**

LRVSP Construction 2030 - El Dorado-Mountain County County, Summer

LRVSP Construction 2030
El Dorado-Mountain County County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	50.00	Dwelling Unit	22.00	90,000.00	143

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2050
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity	641.35	**CH4 Intensity**	0.029	**N2O Intensity**	0.006

1.3 User Entered Comments & Non-Default Data

Land Use - Acres from project description
Construction Phase - Assumed construction schedule of one-year.
Off-road Equipment - Equipment per applicant.
Grading - Acres from project description.
Architectural Coating - all construction in EDCAQMD must apply coatings with VOC contents of 150 g/L or less, effective 1/1/2018

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblConstructionPhase	NumDays	10.00	8.00
tblConstructionPhase	NumDays	35.00	19.00
tblConstructionPhase	NumDays	370.00	190.00
tblConstructionPhase	NumDays	20.00	14.00
tblConstructionPhase	NumDays	20.00	14.00

tblConstructionPhase	PhaseEndDate	1/14/2030	1/10/2030
tblConstructionPhase	PhaseEndDate	3/4/2030	2/6/2030
tblConstructionPhase	PhaseEndDate	8/4/2031	11/19/2030
tblConstructionPhase	PhaseEndDate	9/1/2031	12/9/2030
tblConstructionPhase	PhaseEndDate	9/29/2031	12/27/2030
tblConstructionPhase	PhaseStartDate	1/15/2030	1/11/2030
tblConstructionPhase	PhaseStartDate	3/5/2030	2/27/2030
tblConstructionPhase	PhaseStartDate	8/5/2031	11/20/2030
tblConstructionPhase	PhaseStartDate	9/2/2031	12/10/2030
tblGrading	AcresOfGrading	47.50	22.00
tblLandUse	LotAcreage	16.23	22.00
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.36	0.36
tblOffRoadEquipment	OffRoadEquipmentType	4	Excavators
tblOffRoadEquipment	OffRoadEquipmentType	2	Rubber Tired Loaders

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2030	120.8178	13.8664	23.3543	0.0711	18.2141	0.4887	18.6515	9.9699	0.4886	10.4072	0.0000	7,332.319	7,332.3191	0.2934	0.0000	7,339.654
Maximum	**120.8178**	**13.8664**	**23.3543**	**0.0711**	**18.2141**	**0.4887**	**18.6515**	**9.9699**	**0.4886**	**10.4072**	**0.0000**	**7,332.319**	**7,332.3191**	**0.2934**	**0.0000**	**7,339.654**

3.0 Construction Detail

Construction Phase

Phase	Phase Name	Phase Type	Start Date	End Date	Num Days	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2030	1/10/2030	5	8	
2	Grading	Grading	1/11/2030	2/6/2030	5	19	
3	Building Construction	Building Construction	2/27/2030	11/19/2030	5	190	
4	Paving	Paving	11/20/2030	12/9/2030	5	14	
5	Architectural Coating	Architectural Coating	12/10/2030	12/27/2030	5	14	
6	Utilities	Trenching	2/7/2030	2/26/2030	5	14	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 22

Acres of Paving: 0

Residential Indoor: 182,250; Residential Outdoor: 60,750; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Utilities	Excavators	4	8.00	158	0.38
Utilities	Rubber Tired Loaders	2	8.00	203	0.36
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor	Hauling
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	18.00	5.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Utilities	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	4.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.2 Site Preparation - 2030

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.4399	13.6680	16.2918	0.0466		0.4367	0.4367		0.4367	0.4367		4,409.753	4,409.7537	0.2176		4,415.193
Total	**2.4399**	**13.6680**	**16.2918**	**0.0466**	**18.0663**	**0.4367**	**18.5029**	**9.9307**	**0.4367**	**10.3673**		**4,409.753**	**4,409.7537**	**0.2176**		**4,415.193**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0519	0.0182	0.2974	1.0800e-	0.1479	7.0000e-	0.1486	0.0392	6.4000e-	0.0399		107.2895	107.2895	1.7200e-		107.3325
Total	**0.0519**	**0.0182**	**0.2974**	**1.0800e-**	**0.1479**	**7.0000e-**	**0.1486**	**0.0392**	**6.4000e-**	**0.0399**		**107.2895**	**107.2895**	**1.7200e-**		**107.3325**

3.3 Grading - 2030

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Fugitive Dust					7.2500	0.0000	7.2500	3.4428	0.0000	3.4428			0.0000			0.0000
Off-Road	3.2807	13.8462	23.0239	0.0699		0.4879	0.4879		0.4879	0.4879		7,213.108	7,213.1086	0.2915		7,220.396
Total	**3.2807**	**13.8462**	**23.0239**	**0.0699**	**7.2500**	**0.4879**	**7.7380**	**3.4428**	**0.4879**	**3.9308**		**7,213.108**	**7,213.1086**	**0.2915**		**7,220.396**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0577	0.0203	0.3304	1.2000e-	0.1643	7.7000e-	0.1651	0.0436	7.1000e-	0.0443		119.2106	119.2106	1.9100e-		119.2583
Total	**0.0577**	**0.0203**	**0.3304**	**1.2000e-**	**0.1643**	**7.7000e-**	**0.1651**	**0.0436**	**7.1000e-**	**0.0443**		**119.2106**	**119.2106**	**1.9100e-**		**119.2583**

3.4 Building Construction - 2030

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.546	2,897.5468	0.1162		2,900.452
Total	**1.3091**	**7.9346**	**16.1570**	**0.0310**		**0.1481**	**0.1481**		**0.1481**	**0.1481**		**2,897.546**	**2,897.5468**	**0.1162**		**2,900.452**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0105	0.3642	0.1295	1.2700e-	0.0337	5.6000e-	0.0342	9.6800e-	5.3000e-	0.0102		132.6306	132.6306	1.4100e-		132.6658
Worker	0.0519	0.0182	0.2974	1.0800e-	0.1479	7.0000e-	0.1486	0.0392	6.4000e-	0.0399		107.2895	107.2895	1.7200e-		107.3325
Total	**0.0624**	**0.3824**	**0.4269**	**2.3500e-**	**0.1815**	**1.2600e-**	**0.1828**	**0.0489**	**1.1700e-**	**0.0501**		**239.9201**	**239.9201**	**3.1300e-**		**239.9983**

3.5 Paving - 2030

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Off-Road	1.3845	7.1202	15.8495	0.0281		0.3306	0.3306		0.3306	0.3306		2,656.516	2,656.5168	0.1245		2,659.630
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3845**	**7.1202**	**15.8495**	**0.0281**		**0.3306**	**0.3306**		**0.3306**	**0.3306**		**2,656.516**	**2,656.5168**	**0.1245**		**2,659.630**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0433	0.0152	0.2478	9.0000e-	0.1232	5.8000e-	0.1238	0.0327	5.3000e-	0.0332		89.4079	89.4079	1.4300e-		89.4438
Total	**0.0433**	**0.0152**	**0.2478**	**9.0000e-**	**0.1232**	**5.8000e-**	**0.1238**	**0.0327**	**5.3000e-**	**0.0332**		**89.4079**	**89.4079**	**1.4300e-**		**89.4438**

3.6 Architectural Coating - 2030

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Archit. Coating	120.6755					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1308	0.8563	1.7977	2.9700e-		0.0203	0.0203		0.0203	0.0203		281.4481	281.4481	0.0114		281.7328
Total	**120.8063**	**0.8563**	**1.7977**	**2.9700e-**		**0.0203**	**0.0203**		**0.0203**	**0.0203**		**281.4481**	**281.4481**	**0.0114**		**281.7328**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0115	4.0500e-	0.0661	2.4000e-	0.0329	1.5000e-	0.0330	8.7200e-	1.4000e-	8.8600e-		23.8421	23.8421	3.8000e-		23.8517
Total	**0.0115**	**4.0500e-**	**0.0661**	**2.4000e-**	**0.0329**	**1.5000e-**	**0.0330**	**8.7200e-**	**1.4000e-**	**8.8600e-**		**23.8421**	**23.8421**	**3.8000e-**		**23.8517**

3.7 Utilities - 2030

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4508	3.9318	17.2598	0.0411		0.1549	0.1549		0.1549	0.1549		3,891.476	3,891.4763	0.1275		3,894.664
Total	**1.4508**	**3.9318**	**17.2598**	**0.0411**		**0.1549**	**0.1549**		**0.1549**	**0.1549**		**3,891.476**	**3,891.4763**	**0.1275**		**3,894.664**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0433	0.0152	0.2478	9.0000e-	0.1232	5.8000e-	0.1238	0.0327	5.3000e-	0.0332		89.4079	89.4079	1.4300e-		89.4438
Total	**0.0433**	**0.0152**	**0.2478**	**9.0000e-**	**0.1232**	**5.8000e-**	**0.1238**	**0.0327**	**5.3000e-**	**0.0332**		**89.4079**	**89.4079**	**1.4300e-**		**89.4438**

LRVSP Construction 2031 - El Dorado-Mountain County County, Summer

LRVSP Construction 2031
El Dorado-Mountain County County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	50.00	Dwelling Unit	22.00	90,000.00	143

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2050
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity	641.35	**CH4 Intensity**	0.029	**N2O Intensity**	0.006

1.3 User Entered Comments & Non-Default Data

Land Use - Acres from project description
Construction Phase - Assumed construction schedule of one-year.
Off-road Equipment - Equipment per applicant.
Grading - Acres from project description.
Grading - Acres from project description.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblConstructionPhase	NumDays	10.00	8.00
tblConstructionPhase	NumDays	35.00	19.00
tblConstructionPhase	NumDays	370.00	190.00
tblConstructionPhase	NumDays	20.00	14.00
tblConstructionPhase	NumDays	20.00	14.00
tblConstructionPhase	PhaseEndDate	1/14/2031	1/10/2031

tblConstructionPhase	PhaseEndDate	3/4/2031	2/6/2031
tblConstructionPhase	PhaseEndDate	3/4/2031	2/26/2031
tblConstructionPhase	PhaseEndDate	8/3/2032	11/19/2031
tblConstructionPhase	PhaseEndDate	8/31/2032	12/9/2031
tblConstructionPhase	PhaseEndDate	9/28/2032	12/29/2031
tblConstructionPhase	PhaseStartDate	1/15/2031	1/11/2031
tblConstructionPhase	PhaseStartDate	3/5/2031	2/7/2031
tblConstructionPhase	PhaseStartDate	3/5/2031	2/27/2031
tblConstructionPhase	PhaseStartDate	8/4/2032	11/20/2031
tblConstructionPhase	PhaseStartDate	9/1/2032	12/10/2031
tblGrading	AcresOfGrading	47.50	22.00
tblLandUse	LotAcreage	16.23	22.00
tblOffRoadEquipment	OffRoadEquipmentType	4	Excavators
tblOffRoadEquipment	OffRoadEquipmentType	2	Rubber Tired Loaders

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2031	120.8167	13.8646	23.3320	0.0711	18.2141	0.4887	18.6514	9.9699	0.4886	10.4072	0.0000	7,329.574	7,329.5746	0.2932	0.0000	7,336.905
Maximum	**120.8167**	**13.8646**	**23.3320**	**0.0711**	**18.2141**	**0.4887**	**18.6514**	**9.9699**	**0.4886**	**10.4072**	**0.0000**	**7,329.574**	**7,329.5746**	**0.2932**	**0.0000**	**7,336.905**

3.0 Construction Detail

Construction Phase

Phase	Phase Name	Phase Type	Start Date	End Date	Num Days	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2031	1/10/2031	5	8	
2	Grading	Grading	1/11/2031	2/6/2031	5	19	
3	Building Construction	Building Construction	2/27/2031	11/19/2031	5	190	
4	Utilities	Trenching	2/7/2031	2/26/2031	5	14	
5	Paving	Paving	11/20/2031	12/9/2031	5	14	
6	Architectural Coating	Architectural Coating	12/10/2031	12/29/2031	5	14	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 22

Acres of Paving: 0

Residential Indoor: 182,250; Residential Outdoor: 60,750; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Utilities	Excavators	4	8.00	158	0.38
Utilities	Rubber Tired Loaders	2	8.00	203	0.36
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor	Hauling
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	18.00	5.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Utilities	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	4.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.2 Site Preparation - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.4399	13.6680	16.2918	0.0466		0.4367	0.4367		0.4367	0.4367		4,409.753	4,409.7537	0.2176		4,415.193
Total	**2.4399**	**13.6680**	**16.2918**	**0.0466**	**18.0663**	**0.4367**	**18.5029**	**9.9307**	**0.4367**	**10.3673**		**4,409.753**	**4,409.7537**	**0.2176**		**4,415.193**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0470	0.0166	0.2773	1.0500e-	0.1479	6.4000e-	0.1485	0.0392	5.9000e-	0.0398		104.8194	104.8194	1.5600e-		104.8585
Total	**0.0470**	**0.0166**	**0.2773**	**1.0500e-**	**0.1479**	**6.4000e-**	**0.1485**	**0.0392**	**5.9000e-**	**0.0398**		**104.8194**	**104.8194**	**1.5600e-**		**104.8585**

3.3 Grading - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.2500	0.0000	7.2500	3.4428	0.0000	3.4428			0.0000			0.0000
Off-Road	3.2807	13.8462	23.0239	0.0699		0.4879	0.4879		0.4879	0.4879		7,213.108	7,213.1086	0.2915		7,220.396
Total	**3.2807**	**13.8462**	**23.0239**	**0.0699**	**7.2500**	**0.4879**	**7.7380**	**3.4428**	**0.4879**	**3.9308**		**7,213.108**	**7,213.1086**	**0.2915**		**7,220.396**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0523	0.0184	0.3081	1.1700e-	0.1643	7.2000e-	0.1650	0.0436	6.6000e-	0.0442		116.4660	116.4660	1.7300e-		116.5094
Total	**0.0523**	**0.0184**	**0.3081**	**1.1700e-**	**0.1643**	**7.2000e-**	**0.1650**	**0.0436**	**6.6000e-**	**0.0442**		**116.4660**	**116.4660**	**1.7300e-**		**116.5094**

3.4 Building Construction - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.546	2,897.5468	0.1162		2,900.452
Total	**1.3091**	**7.9346**	**16.1570**	**0.0310**		**0.1481**	**0.1481**		**0.1481**	**0.1481**		**2,897.546**	**2,897.5468**	**0.1162**		**2,900.452**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0103	0.3579	0.1280	1.2700e-	0.0337	5.3000e-	0.0342	9.6800e-	5.1000e-	0.0102		132.2519	132.2519	1.3800e-		132.2864
Worker	0.0470	0.0166	0.2773	1.0500e-	0.1479	6.4000e-	0.1485	0.0392	5.9000e-	0.0398		104.8194	104.8194	1.5600e-		104.8585
Total	**0.0573**	**0.3745**	**0.4053**	**2.3200e-**	**0.1815**	**1.1700e-**	**0.1827**	**0.0489**	**1.1000e-**	**0.0500**		**237.0714**	**237.0714**	**2.9400e-**		**237.1449**

3.5 Utilities - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4436	3.9122	17.1740	0.0409		0.1541	0.1541		0.1541	0.1541		3,872.115	3,872.1157	0.1269		3,875.287
Total	**1.4436**	**3.9122**	**17.1740**	**0.0409**		**0.1541**	**0.1541**		**0.1541**	**0.1541**		**3,872.115**	**3,872.1157**	**0.1269**		**3,875.287**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0392	0.0138	0.2311	8.8000e-	0.1232	5.4000e-	0.1238	0.0327	4.9000e-	0.0332		87.3495	87.3495	1.3000e-		87.3821
Total	**0.0392**	**0.0138**	**0.2311**	**8.8000e-**	**0.1232**	**5.4000e-**	**0.1238**	**0.0327**	**4.9000e-**	**0.0332**		**87.3495**	**87.3495**	**1.3000e-**		**87.3821**

3.6 Paving - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3845	7.1202	15.8495	0.0281		0.3306	0.3306		0.3306	0.3306		2,656.516	2,656.5168	0.1245		2,659.630
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3845**	**7.1202**	**15.8495**	**0.0281**		**0.3306**	**0.3306**		**0.3306**	**0.3306**		**2,656.516**	**2,656.5168**	**0.1245**		**2,659.630**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0392	0.0138	0.2311	8.8000e-	0.1232	5.4000e-	0.1238	0.0327	4.9000e-	0.0332		87.3495	87.3495	1.3000e-		87.3821
Total	**0.0392**	**0.0138**	**0.2311**	**8.8000e-**	**0.1232**	**5.4000e-**	**0.1238**	**0.0327**	**4.9000e-**	**0.0332**		**87.3495**	**87.3495**	**1.3000e-**		**87.3821**

3.7 Architectural Coating - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	120.6755					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1308	0.8563	1.7977	2.9700e-		0.0203	0.0203		0.0203	0.0203		281.4481	281.4481	0.0114		281.7328
Total	**120.8063**	**0.8563**	**1.7977**	**2.9700e-**		**0.0203**	**0.0203**		**0.0203**	**0.0203**		**281.4481**	**281.4481**	**0.0114**		**281.7328**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0105	3.6900e-	0.0616	2.3000e-	0.0329	1.4000e-	0.0330	8.7200e-	1.3000e-	8.8500e-		23.2932	23.2932	3.5000e-		23.3019
Total	**0.0105**	**3.6900e-**	**0.0616**	**2.3000e-**	**0.0329**	**1.4000e-**	**0.0330**	**8.7200e-**	**1.3000e-**	**8.8500e-**		**23.2932**	**23.2932**	**3.5000e-**		**23.3019**

LRVSP Construction 2032 - El Dorado-Mountain County County, Summer

LRVSP Construction 2032
El Dorado-Mountain County County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	50.00	Dwelling Unit	22.00	90,000.00	143

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2050
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity	641.35	**CH4 Intensity**	0.029	**N2O Intensity**	0.006

1.3 User Entered Comments & Non-Default Data

Land Use - Acres from project description
Construction Phase - Assumed construction schedule of one-year.
Off-road Equipment - Equipment per applicant.
Grading - Acres from project description.
Architectural Coating - all construction in EDCAQMD must apply coatings with VOC contents of 150 g/L or less, effective 1/1/2018

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblConstructionPhase	NumDays	10.00	8.00
tblConstructionPhase	NumDays	35.00	19.00
tblConstructionPhase	NumDays	370.00	190.00
tblConstructionPhase	NumDays	20.00	14.00
tblConstructionPhase	NumDays	20.00	14.00

tblConstructionPhase	PhaseEndDate	1/14/2032	1/12/2032
tblConstructionPhase	PhaseEndDate	3/3/2032	2/6/2032
tblConstructionPhase	PhaseEndDate	3/3/2032	2/26/2032
tblConstructionPhase	PhaseEndDate	8/3/2033	11/18/2032
tblConstructionPhase	PhaseEndDate	8/31/2033	12/8/2032
tblConstructionPhase	PhaseEndDate	9/28/2033	12/28/2032
tblConstructionPhase	PhaseStartDate	1/15/2032	1/13/2032
tblConstructionPhase	PhaseStartDate	3/4/2032	2/7/2032
tblConstructionPhase	PhaseStartDate	3/4/2032	2/27/2032
tblConstructionPhase	PhaseStartDate	8/4/2033	11/19/2032
tblConstructionPhase	PhaseStartDate	9/1/2033	12/9/2032
tblGrading	AcresOfGrading	47.50	22.00
tblLandUse	LotAcreage	16.23	22.00
tblOffRoadEquipment	OffRoadEquipmentType	4	Excavators
tblOffRoadEquipment	OffRoadEquipmentType	2	Rubber Tired Loaders

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2032	120.8158	13.8631	23.3130	0.0711	18.2141	0.4886	18.6514	9.9699	0.4885	10.4071	0.0000	7,327.190	7,327.1900	0.2931	0.0000	7,334.517
Maximum	**120.8158**	**13.8631**	**23.3130**	**0.0711**	**18.2141**	**0.4886**	**18.6514**	**9.9699**	**0.4885**	**10.4071**	**0.0000**	**7,327.190**	**7,327.1900**	**0.2931**	**0.0000**	**7,334.517**

3.0 Construction Detail

Construction Phase

Phase	Phase Name	Phase Type	Start Date	End Date	Num Days	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2032	1/12/2032	5	8	
2	Grading	Grading	1/13/2032	2/6/2032	5	19	
3	Building Construction	Building Construction	2/27/2032	11/18/2032	5	190	
4	Utilities	Trenching	2/7/2032	2/26/2032	5	14	
5	Paving	Paving	11/19/2032	12/8/2032	5	14	
6	Architectural Coating	Architectural Coating	12/9/2032	12/28/2032	5	14	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 22

Acres of Paving: 0

Residential Indoor: 182,250; Residential Outdoor: 60,750; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Utilities	Excavators	4	8.00	158	0.38
Utilities	Rubber Tired Loaders	2	8.00	203	0.36
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor	Hauling
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	18.00	5.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Utilities	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	4.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.2 Site Preparation - 2032

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.4399	13.6680	16.2918	0.0466		0.4367	0.4367		0.4367	0.4367		4,409.753	4,409.7537	0.2176		4,415.193
Total	**2.4399**	**13.6680**	**16.2918**	**0.0466**	**18.0663**	**0.4367**	**18.5029**	**9.9307**	**0.4367**	**10.3673**		**4,409.753**	**4,409.7537**	**0.2176**		**4,415.193**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0429	0.0152	0.2602	1.0300e-	0.1479	6.0000e-	0.1485	0.0392	5.5000e-	0.0398		102.6733	102.6733	1.4300e-		102.7090
Total	**0.0429**	**0.0152**	**0.2602**	**1.0300e-**	**0.1479**	**6.0000e-**	**0.1485**	**0.0392**	**5.5000e-**	**0.0398**		**102.6733**	**102.6733**	**1.4300e-**		**102.7090**

3.3 Grading - 2032

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Fugitive Dust					7.2500	0.0000	7.2500	3.4428	0.0000	3.4428			0.0000			0.0000
Off-Road	3.2807	13.8462	23.0239	0.0699		0.4879	0.4879		0.4879	0.4879		7,213.108	7,213.1086	0.2915		7,220.396
Total	**3.2807**	**13.8462**	**23.0239**	**0.0699**	**7.2500**	**0.4879**	**7.7380**	**3.4428**	**0.4879**	**3.9308**		**7,213.108**	**7,213.1086**	**0.2915**		**7,220.396**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0477	0.0169	0.2891	1.1400e-	0.1643	6.6000e-	0.1650	0.0436	6.1000e-	0.0442		114.0814	114.0814	1.5900e-		114.1211
Total	**0.0477**	**0.0169**	**0.2891**	**1.1400e-**	**0.1643**	**6.6000e-**	**0.1650**	**0.0436**	**6.1000e-**	**0.0442**		**114.0814**	**114.0814**	**1.5900e-**		**114.1211**

3.4 Building Construction - 2032

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.546	2,897.5468	0.1162		2,900.452
Total	**1.3091**	**7.9346**	**16.1570**	**0.0310**		**0.1481**	**0.1481**		**0.1481**	**0.1481**		**2,897.546**	**2,897.5468**	**0.1162**		**2,900.452**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0102	0.3515	0.1268	1.2600e-	0.0337	5.0000e-	0.0342	9.6800e-	4.7000e-	0.0102		131.9248	131.9248	1.3600e-		131.9587
Worker	0.0429	0.0152	0.2602	1.0300e-	0.1479	6.0000e-	0.1485	0.0392	5.5000e-	0.0398		102.6733	102.6733	1.4300e-		102.7090
Total	**0.0531**	**0.3667**	**0.3870**	**2.2900e-**	**0.1815**	**1.1000e-**	**0.1826**	**0.0489**	**1.0200e-**	**0.0499**		**234.5980**	**234.5980**	**2.7900e-**		**234.6676**

3.5 Utilities - 2032

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Off-Road	1.4436	3.9122	17.1740	0.0409		0.1541	0.1541		0.1541	0.1541		3,872.115	3,872.1157	0.1269		3,875.287
Total	**1.4436**	**3.9122**	**17.1740**	**0.0409**		**0.1541**	**0.1541**		**0.1541**	**0.1541**		**3,872.115**	**3,872.1157**	**0.1269**		**3,875.287**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0358	0.0127	0.2168	8.6000e-	0.1232	5.0000e-	0.1237	0.0327	4.6000e-	0.0331		85.5611	85.5611	1.1900e-		85.5908
Total	**0.0358**	**0.0127**	**0.2168**	**8.6000e-**	**0.1232**	**5.0000e-**	**0.1237**	**0.0327**	**4.6000e-**	**0.0331**		**85.5611**	**85.5611**	**1.1900e-**		**85.5908**

3.6 Paving - 2032

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Off-Road	1.3845	7.1202	15.8495	0.0281		0.3306	0.3306		0.3306	0.3306		2,656.516	2,656.5168	0.1245		2,659.630
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3845**	**7.1202**	**15.8495**	**0.0281**		**0.3306**	**0.3306**		**0.3306**	**0.3306**		**2,656.516**	**2,656.5168**	**0.1245**		**2,659.630**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0358	0.0127	0.2168	8.6000e-	0.1232	5.0000e-	0.1237	0.0327	4.6000e-	0.0331		85.5611	85.5611	1.1900e-		85.5908

Total	**0.0358**	**0.0127**	**0.2168**	**8.6000e-**	**0.1232**	**5.0000e-**	**0.1237**	**0.0327**	**4.6000e-**	**0.0331**		**85.5611**	**85.5611**	**1.1900e-**		**85.5908**

3.7 Architectural Coating - 2032

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	120.6755					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1308	0.8563	1.7977	2.9700e-		0.0203	0.0203		0.0203	0.0203		281.4481	281.4481	0.0114		281.7328
Total	**120.8063**	**0.8563**	**1.7977**	**2.9700e-**		**0.0203**	**0.0203**		**0.0203**	**0.0203**		**281.4481**	**281.4481**	**0.0114**		**281.7328**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	9.5400e-	3.3800e-	0.0578	2.3000e-	0.0329	1.3000e-	0.0330	8.7200e-	1.2000e-	8.8400e-		22.8163	22.8163	3.2000e-		22.8242
Total	**9.5400e-**	**3.3800e-**	**0.0578**	**2.3000e-**	**0.0329**	**1.3000e-**	**0.0330**	**8.7200e-**	**1.2000e-**	**8.8400e-**		**22.8163**	**22.8163**	**3.2000e-**		**22.8242**

LRVSP Construction 2033 - El Dorado-Mountain County County, Summer

LRVSP Construction 2033
El Dorado-Mountain County County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	49.00	Dwelling Unit	22.00	88,200.00	140

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2050
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity	641.35	**CH4 Intensity**	0.029	**N2O Intensity**	0.006

1.3 User Entered Comments & Non-Default Data

Land Use - Acres from project description
Construction Phase - Assumed construction schedule of one-year.
Off-road Equipment - Equipment per applicant.
Grading - Acres from project description.
Architectural Coating - all construction in EDCAQMD must apply coatings with VOC contents of 150 g/L or less, effective 1/1/2018

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblConstructionPhase	NumDays	10.00	8.00
tblConstructionPhase	NumDays	35.00	19.00
tblConstructionPhase	NumDays	370.00	190.00
tblConstructionPhase	NumDays	20.00	14.00
tblConstructionPhase	NumDays	20.00	14.00
tblConstructionPhase	PhaseEndDate	1/14/2033	1/12/2033

tblConstructionPhase	PhaseEndDate	3/4/2033	2/8/2033
tblConstructionPhase	PhaseEndDate	8/4/2034	11/21/2033
tblConstructionPhase	PhaseEndDate	9/1/2034	12/9/2033
tblConstructionPhase	PhaseEndDate	9/29/2034	12/29/2033
tblConstructionPhase	PhaseStartDate	1/15/2033	1/13/2033
tblConstructionPhase	PhaseStartDate	3/5/2033	3/1/2033
tblConstructionPhase	PhaseStartDate	8/5/2034	11/22/2033
tblConstructionPhase	PhaseStartDate	9/2/2034	12/10/2033
tblGrading	AcresOfGrading	47.50	22.00
tblLandUse	LotAcreage	15.91	22.00
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.36	0.36
tblOffRoadEquipment	OffRoadEquipmentType	4	Excavators
tblOffRoadEquipment	OffRoadEquipmentType	2	Rubber Tired Loaders

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2033	118.4015	13.8618	23.2966	0.0711	18.2141	0.4886	18.6513	9.9699	0.4885	10.4071	0.0000	7,325.131	7,325.1318	0.2930	0.0000	7,332.456
Maximum	**118.4015**	**13.8618**	**23.2966**	**0.0711**	**18.2141**	**0.4886**	**18.6513**	**9.9699**	**0.4885**	**10.4071**	**0.0000**	**7,325.131**	**7,325.1318**	**0.2930**	**0.0000**	**7,332.456**

3.0 Construction Detail

Construction Phase

Phase	Phase Name	Phase Type	Start Date	End Date	Num Days	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2033	1/12/2033	5	8	
2	Grading	Grading	1/13/2033	2/8/2033	5	19	
3	Building Construction	Building Construction	3/1/2033	11/21/2033	5	190	
4	Paving	Paving	11/22/2033	12/9/2033	5	14	
5	Architectural Coating	Architectural Coating	12/10/2033	12/29/2033	5	14	
6	Utilities	Trenching	2/9/2033	2/28/2033	5	14	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 22

Acres of Paving: 0

Residential Indoor: 178,605; Residential Outdoor: 59,535; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Utilities	Excavators	4	8.00	158	0.38
Utilities	Rubber Tired Loaders	2	8.00	203	0.36
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor	Hauling
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	18.00	5.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Utilities	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	4.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.2 Site Preparation - 2033

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.4399	13.6680	16.2918	0.0466		0.4367	0.4367		0.4367	0.4367		4,409.753	4,409.7537	0.2176		4,415.193
Total	**2.4399**	**13.6680**	**16.2918**	**0.0466**	**18.0663**	**0.4367**	**18.5029**	**9.9307**	**0.4367**	**10.3673**		**4,409.753**	**4,409.7537**	**0.2176**		**4,415.193**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0394	0.0141	0.2455	1.0100e-	0.1479	5.6000e-	0.1484	0.0392	5.1000e-	0.0397		100.8209	100.8209	1.3100e-		100.8538
Total	**0.0394**	**0.0141**	**0.2455**	**1.0100e-**	**0.1479**	**5.6000e-**	**0.1484**	**0.0392**	**5.1000e-**	**0.0397**		**100.8209**	**100.8209**	**1.3100e-**		**100.8538**

3.3 Grading - 2033

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.2500	0.0000	7.2500	3.4428	0.0000	3.4428			0.0000			0.0000
Off-Road	3.2807	13.8462	23.0239	0.0699		0.4879	0.4879		0.4879	0.4879		7,213.108	7,213.1086	0.2915		7,220.396
Total	**3.2807**	**13.8462**	**23.0239**	**0.0699**	**7.2500**	**0.4879**	**7.7380**	**3.4428**	**0.4879**	**3.9308**		**7,213.108**	**7,213.1086**	**0.2915**		**7,220.396**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0438	0.0156	0.2727	1.1200e-	0.1643	6.2000e-	0.1649	0.0436	5.7000e-	0.0442		112.0233	112.0233	1.4600e-		112.0598
Total	**0.0438**	**0.0156**	**0.2727**	**1.1200e-**	**0.1643**	**6.2000e-**	**0.1649**	**0.0436**	**5.7000e-**	**0.0442**		**112.0233**	**112.0233**	**1.4600e-**		**112.0598**

3.4 Building Construction - 2033

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.546	2,897.5468	0.1162		2,900.452
Total	**1.3091**	**7.9346**	**16.1570**	**0.0310**		**0.1481**	**0.1481**		**0.1481**	**0.1481**		**2,897.546**	**2,897.5468**	**0.1162**		**2,900.452**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0101	0.3454	0.1261	1.2600e-	0.0337	4.7000e-	0.0341	9.6800e-	4.5000e-	0.0101		131.6061	131.6061	1.3400e-		131.6395
Worker	0.0394	0.0141	0.2455	1.0100e-	0.1479	5.6000e-	0.1484	0.0392	5.1000e-	0.0397		100.8209	100.8209	1.3100e-		100.8538
Total	**0.0495**	**0.3595**	**0.3716**	**2.2700e-**	**0.1815**	**1.0300e-**	**0.1826**	**0.0489**	**9.6000e-**	**0.0499**		**232.4270**	**232.4270**	**2.6500e-**		**232.4933**

3.5 Paving - 2033

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3845	7.1202	15.8495	0.0281		0.3306	0.3306		0.3306	0.3306		2,656.516	2,656.5168	0.1245		2,659.630
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3845**	**7.1202**	**15.8495**	**0.0281**		**0.3306**	**0.3306**		**0.3306**	**0.3306**		**2,656.516**	**2,656.5168**	**0.1245**		**2,659.630**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0328	0.0117	0.2046	8.4000e-	0.1232	4.6000e-	0.1237	0.0327	4.3000e-	0.0331		84.0175	84.0175	1.0900e-		84.0448
Total	**0.0328**	**0.0117**	**0.2046**	**8.4000e-**	**0.1232**	**4.6000e-**	**0.1237**	**0.0327**	**4.3000e-**	**0.0331**		**84.0175**	**84.0175**	**1.0900e-**		**84.0448**

3.6 Architectural Coating - 2033

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	118.2620					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1308	0.8563	1.7977	2.9700e-		0.0203	0.0203		0.0203	0.0203		281.4481	281.4481	0.0114		281.7328
Total	**118.3928**	**0.8563**	**1.7977**	**2.9700e-**		**0.0203**	**0.0203**		**0.0203**	**0.0203**		**281.4481**	**281.4481**	**0.0114**		**281.7328**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	8.7600e-	3.1200e-	0.0546	2.2000e-	0.0329	1.2000e-	0.0330	8.7200e-	1.1000e-	8.8300e-		22.4047	22.4047	2.9000e-		22.4120

Total	**8.7600e-003**	**3.1200e-003**	**0.0546**	**2.2000e-004**	**0.0329**	**1.2000e-004**	**0.0330**	**8.7200e-003**	**1.1000e-004**	**8.8300e-003**		**22.4047**	**22.4047**	**2.9000e-004**		**22.4120**

3.7 Utilities - 2033

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4508	3.9318	17.2598	0.0411		0.1549	0.1549		0.1549	0.1549		3,891.476	3,891.4763	0.1275		3,894.664
Total	**1.4508**	**3.9318**	**17.2598**	**0.0411**		**0.1549**	**0.1549**		**0.1549**	**0.1549**		**3,891.476**	**3,891.4763**	**0.1275**		**3,894.664**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0328	0.0117	0.2046	8.4000e-004	0.1232	4.6000e-004	0.1237	0.0327	4.3000e-004	0.0331		84.0175	84.0175	1.0900e-003		84.0448
Total	**0.0328**	**0.0117**	**0.2046**	**8.4000e-004**	**0.1232**	**4.6000e-004**	**0.1237**	**0.0327**	**4.3000e-004**	**0.0331**		**84.0175**	**84.0175**	**1.0900e-003**		**84.0448**

LRVSP Construction 2034
El Dorado-Mountain County County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	49.00	Dwelling Unit	22.00	88,200.00	140
City Park	3.00	Acre	3.00	130,680.00	0
Other Asphalt Surfaces	8.00	Acre	8.00	348,480.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2050
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity	641.35	**CH4 Intensity**	0.029	**N2O Intensity**	0.006

1.3 User Entered Comments & Non-Default Data

Land Use - Acres from project description
Construction Phase - Assumed construction schedule of one-year.
Off-road Equipment - Equipment per applicant.
Grading - Acres from project description.
Architectural Coating - all construction in EDCAQMD must apply coatings with VOC contents of 150 g/L or less, effective 1/1/2018

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	20,909.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblConstructionPhase	NumDays	20.00	8.00
tblConstructionPhase	NumDays	45.00	19.00
tblConstructionPhase	NumDays	500.00	190.00

tblConstructionPhase	NumDays	35.00	14.00
tblConstructionPhase	NumDays	35.00	14.00
tblConstructionPhase	PhaseEndDate	1/27/2034	1/11/2034
tblConstructionPhase	PhaseEndDate	3/31/2034	2/7/2034
tblConstructionPhase	PhaseEndDate	2/29/2036	11/20/2034
tblConstructionPhase	PhaseEndDate	4/18/2036	12/8/2034
tblConstructionPhase	PhaseEndDate	6/6/2036	12/28/2034
tblConstructionPhase	PhaseStartDate	1/28/2034	1/12/2034
tblConstructionPhase	PhaseStartDate	4/1/2034	2/28/2034
tblConstructionPhase	PhaseStartDate	3/1/2036	11/21/2034
tblConstructionPhase	PhaseStartDate	4/19/2036	12/9/2034
tblGrading	AcresOfGrading	47.50	33.00
tblLandUse	LotAcreage	15.91	22.00
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.36	0.36
tblOffRoadEquipment	OffRoadEquipmentType	4	Excavators
tblOffRoadEquipment	OffRoadEquipmentType	2	Rubber Tired Loaders

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2034	118.4819	13.8607	23.2818	0.0710	18.2141	0.4885	18.6513	9.9699	0.4885	10.4070	0.0000	7,323.359	7,323.3594	0.2929	0.0000	7,330.680
Maximum	**118.4819**	**13.8607**	**23.2818**	**0.0710**	**18.2141**	**0.4885**	**18.6513**	**9.9699**	**0.4885**	**10.4070**	**0.0000**	**7,323.359**	**7,323.3594**	**0.2929**	**0.0000**	**7,330.680**

3.0 Construction Detail

Construction Phase

Phase	Phase Name	Phase Type	Start Date	End Date	Num Days	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2034	1/11/2034	5	8	
2	Grading	Grading	1/12/2034	2/7/2034	5	19	
3	Building Construction	Building Construction	2/28/2034	11/20/2034	5	190	
4	Paving	Paving	11/21/2034	12/8/2034	5	14	
5	Architectural Coating	Architectural Coating	12/9/2034	12/28/2034	5	14	
6	Utilities	Trenching	2/8/2034	2/27/2034	5	14	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 33

Acres of Paving: 8

Residential Indoor: 178,605; Residential Outdoor: 59,535; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Utilities	Excavators	4	8.00	158	0.38
Utilities	Rubber Tired Loaders	2	8.00	203	0.36
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor	Hauling
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	219.00	84.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Utilities	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	44.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.2 Site Preparation - 2034

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.4399	13.6680	16.2918	0.0466		0.4367	0.4367		0.4367	0.4367		4,409.753	4,409.7537	0.2176		4,415.193

Total	**2.4399**	**13.6680**	**16.2918**	**0.0466**	**18.0663**	**0.4367**	**18.5029**	**9.9307**	**0.4367**	**10.3673**		**4,409.753**	**4,409.7537**	**0.2176**		**4,415.193**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0365	0.0131	0.2321	9.9000e-	0.1479	5.2000e-	0.1484	0.0392	4.8000e-	0.0397		99.2257	99.2257	1.2100e-		99.2560
Total	**0.0365**	**0.0131**	**0.2321**	**9.9000e-**	**0.1479**	**5.2000e-**	**0.1484**	**0.0392**	**4.8000e-**	**0.0397**		**99.2257**	**99.2257**	**1.2100e-**		**99.2560**

3.3 Grading - 2034

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Fugitive Dust					7.8640	0.0000	7.8640	3.5091	0.0000	3.5091			0.0000			0.0000
Off-Road	3.2807	13.8462	23.0239	0.0699		0.4879	0.4879		0.4879	0.4879		7,213.108	7,213.1086	0.2915		7,220.396
Total	**3.2807**	**13.8462**	**23.0239**	**0.0699**	**7.8640**	**0.4879**	**8.3519**	**3.5091**	**0.4879**	**3.9970**		**7,213.108**	**7,213.1086**	**0.2915**		**7,220.396**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0405	0.0146	0.2579	1.1000e-	0.1643	5.8000e-	0.1649	0.0436	5.3000e-	0.0441		110.2508	110.2508	1.3500e-		110.2845
Total	**0.0405**	**0.0146**	**0.2579**	**1.1000e-**	**0.1643**	**5.8000e-**	**0.1649**	**0.0436**	**5.3000e-**	**0.0441**		**110.2508**	**110.2508**	**1.3500e-**		**110.2845**

3.4 Building Construction - 2034

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.546	2,897.5468	0.1162		2,900.452
Total	**1.3091**	**7.9346**	**16.1570**	**0.0310**		**0.1481**	**0.1481**		**0.1481**	**0.1481**		**2,897.546**	**2,897.5468**	**0.1162**		**2,900.452**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1673	5.7078	2.1135	0.0211	0.5657	7.5500e-	0.5732	0.1626	7.2200e-	0.1699		2,205.759	2,205.7596	0.0222		2,206.315
Worker	0.4437	0.1593	2.8243	0.0121	1.7990	6.3200e-	1.8054	0.4772	5.8100e-	0.4830		1,207.246	1,207.2465	0.0148		1,207.615
Total	**0.6110**	**5.8671**	**4.9378**	**0.0332**	**2.3647**	**0.0139**	**2.3786**	**0.6398**	**0.0130**	**0.6529**		**3,413.006**	**3,413.0061**	**0.0370**		**3,413.930**

3.5 Paving - 2034

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Off-Road	1.3845	7.1202	15.8495	0.0281		0.3306	0.3306		0.3306	0.3306		2,656.516	2,656.5168	0.1245		2,659.630
Paving	1.4971					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.8817**	**7.1202**	**15.8495**	**0.0281**		**0.3306**	**0.3306**		**0.3306**	**0.3306**		**2,656.516**	**2,656.5168**	**0.1245**		**2,659.630**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0304	0.0109	0.1934	8.3000e-	0.1232	4.3000e-	0.1237	0.0327	4.0000e-	0.0331		82.6881	82.6881	1.0100e-		82.7134
Total	**0.0304**	**0.0109**	**0.1934**	**8.3000e-**	**0.1232**	**4.3000e-**	**0.1237**	**0.0327**	**4.0000e-**	**0.0331**		**82.6881**	**82.6881**	**1.0100e-**		**82.7134**

3.6 Architectural Coating - 2034

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Archit. Coating	118.2620					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1308	0.8563	1.7977	2.9700e-		0.0203	0.0203		0.0203	0.0203		281.4481	281.4481	0.0114		281.7328
Total	**118.3928**	**0.8563**	**1.7977**	**2.9700e-**		**0.0203**	**0.0203**		**0.0203**	**0.0203**		**281.4481**	**281.4481**	**0.0114**		**281.7328**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0891	0.0320	0.5674	2.4300e-	0.3615	1.2700e-	0.3627	0.0959	1.1700e-	0.0970		242.5518	242.5518	2.9600e-		242.6259
Total	**0.0891**	**0.0320**	**0.5674**	**2.4300e-**	**0.3615**	**1.2700e-**	**0.3627**	**0.0959**	**1.1700e-**	**0.0970**		**242.5518**	**242.5518**	**2.9600e-**		**242.6259**

3.7 Utilities - 2034

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4508	3.9318	17.2598	0.0411		0.1549	0.1549		0.1549	0.1549		3,891.476	3,891.4763	0.1275		3,894.664
Total	**1.4508**	**3.9318**	**17.2598**	**0.0411**		**0.1549**	**0.1549**		**0.1549**	**0.1549**		**3,891.476**	**3,891.4763**	**0.1275**		**3,894.664**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0304	0.0109	0.1934	8.3000e-	0.1232	4.3000e-	0.1237	0.0327	4.0000e-	0.0331		82.6881	82.6881	1.0100e-		82.7134
Total	**0.0304**	**0.0109**	**0.1934**	**8.3000e-**	**0.1232**	**4.3000e-**	**0.1237**	**0.0327**	**4.0000e-**	**0.0331**		**82.6881**	**82.6881**	**1.0100e-**		**82.7134**

LRVSP Construction 2035 - El Dorado-Mountain County County, Summer

LRVSP Construction 2035
El Dorado-Mountain County County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	49.00	Dwelling Unit	22.00	88,200.00	140

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2050
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity	641.35	**CH4 Intensity**	0.029	**N2O Intensity**	0.006

1.3 User Entered Comments & Non-Default Data

Land Use - Acres from project description
Construction Phase - Assumed construction schedule of one-year.
Off-road Equipment - Equipment per applicant.
Grading - Acres from project description.
Architectural Coating - all construction in EDCAQMD must apply coatings with VOC contents of 150 g/L or less, effective 1/1/2018

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblConstructionPhase	NumDays	10.00	8.00
tblConstructionPhase	NumDays	35.00	19.00
tblConstructionPhase	NumDays	370.00	190.00
tblConstructionPhase	NumDays	20.00	14.00
tblConstructionPhase	NumDays	20.00	14.00

tblConstructionPhase	PhaseEndDate	1/12/2035	1/10/2035
tblConstructionPhase	PhaseEndDate	3/2/2035	2/6/2035
tblConstructionPhase	PhaseEndDate	3/2/2035	2/26/2035
tblConstructionPhase	PhaseEndDate	8/1/2036	11/19/2035
tblConstructionPhase	PhaseEndDate	8/29/2036	12/7/2035
tblConstructionPhase	PhaseEndDate	9/26/2036	12/27/2035
tblConstructionPhase	PhaseStartDate	1/13/2035	1/11/2035
tblConstructionPhase	PhaseStartDate	3/3/2035	2/7/2035
tblConstructionPhase	PhaseStartDate	3/3/2035	2/27/2035
tblConstructionPhase	PhaseStartDate	8/2/2036	11/20/2035
tblConstructionPhase	PhaseStartDate	8/30/2036	12/8/2035
tblGrading	AcresOfGrading	47.50	22.00
tblLandUse	LotAcreage	15.91	22.00

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2035	118.3874	10.1523	22.7701	0.0710	18.2141	0.3148	18.5057	9.9699	0.3147	10.2615	0.0000	7,321.853	7,321.8535	0.2572	0.0000	7,328.283
Maximum	**118.3874**	**10.1523**	**22.7701**	**0.0710**	**18.2141**	**0.3148**	**18.5057**	**9.9699**	**0.3147**	**10.2615**	**0.0000**	**7,321.853**	**7,321.8535**	**0.2572**	**0.0000**	**7,328.283**

3.0 Construction Detail

Construction Phase

Phase	Phase Name	Phase Type	Start Date	End Date	Num Days	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2035	1/10/2035	5	8	
2	Grading	Grading	1/11/2035	2/6/2035	5	19	
3	Utilities	Trenching	2/7/2035	2/26/2035	5	14	
4	Building Construction	Building Construction	2/27/2035	11/19/2035	5	190	
5	Paving	Paving	11/20/2035	12/7/2035	5	14	
6	Architectural Coating	Architectural Coating	12/8/2035	12/27/2035	5	14	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 22

Acres of Paving: 0

Residential Indoor: 178,605; Residential Outdoor: 59,535; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48
Utilities	Excavators	4	8.00	158	0.38
Utilities	Rubber Tired Loaders	2	8.00	203	0.36

Trips and VMT

Phase Name	Offroad Equipment	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor	Hauling
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	18.00	5.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	4.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Utilities	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.2 Site Preparation - 2035

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.1483	10.1399	15.9731	0.0466		0.2911	0.2911		0.2911	0.2911		4,409.753	4,409.7537	0.1889		4,414.476
Total	**2.1483**	**10.1399**	**15.9731**	**0.0466**	**18.0663**	**0.2911**	**18.3574**	**9.9307**	**0.2911**	**10.2218**		**4,409.753**	**4,409.7537**	**0.1889**		**4,414.476**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0338	0.0123	0.2206	9.8000e-	0.1479	4.9000e-	0.1484	0.0392	4.5000e-	0.0397		97.8649	97.8649	1.1200e-		97.8930
Total	**0.0338**	**0.0123**	**0.2206**	**9.8000e-**	**0.1479**	**4.9000e-**	**0.1484**	**0.0392**	**4.5000e-**	**0.0397**		**97.8649**	**97.8649**	**1.1200e-**		**97.8930**

3.3 Grading - 2035

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Fugitive Dust					7.2500	0.0000	7.2500	3.4428	0.0000	3.4428			0.0000			0.0000
Off-Road	2.9116	9.5942	22.5250	0.0699		0.3142	0.3142		0.3142	0.3142		7,213.114	7,213.1148	0.2560		7,219.513
Total	**2.9116**	**9.5942**	**22.5250**	**0.0699**	**7.2500**	**0.3142**	**7.5643**	**3.4428**	**0.3142**	**3.7571**		**7,213.114**	**7,213.1148**	**0.2560**		**7,219.513**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0376	0.0137	0.2452	1.0900e-	0.1643	5.4000e-	0.1648	0.0436	5.0000e-	0.0441		108.7387	108.7387	1.2500e-		108.7700
Total	**0.0376**	**0.0137**	**0.2452**	**1.0900e-**	**0.1643**	**5.4000e-**	**0.1648**	**0.0436**	**5.0000e-**	**0.0441**		**108.7387**	**108.7387**	**1.2500e-**		**108.7700**

3.4 Utilities - 2035

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Off-Road	1.3268	2.6648	17.1550	0.0409		0.1022	0.1022		0.1022	0.1022		3,872.115	3,872.1157	0.1158		3,875.011
Total	**1.3268**	**2.6648**	**17.1550**	**0.0409**		**0.1022**	**0.1022**		**0.1022**	**0.1022**		**3,872.115**	**3,872.1157**	**0.1158**		**3,875.011**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Worker	0.0282	0.0103	0.1839	8.2000e-	0.1232	4.0000e-	0.1236	0.0327	3.7000e-	0.0331		81.5540	81.5540	9.4000e-		81.5775
Total	**0.0282**	**0.0103**	**0.1839**	**8.2000e-**	**0.1232**	**4.0000e-**	**0.1236**	**0.0327**	**3.7000e-**	**0.0331**		**81.5540**	**81.5540**	**9.4000e-**		**81.5775**

3.5 Building Construction - 2035

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2168	7.1613	16.1178	0.0310		0.0904	0.0904		0.0904	0.0904		2,897.546	2,897.5468	0.1079		2,900.244
Total	**1.2168**	**7.1613**	**16.1178**	**0.0310**		**0.0904**	**0.0904**		**0.0904**	**0.0904**		**2,897.546**	**2,897.5468**	**0.1079**		**2,900.244**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.8700e-	0.3347	0.1251	1.2500e-	0.0337	4.3000e-	0.0341	9.6800e-	4.1000e-	0.0101		131.0419	131.0419	1.3100e-		131.0746
Worker	0.0338	0.0123	0.2206	9.8000e-	0.1479	4.9000e-	0.1484	0.0392	4.5000e-	0.0397		97.8649	97.8649	1.1200e-		97.8930
Total	**0.0437**	**0.3470**	**0.3457**	**2.2300e-**	**0.1815**	**9.2000e-**	**0.1825**	**0.0489**	**8.6000e-**	**0.0498**		**228.9068**	**228.9068**	**2.4300e-**		**228.9676**

3.6 Paving - 2035

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1405	4.8761	15.8203	0.0281		0.1874	0.1874		0.1874	0.1874		2,656.516	2,656.5168	0.1022		2,659.072
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1405**	**4.8761**	**15.8203**	**0.0281**		**0.1874**	**0.1874**		**0.1874**	**0.1874**		**2,656.516**	**2,656.5168**	**0.1022**		**2,659.072**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0282	0.0103	0.1839	8.2000e-	0.1232	4.0000e-	0.1236	0.0327	3.7000e-	0.0331		81.5540	81.5540	9.4000e-		81.5775
Total	**0.0282**	**0.0103**	**0.1839**	**8.2000e-**	**0.1232**	**4.0000e-**	**0.1236**	**0.0327**	**3.7000e-**	**0.0331**		**81.5540**	**81.5540**	**9.4000e-**		**81.5775**

3.7 Architectural Coating - 2035

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	118.2620					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1179	0.7577	1.7943	2.9700e-		9.9000e-	9.9000e-		9.9000e-	9.9000e-		281.4481	281.4481	0.0104		281.7081
Total	**118.3799**	**0.7577**	**1.7943**	**2.9700e-**		**9.9000e-**	**9.9000e-**		**9.9000e-**	**9.9000e-**		**281.4481**	**281.4481**	**0.0104**		**281.7081**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	7.5200e-	2.7400e-	0.0490	2.2000e-	0.0329	1.1000e-	0.0330	8.7200e-	1.0000e-	8.8100e-		21.7477	21.7477	2.5000e-		21.7540
Total	**7.5200e-**	**2.7400e-**	**0.0490**	**2.2000e-**	**0.0329**	**1.1000e-**	**0.0330**	**8.7200e-**	**1.0000e-**	**8.8100e-**		**21.7477**	**21.7477**	**2.5000e-**		**21.7540**

LRVSP Construction 2036 - El Dorado-Mountain County County, Summer

LRVSP Construction 2036
El Dorado-Mountain County County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	49.00	Dwelling Unit	22.00	88,200.00	140

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2050
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity	641.35	**CH4 Intensity**	0.029	**N2O Intensity**	0.006

1.3 User Entered Comments & Non-Default Data

Land Use - Acres from project description
Construction Phase - Assumed construction schedule of one-year.
Off-road Equipment - Equipment per applicant.
Grading - Acres from project description.
Architectural Coating - all construction in EDCAQMD must apply coatings with VOC contents of 150 g/L or less, effective 1/1/2018

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblConstructionPhase	NumDays	10.00	8.00
tblConstructionPhase	NumDays	35.00	19.00
tblConstructionPhase	NumDays	370.00	190.00
tblConstructionPhase	NumDays	20.00	14.00
tblConstructionPhase	NumDays	20.00	14.00

tblConstructionPhase	PhaseEndDate	1/14/2036	1/10/2036
tblConstructionPhase	PhaseEndDate	3/3/2036	2/6/2036
tblConstructionPhase	PhaseEndDate	3/3/2036	2/26/2036
tblConstructionPhase	PhaseEndDate	8/3/2037	11/18/2036
tblConstructionPhase	PhaseEndDate	8/31/2037	12/8/2036
tblConstructionPhase	PhaseEndDate	9/28/2037	12/26/2036
tblConstructionPhase	PhaseStartDate	1/15/2036	1/11/2036
tblConstructionPhase	PhaseStartDate	3/4/2036	2/7/2036
tblConstructionPhase	PhaseStartDate	3/4/2036	2/27/2036
tblConstructionPhase	PhaseStartDate	8/4/2037	11/19/2036
tblConstructionPhase	PhaseStartDate	9/1/2037	12/9/2036
tblGrading	AcresOfGrading	47.50	22.00
tblLandUse	LotAcreage	15.91	22.00

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2036	118.3874	10.1523	22.7701	0.0710	18.2141	0.3148	18.5057	9.9699	0.3147	10.2615	0.0000	7,321.853	7,321.8535	0.2572	0.0000	7,328.283
Maximum	**118.3874**	**10.1523**	**22.7701**	**0.0710**	**18.2141**	**0.3148**	**18.5057**	**9.9699**	**0.3147**	**10.2615**	**0.0000**	**7,321.853**	**7,321.8535**	**0.2572**	**0.0000**	**7,328.283**

3.0 Construction Detail

Construction Phase

Phase	Phase Name	Phase Type	Start Date	End Date	Num Days	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2036	1/10/2036	5	8	
2	Grading	Grading	1/11/2036	2/6/2036	5	19	
3	Utilities	Trenching	2/7/2036	2/26/2036	5	14	
4	Building Construction	Building Construction	2/27/2036	11/18/2036	5	190	
5	Paving	Paving	11/19/2036	12/8/2036	5	14	
6	Architectural Coating	Architectural Coating	12/9/2036	12/26/2036	5	14	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 22

Acres of Paving: 0

Residential Indoor: 178,605; Residential Outdoor: 59,535; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48
Utilities	Excavators	4	8.00	158	0.38
Utilities	Rubber Tired Loaders	2	8.00	203	0.36

Trips and VMT

Phase Name	Offroad Equipment	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor	Hauling
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	18.00	5.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	4.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Utilities	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.2 Site Preparation - 2036

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.1483	10.1399	15.9731	0.0466		0.2911	0.2911		0.2911	0.2911		4,409.753	4,409.7537	0.1889		4,414.476
Total	**2.1483**	**10.1399**	**15.9731**	**0.0466**	**18.0663**	**0.2911**	**18.3574**	**9.9307**	**0.2911**	**10.2218**		**4,409.753**	**4,409.7537**	**0.1889**		**4,414.476**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0338	0.0123	0.2206	9.8000e-	0.1479	4.9000e-	0.1484	0.0392	4.5000e-	0.0397		97.8649	97.8649	1.1200e-		97.8930
Total	**0.0338**	**0.0123**	**0.2206**	**9.8000e-**	**0.1479**	**4.9000e-**	**0.1484**	**0.0392**	**4.5000e-**	**0.0397**		**97.8649**	**97.8649**	**1.1200e-**		**97.8930**

3.3 Grading - 2036

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.2500	0.0000	7.2500	3.4428	0.0000	3.4428			0.0000			0.0000
Off-Road	2.9116	9.5942	22.5250	0.0699		0.3142	0.3142		0.3142	0.3142		7,213.114	7,213.1148	0.2560		7,219.513
Total	**2.9116**	**9.5942**	**22.5250**	**0.0699**	**7.2500**	**0.3142**	**7.5643**	**3.4428**	**0.3142**	**3.7571**		**7,213.114**	**7,213.1148**	**0.2560**		**7,219.513**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0376	0.0137	0.2452	1.0900e-	0.1643	5.4000e-	0.1648	0.0436	5.0000e-	0.0441		108.7387	108.7387	1.2500e-		108.7700
Total	**0.0376**	**0.0137**	**0.2452**	**1.0900e-**	**0.1643**	**5.4000e-**	**0.1648**	**0.0436**	**5.0000e-**	**0.0441**		**108.7387**	**108.7387**	**1.2500e-**		**108.7700**

3.4 Utilities - 2036

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3268	2.6648	17.1550	0.0409		0.1022	0.1022		0.1022	0.1022		3,872.115	3,872.1157	0.1158		3,875.011
Total	**1.3268**	**2.6648**	**17.1550**	**0.0409**		**0.1022**	**0.1022**		**0.1022**	**0.1022**		**3,872.115**	**3,872.1157**	**0.1158**		**3,875.011**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0282	0.0103	0.1839	8.2000e-	0.1232	4.0000e-	0.1236	0.0327	3.7000e-	0.0331		81.5540	81.5540	9.4000e-		81.5775
Total	**0.0282**	**0.0103**	**0.1839**	**8.2000e-**	**0.1232**	**4.0000e-**	**0.1236**	**0.0327**	**3.7000e-**	**0.0331**		**81.5540**	**81.5540**	**9.4000e-**		**81.5775**

3.5 Building Construction - 2036

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2168	7.1613	16.1178	0.0310		0.0904	0.0904		0.0904	0.0904		2,897.546	2,897.5468	0.1079		2,900.244
Total	**1.2168**	**7.1613**	**16.1178**	**0.0310**		**0.0904**	**0.0904**		**0.0904**	**0.0904**		**2,897.546**	**2,897.5468**	**0.1079**		**2,900.244**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.8700e-	0.3347	0.1251	1.2500e-	0.0337	4.3000e-	0.0341	9.6800e-	4.1000e-	0.0101		131.0419	131.0419	1.3100e-		131.0746
Worker	0.0338	0.0123	0.2206	9.8000e-	0.1479	4.9000e-	0.1484	0.0392	4.5000e-	0.0397		97.8649	97.8649	1.1200e-		97.8930
Total	**0.0437**	**0.3470**	**0.3457**	**2.2300e-**	**0.1815**	**9.2000e-**	**0.1825**	**0.0489**	**8.6000e-**	**0.0498**		**228.9068**	**228.9068**	**2.4300e-**		**228.9676**

3.6 Paving - 2036

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1405	4.8761	15.8203	0.0281		0.1874	0.1874		0.1874	0.1874		2,656.516	2,656.5168	0.1022		2,659.072
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1405**	**4.8761**	**15.8203**	**0.0281**		**0.1874**	**0.1874**		**0.1874**	**0.1874**		**2,656.516**	**2,656.5168**	**0.1022**		**2,659.072**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0282	0.0103	0.1839	8.2000e-	0.1232	4.0000e-	0.1236	0.0327	3.7000e-	0.0331		81.5540	81.5540	9.4000e-		81.5775
Total	**0.0282**	**0.0103**	**0.1839**	**8.2000e-**	**0.1232**	**4.0000e-**	**0.1236**	**0.0327**	**3.7000e-**	**0.0331**		**81.5540**	**81.5540**	**9.4000e-**		**81.5775**

3.7 Architectural Coating - 2036

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	118.2620					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1179	0.7577	1.7943	2.9700e-		9.9000e-	9.9000e-		9.9000e-	9.9000e-		281.4481	281.4481	0.0104		281.7081
Total	**118.3799**	**0.7577**	**1.7943**	**2.9700e-**		**9.9000e-**	**9.9000e-**		**9.9000e-**	**9.9000e-**		**281.4481**	**281.4481**	**0.0104**		**281.7081**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	7.5200e-	2.7400e-	0.0490	2.2000e-	0.0329	1.1000e-	0.0330	8.7200e-	1.0000e-	8.8100e-		21.7477	21.7477	2.5000e-		21.7540
Total	**7.5200e-**	**2.7400e-**	**0.0490**	**2.2000e-**	**0.0329**	**1.1000e-**	**0.0330**	**8.7200e-**	**1.0000e-**	**8.8100e-**		**21.7477**	**21.7477**	**2.5000e-**		**21.7540**

LRVSP Construction 2037 - El Dorado-Mountain County County, Summer

LRVSP Construction 2037
El Dorado-Mountain County County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	49.00	Dwelling Unit	22.00	88,200.00	140

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2050
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity	641.35	**CH4 Intensity**	0.029	**N2O Intensity**	0.006

1.3 User Entered Comments & Non-Default Data

Land Use - Acres from project description
Construction Phase - Assumed construction schedule of one-year.
Off-road Equipment - Equipment per applicant.
Grading - Acres from project description.
Architectural Coating - all construction in EDCAQMD must apply coatings with VOC contents of 150 g/L or less, effective 1/1/2018

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblConstructionPhase	NumDays	10.00	8.00
tblConstructionPhase	NumDays	35.00	19.00
tblConstructionPhase	NumDays	370.00	190.00
tblConstructionPhase	NumDays	20.00	14.00
tblConstructionPhase	NumDays	20.00	14.00

tblConstructionPhase	PhaseEndDate	1/14/2037	1/12/2037
tblConstructionPhase	PhaseEndDate	3/4/2037	2/6/2037
tblConstructionPhase	PhaseEndDate	3/4/2037	2/26/2037
tblConstructionPhase	PhaseEndDate	8/4/2038	11/19/2037
tblConstructionPhase	PhaseEndDate	9/1/2038	12/9/2037
tblConstructionPhase	PhaseEndDate	9/29/2038	12/29/2037
tblConstructionPhase	PhaseStartDate	1/15/2037	1/13/2037
tblConstructionPhase	PhaseStartDate	3/5/2037	2/7/2037
tblConstructionPhase	PhaseStartDate	3/5/2037	2/27/2037
tblConstructionPhase	PhaseStartDate	8/5/2038	11/20/2037
tblConstructionPhase	PhaseStartDate	9/2/2038	12/10/2037
tblGrading	AcresOfGrading	47.50	22.00
tblLandUse	LotAcreage	15.91	22.00

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2037	118.3874	10.1523	22.7701	0.0710	18.2141	0.3148	18.5057	9.9699	0.3147	10.2615	0.0000	7,321.853	7,321.8535	0.2572	0.0000	7,328.283
Maximum	**118.3874**	**10.1523**	**22.7701**	**0.0710**	**18.2141**	**0.3148**	**18.5057**	**9.9699**	**0.3147**	**10.2615**	**0.0000**	**7,321.853**	**7,321.8535**	**0.2572**	**0.0000**	**7,328.283**

3.0 Construction Detail

Construction Phase

Phase	Phase Name	Phase Type	Start Date	End Date	Num Days	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2037	1/12/2037	5	8	
2	Grading	Grading	1/13/2037	2/6/2037	5	19	
3	Utilities	Trenching	2/7/2037	2/26/2037	5	14	
4	Building Construction	Building Construction	2/27/2037	11/19/2037	5	190	
5	Paving	Paving	11/20/2037	12/9/2037	5	14	
6	Architectural Coating	Architectural Coating	12/10/2037	12/29/2037	5	14	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 22

Acres of Paving: 0

Residential Indoor: 178,605; Residential Outdoor: 59,535; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48
Utilities	Excavators	4	8.00	158	0.38
Utilities	Rubber Tired Loaders	2	8.00	203	0.36

Trips and VMT

Phase Name	Offroad Equipment	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor	Hauling
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	18.00	5.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	4.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Utilities	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.2 Site Preparation - 2037

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.1483	10.1399	15.9731	0.0466		0.2911	0.2911		0.2911	0.2911		4,409.753	4,409.7537	0.1889		4,414.476
Total	**2.1483**	**10.1399**	**15.9731**	**0.0466**	**18.0663**	**0.2911**	**18.3574**	**9.9307**	**0.2911**	**10.2218**		**4,409.753**	**4,409.7537**	**0.1889**		**4,414.476**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0338	0.0123	0.2206	9.8000e-	0.1479	4.9000e-	0.1484	0.0392	4.5000e-	0.0397		97.8649	97.8649	1.1200e-		97.8930
Total	**0.0338**	**0.0123**	**0.2206**	**9.8000e-**	**0.1479**	**4.9000e-**	**0.1484**	**0.0392**	**4.5000e-**	**0.0397**		**97.8649**	**97.8649**	**1.1200e-**		**97.8930**

3.3 Grading - 2037

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Fugitive Dust					7.2500	0.0000	7.2500	3.4428	0.0000	3.4428			0.0000			0.0000
Off-Road	2.9116	9.5942	22.5250	0.0699		0.3142	0.3142		0.3142	0.3142		7,213.114	7,213.1148	0.2560		7,219.513
Total	**2.9116**	**9.5942**	**22.5250**	**0.0699**	**7.2500**	**0.3142**	**7.5643**	**3.4428**	**0.3142**	**3.7571**		**7,213.114**	**7,213.1148**	**0.2560**		**7,219.513**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0376	0.0137	0.2452	1.0900e-	0.1643	5.4000e-	0.1648	0.0436	5.0000e-	0.0441		108.7387	108.7387	1.2500e-		108.7700
Total	**0.0376**	**0.0137**	**0.2452**	**1.0900e-**	**0.1643**	**5.4000e-**	**0.1648**	**0.0436**	**5.0000e-**	**0.0441**		**108.7387**	**108.7387**	**1.2500e-**		**108.7700**

3.4 Utilities - 2037

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Off-Road	1.3268	2.6648	17.1550	0.0409		0.1022	0.1022		0.1022	0.1022		3,872.115	3,872.1157	0.1158		3,875.011
Total	**1.3268**	**2.6648**	**17.1550**	**0.0409**		**0.1022**	**0.1022**		**0.1022**	**0.1022**		**3,872.115**	**3,872.1157**	**0.1158**		**3,875.011**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0282	0.0103	0.1839	8.2000e-	0.1232	4.0000e-	0.1236	0.0327	3.7000e-	0.0331		81.5540	81.5540	9.4000e-		81.5775

Total	**0.0282**	**0.0103**	**0.1839**	**8.2000e-**	**0.1232**	**4.0000e-**	**0.1236**	**0.0327**	**3.7000e-**	**0.0331**		**81.5540**	**81.5540**	**9.4000e-**		**81.5775**

3.5 Building Construction - 2037

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2168	7.1613	16.1178	0.0310		0.0904	0.0904		0.0904	0.0904		2,897.546	2,897.5468	0.1079		2,900.244
Total	**1.2168**	**7.1613**	**16.1178**	**0.0310**		**0.0904**	**0.0904**		**0.0904**	**0.0904**		**2,897.546**	**2,897.5468**	**0.1079**		**2,900.244**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.8700e-	0.3347	0.1251	1.2500e-	0.0337	4.3000e-	0.0341	9.6800e-	4.1000e-	0.0101		131.0419	131.0419	1.3100e-		131.0746
Worker	0.0338	0.0123	0.2206	9.8000e-	0.1479	4.9000e-	0.1484	0.0392	4.5000e-	0.0397		97.8649	97.8649	1.1200e-		97.8930
Total	**0.0437**	**0.3470**	**0.3457**	**2.2300e-**	**0.1815**	**9.2000e-**	**0.1825**	**0.0489**	**8.6000e-**	**0.0498**		**228.9068**	**228.9068**	**2.4300e-**		**228.9676**

3.6 Paving - 2037

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1405	4.8761	15.8203	0.0281		0.1874	0.1874		0.1874	0.1874		2,656.516	2,656.5168	0.1022		2,659.072
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1405**	**4.8761**	**15.8203**	**0.0281**		**0.1874**	**0.1874**		**0.1874**	**0.1874**		**2,656.516**	**2,656.5168**	**0.1022**		**2,659.072**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0282	0.0103	0.1839	8.2000e-	0.1232	4.0000e-	0.1236	0.0327	3.7000e-	0.0331		81.5540	81.5540	9.4000e-		81.5775
Total	**0.0282**	**0.0103**	**0.1839**	**8.2000e-**	**0.1232**	**4.0000e-**	**0.1236**	**0.0327**	**3.7000e-**	**0.0331**		**81.5540**	**81.5540**	**9.4000e-**		**81.5775**

3.7 Architectural Coating - 2037

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	118.2620					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1179	0.7577	1.7943	2.9700e-		9.9000e-	9.9000e-		9.9000e-	9.9000e-		281.4481	281.4481	0.0104		281.7081
Total	**118.3799**	**0.7577**	**1.7943**	**2.9700e-**		**9.9000e-**	**9.9000e-**		**9.9000e-**	**9.9000e-**		**281.4481**	**281.4481**	**0.0104**		**281.7081**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	7.5200e-	2.7400e-	0.0490	2.2000e-	0.0329	1.1000e-	0.0330	8.7200e-	1.0000e-	8.8100e-		21.7477	21.7477	2.5000e-		21.7540
Total	**7.5200e-**	**2.7400e-**	**0.0490**	**2.2000e-**	**0.0329**	**1.1000e-**	**0.0330**	**8.7200e-**	**1.0000e-**	**8.8100e-**		**21.7477**	**21.7477**	**2.5000e-**		**21.7540**

LRVSP Construction 2038 - El Dorado-Mountain County County, Summer

LRVSP Construction 2038
El Dorado-Mountain County County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	49.00	Dwelling Unit	22.00	88,200.00	140

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2050
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity	641.35	**CH4 Intensity**	0.029	**N2O Intensity**	0.006

1.3 User Entered Comments & Non-Default Data

Land Use - Acres from project description
Construction Phase - Assumed construction schedule of one-year.
Off-road Equipment - Equipment per applicant.
Grading - Acres from project description.
Architectural Coating - all construction in EDCAQMD must apply coatings with VOC contents of 150 g/L or less, effective 1/1/2018

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblConstructionPhase	NumDays	10.00	8.00
tblConstructionPhase	NumDays	35.00	19.00
tblConstructionPhase	NumDays	370.00	190.00
tblConstructionPhase	NumDays	20.00	14.00
tblConstructionPhase	NumDays	20.00	14.00

tblConstructionPhase	PhaseEndDate	1/14/2038	1/12/2038
tblConstructionPhase	PhaseEndDate	3/4/2038	2/8/2038
tblConstructionPhase	PhaseEndDate	3/4/2038	2/26/2038
tblConstructionPhase	PhaseEndDate	8/4/2039	11/19/2038
tblConstructionPhase	PhaseEndDate	9/1/2039	12/9/2038
tblConstructionPhase	PhaseEndDate	9/29/2039	12/29/2038
tblConstructionPhase	PhaseStartDate	1/15/2038	1/13/2038
tblConstructionPhase	PhaseStartDate	3/5/2038	2/9/2038
tblConstructionPhase	PhaseStartDate	3/5/2038	2/27/2038
tblConstructionPhase	PhaseStartDate	8/5/2039	11/20/2038
tblConstructionPhase	PhaseStartDate	9/2/2039	12/10/2038
tblGrading	AcresOfGrading	47.50	22.00
tblLandUse	LotAcreage	15.91	22.00

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2038	118.3874	10.1523	22.7701	0.0710	18.2141	0.3148	18.5057	9.9699	0.3147	10.2615	0.0000	7,321.853	7,321.8535	0.2572	0.0000	7,328.283
Maximum	**118.3874**	**10.1523**	**22.7701**	**0.0710**	**18.2141**	**0.3148**	**18.5057**	**9.9699**	**0.3147**	**10.2615**	**0.0000**	**7,321.853**	**7,321.8535**	**0.2572**	**0.0000**	**7,328.283**

3.0 Construction Detail

Construction Phase

Phase	Phase Name	Phase Type	Start Date	End Date	Num Days	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2038	1/12/2038	5	8	
2	Grading	Grading	1/13/2038	2/8/2038	5	19	
3	Utilities	Trenching	2/9/2038	2/26/2038	5	14	
4	Building Construction	Building Construction	2/27/2038	11/19/2038	5	190	
5	Paving	Paving	11/20/2038	12/9/2038	5	14	
6	Architectural Coating	Architectural Coating	12/10/2038	12/29/2038	5	14	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 22

Acres of Paving: 0

Residential Indoor: 178,605; Residential Outdoor: 59,535; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48
Utilities	Excavators	4	8.00	158	0.38
Utilities	Rubber Tired Loaders	2	8.00	203	0.36

Trips and VMT

Phase Name	Offroad Equipment	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor	Hauling
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	18.00	5.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	4.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Utilities	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.2 Site Preparation - 2038

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.1483	10.1399	15.9731	0.0466		0.2911	0.2911		0.2911	0.2911		4,409.753	4,409.7537	0.1889		4,414.476
Total	**2.1483**	**10.1399**	**15.9731**	**0.0466**	**18.0663**	**0.2911**	**18.3574**	**9.9307**	**0.2911**	**10.2218**		**4,409.753**	**4,409.7537**	**0.1889**		**4,414.476**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0338	0.0123	0.2206	9.8000e-	0.1479	4.9000e-	0.1484	0.0392	4.5000e-	0.0397		97.8649	97.8649	1.1200e-		97.8930
Total	**0.0338**	**0.0123**	**0.2206**	**9.8000e-**	**0.1479**	**4.9000e-**	**0.1484**	**0.0392**	**4.5000e-**	**0.0397**		**97.8649**	**97.8649**	**1.1200e-**		**97.8930**

3.3 Grading - 2038

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.2500	0.0000	7.2500	3.4428	0.0000	3.4428			0.0000			0.0000
Off-Road	2.9116	9.5942	22.5250	0.0699		0.3142	0.3142		0.3142	0.3142		7,213.114	7,213.1148	0.2560		7,219.513
Total	**2.9116**	**9.5942**	**22.5250**	**0.0699**	**7.2500**	**0.3142**	**7.5643**	**3.4428**	**0.3142**	**3.7571**		**7,213.114**	**7,213.1148**	**0.2560**		**7,219.513**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0376	0.0137	0.2452	1.0900e-	0.1643	5.4000e-	0.1648	0.0436	5.0000e-	0.0441		108.7387	108.7387	1.2500e-		108.7700
Total	**0.0376**	**0.0137**	**0.2452**	**1.0900e-**	**0.1643**	**5.4000e-**	**0.1648**	**0.0436**	**5.0000e-**	**0.0441**		**108.7387**	**108.7387**	**1.2500e-**		**108.7700**

3.4 Utilities - 2038

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3268	2.6648	17.1550	0.0409		0.1022	0.1022		0.1022	0.1022		3,872.115	3,872.1157	0.1158		3,875.011
Total	**1.3268**	**2.6648**	**17.1550**	**0.0409**		**0.1022**	**0.1022**		**0.1022**	**0.1022**		**3,872.115**	**3,872.1157**	**0.1158**		**3,875.011**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0282	0.0103	0.1839	8.2000e-	0.1232	4.0000e-	0.1236	0.0327	3.7000e-	0.0331		81.5540	81.5540	9.4000e-		81.5775
Total	**0.0282**	**0.0103**	**0.1839**	**8.2000e-**	**0.1232**	**4.0000e-**	**0.1236**	**0.0327**	**3.7000e-**	**0.0331**		**81.5540**	**81.5540**	**9.4000e-**		**81.5775**

3.5 Building Construction - 2038

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2168	7.1613	16.1178	0.0310		0.0904	0.0904		0.0904	0.0904		2,897.546	2,897.5468	0.1079		2,900.244
Total	**1.2168**	**7.1613**	**16.1178**	**0.0310**		**0.0904**	**0.0904**		**0.0904**	**0.0904**		**2,897.546**	**2,897.5468**	**0.1079**		**2,900.244**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	9.8700e-	0.3347	0.1251	1.2500e-	0.0337	4.3000e-	0.0341	9.6800e-	4.1000e-	0.0101		131.0419	131.0419	1.3100e-		131.0746
Worker	0.0338	0.0123	0.2206	9.8000e-	0.1479	4.9000e-	0.1484	0.0392	4.5000e-	0.0397		97.8649	97.8649	1.1200e-		97.8930
Total	**0.0437**	**0.3470**	**0.3457**	**2.2300e-**	**0.1815**	**9.2000e-**	**0.1825**	**0.0489**	**8.6000e-**	**0.0498**		**228.9068**	**228.9068**	**2.4300e-**		**228.9676**

3.6 Paving - 2038

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1405	4.8761	15.8203	0.0281		0.1874	0.1874		0.1874	0.1874		2,656.516	2,656.5168	0.1022		2,659.072
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1405**	**4.8761**	**15.8203**	**0.0281**		**0.1874**	**0.1874**		**0.1874**	**0.1874**		**2,656.516**	**2,656.5168**	**0.1022**		**2,659.072**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0282	0.0103	0.1839	8.2000e-	0.1232	4.0000e-	0.1236	0.0327	3.7000e-	0.0331		81.5540	81.5540	9.4000e-		81.5775
Total	**0.0282**	**0.0103**	**0.1839**	**8.2000e-**	**0.1232**	**4.0000e-**	**0.1236**	**0.0327**	**3.7000e-**	**0.0331**		**81.5540**	**81.5540**	**9.4000e-**		**81.5775**

3.7 Architectural Coating - 2038

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	118.2620					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1179	0.7577	1.7943	2.9700e-		9.9000e-	9.9000e-		9.9000e-	9.9000e-		281.4481	281.4481	0.0104		281.7081
Total	**118.3799**	**0.7577**	**1.7943**	**2.9700e-**		**9.9000e-**	**9.9000e-**		**9.9000e-**	**9.9000e-**		**281.4481**	**281.4481**	**0.0104**		**281.7081**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	7.5200e-	2.7400e-	0.0490	2.2000e-	0.0329	1.1000e-	0.0330	8.7200e-	1.0000e-	8.8100e-		21.7477	21.7477	2.5000e-		21.7540
Total	**7.5200e-**	**2.7400e-**	**0.0490**	**2.2000e-**	**0.0329**	**1.1000e-**	**0.0330**	**8.7200e-**	**1.0000e-**	**8.8100e-**		**21.7477**	**21.7477**	**2.5000e-**		**21.7540**

LRVSP Land Use Change - El Dorado-Mountain County County, Annual

LRVSP Land Use Change
El Dorado-Mountain County County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Commercial	1.00	User Defined Unit	0.00	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2040
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity	641.35	**CH4 Intensity**	0.029	**N2O Intensity**	0.006

1.3 User Entered Comments & Non-Default Data

Land Use Change - Per LRVSP EIR Biology Chapter (Riparian, Chaparral, Grassland, and Wetlands). Native and Heritage Oak impacts would be

11.1 Vegetation Land Change
Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Wetlands	0.54 / 0	0	0	0	0
Grasslands	99.9 / 0	-431	0	0	-431
Trees	0.3 / 0	-33	0	0	-33
Trees	162.9 / 0	-18082	0	0	-18082
Total		**-18546**	**0**	**0**	**-18546**

Construction RCEM

Input Type

Project Name	Deer Creek Road	
Construction Start Year	2024	Enter a Year between 2014 and 2040 (inclusive)
Project Type	1	1) New Road Construction : Project t 2) Road Widening : Project to add a n 3) Bridge/Overpass Construction : P 4) Other Linear Project Type: Non-roa
Project Construction Time	0.50	months
Working Days per Month	22.00	days (assume 22 if unknown)
Predominant Soil/Site Type: Enter 1, 2, or 3 (for project within "Sacramento County", follow soil type selection instructions in cells E18 to E20 otherwise see instructions provided in cells J18 to J22)	2	1) Sand Gravel : Use for quaternary 2) Weathered Rock-Earth : Use for La 3) Blasted Rock : Use for Salt Springs
Project Length	0.56	miles
Total Project Area	6.00	acres
Maximum Area Disturbed/Day	1.50	acres
Water Trucks Used?	1	1. Yes 2. No

Project Name	Lime Rock Valley Road - Phase 1	
Construction Start Year	2024	Enter a Year between 2014 and 2040 (inclusive)
Project Type	1	1) New Road Construction : Project to build a roadwa 2) Road Widening : Project to add a new lane to an ex 3) Bridge/Overpass Construction : Project to build an 4) Other Linear Project Type: Non-roadway project su
Project Construction Time	0.50	months
Working Days per Month	22.00	days (assume 22 if unknown)
Predominant Soil/Site Type: Enter 1, 2, or 3 (for project within "Sacramento County", follow soil type selection instructions in cells E18 to E20 otherwise see instructions provided in cells J18 to J22)	2	1) Sand Gravel : Use for quaternary deposits (Delta/V 2) Weathered Rock-Earth : Use for Laguna formation 3) Blasted Rock : Use for Salt Springs Slate or Coppe
Project Length	0.56	miles
Total Project Area	7.00	acres
Maximum Area Disturbed/Day	1.75	acres
Water Trucks Used?	1	1. Yes 2. No

Project Name	Lime Rock Valley Road - Phase 2	
Construction Start Year	2030	Enter a Year between 2014 and 2040 (inclusive)
Project Type	1	1) New Road Construction : Project to 2) Road Widening : Project to add a ne 3) Bridge/Overpass Construction : Pro 4) Other Linear Project Type: Non-road
Project Construction Time	0.50	months
Working Days per Month	22.00	days (assume 22 if unknown)
Predominant Soil/Site Type: Enter 1, 2, or 3 (for project within "Sacramento County", follow soil type selection instructions in cells E18 to E20 otherwise see instructions provided in cells J18 to J22)	2	1) Sand Gravel : Use for quaternary de 2) Weathered Rock-Earth : Use for La 3) Blasted Rock : Use for Salt Springs
Project Length	0.68	miles
Total Project Area	8.00	acres
Maximum Area Disturbed/Day	2.00	acres
Water Trucks Used?	1	1. Yes 2. No

Project Name	Lime Rock Valley Road - Phase 3	
Construction Start Year	2035	Enter a Year between 2014 2040 (inclusive)
Project Type	1	1) New Road Construction 2) Road Widening : Projec 3) Bridge/Overpass Constr 4) Other Linear Project Type
Project Construction Time	0.50	months
Working Days per Month	22.00	days (assume 22 if unknov
Predominant Soil/Site Type: Enter 1, 2, or 3 (for project within "Sacramento County", follow soil type selection instructions in cells E18 to E20 otherwise see instructions provided in cells J18 to J22)	2	1) Sand Gravel : Use for qu 2) Weathered Rock-Earth : 3) Blasted Rock : Use for S
Project Length	0.94	miles
Total Project Area	12.00	acres
Maximum Area Disturbed/Day	3.00	acres
Water Trucks Used?	1	1. Yes 2. No

Project Name	Phase 2 Loop Road	
Construction Start Year	2030	Enter a Year between 2014 and 2040 (inclusive)
Project Type	1	1) New Road Construction : Project to 2) Road Widening : Project to add a ne 3) Bridge/Overpass Construction : Pro 4) Other Linear Project Type: Non-road
Project Construction Time	0.50	months
Working Days per Month	22.00	days (assume 22 if unknown)
Predominant Soil/Site Type: Enter 1, 2, or 3 (for project within "Sacramento County", follow soil type selection instructions in cells E18 to E20 otherwise see instructions provided in cells J18 to J22)	2	1) Sand Gravel : Use for quaternary de 2) Weathered Rock-Earth : Use for Lag 3) Blasted Rock : Use for Salt Springs
Project Length	1.89	miles
Total Project Area	23.00	acres
Maximum Area Disturbed/Day	5.75	acres
Water Trucks Used?	1	1. Yes 2. No

Construction Summary

Construction Invenotry

					Unmitigated										Mitigated										MT/Year			
									PM10			PM2.5							PM10			PM2.5						
Type	Phase	Start	End	Days	ROG	NOX	CO	SO2	Dust	Exhaust	Total	Dust	Exhaust	Total	ROG	NOX	CO	SO2	Dust	Exhaust	Total	Dust	Exhaust	Total	CO2	CH4	N2O	CO2e
LRVSP	Site Preparation	1/1/2023	1/11/2023	8	3	28	19	0	18	1	19	10	1	11	3	25	19	0	5	1	6	3	1	4	14	0	0	14
LRVSP	Grading	1/12/2023	2/7/2023	19	3	35	29	0	8	1	10	4	1	5	3	31	29	0	2	1	4	1	1	2	53	0	0	54
LRVSP	Building Construction	2/28/2023	11/20/2023	190	3	24	27	0	3	1	4	1	1	1	3	23	27	0	3	1	4	1	1	1	645	0	0	647
LRVSP	Utilities	2/8/2023	2/27/2023	14	1	12	17	0	0	0	1	0	0	0	1	10	17	0	0	0	1	0	0	0	21	0	0	21
LRVSP	Paving	11/21/2023	12/8/2023	14	3	10	15	0	0	1	1	0	0	1	3	9	15	0	0	1	1	0	0	1	15	0	0	15
LRVSP	Architectural Coating	12/9/2023	12/28/2023	14	124	1	3	0	0	0	1	0	0	0	9	1	3	0	0	0	1	0	0	0	4	0	0	4
LRVSP	Site Preparation	1/1/2024	1/10/2024	8	3	27	19	0	18	1	19	10	1	11	3	24	19	0	5	1	6	3	1	4	14	0	0	14
LRVSP	Grading	1/11/2024	2/6/2024	19	3	32	28	0	7	1	9	3	1	5	3	29	28	0	2	1	3	1	1	2	53	0	0	53
LRVSP	Building Construction	2/27/2024	11/18/2024	190	2	14	17	0	0	1	1	0	1	1	2	13	17	0	0	1	1	0	1	1	243	0	0	245
LRVSP	Utilities	2/7/2024	2/26/2024	14	1	10	17	0	0	0	1	0	0	0	1	9	17	0	0	0	1	0	0	0	21	0	0	21
LRVSP	Paving	11/19/2024	12/6/2024	14	1	10	15	0	0	0	1	0	0	0	1	9	15	0	0	0	1	0	0	0	15	0	0	15
LRVSP	Architectural Coating	12/7/2024	12/26/2024	14	123	1	2	0	0	0	0	0	0	0	8	1	2	0	0	0	0	0	0	0	2	0	0	2
LRVSP	Site Preparation	1/1/2025	1/10/2025	8	3	25	18	0	18	1	19	10	1	11	3	23	18	0	5	1	6	3	1	4	14	0	0	14
LRVSP	Grading	1/11/2025	2/6/2025	19	3	28	27	0	7	1	9	3	1	5	3	25	27	0	2	1	3	1	1	2	53	0	0	53
LRVSP	Building Construction	2/27/2025	11/19/2025	190	1	13	17	0	0	1	1	0	0	1	1	12	17	0	0	1	1	0	0	1	243	0	0	244
LRVSP	Utilities	12/10/2025	12/29/2025	14	1	9	16	0	0	0	0	0	0	0	1	8	16	0	0	0	0	0	0	0	21	0	0	21
LRVSP	Paving	2/7/2025	2/26/2025	14	1	9	15	0	0	0	1	0	0	0	1	8	15	0	0	0	1	0	0	0	15	0	0	15
LRVSP	Architectural Coating	11/20/2025	12/9/2025	14	123	1	2	0	0	0	0	0	0	0	8	1	2	0	0	0	0	0	0	0	2	0	0	2
LRVSP	Site Preparation	1/1/2026	1/12/2026	8	3	25	18	0	18	1	19	10	1	11	3	23	18	0	5	1	6	3	1	4	14	0	0	14
LRVSP	Grading	1/13/2026	2/6/2026	19	3	28	27	0	7	1	9	3	1	5	3	25	27	0	2	1	3	1	1	2	53	0	0	53
LRVSP	Building Construction	2/27/2026	11/19/2026	190	1	13	17	0	0	1	1	0	0	1	1	12	17	0	0	1	1	0	0	1	242	0	0	244
LRVSP	Utilities	12/10/2026	12/29/2026	14	1	9	16	0	0	0	0	0	0	0	1	8	16	0	0	0	0	0	0	0	21	0	0	21
LRVSP	Paving	2/7/2026	2/26/2026	14	1	9	15	0	0	0	1	0	0	0	1	8	15	0	0	0	1	0	0	0	15	0	0	15
LRVSP	Architectural Coating	11/20/2026	12/9/2026	14	123	1	2	0	0	0	0	0	0	0	8	1	2	0	0	0	0	0	0	0	2	0	0	2
LRVSP	Site Preparation	1/1/2027	1/12/2027	8	3	25	18	0	18	1	19	10	1	11	3	23	18	0	5	1	6	3	1	4	14	0	0	14
LRVSP	Grading	1/13/2027	2/8/2027	19	3	28	27	0	7	1	9	3	1	5	3	25	27	0	2	1	3	1	1	2	53	0	0	53
LRVSP	Building Construction	2/27/2027	11/19/2027	190	1	13	17	0	0	1	1	0	0	1	1	12	17	0	0	1	1	0	0	1	242	0	0	243
LRVSP	Utilities	12/10/2027	12/29/2027	14	1	9	16	0	0	0	0	0	0	0	1	8	16	0	0	0	0	0	0	0	21	0	0	21
LRVSP	Paving	2/9/2027	2/26/2027	14	1	9	15	0	0	0	1	0	0	0	1	8	15	0	0	0	1	0	0	0	15	0	0	15
LRVSP	Architectural Coating	11/20/2027	12/9/2027	14	123	1	2	0	0	0	0	0	0	0	8	1	2	0	0	0	0	0	0	0	2	0	0	2
LRVSP	Site Preparation	1/1/2028	1/12/2028	8	3	25	18	0	18	1	19	10	1	11	3	25	18	0	5	1	6	3	1	4	14	0	0	14
LRVSP	Grading	1/13/2028	2/8/2028	19	3	28	27	0	7	1	9	3	1	5	3	28	27	0	2	1	3	1	1	2	53	0	0	53
LRVSP	Building Construction	2/9/2028	2/28/2028	14	1	13	17	0	0	1	1	0	0	1	1	13	17	0	0	1	1	0	0	1	18	0	0	18
LRVSP	Utilities	12/9/2028	12/28/2028	14	1	9	16	0	0	0	0	0	0	0	1	9	16	0	0	0	0	0	0	0	21	0	0	21
LRVSP	Paving	2/29/2028	11/20/2028	190	1	9	15	0	0	0	1	0	0	0	1	9	15	0	0	0	1	0	0	0	198	0	0	200
LRVSP	Architectural Coating	11/21/2028	12/8/2028	14	123	1	2	0	0	0	0	0	0	0	8	1	2	0	0	0	0	0	0	0	2	0	0	2
LRVSP	Site Preparation	1/1/2029	1/10/2029	8	3	25	18	0	18	1	19	10	1	11	3	25	18	0	5	1	6	3	1	4	14	0	0	14
LRVSP	Grading	1/11/2029	2/6/2029	19	3	28	27	0	9	1	10	4	1	5	3	28	27	0	2	1	3	1	1	2	53	0	0	53
LRVSP	Building Construction	2/27/2029	11/19/2029	190	2	18	21	0	2	1	3	1	1	1	2	18	21	0	2	1	3	1	1	1	477	0	0	479
LRVSP	Utilities	2/7/2029	2/26/2029	14	1	9	16	0	0	0	0	0	0	0	1	9	16	0	0	0	0	0	0	0	21	0	0	21
LRVSP	Paving	11/20/2029	12/7/2029	14	5	9	15	0	0	0	1	0	0	0	5	9	15	0	0	0	1	0	0	0	15	0	0	15
LRVSP	Architectural Coating	12/8/2029	12/27/2029	14	121	1	2	0	0	0	0	0	0	0	8	1	2	0	0	0	0	0	0	0	3	0	0	3
LRVSP	Site Preparation	1/1/2030	1/10/2030	8	2	14	17	0	18	0	19	10	0	10	2	14	17	0	5	0	5	3	0	3	16	0	0	16
LRVSP	Grading	1/11/2030	2/6/2030	19	3	14	23	0	7	0	8	3	0	4	3	14	23	0	2	0	2	1	0	1	63	0	0	63
LRVSP	Building Construction	2/27/2030	11/19/2030	190	1	8	17	0	0	0	0	0	0	0	1	8	17	0	0	0	0	0	0	0	270	0	0	271
LRVSP	Utilities	2/7/2030	2/26/2030	14	1	4	18	0	0	0	0	0	0	0	1	4	18	0	0	0	0	0	0	0	25	0	0	25
LRVSP	Paving	11/20/2030	12/9/2030	14	1	7	16	0	0	0	0	0	0	0	1	7	16	0	0	0	0	0	0	0	17	0	0	17
LRVSP	Architectural Coating	12/10/2030	12/27/2030	14	121	1	2	0	0	0	0	0	0	0	8	1	2	0	0	0	0	0	0	0	2	0	0	2
LRVSP	Site Preparation	1/1/2031	1/10/2031	8	2	14	17	0	18	0	19	10	0	10	2	14	17	0	5	0	5	3	0	3	16	0	0	16
LRVSP	Grading	1/11/2031	2/6/2031	19	3	14	23	0	7	0	8	3	0	4	3	14	23	0	2	0	2	1	0	1	63	0	0	63
LRVSP	Building Construction	2/27/2031	11/19/2031	190	1	8	17	0	0	0	0	0	0	0	1	8	17	0	0	0	0	0	0	0	270	0	0	270
LRVSP	Utilities	12/10/2031	12/29/2031	14	1	4	17	0	0	0	0	0	0	0	1	4	17	0	0	0	0	0	0	0	25	0	0	25
LRVSP	Paving	2/7/2031	2/26/2031	14	1	7	16	0	0	0	0	0	0	0	1	7	16	0	0	0	0	0	0	0	17	0	0	17
LRVSP	Architectural Coating	11/20/2031	12/9/2031	14	121	1	2	0	0	0	0	0	0	0	8	1	2	0	0	0	0	0	0	0	2	0	0	2

LRVSP	Site Preparation	1/1/2032	1/12/2032	8	2	14	17	0	18	0	19	10	0	10	2	14	17	0	5	0	5	3	0	3	16	0	0	16
LRVSP	Grading	1/13/2032	2/6/2032	19	3	14	23	0	7	0	8	3	0	4	3	14	23	0	2	0	2	1	0	1	63	0	0	63
LRVSP	Building Construction	2/27/2032	11/18/2032	190	1	8	17	0	0	0	0	0	0	0	1	8	17	0	0	0	0	0	0	0	270	0	0	270
LRVSP	Utilities	12/9/2032	12/28/2032	14	1	4	17	0	0	0	0	0	0	0	1	4	17	0	0	0	0	0	0	0	25	0	0	25
LRVSP	Paving	2/7/2032	2/26/2032	14	1	7	16	0	0	0	0	0	0	0	1	7	16	0	0	0	0	0	0	0	17	0	0	17
LRVSP	Architectural Coating	11/19/2032	12/8/2032	14	121	1	2	0	0	0	0	0	0	0	8	1	2	0	0	0	0	0	0	0	2	0	0	2
LRVSP	Site Preparation	1/1/2033	1/12/2033	8	2	14	17	0	18	0	19	10	0	10	2	14	17	0	5	0	5	3	0	3	16	0	0	16
LRVSP	Grading	1/13/2033	2/8/2033	19	3	14	23	0	7	0	8	3	0	4	3	14	23	0	2	0	2	1	0	1	63	0	0	63
LRVSP	Building Construction	3/1/2033	11/21/2033	190	1	8	17	0	0	0	0	0	0	0	1	8	17	0	0	0	0	0	0	0	270	0	0	270
LRVSP	Utilities	2/9/2033	2/28/2033	14	1	4	17	0	0	0	0	0	0	0	1	4	17	0	0	0	0	0	0	0	25	0	0	25
LRVSP	Paving	11/22/2033	12/9/2033	14	1	7	16	0	0	0	0	0	0	0	1	7	16	0	0	0	0	0	0	0	17	0	0	17
LRVSP	Architectural Coating	12/10/2033	12/29/2033	14	118	1	2	0	0	0	0	0	0	0	8	1	2	0	0	0	0	0	0	0	2	0	0	2
LRVSP	Site Preparation	1/1/2034	1/11/2034	8	2	14	17	0	18	0	19	10	0	10	2	14	17	0	5	0	5	3	0	3	16	0	0	16
LRVSP	Grading	1/12/2034	2/7/2034	19	3	14	23	0	8	0	9	4	0	4	3	14	23	0	2	0	3	1	0	1	63	0	0	63
LRVSP	Building Construction	2/28/2034	11/20/2034	190	2	14	21	0	2	0	3	1	0	1	2	14	21	0	2	0	3	1	0	1	544	0	0	544
LRVSP	Utilities	2/8/2034	2/27/2034	14	1	4	17	0	0	0	0	0	0	0	1	4	17	0	0	0	0	0	0	0	25	0	0	25
LRVSP	Paving	11/21/2034	12/8/2034	14	3	7	16	0	0	0	0	0	0	0	3	7	16	0	0	0	0	0	0	0	17	0	0	17
LRVSP	Architectural Coating	12/9/2034	12/28/2034	14	118	1	2	0	0	0	0	0	0	0	8	1	2	0	0	0	0	0	0	0	3	0	0	3
LRVSP	Site Preparation	1/1/2035	1/10/2035	8	2	10	16	0	18	0	19	10	0	10	2	10	16	0	5	0	5	3	0	3	16	0	0	16
LRVSP	Grading	1/11/2035	2/6/2035	19	3	10	23	0	7	0	8	3	0	4	3	10	23	0	2	0	2	1	0	1	63	0	0	63
LRVSP	Building Construction	2/7/2035	2/26/2035	14	1	8	16	0	0	0	0	0	0	0	1	8	16	0	0	0	0	0	0	0	20	0	0	20
LRVSP	Utilities	12/8/2035	12/27/2035	14	1	3	17	0	0	0	0	0	0	0	1	3	17	0	0	0	0	0	0	0	25	0	0	25
LRVSP	Paving	2/27/2035	11/19/2035	190	1	5	16	0	0	0	0	0	0	0	1	5	16	0	0	0	0	0	0	0	236	0	0	236
LRVSP	Architectural Coating	11/20/2035	12/7/2035	14	118	1	2	0	0	0	0	0	0	0	8	1	2	0	0	0	0	0	0	0	2	0	0	2
LRVSP	Site Preparation	1/1/2036	1/10/2036	8	2	10	16	0	18	0	19	10	0	10	2	10	16	0	5	0	5	3	0	3	16	0	0	16
LRVSP	Grading	1/11/2036	2/6/2036	19	3	10	23	0	7	0	8	3	0	4	3	10	23	0	2	0	2	1	0	1	63	0	0	63
LRVSP	Building Construction	2/7/2036	2/26/2036	14	1	8	16	0	0	0	0	0	0	0	1	8	16	0	0	0	0	0	0	0	20	0	0	20
LRVSP	Utilities	12/9/2036	12/26/2036	14	1	3	17	0	0	0	0	0	0	0	1	3	17	0	0	0	0	0	0	0	25	0	0	25
LRVSP	Paving	2/27/2036	11/18/2036	190	1	5	16	0	0	0	0	0	0	0	1	5	16	0	0	0	0	0	0	0	236	0	0	236
LRVSP	Architectural Coating	11/19/2036	12/8/2036	14	118	1	2	0	0	0	0	0	0	0	8	1	2	0	0	0	0	0	0	0	2	0	0	2
LRVSP	Site Preparation	1/1/2037	1/12/2037	8	2	10	16	0	18	0	19	10	0	10	2	10	16	0	5	0	5	3	0	3	16	0	0	16
LRVSP	Grading	1/13/2037	2/6/2037	19	3	10	23	0	7	0	8	3	0	4	3	10	23	0	2	0	2	1	0	1	63	0	0	63
LRVSP	Building Construction	2/7/2037	2/26/2037	14	1	8	16	0	0	0	0	0	0	0	1	8	16	0	0	0	0	0	0	0	20	0	0	20
LRVSP	Utilities	12/10/2037	12/29/2037	14	1	3	17	0	0	0	0	0	0	0	1	3	17	0	0	0	0	0	0	0	25	0	0	25
LRVSP	Paving	2/27/2037	11/19/2037	190	1	5	16	0	0	0	0	0	0	0	1	5	16	0	0	0	0	0	0	0	236	0	0	236
LRVSP	Architectural Coating	11/20/2037	12/9/2037	14	118	1	2	0	0	0	0	0	0	0	8	1	2	0	0	0	0	0	0	0	2	0	0	2
LRVSP	Site Preparation	1/1/2038	1/12/2038	8	2	10	16	0	18	0	19	10	0	10	2	10	16	0	5	0	5	3	0	3	16	0	0	16
LRVSP	Grading	1/13/2038	2/8/2038	19	3	10	23	0	7	0	8	3	0	4	3	10	23	0	2	0	2	1	0	1	63	0	0	63
LRVSP	Building Construction	2/9/2038	2/26/2038	14	1	8	16	0	0	0	0	0	0	0	1	8	16	0	0	0	0	0	0	0	20	0	0	20
LRVSP	Utilities	12/10/2038	12/29/2038	14	1	3	17	0	0	0	0	0	0	0	1	3	17	0	0	0	0	0	0	0	25	0	0	25
LRVSP	Paving	2/27/2038	11/19/2038	190	1	5	16	0	0	0	0	0	0	0	1	5	16	0	0	0	0	0	0	0	236	0	0	236
LRVSP	Architectural Coating	11/20/2038	12/9/2038	14	118	1	2	0	0	0	0	0	0	0	8	1	2	0	0	0	0	0	0	0	2	0	0	2
Lime Rock Valley Road - Phase 1	Grubbing/Land Clearing	1/1/2024	1/2/2024	1.1	1	7	6	0	18	0	18	4	0	4	1	6	6	0	4	0	5	1	0	1	0	0	0	0
Lime Rock Valley Road - Phase 1	Grading/Excavation	1/3/2024	1/7/2024	4.95	4	37	37	0	18	2	19	4	1	5	4	34	37	0	4	2	6	1	1	2	20	0	0	21
Lime Rock Valley Road - Phase 1	Drainage/Utilities/Sub-Grade	1/10/2024	1/13/2024	3.3	3	31	32	0	18	1	19	4	1	5	3	28	32	0	4	1	6	1	1	2	11	0	0	11
Lime Rock Valley Road - Phase 1	Paving	1/15/2024	1/16/2024	1.65	1	11	17	0	0	1	1	0	1	1	1	10	17	0	0	1	1	0	1	1	2	0	0	2
Deer Creek Road	Grubbing/Land Clearing	1/1/2024	1/2/2024	1.1	1	7	6	0	15	0	15	3	0	3	1	6	6	0	4	0	4	1	0	1	0	0	0	0
Deer Creek Road	Grading/Excavation	1/3/2024	1/7/2024	4.95	4	37	37	0	15	2	17	3	1	5	4	34	37	0	4	2	5	1	1	2	20	0	0	21
Deer Creek Road	Drainage/Utilities/Sub-Grade	1/10/2024	1/13/2024	3.3	3	31	32	0	15	1	16	3	1	4	3	28	32	0	4	1	5	1	1	2	11	0	0	11
Deer Creek Road	Paving	1/15/2024	1/16/2024	1.65	1	11	17	0	0	1	1	0	1	1	1	10	17	0	0	1	1	0	1	1	2	0	0	2
Lime Rock Valley Road - Phase 2	Grubbing/Land Clearing	1/1/2030	1/2/2030	1.1	1	3	6	0	20	0	20	4	0	4	1	3	6	0	5	0	5	1	0	1	0	0	0	0
Lime Rock Valley Road - Phase 2	Grading/Excavation	1/3/2030	1/7/2030	4.95	4	16	33	0	20	1	21	4	1	5	4	16	33	0	5	1	6	1	1	2	24	0	0	24
Lime Rock Valley Road - Phase 2	Drainage/Utilities/Sub-Grade	1/10/2030	1/13/2030	3.3	3	16	27	0	20	1	21	4	0	5	3	16	27	0	5	1	6	1	0	2	12	0	0	13
Lime Rock Valley Road - Phase 2	Paving	1/15/2030	1/16/2030	1.65	1	8	17	0	0	0	0	0	0	0	1	8	17	0	0	0	0	0	0	0	3	0	0	3
Phase 2 Loop Road	Grubbing/Land Clearing	1/1/2030	1/2/2030	1.1	1	5	12	0	58	0	58	12	0	12	1	5	12	0	14	0	15	3	0	3	0	0	0	0
Phase 2 Loop Road	Grading/Excavation	1/3/2030	1/7/2030	4.95	7	27	51	0	58	1	59	12	1	13	7	27	51	0	14	1	15	3	1	4	40	0	0	40
Phase 2 Loop Road	Drainage/Utilities/Sub-Grade	1/10/2030	1/13/2030	3.3	5	28	48	0	58	1	58	12	1	13	5	28	48	0	14	1	15	3	1	4	21	0	0	21
Phase 2 Loop Road	Paving	1/15/2030	1/16/2030	1.65	2	13	28	0	0	1	1	0	0	0	2	13	28	0	0	1	1	0	0	0	4	0	0	4
Lime Rock Valley Road - Phase 3	Grubbing/Land Clearing	1/1/2035	1/2/2035	1.1	1	2	6	0	30	0	30	6	0	6	1	2	6	0	8	0	8	2	0	2	0	0	0	0

Lime Rock Valley Road - Phase 3	Grading/Excavation	1/3/2035	1/7/2035	4.95	4	12	32	0	30	0	30	6	0	7	4	12	32	0	8	0	8	2	0	2	24	0	0	24
Lime Rock Valley Road - Phase 3	Drainage/Utilities/Sub-Grade	1/10/2035	1/13/2035	3.3	3	13	27	0	30	0	30	6	0	7	3	13	27	0	8	0	8	2	0	2	12	0	0	12
Lime Rock Valley Road - Phase 3	Paving	1/15/2035	1/16/2035	1.65	1	7	17	0	0	0	0	0	0	0	1	7	17	0	0	0	0	0	0	0	3	0	0	3
Bass Lake Road Interim Interchange	Grubbing/Land Clearing	1/1/2023	2/14/2023	44	1	7	6	0	5	0	5	1	0	1	1	6	6	0	1	0	1	0	0	0	0	0	0	0
Bass Lake Road Interim Interchange	Grading/Excavation	3/3/2023	10/9/2023	220	4	40	37	0	5	2	6	1	2	2	4	36	37	0	1	2	3	0	2	2	904	0	0	914
Bass Lake Road Interim Interchange	Drainage/Utilities/Sub-Grade	1/2/2024	4/21/2024	110	3	31	32	0	5	1	6	1	1	2	3	28	32	0	1	1	2	0	1	1	370	0	0	374
Bass Lake Road Interim Interchange	Paving	6/3/2024	8/8/2024	66	1	11	17	0	0	1	1	0	1	1	1	10	17	0	0	1	1	0	1	1	89	0	0	90
Cambridge Interim Interchange	Grubbing/Land Clearing	1/1/2029	2/14/2029	44	1	6	6	0	6	0	6	1	0	1	1	6	6	0	1	0	2	0	0	1	0	0	0	0
Cambridge Interim Interchange	Grading/Excavation	3/3/2029	10/9/2029	220	3	32	35	0	6	1	7	1	1	2	3	32	35	0	1	1	3	0	1	1	893	0	0	903
Cambridge Interim Interchange	Drainage/Utilities/Sub-Grade	1/2/2030	4/22/2030	110	3	16	27	0	6	1	6	1	0	2	3	16	27	0	1	1	2	0	0	1	415	0	0	417
Cambridge Interim Interchange	Paving	6/4/2030	8/9/2030	66	1	8	17	0	0	0	0	0	0	0	1	8	17	0	0	0	0	0	0	0	101	0	0	102
Marble Valley Parkway	Grubbing/Land Clearing	1/1/2031	1/23/2031	44	1	5	12	0	37	0	37	8	0	8	1	5	12	0	9	0	9	2	0	2	0	0	0	0
Marble Valley Parkway	Grading/Excavation	2/1/2031	5/22/2031	220	8	33	65	0	37	1	38	8	1	9	8	33	65	0	9	1	10	2	1	3	1,055	0	0	1,059
Marble Valley Parkway	Drainage/Utilities/Sub-Grade	7/4/2031	8/28/2031	110	6	32	54	0	37	1	38	8	1	9	6	32	54	0	9	1	10	2	1	3	414	0	0	415
Marble Valley Parkway	Paving	9/19/2031	10/22/2031	66	3	16	34	0	0	1	1	0	1	1	3	16	34	0	0	1	1	0	1	1	100	0	0	100
24" Potable Water Transmission Line	Grubbing/Land Clearing	1/1/2022	2/14/2022	44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24" Potable Water Transmission Line	Grading/Excavation	1/1/2022	8/9/2022	220	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24" Potable Water Transmission Line	Drainage/Utilities/Sub-Grade	1/1/2022	4/21/2022	110	4	35	34	0	33	2	34	7	1	8	4	32	34	0	8	2	10	2	1	3	1,564	0	0	1,579
24" Potable Water Transmission Line	Paving	9/2/2023	11/7/2023	66	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Operation CalEEMod

LRVSP Annual Operation - 2024 - El Dorado-Mountain County County, Summer

LRVSP Annual Operation - 2024
El Dorado-Mountain County County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	9.00	Acre	9.00	392,040.00	0
City Park	5.00	Acre	5.00	217,800.00	0
Single Family Housing	51.00	Dwelling Unit	16.56	91,800.00	146

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity	641.35	**CH4 Intensity**	0.029	**N2O Intensity**	0.006

1.3 User Entered Comments & Non-Default Data

Land Use - From project description
Vehicle Trips - Trip rates per traffic study
Area Mitigation - Only natural gas hearth (LRVSP Policy 7.78)
Energy Mitigation - Min 7% better than the 2016 code (model default) per 2019 standard

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	28.05	31.73
tblFireplaces	NumberWood	17.85	19.27
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	9.91	9.52
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	8.62	9.52
tblVehicleTrips	WD_TR	1.89	0.00

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.2017	0.8945	4.5672	5.6200e-		0.0917	0.0917		0.0917	0.0917	0.0000	1,087.579	1,087.5792	0.0280	0.0198	1,094.179
Energy	0.0172	0.1465	0.0624	9.4000e-		0.0119	0.0119		0.0119	0.0119		187.0730	187.0730	3.5900e-	3.4300e-	188.1847
Mobile	0.9247	2.4312	9.7471	0.0312	2.9426	0.0273	2.9699	0.7860	0.0255	0.8115		3,126.491	3,126.4917	0.0878		3,128.685
Total	**4.1436**	**3.4722**	**14.3767**	**0.0377**	**2.9426**	**0.1309**	**3.0734**	**0.7860**	**0.1291**	**0.9150**	**0.0000**	**4,401.144**	**4,401.1440**	**0.1193**	**0.0232**	**4,411.049**

4.0 Operational Detail - Mobile

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	485.52	485.52	485.52	1,390,793	1,390,793
Total	485.52	485.52	485.52	1,390,793	1,390,793

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.542923	0.036563	0.224970	0.128073	0.025383	0.005498	0.017257	0.009562	0.001621	0.001069	0.005080	0.000783	0.001219
Other Asphalt Surfaces	0.542923	0.036563	0.224970	0.128073	0.025383	0.005498	0.017257	0.009562	0.001621	0.001069	0.005080	0.000783	0.001219
Single Family Housing	0.542923	0.036563	0.224970	0.128073	0.025383	0.005498	0.017257	0.009562	0.001621	0.001069	0.005080	0.000783	0.001219

5.0 Energy Detail

Historical Energy Use: N
Exceed Title 24

	NaturalGa	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Other Asphalt	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family	1.59012	0.0172	0.1465	0.0624	9.4000e-		0.0119	0.0119		0.0119	0.0119		187.0730	187.0730	3.5900e-	3.4300e-	188.1847
Total		**0.0172**	**0.1465**	**0.0624**	**9.4000e-**		**0.0119**	**0.0119**		**0.0119**	**0.0119**		**187.0730**	**187.0730**	**3.5900e-**	**3.4300e-**	**188.1847**

6.0 Area Detail

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural	0.8615					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer	2.1146					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0990	0.8460	0.3600	5.4000e-		0.0684	0.0684		0.0684	0.0684	0.0000	1,080.000	1,080.0000	0.0207	0.0198	1,086.417
Landscaping	0.1266	0.0485	4.2072	2.2000e-		0.0233	0.0233		0.0233	0.0233		7.5792	7.5792	7.2800e-		7.7612
Total	**3.2017**	**0.8945**	**4.5672**	**5.6200e-**		**0.0917**	**0.0917**		**0.0917**	**0.0917**	**0.0000**	**1,087.579**	**1,087.5792**	**0.0280**	**0.0198**	**1,094.179**

LRVSP Annual Operation - 2025 - El Dorado-Mountain County County, Summer

LRVSP Annual Operation - 2025
El Dorado-Mountain County County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	9.00	Acre	9.00	392,040.00	0
City Park	5.00	Acre	5.00	217,800.00	0
Single Family Housing	102.00	Dwelling Unit	33.12	183,600.00	292

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2025
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity	641.35	**CH4 Intensity**	0.029	**N2O Intensity**	0.006

1.3 User Entered Comments & Non-Default Data

Land Use - From project description
Vehicle Trips - Trip rates from F&P
Area Coating - all operations in EDCAQMD must apply coatings with VOC contents of 150 g/L or less, effective 1/1/2018
Area Mitigation - Only natural gas hearth (LRVSP Policy 7.78)
Energy Mitigation - Min 7% better than the 2016 code (model default) per 2019 standard. Energy star appliances (LRVSP Policy 7.15).

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	56.10	63.47
tblFireplaces	NumberWood	35.70	38.53
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	9.91	9.52
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	8.62	9.52
tblVehicleTrips	WD_TR	1.89	0.00

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.1781	1.7889	9.1286	0.0112		0.1835	0.1835		0.1835	0.1835	0	2,175.16	2,175.16	0.0559	0.0396	2,188.35
Energy	0.0343	0.2931	0.1247	1.87E-03		0.0237	0.0237		0.0237	0.0237		374.146	374.146	7.17E-03	6.86E-03	376.3694
Mobile	1.7479	4.5194	18.2288	0.06	5.8831	0.0521	5.9352	1.5711	0.0486	1.6197		6,023.62	6,023.62	0.1627		6,027.69
Total	**7.9603**	**6.6013**	**27.4821**	**0.0731**	**5.8831**	**0.2592**	**6.1423**	**1.5711**	**0.2557**	**1.8268**	**0**	**8,572.92**	**8,572.92**	**0.2258**	**0.0465**	**8,592.41**

4.0 Operational Detail - Mobile

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	971.04	971.04	971.04	2,781,585	2,781,585
Total	971.04	971.04	971.04	2,781,585	2,781,585

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.548420	0.035778	0.224960	0.125817	0.023380	0.005183	0.017399	0.009541	0.001620	0.001043	0.004971	0.000775	0.001113
Other Asphalt Surfaces	0.548420	0.035778	0.224960	0.125817	0.023380	0.005183	0.017399	0.009541	0.001620	0.001043	0.004971	0.000775	0.001113
Single Family Housing	0.548420	0.035778	0.224960	0.125817	0.023380	0.005183	0.017399	0.009541	0.001620	0.001043	0.004971	0.000775	0.001113

5.0 Energy Detail

Historical Energy Use: N
Exceed Title 24
Install Energy Efficient Appliances

	NaturalGa	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0	0	0	0		0	0		0	0		0	0	0	0	0
Other Asphalt	0	0	0	0	0		0	0		0	0		0	0	0	0	0
Single Family	3.18024	0.0343	0.2931	0.1247	1.87E-03		0.0237	0.0237		0.0237	0.0237		374.146	374.146	7.17E-03	6.86E-03	376.3694
Total		**0.0343**	**0.2931**	**0.1247**	**1.87E-03**		**0.0237**	**0.0237**		**0.0237**	**0.0237**		**374.146**	**374.146**	**7.17E-03**	**6.86E-03**	**376.3694**

6.0 Area Detail

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural	1.6484					0	0		0	0			0			0
Consumer	4.0791					0	0		0	0			0			0
Hearth	0.198	1.692	0.72	0.0108		0.1368	0.1368		0.1368	0.1368	0	2,160.00	2,160.00	0.0414	0.0396	2,172.84
Landscaping	0.2526	0.0969	8.4086	4.40E-04		0.0467	0.0467		0.0467	0.0467		15.1554	15.1554	0.0145		15.5184
Total	**6.1781**	**1.7889**	**9.1286**	**0.0112**		**0.1835**	**0.1835**		**0.1835**	**0.1835**	**0**	**2,175.16**	**2,175.16**	**0.0559**	**0.0396**	**2,188.35**

LRVSP Annual Operation - 2026 - El Dorado-Mountain County County, Summer

LRVSP Annual Operation - 2026
El Dorado-Mountain County County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	9.00	Acre	9.00	392,040.00	0
City Park	5.00	Acre	5.00	217,800.00	0
Single Family Housing	153.00	Dwelling Unit	49.68	275,400.00	438

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2026
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity	641.35	**CH4 Intensity**	0.029	**N2O Intensity**	0.006

1.3 User Entered Comments & Non-Default Data

Land Use - From project description
Vehicle Trips - Trip rates from F&P
Area Coating - all operations in EDCAQMD must apply coatings with VOC contents of 150 g/L or less, effective 1/1/2018
Area Mitigation - Only natural gas hearth (LRVSP Policy 7.78)
Energy Mitigation - Min 7% better than the 2016 code (model default) per 2019 standard. Energy star appliances (LRVSP Policy 7.15).

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	84.15	95.20
tblFireplaces	NumberWood	53.55	57.80
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	9.91	9.52
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	8.62	9.52
tblVehicleTrips	WD_TR	1.89	0.00

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.1547	2.6833	13.6922	0.0169		0.2752	0.2752		0.2752	0.2752	0	3,262.73	3,262.73	0.0839	0.0594	3,282.53
Energy	0.0515	0.4396	0.1871	2.81E-03		0.0355	0.0355		0.0355	0.0355		561.219	561.219	0.0108	0.0103	564.5541
Mobile	2.4864	6.3277	25.6868	0.0869	8.8221	0.074	8.8962	2.3556	0.069	2.4246		8,729.71	8,729.71	0.2276		8,735.40
Total	**11.6925**	**9.4506**	**39.5661**	**0.1066**	**8.8221**	**0.3847**	**9.2069**	**2.3556**	**0.3797**	**2.7353**	**0**	**12,553.66**	**12,553.66**	**0.3222**	**0.0697**	**12,582.48**

4.0 Operational Detail - Mobile

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	1,456.56	1,456.56	1456.56	4,172,378	4,172,378
Total	1,456.56	1,456.56	1,456.56	4,172,378	4,172,378

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.552995	0.035126	0.225007	0.123925	0.021624	0.004925	0.017556	0.009519	0.001625	0.001021	0.004886	0.000770	0.001022
Other Asphalt Surfaces	0.552995	0.035126	0.225007	0.123925	0.021624	0.004925	0.017556	0.009519	0.001625	0.001021	0.004886	0.000770	0.001022
Single Family Housing	0.552995	0.035126	0.225007	0.123925	0.021624	0.004925	0.017556	0.009519	0.001625	0.001021	0.004886	0.000770	0.001022

5.0 Energy Detail

Historical Energy Use: N
Exceed Title 24
Install Energy Efficient Appliances

	NaturalGa	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family	4.77036	0.0515	0.4396	0.1871	2.8100e-		0.0355	0.0355		0.0355	0.0355		561.2190	561.2190	0.0108	0.0103	564.5541
Total		**0.0515**	**0.4396**	**0.1871**	**2.8100e-**		**0.0355**	**0.0355**		**0.0355**	**0.0355**		**561.2190**	**561.2190**	**0.0108**	**0.0103**	**564.5541**

6.0 Area Detail

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural	2.4353					0	0		0	0			0			0
Consumer	6.0436					0	0		0	0			0			0
Hearth	252.4405	4.9634	309.2626	0.5567		43.3003	43.3003		43.3003	43.3003	4,520.31	2,016.00	6,536.31	3.9257	0.3624	6,742.46
Landscaping	0.3788	0.1453	12.6122	6.70E-04		0.07	0.07		0.07	0.07		22.7316	22.7316	0.0218		23.2759
Total	**261.2982**	**5.1087**	**321.8748**	**0.5574**		**43.3703**	**43.3703**		**43.3703**	**43.3703**	**4,520.31**	**2,038.73**	**6,559.04**	**3.9475**	**0.3624**	**6,765.74**

LRVSP Annual Operation - 2027 - El Dorado-Mountain County County, Summer

LRVSP Annual Operation - 2027
El Dorado-Mountain County County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	9.00	Acre	9.00	392,040.00	0
City Park	5.00	Acre	5.00	217,800.00	0
Single Family Housing	204.00	Dwelling Unit	66.23	367,200.00	583

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2027
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity	641.35	**CH4 Intensity**	0.029	**N2O Intensity**	0.006

1.3 User Entered Comments & Non-Default Data

Land Use - From project description
Vehicle Trips - Trip rates from F&P
Area Coating - all operations in EDCAQMD must apply coatings with VOC contents of 150 g/L or less, effective 1/1/2018
Area Mitigation - Only natural gas hearth (LRVSP Policy 7.78)
Energy Mitigation - Min 7% better than the 2016 code (model default) per 2019 standard. Energy star appliances (LRVSP Policy 7.15).

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	112.20	126.93
tblFireplaces	NumberWood	71.40	77.07
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	9.91	9.52
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	8.62	9.52
tblVehicleTrips	WD_TR	1.89	0.00

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	12.1313	3.5777	18.2557	0.0225		0.3669	0.3669		0.3669	0.3669	0.0000	4,350.307	4,350.3077	0.1118	0.0792	4,376.705
Energy	0.0686	0.5862	0.2494	3.7400e-		0.0474	0.0474		0.0474	0.0474		748.2921	748.2921	0.0143	0.0137	752.7388
Mobile	3.1446	7.8819	32.2464	0.1122	11.7596	0.0923	11.8519	3.1394	0.0860	3.2254		11,270.55	11,270.553	0.2834		11,277.63
Total	**15.3445**	**12.0457**	**50.7516**	**0.1385**	**11.7596**	**0.5066**	**12.2662**	**3.1394**	**0.5003**	**3.6397**	**0.0000**	**16,369.15**	**16,369.153**	**0.4095**	**0.0929**	**16,407.08**

4.0 Operational Detail - Mobile

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	1,942.08	1,942.08	1942.08	5,563,171	5,563,171
Total	1,942.08	1,942.08	1,942.08	5,563,171	5,563,171

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.557019	0.034577	0.225137	0.122292	0.020027	0.004692	0.017649	0.009477	0.001627	0.000999	0.004800	0.000764	0.000939
Other Asphalt Surfaces	0.557019	0.034577	0.225137	0.122292	0.020027	0.004692	0.017649	0.009477	0.001627	0.000999	0.004800	0.000764	0.000939
Single Family Housing	0.557019	0.034577	0.225137	0.122292	0.020027	0.004692	0.017649	0.009477	0.001627	0.000999	0.004800	0.000764	0.000939

5.0 Energy Detail

Historical Energy Use: N
Exceed Title 24
Install Energy Efficient Appliances

	NaturalGa	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					

City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family	6.36048	0.0686	0.5862	0.2494	3.7400e-		0.0474	0.0474		0.0474	0.0474		748.2921	748.2921	0.0143	0.0137	752.7388
Total		**0.0686**	**0.5862**	**0.2494**	**3.7400e-**		**0.0474**	**0.0474**		**0.0474**	**0.0474**		**748.2921**	**748.2921**	**0.0143**	**0.0137**	**752.7388**

6.0 Area Detail

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural	3.2222					0	0		0	0			0			0
Consumer	8.0082					0	0		0	0			0			0
Hearth	0.396	3.384	1.44	0.0216		0.2736	0.2736		0.2736	0.2736	0	4,320.00	4,320.00	0.0828	0.0792	4,345.67
Landscaping	0.505	0.1937	16.8157	8.90E-04		0.0933	0.0933		0.0933	0.0933		30.3077	30.3077	0.029		31.0334
Total	**12.1313**	**3.5777**	**18.2557**	**0.0225**		**0.3669**	**0.3669**		**0.3669**	**0.3669**	**0**	**4,350.31**	**4,350.31**	**0.1118**	**0.0792**	**4,376.71**

LRVSP Annual Operation - 2028 - El Dorado-Mountain County County, Summer

LRVSP Annual Operation - 2028
El Dorado-Mountain County County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	9.00	Acre	9.00	392,040.00	0
City Park	5.00	Acre	5.00	217,800.00	0
Single Family Housing	255.00	Dwelling Unit	82.79	459,000.00	729

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2028
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity	641.35	**CH4 Intensity**	0.029	**N2O Intensity**	0.006

1.3 User Entered Comments & Non-Default Data

Land Use - From project description
Vehicle Trips - Trip rates from F&P
Area Coating - all operations in EDCAQMD must apply coatings with VOC contents of 150 g/L or less, effective 1/1/2018
Area Mitigation - Only natural gas hearth (LRVSP Policy 7.78)
Energy Mitigation - Min 7% better than the 2016 code (model default) per 2019 standard. Energy star appliances (LRVSP Policy 7.15).

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	140.25	158.67
tblFireplaces	NumberWood	89.25	96.33
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	9.91	9.52
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	8.62	9.52
tblVehicleTrips	WD_TR	1.89	0.00

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	15.1079	4.4721	22.8193	0.0281		0.4586	0.4586		0.4586	0.4586	0	5,437.88	5,437.88	0.1398	0.099	5,470.88
Energy	0.0857	0.7327	0.3118	4.68E-03		0.0592	0.0592		0.0592	0.0592		935.3651	935.3651	0.0179	0.0172	940.9235
Mobile	3.7289	9.2151	38.0384	0.1362	14.6953	0.1062	14.8015	3.9225	0.0989	4.0214		13,676.69	13,676.69	0.3298		13,684.93
Total	**18.9225**	**14.4199**	**61.1695**	**0.169**	**14.6953**	**0.6241**	**15.3194**	**3.9225**	**0.6168**	**4.5392**	**0**	**20,049.94**	**20,049.94**	**0.4875**	**0.1162**	**20,096.74**

4.0 Operational Detail - Mobile

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	2,427.60	2,427.60	2427.60	6,953,964	6,953,964
Total	2,427.60	2,427.60	2,427.60	6,953,964	6,953,964

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.560436	0.034127	0.225306	0.120925	0.018624	0.004494	0.017700	0.009446	0.001631	0.000961	0.004725	0.000760	0.000866
Other Asphalt Surfaces	0.560436	0.034127	0.225306	0.120925	0.018624	0.004494	0.017700	0.009446	0.001631	0.000961	0.004725	0.000760	0.000866
Single Family Housing	0.560436	0.034127	0.225306	0.120925	0.018624	0.004494	0.017700	0.009446	0.001631	0.000961	0.004725	0.000760	0.000866

5.0 Energy Detail

Historical Energy Use: N
Exceed Title 24
Install Energy Efficient Appliances

	NaturalGa	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family	7.9506	0.0857	0.7327	0.3118	4.6800e-		0.0592	0.0592		0.0592	0.0592		935.3651	935.3651	0.0179	0.0172	940.9235
Total		**0.0857**	**0.7327**	**0.3118**	**4.6800e-**		**0.0592**	**0.0592**		**0.0592**	**0.0592**		**935.3651**	**935.3651**	**0.0179**	**0.0172**	**940.9235**

6.0 Area Detail

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural	4.009					0	0		0	0			0			0
Consumer	9.9727					0	0		0	0			0			0
Hearth	0.495	4.23	1.8	0.027		0.342	0.342		0.342	0.342	0	5,400.00	5,400.00	0.1035	0.099	5,432.09
Landscaping	0.6312	0.2421	21.0193	1.11E-03		0.1166	0.1166		0.1166	0.1166		37.8839	37.8839	0.0363		38.791
Total	**15.1079**	**4.4721**	**22.8193**	**0.0281**		**0.4586**	**0.4586**		**0.4586**	**0.4586**	**0**	**5,437.88**	**5,437.88**	**0.1398**	**0.099**	**5,470.88**

LRVSP Annual Operation - 2029 - El Dorado-Mountain County County, Summer

LRVSP Annual Operation - 2029
El Dorado-Mountain County County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	9.00	Acre	9.00	392,040.00	0
City Park	5.00	Acre	5.00	217,800.00	0
Single Family Housing	306.00	Dwelling Unit	99.35	550,800.00	875

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2029
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity	641.35	**CH4 Intensity**	0.029	**N2O Intensity**	0.006

1.3 User Entered Comments & Non-Default Data

Land Use - From project description
Vehicle Trips - Trip rates from F&P
Area Coating - all operations in EDCAQMD must apply coatings with VOC contents of 150 g/L or less, effective 1/1/2018
Area Mitigation - Only natural gas hearth (LRVSP Policy 7.78)
Energy Mitigation - Min 7% better than the 2016 code (model default) per 2019 standard. Energy star appliances (LRVSP Policy 7.15).

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	168.30	190.40
tblFireplaces	NumberWood	107.10	115.60
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	9.91	9.52
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	8.62	9.52
tblVehicleTrips	WD_TR	1.89	0.00

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	18.0845	5.3665	27.3829	0.0337		0.5504	0.5504		0.5504	0.5504	0	6,525.46	6,525.46	0.1677	0.1188	6,565.06
Energy	0.1029	0.8792	0.3742	5.61E-03		0.0711	0.0711		0.0711	0.0711		1,122.44	1,122.44	0.0215	0.0206	1,129.11
Mobile	4.2525	10.4067	43.1752	0.159	17.6306	0.1175	17.7481	4.7054	0.1094	4.8148		15,975.89	15,975.89	0.3721		15,985.19
Total	**22.4399**	**16.6524**	**70.9323**	**0.1984**	**17.6306**	**0.739**	**18.3695**	**4.7054**	**0.7308**	**5.4362**	**0**	**23,623.78**	**23,623.78**	**0.5614**	**0.1394**	**23,679.35**

4.0 Operational Detail - Mobile

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	2,913.12	2,913.12	2913.12	8,344,756	8,344,756
Total	2,913.12	2,913.12	2,913.12	8,344,756	8,344,756

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.563277	0.033751	0.225511	0.119803	0.017382	0.004328	0.017751	0.009394	0.001633	0.000947	0.004665	0.000757	0.000801
Other Asphalt Surfaces	0.563277	0.033751	0.225511	0.119803	0.017382	0.004328	0.017751	0.009394	0.001633	0.000947	0.004665	0.000757	0.000801
Single Family Housing	0.563277	0.033751	0.225511	0.119803	0.017382	0.004328	0.017751	0.009394	0.001633	0.000947	0.004665	0.000757	0.000801

5.0 Energy Detail

Historical Energy Use: N
Exceed Title 24
Install Energy Efficient Appliances

	NaturalGa	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family	9.54072	0.1029	0.8792	0.3742	5.6100e-		0.0711	0.0711		0.0711	0.0711		1,122.4381	1,122.438	0.0215	0.0206	1,129.1082
Total		**0.1029**	**0.8792**	**0.3742**	**5.6100e-**		**0.0711**	**0.0711**		**0.0711**	**0.0711**		**1,122.4381**	**1,122.438**	**0.0215**	**0.0206**	**1,129.1082**

6.0 Area Detail

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural	4.7959					0	0		0	0			0			0
Consumer	11.9372					0	0		0	0			0			0
Hearth	0.594	5.076	2.16	0.0324		0.4104	0.4104		0.4104	0.4104	0	6,480.00	6,480.00	0.1242	0.1188	6,518.51
Landscaping	0.7574	0.2905	25.2229	1.33E-03		0.14	0.14		0.14	0.14		45.4601	45.4601	0.0435		46.5485
Total	**18.0845**	**5.3665**	**27.3829**	**0.0337**		**0.5504**	**0.5504**		**0.5504**	**0.5504**	**0**	**6,525.46**	**6,525.46**	**0.1677**	**0.1188**	**6,565.06**

LRVSP Full Build - 2030 no LRVSP - El Dorado-Mountain County County, Annual

LRVSP Full Build - 2030 no LRVSP
El Dorado-Mountain County County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	31.00	Acre	31.00	1,350,360.00	0
City Park	5.00	Acre	5.00	217,800.00	0
Single Family Housing	356.00	Dwelling Unit	115.58	640,800.00	1018

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity	133	**CH4 Intensity**	0.018	**N2O Intensity**	0.002

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E and eGrid emission factors adjusted for SB100 and RPS
Land Use - From project description
Vehicle Trips - Trip rates from F&P
Water And Wastewater - Water assumptions from WSP water study (includes 20% reduction in water use per specific plan rates (LRVSP Policy 7.34)).
Energy Mitigation - Min 7% better than the 2016 code (model default) per 2019 standard.

Table Name	Column Name	Default Value	New Value
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.018
tblProjectCharacteristics	CO2IntensityFactor	641.35	133
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.002
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	9.91	9.52
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	8.62	9.52

tblVehicleTrips	WD_TR	1.89	0.00
tblWater	IndoorWaterUseRate	23,194,833.12	39,658,215.00
tblWater	OutdoorWaterUseRate	5,957,406.75	5,099,738.00
tblWater	OutdoorWaterUseRate	0.00	11,414,576.00
tblWater	OutdoorWaterUseRate	14,622,829.58	33,407.75

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	26.0579	0.4666	30.2101	0.0501		3.8807	3.8807		3.8807	3.8807	367.7329	158.5403	526.2733	0.3435	0.0289	543.4797
Energy	0.0219	0.1867	0.0794	1.1900e-		0.0151	0.0151		0.0151	0.0151	0	401.1832	401.1832	0.0292	6.75E-03	403.9229
Mobile	0.6913	2.1934	8.1211	0.0308	3.5785	0.0230	3.6015	0.9583	0.0214	0.9796	0	2,805.61	2,805.61	0.0659	0	2,807.25
Waste						0.0000	0.0000		0.0000	0.0000	51.7485	0	51.7485	3.0583	0	128.2047
Water						0.0000	0.0000		0.0000	0.0000	12.5817	16.4398	29.0215	1.2945	0.0308	70.5503
Total	**26.7710**	**2.8467**	**38.4106**	**0.0820**	**3.5785**	**3.9188**	**7.4973**	**0.9583**	**3.9172**	**4.8754**	**432.0632**	**3,381.77**	**3,813.83**	**4.7913**	**0.0664**	**3,953.41**

4.0 Operational Detail - Mobile

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	3,389.12	3,389.12	3389.12	9,708,279	9,708,279
Total	3,389.12	3,389.12	3,389.12	9,708,279	9,708,279

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.565604	0.033433	0.225772	0.118876	0.016293	0.004189	0.017799	0.009349	0.001639	0.000932	0.004613	0.000754	0.000746
Other Asphalt Surfaces	0.565604	0.033433	0.225772	0.118876	0.016293	0.004189	0.017799	0.009349	0.001639	0.000932	0.004613	0.000754	0.000746
Single Family Housing	0.565604	0.033433	0.225772	0.118876	0.016293	0.004189	0.017799	0.009349	0.001639	0.000932	0.004613	0.000754	0.000746

5.0 Energy Detail

Historical Energy Use: N
Exceed Title 24

5.2 Energy by Land Use - NaturalGas

	NaturalGa	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family	4.05138e+	0.0219	0.1867	0.0794	1.1900e-		0.0151	0.0151		0.0151	0.0151	0.0000	216.1970	216.1970	4.1400e-	3.9600e-	217.4817
Total		**0.0219**	**0.1867**	**0.0794**	**1.1900e-**		**0.0151**	**0.0151**		**0.0151**	**0.0151**	**0.0000**	**216.1970**	**216.1970**	**4.1400e-**	**3.9600e-**	**217.4817**

5.3 Energy by Land Use - Electricity

	Electricity	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt	0	0.0000	0.0000	0.0000	0.0000
Single Family	3.06635e+	184.9863	0.0250	2.7800e-	186.4411
Total		**184.9863**	**0.0250**	**2.7800e-**	**186.4411**

6.0 Area Detail

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural	1.0494					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer	2.5920					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	22.3376	0.4362	27.5734	0.0500		3.8661	3.8661		3.8661	3.8661	367.7329	154.2218	521.9548	0.3394	0.0289	539.0583
Landscaping	0.0789	0.0304	2.6367	1.4000e-		0.0147	0.0147		0.0147	0.0147	0.0000	4.3185	4.3185	4.1200e-	0.0000	4.4214
Total	**26.0579**	**0.4666**	**30.2101**	**0.0501**		**3.8807**	**3.8807**		**3.8807**	**3.8807**	**367.7329**	**158.5403**	**526.2733**	**0.3435**	**0.0289**	**543.4797**

7.0 Water Detail

	Indoor/Out	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 5.09974	1.0768	1.5000e-	2.0000e-	1.0853
Other Asphalt	0 / 11.4146	2.4102	3.3000e-	4.0000e-	2.4291
Single Family	39.6582 /	25.5346	1.2940	0.0307	67.0359
Total		**29.0215**	**1.2945**	**0.0308**	**70.5503**

8.0 Waste Detail

	Waste	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.43	0.0873	5.1600e-	0.0000	0.2163
Other Asphalt	0	0.0000	0.0000	0.0000	0.0000
Single Family	254.5	51.6612	3.0531	0.0000	127.9884
Total		**51.7485**	**3.0583**	**0.0000**	**128.2047**

LRVSP Full Build - 2030 with LRVSP - El Dorado-Mountain County County, Annual

LRVSP Full Build - 2030 with LRVSP
El Dorado-Mountain County County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	31.00	Acre	31.00	1,350,360.00	0
City Park	5.00	Acre	5.00	217,800.00	0
Single Family Housing	356.00	Dwelling Unit	115.58	640,800.00	1018

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity	133	**CH4 Intensity**	0.018	**N2O Intensity**	0.002

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E and eGrid emission factors adjusted for SB100 and RPS
Land Use - From project description
Vehicle Trips - Trip rates from F&P
Area Mitigation - Only natural gas hearth (LRVSP Policy 7.78)
Energy Mitigation - Min 7% better than the 2016 code (model default) per 2019 standard. Energy star appliances (LRVSP Policy 7.15)
Water And Wastewater - Water assumptions from WSP water study (includes 20% reduction in water use per specific plan rates (LRVSP Policy 7.34)).
Water Mitigation - Recycled water per WSA study (LRVSP Policy 7.38); water efficient irrigation systems (LRVSP Policy 7.40); turf reduction (LRVSP

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	195.80	221.51
tblFireplaces	NumberWood	124.60	134.49
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.018
tblProjectCharacteristics	CO2IntensityFactor	641.35	133
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.002

tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	9.91	9.52
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	8.62	9.52
tblVehicleTrips	WD_TR	1.89	0.00
tblWater	IndoorWaterUseRate	23,194,833.12	31,726,572.00
tblWater	OutdoorWaterUseRate	5,957,406.75	5,099,738.00
tblWater	OutdoorWaterUseRate	0.00	11,414,576.00
tblWater	OutdoorWaterUseRate	14,622,829.58	33,407,735.00

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.7486	0.2725	2.7397	1.6900e-		0.0342	0.0342		0.0342	0.0342	0.0000	284.7218	284.7218	9.4900e-	5.1400e-	286.4910
Energy	0.0219	0.1867	0.0794	1.1900e-		0.0151	0.0151		0.0151	0.0151	0.0000	397.5728	397.5728	0.0287	6.6900e-	400.2840
Mobile	0.6913	2.1934	8.1211	0.0308	3.5785	0.0230	3.6015	0.9583	0.0214	0.9796	0.0000	2,805.608	2,805.6082	0.0659	0.0000	2,807.254
Waste						0.0000	0.0000		0.0000	0.0000	51.7485	0.0000	51.7485	3.0583	0.0000	128.2047
Water						0.0000	0.0000		0.0000	0.0000	10.0654	17.7603	27.8256	1.0362	0.0247	61.0849
Total	**4.4617**	**2.6526**	**10.9402**	**0.0336**	**3.5785**	**0.0723**	**3.6508**	**0.9583**	**0.0707**	**1.0290**	**61.8139**	**3,505.663**	**3,567.4770**	**4.1985**	**0.0365**	**3,683.319**

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	3,389.12	3,389.12	3389.12	9,708,279	9,708,279
Total	3,389.12	3,389.12	3,389.12	9,708,279	9,708,279

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.565604	0.033433	0.225772	0.118876	0.016293	0.004189	0.017799	0.009349	0.001639	0.000932	0.004613	0.000754	0.000746
Other Asphalt Surfaces	0.565604	0.033433	0.225772	0.118876	0.016293	0.004189	0.017799	0.009349	0.001639	0.000932	0.004613	0.000754	0.000746

Single Family Housing	0.565604	0.033433	0.225772	0.118876	0.016293	0.004189	0.017799	0.009349	0.001639	0.000932	0.004613	0.000754	0.000746

5.0 Energy Detail

Historical Energy Use: N
Exceed Title 24
Install Energy Efficient Appliances

5.2 Energy by Land Use - NaturalGas

	NaturalGa	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family	4.05138e+	0.0219	0.1867	0.0794	1.1900e-		0.0151	0.0151		0.0151	0.0151	0.0000	216.1970	216.1970	4.1400e-	3.9600e-	217.4817
Total		**0.0219**	**0.1867**	**0.0794**	**1.1900e-**		**0.0151**	**0.0151**		**0.0151**	**0.0151**	**0.0000**	**216.1970**	**216.1970**	**4.1400e-**	**3.9600e-**	**217.4817**

5.3 Energy by Land Use - Electricity

	Electricity	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt	0	0.0000	0.0000	0.0000	0.0000
Single Family	3.00651e+	181.3758	0.0246	2.7300e-	182.8023
Total		**181.3758**	**0.0246**	**2.7300e-**	**182.8023**

6.0 Area Detail

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural	1.0494					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer	2.5920					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0283	0.2421	0.1030	1.5500e-		0.0196	0.0196		0.0196	0.0196	0.0000	280.4033	280.4033	5.3700e-	5.1400e-	282.0696
Landscaping	0.0789	0.0304	2.6367	1.4000e-		0.0147	0.0147		0.0147	0.0147	0.0000	4.3185	4.3185	4.1200e-	0.0000	4.4214
Total	**3.7486**	**0.2725**	**2.7397**	**1.6900e-**		**0.0342**	**0.0342**		**0.0342**	**0.0342**	**0.0000**	**284.7218**	**284.7218**	**9.4900e-**	**5.1400e-**	**286.4910**

7.0 Water Detail

Use Reclaimed Water
Turf Reduction
Use Water Efficient Irrigation System

	Indoor/Out	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 3.58191	0.7563	1.0000e-	1.0000e-	0.7623
Other Asphalt	0 / 8.01728	1.6928	2.3000e-	3.0000e-	1.7061
Single Family	31.7266 /	25.3765	1.0359	0.0246	58.6165
Total		**27.8256**	**1.0362**	**0.0247**	**61.0849**

8.0 Waste Detail

	Waste	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.43	0.0873	5.1600e-	0.0000	0.2163
Other Asphalt	0	0.0000	0.0000	0.0000	0.0000
Single Family	254.5	51.6612	3.0531	0.0000	127.9884
Total		**51.7485**	**3.0583**	**0.0000**	**128.2047**

LRVSP Full Build - 2030 with LRVSP - El Dorado-Mountain County County, Summer

LRVSP Full Build - 2030 with LRVSP
El Dorado-Mountain County County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	31.00	Acre	31.00	1,350,360.00	0
City Park	5.00	Acre	5.00	217,800.00	0
Single Family Housing	356.00	Dwelling Unit	115.58	640,800.00	1018

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity	133	**CH4 Intensity**	0.018	**N2O Intensity**	0.002

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E and eGrid emission factors adjusted for SB100 and RPS
Land Use - From project description
Vehicle Trips - Trip rates from F&P
Area Mitigation - Only natural gas hearth (LRVSP Policy 7.78)
Energy Mitigation - Min 7% better than the 2016 code (model default) per 2019 standard. Energy star appliances (LRVSP Policy 7.15)
Water And Wastewater - Water assumptions from WSP water study (includes 20% reduction in water use per specific plan rates (LRVSP Policy 7.34)).
Water Mitigation - Recycled water per WSA study (LRVSP Policy 7.38); water efficient irrigation systems (LRVSP Policy 7.40); turf reduction (LRVSP

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	195.80	221.51
tblFireplaces	NumberWood	124.60	134.49
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.018
tblProjectCharacteristics	CO2IntensityFactor	641.35	133
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.002

tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	9.91	9.52
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	8.62	9.52
tblVehicleTrips	WD_TR	1.89	0.00
tblWater	IndoorWaterUseRate	23,194,833.12	31,726,572.00
tblWater	OutdoorWaterUseRate	5,957,406.75	5,099,738.00
tblWater	OutdoorWaterUseRate	0.00	11,414,576.00
tblWater	OutdoorWaterUseRate	14,622,829.58	33,407,735.00

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	21.5201	6.2431	31.8094	0.0393		0.6404	0.6404		0.6404	0.6404	0	7,591.72	7,591.72	0.1949	0.1382	7,637.78
Energy	0.1197	1.0229	0.4353	6.53E-03		0.0827	0.0827		0.0827	0.0827		1,305.84	1,305.84	0.025	0.0239	1,313.60
Mobile	4.698	11.4409	47.6097	0.1805	20.5076	0.1263	20.6339	5.4727	0.1175	5.5902		18,140.20	18,140.20	0.4072		18,150.38
Total	**26.3378**	**18.7069**	**79.8544**	**0.2263**	**20.5076**	**0.8493**	**21.357**	**5.4727**	**0.8405**	**6.3132**	**0**	**27,037.76**	**27,037.76**	**0.6271**	**0.1622**	**27,101.76**

4.0 Operational Detail - Mobile

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	3,389.12	3,389.12	3389.12	9,708,279	9,708,279
Total	3,389.12	3,389.12	3,389.12	9,708,279	9,708,279

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.565604	0.033433	0.225772	0.118876	0.016293	0.004189	0.017799	0.009349	0.001639	0.000932	0.004613	0.000754	0.000746
Other Asphalt Surfaces	0.565604	0.033433	0.225772	0.118876	0.016293	0.004189	0.017799	0.009349	0.001639	0.000932	0.004613	0.000754	0.000746

Single Family Housing	0.565604	0.033433	0.225772	0.118876	0.016293	0.004189	0.017799	0.009349	0.001639	0.000932	0.004613	0.000754	0.000746

5.0 Energy Detail

Historical Energy Use: N
Exceed Title 24
Install Energy Efficient Appliances

	NaturalGa	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family	11.0997	0.1197	1.0229	0.4353	6.5300e-		0.0827	0.0827		0.0827	0.0827		1,305.8430	1,305.843	0.0250	0.0239	1,313.6030
Total		**0.1197**	**1.0229**	**0.4353**	**6.5300e-**		**0.0827**	**0.0827**		**0.0827**	**0.0827**		**1,305.8430**	**1,305.843**	**0.0250**	**0.0239**	**1,313.6030**

6.0 Area Detail

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural	5.7499					0	0		0	0			0			0
Consumer	14.2026					0	0		0	0			0			0
Hearth	0.6911	5.9054	2.5129	0.0377		0.4775	0.4775		0.4775	0.4775	0	7,538.82	7,538.82	0.1445	0.1382	7,583.62
Landscaping	0.8765	0.3377	29.2965	1.55E-03		0.1629	0.1629		0.1629	0.1629		52.8925	52.8925	0.0504		54.1527
Total	**21.5201**	**6.2431**	**31.8094**	**0.0392**		**0.6404**	**0.6404**		**0.6404**	**0.6404**	**0**	**7,591.72**	**7,591.72**	**0.1949**	**0.1382**	**7,637.78**

LRVSP Annual Operation - 2031 - El Dorado-Mountain County County, Summer

LRVSP Annual Operation - 2031
El Dorado-Mountain County County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	31.00	Acre	31.00	1,350,360.00	0
City Park	5.00	Acre	5.00	217,800.00	0
Single Family Housing	406.00	Dwelling Unit	131.82	730,800.00	1161

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2031
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity	641.35	**CH4 Intensity**	0.029	**N2O Intensity**	0.006

1.3 User Entered Comments & Non-Default Data

Land Use - From project description
Vehicle Trips - Trip rates from F&P
Area Coating - all operations in EDCAQMD must apply coatings with VOC contents of 150 g/L or less, effective 1/1/2018
Area Mitigation - Only natural gas hearth (LRVSP Policy 7.78)
Energy Mitigation - Min 7% better than the 2016 code (model default) per 2019 standard. Energy star appliances (LRVSP Policy 7.15).

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	223.30	252.62
tblFireplaces	NumberWood	142.10	153.38
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	9.91	9.52
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	8.62	9.52
tblVehicleTrips	WD_TR	1.89	0.00

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	24.4376	7.1200	36.2765	0.0448		0.7303	0.7303		0.7303	0.7303	0.0000	8,657.967	8,657.9672	0.2223	0.1576	8,710.495
Energy	0.1365	1.1666	0.4964	7.4500e-		0.0943	0.0943		0.0943	0.0943		1,489.247	1,489.2479	0.0285	0.0273	1,498.097
Mobile	5.0801	12.4141	51.5667	0.2015	23.3848	0.1333	23.5181	6.2400	0.1240	6.3640		20,252.08	20,252.083	0.4389		20,263.05
Total	**29.6542**	**20.7006**	**88.3396**	**0.2537**	**23.3848**	**0.9579**	**24.3427**	**6.2400**	**0.9486**	**7.1886**	**0.0000**	**30,399.29**	**30,399.298**	**0.6897**	**0.1849**	**30,471.64**

4.0 Operational Detail - Mobile

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	3,865.12	3,865.12	3865.12	11,071,801	11,071,801
Total	3,865.12	3,865.12	3,865.12	11,071,801	11,071,801

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.567444	0.033164	0.226031	0.118096	0.015320	0.004075	0.017934	0.009350	0.001642	0.000921	0.004569	0.000751	0.000701
Other Asphalt Surfaces	0.567444	0.033164	0.226031	0.118096	0.015320	0.004075	0.017934	0.009350	0.001642	0.000921	0.004569	0.000751	0.000701
Single Family Housing	0.567444	0.033164	0.226031	0.118096	0.015320	0.004075	0.017934	0.009350	0.001642	0.000921	0.004569	0.000751	0.000701

5.0 Energy Detail

Historical Energy Use: N
Exceed Title 24
Install Energy Efficient Appliances

	NaturalGa	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family	12.6586	0.1365	1.1666	0.4964	7.4500e-		0.0943	0.0943		0.0943	0.0943		1,489.2479	1,489.247	0.0285	0.0273	1,498.0978
Total		**0.1365**	**1.1666**	**0.4964**	**7.4500e-**		**0.0943**	**0.0943**		**0.0943**	**0.0943**		**1,489.2479**	**1,489.247**	**0.0285**	**0.0273**	**1,498.0978**

6.0 Area Detail

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural	6.5213					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer	16.1286					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.7881	6.7348	2.8659	0.0430		0.5445	0.5445		0.5445	0.5445	0.0000	8,597.647	8,597.6471	0.1648	0.1576	8,648.738
Landscaping	0.9996	0.3852	33.4107	1.7700e-		0.1858	0.1858		0.1858	0.1858		60.3201	60.3201	0.0575		61.7572
Total	**24.4376**	**7.1200**	**36.2765**	**0.0448**		**0.7303**	**0.7303**		**0.7303**	**0.7303**	**0.0000**	**8,657.967**	**8,657.9672**	**0.2223**	**0.1576**	**8,710.495**

LRVSP Annual Operation - 2032 - El Dorado-Mountain County County, Summer

LRVSP Annual Operation - 2032
El Dorado-Mountain County County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	31.00	Acre	31.00	1,350,360.00	0
City Park	5.00	Acre	5.00	217,800.00	0
Single Family Housing	456.00	Dwelling Unit	148.05	820,800.00	1304

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2032
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity	641.35	**CH4 Intensity**	0.029	**N2O Intensity**	0.006

1.3 User Entered Comments & Non-Default Data

Land Use - From project description
Vehicle Trips - Trip rates from F&P
Area Coating - all operations in EDCAQMD must apply coatings with VOC contents of 150 g/L or less, effective 1/1/2018
Area Mitigation - Only natural gas hearth (LRVSP Policy 7.78)
Energy Mitigation - Min 7% better than the 2016 code (model default) per 2019 standard. Energy star appliances (LRVSP Policy 7.15).

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	250.80	283.73
tblFireplaces	NumberWood	159.60	172.27
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	9.91	9.52
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	8.62	9.52
tblVehicleTrips	WD_TR	1.89	0.00

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	27.3552	7.9968	40.7436	0.0503		0.8202	0.8202		0.8202	0.8202	0.0000	9,724.218	9,724.2183	0.2496	0.1770	9,783.215
Energy	0.1533	1.3102	0.5576	8.3600e-		0.1059	0.1059		0.1059	0.1059		1,672.652	1,672.6528	0.0321	0.0307	1,682.592
Mobile	5.4323	13.3157	55.2482	0.2220	26.2617	0.1389	26.4005	7.0072	0.1291	7.1363		22,319.91	22,319.916	0.4692		22,331.64
Total	**32.9409**	**22.6228**	**96.5494**	**0.2807**	**26.2617**	**1.0650**	**27.3267**	**7.0072**	**1.0553**	**8.0625**	**0.0000**	**33,716.78**	**33,716.787**	**0.7509**	**0.2077**	**33,797.45**

4.0 Operational Detail - Mobile

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	4,341.12	4,341.12	4341.12	12,435,323	12,435,323
Total	4,341.12	4,341.12	4,341.12	12,435,323	12,435,323

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.568926	0.032957	0.226285	0.117469	0.014479	0.003987	0.018049	0.009344	0.001646	0.000912	0.004534	0.000749	0.000662
Other Asphalt Surfaces	0.568926	0.032957	0.226285	0.117469	0.014479	0.003987	0.018049	0.009344	0.001646	0.000912	0.004534	0.000749	0.000662
Single Family Housing	0.568926	0.032957	0.226285	0.117469	0.014479	0.003987	0.018049	0.009344	0.001646	0.000912	0.004534	0.000749	0.000662

5.0 Energy Detail

Historical Energy Use: N
Exceed Title 24
Install Energy Efficient Appliances

	NaturalGa	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family	14.2175	0.1533	1.3102	0.5576	8.3600e-		0.1059	0.1059		0.1059	0.1059		1,672.6528	1,672.652	0.0321	0.0307	1,682.5926
Total		**0.1533**	**1.3102**	**0.5576**	**8.3600e-**		**0.1059**	**0.1059**		**0.1059**	**0.1059**		**1,672.6528**	**1,672.652**	**0.0321**	**0.0307**	**1,682.5926**

6.0 Area Detail

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural	7.2928					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer	18.0546					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.8852	7.5642	3.2188	0.0483		0.6116	0.6116		0.6116	0.6116	0.0000	9,656.470	9,656.4706	0.1851	0.1770	9,713.854
Landscaping	1.1226	0.4326	37.5248	1.9900e-		0.2086	0.2086		0.2086	0.2086		67.7477	67.7477	0.0646		69.3617
Total	**27.3552**	**7.9968**	**40.7436**	**0.0503**		**0.8202**	**0.8202**		**0.8202**	**0.8202**	**0.0000**	**9,724.218**	**9,724.2183**	**0.2496**	**0.1770**	**9,783.215**

LRVSP Annual Operation - 2033 - El Dorado-Mountain County County, Summer

LRVSP Annual Operation - 2033
El Dorado-Mountain County County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	31.00	Acre	31.00	1,350,360.00	0
City Park	5.00	Acre	5.00	217,800.00	0
Single Family Housing	506.00	Dwelling Unit	164.29	910,800.00	1447

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2033
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity	641.35	**CH4 Intensity**	0.029	**N2O Intensity**	0.006

1.3 User Entered Comments & Non-Default Data

Land Use - From project description
Vehicle Trips - Trip rates from F&P
Area Coating - all operations in EDCAQMD must apply coatings with VOC contents of 150 g/L or less, effective 1/1/2018
Area Mitigation - Only natural gas hearth (LRVSP Policy 7.78)
Energy Mitigation - Min 7% better than the 2016 code (model default) per 2019 standard. Energy star appliances (LRVSP Policy 7.15).

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	278.30	314.84
tblFireplaces	NumberWood	177.10	191.16
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	9.91	9.52
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	8.62	9.52
tblVehicleTrips	WD_TR	1.89	0.00

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.2728	8.8737	45.2107	0.0558		0.9102	0.9102		0.9102	0.9102	0.0000	10,790.46	10,790.469	0.2770	0.1965	10,855.93
Energy	0.1701	1.4539	0.6187	9.2800e-		0.1176	0.1176		0.1176	0.1176		1,856.057	1,856.0577	0.0356	0.0340	1,867.087
Mobile	5.7553	14.1490	58.7666	0.2423	29.1386	0.1434	29.2819	7.7745	0.1332	7.9077		24,357.45	24,357.451	0.4987		24,369.91
Total	**36.1982**	**24.4765**	**104.5960**	**0.3073**	**29.1386**	**1.1711**	**30.3096**	**7.7745**	**1.1609**	**8.9354**	**0.0000**	**37,003.97**	**37,003.978**	**0.8112**	**0.2305**	**37,092.94**

4.0 Operational Detail - Mobile

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	4,817.12	4,817.12	4817.12	13,798,845	13,798,845
Total	4,817.12	4,817.12	4,817.12	13,798,845	13,798,845

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.570099	0.032790	0.226523	0.116980	0.013774	0.003915	0.018157	0.009326	0.001650	0.000905	0.004507	0.000746	0.000629
Other Asphalt Surfaces	0.570099	0.032790	0.226523	0.116980	0.013774	0.003915	0.018157	0.009326	0.001650	0.000905	0.004507	0.000746	0.000629
Single Family Housing	0.570099	0.032790	0.226523	0.116980	0.013774	0.003915	0.018157	0.009326	0.001650	0.000905	0.004507	0.000746	0.000629

5.0 Energy Detail

Historical Energy Use: N
Exceed Title 24
Install Energy Efficient Appliances

	NaturalGa	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family	15.7765	0.1701	1.4539	0.6187	9.2800e-		0.1176	0.1176		0.1176	0.1176		1,856.0577	1,856.057	0.0356	0.0340	1,867.0874
Total		**0.1701**	**1.4539**	**0.6187**	**9.2800e-**		**0.1176**	**0.1176**		**0.1176**	**0.1176**		**1,856.0577**	**1,856.057**	**0.0356**	**0.0340**	**1,867.0874**

6.0 Area Detail

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural	8.0642					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer	19.9806					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.9822	8.3937	3.5718	0.0536		0.6786	0.6786		0.6786	0.6786	0.0000	10,715.29	10,715.294	0.2054	0.1965	10,778.96
Landscaping	1.2457	0.4800	41.6390	2.2000e-		0.2315	0.2315		0.2315	0.2315		75.1753	75.1753	0.0716		76.9662
Total	**30.2728**	**8.8737**	**45.2107**	**0.0558**		**0.9102**	**0.9102**		**0.9102**	**0.9102**	**0.0000**	**10,790.46**	**10,790.469**	**0.2770**	**0.1965**	**10,855.93**

LRVSP Annual Operation - 2034 - El Dorado-Mountain County County, Summer

LRVSP Annual Operation - 2034
El Dorado-Mountain County County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	31.00	Acre	31.00	1,350,360.00	0
City Park	5.00	Acre	5.00	217,800.00	0
Single Family Housing	555.00	Dwelling Unit	180.19	999,000.00	1587

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2034
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity	641.35	**CH4 Intensity**	0.029	**N2O Intensity**	0.006

1.3 User Entered Comments & Non-Default Data

Land Use - From project description
Vehicle Trips - Trip rates from F&P
Area Coating - all operations in EDCAQMD must apply coatings with VOC contents of 150 g/L or less, effective 1/1/2018
Area Mitigation - Only natural gas hearth (LRVSP Policy 7.78)
Energy Mitigation - Min 7% better than the 2016 code (model default) per 2019 standard. Energy star appliances (LRVSP Policy 7.15).

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	305.25	345.33
tblFireplaces	NumberWood	194.25	209.67
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	9.91	9.52
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	8.62	9.52
tblVehicleTrips	WD_TR	1.89	0.00

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	33.1320	9.7330	49.5885	0.0612		0.9983	0.9983		0.9983	0.9983	0.0000	11,835.39	11,835.395	0.3038	0.2155	11,907.20
Energy	0.1866	1.5947	0.6786	0.0102		0.1289	0.1289		0.1289	0.1289		2,035.794	2,035.7946	0.0390	0.0373	2,047.892
Mobile	6.0152	14.8950	61.8875	0.2618	31.9574	0.1463	32.1036	8.5261	0.1359	8.6620		26,326.90	26,326.901	0.5241		26,340.00
Total	**39.3338**	**26.2227**	**112.1546**	**0.3331**	**31.9574**	**1.2735**	**33.2308**	**8.5261**	**1.2631**	**9.7892**	**0.0000**	**40,198.09**	**40,198.091**	**0.8669**	**0.2528**	**40,295.09**

4.0 Operational Detail - Mobile

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	5,283.60	5,283.60	5283.60	15,135,097	15,135,097
Total	5,283.60	5,283.60	5,283.60	15,135,097	15,135,097

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.571038	0.032651	0.226774	0.116597	0.013140	0.003857	0.018254	0.009314	0.001655	0.000893	0.004485	0.000743	0.000600
Other Asphalt Surfaces	0.571038	0.032651	0.226774	0.116597	0.013140	0.003857	0.018254	0.009314	0.001655	0.000893	0.004485	0.000743	0.000600
Single Family Housing	0.571038	0.032651	0.226774	0.116597	0.013140	0.003857	0.018254	0.009314	0.001655	0.000893	0.004485	0.000743	0.000600

5.0 Energy Detail

Historical Energy Use: N
Exceed Title 24
Install Energy Efficient Appliances

	NaturalGa	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family	17.3043	0.1866	1.5947	0.6786	0.0102		0.1289	0.1289		0.1289	0.1289		2,035.7946	2,035.794	0.0390	0.0373	2,047.8923
Total		**0.1866**	**1.5947**	**0.6786**	**0.0102**		**0.1289**	**0.1289**		**0.1289**	**0.1289**		**2,035.7946**	**2,035.794**	**0.0390**	**0.0373**	**2,047.8923**

6.0 Area Detail

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural	8.8202					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer	21.8681					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.0774	9.2065	3.9177	0.0588		0.7444	0.7444		0.7444	0.7444	0.0000	11,752.94	11,752.941	0.2253	0.2155	11,822.78
Landscaping	1.3663	0.5265	45.6709	2.4200e-		0.2539	0.2539		0.2539	0.2539		82.4544	82.4544	0.0786		84.4187
Total	**33.1320**	**9.7330**	**49.5885**	**0.0612**		**0.9983**	**0.9983**		**0.9983**	**0.9983**	**0.0000**	**11,835.39**	**11,835.395**	**0.3038**	**0.2155**	**11,907.20**

LRVSP Annual Operation - 2035 - El Dorado-Mountain County County, Summer

LRVSP Annual Operation - 2035
El Dorado-Mountain County County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	39.00	Acre	39.00	1,698,840.00	0
City Park	8.00	Acre	8.00	348,480.00	0
Single Family Housing	604.00	Dwelling Unit	196.10	1,087,200.00	1727

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2035
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity	641.35	**CH4 Intensity**	0.029	**N2O Intensity**	0.006

1.3 User Entered Comments & Non-Default Data

Land Use - From project description
Vehicle Trips - Trip rates from F&P
Area Coating - all operations in EDCAQMD must apply coatings with VOC contents of 150 g/L or less, effective 1/1/2018
Area Mitigation - Only natural gas hearth (LRVSP Policy 7.78)
Energy Mitigation - Min 7% better than the 2016 code (model default) per 2019 standard. Energy star appliances (LRVSP Policy 7.15).

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	332.20	375.82
tblFireplaces	NumberWood	211.40	228.18
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	8.62	9.52
tblVehicleTrips	WD_TR	1.89	0.00

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	36.1860	10.5922	53.9239	0.0666		1.0864	1.0864		1.0864	1.0864	0.0000	12,880.32	12,880.324	0.3306	0.2345	12,958.46
Energy	0.2031	1.7355	0.7385	0.0111		0.1403	0.1403		0.1403	0.1403		2,215.531	2,215.5314	0.0425	0.0406	2,228.697
Mobile	6.4993	16.2732	67.5334	0.2928	36.2009	0.1548	36.3556	9.6578	0.1438	9.8016		29,448.25	29,448.257	0.5715		29,462.54
Total	**42.8884**	**28.6009**	**122.1958**	**0.3704**	**36.2009**	**1.3815**	**37.5824**	**9.6578**	**1.3705**	**11.0283**	**0.0000**	**44,544.11**	**44,544.113**	**0.9445**	**0.2751**	**44,649.70**

4.0 Operational Detail - Mobile

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	5,750.08	5,985.64	5750.08	16,567,745	16,567,745
Total	5,750.08	5,985.64	5,750.08	16,567,745	16,567,745

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.571778	0.032543	0.227016	0.116290	0.012601	0.003811	0.018332	0.009298	0.001658	0.000887	0.004468	0.000740	0.000577
Other Asphalt Surfaces	0.571778	0.032543	0.227016	0.116290	0.012601	0.003811	0.018332	0.009298	0.001658	0.000887	0.004468	0.000740	0.000577
Single Family Housing	0.571778	0.032543	0.227016	0.116290	0.012601	0.003811	0.018332	0.009298	0.001658	0.000887	0.004468	0.000740	0.000577

5.0 Energy Detail

Historical Energy Use: N
Exceed Title 24
Install Energy Efficient Appliances

	NaturalGa	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					

City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family	18.832	0.2031	1.7355	0.7385	0.0111		0.1403	0.1403		0.1403	0.1403		2,215.5314	2,215.531	0.0425	0.0406	2,228.6972
Total		**0.2031**	**1.7355**	**0.7385**	**0.0111**		**0.1403**	**0.1403**		**0.1403**	**0.1403**		**2,215.5314**	**2,215.531**	**0.0425**	**0.0406**	**2,228.6972**

6.0 Area Detail

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural	9.6426					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer	23.8858					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.1725	10.0193	4.2635	0.0640		0.8101	0.8101		0.8101	0.8101	0.0000	12,790.58	12,790.588	0.2452	0.2345	12,866.59
Landscaping	1.4851	0.5729	49.6604	2.6300e-		0.2764	0.2764		0.2764	0.2764		89.7359	89.7359	0.0854		91.8719
Total	**36.1860**	**10.5922**	**53.9239**	**0.0666**		**1.0864**	**1.0864**		**1.0864**	**1.0864**	**0.0000**	**12,880.32**	**12,880.324**	**0.3306**	**0.2345**	**12,958.46**

LRVSP Annual Operation - 2036 - El Dorado-Mountain County County, Summer

LRVSP Annual Operation - 2036
El Dorado-Mountain County County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	39.00	Acre	39.00	1,698,840.00	0
City Park	8.00	Acre	8.00	348,480.00	0
Single Family Housing	653.00	Dwelling Unit	212.01	1,175,400.00	1868

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2035
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity	641.35	**CH4 Intensity**	0.029	**N2O Intensity**	0.006

1.3 User Entered Comments & Non-Default Data

Land Use - From project description
Vehicle Trips - Trip rates from F&P
Area Coating - all operations in EDCAQMD must apply coatings with VOC contents of 150 g/L or less, effective 1/1/2018
Area Mitigation - Only natural gas hearth (LRVSP Policy 7.78)
Energy Mitigation - Min 7% better than the 2016 code (model default) per 2019 standard. Energy star appliances (LRVSP Policy 7.15).

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	359.15	406.31
tblFireplaces	NumberWood	228.55	246.69
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	9.91	9.52
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	8.62	9.52
tblVehicleTrips	WD_TR	1.89	0.00

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	39.0450	11.4515	58.2982	0.0720		1.1746	1.1746		1.1746	1.1746	0.0000	13,925.25	13,925.250	0.3574	0.2535	14,009.73
Energy	0.2196	1.8763	0.7984	0.0120		0.1517	0.1517		0.1517	0.1517		2,395.268	2,395.2682	0.0459	0.0439	2,409.502
Mobile	6.7500	16.9010	70.1388	0.3041	37.5975	0.1607	37.7582	10.0304	0.1493	10.1797		30,584.34	30,584.342	0.5935		30,599.17
Total	**46.0146**	**30.2288**	**129.2354**	**0.3880**	**37.5975**	**1.4870**	**39.0844**	**10.0304**	**1.4756**	**11.5060**	**0.0000**	**46,904.86**	**46,904.860**	**0.9968**	**0.2974**	**47,018.41**

4.0 Operational Detail - Mobile

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	6,216.56	6,216.56	6216.56	17,807,601	17,807,601
Total	6,216.56	6,216.56	6,216.56	17,807,601	17,807,601

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.571778	0.032543	0.227016	0.116290	0.012601	0.003811	0.018332	0.009298	0.001658	0.000887	0.004468	0.000740	0.000577
Other Asphalt Surfaces	0.571778	0.032543	0.227016	0.116290	0.012601	0.003811	0.018332	0.009298	0.001658	0.000887	0.004468	0.000740	0.000577
Single Family Housing	0.571778	0.032543	0.227016	0.116290	0.012601	0.003811	0.018332	0.009298	0.001658	0.000887	0.004468	0.000740	0.000577

5.0 Energy Detail

Historical Energy Use: N
Exceed Title 24
Install Energy Efficient Appliances

	NaturalGa	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family	20.3598	0.2196	1.8763	0.7984	0.0120		0.1517	0.1517		0.1517	0.1517		2,395.2682	2,395.268	0.0459	0.0439	2,409.5021
Total		**0.2196**	**1.8763**	**0.7984**	**0.0120**		**0.1517**	**0.1517**		**0.1517**	**0.1517**		**2,395.2682**	**2,395.268**	**0.0459**	**0.0439**	**2,409.5021**

6.0 Area Detail

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural	10.3986					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer	25.7732					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.2676	10.8321	4.6094	0.0691		0.8758	0.8758		0.8758	0.8758	0.0000	13,828.23	13,828.235	0.2650	0.2535	13,910.40
Landscaping	1.6056	0.6194	53.6887	2.8500e-		0.2988	0.2988		0.2988	0.2988		97.0149	97.0149	0.0924		99.3242
Total	**39.0450**	**11.4515**	**58.2982**	**0.0720**		**1.1746**	**1.1746**		**1.1746**	**1.1746**	**0.0000**	**13,925.25**	**13,925.250**	**0.3574**	**0.2535**	**14,009.73**

LRVSP Annual Operation - 2037 - El Dorado-Mountain County County, Summer

LRVSP Annual Operation - 2037
El Dorado-Mountain County County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	39.00	Acre	39.00	1,698,840.00	0
City Park	8.00	Acre	8.00	348,480.00	0
Single Family Housing	702.00	Dwelling Unit	227.92	1,263,600.00	2008

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2035
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity	641.35	**CH4 Intensity**	0.029	**N2O Intensity**	0.006

1.3 User Entered Comments & Non-Default Data

Land Use - From project description
Vehicle Trips - Trip rates from F&P
Area Coating - all operations in EDCAQMD must apply coatings with VOC contents of 150 g/L or less, effective 1/1/2018
Area Mitigation - Only natural gas hearth (LRVSP Policy 7.78)
Energy Mitigation - Min 7% better than the 2016 code (model default) per 2019 standard. Energy star appliances (LRVSP Policy 7.15).

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	386.10	436.80
tblFireplaces	NumberWood	245.70	265.20
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	9.91	9.52
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	8.62	9.52
tblVehicleTrips	WD_TR	1.89	0.00

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	41.9041	12.3108	62.6724	0.0774		1.2627	1.2627		1.2627	1.2627	0.0000	14,970.17	14,970.176	0.3842	0.2725	15,060.99
Energy	0.2360	2.0171	0.8583	0.0129		0.1631	0.1631		0.1631	0.1631		2,575.005	2,575.0050	0.0494	0.0472	2,590.307
Mobile	7.2566	18.1692	75.4019	0.3269	40.4187	0.1728	40.5915	10.7831	0.1605	10.9436		32,879.33	32,879.338	0.6380		32,895.28
Total	**49.3967**	**32.4972**	**138.9326**	**0.4172**	**40.4187**	**1.5986**	**42.0173**	**10.7831**	**1.5863**	**12.3694**	**0.0000**	**50,424.51**	**50,424.519**	**1.0716**	**0.3198**	**50,546.59**

4.0 Operational Detail - Mobile

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	6,683.04	6,683.04	6683.04	19,143,853	19,143,853
Total	6,683.04	6,683.04	6,683.04	19,143,853	19,143,853

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.571778	0.032543	0.227016	0.116290	0.012601	0.003811	0.018332	0.009298	0.001658	0.000887	0.004468	0.000740	0.000577
Other Asphalt Surfaces	0.571778	0.032543	0.227016	0.116290	0.012601	0.003811	0.018332	0.009298	0.001658	0.000887	0.004468	0.000740	0.000577
Single Family Housing	0.571778	0.032543	0.227016	0.116290	0.012601	0.003811	0.018332	0.009298	0.001658	0.000887	0.004468	0.000740	0.000577

5.0 Energy Detail

Historical Energy Use: N
Exceed Title 24
Install Energy Efficient Appliances

	NaturalGa	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family	21.8875	0.2360	2.0171	0.8583	0.0129		0.1631	0.1631		0.1631	0.1631		2,575.0050	2,575.005	0.0494	0.0472	2,590.3070
Total		**0.2360**	**2.0171**	**0.8583**	**0.0129**		**0.1631**	**0.1631**		**0.1631**	**0.1631**		**2,575.0050**	**2,575.005**	**0.0494**	**0.0472**	**2,590.3070**

6.0 Area Detail

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural	11.1546					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer	27.6607					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.3627	11.6449	4.9553	0.0743		0.9415	0.9415		0.9415	0.9415	0.0000	14,865.88	14,865.882	0.2849	0.2725	14,954.22
Landscaping	1.7260	0.6659	57.7171	3.0600e-		0.3212	0.3212		0.3212	0.3212		104.2940	104.2940	0.0993		106.7765
Total	**41.9041**	**12.3108**	**62.6724**	**0.0774**		**1.2627**	**1.2627**		**1.2627**	**1.2627**	**0.0000**	**14,970.17**	**14,970.176**	**0.3842**	**0.2725**	**15,060.99**

LRVSP Annual Operation - 2038 - El Dorado-Mountain County County, Summer

LRVSP Annual Operation - 2038
El Dorado-Mountain County County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	39.00	Acre	39.00	1,698,840.00	0
City Park	8.00	Acre	8.00	348,480.00	0
Single Family Housing	751.00	Dwelling Unit	243.83	1,351,800.00	2148

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2035
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity	641.35	**CH4 Intensity**	0.029	**N2O Intensity**	0.006

1.3 User Entered Comments & Non-Default Data

Land Use - From project description
Vehicle Trips - Trip rates from F&P
Area Coating - all operations in EDCAQMD must apply coatings with VOC contents of 150 g/L or less, effective 1/1/2018
Area Mitigation - Only natural gas hearth (LRVSP Policy 7.78)
Energy Mitigation - Min 7% better than the 2016 code (model default) per 2019 standard. Energy star appliances (LRVSP Policy 7.15).

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	413.05	467.29
tblFireplaces	NumberWood	262.85	283.71
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	9.91	9.52
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	8.62	9.52
tblVehicleTrips	WD_TR	1.89	0.00

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	44.7631	13.1701	67.0466	0.0828		1.3508	1.3508		1.3508	1.3508	0.0000	16,015.10	16,015.102	0.4111	0.2916	16,112.26
Energy	0.2525	2.1579	0.9183	0.0138		0.1745	0.1745		0.1745	0.1745		2,754.741	2,754.7418	0.0528	0.0505	2,771.111
Mobile	7.7631	19.4375	80.6650	0.3497	43.2400	0.1848	43.4248	11.5357	0.1717	11.7074		35,174.33	35,174.335	0.6826		35,191.39
Total	**52.7787**	**34.7655**	**148.6298**	**0.4463**	**43.2400**	**1.7101**	**44.9501**	**11.5357**	**1.6970**	**13.2327**	**0.0000**	**53,944.17**	**53,944.179**	**1.1464**	**0.3421**	**54,074.77**

4.0 Operational Detail - Mobile

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	7,149.52	7,149.52	7149.52	20,480,105	20,480,105
Total	7,149.52	7,149.52	7,149.52	20,480,105	20,480,105

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.571778	0.032543	0.227016	0.116290	0.012601	0.003811	0.018332	0.009298	0.001658	0.000887	0.004468	0.000740	0.000577
Other Asphalt Surfaces	0.571778	0.032543	0.227016	0.116290	0.012601	0.003811	0.018332	0.009298	0.001658	0.000887	0.004468	0.000740	0.000577
Single Family Housing	0.571778	0.032543	0.227016	0.116290	0.012601	0.003811	0.018332	0.009298	0.001658	0.000887	0.004468	0.000740	0.000577

5.0 Energy Detail

Historical Energy Use: N
Exceed Title 24
Install Energy Efficient Appliances

	NaturalGa	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family	23.4153	0.2525	2.1579	0.9183	0.0138		0.1745	0.1745		0.1745	0.1745		2,754.7418	2,754.741	0.0528	0.0505	2,771.1119
Total		**0.2525**	**2.1579**	**0.9183**	**0.0138**		**0.1745**	**0.1745**		**0.1745**	**0.1745**		**2,754.7418**	**2,754.741**	**0.0528**	**0.0505**	**2,771.1119**

6.0 Area Detail

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural	11.9107					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer	29.5482					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.4578	12.4578	5.3012	0.0795		1.0072	1.0072		1.0072	1.0072	0.0000	15,903.52	15,903.529	0.3048	0.2916	15,998.03
Landscaping	1.8465	0.7124	61.7454	3.2700e-		0.3436	0.3436		0.3436	0.3436		111.5731	111.5731	0.1062		114.2288
Total	**44.7631**	**13.1701**	**67.0466**	**0.0828**		**1.3508**	**1.3508**		**1.3508**	**1.3508**	**0.0000**	**16,015.10**	**16,015.102**	**0.4111**	**0.2916**	**16,112.26**

LRVSP Annual Operation - 2039 - El Dorado-Mountain County County, Annual

LRVSP Full Build - 2039 without LRVSP
El Dorado-Mountain County County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	39.00	Acre	39.00	1,698,840.00	0
City Park	8.00	Acre	8.00	348,480.00	0
Single Family Housing	800.00	Dwelling Unit	259.74	1,440,000.00	2288

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2035
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity	53	**CH4 Intensity**	0.007	**N2O Intensity**	0.001

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E and eGrid emission factors adjusted for SB100 and RPS
Land Use - From project description
Trips and VMT - operational modeling only
Vehicle Trips - Trip rates from F&P
Energy Mitigation - Min 7% better than the 2016 code (model default) per 2019 standard.
Water And Wastewater - Water use rates according to WSA

Table Name	Column Name	Default Value	New Value
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.007
tblProjectCharacteristics	CO2IntensityFactor	641.35	53
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.001
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	9.91	9.52
tblVehicleTrips	SU_TR	16.74	0.00

tblVehicleTrips	SU_TR	8.62	9.52
tblVehicleTrips	WD_TR	1.89	0.00
tblFireplaces	NumberGas	440.00	497.78
tblFireplaces	NumberWood	280.00	302.22
tblWater	IndoorWaterUseRate	52,123,220.50	56,184,085.00
tblWater	OutdoorWaterUseRate	9,531,850.80	8,159,580.00
tblWater	OutdoorWaterUseRate	0.00	14,360,272.00
tblWater	OutdoorWaterUseRate	32,860,291.18	108,009,061.00

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	62.3437	1.1323	72.2191	0.1197		9.3156	9.3156		9.3156	9.3156	879.1167	401.7785	1,280.90	0.7727	0.0705	1,321.22
Energy	0.0491	0.4195	0.1785	2.6800e-		0.0339	0.0339		0.0339	0.0339	0.0000	651.4906	651.4906	0.0312	0.0120	655.8560
Mobile	1.2073	3.9482	14.5594	0.0635	8.0374	0.0358	8.0732	2.1516	0.0333	2.1849	0.0000	5,795.348	5,795.3486	0.1180	0.0000	5,798.299
Waste						0.0000	0.0000		0.0000	0.0000	116.2509	0.0000	116.2509	6.8702	0.0000	288.0067
Water						0.0000	0.0000		0.0000	0.0000	17.8246	18.2915	36.1161	1.8332	0.0436	94.9303
Total	**63.6001**	**5.5001**	**86.9569**	**0.1858**	**8.0374**	**9.3854**	**17.4228**	**2.1516**	**9.3828**	**11.5344**	**1,013.192**	**6,866.909**	**7,880.1013**	**9.6253**	**0.1261**	**8,158.310**

4.0 Operational Detail - Mobile

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	7,616.00	7,616.00	7616.00	21,816,356	21,816,356
Total	7,616.00	7,616.00	7,616.00	21,816,356	21,816,356

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.571778	0.032543	0.227016	0.116290	0.012601	0.003811	0.018332	0.009298	0.001658	0.000887	0.004468	0.000740	0.000577

Other Asphalt Surfaces	0.571778	0.032543	0.227016	0.116290	0.012601	0.003811	0.018332	0.009298	0.001658	0.000887	0.004468	0.000740	0.000577
Single Family Housing	0.571778	0.032543	0.227016	0.116290	0.012601	0.003811	0.018332	0.009298	0.001658	0.000887	0.004468	0.000740	0.000577

5.0 Energy Detail

Historical Energy Use: N
Exceed Title 24

5.2 Energy by Land Use - NaturalGas

	NaturalGa	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family	9.10422e+	0.0491	0.4195	0.1785	2.6800e-		0.0339	0.0339		0.0339	0.0339	0.0000	485.8359	485.8359	9.3100e-	8.9100e-	488.7229
Total		**0.0491**	**0.4195**	**0.1785**	**2.6800e-**		**0.0339**	**0.0339**		**0.0339**	**0.0339**	**0.0000**	**485.8359**	**485.8359**	**9.3100e-**	**8.9100e-**	**488.7229**

5.3 Energy by Land Use - Electricity

	Electricity	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt	0	0.0000	0.0000	0.0000	0.0000
Single Family	6.89068e+	165.6547	0.0219	3.1300e-	167.1331
Total		**165.6547**	**0.0219**	**3.1300e-**	**167.1331**

6.0 Area Detail

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural	2.3117					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer	5.7370					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	54.1180	1.0641	66.2994	0.1194		9.2827	9.2827		9.2827	9.2827	879.1167	392.0746	1,271.1913	0.7635	0.0705	1,311.283
Landscaping	0.1770	0.0683	5.9196	3.1000e-		0.0329	0.0329		0.0329	0.0329	0.0000	9.7039	9.7039	9.2400e-	0.0000	9.9349
Total	**62.3437**	**1.1323**	**72.2191**	**0.1197**		**9.3156**	**9.3156**		**9.3156**	**9.3156**	**879.1167**	**401.7785**	**1,280.8952**	**0.7727**	**0.0705**	**1,321.218**

7.0 Water Detail

	Indoor/Out	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 8.15958	0.6866	9.0000e-	1.0000e-	0.6927
Other Asphalt	0 / 14.3603	1.2083	1.6000e-	2.0000e-	1.2191

Single Family	56.1841 /	34.2212	1.8329	0.0435	93.0185
Total		**36.1161**	**1.8332**	**0.0436**	**94.9303**

8.0 Waste Detail

	Waste	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.69	0.1401	8.2800e-	0.0000	0.3470
Other Asphalt	0	0.0000	0.0000	0.0000	0.0000
Single Family	572	116.1108	6.8620	0.0000	287.6597
Total		**116.2509**	**6.8702**	**0.0000**	**288.0067**

LRVSP Full Build - 2039 with LRVSP - El Dorado-Mountain County County, Annual

LRVSP Full Build - 2039 with LRVSP
El Dorado-Mountain County County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	39.00	Acre	39.00	1,698,840.00	0
City Park	8.00	Acre	8.00	348,480.00	0
Single Family Housing	800.00	Dwelling Unit	259.74	1,440,000.00	2288

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2035
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity	53	**CH4 Intensity**	0.007	**N2O Intensity**	0.001

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E and eGrid emission factors adjusted for SB100 and RPS
Land Use - From project description
Vehicle Trips - Trip rates from F&P
Water And Wastewater - Water assumptions from WSP water study (includes 20% reduction in water use per specific plan rates (LRVSP Policy 7.34)).
Area Mitigation - Only natural gas hearth (LRVSP Policy 7.78)
Energy Mitigation - Min 7% better than the 2016 code (model default) per 2019 standard. Energy star appliances (LRVSP Policy 7.15).
Water Mitigation - Recycled water per WSA study (LRVSP Policy 7.38); water efficient irrigation systems (LRVSP Policy 7.40); turf reduction (LRVSP

Table Name	Column Name	Default Value	New Value
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.007
tblProjectCharacteristics	CO2IntensityFactor	641.35	53
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.001
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	9.91	9.52

tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	8.62	9.52
tblVehicleTrips	WD_TR	1.89	0.00
tblFireplaces	NumberGas	440.00	497.78
tblFireplaces	NumberWood	280.00	302.22
tblWater	IndoorWaterUseRate	52,123,220.50	44,947,268.00
tblWater	OutdoorWaterUseRate	9,531,850.80	8,159,580.00
tblWater	OutdoorWaterUseRate	0.00	14,360,272.00
tblWater	OutdoorWaterUseRate	32,860,291.18	108,009,061.00

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	8.2894	0.6124	6.1512	3.7900e-		0.0769	0.0769		0.0769	0.0769	0.0000	639.8237	639.8237	0.0213	0.0116	643.7992
Energy	0.0491	0.4195	0.1785	2.6800e-		0.0339	0.0339		0.0339	0.0339	0.0000	648.2574	648.2574	0.0308	0.0120	652.5940
Mobile	1.2073	3.9482	14.5594	0.0635	8.0374	0.0358	8.0732	2.1516	0.0333	2.1849	0.0000	5,795.348	5,795.3486	0.1180	0.0000	5,798.299
Waste						0.0000	0.0000		0.0000	0.0000	116.2509	0.0000	116.2509	6.8702	0.0000	288.0067
Water						0.0000	0.0000		0.0000	0.0000	14.2597	13.5609	27.8206	1.4664	0.0348	74.8624
Total	**9.5458**	**4.9801**	**20.8890**	**0.0700**	**8.0374**	**0.1467**	**8.1841**	**2.1516**	**0.1441**	**2.2957**	**130.5106**	**7,096.990**	**7,227.5012**	**8.5067**	**0.0584**	**7,457.561**

4.0 Operational Detail - Mobile

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	7,616.00	7,616.00	7616.00	21,816,356	21,816,356
Total	7,616.00	7,616.00	7,616.00	21,816,356	21,816,356

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH

City Park	0.571778	0.032543	0.227016	0.116290	0.012601	0.003811	0.018332	0.009298	0.001658	0.000887	0.004468	0.000740	0.000577
Other Asphalt Surfaces	0.571778	0.032543	0.227016	0.116290	0.012601	0.003811	0.018332	0.009298	0.001658	0.000887	0.004468	0.000740	0.000577
Single Family Housing	0.571778	0.032543	0.227016	0.116290	0.012601	0.003811	0.018332	0.009298	0.001658	0.000887	0.004468	0.000740	0.000577

5.0 Energy Detail

Historical Energy Use: N
Exceed Title 24
Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity						0.0000	0.0000		0.0000	0.0000	0.0000	162.4215	162.4215	0.0215	3.0600e-	163.8711
Electricity						0.0000	0.0000		0.0000	0.0000	0.0000	166.8830	166.8830	0.0220	3.1500e-	168.3724
NaturalGas	0.0491	0.4195	0.1785	2.6800e-		0.0339	0.0339		0.0339	0.0339	0.0000	485.8359	485.8359	9.3100e-	8.9100e-	488.7229
NaturalGas	0.0523	0.4467	0.1901	2.8500e-		0.0361	0.0361		0.0361	0.0361	0.0000	517.2661	517.2661	9.9100e-	9.4800e-	520.3399

5.2 Energy by Land Use - NaturalGas

	NaturalGa	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family	9.10422e+	0.0491	0.4195	0.1785	2.6800e-		0.0339	0.0339		0.0339	0.0339	0.0000	485.8359	485.8359	9.3100e-	8.9100e-	488.7229
Total		**0.0491**	**0.4195**	**0.1785**	**2.6800e-**		**0.0339**	**0.0339**		**0.0339**	**0.0339**	**0.0000**	**485.8359**	**485.8359**	**9.3100e-**	**8.9100e-**	**488.7229**

5.3 Energy by Land Use - Electricity

	Electricity	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt	0	0.0000	0.0000	0.0000	0.0000
Single Family	6.75619e+	162.4215	0.0215	3.0600e-	163.8711
Total		**162.4215**	**0.0215**	**3.0600e-**	**163.8711**

6.0 Area Detail

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural	2.3117					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer	5.7370					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Hearth	0.0637	0.5441	0.2315	3.4700e-		0.0440	0.0440		0.0440	0.0440	0.0000	630.1199	630.1199	0.0121	0.0116	633.8643
Landscaping	0.1770	0.0683	5.9196	3.1000e-		0.0329	0.0329		0.0329	0.0329	0.0000	9.7039	9.7039	9.2400e-	0.0000	9.9349
Total	**8.2894**	**0.6124**	**6.1512**	**3.7800e-**		**0.0769**	**0.0769**		**0.0769**	**0.0769**	**0.0000**	**639.8237**	**639.8237**	**0.0213**	**0.0116**	**643.7992**

7.0 Water Detail

Use Reclaimed Water
Turf Reduction
Use Water Efficient Irrigation System

	Indoor/Out	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 5.73106	0.4822	6.0000e-	1.0000e-	0.4865
Other Asphalt	0 / 10.0863	0.8487	1.1000e-	2.0000e-	0.8563
Single Family	44.9473 /	26.4897	1.4662	0.0348	73.5197
Total		**27.8206**	**1.4664**	**0.0348**	**74.8624**

8.0 Waste Detail

	Waste	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.69	0.1401	8.2800e-	0.0000	0.3470
Other Asphalt	0	0.0000	0.0000	0.0000	0.0000
Single Family	572	116.1108	6.8620	0.0000	287.6597
Total		**116.2509**	**6.8702**	**0.0000**	**288.0067**

LRVSP Full Build - 2039 with LRVSP - El Dorado-Mountain County County, Summer

LRVSP Full Build - 2039 with LRVSP
El Dorado-Mountain County County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	39.00	Acre	39.00	1,698,840.00	0
City Park	8.00	Acre	8.00	348,480.00	0
Single Family Housing	800.00	Dwelling Unit	259.74	1,440,000.00	2288

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2035
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity	53	**CH4 Intensity**	0.007	**N2O Intensity**	0.001

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E and eGrid emission factors adjusted for SB100 and RPS
Land Use - From project description
Vehicle Trips - Trip rates from F&P
Water And Wastewater - Water assumptions from WSP water study (includes 20% reduction in water use per specific plan rates (LRVSP Policy 7.34)).
Area Mitigation - Only natural gas hearth (LRVSP Policy 7.78)
Energy Mitigation - Min 7% better than the 2016 code (model default) per 2019 standard. Energy star appliances (LRVSP Policy 7.15).
Water Mitigation - Recycled water per WSA study (LRVSP Policy 7.38); water efficient irrigation systems (LRVSP Policy 7.40); turf reduction (LRVSP

Table Name	Column Name	Default Value	New Value
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.007
tblProjectCharacteristics	CO2IntensityFactor	641.35	53
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.001
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	9.91	9.52

tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	8.62	9.52
tblVehicleTrips	WD_TR	1.89	0.00
tblFireplaces	NumberGas	440.00	497.78
tblFireplaces	NumberWood	280.00	302.22
tblWater	IndoorWaterUseRate	52,123,220.50	44,947,268.00
tblWater	OutdoorWaterUseRate	9,531,850.80	8,159,580.00
tblWater	OutdoorWaterUseRate	0.00	14,360,272.00
tblWater	OutdoorWaterUseRate	32,860,291.18	108,009,061.00

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	47.6222	14.0294	71.4209	0.0882		1.439	1.4390		1.439	1.4390	0.0000	17,060.02	17,060.028	0.4379	0.3106	17,163.53
Energy	0.2690	2.2987	0.9782	0.0147		0.1859	0.1859		0.1859	0.1859		2,934.478	2,934.4787	0.0562	0.0538	2,951.916
Mobile	8.2696	20.7057	85.9281	0.3725	46.0612	0.1969	46.2581	12.2884	0.1829	12.4713		37,469.33	37,469.331	0.7271		37,487.50
Total	**56.1608**	**37.0338**	**158.3271**	**0.4754**	**46.0612**	**1.8217**	**47.8829**	**12.2884**	**1.8077**	**14.0961**	**0.0000**	**57,463.83**	**57,463.839**	**1.2212**	**0.3644**	**57,602.95**

4.0 Operational Detail - Mobile

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	7,616.00	7,616.00	7616.00	21,816,356	21,816,356
Total	7,616.00	7,616.00	7,616.00	21,816,356	21,816,356

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.571778	0.032543	0.227016	0.116290	0.012601	0.003811	0.018332	0.009298	0.001658	0.000887	0.004468	0.000740	0.000577

Other Asphalt Surfaces	0.571778	0.032543	0.227016	0.116290	0.012601	0.003811	0.018332	0.009298	0.001658	0.000887	0.004468	0.000740	0.000577
Single Family Housing	0.571778	0.032543	0.227016	0.116290	0.012601	0.003811	0.018332	0.009298	0.001658	0.000887	0.004468	0.000740	0.000577

5.0 Energy Detail

Historical Energy Use: N
Exceed Title 24
Install Energy Efficient Appliances

	NaturalGa	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family	24.9431	0.2690	2.2987	0.9782	0.0147		0.1859	0.1859		0.1859	0.1859		2,934.4787	2,934.478	0.0562	0.0538	2,951.9168
Total		**0.2690**	**2.2987**	**0.9782**	**0.0147**		**0.1859**	**0.1859**		**0.1859**	**0.1859**		**2,934.4787**	**2,934.478**	**0.0562**	**0.0538**	**2,951.9168**

6.0 Area Detail

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural	12.6667					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer	31.4357					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.5529	13.2706	5.6471	0.0847		1.0729	1.0729		1.0729	1.0729	0.0000	16,941.17	16,941.176	0.3247	0.3106	17,041.84
Landscaping	1.9669	0.7588	65.7738	3.4900e-		0.3660	0.3660		0.3660	0.3660		118.8521	118.8521	0.1132		121.6811
Total	**47.6222**	**14.0294**	**71.4209**	**0.0882**		**1.4390**	**1.4390**		**1.4390**	**1.4390**	**0.0000**	**17,060.02**	**17,060.028**	**0.4379**	**0.3106**	**17,163.53**

LRVSP Full Build - 2045 without LRVSP - El Dorado-Mountain County County, Annual

LRVSP Full Build - 2045 without LRVSP
El Dorado-Mountain County County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	39.00	Acre	39.00	1,698,840.00	0
City Park	8.00	Acre	8.00	348,480.00	0
Single Family Housing	800.00	Dwelling Unit	259.74	1,440,000.00	2288

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2045
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity	0	**CH4 Intensity**	0	**N2O Intensity**	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E and eGrid emission factors adjusted for SB100 and RPS
Land Use - From project description
Vehicle Trips - Trip rates from F&P (account for internalization and mixed use design)
Area Coating - all operations in EDCAQMD must apply coatings with VOC contents of 150 g/L or less, effective 1/1/2018
Water And Wastewater - Water use rates according to WSA
Energy Mitigation - Min 7% better than the 2016 code (model default) per 2019 standard. Energy star appliances (LRVSP Policy 7.15).

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	440.00	497.78
tblFireplaces	NumberWood	280.00	302.22
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00

tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0
tblProjectCharacteristics	CO2IntensityFactor	641.35	0
tblProjectCharacteristics	N2OIntensityFactor	0.006	0
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	9.91	9.52
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	8.62	9.52
tblVehicleTrips	WD_TR	1.89	0.00
tblWater	IndoorWaterUseRate	52,123,220.50	56,184,085.00
tblWater	OutdoorWaterUseRate	9,531,850.80	8,159,580.00
tblWater	OutdoorWaterUseRate	0.00	14,360,272.00
tblWater	OutdoorWaterUseRate	32,860,291.18	108,009,061.00

2.0 Emissions Summary

Operational no LRVSP

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	62	1	72	0		9	9		9	9	879	402	1,281	1	0	1,321
Energy	0	0	0	0		0	0		0	0	0	486	486	0	0	489
Mobile	1	3	12	0	8	0	8	2	0	2	0	5,480	5,480	0	0	5,483
Waste						0	0		0	0	116	0	116	7	0	288
Water						0	0		0	0	18	0	18	2	0	76
Total	**63**	**5**	**84**	**0**	**8**	**9**	**17**	**2**	**9**	**12**	**1,013**	**6,368**	**7,381**	**10**	**0**	**7,657**

4.0 Operational Detail - Mobile

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	7,616.00	7,616.00	7616.00	21,816,356	21,816,356
Total	7,616.00	7,616.00	7,616.00	21,816,356	21,816,356

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by

City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.574767	0.032115	0.229243	0.114553	0.009169	0.003663	0.019090	0.009340	0.001694	0.000867	0.004357	0.000681	0.000462
Other Asphalt Surfaces	0.574767	0.032115	0.229243	0.114553	0.009169	0.003663	0.019090	0.009340	0.001694	0.000867	0.004357	0.000681	0.000462
Single Family Housing	0.574767	0.032115	0.229243	0.114553	0.009169	0.003663	0.019090	0.009340	0.001694	0.000867	0.004357	0.000681	0.000462

5.0 Energy Detail

Historical Energy Use: N
Exceed Title 24

5.2 Energy by Land Use - NaturalGas

	NaturalGa	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family	9.10422e+	0.0491	0.4195	0.1785	2.6800e-		0.0339	0.0339		0.0339	0.0339	0.0000	485.8359	485.8359	9.3100e-	8.9100e-	488.7229
Total		**0.0491**	**0.4195**	**0.1785**	**2.6800e-**		**0.0339**	**0.0339**		**0.0339**	**0.0339**	**0.0000**	**485.8359**	**485.8359**	**9.3100e-**	**8.9100e-**	**488.7229**

5.3 Energy by Land Use - Electricity

	Electricity	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt	0	0.0000	0.0000	0.0000	0.0000
Single Family	6.89068e+	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural	2.3117					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer	5.7370					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	54.1176	1.0641	66.2990	0.1194		9.2826	9.2826		9.2826	9.2826	879.1115	392.0763	1,271.1878	0.7635	0.0705	1,311.280
Landscaping	0.1769	0.0683	5.9144	3.1000e-		0.0329	0.0329		0.0329	0.0329	0.0000	9.7039	9.7039	9.2400e-	0.0000	9.9348

Total	**62.3432**	**1.1323**	**72.2134**	**0.1197**		**9.3156**	**9.3156**		**9.3156**	**9.3156**	**879.1115**	**401.7802**	**1,280.8917**	**0.7727**	**0.0705**	**1,321.214**

7.0 Water Detail

	Indoor/Out	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 8.15958	0.0000	0.0000	0.0000	0.0000
Other Asphalt	0 / 14.3603	0.0000	0.0000	0.0000	0.0000
Single Family	56.1841 /	17.8246	1.8308	0.0432	76.4756
Total		**17.8246**	**1.8308**	**0.0432**	**76.4756**

8.0 Waste Detail

	Waste	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.69	0.1401	8.2800e-	0.0000	0.3470
Other Asphalt	0	0.0000	0.0000	0.0000	0.0000
Single Family	572	116.1108	6.8620	0.0000	287.6597
Total		**116.2509**	**6.8702**	**0.0000**	**288.0067**

LRVSP Full Build - 2045 with LRVSP - El Dorado-Mountain County County, Annual

LRVSP Full Build - 2045 with LRVSP
El Dorado-Mountain County County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	39.00	Acre	39.00	1,698,840.00	0
City Park	8.00	Acre	8.00	348,480.00	0
Single Family Housing	800.00	Dwelling Unit	259.74	1,440,000.00	2288

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2050
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity	0	**CH4 Intensity**	0	**N2O Intensity**	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E and eGrid emission factors adjusted for SB100 and RPS
Land Use - From project description
Trips and VMT - operational modeling only
Vehicle Trips - Trip rates from F&P (account for internalization and mixed use design)
Area Coating - all operations in EDCAQMD must apply coatings with VOC contents of 150 g/L or less, effective 1/1/2018
Water And Wastewater - Water assumptions from WSP water study (includes 20% reduction in water use per specific plan rates (LRVSP Policy 7.34)).
Area Mitigation - Only natural gas hearth (LRVSP Policy 7.78)
Energy Mitigation - Min 7% better than the 2016 code (model default) per 2019 standard. Energy star appliances (LRVSP Policy 7.15).
Water Mitigation - Recycled water per WSA study (LRVSP Policy 7.38); water efficient irrigation systems (LRVSP Policy 7.40); turf reduction (LRVSP

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	400.00	0.00
tblFireplaces	NumberGas	440.00	497.78
tblFireplaces	NumberWood	280.00	302.22

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0
tblProjectCharacteristics	CO2IntensityFactor	641.35	0
tblProjectCharacteristics	N2OIntensityFactor	0.006	0
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	9.91	9.52
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	8.62	9.52
tblVehicleTrips	WD_TR	1.89	0.00
tblWater	IndoorWaterUseRate	52,123,220.50	44,947,268.00
tblWater	OutdoorWaterUseRate	9,531,850.80	8,159,580.00
tblWater	OutdoorWaterUseRate	0.00	14,360,272.00
tblWater	OutdoorWaterUseRate	32,860,291.18	108,009,061.00

2.0 Emissions Summary

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	8	1	6	0		0	0		0	0	0	640	640	0	0	644
Energy	0	0	0	0		0	0		0	0	0	486	486	0	0	489
Mobile	1	3	12	0	8	0	8	2	0	2	0	5480	5480	0	0	5483
Waste						0	0		0	0	116	0	116	7	0	288
Water						0	0		0	0	14	0	14	1	0	61
Total	**9**	**4**	**18**	**0**	**8**	**0**	**8**	**2**	**0**	**2**	**131**	**6606**	**6737**	**8**	**0**	**6965**

4.0 Operational Detail - Mobile

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	7,616.00	7,616.00	7616.00	21,816,356	21,816,356
Total	7,616.00	7,616.00	7,616.00	21,816,356	21,816,356

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.574767	0.032115	0.229243	0.114553	0.009169	0.003663	0.019090	0.009340	0.001694	0.000867	0.004357	0.000681	0.000462
Other Asphalt Surfaces	0.574767	0.032115	0.229243	0.114553	0.009169	0.003663	0.019090	0.009340	0.001694	0.000867	0.004357	0.000681	0.000462
Single Family Housing	0.574767	0.032115	0.229243	0.114553	0.009169	0.003663	0.019090	0.009340	0.001694	0.000867	0.004357	0.000681	0.000462

5.0 Energy Detail

Historical Energy Use: N
Exceed Title 24
Install Energy Efficient Appliances

5.2 Energy by Land Use - NaturalGas

	NaturalGa	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family	9.10422e+	0.0491	0.4195	0.1785	2.6800e-		0.0339	0.0339		0.0339	0.0339	0.0000	485.8359	485.8359	9.3100e-	8.9100e-	488.7229
Total		**0.0491**	**0.4195**	**0.1785**	**2.6800e-**		**0.0339**	**0.0339**		**0.0339**	**0.0339**	**0.0000**	**485.8359**	**485.8359**	**9.3100e-**	**8.9100e-**	**488.7229**

5.3 Energy by Land Use - Electricity

	Electricity	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt	0	0.0000	0.0000	0.0000	0.0000
Single Family	6.75619e+	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

	ROG	NOx	CO	SO2	Fugitive	Exhaust	PM10	Fugitive	Exhaust	PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural	2.3117					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer	5.7370					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Hearth	0.0637	0.5441	0.2315	3.4700e-		0.0440	0.0440		0.0440	0.0440	0.0000	630.1199	630.1199	0.0121	0.0116	633.8643
Landscaping	0.1769	0.0683	5.9144	3.1000e-		0.0329	0.0329		0.0329	0.0329	0.0000	9.7039	9.7039	9.2400e-	0.0000	9.9348
Total	**8.2893**	**0.6124**	**6.1460**	**3.7800e-**		**0.0769**	**0.0769**		**0.0769**	**0.0769**	**0.0000**	**639.8237**	**639.8237**	**0.0213**	**0.0116**	**643.7992**

7.0 Water Detail

Use Reclaimed Water
Turf Reduction
Use Water Efficient Irrigation System

	Indoor/Out	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 5.73106	0.0000	0.0000	0.0000	0.0000
Other Asphalt	0 / 10.0863	0.0000	0.0000	0.0000	0.0000
Single Family	44.9473 /	14.2597	1.4646	0.0346	61.1805
Total		**14.2597**	**1.4646**	**0.0346**	**61.1805**

8.0 Waste Detail

	Waste	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.69	0.1401	8.2800e-	0.0000	0.3470
Other Asphalt	0	0.0000	0.0000	0.0000	0.0000
Single Family	572	116.1108	6.8620	0.0000	287.6597
Total		**116.2509**	**6.8702**	**0.0000**	**288.0067**

Policy 7.2: Off-street parking, if any, in the Village Park designation shall include a minimum number of dedicated public parking spaces for Low-Emitting and Fuel-Efficient Vehicles, in accordance with CALGreen Nonresidential Tier 1 Voluntary Measures, as well as shared vehicles

Policy 7.3: Off-street parking, if any, in the Village Park designation shall include dedicated parking for PEVs and the installation of minimum Level 2 PEV charging stations in each dedicated PEV parking space will be encouraged where feasible and subject to the approval of the local agency, in accordance with CALGreen Nonresidential Tier 1 Voluntary Measures. Installation of 220/240 volt garage circuits to support PEVs will be required in all Residential-Low and Residential-Medium designations

Assumptions
1. Measures will provide preferential parking for shared vehicles and will install PEV charing stations to support a local EV network. Based on VMT reductions presented in SMAQMD's Guidance for Land Use Emissions Reductions and CAPCOA's Quatnifying GHG Reduction Measures, conservaively assumed these measrues would achieve at least a 1% VMT reduction.

NEV/EV Parking VMT Reductions

0.50%	Low	SMAQMD/CAPCOA
12.70%	High	SMAQMD/CAPCOA

Parking Policy VMT Reductions

5%	Low	SMAQMD/CAPCOA
12..5%	High	SMAQMD/CAPCOA

	VMT CalEEMod (with LRVSP)			VMT CalEEMod (with 7.2-7.3)			Percent Change		
Land Use	2030	2039	2045	2030	2039	2045	2030	2039	2045
All	9,708,279	21,816,356	21,816,356	9,611,196	21,598,193	21,598,193	-1%	-1%	-1%

	MT from Mobile 2030 (with LRVSP)				MT from Mobile 2039 (with LRVSP)				MT from Mobile 2045 (with LRVSP)			
Land Use	CO2	CH4	N2O	CO2e	CO2	CH4	N2O	CO2e	CO2	CH4	N2O	CO2e
All	2,806	0	0	2,807	5,795	0	0	5,798	5,480	0	0	5,483

	MT from Mobile 2030 (with 7.2-7.3)				MT from Mobile 2039 (with 7.2-7.3)				MT from Mobile 2045 (with 7.2-7.3)			
Land Use	CO2	CH4	N2O	CO2e	CO2	CH4	N2O	CO2e	CO2	CH4	N2O	CO2e
All	2,778	0	0	2,779	5,737	0	0	5,740	5,426	0	0	5,428

Total Reductions	-28	-58	-55
Percent	-1%	-1%	-1%

Assumed % reduction credit 1%

Policy 7.22: Residential and public buildings shall be designed to allow for the installation of alternative energy technologies including active solar, wind, or other emerging technologies, and shall comply with the following standards. All Residential-Low and Residential-Medium developments will be required to install rooftop solar power

Assumptions
1. Used default PVWatts inputs to calculate annual energy savings for project area.
2. Subtracted energy savings from kWh from CalEEMod (if > CalEEMod, assumed a full offset)

PVWatts: Monthly PV Performance Data

Requested Location:	Deer Creek Rd, Cameron Park, CA 95682
Location:	Lat, Lon: 38.61, -120.98
Lat (deg N):	38.61
Long (deg W):	120.98
Elev (m):	307
DC System Size (kW):	4
Module Type:	Standard
Array Type:	Fixed (open rack)
Array Tilt (deg):	20
Array Azimuth (deg):	180
System Losses:	14.08
Invert Efficiency:	96
DC to AC Size Ratio:	1.2
Average Cost of Electricity ($/kWh):	0.156
Capacity Factor (%)	17.8

Month	AC System Output(kWh)
1	289
2	339
3	512
4	595
5	671
6	700
7	714
8	691
9	596
10	489
11	351
12	298
Total	6,245

	Number			kWh Renewable (PVWatts)		
Designtation with solar	2030	2039	2045	2030	2039	2045
Village Residential	356	800	800	2,223,054	4,995,626	4,995,626

	kWh CalEEMod (with LRVSP)			kWh with LRVSP + Solar			Percent Change		
Designtation with solar	2030	2039	2045	2030	2039	2045	2030	2039	2045
Village Residential	3,006,510	6,756,190	6,756,190	783,456	1,760,564	1,760,564	-74%	-74%	-74%

	MT from Electricity 2030 (with LRVSP)				MT from Electricity 2039 (with LRVSP)				MT from Electricity 2045 (with LRVSP)			
Land Use	CO2	CH4	N2O	CO2e	CO2	CH4	N2O	CO2e	CO2	CH4	N2O	CO2e
Village Residential	181	0	0	183	162	0	0	164	0	0	0	0
Total	181	0	0	183	162	0	0	164	0	0	0	0

	MT from Electricity 2030 (with 9.22)				MT from Electricity 2039 (with 9.22)				MT from Electricity 2045 (with 9.22)			
Land Use	CO2	CH4	N2O	CO2e	CO2	CH4	N2O	CO2e	CO2	CH4	N2O	CO2e
Village Residential	47	0	0	48	42	0	0	43	0	0	0	0
Total	47	0	0	48	42	0	0	43	0	0	0	0

Total Reductions	-135	-121	0
Percent	-74%	-74%	0%

CalRoads (CO Hotspot)

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Lime Rock
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 0. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 15. DEGREES TEMP= 3.9 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. EBA	*	-1000	-2	0	-2	* AG	1440	1.3	0.0	27.9
B. EBD	*	0	-2	1000	-2	* AG	390	1.3	0.0	17.0
C. WBA	*	1000	0	0	0	* AG	0	1.3	0.0	27.9
D. WBD	*	0	0	-1000	0	* AG	0	1.3	0.0	17.0
E. SBA	*	-2	1000	-2	0	* AG	670	1.3	0.0	24.3
F. SBD	*	-2	0	-2	-1000	* AG	1170	1.3	0.0	13.3
G. NBA	*	2	-1000	2	0	* AG	850	1.3	0.0	24.3
H. NBD	*	2	0	2	1000	* AG	1400	1.3	0.0	13.3

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. R_001	-7	5	1.8
2. R_002	-7	-7	1.8
3. R_003	7	-7	1.8
4. R_004	7	5	1.8

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JOB: Lime Rock
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. R_001	176.	0.4	0.1	0.0	0.0	0.0	0.0	0.2	0.1	0.0
2. R_002	6.	0.4	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.2
3. R_003	356.	0.4	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.3
4. R_004	356.	0.4	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.3

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EXIT

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Lime Rock
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 0. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 15. DEGREES TEMP= 3.9 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. EBA	*	-1000	-2	0	-2	* AG	1570	1.3	0.0	27.9
B. EBD	*	0	-2	1000	-2	* AG	450	1.3	0.0	17.0
C. WBA	*	1000	0	0	0	* AG	0	1.3	0.0	27.9
D. WBD	*	0	0	-1000	0	* AG	0	1.3	0.0	17.0
E. SBA	*	-2	1000	-2	0	* AG	850	1.3	0.0	24.3
F. SBD	*	-2	0	-2	-1000	* AG	1430	1.3	0.0	13.3
G. NBA	*	2	-1000	2	0	* AG	950	1.3	0.0	24.3
H. NBD	*	2	0	2	1000	* AG	1490	1.3	0.0	13.3

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. R_001	-7	5	1.8
2. R_002	-7	-7	1.8
3. R_003	7	-7	1.8
4. R_004	7	5	1.8

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Lime Rock
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. R_001	176.	0.5	0.1	0.0	0.0	0.0	0.0	0.3	0.2	0.0
2. R_002	176.	0.5	0.0	0.0	0.0	0.0	0.0	0.3	0.2	0.0
3. R_003	356.	0.4	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.3
4. R_004	356.	0.5	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.3

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EXIT

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Lime Rock
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 0. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 15. DEGREES TEMP= 3.9 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. EBA	*	-1000	-2	0	-2	* AG	618	7.1	0.0	27.9
B. EBD	*	0	-2	1000	-2	* AG	104	7.1	0.0	17.0
C. WBA	*	1000	0	0	0	* AG	0	7.1	0.0	27.9
D. WBD	*	0	0	-1000	0	* AG	0	7.1	0.0	17.0
E. SBA	*	-2	1000	-2	0	* AG	107	7.1	0.0	24.3
F. SBD	*	-2	0	-2	-1000	* AG	26	7.1	0.0	13.3
G. NBA	*	2	-1000	2	0	* AG	15	7.1	0.0	24.3
H. NBD	*	2	0	2	1000	* AG	610	7.1	0.0	13.3

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. R_001	-7	5	1.8
2. R_002	-7	-7	1.8
3. R_003	7	-7	1.8
4. R_004	7	5	1.8

1

JOB: Lime Rock
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. R_001	8.	0.7	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.6
2. R_002	6.	0.8	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.5
3. R_003	356.	0.8	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.7
4. R_004	356.	0.9	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.8

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EXIT

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Lime Rock
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 0. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 15. DEGREES TEMP= 3.9 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. EBA	*	-1000	-2	0	-2	* AG	966	7.1	0.0	27.9
B. EBD	*	0	-2	1000	-2	* AG	169	7.1	0.0	17.0
C. WBA	*	1000	0	0	0	* AG	0	7.1	0.0	27.9
D. WBD	*	0	0	-1000	0	* AG	0	7.1	0.0	17.0
E. SBA	*	-2	1000	-2	0	* AG	262	7.1	0.0	24.3
F. SBD	*	-2	0	-2	-1000	* AG	529	7.1	0.0	13.3
G. NBA	*	2	-1000	2	0	* AG	310	7.1	0.0	24.3
H. NBD	*	2	0	2	1000	* AG	840	7.1	0.0	13.3

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. R_001	-7	5	1.8
2. R_002	-7	-7	1.8
3. R_003	7	-7	1.8
4. R_004	7	5	1.8

1

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Lime Rock
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. R_001	176.	1.2	0.2	0.0	0.0	0.0	0.0	0.6	0.3	0.0
2. R_002	6.	1.3	0.2	0.0	0.0	0.0	0.3	0.1	0.0	0.7
3. R_003	356.	1.2	0.0	0.1	0.0	0.0	0.3	0.0	0.0	0.9
4. R_004	267.	1.3	0.8	0.0	0.0	0.0	0.1	0.0	0.0	0.3

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EXIT

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Lime Rock
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 0. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 15. DEGREES TEMP= 3.9 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. EBA	*	-1000	-4	0	-4	* AG	350	1.3	0.0	27.9
B. EBD	*	0	-2	1000	-2	* AG	520	1.3	0.0	17.0
C. WBA	*	1000	4	0	4	* AG	1330	1.3	0.0	27.9
D. WBD	*	0	2	-1000	2	* AG	450	1.3	0.0	17.0
E. SBA	*	-4	1000	-4	0	* AG	1130	1.3	0.0	24.3
F. SBD	*	-2	0	-2	-1000	* AG	1510	1.3	0.0	13.3
G. NBA	*	4	-1000	4	0	* AG	950	1.3	0.0	24.3
H. NBD	*	2	0	2	1000	* AG	1280	1.3	0.0	13.3

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. R_001	-7	5	1.8
2. R_002	-7	-7	1.8
3. R_003	7	-7	1.8
4. R_004	7	5	1.8

1

JOB: Lime Rock
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. R_001	176.	0.5	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.0
2. R_002	5.	0.5	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.2
3. R_003	355.	0.5	0.0	0.0	0.1	0.0	0.2	0.0	0.0	0.2
4. R_004	185.	0.5	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0

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EXIT

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Lime Rock
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 0. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 15. DEGREES TEMP= 3.9 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. EBA	*	-1000	-4	0	-4	* AG	380	1.3	0.0	27.9
B. EBD	*	0	-2	1000	-2	* AG	600	1.3	0.0	17.0
C. WBA	*	1000	4	0	4	* AG	1430	1.3	0.0	27.9
D. WBD	*	0	2	-1000	2	* AG	480	1.3	0.0	17.0
E. SBA	*	-4	1000	-4	0	* AG	1160	1.3	0.0	24.3
F. SBD	*	-2	0	-2	-1000	* AG	1550	1.3	0.0	13.3
G. NBA	*	4	-1000	4	0	* AG	980	1.3	0.0	24.3
H. NBD	*	2	0	2	1000	* AG	1320	1.3	0.0	13.3

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. R_001	-7	5	1.8
2. R_002	-7	-7	1.8
3. R_003	7	-7	1.8
4. R_004	7	5	1.8

1

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Lime Rock
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. R_001	176.	0.5	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.0
2. R_002	86.	0.5	0.0	0.1	0.2	0.0	0.0	0.1	0.1	0.0
3. R_003	355.	0.5	0.0	0.0	0.1	0.0	0.2	0.0	0.0	0.2
4. R_004	185.	0.5	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0

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EXIT

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Lime Rock
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 0. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 15. DEGREES TEMP= 3.9 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. EBA	*	-1000	-4	0	-4	* AG	311	7.1	0.0	27.9
B. EBD	*	0	-2	1000	-2	* AG	238	7.1	0.0	17.0
C. WBA	*	1000	4	0	4	* AG	448	7.1	0.0	27.9
D. WBD	*	0	2	-1000	2	* AG	420	7.1	0.0	17.0
E. SBA	*	-4	1000	-4	0	* AG	361	7.1	0.0	24.3
F. SBD	*	-2	0	-2	-1000	* AG	378	7.1	0.0	13.3
G. NBA	*	4	-1000	4	0	* AG	548	7.1	0.0	24.3
H. NBD	*	2	0	2	1000	* AG	632	7.1	0.0	13.3

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. R_001	-7	5	1.8
2. R_002	-7	-7	1.8
3. R_003	7	-7	1.8
4. R_004	7	5	1.8

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Lime Rock
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. R_001	176.	1.2	0.1	0.0	0.0	0.1	0.0	0.5	0.5	0.0
2. R_002	5.	1.3	0.1	0.0	0.0	0.2	0.4	0.1	0.0	0.5
3. R_003	356.	1.3	0.0	0.1	0.1	0.0	0.3	0.0	0.0	0.7
4. R_004	268.	1.2	0.3	0.0	0.0	0.5	0.1	0.0	0.0	0.3

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EXIT

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Lime Rock
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 0. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 15. DEGREES TEMP= 3.9 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. EBA	*	-1000	-4	0	-4	* AG	311	7.1	0.0	27.9
B. EBD	*	0	-2	1000	-2	* AG	240	7.1	0.0	17.0
C. WBA	*	1000	4	0	4	* AG	448	7.1	0.0	27.9
D. WBD	*	0	2	-1000	2	* AG	420	7.1	0.0	17.0
E. SBA	*	-4	1000	-4	0	* AG	361	7.1	0.0	24.3
F. SBD	*	-2	0	-2	-1000	* AG	378	7.1	0.0	13.3
G. NBA	*	4	-1000	4	0	* AG	550	7.1	0.0	24.3
H. NBD	*	2	0	2	1000	* AG	632	7.1	0.0	13.3

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. R_001	-7	5	1.8
2. R_002	-7	-7	1.8
3. R_003	7	-7	1.8
4. R_004	7	5	1.8

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Lime Rock
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. R_001	176.	1.2	0.1	0.0	0.0	0.1	0.0	0.5	0.5	0.0
2. R_002	5.	1.3	0.1	0.0	0.0	0.2	0.4	0.1	0.0	0.5
3. R_003	356.	1.3	0.0	0.1	0.1	0.0	0.3	0.0	0.0	0.7
4. R_004	268.	1.2	0.3	0.0	0.0	0.5	0.1	0.0	0.0	0.3

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EXIT

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Lime Rock
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 0. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 15. DEGREES TEMP= 3.9 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. EBA	*	-1000	-5	0	-5	* AG	860	1.3	0.0	27.9
B. EBD	*	0	-4	1000	-4	* AG	370	1.3	0.0	17.0
C. WBA	*	1000	5	0	5	* AG	250	1.3	0.0	27.9
D. WBD	*	0	4	-1000	4	* AG	1450	1.3	0.0	17.0
E. SBA	*	-9	1000	-9	0	* AG	1430	1.3	0.0	24.3
F. SBD	*	-5	0	-6	-1000	* AG	1780	1.3	0.0	13.3
G. NBA	*	9	-1000	9	0	* AG	2820	1.3	0.0	24.3
H. NBD	*	5	0	5	1000	* AG	1760	1.3	0.0	13.3

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. R_001	-10	7	1.8
2. R_002	-7	-10	1.8
3. R_003	10	-7	1.8
4. R_004	7	10	1.8

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Lime Rock
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. R_001	172.	0.7	0.1	0.0	0.0	0.1	0.0	0.3	0.2	0.0
2. R_002	174.	0.7	0.0	0.0	0.0	0.0	0.0	0.4	0.3	0.0
3. R_003	183.	0.6	0.0	0.0	0.0	0.0	0.0	0.1	0.5	0.0
4. R_004	182.	0.7	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.1

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EXIT

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Lime Rock
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 0. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 15. DEGREES TEMP= 3.9 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. EBA	*	-1000	-5	0	-5	* AG	870	1.3	0.0	27.9
B. EBD	*	0	-4	1000	-4	* AG	370	1.3	0.0	17.0
C. WBA	*	1000	5	0	5	* AG	250	1.3	0.0	27.9
D. WBD	*	0	4	-1000	4	* AG	1460	1.3	0.0	17.0
E. SBA	*	-9	1000	-9	0	* AG	1450	1.3	0.0	24.3
F. SBD	*	-5	0	-6	-1000	* AG	1800	1.3	0.0	13.3
G. NBA	*	9	-1000	9	0	* AG	2860	1.3	0.0	24.3
H. NBD	*	5	0	5	1000	* AG	1800	1.3	0.0	13.3

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. R_001	-10	7	1.8
2. R_002	-7	-10	1.8
3. R_003	10	-7	1.8
4. R_004	7	10	1.8

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Lime Rock
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. R_001	172.	0.7	0.1	0.0	0.0	0.1	0.0	0.3	0.2	0.0
2. R_002	174.	0.7	0.0	0.0	0.0	0.0	0.0	0.4	0.3	0.0
3. R_003	183.	0.6	0.0	0.0	0.0	0.0	0.0	0.1	0.5	0.0
4. R_004	182.	0.7	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.1

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EXIT

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Lime Rock
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 0. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 15. DEGREES TEMP= 3.9 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. EBA	*	-1000	-5	0	-5	* AG	0	7.1	0.0	27.9
B. EBD	*	0	-4	1000	-4	* AG	0	7.1	0.0	17.0
C. WBA	*	1000	5	0	5	* AG	564	7.1	0.0	27.9
D. WBD	*	0	4	-1000	4	* AG	1509	7.1	0.0	17.0
E. SBA	*	-9	1000	-9	0	* AG	1146	7.1	0.0	24.3
F. SBD	*	-5	0	-6	-1000	* AG	956	7.1	0.0	13.3
G. NBA	*	9	-1000	9	0	* AG	2790	7.1	0.0	24.3
H. NBD	*	5	0	5	1000	* AG	2035	7.1	0.0	13.3

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. R_001	-10	7	1.8
2. R_002	-7	-10	1.8
3. R_003	10	-7	1.8
4. R_004	7	10	1.8

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JOB: Lime Rock
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. R_001	172.	2.8	0.0	0.0	0.0	0.5	0.1	1.0	1.3	0.0
2. R_002	4.	2.8	0.0	0.0	0.0	0.5	0.9	0.3	0.0	1.1
3. R_003	355.	2.9	0.0	0.0	0.2	0.0	0.6	0.0	0.2	1.9
4. R_004	181.	3.4	0.0	0.0	0.1	0.0	0.0	0.5	2.2	0.6

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EXIT

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Lime Rock
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 0. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 15. DEGREES TEMP= 3.9 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. EBA	*	-1000	-5	0	-5	* AG	0	7.1	0.0	27.9
B. EBD	*	0	-4	1000	-4	* AG	0	7.1	0.0	17.0
C. WBA	*	1000	5	0	5	* AG	627	7.1	0.0	27.9
D. WBD	*	0	4	-1000	4	* AG	1509	7.1	0.0	17.0
E. SBA	*	-9	1000	-9	0	* AG	1169	7.1	0.0	24.3
F. SBD	*	-5	0	-6	-1000	* AG	1016	7.1	0.0	13.3
G. NBA	*	9	-1000	9	0	* AG	2790	7.1	0.0	24.3
H. NBD	*	5	0	5	1000	* AG	2061	7.1	0.0	13.3

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. R_001	-10	7	1.8
2. R_002	-7	-10	1.8
3. R_003	10	-7	1.8
4. R_004	7	10	1.8

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Lime Rock
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. R_001	172.	2.9	0.0	0.0	0.0	0.5	0.1	1.0	1.3	0.0
2. R_002	4.	2.8	0.0	0.0	0.0	0.5	0.9	0.3	0.0	1.1
3. R_003	355.	3.0	0.0	0.0	0.2	0.0	0.6	0.0	0.2	2.0
4. R_004	181.	3.5	0.0	0.0	0.1	0.0	0.0	0.5	2.2	0.6

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EXIT

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Lime Rock
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 0. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 15. DEGREES TEMP= 3.9 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. EBA	*	-1000	-4	0	-4	* AG	760	1.3	0.0	27.9
B. EBD	*	0	-2	1000	-2	* AG	750	1.3	0.0	17.0
C. WBA	*	1000	2	0	2	* AG	530	1.3	0.0	27.9
D. WBD	*	0	0	-1000	0	* AG	0	1.3	0.0	17.0
E. SBA	*	-9	1000	-9	0	* AG	1780	1.3	0.0	24.3
F. SBD	*	-7	0	-7	-1000	* AG	2300	1.3	0.0	13.3
G. NBA	*	7	-1000	7	0	* AG	2800	1.3	0.0	24.3
H. NBD	*	7	0	7	1000	* AG	2820	1.3	0.0	13.3

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. R_001	-21	5	1.8
2. R_002	-18	-10	1.8
3. R_003	18	-7	1.8
4. R_004	18	7	1.8

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JOB: Lime Rock
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. R_001	169.	0.5	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0
2. R_002	169.	0.5	0.0	0.0	0.0	0.0	0.0	0.3	0.2	0.0
3. R_003	349.	0.6	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.3
4. R_004	188.	0.6	0.0	0.1	0.0	0.0	0.0	0.1	0.4	0.0

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EXIT

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Lime Rock
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 0. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 15. DEGREES TEMP= 3.9 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. EBA	*	-1000	-4	0	-4	* AG	770	1.3	0.0	27.9
B. EBD	*	0	-2	1000	-2	* AG	800	1.3	0.0	17.0
C. WBA	*	1000	2	0	2	* AG	530	1.3	0.0	27.9
D. WBD	*	0	0	-1000	0	* AG	0	1.3	0.0	17.0
E. SBA	*	-9	1000	-9	0	* AG	1800	1.3	0.0	24.3
F. SBD	*	-7	0	-7	-1000	* AG	2310	1.3	0.0	13.3
G. NBA	*	7	-1000	7	0	* AG	2870	1.3	0.0	24.3
H. NBD	*	7	0	7	1000	* AG	2860	1.3	0.0	13.3

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z

1. R_001	-21	5	1.8
2. R_002	-18	-10	1.8
3. R_003	18	-7	1.8
4. R_004	18	7	1.8

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Lime Rock
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. R_001	169.	0.5	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0
2. R_002	169.	0.5	0.0	0.0	0.0	0.0	0.0	0.3	0.2	0.0
3. R_003	349.	0.6	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.3
4. R_004	188.	0.6	0.0	0.1	0.0	0.0	0.0	0.1	0.4	0.0

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EXIT

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Lime Rock
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 0. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 15. DEGREES TEMP= 3.9 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. EBA	*	-1000	-4	0	-4	* AG	700	7.1	0.0	27.9
B. EBD	*	0	-2	1000	-2	* AG	913	7.1	0.0	17.0
C. WBA	*	1000	2	0	2	* AG	949	7.1	0.0	27.9
D. WBD	*	0	0	-1000	0	* AG	0	7.1	0.0	17.0
E. SBA	*	-9	1000	-9	0	* AG	956	7.1	0.0	24.3
F. SBD	*	-7	0	-7	-1000	* AG	1445	7.1	0.0	13.3
G. NBA	*	7	-1000	7	0	* AG	2543	7.1	0.0	24.3
H. NBD	*	7	0	7	1000	* AG	2790	7.1	0.0	13.3

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. R_001	-21	5	1.8
2. R_002	-18	-10	1.8
3. R_003	18	-7	1.8
4. R_004	18	7	1.8

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CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Lime Rock
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. R_001	93.	2.4	0.1	0.7	0.7	0.0	0.3	0.0	0.1	0.4
2. R_002	85.	2.6	0.1	0.7	0.6	0.0	0.0	0.5	0.6	0.0
3. R_003	349.	2.9	0.0	0.3	0.3	0.0	0.4	0.0	0.2	1.7
4. R_004	188.	3.0	0.0	0.4	0.2	0.0	0.0	0.5	1.8	0.0

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EXIT

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Lime Rock
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 0. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 15. DEGREES TEMP= 3.9 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. EBA	*	-1000	-4	0	-4	* AG	700	7.1	0.0	27.9
B. EBD	*	0	-2	1000	-2	* AG	1027	7.1	0.0	17.0
C. WBA	*	1000	2	0	2	* AG	949	7.1	0.0	27.9
D. WBD	*	0	0	-1000	0	* AG	0	7.1	0.0	17.0
E. SBA	*	-9	1000	-9	0	* AG	1026	7.1	0.0	24.3
F. SBD	*	-7	0	-7	-1000	* AG	1482	7.1	0.0	13.3
G. NBA	*	7	-1000	7	0	* AG	2624	7.1	0.0	24.3
H. NBD	*	7	0	7	1000	* AG	2790	7.1	0.0	13.3

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. R_001	-21	5	1.8
2. R_002	-18	-10	1.8
3. R_003	18	-7	1.8
4. R_004	18	7	1.8

1

JOB: Lime Rock
RUN: CALINE4 RUN (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. R_001	93.	2.5	0.1	0.7	0.7	0.0	0.3	0.0	0.2	0.4
2. R_002	85.	2.7	0.1	0.8	0.6	0.0	0.0	0.5	0.6	0.0
3. R_003	349.	3.0	0.0	0.4	0.3	0.0	0.4	0.0	0.2	1.7
4. R_004	188.	3.1	0.0	0.4	0.2	0.0	0.0	0.6	1.9	0.0

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Appendix D

EDCAQMD Rule 223-1 Best Management Practices and Rule 223-2

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Table 1. Construction and Other Earthmoving Activities

Source Category	Control Measure	EDCAQMD Guidance
Backfilling	A1. Stabilize backfill material when not actively handling; and A2. Stabilize backfill material during handling; and A3. Stabilize soil at completion of activity.	– Mix backfill soil with water prior to moving – Dedicate water truck or high capacity hose to backfilling equipment. – Empty loader bucket slowly so that no dust plumes are generated. – Minimize drop height from loader bucket.
Clearing and grubbing	B1. Maintain stability of soil through pre-watering of site prior to clearing and grubbing; and B2. Stabilize soil during clearing and grubbing activities; and B3. Stabilize soil immediately after clearing and grubbing activities.	– Maintain live perennial vegetation where possible. – Apply water in sufficient quantity to prevent generation of dust plumes.
Clearing forms	C1. Use water spray to clear forms; or C2. Use sweeping and water spray to clear forms; or C3. Use vacuum system to clear forms.	– Use of high pressure air to clear forms may cause exceedance of Rule requirements.
Crushing	D1. Stabilize surface soils prior to operation of support equipment; and D2. Stabilize material after crushing.	– Follow permit conditions for crushing equipment. – Pre-water material prior to loading into crusher. – Monitor crusher emissions opacity. – Apply water to crushed material to prevent dust plumes.
Cut and fill	E1. Pre-water soils prior to cut and fill activities; and E2. Stabilize soil during and after cut and fill activities	– For large sites, pre-water with sprinklers or water trucks and allow time for penetration. – Use water as necessary to keep dust down.
Demolition – mechanical/manual	F1. Stabilize wind erodible surfaces to reduce dust; and F2. Stabilize surface soil where support equipment and vehicles will operate; and F3. Stabilize loose soil and demolition debris.	– Apply water in sufficient quantities to prevent the generation of visible dust plumes.
Disturbed soil	G1. Stabilize disturbed soil throughout the construction site; and G2. Stabilize disturbed soil between structures	– Limit vehicular traffic and disturbances on soils where possible. – If interior block walls are planned, install as early as possible. – Apply water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes.

Source Category	Control Measure	EDCAQMD Guidance
Earth-moving activities	H1. Pre-apply water; and H2. Re-apply water as necessary to maintain soils in a damp condition and to ensure that visible emissions do not exceed 50 feet or beyond property line in any direction; and H3. Stabilize soils once earth-moving activities are complete.	– Grade each project phase separately, timed to coincide with construction phase. – Upwind fencing can prevent material movement on site. – Apply water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes.
Importing/exporting of bulk materials	I1. Stabilize or adequately wet material while loading to reduce fugitive dust emissions; and I2. Maintain at least six inches of freeboard on haul vehicles traveling offsite; and I3. Stabilize or adequately wet material while transporting to reduce fugitive dust emissions; and I4. Stabilize material while unloading to reduce fugitive dust emissions.	– Use tarps or other suitable enclosures on haul trucks. – Comply with track-out prevention/ mitigation requirements. – Provide water while loading and unloading to reduce visible dust plumes.
Landscaping	J1. Stabilize soils, materials and slopes.	– Apply water to materials to stabilize. – Maintain materials in a crusted condition. – Maintain effective cover over materials – Stabilize sloping surfaces using soil binders until vegetation or ground cover can effectively stabilize the slopes – Hydroseed prior to rainy season.
Road shoulder maintenance	K1. Apply water to unpaved shoulders prior to clearing; and K2. Apply chemical dust suppressants and/or other appropriate material in accordance with DOT specifications to maintain a stabilized surface after completing road shoulder maintenance.	– Installation of curbing and/or paving of road shoulders can reduce recurring maintenance costs. – Use of chemical dust suppressants can inhibit vegetation growth and reduce future road shoulder maintenance costs.
Screening	L1. Pre-water material prior to screening; and L2. Limit fugitive dust emissions to opacity and plume length standards; and L3. Stabilize material immediately after screening.	– Dedicate water truck or high capacity hose to screening operation. – Drop material through the screen slowly and minimize drop height. – Install wind barrier with a porosity of no more than 50% upwind of screen to the height of the drop point.

Source Category	Control Measure	EDCAQMD Guidance
Staging areas	M1. Stabilize staging areas during use; and M2. Stabilize staging area soils at project completion.	– Limit size of staging area. – Limit vehicle speeds to prevent visible dust in excess of standards per 223-1.4.A. – Limit number and size of staging area entrances/exists.
Stockpiles/Bulk Material Handling	N1. Stabilize stockpiled materials. N2. Stockpiles within 100 yards of off-site occupied buildings must not be greater than eight feet in height; or must have a road bladed to the top to allow water truck access or must have an operational water irrigation system that is capable of complete stockpile coverage.	– Add or remove material from the downwind portion of the storage pile. – Maintain storage piles to avoid slides.
Traffic areas for construction activities	O1. Stabilize or maintain adequate moisture on all off-road traffic and parking areas; and O2. Stabilize or maintain adequate moisture on all haul routes; and O3. Direct construction traffic over established haul routes.	– Apply gravel/paving to all haul routes as soon as possible to all future roadway areas. – Barriers can be used to ensure vehicles are only used on established parking areas/haul routes.
Trenching	P1. Stabilize surface soils where trencher or excavator and support equipment will operate; and P2. Stabilize soils at the completion of trenching activities.	– Pre-watering of soils prior to trenching is an effective preventive measure. – Washing mud and soils from equipment at the conclusion of trenching activities can prevent crusting and drying of soil on equipment.
Truck loading	Q1. Pre-water material prior to loading; or Q2. Apply water as loader bucket is being emptied; and Q2. Freeboard must be 6 inches or greater (VCS 23114)	– Empty loader bucket such that no visible dust plumes are created. – Ensure that the loader bucket is close to the truck to minimize drop height while loading.
Turf Overseeding	R1. Apply sufficient water immediately prior to conducting turf vacuuming activities to meet opacity and plume length standards; and R2. Cover haul vehicles prior to exiting the site.	– Haul waste material immediately off-site.
Unpaved roads/ parking lots	S1. Stabilize soils to meet the applicable performance standards(Surface crusting); and S2. Limit vehicular travel to established unpaved roads (haul routes) and unpaved parking lots.	– Restricting vehicular access to established unpaved travel paths and parking lots can reduce stabilization requirements.

Source Category	Control Measure	EDCAQMD Guidance
Vacant land	T1. In instances where vacant lots are 0.10 acre or larger and have a cumulative area of 500 square feet or more that are driven over and/or used by motor vehicles and/or off-road vehicles, prevent motor vehicle and/or off-road vehicle trespassing, parking and/or access.	– Installing barriers, curbs, fences, gates, posts, signs, shrubs, trees or other effective control measures to prevent access to motor or off-road vehicles.

Table 2. Bulk Material Handling

Source Category	Control Actions
Handling Of Bulk Materials	A1. When handling bulk materials, apply water or chemical/organic stabilizers/ suppressants;
Storage of Bulk Materials	B1. When storing bulk materials, comply with the conditions for a stabilized surface; or B2. Cover bulk materials stored outdoors with tarps, plastic or other suitable material and anchor in such a manner that prevents the cover from being removed by wind action; or B3. Construct and maintain wind barriers with less than 50% porosity. If utilizing fences or wind barriers, apply water or chemical/organic stabilizers/suppressants; or B4. Utilize a 3-sided structure with a height at least equal to the height of the storage pile and with less than 50% porosity.
On-Site Transporting of Bulk Materials	C1. Limit vehicular speed while traveling on the work site; or C2. Load all haul trucks such that the freeboard is not less than six (6) inches when material is transported across any paved public access road; or C3. Apply water to the top of the load; or C4. Cover haul trucks with a tarp or other suitable cover.
Off-Site Transporting of Bulk Materials	D1. Clean the interior of the cargo compartment or cover the cargo compartment before the empty truck leaves the site; and D2. Prevent spillage or loss of bulk material from holes or other openings in the cargo compartment's floor, sides and/or tailgate; and D3. Load all haul trucks such that the freeboard is not less than six (6) inches when material is transported on any paved road, and apply water to the top of the load; or cover haul trucks with a tarp or other suitable cover.
Outdoor Transport Of Bulk Materials With A Chute Or Conveyor:	E1. Fully enclose the chute or conveyor; or E2. Operate water spray equipment; or E3. Wash separated or screened materials to remove conveyed materials having an aerodynamic diameter of 10 microns or less.

Table 3. Removal and Prevention of Trackout

Source Category	Control Actions
Removal of Trackout Material	A1. Manually sweeping and picking-up; or A2. Operating a rotary brush or broom accompanied or preceded by sufficient wetting; or A3. Operating a PM10-efficient street sweeper; or A4. Flushing with water, where the use of water will not result in adverse impacts on storm water drainage systems or violate any National Pollutant Discharge Elimination System permit program; and A5. The use of blower devices, or dry rotary brushes or dry brooms is expressly prohibited.
Frequency of Trackout Material Removal	B1. At the minimum trackout must be removed at the end of the day; and B2. Trackout must be immediately removed when it extends 50 feet or more from the nearest unpaved surface exit point of a site; and B3. On interior paved roads trackout must be removed at least once per workday.
Trackout Prevention for Large Operations or Sites with more than 150 vehicle trips/day.	C1. Installation of grizzlies, or similar devices designed to remove dirt/mud from tires; or C2. Installation of gravel pads; or C3. Paving of interior roads.

Table 4. Blasting Activities

Source Category	Control Measure	EDCAQMD Guidance
Site Preparation (drilling, setting charges, burial of charges)	A1. Reduce dust from drilling operation A2. Pre-wet blast area A3. Cover charges to minimize dust	– Control rate of drilling – Apply water fog – Place blast mats over charges – Place soil mounds over charges – Wet entire area prior to blasting
Blasting activities	B1. Dust cannot exceed 50 ft or cross the project property line	– Conduct blasting on calm days – Consider wind direction with respect to your property line, nearby residences and other receptors.
Post-Blasting Activities	C1. Follow Best Management Practice for all construction activities (Rule 223-1, Table 1)	

Table 5. Large Operations Dust Control

Source Category	Control Actions
Earth-moving: (except construction cutting and filling areas, and mining operations)	A1. Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Air Pollution Control Officer. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations each subsequent four-hour period of active operations; or A2. For any earth-moving which is more than 50 feet from all property lines, conduct watering as necessary to prevent visible dust emissions from exceeding 50 feet in length in any direction. Visible emissions must not extend beyond property boundary.
Earth-moving: Construction fill areas	B1. Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Air Pollution Control Officer. For areas which have an optimum moisture content for compaction of less than 12 percent, as determined by ASTM Method 1557 or other equivalent method approved by the Air Pollution Control Officer complete the compaction process as expeditiously as possible after achieving at least 70 percent of the optimum soil moisture content. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations during each subsequent four hour period of active operations; or B2. For any earth-moving which is more than 50 feet from all property lines, conduct watering as necessary to prevent visible dust emissions from exceeding 50 feet in length in any direction. Visible emissions must not extend beyond property boundary.
Earth-moving: Construction cut areas	C1. Conduct watering as necessary to prevent any visible emissions from extending beyond property boundary.
Disturbed surface areas: (except completed grading areas)	D1. Apply dust suppression in sufficient quantity and frequency to maintain a stabilized surface. Any areas which cannot be stabilized, as evidenced by wind driven fugitive dust must have an application of water at least twice per day to at least 80 percent of the unstabilized area.
Disturbed surface areas: Completed grading areas	E1. Apply chemical stabilizers within five working days of grading completion; or E2. Take actions F1 or F3 specified for inactive disturbed surface areas.
Inactive disturbed surface areas	F1. Apply water to at least 80 percent of all inactive disturbed surface areas on a daily basis when there is evidence of wind driven fugitive dust, excluding any areas which are inaccessible to watering vehicles due to excessive slope or other safety conditions; or F2. Apply dust suppressants in sufficient quantity and frequency to maintain a stabilized surface; or F3. Establish a vegetative ground cover within 21 days after active operations have ceased. Ground cover must be of sufficient density to expose less than 30 percent of unstabilized ground within 90 days of planting, and at all times thereafter; or F4. Utilize any combination of control actions F1, F2 and F3 such that, in total, these actions apply to all inactive disturbed surface areas. F5. Establishment and maintenance of surface crusting sufficient to satisfy the test in Section 223-1.10 F6. Approved mixture of tackifier and fiber mulch, applied per manufacturer's recommendation.

Source Category	Control Actions
Unpaved Roads	G1. Water all roads used for any vehicular traffic at least once per every two hours of active operations or as often as necessary; or G2. Apply a chemical stabilizer to all unpaved road surfaces in sufficient quantity and frequency to maintain a stabilized surface; and G3. Restrict vehicle speeds where necessary ;
Open storage piles	H1. Apply chemical stabilizers; or H2. Apply water to at least 80 percent of the surface area of all open storage piles on a daily basis when there is evidence of wind driven fugitive dust; or H3. Install temporary coverings; or H4. Install a three-sided enclosure with walls with no more than 50 percent porosity which extend, at a minimum, to the top of the pile. This option may only be used at aggregate-related plants or at cement manufacturing facilities.
All Categories	I1. Any other control measures approved by the Air Pollution Control Officer as equivalent to the methods specified in Table 5 may be used.

Table 6. Large Operations Contingency Dust Control

Source Category	Control Actions
Earth-moving	A1. Cease all active operations except for dust mitigation activities; or A2. Apply water to soil not more than 15 minutes prior to moving such soil; and A3. Apply water during soil moving or disturbance operations.
Disturbed surface areas	B1. On the last day of active operations prior to a weekend, holiday or any other period when active operations will not occur for not more than four consecutive days: apply water with a mixture of chemical stabilizer diluted to not less than 1/20 of the concentration required to maintain a stabilized surface for a period of six months; or B2. Apply chemical stabilizers prior to wind event; or B3. Apply water to all unstabilized disturbed areas 3 times per day. If there is any evidence of wind driven fugitive dust, watering frequency is increased to a minimum of four times per day; or B4. Take the actions specified in Table 5, control action F3; or B5. Utilize any combination of control actions B1, B2 and B3B such that, in total, these actions apply to all disturbed surface areas.
Unpaved roads	C1. Apply chemical stabilizers prior to wind event; or C2. Apply water twice per hour during active operation; or C3. Stop all vehicular traffic, except for dust mitigation equipment.
Open storage piles	D1. Apply water twice per hour; or D2. Install temporary coverings.
Bulk Material Transport	E1. Cover all haul vehicles; or E2. Freeboard must be 6 inches or greater (VCS 23114)
All Categories	F1. Any other control measures approved by the Air Pollution Control Officer as equivalent to the methods specified in Table 6 may be used.

EL DORADO COUNTY AIR QUALITY MANAGEMENT DISTRICT

RULE 223-2 FUGITIVE DUST – ASBESTOS HAZARD MITIGATION
(Adopted 7/19/2005, Amended 10/18/2005)

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REFERENCE A - Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying and Surface Mining, Section 93105, Title 17, California Code of Regulations

REFERENCE B - Asbestos Airborne Toxic Control Measure For Surfacing Applications, Section 93106, Title 17, California Code of Regulations

5-2.1 GENERAL

A. **PURPOSE:** The purpose of this Rule is to reduce the amount of asbestos particulate matter entrained in the ambient air as a result of any construction or construction related activities, that disturbs or potentially disturbs naturally occurring asbestos by requiring actions to prevent, reduce or mitigate asbestos emissions.

B. **APPLICABILITY:** Unless one of the exemptions specified in Section 223-2.2 Exemptions applies, this Rule shall apply to **any construction or construction related activity** that:

1. is in excess of 20 cubic yards of graded material per project, or if required by the Air Pollution Control Officer **and**

2. meets **either** of the following criteria:

. Any portion of the area to be disturbed:
  . is located in a geographic ultramafic rock unit, **or**
  . has naturally-occurring asbestos, serpentine or ultramafic rock as determined by owner/operator, Professional Geologist or the Air Pollution Control Officer, **or**
  ii. is located within designated Naturally Occurring Asbestos Review Areas on the current El Dorado County Naturally Occurring Asbestos Review Area Map

. Naturally-occurring asbestos, serpentine, or ultramafic rock is discovered by the owner/operator, a Professional Geologist, or the Air Pollution Control Officer in the area to be disturbed after the start of any construction or construction related activity.

C. **ASBESTOS RELATED STATE OF CALIFORNIA REGULATIONS**

1. In addition to the requirements of this rule there are two State of California regulations for asbestos control that are applicable within El Dorado County and enforceable by the El Dorado County Air Quality Management District (EDCAQMD). These two asbestos control regulations are Attachments A and B to this rule.

Reference A: Asbestos Airborne Toxic Control Measure (ATCM) for Construction, Grading, Quarrying and Surface Mining Operations (California Code of Regulations, Title 17, Section 93105)

. Reference B: Asbestos Airborne Toxic Control Measure (ATCM) for Surfacing Applications (California Code of Regulations, Title 17, Section 93106)

1. A person who is subject to the Asbestos Airborne Toxic Control Measure (ATCM) for Construction, Grading, Quarrying and Surface Mining Operations (California Code of Regulations, Title 17, Section 93105) is required to comply with the following sections in addition to the requirements under the ATCM:

a. Section 223-2.4.A. regarding the visible emission standards.

b. Section 223-2.4.C: regarding the suspension of operations under high wind conditions.

c. Section 223-2.4.D: regarding the posting of Asbestos Warning signs.

d. Section 223-2.6.A and B: regarding trackout removal.

e. Section 223-2.6.D: regarding disposal of asbestiform containing soils removed by excavation.

e. Section 223-2.6.E: regarding 30-day time limit and other requirements for completion of post construction stabilization/mitigation.

223-2.2 EXEMPTION

A**. GENERAL:** Exemptions as defined in EDCAQMD Rule 223.2 A through F shall apply to this rule.

B. **GEOLOGIC EVALUATION**: The Air Pollution Control Officer may provide an exemption from this Rule for any property that meets at least one of the criteria in Section 223-2.1.B if a Professional Geologist has **conducted** a geologic evaluation of the property and determined that no serpentine or ultramafic rock, or asbestos, is likely to be found in the area to be disturbed. Before an exemption can be granted, the owner/operator must provide a copy of a report detailing the geologic evaluation to the Air Pollution Control Officer for his or her consideration.

1. At a minimum, the geologic evaluation must include:
   a. A general description of the property and the proposed use;
   b. A detailed site characterization which may include:
      . A physical site inspection;
      . Offsite geologic evaluation of adjacent property;
      . Evaluation of existing geological maps and studies of the site and surrounding area;
      . Development of geologic maps of the site and vicinity;
      . Identification and description of geologic units, rock and soil types, and features that could be related to the presence of ultramafic rocks, serpentine, or asbestos mineralization; and
      . A subsurface investigation to evaluate the nature and extent of geologic materials in the subsurface where excavation is planned; methods of subsurface investigation may include, but are not limited to borings, test pits, trenching, and geophysical surveys;
   c. A classification of rock types found must conform to the nomenclature based on the International Union of Geological Science system;
   d. A description of the sampling procedures used;
   e. A description of the analytical procedures used, which may include mineralogical analyses, petrographic analyses, chemical analyses, or analyses for asbestos content;
   f. An archive of collected rock samples for third party examination (to be kept for at least one year after the completion of the project); and
   g. A geologic evaluation report documenting observations, methods, data, and findings; the format and content of the report should follow the Guidelines for the Assessment of Naturally Occurring Asbestos issued by the California Geologic Survey.

2. The Air Pollution Control Officer may request any additional tests or other information needed to evaluate an application for exemption

3. The Air Pollution Control Officer shall grant or deny a request for an exemption within 30 days of the receipt of a complete application.

4. If the request for an exemption is denied, the Air Pollution Control Officer shall provide written reasons for the denial.

5. Expiration of the Geologic Exemption: If the owner/operator discovers any naturally-occurring asbestos, serpentine, or ultramafic rock in the area to be disturbed after the exemption is granted, then:

    a. The owner/operator must comply with the requirements of this Rule.
    b. The owner/operator must report the discovery of the naturally-occurring asbestos, serpentine or ultramafic rock to the Air Pollution Control Officer no later than the next business day.
    g. The exemption under Section 223-2.2.B shall expire and cease to be effective.

223-2.3 DEFINITIONS

In addition to the definitions of terms in EDCAQMD Rule 223 (General Requirements), the following definitions shall apply to this rule.

E. **ADEQUATELY WETTED:** sufficiently moistened with water to minimize the release of particulate matter into the ambient air.

F. **APPROVED ASBESTOS BULK TEST METHOD:** ARB Test Method 435 or an alternative asbestos bulk test method approved in writing by the Executive Officer of the California Air Resources Board.

G. **ARB:** the California Air Resources Board.

H. **ARB TEST METHOD 435:** the test method specified in title 17, California Code of Regulations, Section 94147.

I. **ASBESTOS:** asbestiforms of the following minerals: chrysotile (fibrous serpentine), crocidolite (fibrous riebeckite), amosite (fibrous cummingtonite--grunerite), asbestiform amphiboles (e.g. edenite, winchite and richterite), fibrous tremolite, fibrous actinolite, fibrous anthophyllite and tremolite/actinolite solution series of asbestiform minerals.

J. **ASBESTOS-CONTAINING MATERIAL:** any material that has asbestos content of 0.25 percent or greater by ARB test method 435.

K. **ASBESTOS CONTAINING WASTE or ACW:** asbestos containing waste managed at a landfill as authorized by Section 25143.7, chapter 6.5 of the California Health and Safety Code, which contains greater than (1%) friable asbestos by weight. Asbestos containing waste does not include waste contaminated with another hazardous waste as identified in chapter 11, division 4.5, Title 22, California Code of Regulations.

L. **ASBESTOS DUST MITIGATION PLAN:** a detailed written document specifying measures that would be implemented to minimize the emissions of asbestos-laden dust.

D. EL DORADO COUNTY NATURALLY OCCURING ASBESTOS REVIEW AREA MAP: a map created by adding mapping accuracy buffers to (1) faults and areas likely to contain asbestos as shown on the March 2000 Department of Mines and Geology “Areas More Likely to Contain Naturally-Occurring Asbestos in Western El Dorado County, California” map and (2) documented discovery sites containing at least 0.25% Asbestos. The most current map is provided on the EDCAQMD website and is available at the El Dorado County Surveyor’s office.

E. G**EOGRAPHIC ULTRAMAFIC ROCK UNIT:** a geographic area that is designated as an ultramafic rock unit or ultrabasic rock unit, including the unit boundary line, on any of the maps referenced in Appendix A of the Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying and Surface Mining, Section 93105, Title 17, California Code of Regulations

F. **GEOLOGIC EVALUATION:** an evaluation of a property by a Professional Geologist to determine the presence of various types of rocks, including but not limited to ultramafic rock, serpentinite, or other metamorphic derivatives of ultramafic rock.

G. **HEPA FILTER:** a High Efficiency Particulate Air filter used to remove particles less than one (1) micron in aerodynamic diameter that operates at removal efficiencies of 99.9 percent or greater.

H. **NATURALLY-OCCURRING ASBESTOS:** asbestos that has not been processed in an asbestos mill or is not asbestos mine tailings.

I. **PROFESSIONAL GEOLOGIST:** an individual who is currently licensed as a geologist with the State of California, Department of Consumer Affairs, Board of Geology and Geophysicists.

J. **REMOTE LOCATION:** any location that is at least one (1.0) mile from the location of a receptor.

K. **RECEPTOR:** includes, but is not limited to, any hospital, school, day care center, work site, business, residence, and permanent campground. The distance to the nearest receptor is to be measured from the outermost limit of the area to be disturbed or road surface, whichever is closer.

L. **SERPENTINE:** any form of the following hydrous magnesium silicate minerals: antigorite, lizardite, and chrysotile.

M. **SERPENTINITE:** a rock consisting almost entirely of serpentine, although small amounts of other minerals such as magnetite, chromite, talc, brucite, and tremolite-actinolite may also be present. "Serpentinite" is a metamorphic derivative of the ultramafic rocks, peridotite, pyroxenite, or dunite.

N. **ULTRABASIC ROCK:** ultramafic rock.

O. **ULTRAMAFIC ROCK:** an igneous rock composed of 90 percent or greater of one or a combination of the following iron/magnesium-rich, dark-colored silicate minerals: olivine, pyroxene or more rarely amphibole. For the purposes of this section, "ultramafic rock" includes the following rock types: dunite, pyroxenite and peridotite; and their metamorphic derivatives.

P. **VEGETATIVE COVER**: ground cover with sufficient density to expose less than 30 percent of unstabilized ground within 90 days of planting, and at all times thereafter.

1-9.1 GENERAL REQUIREMENTS

A. Visible emissions shall not exceed the shade designated as No. 0 on the Ringelmann Chart, or 0% opacity as determined in accordance with US EPA Method 9, at 25 feet from the point-of-origin and at the property line. Visible emissions shall not exceed the shade designated as No. 1 on the Ringelmann Chart, or 20% opacity as determined in accordance with US EPA Method 9at the point-of-origin. Applicable Best Management Practices included in Table 1 through 4 of this Rule or

similar effective measures shall be utilized to comply with fugitive dust standards of this rule from each fugitive dust source type within the active operation.

A. Vehicle Speed Limitations and Posting of Speed Limit Signs

1. An owner/operator shall limit the speed of vehicles traveling within construction sites to a maximum of 15 miles per hour.

2 An owner/operator shall post speed limit signs limiting vehicle speed to maximum of 15 miles per hour that meet State and Federal Department of Transportation standards at each construction site's uncontrolled unpaved access/haul road entrance.

C. When sustained wind speeds result in visible dust emissions in excess of the standards in Section 223-2.4 A., despite the application of dust mitigation measures, grading and earthmoving operations except except for dust mitigation activities shall be suspended

D. Warning Signs shall be posted at the main entrance(s) to the project for the duration of soil disturbance activities. Signs shall be posted in letter of sufficient size as to be readily visible and legible. The following wording is recommended: "Warning. Soils in the area may contain naturally occurring asbestos. Asbestos is a known carcinogen. Report excessive fugitive dust to the contractor at (contractor phone number), NOA Hotline: 888-FYI4NOA or EDCAQMD: 530-621-6662"

I. Following operations and activities are expressly prohibited:

2. Rock crushing of asbestos-containing material;

2. Use of blower devices for any removal of asbestos-containing material.

223-2.5 ADMINISTRATIVE REQUIREMENTS

A. Asbestos Dust Mitigation Plan

1. An owner/operator shall submit an Asbestos Dust Mitigation Plan to the Air Pollution Control Officer prior to the start of any construction activity that is applicable to this rule. An updated Asbestos Dust Mitigation Plan must be submitted if the project is significantly modified, a new grading permit is issued, the owner/operator changes or at the request of the Air Pollution Control Officer.

   Construction activities shall not commence until the Air Pollution Control Officer has approved or conditionally approved the Asbestos Dust Mitigation Plan. An owner/operator shall provide written notification to the Air Pollution Control Officer at least 10 days prior to the commencement of earthmoving activities via fax or mail. Projects that are less than 1 acre shall provide notification to the Air Pollution Control Officer at least 48 hours prior to earthmoving activities via fax or mail. The requirement to submit an Asbestos Dust Mitigation Plan shall apply to all such activities conducted for residential and non-residential (e.g., commercial, industrial, or institutional) purposes or conducted by any governmental entity.

2. . An owner/operator may submit one Asbestos Dust Mitigation Plan covering multiple construction stages within same project, provided the plan includes description of activities and

control measures for all stages of the project. The Asbestos Dust Mitigation Plan shall specify the expected start and final completion date of each project.

3. Asbestos Dust Mitigation Plan shall describe all dust mitigation measures to be implemented before, during and after any dust generating activity.

4. Asbestos Dust Mitigation Plan shall contain all the information described in Section 223-2.5.B. The Air Pollution Control Officer shall approve, disapprove or conditionally approve the Asbestos Dust Mitigation Plan within 30 days of plan submittal.

5. An owner/operator shall retain a copy of an approved Asbestos Dust Mitigation Plan at the project site. The approved Asbestos Dust Mitigation Plan shall remain valid until the termination of all dust generating activities. Failure to comply with the provisions of an approved Asbestos Dust Mitigation Plan is deemed to be a violation of this rule. Regardless of whether an approved Asbestos Dust Mitigation Plan is in place or not, or even when the owner/operator responsible for the plan is complying with an approved Asbestos Dust Mitigation Plan, the owner/operator shall comply also with all requirements of this Rule at all times.

B. An Asbestos Dust Mitigation Plan shall contain all of the following information:

0. Name(s), address(s), and phone number(s) of person(s) and owner(s)/operator(s) responsible for the preparation, submittal, and implementation of the Asbestos Dust Mitigation Plan and responsible for the dust generating operation and the application of dust control measures.

0. A plot plan which shows the type and location of each project.

0. The total area of land surface to be disturbed and total area in acres of the entire project site.

0. The expected start and completion dates of dust generating and soil disturbance activities to be performed on the site.

0. The actual and potential sources of fugitive dust emissions on the site and the location of bulk material handling and storage areas, paved and unpaved roads; entrances and exits where carryout/trackout may occur; and traffic areas.

0. Best Management Practice (Rule 223-2, Table 1 through 4) or other effective measures for:
   - Construction
   - Bulk Material Handling
   - Carryout and Trackout Management
   - Blasting Activities

0. Large Operations must include Dust Control Measures (Rule 223-2, Table 5 and 6).

0. If chemical dust suppressants are to be applied, the following information must be included: product specifications; manufacturer's usage instructions (method, frequency, and intensity of application); type, number, and capacity of application equipment; and information on environmental impacts and approvals or certifications related to appropriate and safe use for ground application.

0. Specific surface treatment(s) and/or control measures utilized to control material carryout, trackout, and sedimentation where unpaved and/or access points join paved roads.

10. Frequency of reporting: The plan shall state how often the items specified in Section 223-2.9. and any other items identified in the plan, will be reported to the EDCAQMD.

223-2.6 REQUIREMENTS FOR TRACKOUT MANAGEMENT, EXCAVATED SOIL MANAGEMENT AND POST-CONSTRUCTION STABILIZATION

A. An owner/operator shall prevent or cleanup carryout and trackout as specified in Section 223-2.6.A. The use of blower devices, or dry rotary brushes or brooms, for removal of carryout and trackout on public roads is expressly prohibited. The removal of carryout and trackout from paved public roads does not exempt an owner/operator from obtaining state or local agency permits which may be required for the cleanup of mud and dirt on paved public roads.

1. Owners/operators shall prevent carryout and trackout, or remove all visible carryout and trackout immediately.

2. Cleanup of carryout and trackout shall be accomplished by:
   a. Wet sweeping and picking-up; or
   b. Operating a HEPA filter equipped vacuum device; or
   c. Flushing with water, if curbs or gutters are not present, and where the use of water will not result in a source of trackout material or result in adverse impacts on storm water drainage systems or violate any National Pollutant Discharge Elimination System permit program.

E. An owner/operator of any site with 150 or more vehicle trips per day, or 20 or more vehicle trips per day by vehicles with three or more axles shall in addition to the requirements in Section 223-2.6.A, take the following preventative actions for carryout and trackout:

1. Installing and maintaining a trackout control device (grizzlies, gravel pads or paved surfaces) designed and maintained to control trackout at all access points to paved public roads; or:

2. Utilizing a carryout and trackout prevention procedure which has been demonstrated to the satisfaction of the Air Pollution Control Officer as achieving an equivalent or greater level of control.

F. Control for disturbed surface areas and storage piles, shall comply with all applicable requirements of this Rule.

G. Disposal of asbestiform containing soils removed by excavation:

1. Placing excavated soils into fills constructed elsewhere on the project.
   a. The location(s) of such removals and the placement quantities and locations shall be documented.
   b. Fills with a naturally occurring asbestos content equal to or greater than 1.0% by ARB Test Method 435, or when visually evident fibrous materials likely to be asbestos are present, located in residential landscaping areas shall be covered by at least two feet (24 inches) of non-asbestiform containing material or by concrete or asphalt paving.

2. It is the owner/operator responsibility that final destination (usage or disposal) and transports of any excavated soils from the project is in conducted in full compliance with pertinent federal,

state and local rules and regulations including CA Title 17, Section 93106, Asbestos Airborne Toxic Control Measure for Surfacing Applications.

3. For any soils transported off-site the following information must be documented, retained for a period of at least 3 years, and provided to the Air Pollution Control Officer upon request:
   e. Project location
   f. Laboratory results for any asbestos soil testing done at the project location
   g. Date(s) of off-site transport(s) of excavated soils
   h. Location(s) where excavated soils were transported to
   i. Total quantity transported to each location
   j. Intended usage (fill, surface application), if the final destination is other than Class II or Class III landfill disposal facility.

H. Control for off-site transport. The owner/operator shall ensure that no trucks are allowed to transport excavated material off-site unless:

1. Trucks are maintained such that no spillage can occur from holes or other openings in cargo compartments; and

2. Loads are adequately wetted; and
   a. Covered with tarps; or
   b. Loaded such that the material does not touch the front, back, or sides of the cargo compartment at any point less than six inches from the top and that no point of the load extends above the top of the cargo compartment.

5. If excavated material is classified as a hazardous waste/material, off-site transport must comply with pertinent State and Federal rules and regulations.

I. Post construction stabilization of disturbed areas. For multiple phase projects, the property owner shall be responsible for ensuring that the soil be stabilized following each phase of the project using one of the methods listed below or by any other method approved by the APCO. Upon completion of all phases of the project, but no later than 30 days following the end of soil disturbing activities, all disturbed surfaces with naturally occurring asbestos content of equal to or greater than 0.25% by ARB test method 435 shall be stabilized using one or more of the following methods:

1. Establishment of a vegetative cover;

2. Placement of non-asbestos containing material on disturbed soil areas shall be as follows:
   a. At least three (3.0) inches in residential and nonresidential areas;
   b. A total of at least twelve (12) inches or the maximum depth of irrigation improvements, whichever is higher, in residential landscaping areas with a naturally occurring asbestos content greater than 0.25% by ARB Test Method 435, or when visually evident fibrous materials likely to be asbestos are present;

3. Paving, building foundations, concrete flatwork or retaining walls

223-2.7. ADDITIONAL REQUIREMENTS FOR LARGE OPERATIONS

E. Any person who conducts or authorizes the conducting of a large operation subject to this Rule shall implement the applicable actions specified in Table 5 of this Rule at all times and shall implement the

applicable actions specified in Table 6 of this Rule when the applicable performance standards can not be met through use of Table 5 actions; and shall:

0. Submit a Large Operation Notification to the Air Pollution Control Officer within 7 days of qualifying as a large operation;

0. Maintain daily records to document the specific dust control actions taken, maintain such records for a period of not less than three years; and make such records available to the Air Pollution Control Officer upon request;

0. Identify a dust control supervisor that:
   a. is employed by or contracted with the property owner or developer;
   b. is on the site or available on-site within 30 minutes during working hours;
   c. has the authority to expeditiously employ sufficient dust mitigation measures to ensure compliance with all Rule requirements.

223-2.8 AIR MONITORING FOR ASBESTOS

A. Pursuant to the requirements of California Health and Safety Code Section 41511:

1. Air monitoring may be required by the Air Pollution Control Officer.

2. The Air Pollution Control Officer may require revisions to the asbestos dust mitigation plan on the basis of the results of the air monitoring.

. Air monitoring for asbestos (if required by the Air Pollution Control Officer).

0. If required by the Air Pollution Control Officer, the Asbestos Dust Mitigation Plan shall include an air-monitoring component.

1. The air monitoring component shall specify the following:
   . Type of air sampling device(s);
   . Siting of air sampling device(s);
   . Sampling duration and frequency; and
   . Analytical method
   . Frequency and detail of analytical data submittal

223-2.9 RECORDKEEPING AND REPORTING REQUIREMENTS

A. Recordkeeping Requirements: The owner shall retain all of the following records for at least ten (10) years following the completion of the construction project:

0. The results of any air monitoring conducted any time during the project.

0. The documentation for any geologic evaluation conducted on the property for the purposes of obtaining an exemption, except the archive of collected samples which may be discarded at the expiration of the exemption or one (1) year after the exemption is granted whichever is less.

0. The results of any asbestos bulk sampling that meets any of the following conditions:

a. The asbestos bulk sampling was conducted by the owner/operator to document the applicability of or compliance with this section.
b. The asbestos bulk sampling was done at the request of the Air Pollution Control Officer or the El Dorado Building Department or Department of Transportation (DOT).

7. The placement quantities and both removal and placement location of asbestiform containing soils removed by excavation as required in 223-2.6.D.

8. Records and reports for the project, as defined in 223-2.9.A, shall be provided upon request with disclosures in real estate transactions concerning the project or property.

B. Reporting Requirements: The owner/operator of any grading or construction operation subject to this section shall submit the following to the EDCAQMD:

1. The results of any air monitoring conducted at the request of the Air Pollution Control Officer.

2. The laboratory results of any asbestos bulk sampling or testing.

3. The areas where asbestos was identified, removed, and placed, onsite or offsite shall be described upon completion of the project.

4. Any public complaints received by the contractor during the project shall be reported as requested by the Air Pollution Control Officer.

223-2.10 TEST METHODS

E. Ultramafic Rock: The ultramafic rock composition of any material shall be determined using standard analysis techniques including, but not limited to, color index assessment, microscopic examination, petrographic analysis or rock thin sections, or chemical analysis techniques, such as X-ray fluorescence spectrometry or inductively coupled plasma analysis.

F. Bulk Sampling Methods: ARB Test Method 435, or an alternative asbestos bulk test method approved in writing by the Executive Officer of the California Air Resources Board, shall be used to determine the asbestos content of a bulk sample. For the purposes of determining compliance with this section, references in ARB Test Method 435 to "serpentine aggregate" shall mean "gravel" or other "bulk materials" to be tested for asbestos content.

G. Surface Crusting: “Measurement of the stability of surface crusting on horizontal surfaces” shall be as follows:

1. Where a visible crust exists, drop a steel ball with a diameter of 15.9 millimeters (0.625 inches) and a mass ranging from 16 to 17 grams from a distance of 30 centimeters (one foot) directly above at a 90 degree angle (perpendicular) to the ground surface. If blowsand (thin deposits of loose grains covering less than 50 percent of the surface that have not originated from the surface being tested) is present, clear the blowsand from the surfaces to be tested before dropping the steel ball.

2. A sufficient crust is determined to exist if, when the ball is dropped according to Section 223-2.10.C.1 the ball does not sink into the surface so that it is partially or fully surrounded by loose

grains and, upon removing the ball, the surface on which it was dropped has not been pulverized so that loose grains are visible.

0. Drop the ball three times each in three representative test areas within a survey area measuring 1 foot by 1 foot that represents a random portion of the surface being evaluated. The test area shall be deemed to have passed if at least two of the three times the ball was dropped, the results met the criteria in Section 223-2.10.C.1. If all three test areas pass, the area shall be deemed to be "sufficiently crusted".

C. Analysis of Air Samples: Analysis of all air samples shall follow the analytical method specified by the United States Environmental Protection Agency, Asbestos Hazard Emergency Response Act (AHERA) criteria for asbestos (40 CFR, Part 763 Subpart E, Appendix A, adopted October 30, 1987), with the following exceptions:

0. The analytical sensitivity shall be 0.001 structures per cubic centimeter (0.001 s/cc); and

0. All asbestos structures with an aspect ratio greater than three to one (3:1) shall be counted irrespective of length.

2. The results of the analysis of air samples shall be reported as transmission electron microscopy (TEM) asbestos structures per cubic centimeter (s/cc).

D. Adequately Wetted: Field determination of "adequately wetted" shall be as follows:

0. If the district-approved asbestos dust mitigation plan has specified a percent moisture content for specific materials the determination shall be as specified in the district-approved asbestos dust mitigation plan; or

0. If no moisture threshold is specified in a district-approved asbestos dust mitigation plan, a sample of at least one (1) quart in volume shall be taken from the top three (3) inches of a road, or bare area or from the surface of a stockpile. The sample shall be poured out from a height of four (4) feet onto a clean hard surface. The material shall be considered to be adequately wetted if there is no observable dust emitted when the material is dropped.

RULE 223-2 TABLE 1
BEST MANAGEMENT PRACTICE FOR ASBESTOS DUST MITIGATION
(Construction And Other Earthmoving Activities)

Source Category	Control Measure	Guidance
Backfilling	A1 Stabilize backfill material when not actively handling; and A2 Stabilize backfill material during handling; and A3 Stabilize soil at completion of activity. .	□ Mix backfill soil with water prior to moving □ Dedicate water truck or high capacity hose to backfilling equipment. □ Empty loader bucket slowly so that no dust plumes are generated. □ Minimize drop height from loader bucket.
Clearing and grubbing	B1 Maintain stability of soil through pre-watering of site prior to clearing and grubbing; and B2 Stabilize soil during clearing and grubbing activities; and B3 Stabilize soil immediately after clearing and grubbing activities.	□ Maintain live perennial vegetation where possible. □ Apply water in sufficient quantity to prevent generation of visible dust.
Clearing forms	C1 Use water spray to clear forms; or C2 Use sweeping and water spray to clear forms; or C3 Use vacuum system to clear forms.	□ Use of high pressure air to clear forms may cause exceedance of Rule requirements.
Crushing	D1 Crushing asbestos containing material is expressly prohibited..	
Cut and fill	E1 Pre-water soils prior to cut and fill activities; and E2 Stabilize soil during and after cut and fill activities.	□ For large sites, pre-water with sprinklers or water trucks and allow time for penetration. □ Use water as necessary to keep dust down.
Demolition – mechanical/manual	F1 Stabilize wind erodible surfaces to reduce dust; and F2 Stabilize surface soil where support equipment and vehicles will operate; and F3 Stabilize loose soil and demolition debris.	□ Apply water in sufficient quantities to prevent the generation of visible dust.
Disturbed soil	G1 Stabilize disturbed soil throughout the construction site; and G2 Stabilize disturbed soil between structures	□ Limit vehicular traffic and disturbances on soils where possible. □ If interior block walls are planned, install as early as possible. □ Apply water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes.

RULE 223-2 TABLE 1
BEST MANAGEMENT PRACTICE FOR ASBESTOS DUST MITIGATION
(Construction And Other Earthmoving Activities)

Source Category	Control Measure	Guidance
Earth-moving activities	H1 Pre-apply water; and H2 Re-apply water as necessary to maintain soils in a damp condition and to ensure that visible emissions do not exceed 25 feet or beyond property line in any direction; and H3 Stabilize soils once earth-moving activities are complete.	Grade each project phase separately, timed to coincide with construction phase. Upwind fencing can prevent material movement on site. Apply water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes. Suspend operations when winds generate visible dust emissions despite control measures
Importing/exporting of bulk materials	I1 Stabilize or adequately wet material while loading to reduce fugitive dust emissions; and I2 Maintain at least six inches of freeboard on haul vehicles traveling off-site; and I3 Stabilize or adequately wet material while transporting to reduce fugitive dust emissions; and I4 Stabilize material while unloading to reduce fugitive dust emissions.	Use tarps or other suitable enclosures on haul trucks. Comply with track-out prevention/ mitigation requirements. Provide water while loading and unloading to reduce visible dust plumes. Maintain trucks and cargo compartments, to prevent any spillage of material. If excavated material is classified as a hazardous waste/material, off-site transport must comply with pertinent State and Federal rules and regulations.
Landscaping	J1 Stabilize soils, materials and slopes.	Apply water to materials to stabilize. Maintain materials in a crusted condition. Maintain effective cover over materials Stabilize sloping surfaces using soil binders until vegetation or ground cover can effectively stabilize the slopes Hydroseed prior to rainy season.
Road shoulder maintenance	K1 Apply water to unpaved shoulders prior to clearing; and K2 Apply chemical dust suppressants and/or other appropriate material in accordance with DOT specifications to maintain a stabilized surface after completing road shoulder maintenance.	Installation of curbing and/or paving of road shoulders can reduce recurring maintenance costs. Use of chemical dust suppressants can inhibit vegetation growth and reduce future road shoulder maintenance costs.
Staging areas	M1 Stabilize staging areas during use; and M2 Stabilize staging area soils at project completion.	Limit size of staging area. Limit vehicle speeds to 15 miles per hour. Limit number and size of staging area entrances/exists.

RULE 223-2 TABLE 1
BEST MANAGEMENT PRACTICE FOR ASBESTOS DUST MITIGATION
(Construction And Other Earthmoving Activities)

Source Category	Control Measure	Guidance
Stockpiles/Bulk Material Handling	N1 Stabilize stockpiled materials. N2 Stockpiles within 100 yards of off-site occupied buildings must not be greater than eight feet in height; or must have a road bladed to the top to allow water truck access or must have an operational water irrigation system that is capable of complete stockpile coverage.	Add or remove material from the downwind portion of the storage pile. Maintain storage piles to avoid slides.
Traffic areas for construction activities	O1 Stabilize or maintain adequate moisture on all off-road traffic and parking areas; and O2 Stabilize or maintain adequate moisture on all haul routes; and O3 Direct construction traffic over established haul routes.	Apply gravel/paving to all haul routes as soon as possible to all future roadway areas. Barriers can be used to ensure vehicles are only used on established parking areas/haul routes.
Trenching	P1 Stabilize surface soils where trencher or excavator and support equipment will operate; and P2 Stabilize soils at the completion of trenching activities.	Pre-watering of soils prior to trenching is an effective preventive measure. Washing mud and soils from equipment at the conclusion of trenching activities can prevent crusting and drying of soil on equipment.
Truck loading	Q1 Material must be adequately wet prior to loading; and Q2 Freeboard must be 6 inches or greater (VCS 23114)	Empty loader bucket such that no visible dust plumes are created. Ensure that the loader bucket is close to the truck to minimize drop height while loading.
Unpaved roads/parking lots	S1 Stabilize soils to meet the applicable performance standards (Surface Crusting); and S2 Limit vehicular travel to established unpaved roads (haul routes) and unpaved parking lots.	Restricting vehicular access to established unpaved travel paths and parking lots can reduce stabilization requirements.

RULE 223-2 TABLE 1
BEST MANAGEMENT PRACTICE FOR ASBESTOS DUST MITIGATION
(Construction And Other Earthmoving Activities)

Source Category	Control Measure	Guidance
Vacant land	T1 In instances where vacant lots are 0.10 acre or larger and have a cumulative area of 500 square feet or more that are driven over and/or used by motor vehicles and/or off-road vehicles, prevent motor vehicle and/or off-road vehicle trespassing, parking and/or access.	□ Installing barriers, curbs, fences, gates, posts, signs, shrubs, trees or other effective control measures to prevent access to motor or off-road vehicles.
Onsite Disposal of asbestiform containing soils	U1 If possible, place excavated soils into fills constructed elsewhere on the project	□ Fills with NOA content equal to or greater than 1.0%, or when visually evident fibrous materials likely to be asbestos are present, in residential landscaping areas must be covered by at least 24 inches of clean fill □ Document location and quantities of fills
Offsite disposal of asbestiform containing soils	V1 Management and disposition of excavated soils transported offsite must be in accordance with federal, state and local regulations.	□ For excavated soils transported offsite, information per Rule 223-2.6.D.3. must be documented by owner/operator and retained for a period of 3 years.
Post Construction Stabilization of Disturbed Areas	W1 Must be completed no later than 30 days following completion of the project.	□ Establishment of vegetative cover; or □ Placement of at least 3 inches of clean fill, □ Placement of a total of at least 12 inches, or maximum depth of irrigation improvements, whichever is higher, of clean fill in residential landscaping areas with NOA greater than 0.25%; or □ Paving, Foundations, Retaining Walls; or □ Other measures as approved by APCO.
Signage	X1 Post Warning Signs at the main entrance to the project for the duration of soil disturbance activities	□ Signs to be in compliance with current OSHA requirements □ Proposition 65 (H&S Code 25249.5-25249.13) may apply

RULE 223-2 TABLE 2
BEST MANAGEMENT PRACTICE FOR ASBESTOS DUST MITIGATION
(Bulk Material Handling)

Source Category	**Control Actions**
Handling Of Bulk Materials	A1 When handling bulk materials, apply water or chemical/organic stabilizers/ suppressants;
Storage of Bulk Materials	B1 When storing bulk materials, comply with the conditions for a stabilized surface; or B2 Cover bulk materials stored outdoors with tarps, plastic or other suitable material and anchor in such a manner that prevents the cover from being removed by wind action; or B3 Construct and maintain wind barriers with less than 50% porosity. If utilizing fences or wind barriers, apply water or chemical/organic stabilizers/suppressants; or B4 Utilize a 3-sided structure with a height at least equal to the height of the storage pile and with less than 50% porosity.
On-Site Transporting of Bulk Materials	C1 Limit vehicular speed while traveling on the work site; or C2 Load all haul trucks such that the freeboard is not less than six (6) inches when material is transported across any paved public access road; or C3 Apply water to the top of the load; or C4 Cover haul trucks with a tarp or other suitable cover.
Off-Site Transporting of Bulk Materials	D1 Clean the interior of the cargo compartment or cover the cargo compartment before the empty truck leaves the site; and D2 Material must be adequately wet prior to loading; and D3 Prevent spillage or loss of bulk material from holes or other openings in the cargo compartment's floor, sides and/or tailgate; and D4 Load all haul trucks such that the freeboard is not less than six (6) inches when material is transported on any paved road, and apply water to the top of the load; or cover haul trucks with a tarp or other suitable cover. D5 If excavated material is classified as a hazardous waste/material, off-site transport must comply with pertinent State and Federal rules and regulations.
Outdoor Transport Of Bulk Materials With A Chute Or Conveyor:	E1 Fully enclose the chute or conveyor; or E2 Operate water spray equipment; or E3 Wash separated or screened materials to remove conveyed materials having an aerodynamic diameter of 10 microns or less.

RULE 223-2 TABLE 3
BEST MANAGEMENT PRACTICE FOR ASBESTOS DUST MITIGATION
(Removal and Prevention of Trackout)

Source Category	**Control Actions**
Removal of Trackout Material	A1 Manually wet sweeping and picking-up; or A2 Operating HEPA filter equipped vacuum device; or A3 Flushing with water, where the use of water will not result in adverse impacts on storm water drainage systems or violate any National Pollutant Discharge Elimination System permit program; and A4 The use of blower devices, or dry rotary brushes or dry brooms is expressly prohibited.
Frequency of Trackout Material Removal	B1 Visible trackout must be immediately removed from paved public roads; and B4 On interior paved roads trackout must be removed at least once per workday.
Trackout Prevention for Large Operations or Sites with more than 150 vehicle trips/day.	C1 Installation of grizzlies, or similar devices designed to remove dirt/mud from tires; or C2 Installation of gravel pad; or C3 Paving of interior roads.

RULE 223-2 TABLE 4
BEST MANAGEMENT PRACTICE FOR ASBESTOS DUST MITIGATION
(Blasting Activities)

Source Category	Control Measure	Guidance
Site Preparation (drilling, setting charges, burial of charges)	A1 Reduce dust from drilling operation A2 Pre-wet blast area A3 Cover charges to minimize dust	□ Control rate of drilling □ Apply water fog □ Place blast mats over charges □ Place soil mounds over charges □ Wet entire area prior to blasting
Blasting activities	B1 Dust cannot exceed 25 ft or cross the project property line	□ Conduct blasting on calm days □ Consider wind direction with respect to your property line, nearby residences and other receptors.
Post-Blasting Activities	C1 Follow Best Management Practices for all construction activities (Table 223-2, Table 1)	

RULE 223-2 TABLE 5
DUST CONTROL MEASURES FOR LARGE OPERATIONS

Source Category	Control Actions
Earth-moving (except construction cutting and filling areas, and mining operations)	A1 Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Air Pollution Control Officer. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations each subsequent four-hour period of active operations; or A2 For any earth-moving which is more than 25 feet from all property lines, conduct watering as necessary to prevent visible dust emissions from exceeding 25 feet in length in any direction. Visible emissions must not extend beyond property boundary.
Earth-moving: Construction fill areas:	B1 Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Air Pollution Control Officer. For areas which have an optimum moisture content for compaction of less than 12 percent, as determined by ASTM Method 1557 or other equivalent method approved by the Air Pollution Control Officer complete the compaction process as expeditiously as possible after achieving at least 70 percent of the optimum soil moisture content. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations during each subsequent four hour period of active operations. B2 For any earth-moving which is more than 25 feet from all property lines, conduct watering as necessary to prevent visible dust emissions from exceeding 25 feet in length in any direction. Visible emissions must not extend beyond property boundary.
Earth-moving: Construction cut areas	C1 Conduct watering as necessary to prevent any visible emissions from extending beyond property boundary.
Disturbed surface areas: (except completed grading areas)	D1 Apply dust suppression in sufficient quantity and frequency to maintain a stabilized surface. Any areas which cannot be stabilized, as evidenced by wind driven fugitive dust must have an application of water at least twice per day to at least 80 percent of the unstabilized area.
Disturbed surface areas: Completed grading areas	E1 Apply chemical stabilizers within five working days of grading completion; or E2 Take actions F1 or F3 specified for inactive disturbed surface areas.

RULE 223-2 TABLE 5
DUST CONTROL MEASURES FOR LARGE OPERATIONS

Source Category	Control Actions
Inactive disturbed surface areas	F1 Apply water to at least 80 percent of all inactive disturbed surface areas on a daily basis when there is evidence of wind driven fugitive dust, excluding any areas which are inaccessible to watering vehicles due to excessive slope or other safety conditions; or F2 Apply dust suppressants in sufficient quantity and frequency to maintain a stabilized surface; or F3 Establish a vegetative ground cover within 21 days after active operations have ceased. Ground cover must be of sufficient density to expose less than 30 percent of unstabilized ground within 90 days of planting, and at all times thereafter; or F4 Utilize any combination of control actions F1, F2 and F3 such that, in total, these actions apply to all inactive disturbed surface areas. F5 Establishment and maintenance of surface crusting sufficient to satisfy the test in Section 223-2.10.C F6 Approved mixture of tackifier and fiber mulch, applied per manufacturer's recommendation.
Unpaved Roads	G1 Water all roads used for any vehicular traffic at least once per every two hours of active operations or as often as necessary; or G2 Apply a chemical stabilizer to all unpaved road surfaces in sufficient quantity and frequency to maintain a stabilized surface; and G3 Restrict vehicle speeds to 15 miles per hour;
Open storage piles	H1 Apply chemical stabilizers; or H2 Apply water to at least 80 percent of the surface area of all open storage piles on a daily basis when there is evidence of wind driven fugitive dust; or H3 Install temporary coverings; or H4 Install a three-sided enclosure with walls with no more than 50 percent porosity which extend, at a minimum, to the top of the pile. This option may only be used at aggregate-related plants or at cement manufacturing facilities.
All Categories	I1 Any other control measures approved by the Air Pollution Control Officer as equivalent to the methods specified in Table 5 may be used.

RULE 223-2 TABLE 6
CONTINGENCY DUST CONTROL MEASURES FOR LARGE OPERATIONS

Source Category	Control Actions
Earth-moving	A1 Cease all active operations except for dust mitigation activities; or A2 Apply water to soil not more than 15 minutes prior to moving such soil; and A3 Apply water during soil moving or disturbance operations.
Disturbed surface areas	B1 On the last day of active operations prior to a weekend, holiday or any other period when active operations will not occur for not more than four consecutive days: apply water with a mixture of chemical stabilizer diluted to not less than 1/20 of the concentration required to maintain a stabilized surface for a period of six months; or B2 Apply chemical stabilizers prior to wind event; or B3 Apply water to all unstabilized disturbed areas 3 times per day. If there is any evidence of wind driven fugitive dust, watering frequency is increased to a minimum of four times per day; or B4 Take the actions specified in Table 5, control action F3; or B5 Utilize any combination of control actions B1, B2 and B3B such that, in total, these actions apply to all disturbed surface areas.
Unpaved roads	C1 Apply chemical stabilizers prior to wind event; or C2 Apply water twice per hour during active operation; or C3 Stop all vehicular traffic, except for dust mitigation equipment.
Open storage piles	D1 Apply water twice per hour; or D2 Install temporary coverings.
Bulk Material Transport	E1 Cover all haul vehicles; or E2 Freeboard must be 6 inches or greater (VCS 23114)
All Categories	F1 Any other control measures approved by the Air Pollution Control Officer as equivalent to the methods specified in Table 6 may be used.

Appendix E
Plant Species

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Appendix E
Plant Species

Plant Species Observed at the Lime Rock Valley Project Site June 21, 22, September 27, 28, 2012, March 4 and 5, May 13, 2013

FAMILY/Species Name – Scientific	FAMILY/Common Name	Native
FERNS and FERN ALLIES		
POLYPODIACEAE	POLYPODY FAMILY	
Polypodium californicum	California polypody	yes
PTERIDACEAE	BRAKE FAMILY	
Pentagramma triangularis	Gold-back fern	yes
GYMNOSPERMS		
CUPRESSACEAE	CYPRESS FAMILY	
Calocedrus decurrens	Incense cedar	yes
PINACEAE	PINE FAMILY	
Pinus sabiniana	Foothill pine	yes
EUDICOTS		
ADOXACEAE	MUSKROOT	
Sambucus nigra subs. canadensis	Blue elderberry	yes
ANACARDIACEAE	SUMAC/CASHEW	
Toxicodendron diversilobum	Poison oak	yes
APIACEAE	CARROT	
Perideridia sp.	Yampa	yes
Scandix pecten-veneris	Shepherd's needle	no
Sanicula bipinnatifida	Purple sanicle	yes
Sanicula crassicaulis	Wood sanicle	yes
Tauschia hartwegii	Tauschia	yes
Torilis arvensis	Torilis	no*
APOCYNACEAE	DOGBANE FAMILY	
Vinca major	Periwinkle	no*
ASTERACEAE	SUNFLOWER FAMILY	
Achillea millefolium	Yarrow	yes
Agoseris sp.	Dandelion	yes
Artemisia douglasiana	Mugwort	yes
Baccharis pilularis	Coyote brush	yes

FAMILY/Species Name – Scientific	FAMILY/Common Name	Native
Carduus pycnocephalus	Italian thistle	no*
Centaurea melitensis	Tocalote	no*
Centaurea solstitialis	Yellow star-thistle	no*
Centaurea stoebe subsp. micranthos	Spotted knapweed	no*
Cichorium intybus	Chicory	no
Cirsium vulgare	Bull thistle	no*
Dittrichia graveolens	Stinkwort	no*
Ericameria arborescens	Golden fleece	yes
Grindelia camporum (var. *camporum*)	Great Valley gumplant	yes
Holocarpha virgata	Pitgland tarweed	yes
Hypochaeris glabra	Smooth cat's ear	no*
Lactuca serriola	Prickly lettuce	no
Leontodon saxatilis	Hawkbit	no
Logfia gallica	Narrowleaf cottonrose	no
Packera layneae	Layne's ragwort [butterweed]	yes
Pseudognaphalium californicum	California cudweed	yes
Pseudognaphalium canescens	Wright's cudweed	yes
Psilocarphus sp.	Woollyheads	yes
Senecio vulgaris	Common groundsel	no
Silybum marianum	Milk thistle	no*
Tragopogon porrifolius	Salsify	no
Wyethia glabra	Shining mule ears	yes
BORAGINACEAE	BORAGE FAMILY	
Amsinckia menziesii	Menzies' fiddleneck	yes
Eriodictyon californicum	California yerba santa	yes
Nemophila sp.	Nemophila	yes
Plagiobothrys nothofulvus	Rusty popcornflower	yes
Plagiobothrys sp.	Popcornflower	yes
BRASSICACEAE	MUSTARD FAMILY	
Capsella bursa-pastoris	Shepherd's purse	no
Draba verna	Vernal whitlow grass	yes
Hirschfeldia incana	Shortpod mustard	no*
Nasturtium officinale	Small-leaved watercress	yes
CAPRIFOLIACEAE	HONEYSUCKLE FAMILY	
Lonicera hispidula	Honeysuckle	yes
Symphoricarpos albus var. *laevigatus*	Snowberry	yes
CARYOPHYLLACEAE	PINK FAMILY	
Cerastium arvense	Field chickweed	yes
Cerastium glomeratum	Mouse-eared chickweed	no

FAMILY/Species Name – Scientific	FAMILY/Common Name	Native
CISTACEAE		
Crocanthemum suffrutescens (synonym = *Helianthemum suffrutescens*)	Bisbee Peak rush-rose	yes
CRASSULACEAE	STONECROP	
Crassula aquatica	Water pygmyweed	yes
Crassula connata	Sand pygmyweed	yes
ERICACEAE	HEATH FAMILY	
Arctostaphylos manzanita subsp. *manzanita*	Whiteleaf manzanita	yes
Arctostaphylos patula	Greenleaf manzanita	yes
Arctostaphylos viscida subsp. *viscida*	Sticky whiteleaf manzanita	yes
EUPHORBIACEAE	SPURGE FAMILY	
Croton setigerus	Doveweed	yes
Euphorbia sp.	Euphorbia	no
FABACEAE	LEGUME FAMILY	
Acmispon parviflorus	Hill lotus	yes
Acmispon glaber	Deerweed	yes
Lotus corniculatus	Bird's-foot trefoil	no
Lupinus bicolor	Miniature lupine	yes
Medicago arabica	Spotted medic	no
Trifolium hirtum	Rose clover	no*
Vicia sativa	Spring vetch	no
Vicia villosa	Hairy vetch	no
FAGACEAE	OAK FAMILY	
Quercus berberidifolia	Scrub oak	yes
Quercus chrysolepis	Canyon live oak	yes
Quercus douglasii	Blue oak	yes
Quercus kelloggii	California black oak	yes
Quercus lobata	Valley oak	yes
GENTIANACEAE		
Zeltnera muehlenbergii	Muehlenberg's centaury	yes
GERANIACEAE	GERANIUM FAMILY	
Erodium botrys	Long beaked filaree	no
Erodium cicutarium	Redstem filaree	no*
Erodium moschatum	White-stem filaree	no
Geranium dissectum	Cutleaf geranium	no*
Geranium molle	Woodland geranium	no

FAMILY/Species Name – Scientific	FAMILY/Common Name	Native
HYPERICACEAE		
Hypericum concinnum	Goldwire	yes
Hypericum perforatum	Klamath weed	no*
LAMIACEAE	MINT FAMILY	
Lamium amplexicaule	Henbit deadnettle	no
Lepechinia calycina	White pitcher sage	yes
Marrubium vulgare	Horehound	no*
Mentha pulegium	Pennyroyal	no*
Monardella sp.	Coyote mint	yes
Salvia sonomensis	Creeping sage	yes
Scutellaria tuberosa	Skullcap	yes
Trichostema sp.	Bluecurls	yes
LINACEAE	FLAX	
Linum usitatissimum	Common flax	no
LYTHRACEAE	LOOSETRIFE	
Lythrum hyssopifolia	Hyssop loosestrife	no*
MALVACEAE	MALLOW FAMILY	
Sidalcea sp.	Checkerbloom	yes
MONTIACEAE	PURSLANE FAMILY	
Claytonia perfoliata	Miner’s lettuce	yes
MORACEAE		
Ficus carica	Edible fig	no*
OROBANCHACEAE		
Orobanche bulbosa	Chaparral broomrape	yes
PHRYMACEAE		
Mimulus aurantiacus	Bush monkeyflower	yes
Mimulus guttatus	Monkeyflower	yes
Mimulus viscidus	Viscid monkeyflower	yes
PLANTAGINACEAE	PLANTIAN FAMILY	
Plantago lanceolata	English plantain	no*
Veronica persica	Bird's eyes speedwell	no
POLYGALACEAE	MILKWORT FAMILY	
Polygala cornuta	Sierra milkwort	yes

FAMILY/Species Name – Scientific	FAMILY/Common Name	Native
POLYGONACAE	BUCKWHEAT FAMILY	
Chorizanthe polygonoides	Knotweed spineflower	yes
Rumex conglomeratus	Green dock	no
Rumex crispus	Curly dock	no*
RANUNCULACEAE	BUTTERCUP FAMILY	
Ranunculus muricatus	Spinyfruit buttercup	no
Thalictrum fendleri	Meadow rue	yes
RHAMNACEAE	BUCKTHORN FAMILY	
Ceanothus cuneatus	Buckbrush	yes
Rhamnus ilicifolia	Hollyleaf redberry	yes
ROSACEAE	ROSE FAMILY	
Adenostoma fasciculatum	Chamise	yes
Aphanes occidentalis	Lady's mantle	yes
Heteromeles arbutiflora	Toyon	yes
Horkelia californica	California horkelia	yes
Prunus cerasifera	Wild plum	no*
Pyracantha angustifolia	Firethorn	no*
Rubus armeniacus	Himalayan blackberry	no*
RUBIACEAE	MADDER FAMILY	
Galium aparine	Goose grass	yes
Galium californicum	California bedstraw	yes
Galium californicum ssp. *californicum*	California bedstraw	yes
Galium murale	Tiny bedstraw	no
Galium parisiense	Wall bedstraw	no
Galium porrigens	Climbing bedstraw	yes
SAXIFRAGACEAE	SAXIFRAGE FAMILY	
Micranthes californica	Greene’s saxifrage	yes
SALICACEAE	WILLOW FAMILY	
Salix exigua	Sandbar willow	yes
Salix lasiolepis	Arroyo willow	yes
SAPINDACEAE	BUCKEYE FAMILY	
Aesculus californica	California buckeye	yes
SCROPHULARIACEAE	FIGWORT FAMILY	
Scrophularia californica	Bee plant	yes
Verbascum blattaria	Moth mullein	no
Verbascum thapsus	Wooly mullein	no*

FAMILY/Species Name – Scientific	FAMILY/Common Name	Native
VIOLACEAE		
Viola sp.	Violet	yes
VISCACEAE		
Arceuthobium campylopodum	Golden mistletoe	yes
Phoradendron villosum	Pacific mistletoe	yes
VITACEAE		
Vitis californica	California grape	yes
MONOCOTS		
AGAVACEAE		
Chlorogalum pomeridianum	Soap plant	yes
ALISMATACEAE	WATER PLANTAIN	
Alisma triviale	Western water-plantain	yes
AMARYLLIDACEAE		
Narcissus pseudo-narcissus	Daffodil	no
CYPERACEAE	SEDGE FAMILY	
Eleocharis sp.	Spike rush	yes
HYDROPCHARITACEAE	WATERWEED FAMILY	
Najas guadalupensis	Common water nymph	yes
IRIDACEAE	IRIS FAMILY	
Sisyrinchium bellum	Blue-eyed grass	yes
JUNCACEAE	RUSH FAMILY	
Juncus xiphioides	Iris leaf rush	yes
Luzula comosa	Wood rush	yes
LILIACEAE	LILY FAMILY	
Erythronium multiscapoideum	Sierra fawn lily	yes
POACEAE	GRASS FAMILY	
Agoseris sp.	Dandelion	yes
Aira caryophyllea	Silver hairgrass	no
Avena barbata	Slender wild oat	no*
Bromus diandrus	Ripgut brome	no*
Bromus hordeaceus	Soft cheatgrass	no*
Bromus madritensis	Foxtail chess	no*

FAMILY/Species Name – Scientific	FAMILY/Common Name	Native
Cynodon dactylon	Bermuda Grass	no*
Cynosurus echinatus	Dogtail grass	no*
Dactylis glomerata	Orchard grass	no*
Elymus caput-medusae	Medusa head	no*
Elymus glaucus	Blue wildrye	yes
Festuca perennis	Italian ryegrass	no*
Gastridium phleoides	Nitgrass	no
Hordeum brachyantherum	Meadow barley	yes
Hordeum marinum	Mediterranean barley	no*
Phalaris aquatica	Harding grass	no*
Polypogon monspeliensis	Rabbit's-foot grass	no*

* Indicates species is on Cal-IPC (2006) and/or CDFA (2013) invasive species list.

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Appendix F

Important Habitat Mitigation Plan

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BIOLOGICAL RESOURCES STUDY AND IMPORTANT HABITAT MITIGATION PROGRAM

LIME ROCK VALLEY SPECIFIC PLAN

EL DORADO COUNTY, CALIFORNIA

LSA

May 2014

BIOLOGICAL RESOURCES STUDY AND IMPORTANT HABITAT MITIGATION PROGRAM

LIME ROCK VALLEY SPECIFIC PLAN

EL DORADO COUNTY, CALIFORNIA

Submitted to:

G3 Enterprises, Inc.
502 E Whitemore Avenue
Modesto, California 95358

Prepared by:

LSA Associates, Inc.
157 Park Place
Point Richmond, California 94801
510.236.6810

Project No. GGG1202

LSA

May 2014

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1.0 INTRODUCTION

At the request of the G3 Enterprises, Inc. LSA Associates (LSA) conducted a Biological Resources Study and created an Important Habitat Mitigation Plan to address oak tree impacts and proposed mitigation for the Lime Rock Valley Specific Plan (LRVSP) Project. The 740-acre LRVSP is part of a proposed regional community plan for properties within the El Dorado Hills and Cameron Park communities in the El Dorado Hills area within El Dorado County, California.

1.1 PROJECT LOCATION

The Project is located south of U.S. Highway 50, between the Cambridge Road and Cameron Park interchanges, on the eastern edge of the unincorporated community of El Dorado Hills. The Project is bounded on the north by Cameron Estates, on the east by the Sacramento-Placerville Transportation Corridor, on the south by Royal Equestrian Estates and on the west by the proposed Village of Marble Valley and the E.I.D. Deer Creek Wastewater Treatment Plant (Figures 1 and 2).

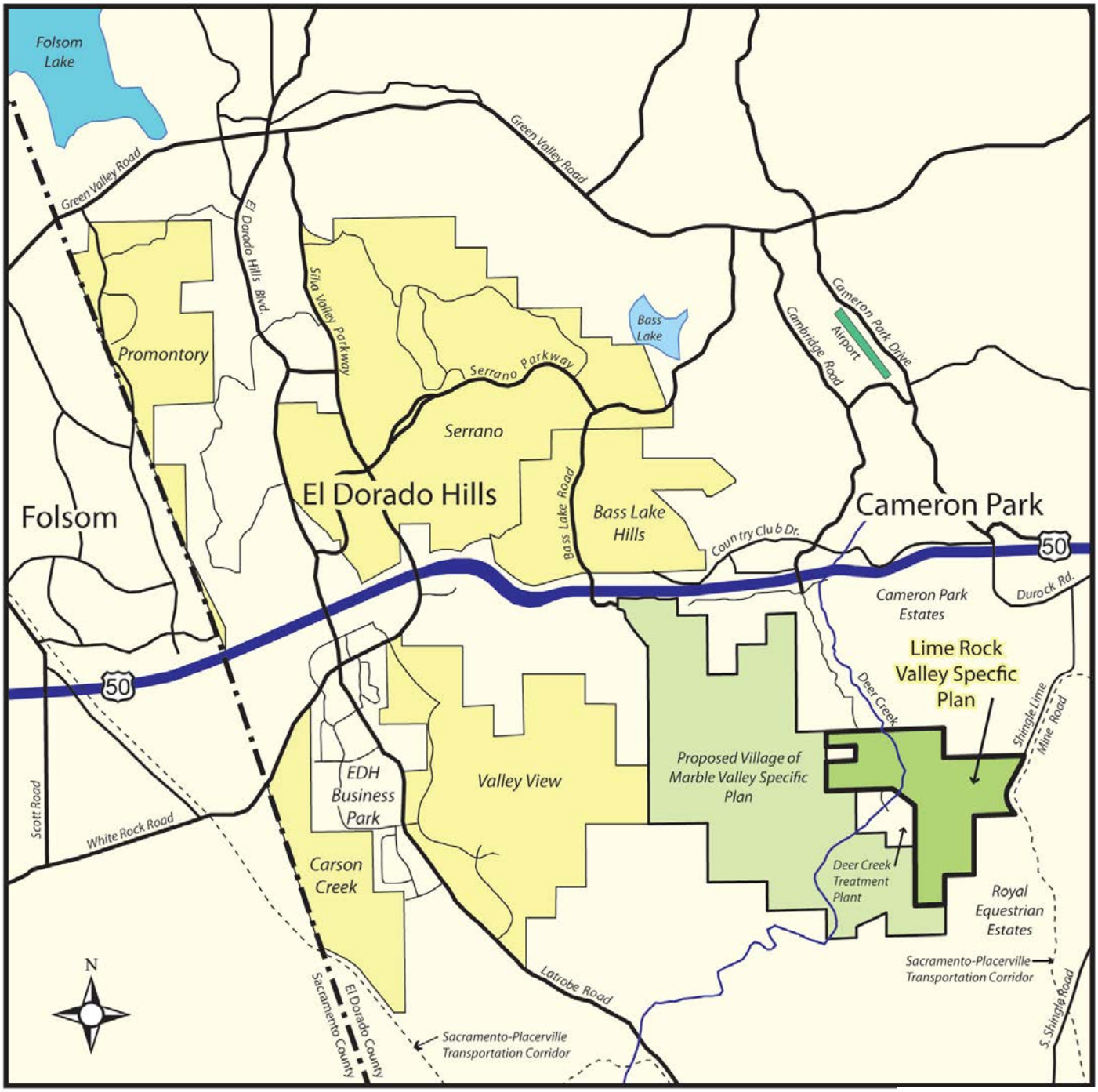
The proposed Development includes 800 dwelling units of low and medium density residential (0.2-8.0 dwelling units per acre) on approximately 360 acres, an 8-acre neighborhood park with recreational amenities, and about 333 acres of public and private open space. The balance of the area, about 39 acres, would comprise roads and rights-of-way. About 45 percent of the site (approximately 333 acres) would be designated as Open Space, with an extensive network of trails interconnecting the proposed land uses (Figure 3).

1.2 EL DORADO COUNTY OAK WOODLAND MITIGATION REQUIREMENTS

Objective 7.4.4 of the El Dorado County General Plan (General Plan) protects Forest and Oak Woodland Resources.

Policy 7.4.4.4 of the General Plan specifies that for new projects that would result in soil disturbance on parcels that are over one acre in size and have at least 1 percent oak woodland canopy cover, two mitigation options are available: Option A) the project shall adhere to the tree canopy retention and replacement standards presented in this policy; or Option B) the project shall contribute to El Dorado County's (County) Integrated Natural Resources Management Plan (INRMP) conservation fund. The use of the Option B fund is not currently available and the applicant for the LRVSP Project is required to follow Option A.

Option A specifies tree canopy retention standards based on the percentage of existing tree canopy present within the Project site. These are as follows:



G3 Enterprises

Figure 1 - Project Location

G3 Enterprises

Figure 2 – Project Vicinity

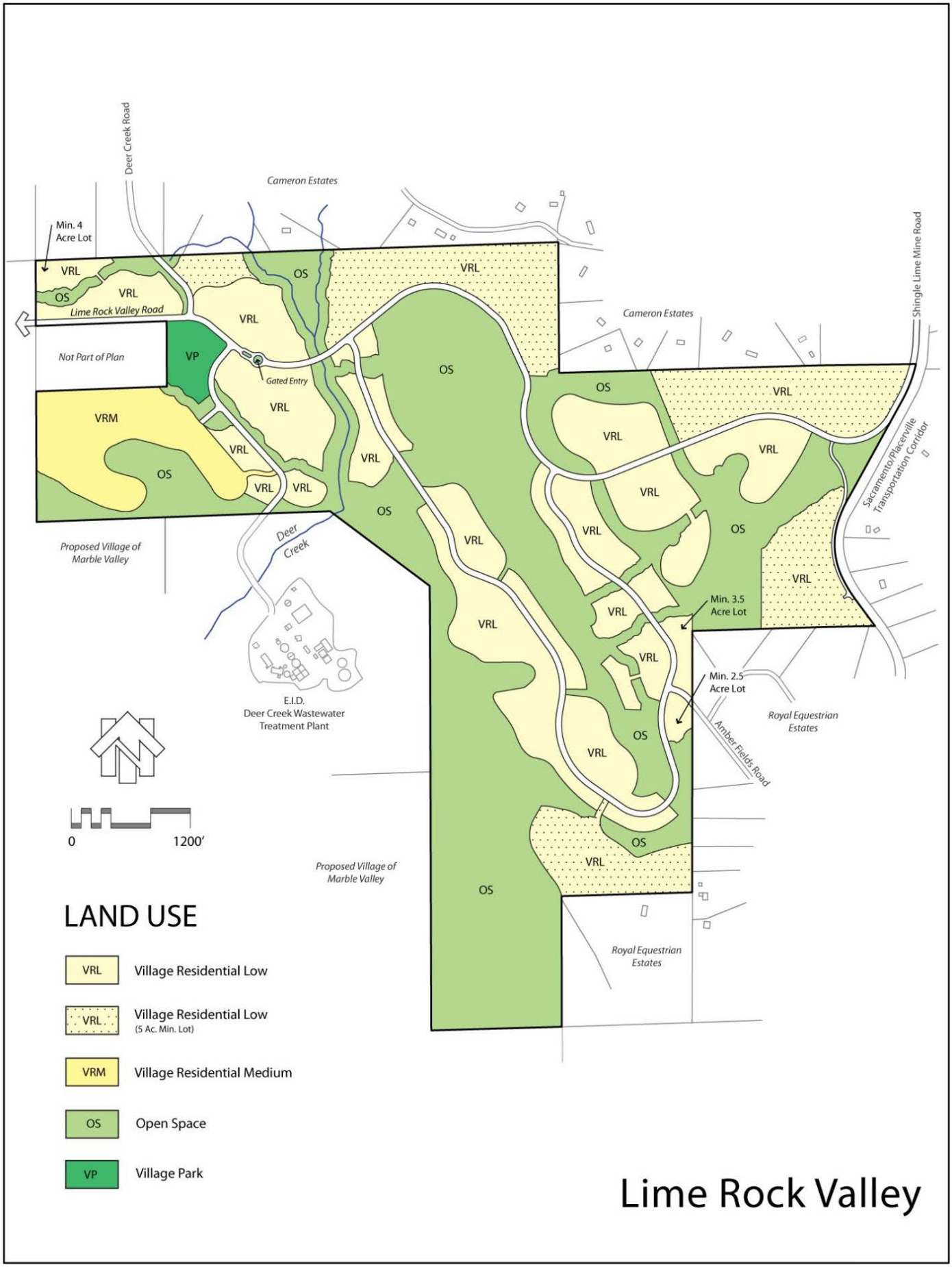


Figure 3 – Land Use Plan

Percentage Existing Canopy Cover	Canopy Cover to be Retained
80-100	60% of existing canopy
60-79	70% of existing canopy
40-59	80% of existing canopy
20-39	85% of existing canopy
10-19	90% of existing canopy
1-9 for parcels > 1 acre	90% of existing canopy

This policy requires that the applicant replace removed oak woodland habitat at a 1:1 ratio (canopy cover removed:canopy cover replaced). The LRVSP site has a total oak woodland canopy cover of 246.6 acres or 34 percent of the site which under this policy requires retention of 85 percent (209.6 ac.) of this canopy cover. Up to 37 acres could be removed.

Option A requires the preparation of a Biological Resources Study and Important Habitat Mitigation Plan, which addresses oak woodland habitat impacts and mitigation. This document addresses both of these requirements.

The Biological Resources Study (Study) portion of this document covers the following:

- Documents the existing oak woodland and oak canopy habitat with the Project;
- Presents proposed impacts to oak canopy with the current proposed land use plan;
- Compares pre- and post-Development canopy cover;
- Discusses the relative importance of the LRVSP oak woodland and oak canopy as habitat for regionally occurring wildlife species and as wildlife corridors; and
- Discusses Project-related impacts on the remaining oak canopy.

The Important Habitat Mitigation Plan (Plan) portion of this document covers the following:

- How the LRVSP will conform to the requirements of General Plan Policy 7.4.4.4 Option A;
- Project avoidance, minimization, and/or compensation for impacts on important oak woodland habitats;
- Recommendations for tree protection during development; and
- Mitigation planting, monitoring, and reporting.

2.0 BIOLOGICAL RESOURCES STUDY

This Study identifies the existing oak woodland and oak canopy resources within the Project. A biological resource survey was conducted on the site, in 2012 and 2013 by LSA, and identified a total oak canopy on the project site of 246.6 acres.

2.1 OAK WOODLAND HABITAT RESOURCES

2.1.1 Vegetation Communities

Vegetation Communities Mapping Methods. Vegetation Communities were mapped based on aerial photo interpretation and field surveys performed by LSA in 2012 and 2013. The vegetation community classification was based on the classification systems presented in Sawyer, Keeler-Wolf and Evens (2009).

Vegetation Communities Mapping Results. Five vegetation communities were mapped within the LRVSP area (Figure 4): annual grassland, oak woodland, whiteleaf manzanita chaparral, valley-foothill riparian woodland and ruderal. The following provides information on the site's oak woodlands.

Oak Woodland. The oak woodland community on the site consists of mixed stands of blue oak and canyon live oak, with scattered valley oak and black oaks. The total area of oak canopy on the site is 246.6 acres. The majority of the blue oak woodland is located on the slopes of the eastern half of the property. Here, the canopy density of blue oak varies such that it ranges from closed canopy with a mixed species assemblage in the understory to a savanna like setting where oaks are scattered throughout the annual grassland. Trees associated with the closed canopy oak woodland community include madrone (*Arbutus menziesii),* foothill pine (*Pinus sabiniana),* interior live oak (*Quercus wislizeni),* blue oak (*Quercus douglasii),* black oak (*Quercus kelloggii),* and canyon live oak (*Quercus chrysolepis).* The understory is dominated by annual grassland species but other species frequently occur including common manzanita (*Arctostaphylos manzanita* subsp. *manzanita*), soap plant (*Chlorogalum pomeridianum* var. *pomeridianum*), miner's lettuce (*Claytonia perfoliata*), poison oak (*Toxicodendron diversilobum*), and Pacific sanicle (*Sanicula crassicaulis*). On occasion this community also intergrades with nearby white leaf manzanita chaparral where associated species include chamise (*Adenostoma fasciculatum),* white leaf manzanita (*Arctostaphylos viscida*), buck brush (*Ceanothus cuneatus)* deerbrush (*C. integerrimus*), and wild rose (*Rosa californica).*

Wildlife expected to use the oak woodlands with an open grass understory (savanna) include several reptile species, such as the western fence lizard (*Sceloporus occidentalis*), southern alligator lizard (*Elgaria multicarinata*), Pacific gopher snake (*Pituophis catenifer*), and Pacific rattlesnake (*Crotalus oreganus*). Birds observed include turkey vulture (*Cathartes aura*), red-tailed hawk (*Buteo jamaicensis*), wild turkey (*Meleagris gallopavo*), mourning dove (*Zenaida*

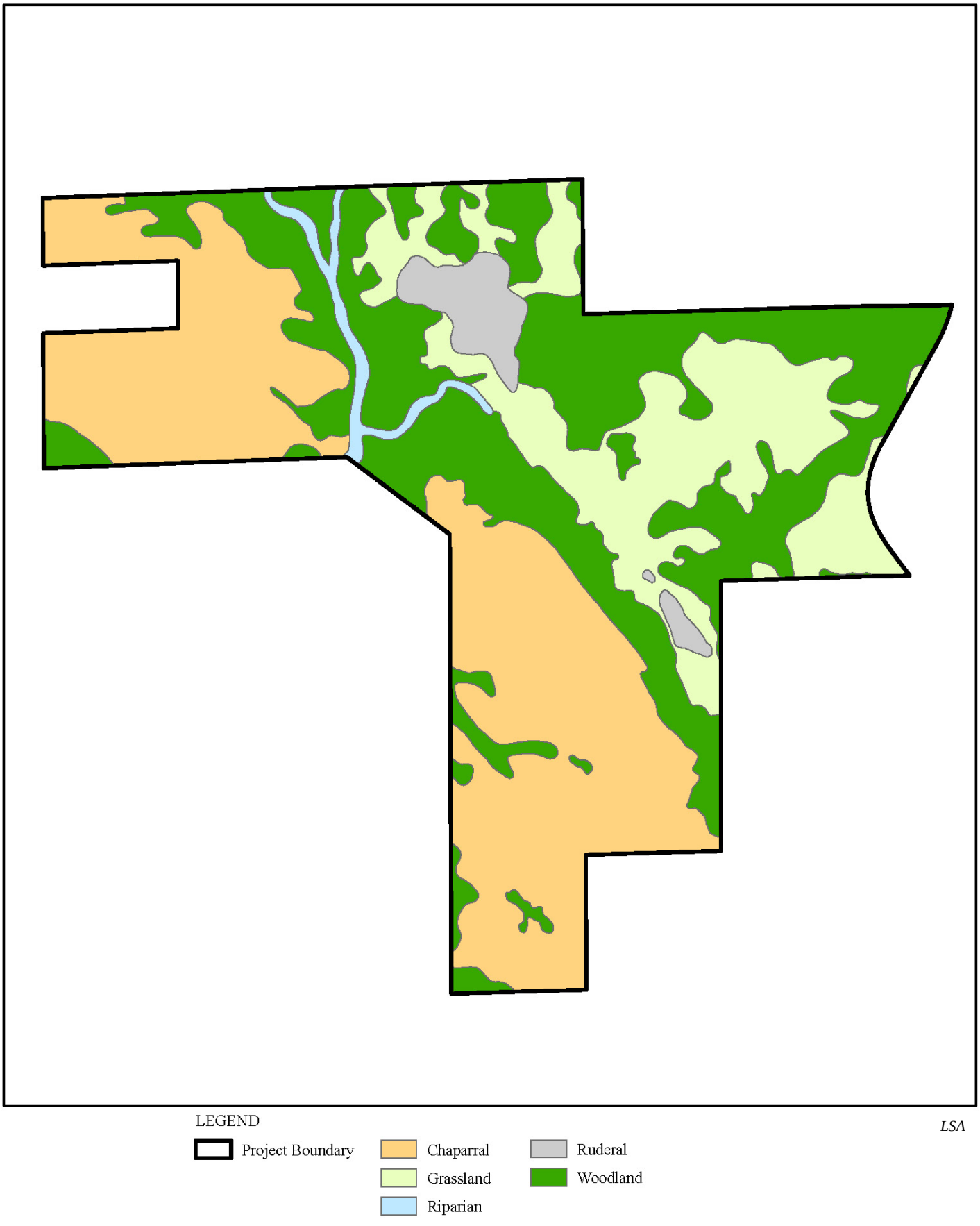


Figure 4 – Vegetation Communities

macroura), and white-crowned sparrow (*Zonotrichia leucophrys*). Common mammals include Botta's pocket gopher (*Thomomys bottae*), California meadow vole (*Microtus californicus*) and black tailed deer (*Odocoileus hemionus*) were observed on the site. Carnivorous mammals expected to occur in this habitat include the coyote (*Canis latrans*), gray fox (*Urocyon cinereoargenteus*), mountain lion (*Felis concolor*) and bobcat (*Lynx rufus*).

A variety of other wildlife species use oak woodlands with greater tree cover. Fallen logs, bark, and leaf litter provide habitat for additional amphibian and reptile species such as California slender salamander (*Batrachoseps attenuatus*), arboreal salamander (*Ensatina eschscholtzii*), and ring-neck snake (*Diadophis punctatus*). The abundant oak trees, both living and dead, provide nest sites for cavity-nesting bird species such as acorn woodpecker (*Melanerpes formicivorus*), Nuttall's woodpecker (Picoides nuttallii), violet-green swallow (*Tachycineta thalassina*), oak titmouse (*Baeolophus inornatus*), white-breasted nuthatch (*Sitta carolinensis*), and western bluebird (*Sialia mexicana*). In addition to the mammal species expected to occur in savanna like areas, oak woodlands also likely support western gray squirrel (*Sciurus griseus*).

2.1.2 Oak Canopy

Oak Canopy Mapping Methods. Oak Canopy was mapped using aerial photography to delineate the oak canopy polygons and ground truthing to confirm polygon boundaries and species identification. These techniques mapped the location and canopy area of native oak trees and other woody vegetation on the project site.

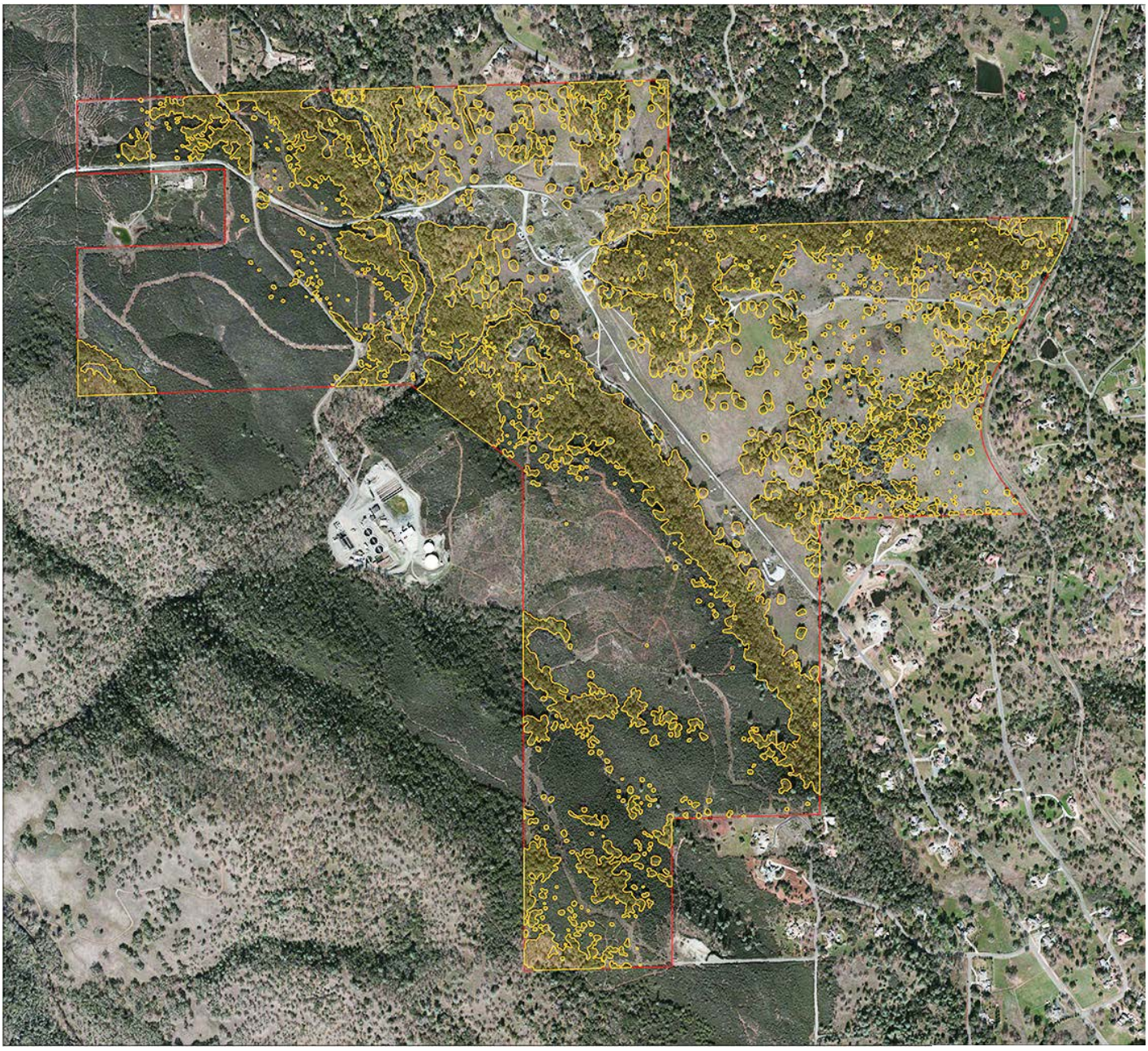
Oak Canopy Mapping Results. The amount of oak woodland canopy on the 740-acre LRVSP, totals 246.6 acres (Figure 5). Oak Canopy comprises 34 percent of the total plant cover on the project site.

2.2 IMPACT ANALYSIS

2.2.1 Oak Canopy Impacts

The proposed LRVSP development footprint includes 121.8 acres of oak canopy, 49 percent of the total 246.6 acres of oak canopy on the site. As described earlier under the County's General Plan Policy 7.4.4.4, the project is required to preserve 85 percent of the site's oak canopy and could impact up to 15 percent (37 acres). The project is preserving 124.8 acres of oak canopy within open space areas. The project will preserve 84.8 acres or more of oak canopy within the proposed development footprint in order to meet this criterion.

Avoidance measures have been incorporated into the various project design elements in order to impact no more than the allowed 15 percent (37 acres) of oak canopy, thereby meeting the requirements of this policy. Depending on the project element within the development footprint (e.g., road, residential lot, park), it is estimated that a certain percentage of oak canopy within each of the proposed land use categories will be retained. The following list includes the proposed land use categories and the target oak canopy retention rates determined for them:



LSA

Figure 5 – Oak Tree Canopy

Target Oak Retention Rate	Land Use Category/Project Element Types
100%	Open Space, Village Park
96%	Residential (5-acre Lots)
90%	Residential (1-acre Lots)
75%	Residential (R10 and R15 Lots)
55%	R15 where Oak Canopy exceeds 15%
0%	Residential (R4 and R6), Roads

Table 1 summarizes the total oak canopy acreage, target retention rate, and impact acreage for different project element types based on the proposed retention rates. Actual retention rates may vary for each of the proposed project elements as development of the Specific Plan progresses, but will not exceed the maximum impact acreage allowed under Option A (37 acres) of Policy 7.4.4.4. If the County amends its oak woodlands retention regulations in the future, prior to project approval, the retention rates contained in this document may be modified.

Table 1: Summary of Approximate Oak Canopy Retention in Project Area

Project Element	**Retention Percentage**	**Total Canopy Acreage**	**Proposed Impact Acreage**
Roads	0%	10.9	10.9
Village Residential Medium (R4-PD)	0%	0.1	0.1
Village Residential Low (R6-PD)	0%	4.6	4.6
Village Residential Low (R15-PD) **Existing canopy greater than 15%*	55%	32	14.2
Village Residential Low (R10-PD)	75%	6.3	1.6
Village Residential Low (R15-PD)	75%	11.2	2.8
Village Residential Low (R1A-PD)	90%	7.9	0.8
Village Residential Low (R5A-PD)	96%	49.1	2.0
Village Park (R15-PD (VP))	100%	0.3	0.0
Open Space (OS1-PD, OS2-PD)	100%	124.2	0.0
TOTAL		**246.6**	**37.0**

After incorporating these retention rates to the oak canopy impact acreages, total project related impact to oak canopy is 37 acres, preserving 209.6 acres which complies with the canopy retention rates stipulated by General Plan Policy 7.4.4.4.

2.3 OAK WOODLAND CORRIDORS

2.3.1 Impacts to Oak Woodland and Corridors within the Lime Rock Valley Specific Plan

The proposed LRVSP project will impact 37 acres (15%) of oak canopy within the Project area. The Project has been designed to avoid large tracts of unfragmented oak woodland and chaparral habitat and preserve wildlife corridors including the entire length of Deer Creek and its associated riparian vegetation on the site. These areas will remain undeveloped to protect habitat for the many wildlife species present and provide the opportunity for wildlife to move freely to adjacent areas. In addition to these larger tracts of undisturbed habitat which also function as corridors, smaller wildlife corridors connect areas of project open space. Along the majority of the northern, eastern and southern edges of the Project site, 5-acre residential estates are proposed. These lots will allow for additional unconstrained wildlife movement to adjacent lands (Figure 6).

The southwestern portion of the Plan Area is a large area of open space that is contiguous with proposed public Open Space on the Villages of Marble Valley project which allows for unimpeded wildlife movement between the two properties.

2.3.2 Post-construction Oak Woodlands

At project completion the project site will continue to contain large areas of oak woodland that are of sufficient size, with adequate connections to adjacent lands, to maintain the quality of the oak woodland habitat and the wildlife it supports. There will be an overall reduction in the amount of available habitat due to the development of natural lands.

As part of project mitigation, oak plantings will occur within identified locations within the Open Space areas and low density residential areas. In addition to the required oak canopy replacement plantings, oaks will be used as landscape species within the development footprint. These trees will provide additional habitat for oak associated wildlife species and additional oak canopy.

2.4 CONCLUSIONS

The LRVSP has been designed to comply with the County's oak retention and replacement standards. Preserved oak woodlands will be protected in an open space network that comprises more than 45 percent of the plan area. The plan also results in the preservation of oak woodland within the development footprint. The project impacts up to 15 percent of the existing oak canopy, preserving intact large stands of mature oak woodlands. Preserved oak woodland habitat is connected by corridors to allow for wildlife movement. The large, intact woodlands will continue to provide suitable habitat for wildlife species that require larger tracts of undisturbed habitat.

The project will mitigate for oak canopy loss by planting new oak trees within on-site open space and low density residential areas. Mitigation measures are discussed in more detail in Section 3.0. Oak plantings as part of project landscaping will provide additional habitat, especially for birds that will use these trees as nesting and/or foraging habitats.

Figure 6 – Wildlife Corridors

3.0 IMPORTANT HABITAT MITIGATION PLAN

This Plan identifies the Mitigation Measures/Best Management Practices that will be used by the Project to avoid or minimize impacts to oak tree resources. It also presents the necessary mitigation measures for oak tree replacement that is required by General Plan policy 7.4.4.4, Option A. Under this policy the project can remove up to 37 acres of oak canopy and is required to replace the amount of canopy removed on a 1:1 basis. All oak canopy replacement will occur on-site.

3.1 POTENTIAL ON-SITE OAK MITIGATION ASSESSMENT

The entire project site was evaluated for the potential for on-site oak planting. This evaluation included overlaying on aerial photos the 740-acre LRVSP area with the current land use plan (Figure 2) and Natural Resources Conservation Service (NRCS) soil map units (Figure 7). This was done to determine the amount of existing grassland/savanna areas that were underlain by soil types suitable for oak establishment that were either in areas proposed as project open space or low density residential.

Field surveys to verify the amount of oak canopy and determine the suitability of potential oak mitigation areas were conducted on September 27 and 28, 2012. As a result of this process 75.5 acres were identified as suitable oak planting areas (Figure 8).

3.2 AVOIDANCE AND MINIMIZATION MEASURES

3.2.1 Conservation Measures

The following measures have been followed in the preparation of the Specific Plan design to minimize impacts to oak woodland habitat.

- No more than 15% (37 acres) of oak woodland canopy will be impacted during Project development.
- 333 acres of Open Space will protect biological resources on and adjacent to the site. This will be accomplished by protecting large blocks of open space, connecting open space areas with viable corridors and locating open space contiguous to Marble Valley open space providing a regionally important open space network.
- The Project has been designed to cluster development to reduce habitat fragmentation.
- Construction activities will be timed to avoid critical time periods for fish and wildlife. When necessary preconstruction surveys will be conducted and avoidance measures implemented to avoid construction impacts to important wildlife resources.
- Where possible, infrastructure elements such as bridges, roads, utilities, and pipelines will be placed within previously disturbed locations to limit disturbance.

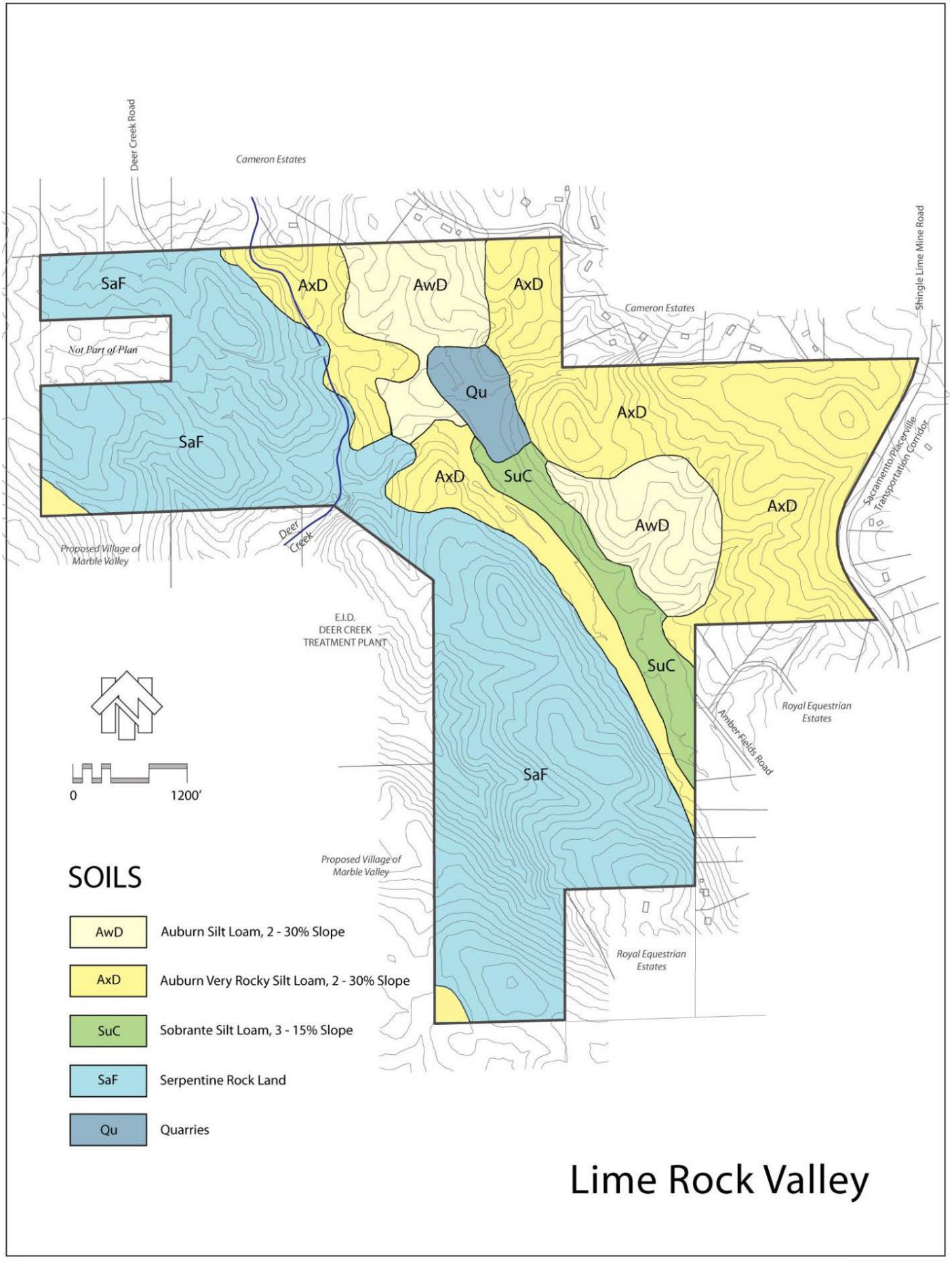
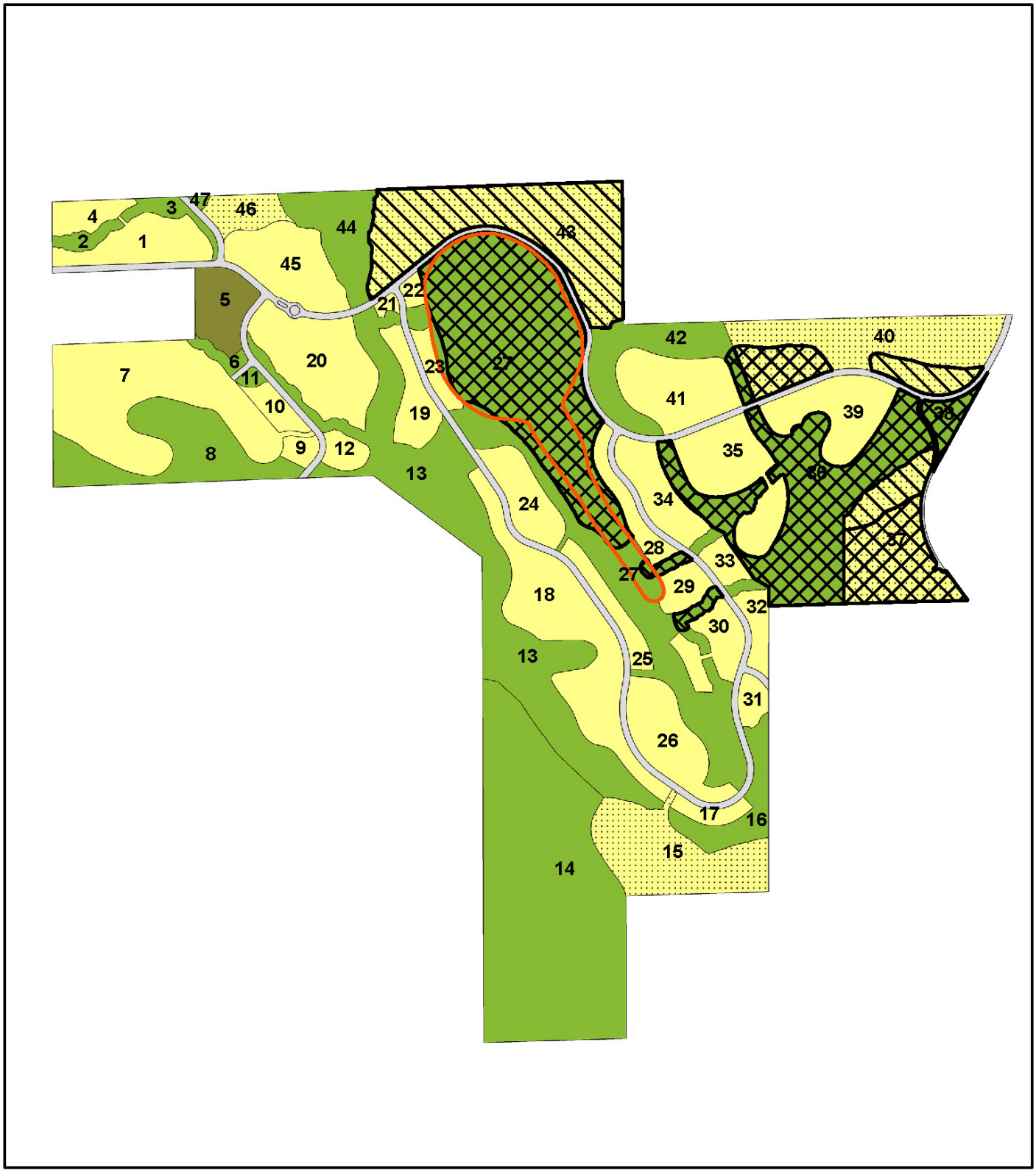


Figure 7 – Soil Types



Legend

LSA

Land Use

- Villlage Residential Low
- Village Residential Low (5 acre min)
- Neighborhood Park
- Open Space
- Road

Oak Woodland Planting Areas

- Potential Planting Area
- Possible Planting Area
- Proposed Mine Setback Area

Figure 8 – Potential Oak Mitigation Areas

- The oak canopy replacement program will include restoration/enhancement of existing oak woodlands to mitigate for the loss of oak canopy.
- Additional planting of oak trees will occur as part of project landscaping.
- Contiguous stands of oak woodland habitat and corridors connecting the stands will be retained (Figure 6).
- Setbacks as required by the County General Plan along perennial (100 feet) and intermittent (50 feet) streams have been provided.
- To reduce impacts of five acre lot development on oak trees Design Guidelines will be established to minimize tree removal and protect remaining trees.

3.2.2 Oak Woodland Habitat Protection Measures

The project plans to retain areas of contiguous oak woodland and corridors linking oak woodland habitats to each other. Areas of preserved oak woodland will be protected from incidental damage during construction by following the tree preservation guidelines presented herein.

Protection Fencing. To protect trees within the oak woodland preserve, tree protection fencing (TPF) will be installed during site preparation under supervision of the project Certified Arborist; prior to the commencement of grading or vegetation clearing. The TPF will be installed at, or outside of, the dripline of protected trees to the extent feasible based on the limits of grading. The TPF should consist of blaze orange barrier fencing supported by metal "T rail" fence posts, or equivalent. The integrity and perimeter of TPF will be maintained during all phases of the construction process and inspected regularly to assure that trees and their growing environment are not harmed. The project Certified Arborist shall be consulted immediately if construction personnel need to alter the limits of the TPF to increase encroachment limits for grading or excavation, otherwise the fence is not to be altered or moved during construction activities.

Oak Woodland Avoidance. The project design has avoided 85 percent or more of the sites oak tree canopy. Construction personnel will not dig, install utility services or irrigation lines, nor use the areas within the limits of the TPF for temporary storage of construction materials, machinery, tools, fuels, or lubricating fluids. Warning signs indicating the purpose of the TPF should be attached to the fence approximately every 100 feet. The signs will be weather resistant and shall read "WARNING – Tree Protection Zone – This fencing shall not be removed or altered without approval of the project's Certified Arborist". The locations of tree preservation areas and tree avoidance measures will be explained to all worksite personnel at training sessions prior to initiating construction activities. Allowable uses are limited to non-harmful activities such as seeking refuge from the sun during work breaks.

Tree Maintenance Prior to and During Construction, Canopy. It may be necessary to perform pruning, cabling, or other forms of tree surgery in the canopy of preserved trees to reduce the hazard of accidental limb failure and to allow the movement of construction machinery. Although specific treatments cannot be anticipated due to the scale (large amount) of the preserved oak woodland, all tree work will conform to the American National Standards Institute best management practices for tree care (ANSI A300). Any impeding or potentially hazardous limbs should be removed using the three cut method as outlined in the ANSI A300 Part 1 - Tree Pruning. It is recommended that a

professional tree company with certified arborists be retained to do this work. If accidental damage of tree trunks and limbs should occur during construction, a professional arborist will be consulted to properly address these types of issues. Tree trimming will not be allowed to be performed by construction personnel.

Tree Maintenance During Construction, Root Zones. Tree roots often extend far beyond the canopy drip line. Excavation work near the oak woodland preserve may encounter and tear roots if not properly exposed and pruned. If large diameter roots (greater than 4 inches in diameter) are encountered during excavation, continue digging with light equipment or by hand to expose and cut roots with a sharp chainsaw blade. Any cut or exposed roots are to be immediately backfilled with soil, or covered with wetted burlap or other protective material to retain root moisture until roots can be buried with soil.

Irrigation. Native trees have evolved to grow with no rainfall during the dry season and summer irrigation can lead to tree mortality. Landscaping that requires summer irrigation is prohibited beneath native oaks. Adjacent landscaped areas should be graded so that drainage is directed away from native oaks and the oak woodland preserve.

3.2.3 Tree Protection Measures within Development Areas

The project will also retain oaks within the development footprint. The El Dorado County General Plan (Policy 7.4.5: Native Vegetation and Landmark Trees) requires preparation of a Tree Survey, Preservation, and Replacement Plan prior to the issuance of a grading permit. These plans will be prepared by project phase. Preserved single trees and groupings of trees (native oaks, separate from the larger areas of preserved oak woodland) will be protected from incidental damage during and after construction by conforming to County guidelines (*Biological Resources Study and Important Habitat Mitigation Program Guidelines*, adopted November 9, 2006). These guidelines present specific measures for safeguarding trees during construction (2.2.2.1) and safeguarding trees after construction (2.2.2.2). These measures are included as Attachment A to this report.

3.3 PROPOSED REVEGETATION AND RESTORATION PLAN

3.3.1 On-site Oak Replacement Area

County General Plan Policy 7.4.4.4, Option A, requires the replacement of oak canopy removed on a 1:1 basis. As previously described, a maximum of 37 acres of oak canopy will be impacted. The project will need to plant and establish 37 acres of new oak canopy. We identified 105.5 acres within the Open Space areas and custom lots as potential oak mitigation sites. Existing oak canopy covers approximately 30 acres of this total resulting in 75.5 acres available for planting. This amount is greater than the amount required (37 acres), so all mitigation for oak woodland impacts can be accomplished on the project site.

In addition to the mitigation plantings required under Option A, the project will plant oak trees within development areas as part of project landscaping that will not be included in fulfilling the project's oak mitigation replacement requirements.

Figure 7 depicts the potential oak mitigation areas. Within these areas, a variety of oak species will be established based on site suitability. Black oak, canyon live oak and interior live oak will primarily be planted along the western edge of the planting areas where these species are already present. Valley oak plantings will primarily be located along the on-site creeks. Blue oaks with some interior live oaks will be planted in the eastern half of the site where blue oak woodland is the dominant woodland type.

Plantings will be made according to the following priority:

- Within designated open space areas outside of the mine setback area.
- Within protected areas on 5 acre lots.
- Within the mine setback area beginning furthest away from the mine entrance.

Planting will only occur in a lower priority area if all available sites for mitigation plantings have been planted and additional planting area is needed.

The mine setback open space area has been identified as the lowest priority for planting due to the potential for loss of the plantings from possible subsidence of the ground surface. The potential for this to occur is greatest near the mine entrance and decreases further away as the depth of the mine increases.

3.3.2 Planting Types and Amounts

Option A requires that the replacement of removed tree canopy shall be at a density of 200 trees/acre or as recommended by a qualified professional. Replacement trees are defined as either a one-gallon seedling (container plant) or three acorns. LSA proposes to primarily use bareroot or container plants. If planting conditions are not suitable for container stock or bare root trees, acorns will be planted (3 planted acorns = 1 planted tree). This plan is based on a density of 200 trees/acre. This density will result in a plant spacing of 10 feet if planted on-center. This will result in the need to plant up to 7,400 oaks. The final amount is dependent on the actual impacted acreage. Tree survey, Preservation and Replacement Plans prepared for each project phase may recommend different planting densities based on recent research and/or project experience with earlier phases.

Two types of plantings will be made; stand augmentation and new stand establishment. Augmentation will occur where existing trees are present but do not form a continuous canopy or there is no recruitment in the understory and plantings will provide replacements as older trees die off. New stand establishment will plant in grassland areas where no trees are currently present.

Timing and Phasing. Mitigation plantings will be timed to occur with project phasing. Plantings will be undertaken after the installation of municipal water service to provide a reliable source of irrigation water. The timing of Specific Plan phasing has not been determined. Oak planting will coincide with the loss of oak woodland habitat so that areas planted will always be equal to or greater than the loss of oak canopy. Prior to the initiation of any phase, a Tree Survey, Preservation and Replacement Plan will be prepared pursuant to County requirements and submitted to the County for review and approval.

The availability of irrigation water is necessary to meet the 90 percent survival rate established by the County. Irrigation will be applied for a minimum of three years after planting during the dry season (May to October) and during the rainfall season (November to April) if periods of three weeks or more with no rainfall occur.

Maintenance. The oak plantings will be maintained during the entire 10-year monitoring period for areas of tree plantings and 15 years for acorn plantings. Maintenance activities will include:

- Weeding the planting basins.
- Insuring any tree protection measures are in place and working as planned.
- Inspecting the irrigation system to insure all trees are being irrigated.
- Maintaining mulch within the planting basins.
- Pruning if necessary.

3.3.3 Irrigation

Irrigation water will be provided by drip irrigation systems. If drip irrigation cannot be provided to a location, plants will be hand-watered.

Irrigation will occur most frequently during the plantings first year and the frequency reduced in years two and three and generally ended after three years. Irrigation after three years will be based on plant performance. All plantings will need to survive for a minimum three year period after the end of irrigation to demonstrate compliance with County survival requirements.

Attachment B contains information on oak tree planting and maintenance. Attachment C contains similar information on acorn harvesting, planting, and maintenance. These Attachments detail installation timing, design, and planting methods.

3.4 MITIGATION MONITORING AND REPORTING

3.4.1 Monitoring Schedule

Each phase of tree planting will be monitored for 10 years and 15 years for acorn plantings. Monitoring of all plantings will be the responsibility of the project developer. Monitoring will consist of regular maintenance visits described previously, semi-annual monitoring visits for two years after planting and annual monitoring visits for years 3 through 10-15. The purpose of the semi-annual/annual monitoring is to assess progress towards meeting the success criteria. The monitoring visits will determine tree survival rates, whether additional plantings are needed, and the rate of tree growth to determine progress towards meeting canopy cover criteria.

3.4.2 Monitoring Methods

To ensure that success criteria are met, and facilitate monitoring, all planted trees and acorns will have a number assigned, their location fixed by GPS and maps produced with the locations of all tree and acorn plantings.

A biologist will sample the mitigation sites, documenting the health and vigor of the trees noting whether they are dead, in poor or good condition. The definitions of poor and good condition are presented below:

> Poor condition - no new growth, or sparse growth, leaves discolored or showing signs of disease, insect damage.
>
> Good condition - new growth, healthy leaves, little evidence of insect damage.

The height of the trees will be measured for the first 5 years, after which, if trees are 10 feet or over, the height measurement will no longer be taken and replaced with a measurement of its canopy diameter.

This measurement will provide information on project progress towards achieving the tree cover success criteria. Tree plantings will be measured 10 years after initial planting and acorn plantings 15 years after initial plantings to ensure that the canopy cover success criteria has been met.

Permanent photo points will be set up at representative planting sites. The photo points will be placed in areas that will document the progress of overall tree growth.

3.4.3 Success Criteria

As required by Option A, after 10 years of management and monitoring, tree survival will be 90 percent or greater than the required number of trees planted. Canopy cover will equal the acreage of oak tree canopy removed by the project, not to exceed 37 acres.

3.4.4 Reporting

Directly after planting is completed at each mitigation site, a report will be prepared which will include (but not be limited to) the following; locations and dates of where and when trees were planted (with GPS locations), who installed the planting, number of trees planted, description of the irrigation system, and what type of browse protection was provided. This report will act as a bench mark and will signal the time for monitoring to officially begin.

Annual reports will be prepared and submitted to the County by December 31 of each monitoring year presenting the results from the past growing season. The report will include the data collected when monitoring, a discussion of the data, and a discussion of the overall condition of the mitigation areas. The document will also report on the progress toward meeting the success criteria and any contingency measures taken during the previous monitoring period. Recommendations for remedial actions and/or modifications proposed for the next growing season will be provided in the Annual Report.

Annual reports will be submitted for 10 to 15 years. The monitoring period will be extended as needed until the success criteria are met. Photographs of each mitigation area will be provided in the annual reports. Photographs will be taken from photo points established when the plants are installed. A map denoting the location of the photo points will be included with the annual report.

3.5 FUNDING

Guaranteed funding for the implementation of the oak planting program will be established in the Tree Survey, Preservation and Replacement Plans that will be prepared for each construction phase of the project. Funding will either be the direct responsibility of the phase developer and guaranteed by posting a bond or similar form of financial guarantee, or by establishing an upfront endowment with sufficient funds to pay for all required work.

3.5.1 Certification

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this Biological Resources Study and Important Habitat Mitigation Program, and that the facts, statements, and information presented herein are true and correct to the best of my knowledge and belief.

Signed: Malcolm J Sproul Dated: 5/12/14

3.6 REPORT AUTHORS

Malcolm J. Sproul, Principal-in-Charge
Linda Aberbom, Restoration Specialist
Tim Milliken, Certified Arborist
David Muth, Field Investigator

ATTACHMENT A

BIOLOGICAL RESOURCES STUDY AND IMPORTANT HABITAT MITIGATION PROGRAM, SECTIONS 2.2.2.1 AND 2.2.2.2

SAFEGUARDING TREES DURING AND AFTER CONSTUCTION

Section 2.2.2.1: Safeguarding Trees During Construction

For the purposes of safeguarding any protected oak, heritage, and landmark trees during construction, the following conditions shall apply:

1. Prior to issuance of a grading or building permit, all oak, heritage, and landmark trees in a construction area shall be inventoried by the owner of such site or by the contractor as to size and location on the site. Such inventory shall be submitted to Planning Services, and field checked by County staff or contract assistance (e.g., a qualified professional) at the applicant's cost to verify the number, size and location of the trees and the adequacy of protective fencing.
2. During grading of any property on which there are oak trees of six (6) inches or greater DBH, the following standards of oversight shall apply:
    a. If grading, cutting or filling is approved for areas within the tree root zone of oaks or within a five (5) foot distance of the tree root zone of an oak to be preserved, the work shall be supervised by a Certified Arborist or other qualified professional. The Arborist or professional shall be responsible for maintaining protective fencing and insuring the oak trees are not damaged by grading related activities. The Arborist or professional shall be paid for by the applicant /developer of the property. The County reserves the right to hire an independent Certified Arborist or qualified professional if it is deemed necessary by the Director of Development Services (or his/her designee) to provide adequate supervision of grading.
    b. b. Grading, cutting and filling on property that has oak trees but which is planned to occur at least five (5) feet beyond the tree root zone of any oak trees of six (6) inches or greater DBH, but within twenty (20) feet of the oak trees, shall not occur unless there is a monitor present to insure that grading occurs in accordance with approved plans and without encroachment into areas within five (5) feet of the tree root zone of any oak tree(s) of six (6) inches or greater DBH. The monitor shall be paid for by the applicant / developer of the property and shall be present during all grading related activities. The County reserves the right to hire an independent monitor if it is deemed necessary by the Director of Development Services (or his/her designee) to provide adequate supervision of grading.
3. Damage to any protected tree during construction shall be immediately reported to Planning Services. The property owner shall be responsible for correcting any damage to protected trees on the property in a manner specified by a Certified Arborist or qualified professional hired by the County at the applicant's cost.
4. Oil, gasoline, chemicals and other construction materials or equipment which might be harmful to trees shall not be stored within the tree root zone.
5. Drains shall be installed according to County specifications so as to avoid harm to the oak trees due to excess watering.
6. Wires, signs and other similar items shall not be attached to the protected trees.
7. The existing ground surface within the tree root zone of any protected tree shall not be cut, filled, compacted, or pared except as permitted by this ordinance. Anticipated exceptions include making allowances to construct planned public improvements such as roads and sidewalks when it is not feasible to design the public improvements in a manner that will avoid encroachment into the tree root zone.

8. No paint thinner, paint, plaster or other liquid or solid excess or waste construction materials or waste water shall be dumped on the ground or into any grate between the tree root zone and the base of the protected trees, or uphill from any protected tree where such substance might reach the roots through a leaching process.
9. A minimum of a 4' tall temporary tree protection fence, of orange standard fencing or of a type and design subject to the approval of Planning Services or a designated representative shall be installed at the outermost edge of the tree root zone to prevent compaction and injury to a tree's surface roots. Once approved, the fences must remain in place throughout the entire construction period and may not be removed without obtaining written authorization from Planning Services.
10. Wherever cuts are made in the ground near the roots of any protected tree, appropriate measures shall be taken to prevent exposed soil from drying out. All cuts within the tree root zone are to be made with hand tools (no backhoes or graders).
11. All root pruning is to be done by hand, or by air knives or water jets under the direction of a Certified Arborist or qualified professional.
12. No person shall store building material or park vehicles or equipment within the tree root zone of any protected tree during development, unless specifically authorized by the County and under the direction of a Certified Arborist or qualified professional.
13. No person shall drive metal stakes into tree trunks or stems or the tree root zone for any purpose other than to support a protected tree.
14. No person shall have an open flame within fifteen feet of the foliar canopy or trunk of a protected tree.
15. Except unless specifically approved by a Certified Arborist, no trenching whatsoever shall be allowed within the tree root zone of protected trees. If it is absolutely necessary to install underground utilities within the tree root zone(s) of a protected tree, the trench shall be either bored or drilled unless the Certified Arborist or qualified professional determines that the trenching can be accomplished without endangering the protected tree.
16. Paving within the tree root zone of protected trees shall be stringently minimized. When it is absolutely necessary, porous material should be used. If Planning Services has reason to believe that construction or development activities may endanger a protected tree, Planning Services may seek professional consultation, at the expense of the applicant seeking to undertake construction or development of the property, to recommend measures necessary to safeguard the tree(s).

Section 2.2.2.2: Safeguarding Trees After Construction

Oak, heritage, and landmark trees required to be kept on a building site and oak trees required to be planted as a condition of construction shall be maintained after completion of construction according to County requirements for the purpose of maintaining or furthering the health of such trees.

Landscaping beneath oak, heritage, and landmark trees may include non-living plant materials such as wood chips, or live landscaping such as drought resistant plants. Solid cobbles, boulders, and gravel are not recommended as resultant heat radiation harms the tree. Planning Services may require that drought resistant landscaping be installed as an alternative to irrigated landscaping where appropriate. All landscaping shall be kept at least four feet away from the trunk of the protected tree. All landscaping shall be subject to the approval of the Director of Development Services.

ATTACHMENT B

OAK WOODLAND CONTAINER/BARE ROOT PLANTING AND MAINTENANCE

OAK WOODLAND CONTAINER/BARE ROOT PLANTING AND MAINTENANCE

Planting Site Preparation and Installation

Planting will be implemented in late fall or early winter after soil and air temperatures have cooled and soil moisture is at an appropriate level for installation of container plants. Locations of planting sites will be marked by the biological monitor. Irrigation will be installed prior to or concurrent with planting. Plants will be installed according to methods outlined below.

Container Plant Stock - Conditions and Maintenance

Native plant material will be propagated from locally collected seed, as available, or obtained from a reputable native plant nursery. Plant materials purchased from a nursery will be grown from local sources.

Container plants will be free of weeds and disease, have well-developed roots and be labeled according to their botanical name. The biological monitor will inspect the plants at the nursery and again when they are delivered to the mitigation site. The biological monitor will reject any or all plants that are of sub-standard quality. Bare root material not planted on the date of delivery to the mitigation site will have their roots protected from drying and will be kept moist at all times.

Container/Bare Root Plant Installation Guidelines

1. Weedy plant material will be scraped away to form a 4-foot by 4-foot-square directly around each planting location.
2. Planting holes will be at least as deep as the root ball and one and a half times as wide. All planting holes will have vertical sides with scarified, roughened surfaces.
3. Planting holes will be watered as needed and the water will be allowed to drain prior to placing the plant into the hole.
4. Plants in containers will be thoroughly irrigated prior to planting.
5. A slow release fertilizer packet or tablet will be placed in the planting hole three to four inches below planted seedlings.
6. Plant containers will be removed from the root ball, and the sides of the root ball scarified or untangled to promote the development of new roots.
7. The plant will be set plumb and braced rigidly in position until planting soil has been tamped solidly around the root ball.
8. Backfill will consist of native soil harvested from the site.
9. A 3-foot diameter watering basin will be installed around each plant. The watering basin will have a 3-inch berm that will retain irrigation and rain water. The crown of the plant will be elevated 1 inch above the final grade within the watering basin.
10. A 4-foot by 4-foot-square of weed control fabric will be laid flush with the cleared ground to control weed growth and retain moisture. The weed control fabric will be secured with at least 8 wire jute net stables.
11. All plants will be irrigated immediately after planting and approximately once every 7 days thereafter, until, and in the opinion of the biological monitor, adequate rainfall occurs to avoid the need for further irrigation until the following dry season.

Browse Protection

Browse protection devices will be required to protect the plantings.

Browse protection hardware will be installed around individual plants according to the following specifications:

1. Deer browse tree devices will be installed around trees at the time of planting. Each device will be constructed as a cylinder of a 4-inch by 4-inch welded or knotted wire that is 4 feet in height and approximately 3 feet in diameter. The larger browse protection device will allow plant growth without requiring device enlargement or replacement. The cage bottom will be buried at least 1 foot below the soil surface and secured with two stakes. The stakes will be 5 feet in length and installed at least 2 feet into the soil.

2. If voles are found to be girdling the trunks, trunk protectors such as ArborGard+ or equivalent will be installed around the trunk or stem and buried 4 inches into the soil. Deer exclusion cages will remain in place around the trunk protectors if they have already been placed around the affected plant.

Browse protection devices will remain in place until the biological monitor authorizes their removal. The biological monitor will make recommendations for the removal of devices as the plantings become established. The biological monitor will inspect the browse protection devices on a regular basis and will report maintenance needs to the contractor.

Irrigation

All container plantings will be equipped with temporary drip systems. Irrigation will be applied during prolonged winter drought periods to supplement any deficiency in rainfall that may occur. Irrigation also will be applied during the dry season, generally between the months of April and September to ensure the successful establishment of the plants.

MAINTENANCE

The plantings will be maintained for a minimum of 10 years following planting to ensure the success of the program. The specific maintenance activities to be implemented throughout the life of the maintenance period are described below.

Weed Removal

Herbaceous weeds competing with the newly planted vegetation will be removed by hand during the first three years after planting from the 4-foot by 4-foot area covered by the weed cloth. In subsequent years weeds will be removed from the immediate vicinity of the trunk (approximately 6" radius).

Plant Replacement

Replacement plants will only be installed in the fall or winter following the planting specifications contained in this document.

Trash Removal

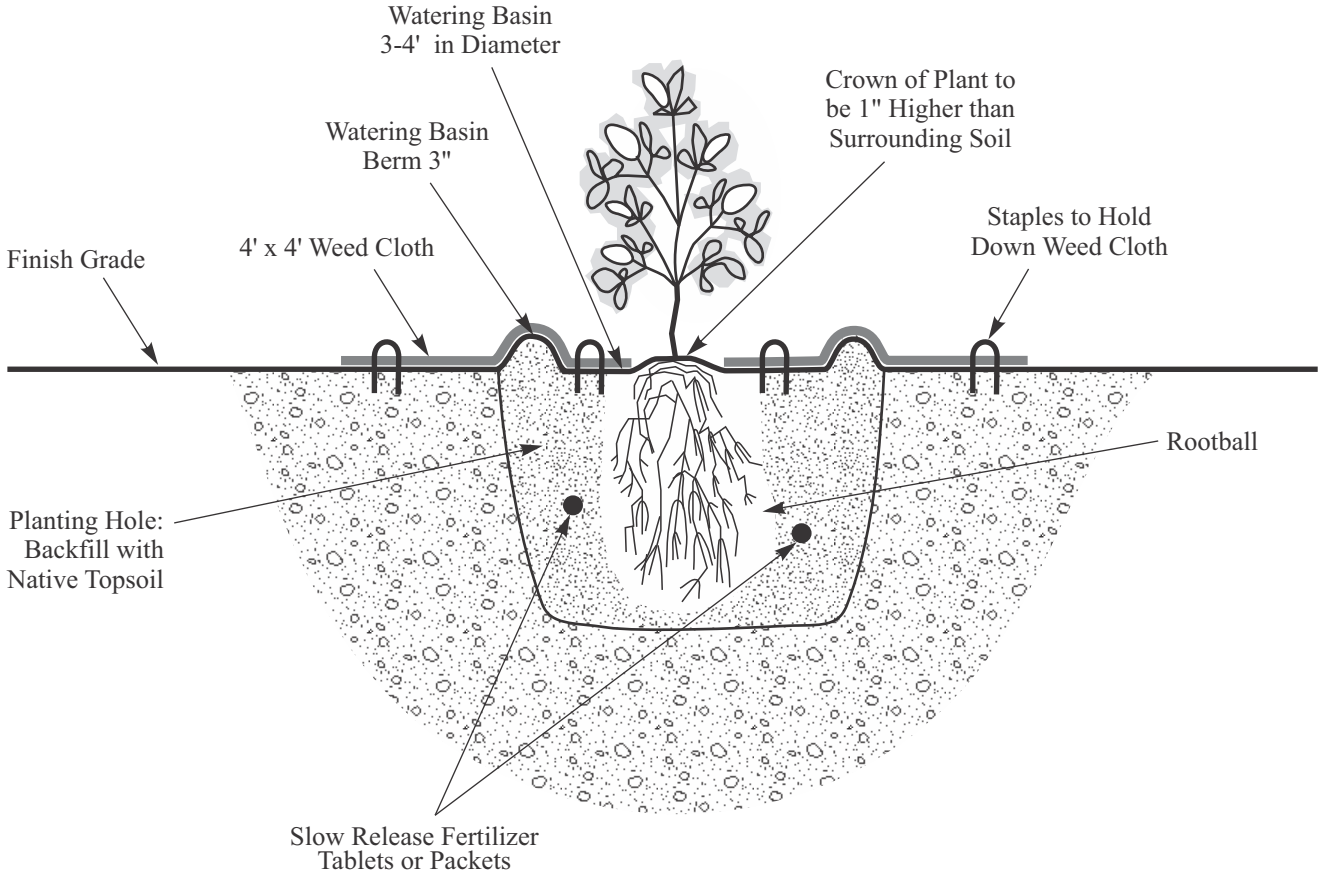
Trash will be removed from the mitigation areas when observed on all monitoring visits.

Irrigation System

At the beginning of each irrigation year, the irrigation system will be inspected to ensure proper functioning during a test irrigation. The system will be spot checked during monitoring and maintenance visits throughout the irrigation year. Any broken or malfunctioning parts of the irrigation system serving a mitigation area will be repaired or replaced upon detection.

Irrigation Applications

The amount and frequency of irrigation will be determined by conducting a test irrigation application in late spring prior to the first irrigation season. The test irrigation will entail monitoring the percolation rate and level of saturation of the soil. Once the soil surface appears saturated, the soil will be augered to the depth of the root zone to determine if water has percolated below the root zone. If not, the process will be repeated until the desired results are achieved. The time required to achieve the goal will determine the duration of each application. The frequency of application will be determined by monitoring the soil moisture content. After the first irrigation application, the landscape contractor and biological monitor will auger the root zone of several plants every three to four days to determine the amount of moisture present. When the soil is relatively dry the irrigation application will be repeated. This will be the frequency of each application.



Planting notes:

1. Planting holes to be dug twice as wide as the rootball.
2. Planting holes to be dug slightly less than the depth of the rootball, do not over-excavate planting holes.
3. Provide 3 to 4 inch berm to retain water.
4. Water in immediately.

LSA

Lime Rock Valley Project

Oak Tree Container
Planting Detail

Not to scale

P:\GGG1202\Linda's work\Oak Tree Container Planting Detail.cdr (04/18/2014)

ATTACHMENT C

OAK WOODLAND ACORN HARVESTING, PLANTING AND MAINTENANCE

OAK WOODLAND ACORN HARVESTING, PLANTING, AND MAINTENANCE

Planting Site Preparation and Installation

Planting will be implemented in late fall or early winter after soil and air temperatures have cooled and soil moisture is at an appropriate level for installation of acorns. Locations of planting sites will be marked by the biological monitor. Irrigation will be installed before or concurrent with planting. Acorns plants will be installed according to methods outlined below.

Acorn Harvesting and Storage

Acorns will be harvested from local sites during the fall when acorns are ripe. Acorns will be placed in plastic bags with moist peat moss and placed in a refrigerator until planting. This method of storing acorns is called seed stratification and is required with acorns as the endocarp is large and fleshy and can desiccate quickly (within weeks of seed drop).

The acorns can be stored in the refrigerator for months. In many cases the radical (primary, stabilizing root) may emerge. If so, the acorn can be planted and grown with great success, however, the radical must be positioned downward and care must be taken to not break the tip. If the radical is more than 3 inches, it is suggested to prune the root tip to so the radical is approximately 2 inches long when planting.

Acorn Planting Guidelines (See Figure)

1. Weedy plant material will be scraped away to form a 4-foot by 4-foot-square directly around each planting location.
2. Planting holes will be 12-inches deep with a 6-inch diameter. All planting holes will have vertical sides with scarified, roughened surfaces.
3. Planting holes will be watered if the soil is dry and the water will be allowed to drain prior to placing acorns into the hole.
4. The planting holes will be filled, prior to placing the acorns, to within 4-5-inches of the finished grade of the site and the soil gently tamped.
5. A slow release fertilizer tablet will be placed in the planting hole, three to four inches below the acorns.
6. Acorns, (2/hole) will be placed on their side and covered with 2 inches of site soil and the soil gently, but firmly tamped.
7. A 3-foot diameter watering basin will be installed around each planting hole. The watering basin will have a 3-inch berm that will retain irrigation and rain water.
8. A planting shelter, tubex or equivalent, with hardware cloth screen secured on the top of the shelter, will be placed around the planted acorns and buried to a depth of 4 inches or more.
9. A 4-foot by 4-foot-square of weed control fabric will be laid flush around the shelter to control weed growth and retain moisture. The weed control fabric will be secured with wire jute net staples.
10. Planting locations will be irrigated immediately after planting.

Irrigation

Acorn plantings will be equipped with temporary drip systems or will be hand watered if an irrigation system cannot be provided. Irrigation will be applied during the dry season, generally between the months of April and September to ensure the successful establishment of the plants. Irrigation may be applied during winter dry periods (three or more weeks without rainfall) to supplement any deficiency in rainfall that occurs.

MAINTENANCE

The planting areas will be maintained for 15 years (acorns) following planting to ensure the success of the program. The specific maintenance activities to be implemented throughout the life of the maintenance period are described below.

Weed Removal

Herbaceous weeds competing with the newly planted acorns will be removed by hand from the 4' x 4' area covered by the weed cloth during the initial establishment periods (three years). Weed growth will be cleared from around the trunks of all trees in remaining years (approximately 6-inch radius).

Trash Removal

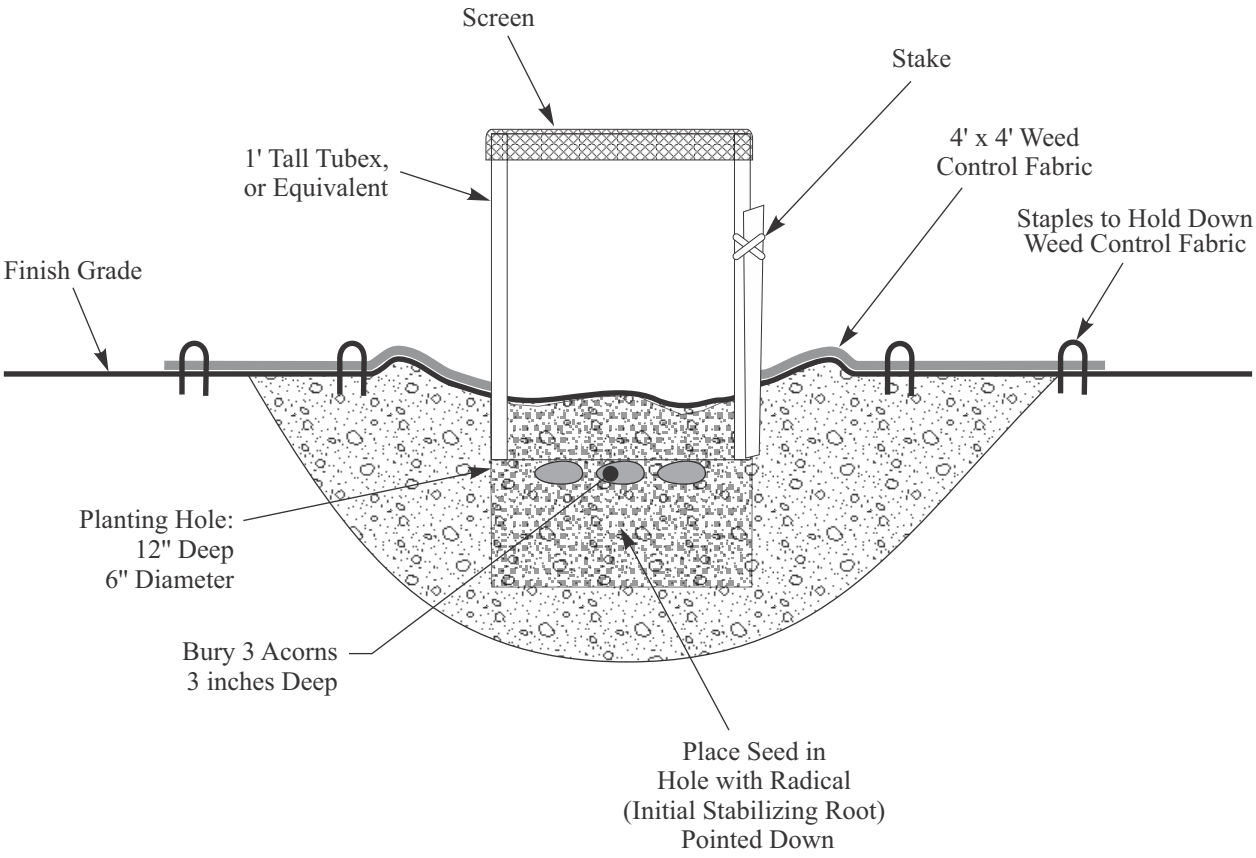
Trash will be removed from the mitigation areas when observed on all monitoring visits.

Irrigation System

At the beginning of each irrigation year, the irrigation system will be inspected to ensure proper functioning during a test irrigation. The system will be spot checked during monitoring and maintenance visits throughout the irrigation year. Any broken or malfunctioning parts of the irrigation system serving a mitigation area will be repaired or replaced upon detection.

Irrigation Applications

The amount and frequency of irrigation will be determined by conducting a test irrigation application in late spring prior to the first irrigation season. The test irrigation will entail monitoring the percolation rate and level of saturation of the soil. Once the soil surface appears saturated, the soil will be augered to the depth of the root zone to determine if water has percolated below the root zone. If not, the process will be repeated until the desired results are achieved. The time required to achieve the goal will determine the duration of each application. The frequency of application will be determined by monitoring the soil moisture content. After the first irrigation application, the landscape contractor and biological monitor will auger the root zone of several plants every three to four days to determine the amount of moisture present. When the soil is relatively dry the irrigation application will be repeated. This will be the frequency of each application.



LSA

Lime Rock Valley Project

Not to scale

Acorn Planting Detail

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Appendix G

Native American Consultation Documentation

DEVELOPMENT SERVICES DEPARTMENT

COUNTY OF EL DORADO **http://www.edcgov.us/devservices**

PLACERVILLE OFFICE:
2850 FAIRLANE COURT PLACERVILLE, CA 95667
BUILDING (530) 621-5315 / (530) 622-1708 FAX
bldgdept@edcgov.us
PLANNING (530) 621-5355 / (530) 642-0508 FAX
planning@edcgov.us

LAKE TAHOE OFFICE:
3368 LAKE TAHOE BLVD. SUITE 302
SOUTH LAKE TAHOE, CA 96150
(530) 573-3330
(530) 542-9082 FAX
tahoebuild@edcgov.us

December 6, 2012

Debbie Pilas-Treadway
Native American Heritage Commission
915 Capitol Mall, Room 364
Sacramento, CA 95814

Re: Sacred Lands Search and contacts for the Lime Rock Valley, Central El Dorado Hills, Village of Marble Valley Specific Plans
File Nos. SP12-0001, SP12-0002, and SP12-0003

Dear Ms. Pilas-Treadway:

I am requesting a sacred lands search to identify the presence of any Native American cultural resources within the project area of each of the proposed specific plans in El Dorado County. I am also requesting a list of Native American contacts for the project area in order to request consultation in compliance with Senate Bill SB18. In the coming months, the County will be initiating the EIR process for these projects. For your reference and review, attached are each of specific plan area exhibits and maps depicting the quadrant identification and township and range (Exhibits A-D).

Your assistance and prompt feedback would be invaluable to this process. Should you have any questions, I can be reached directly at 530-621-5363 or via email at Rommel.Pabalinas@edcgov.us.

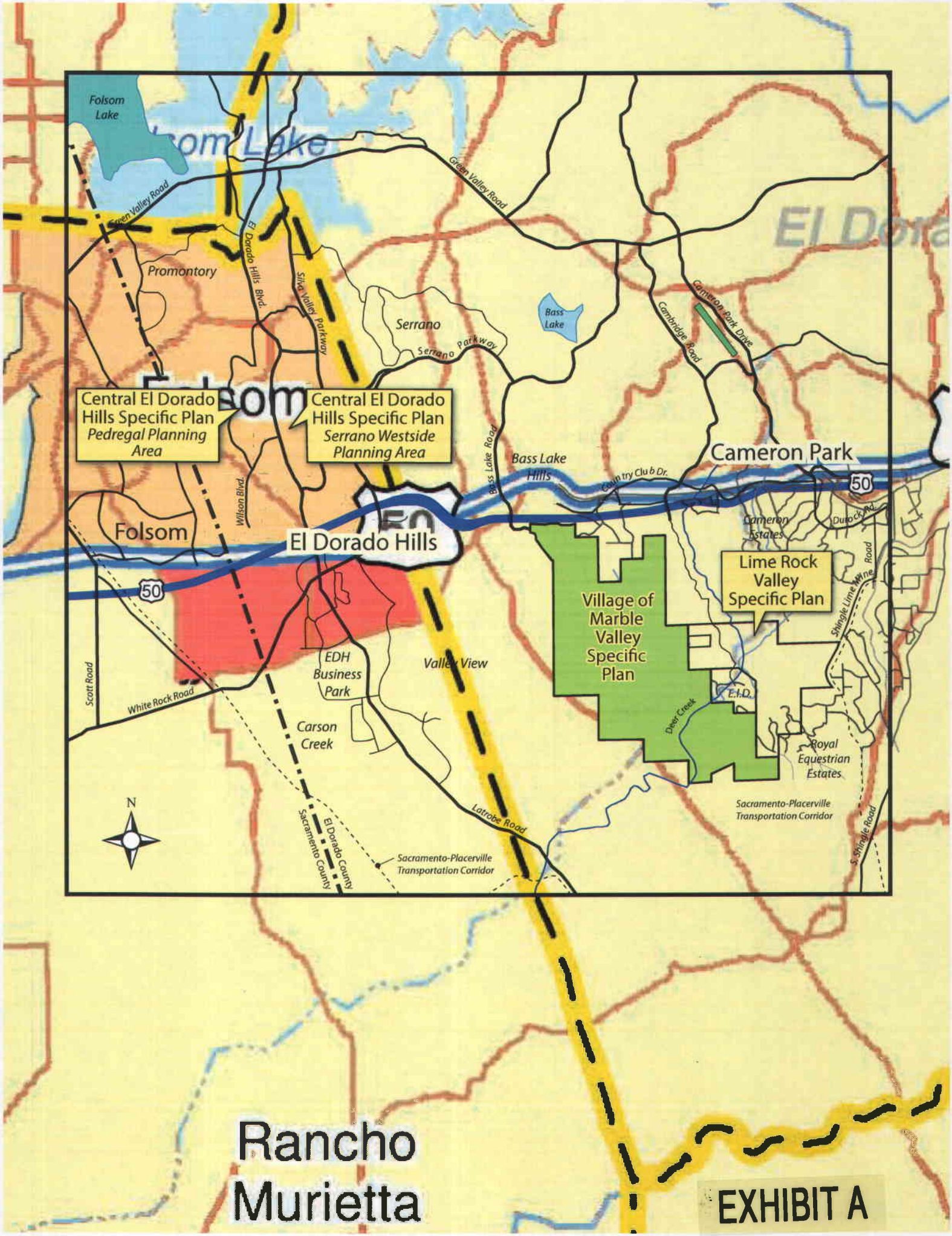
Cordially,

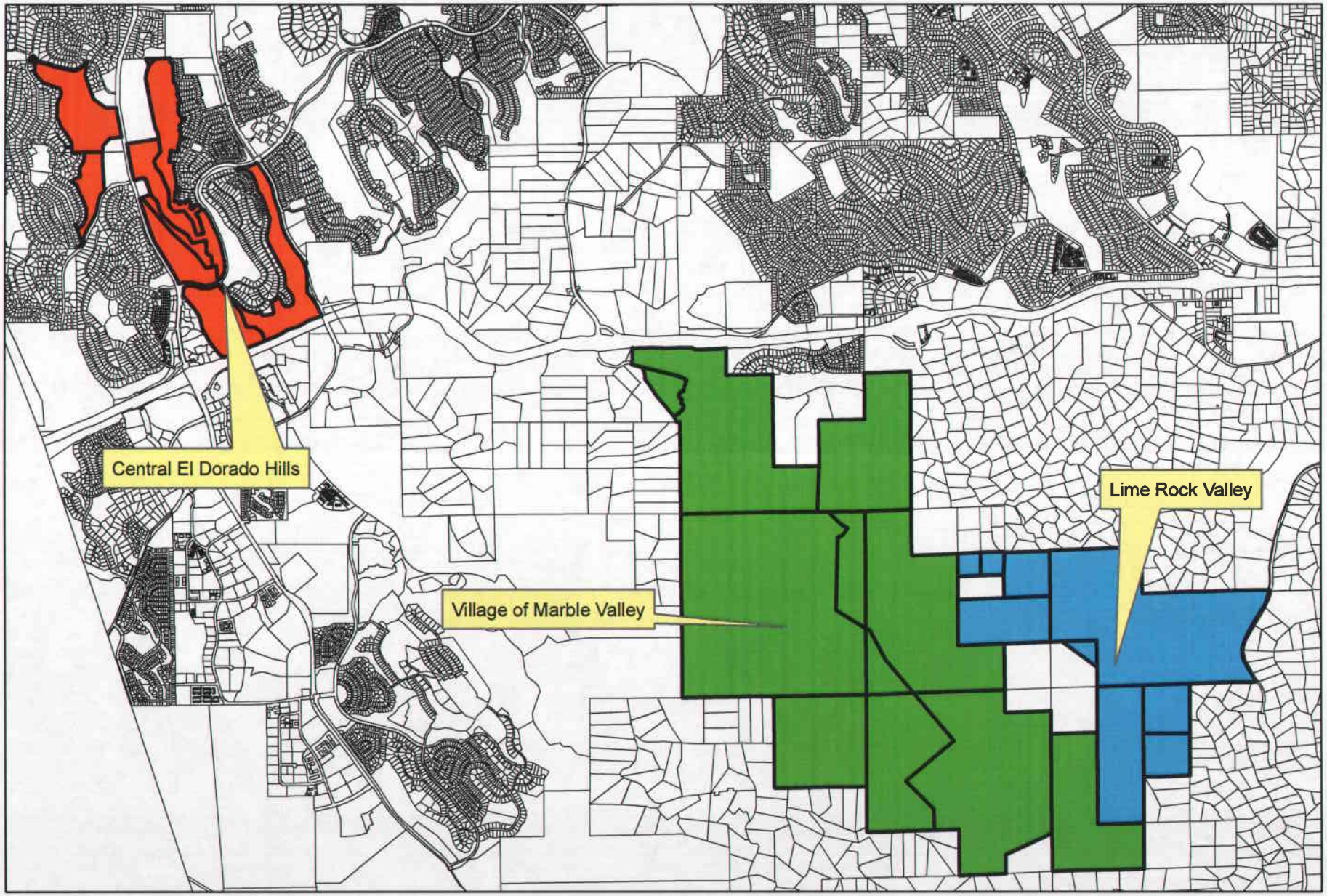
Mel Pabalinas, Senior Planner

Exhibits:

A. Composite Map of Lime Rock Valley, Central El Dorado Hills, Village of Marble Valley Specific Plans
B. Specific Plan- Project Parcels
C. Quadrant, Township, and Range Maps
D. Specific Plan Exhibits

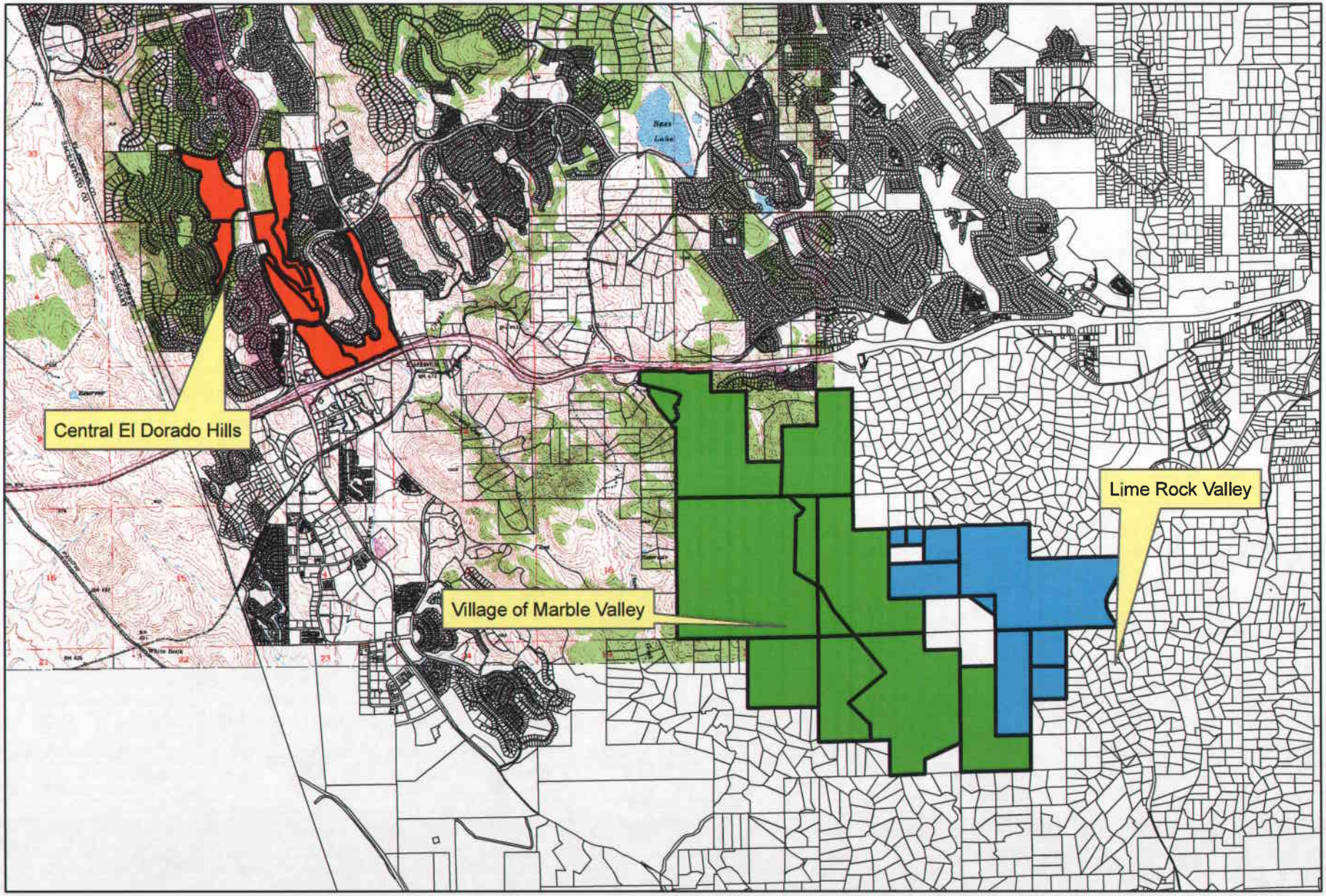
Cc. Project Files


Folsom Lake
Green Valley Road
El Dorado Hills Blvd.
Silva Valley Parkway
Promontory
Serrano
Serrano Parkway
Bass Lake
Cambridge Road
Cameron Park Drive
Central El Dorado Hills Specific Plan
Pedregal Planning Area
Central El Dorado Hills Specific Plan
Serrano Westside Planning Area
Bass Lake Road
Bass Lake Hills
Country Club Dr.
Cameron Park
50
Cameron Estates
Durock Rd.
Folsom
El Dorado Hills
Wilson Blvd.
Lime Rock Valley Specific Plan
Shingle Line Road
Village of Marble Valley Specific Plan
EDH Business Park
Valley View
Scott Road
White Rock Road
Carson Creek
E.I.D.
Deer Creek
Royal Equestrian Estates
Sacramento-Placerville Transportation Corridor
N
Latrobe Road
Sacramento County
El Dorado County
Sacramento-Placerville Transportation Corridor
S. Shingle Road
Rancho Murietta
EXHIBIT A



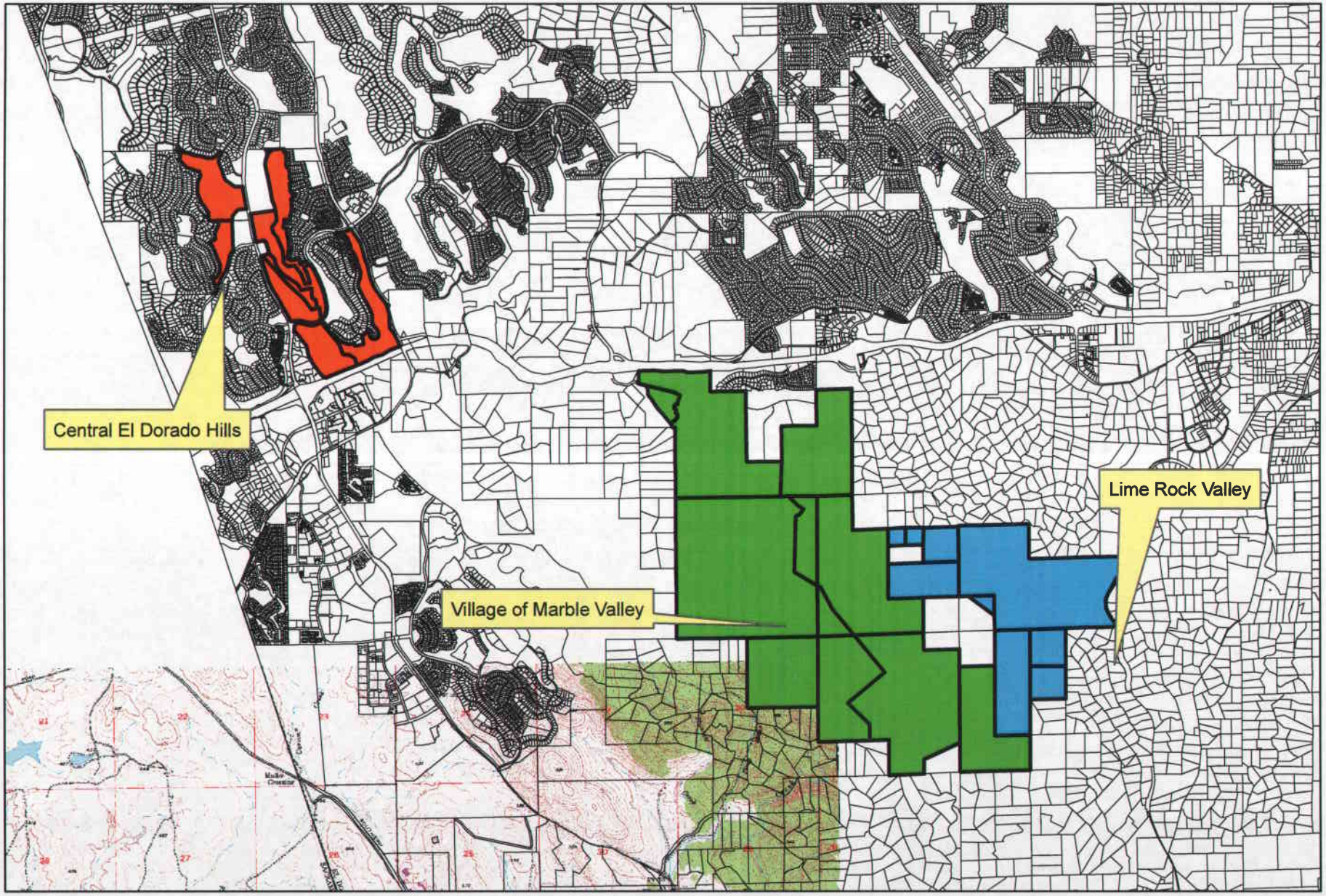
Central El Dorado Hills, Village of Marble Valley and Lime Rock Valley Specific Plans

EXHIBIT B

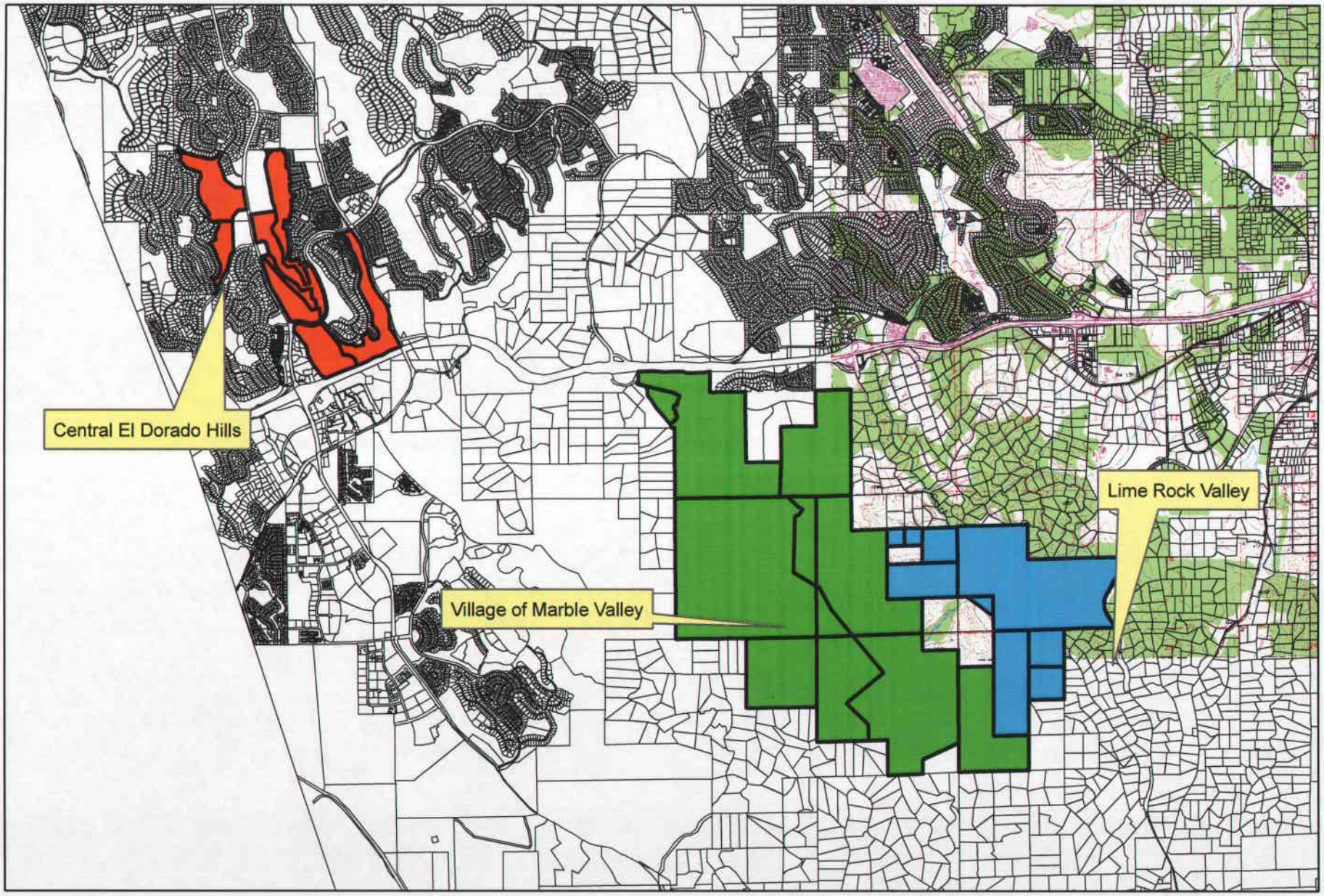


Central El Dorado Hills, Village of Marble Valley and Lime Rock Valley Specific Plans (Clarksville Quadrant)

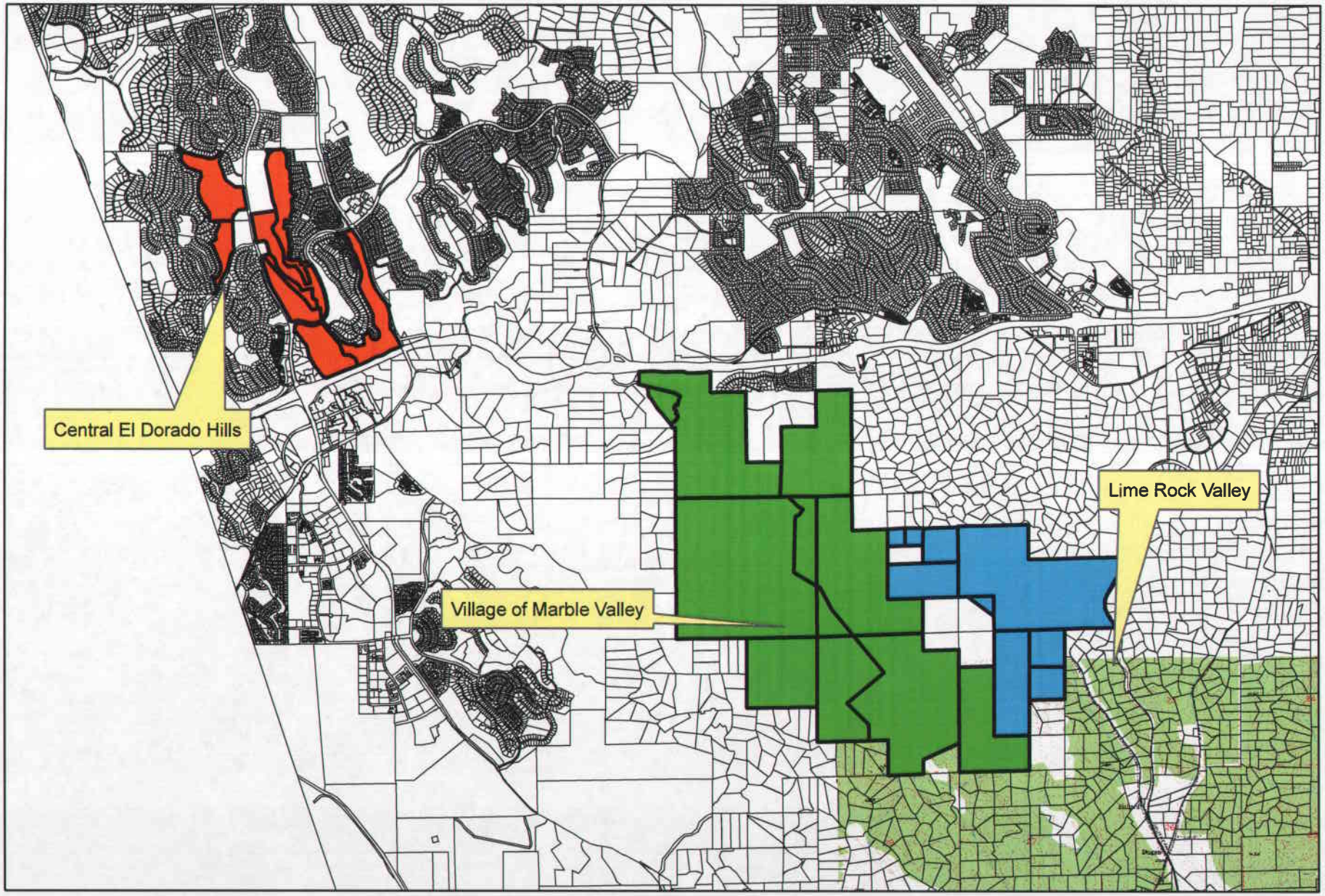
EXHIBIT C



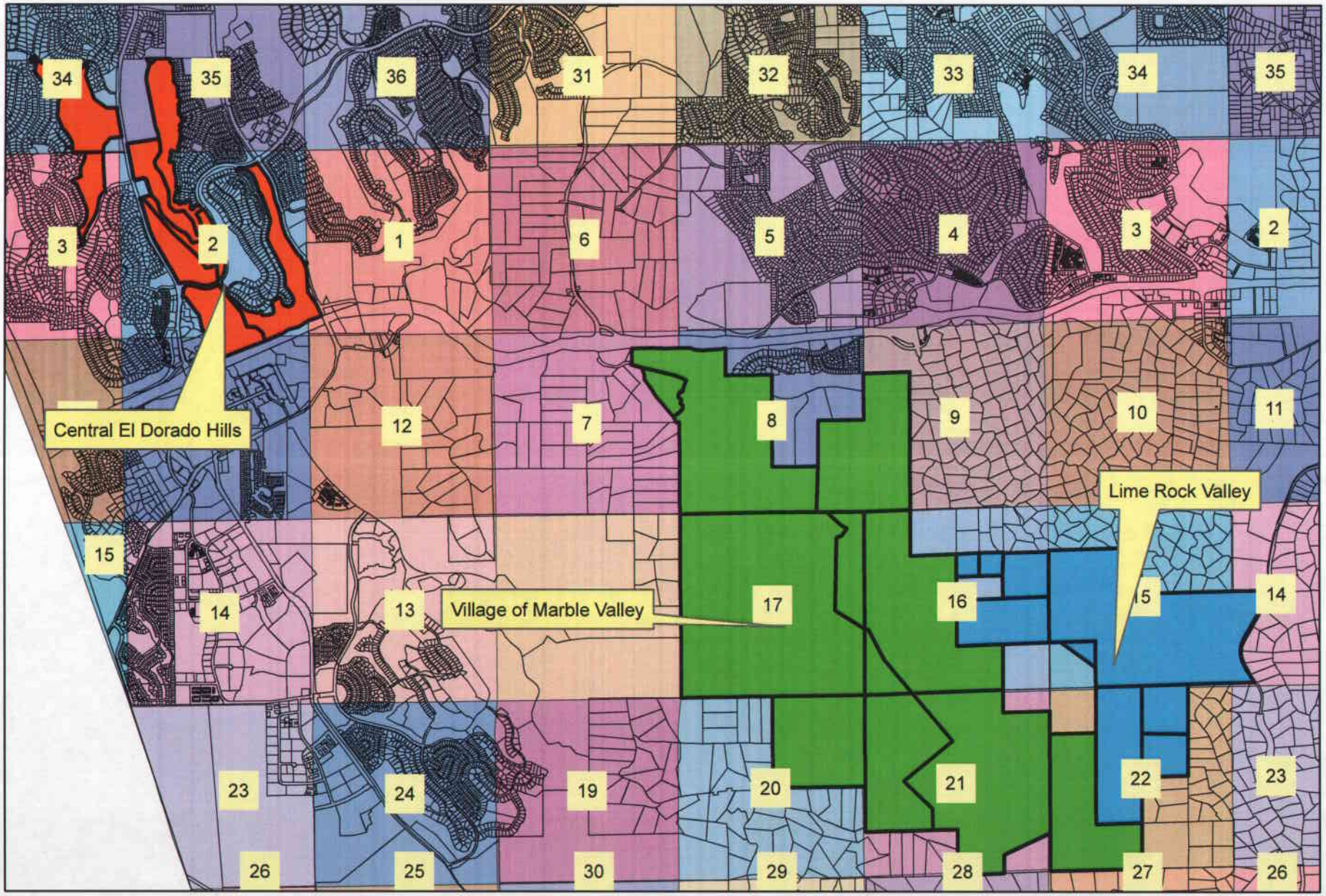
Central El Dorado Hills, Village of Marble Valley and Lime Rock Valley Specific Plans (Folsom SE Quadrant)



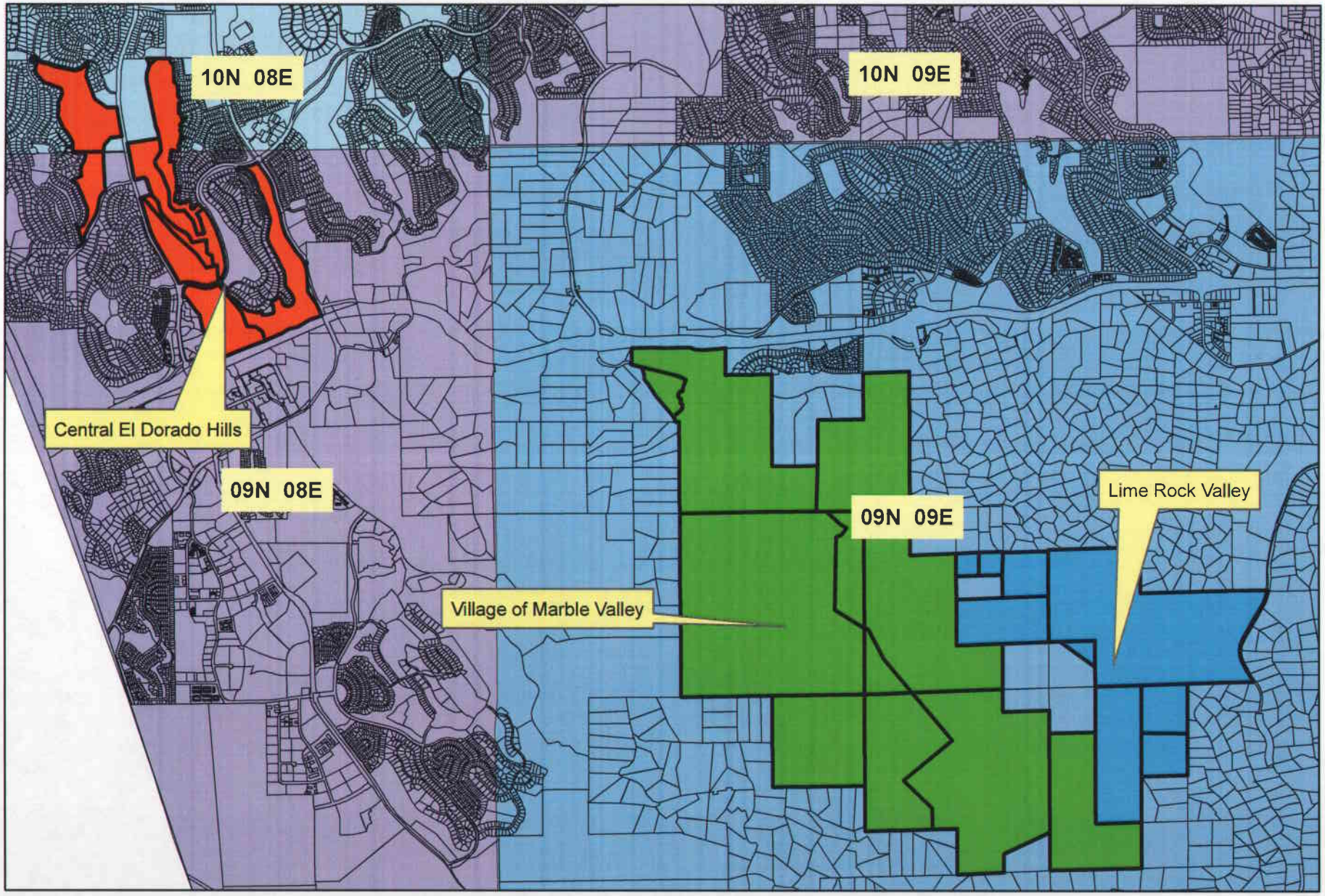
Central El Dorado Hills, Village of Marble Valley and Lime Rock Valley Specific Plans (Shingle Springs Quadrant)



Central El Dorado Hills, Village of Marble Valley and Lime Rock Valley Specific Plans (Latrobe Quadrant)



Central El Dorado Hills, Village of Marble Valley and Lime Rock Valley Specific Plans (Sections)



Central El Dorado Hills, Village of Marble Valley and Lime Rock Valley Specific Plans (Township and Range)

CENTRAL EL DORADO HILLS SPECIFIC PLAN

AERIAL MAP OF PROJECT SITE WITH ADJACENT USES

COUNTY OF EL DORADO, CALIFORNIA

NOVEMBER 2012

0 200' 400' 800'

SCALE IN FEET

925 Sunset Street Suite 200 Folsom, CA 95630
(916) 366-3040 Fax (916) 366-3303
R. E. Y. ENGINEERS, Inc.
Civil Engineers / Land Surveyors

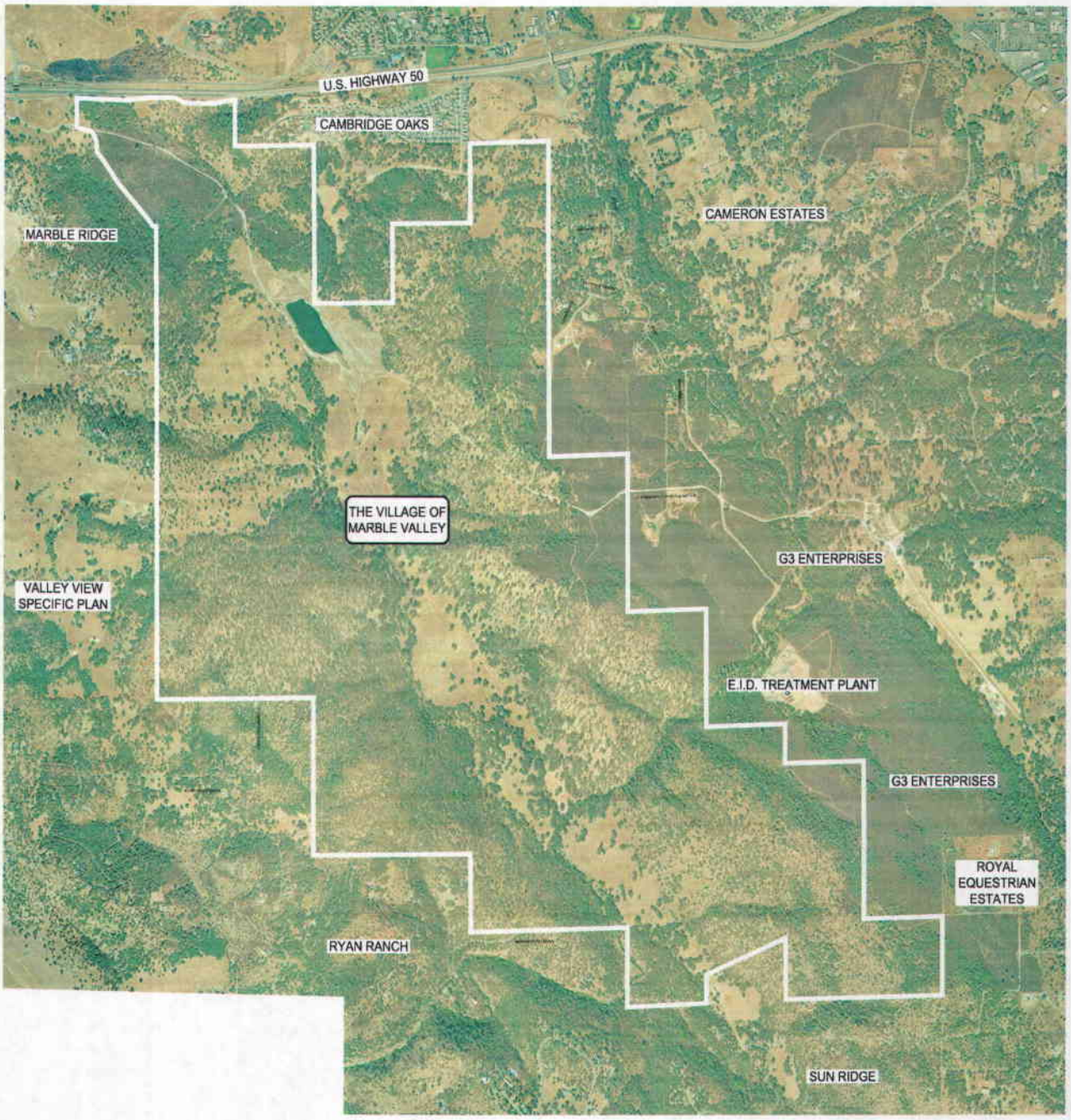
EXHIBIT D

THE VILLAGE OF MARBLE VALLEY SPECIFIC PLAN

AERIAL MAP OF PROJECT SITE WITH ADJACENT USES

COUNTY OF EL DORADO, CALIFORNIA

NOVEMBER 2012



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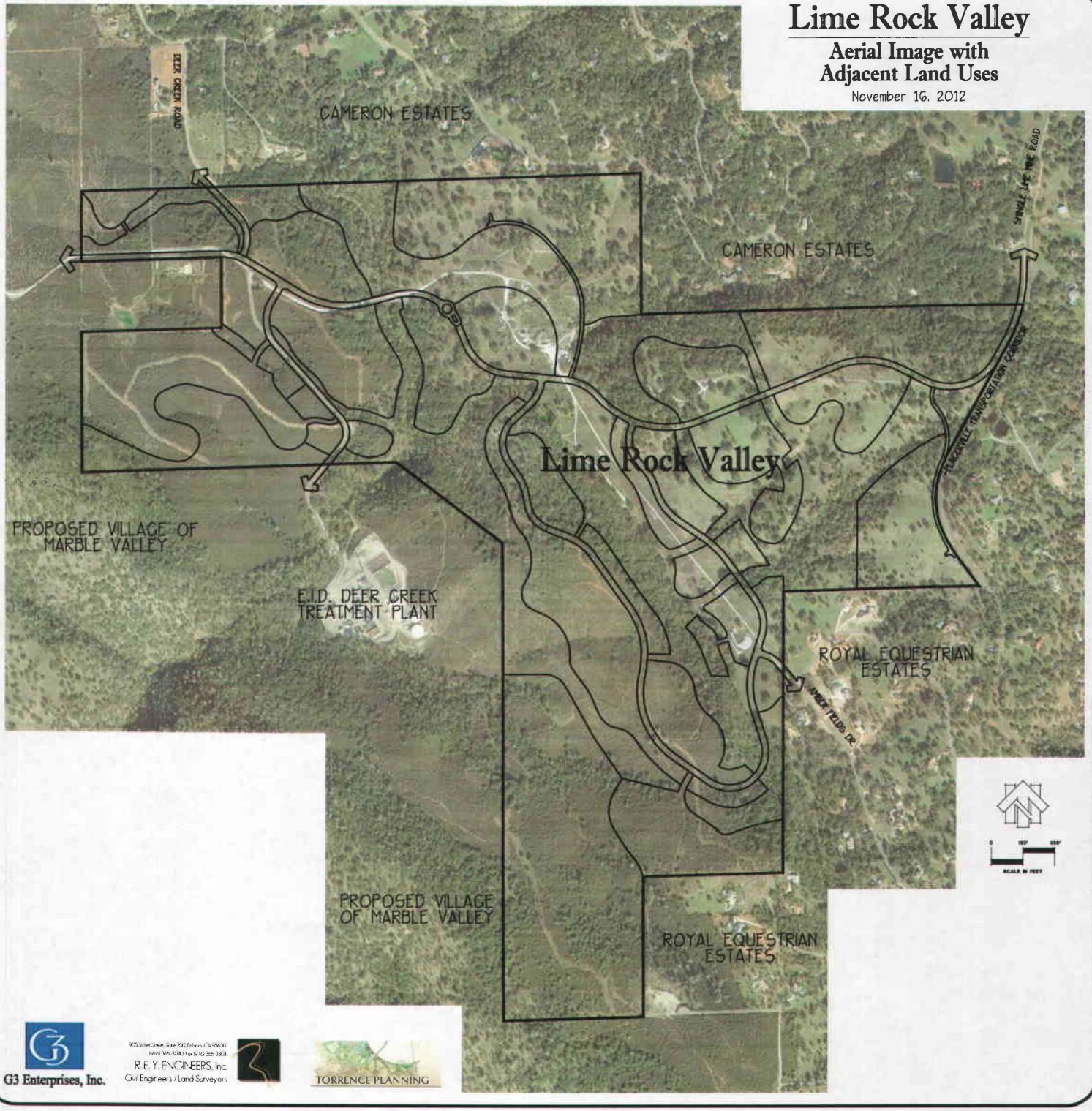
SCALE IN FEET

R.E.Y. ENGINEERS, Inc.
Civil Engineers / Land Surveyors

Lime Rock Valley

Aerial Image with Adjacent Land Uses

November 16, 2012



G3 Enterprises, Inc.

905 Sutter Street, Suite 200 Folsom, CA 95630
(916) 355-1040 Fax (916) 355-1818
R.E.Y. ENGINEERS, Inc.
Civil Engineers / Land Surveyors

TORRENCE PLANNING

Chiu, Bonnie

From: Rommel Pabalinas <rommel.pabalinas@edcgov.us>
Sent: Tuesday, December 11, 2012 3:09 PM
To: nahc@pacbell.net
Cc: Pat Angell; Kent MacDiarmid; Chiu, Bonnie
Subject: Quadrant, Sections, Township for Specific Plans

Dear Ms. Fowler:

Thank you for contacting me. Per your request below are the quadrant, section, township information for the Central El Dorado Hills, Village of Marble Valley, and Lime Rock Valley Specific Plan. The information supplements the correspondence that I sent today and last week. Please let me know should you need any additional information.

Central El Dorado Hills Specific Plan

Quadrant: Clarksville
Sections: 1-3, 11, 34 and 35
Township: 10N 08E and 09N 08E

Village of Marble Valley Specific Plan

Quadrants: Clarksville, Folsom SE, Latrobe and Shingle Springs
Sections: 7-9, 16, 17, 20-22
Township: 09N 09E

Lime Rock Valley Specific Plan

Quadrant: Shingle Springs and Latrobe
Sections: 14-16, 22
Township: 09N 09E

==========

Rommel (Mel) Pabalinas, Senior Planner
El Dorado County Development Services Department
Planning Division
2850 Fairlane Court
Placerville, CA 95667
Main Line 530-621-5355
Direct line 530-621-5363
Fax 530-642-0508

STATE OF CALIFORNIA Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390

January 15, 2013

Mel Pabalinas, Senior Planner
Development Services Department
County of El Dorado

Sent by Fax: 530-642-0508
Number of Pages: 2

RE: SB 18 Tribal Consultation and Sacred Lands File Check for the Lime Rock Valley, Central El Dorado Hills, Village of Marble Valley Specific Plans, File Nos. SP12-0001, SP12-0002, and SP12-0003; El Dorado County

Dear Mr. Pabalinas:

Government Code §65352.3 requires local governments to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose of protecting, and/or mitigating impacts to cultural places. Attached is a consultation list of tribes with traditional lands or cultural places located within the boundaries of the above general plan amendment.

As a part of consultation, the NAHC recommends that local governments conduct record searches through the NAHC and California Historic Resources Information System (CHRIS) to determine if any cultural places are located within the area(s) affected by the proposed action. A record search of the Native American Heritage Commission *Sacred Lands File* indicates the potential of Native American cultural resources in the project vicinity that may be impacted. The site is on the *Shingle Springs* USGS quadrangle (Township 9 north, Range 9 east, section 9). The site is known as the *Boychuk Site.* It is also a recorded archaeological site, number CA-ELD-225. For specific information regarding this site, please contact the Singles Springs Rancheria. The tribe's telephone number is on the attached list. Local governments should also be aware that records maintained by the NAHC and CHRIS is not exhaustive. A tribe may be the only source of information regarding the existence of a cultural place.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance we are able to assure that our consultation list contains current information.

If you have any questions, please contact me at my email address: rw_nahc@pacbell.net.

Sincerely,

Rob Wood
Associate Government Program Analyst

TRIBAL CONSULTATION LIST
El Dorado County
January 15, 2013

Wilton Rancheria
Andrew Franklin, Chairperson
9300 W. Stockton, Suite Miwok
Elk Grove , CA 95758
916-683-6000

Shingle Springs Band of Miwok Indians
Nicholas Fonseca, Chairperson
P.O. Box 1340 Miwok
Shingle Springs, CA 95682 Maidu
nfonseca@ssband.org
(530) 676-8010

United Auburn Indian Community of the Auburn Rancheria
David Keyser, Chairperson
10720 Indian Hill Road Maidu
Auburn , CA 95603 Miwok
530-883-2390

Nashville-El Dorado Miwok
Cosme Valdez, Interim Chief Executive Officer
PO Box 580986 Miwok
Elk Grove , CA 95758
valdezcom@comcast.net
916-429-8047 voice

Ione Band of Miwok Indians
Yvonne Miller, Chairperson
PO Box 699 Miwok
Plymouth , CA 95669
(209) 274-6753

T'Si-akim Maidu
Grayson Coney, Cultural Director
P.O. Box 1316 Maidu
Colfax , CA 95713
akimmaidu@att.net
(530) 383-7234

Buena Vista Rancheria
Rhonda Morningstar Pope, Chairperson
1418 20th Street, Suite 200 Me-Wuk / Miwok
Sacramento , CA 95811
rhonda@buenavistatribe.com
916 491-0011

T si-Akim Maidu
Eileen Moon,Vice Chairperson
1239 East Main St. Maidu
Grass Valley, CA 95945
530-274-7497

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is applicable only for consultation with Native American tribes under Government Code Section 65352.3. Lime Rock Valley, Central El Dorado Hills, Village of Marble Valley Specific Plans, File NOS. SP12-0001, SP12-0002, and SP12-0003, El Dorado Co.

Wilton Rancheria
9300 W. Stockton Blvd., Suite 200
Elk Grove, CA 95758
Ph: (916) 683-6000
Fax: (916) 683-6015

March 15, 2013

To: Mel Pabalinas, Senior Planner

Development Services Department

County of El Dorado

2850 Fairlane Court

Placerville, CA 95667

Re: SB 18 Tribal Consultation for the Lime Rock Valley Specific Plan

Project File No. SP12-0003

Dear Mr. Pabalinas:

Thank you for your letter regarding the above named project. Wilton Rancheria is comprised of Miwok people whose ancestral territory spans are within El Dorado and surrounding Counties. Wilton Rancheria is concerned about development within its ancestral territory that has potential to impact the lifeways, traditional cultural properties and landscapes that may be of sacred or ceremonial significance. We appreciate the opportunity to comment on this and other projects in your jurisdiction.

To determine whether or not the project could affect cultural resources that may be of importance to Wilton Rancheria, we would like to receive copies of any completed record searches and or archeological, cultural and environmental surveys that have been, or will be, completed for the project. The information gathered will provide us with a better understanding of the project and cultural resources on site and is invaluable for consultation purposes.

Thank you again for taking these matters into consideration, please contact Steven Hutchason, Director of Cultural Rights Protection, at (916) 683-6000 or email at shutchason@wiltonrancheria-nsn.gov if you have any questions.

Sincerely,

Steven Hutchason, Director Cultural Rights Protection
Cc: Roger Trout

DEVELOPMENT SERVICES DEPARTMENT

COUNTY OF EL DORADO **http://www.edcgov.us/devservices**

PLACERVILLE OFFICE:
2850 FAIRLANE COURT PLACERVILLE, CA 95667
BUILDING (530) 621-5315 / (530) 622-1708 FAX
bldgdept@edcgov.us
PLANNING (530) 621-5355 / (530) 642-0508 FAX
planning@edcgov.us

LAKE TAHOE OFFICE:
3368 LAKE TAHOE BLVD. SUITE 302
SOUTH LAKE TAHOE, CA 96150
(530) 573-3330
(530) 542-9082 FAX
tahoebuild@edcgov.us

December 6, 2012

Debbie Pilas-Treadway
Native American Heritage Commission
915 Capitol Mall, Room 364
Sacramento, CA 95814

Re: Sacred Lands Search and contacts for the Lime Rock Valley, Central El Dorado Hills, Village of Marble Valley Specific Plans
File Nos. SP12-0001, SP12-0002, and SP12-0003

Dear Ms. Pilas-Treadway:

I am requesting a sacred lands search to identify the presence of any Native American cultural resources within the project area of each of the proposed specific plans in El Dorado County. I am also requesting a list of Native American contacts for the project area in order to request consultation in compliance with Senate Bill SB18. In the coming months, the County will be initiating the EIR process for these projects. For your reference and review, attached are each of specific plan area exhibits and maps depicting the quadrant identification and township and range (Exhibits A-D).

Your assistance and prompt feedback would be invaluable to this process. Should you have any questions, I can be reached directly at 530-621-5363 or via email at Rommel.Pabalinas@edcgov.us.

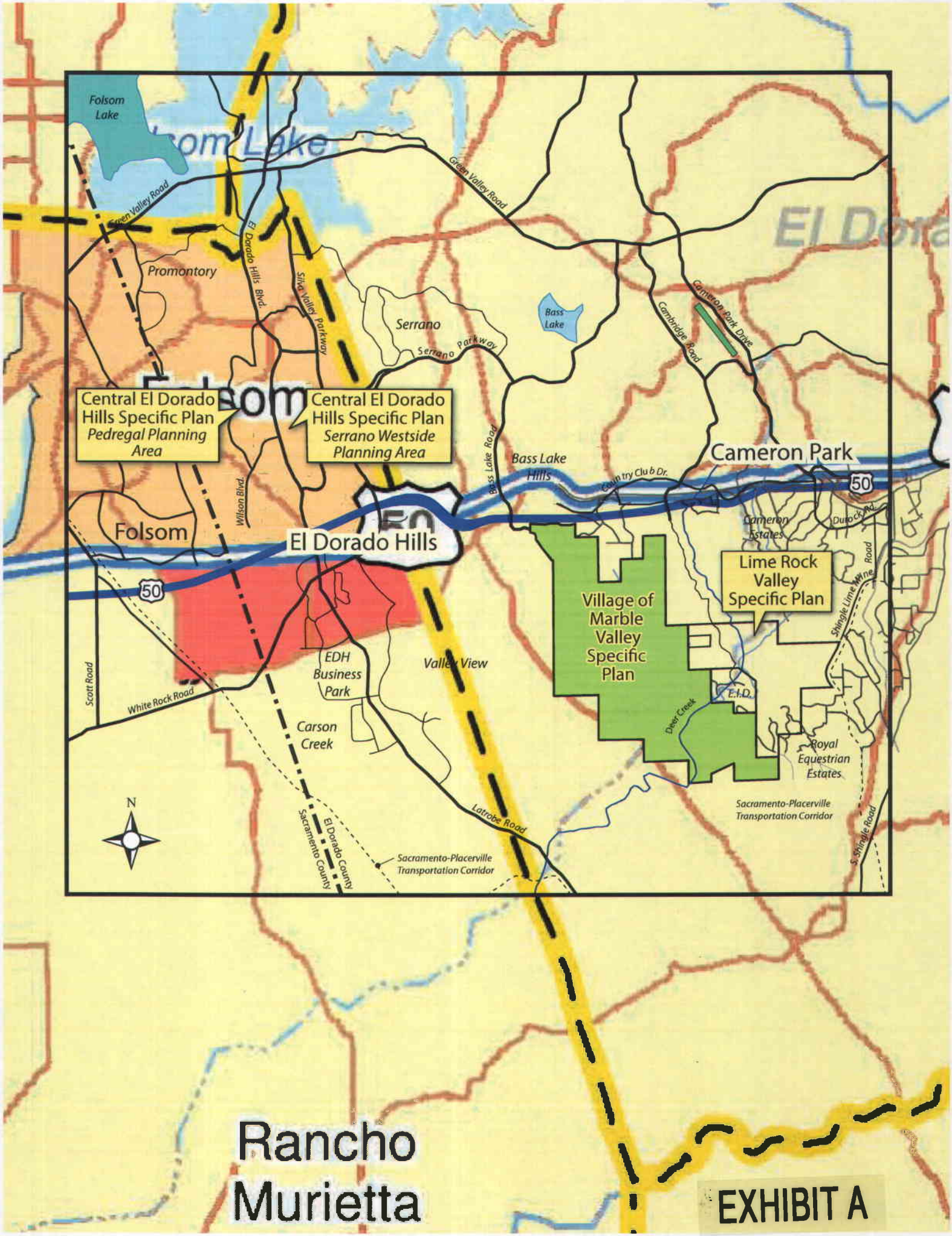
Cordially,

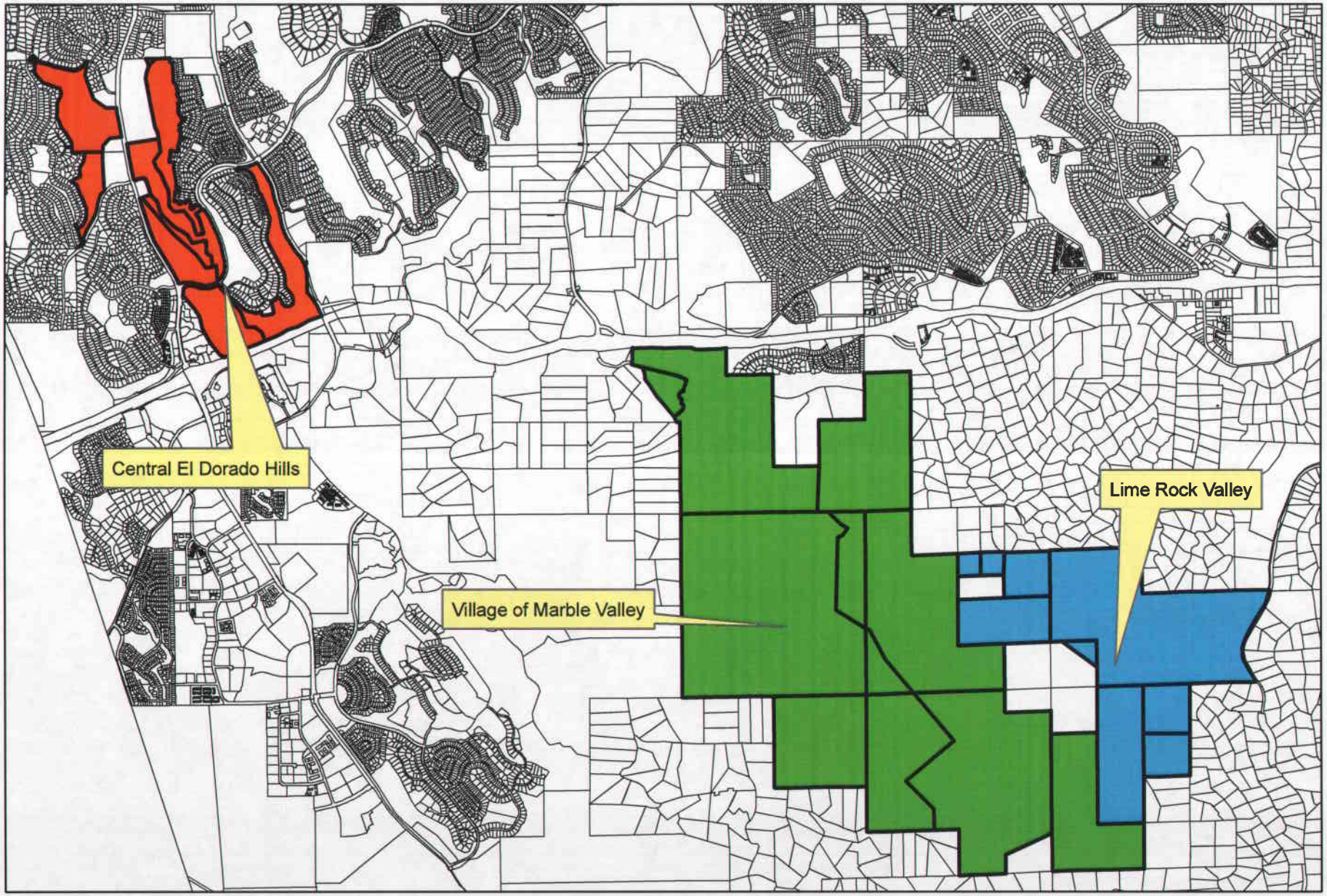
Mel Pabalinas, Senior Planner

Exhibits:

A. Composite Map of Lime Rock Valley, Central El Dorado Hills, Village of Marble Valley Specific Plans
B. Specific Plan- Project Parcels
C. Quadrant, Township, and Range Maps
D. Specific Plan Exhibits

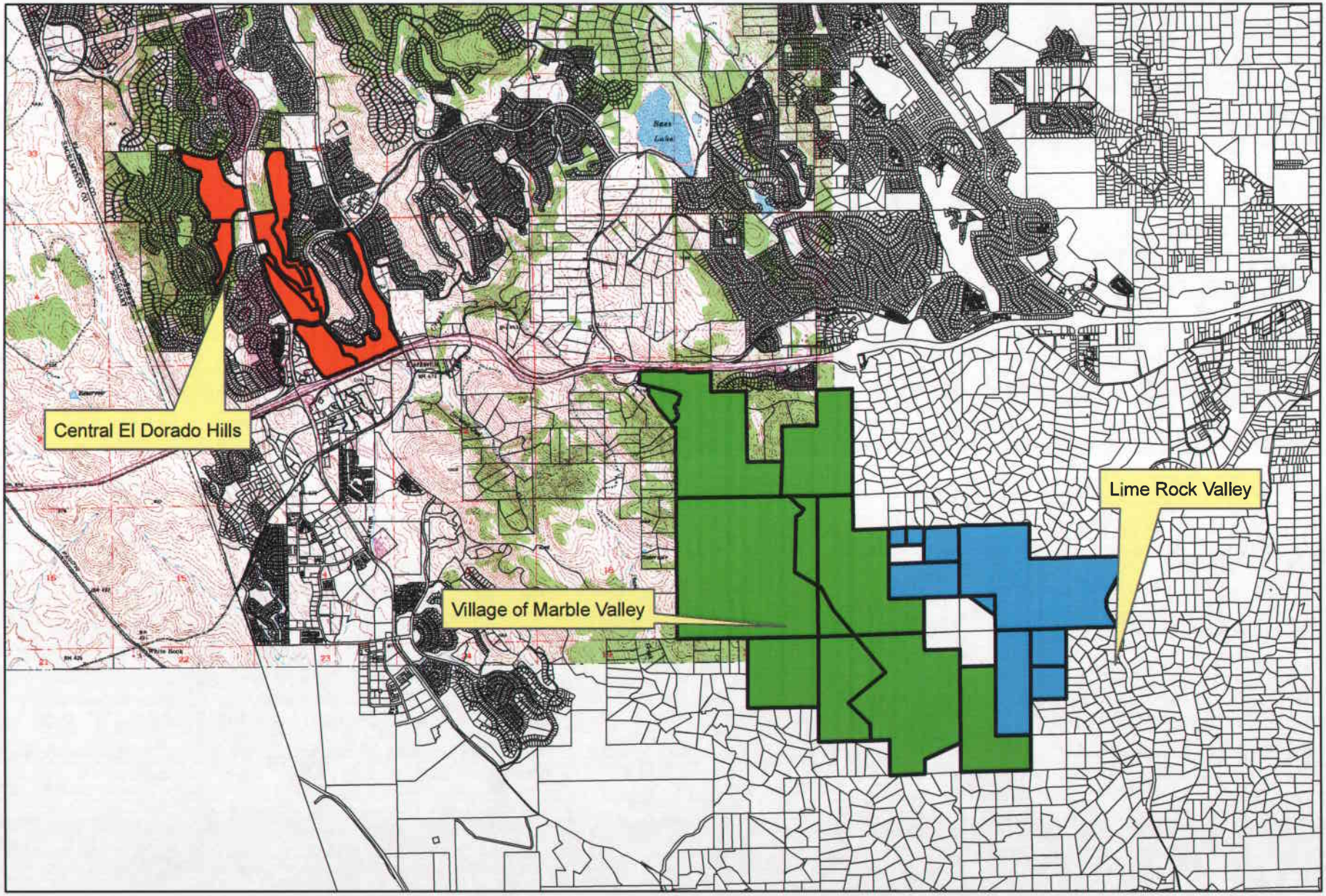
Cc. Project Files


Folsom Lake
Green Valley Road
El Dorado Hills Blvd.
Silva Valley Parkway
Promontory
Serrano
Serrano Parkway
Bass Lake
Cambridge Road
Cameron Park Drive
Central El Dorado Hills Specific Plan
Pedregal Planning Area
Central El Dorado Hills Specific Plan
Serrano Westside Planning Area
Bass Lake Road
Bass Lake Hills
Country Club Dr.
Cameron Park
50
Cameron Estates
Durock Rd.
Folsom
El Dorado Hills
Wilson Blvd.
Lime Rock Valley Specific Plan
Shingle Line Road
Village of Marble Valley Specific Plan
EDH Business Park
Valley View
Scott Road
White Rock Road
Carson Creek
E.I.D.
Deer Creek
Royal Equestrian Estates
Sacramento-Placerville Transportation Corridor
N
Latrobe Road
Sacramento County
El Dorado County
Sacramento-Placerville Transportation Corridor
S. Shingle Road
Rancho Murietta
EXHIBIT A



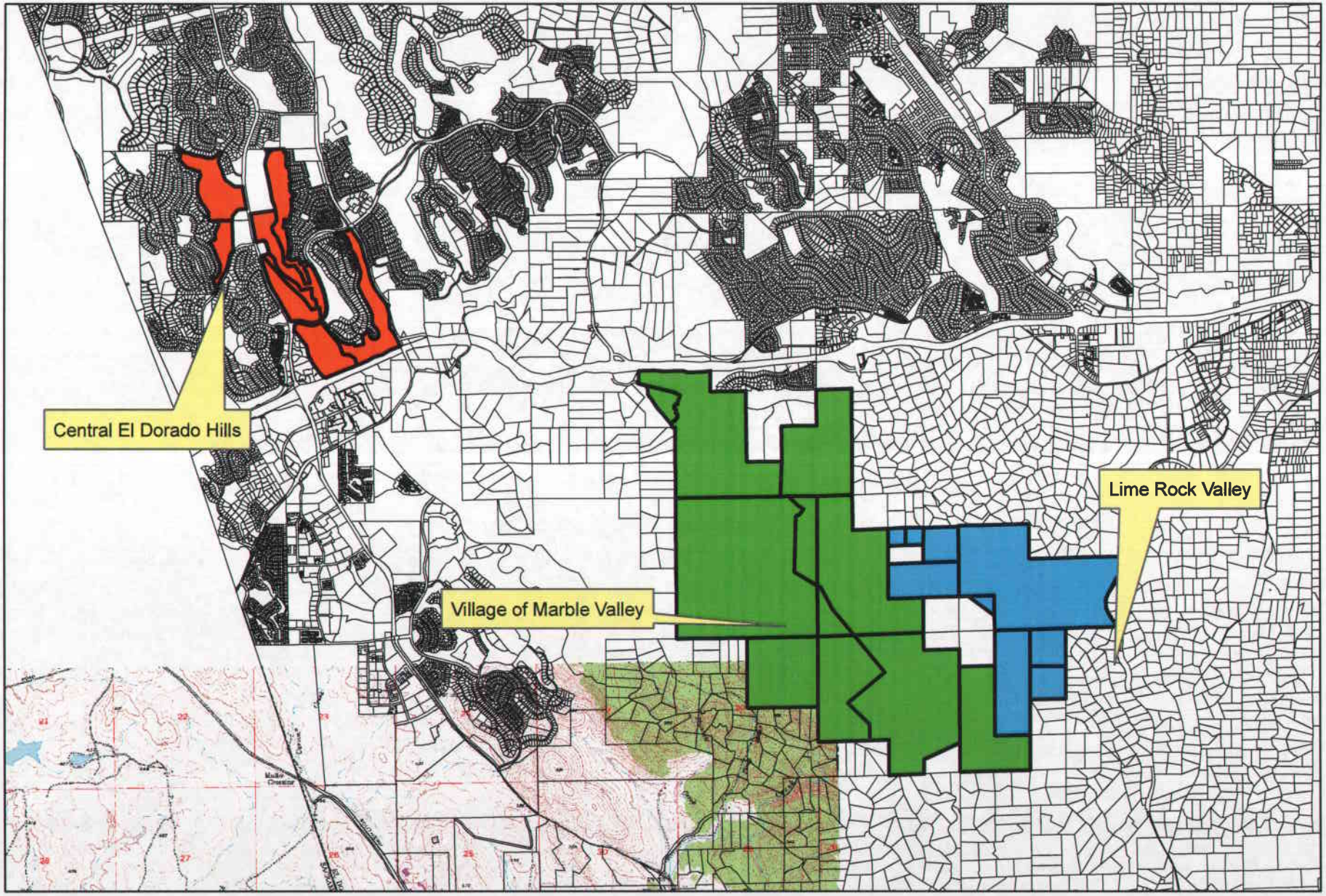
Central El Dorado Hills, Village of Marble Valley and Lime Rock Valley Specific Plans

EXHIBIT B

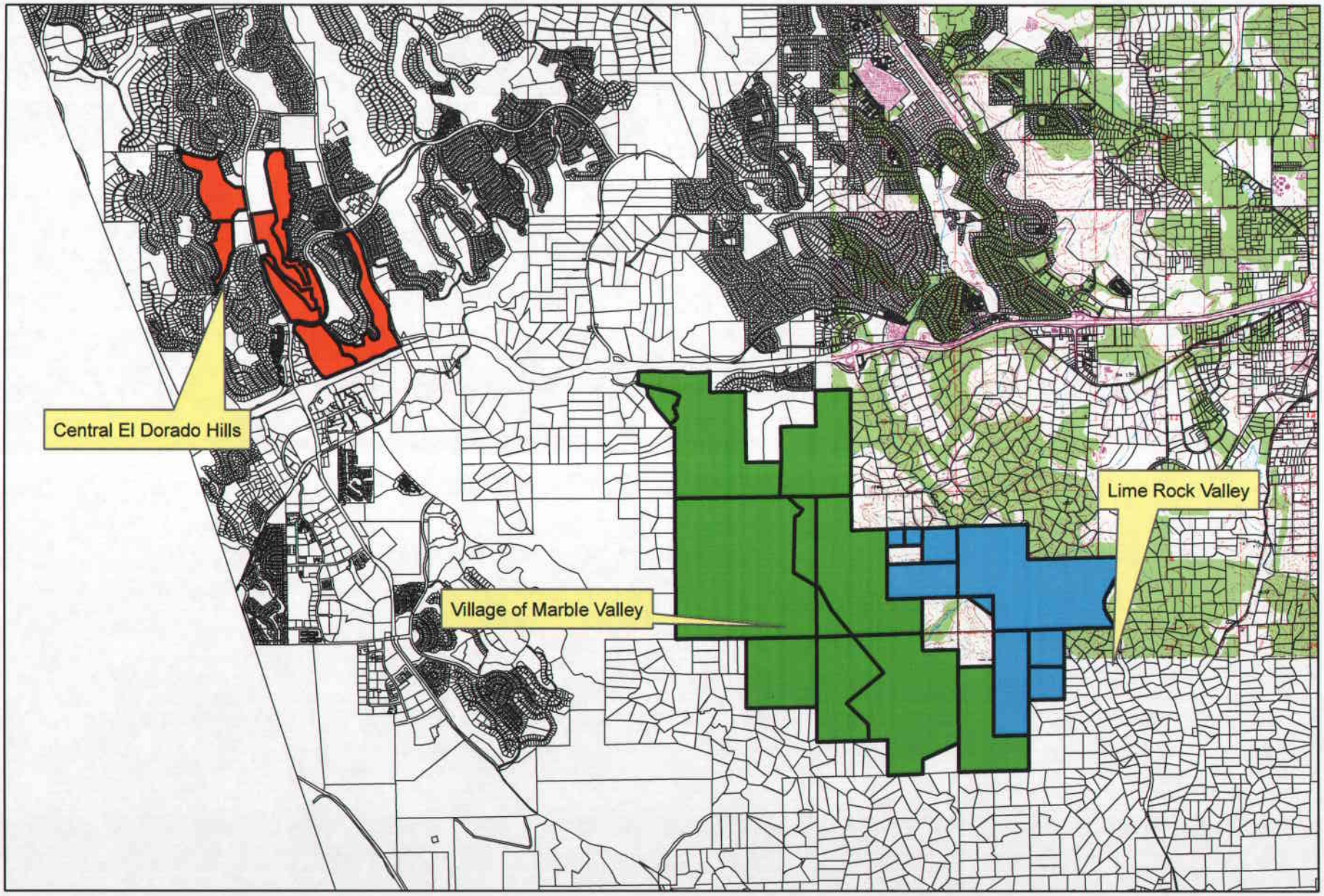


Central El Dorado Hills, Village of Marble Valley and Lime Rock Valley Specific Plans (Clarksville Quadrant)

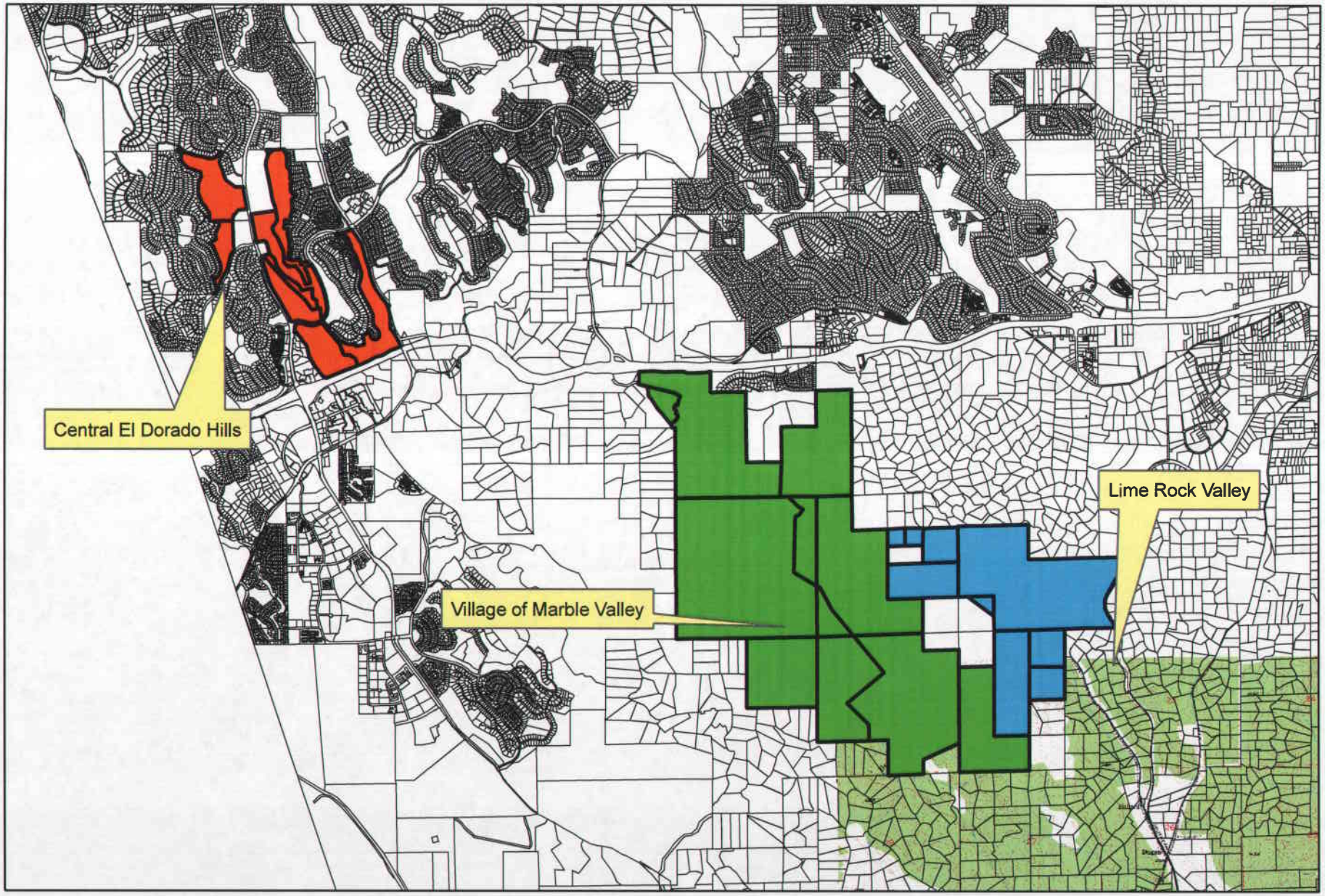
EXHIBIT C



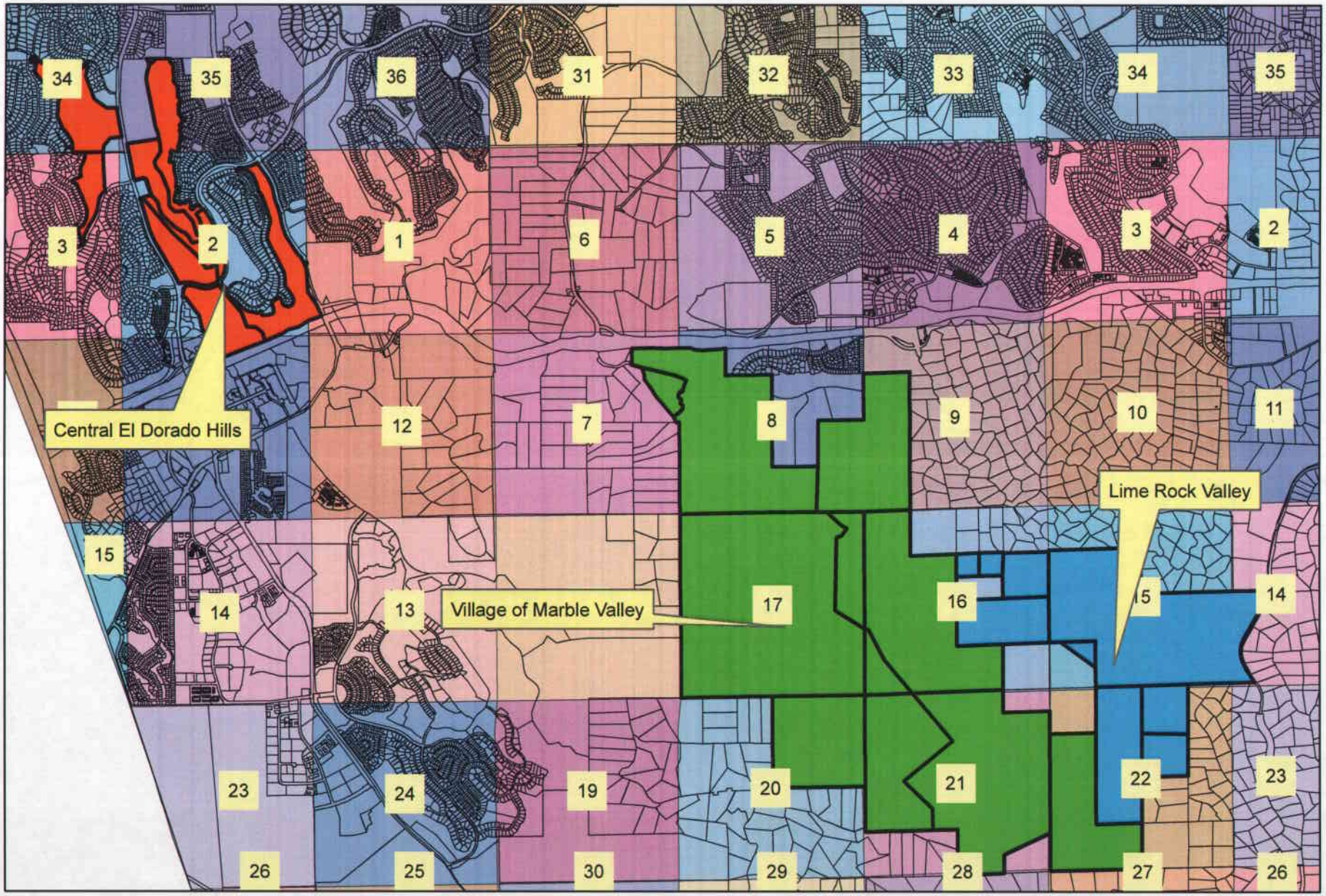
Central El Dorado Hills, Village of Marble Valley and Lime Rock Valley Specific Plans (Folsom SE Quadrant)



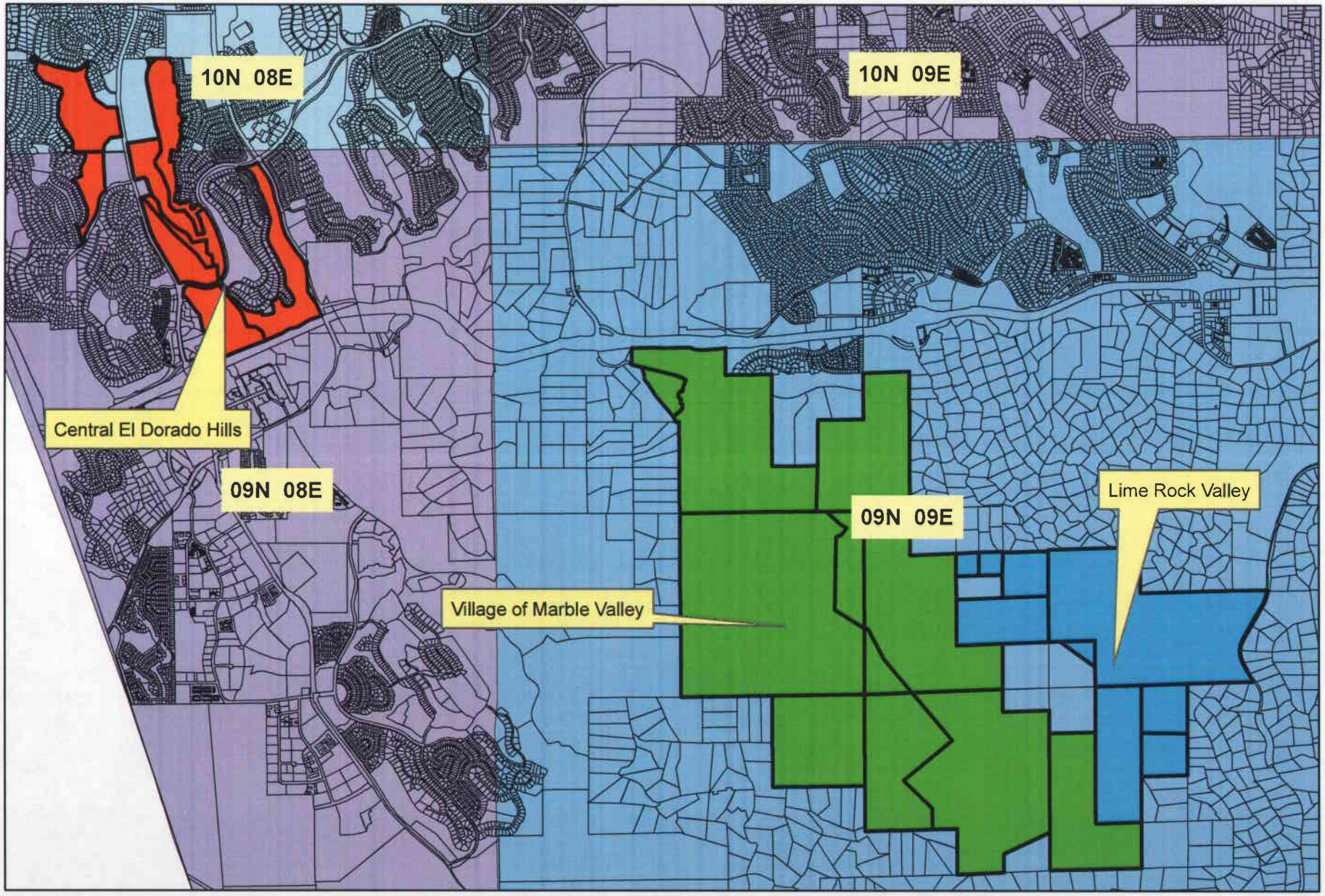
Central El Dorado Hills, Village of Marble Valley and Lime Rock Valley Specific Plans (Shingle Springs Quadrant)



Central El Dorado Hills, Village of Marble Valley and Lime Rock Valley Specific Plans (Latrobe Quadrant)



Central El Dorado Hills, Village of Marble Valley and Lime Rock Valley Specific Plans (Sections)



Central El Dorado Hills, Village of Marble Valley and Lime Rock Valley Specific Plans (Township and Range)

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AERIAL MAP OF PROJECT SITE WITH ADJACENT USES

COUNTY OF EL DORADO, CALIFORNIA

NOVEMBER 2012

0 200' 400' 800'

SCALE IN FEET

925 Sunset Street Suite 200 Folsom, CA 95630
(916) 366-3040 Fax (916) 366-3303
R. E. Y. ENGINEERS, Inc.
Civil Engineers / Land Surveyors

EXHIBIT D

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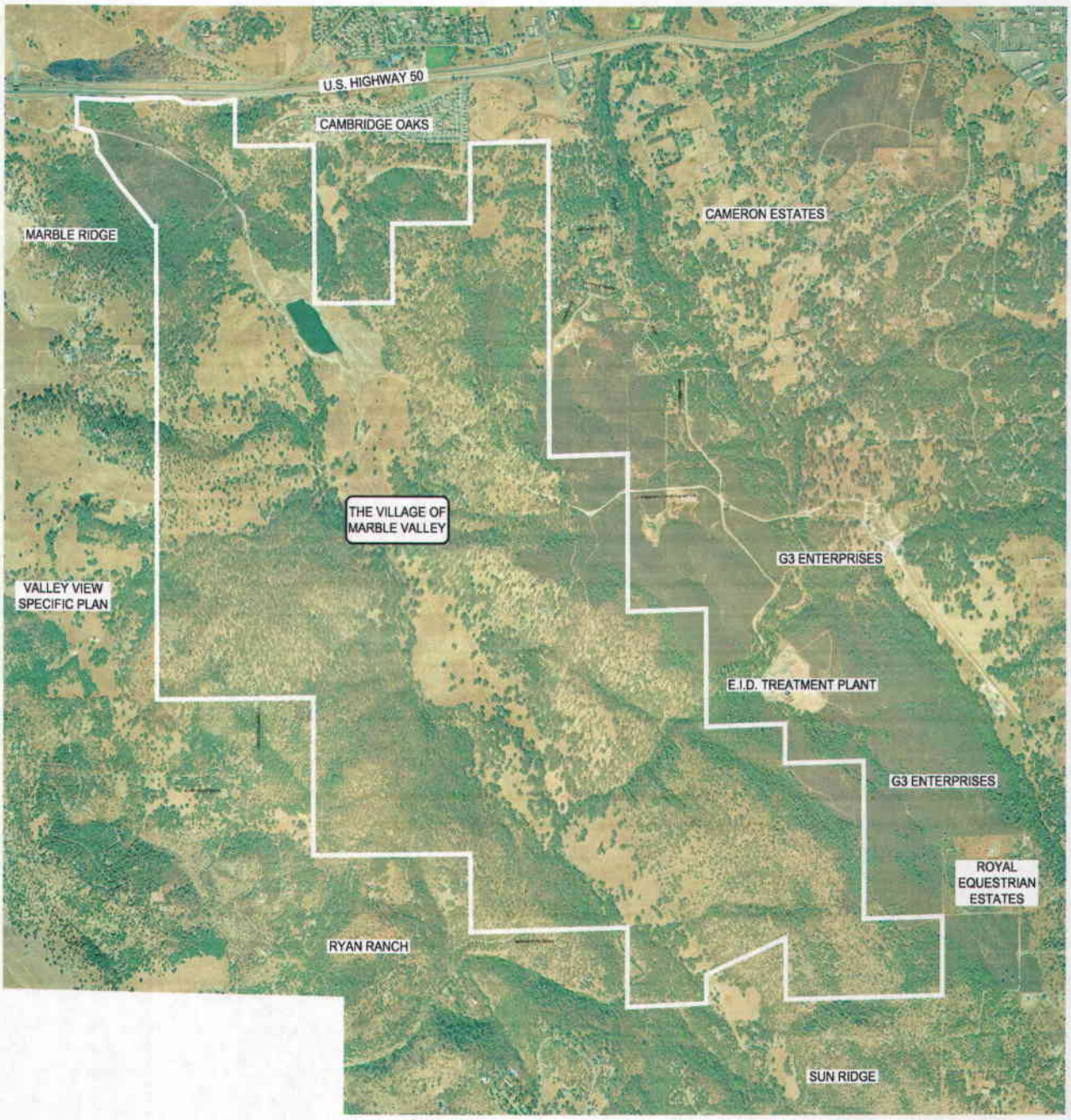
NOVEMBER 2012



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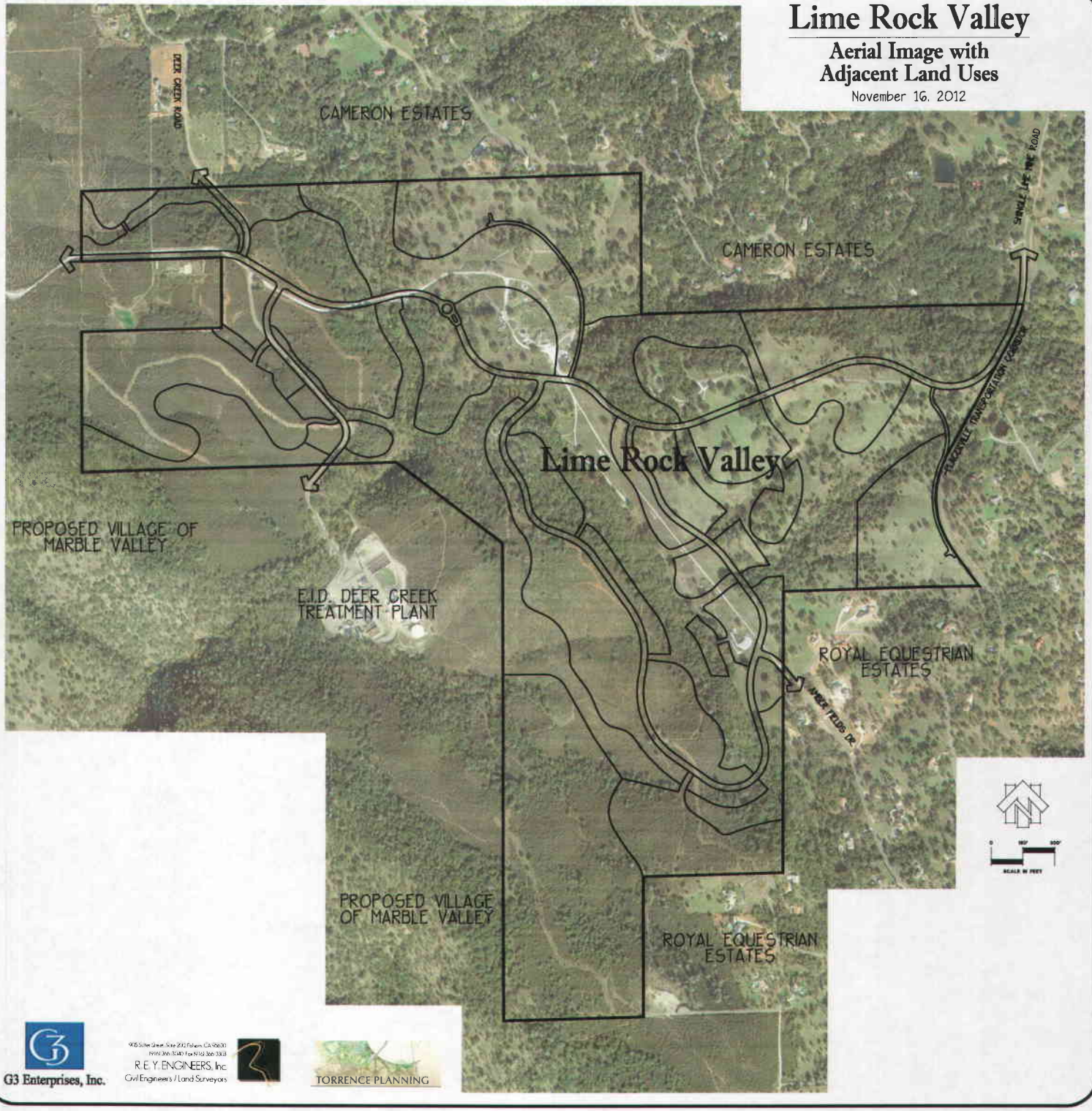
SCALE IN FEET

R.E.Y. ENGINEERS, Inc.
Civil Engineers / Land Surveyors

Lime Rock Valley

Aerial Image with Adjacent Land Uses

November 16, 2012



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(916) 355-1040 Fax (916) 355-1818
R.E.Y. ENGINEERS, Inc.
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TORRENCE PLANNING

Chiu, Bonnie

From: Rommel Pabalinas <rommel.pabalinas@edcgov.us>
Sent: Tuesday, December 11, 2012 3:09 PM
To: nahc@pacbell.net
Cc: Pat Angell; Kent MacDiarmid; Chiu, Bonnie
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Township: 09N 09E

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Sections: 14-16, 22
Township: 09N 09E

==========

Rommel (Mel) Pabalinas, Senior Planner
El Dorado County Development Services Department
Planning Division
2850 Fairlane Court
Placerville, CA 95667
Main Line 530-621-5355
Direct line 530-621-5363
Fax 530-642-0508

STATE OF CALIFORNIA Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390

January 15, 2013

Mel Pabalinas, Senior Planner
Development Services Department
County of El Dorado

Sent by Fax: 530-642-0508
Number of Pages: 2

RE: SB 18 Tribal Consultation and Sacred Lands File Check for the Lime Rock Valley, Central El Dorado Hills, Village of Marble Valley Specific Plans, File Nos. SP12-0001, SP12-0002, and SP12-0003; El Dorado County

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Sincerely,

Rob Wood
Associate Government Program Analyst

TRIBAL CONSULTATION LIST
El Dorado County
January 15, 2013

Wilton Rancheria
Andrew Franklin, Chairperson
9300 W. Stockton, Suite Miwok
Elk Grove , CA 95758
916-683-6000

Shingle Springs Band of Miwok Indians
Nicholas Fonseca, Chairperson
P.O. Box 1340 Miwok
Shingle Springs, CA 95682 Maidu
nfonseca@ssband.org
(530) 676-8010

United Auburn Indian Community of the Auburn Rancheria
David Keyser, Chairperson
10720 Indian Hill Road Maidu
Auburn , CA 95603 Miwok
530-883-2390

Nashville-El Dorado Miwok
Cosme Valdez, Interim Chief Executive Officer
PO Box 580986 Miwok
Elk Grove , CA 95758
valdezcom@comcast.net
916-429-8047 voice

Ione Band of Miwok Indians
Yvonne Miller, Chairperson
PO Box 699 Miwok
Plymouth , CA 95669
(209) 274-6753

T'Si-akim Maidu
Grayson Coney, Cultural Director
P.O. Box 1316 Maidu
Colfax , CA 95713
akimmaidu@att.net
(530) 383-7234

Buena Vista Rancheria
Rhonda Morningstar Pope, Chairperson
1418 20th Street, Suite 200 Me-Wuk / Miwok
Sacramento , CA 95811
rhonda@buenavistatribe.com
916 491-0011

T si-Akim Maidu
Eileen Moon,Vice Chairperson
1239 East Main St. Maidu
Grass Valley, CA 95945
530-274-7497

This list is current only as of the date of this document.

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MIWOK MAIDU United Auburn Indian Community of the Auburn Rancheria

Gene Whitehouse, Chairman | John L. Williams, Vice Chairman | Brenda Adams, Treasurer | Calvin Moman, Council Member

February 12, 2013

Mel Pabalinas
Development Services Department
County of El Dorado
2850 Fairlane Court
Placerville, CA 95667

Subject: SB 18 Consultation for the Central El Dorado Hills SP, Project File No. SP12-0002

Dear Mr. Pabalinas,

Thank you for requesting information regarding the above referenced project. The United Auburn Indian Community (UAIC) of the Auburn Rancheria is comprised of Miwok and Southern Maidu (Nisenan) people whose tribal lands are within Placer County and ancestral territory spans into El Dorado, Nevada, Sacramento, Sutter, and Yuba counties. The UAIC is concerned about development within its aboriginal territory that has potential to impact the lifeways, cultural sites, and landscapes that may be of sacred or ceremonial significance. We appreciate the opportunity to comment on this and other projects in your jurisdiction.

In order to ascertain whether or not the project could affect cultural resources that may be of importance to the UAIC, we would like to receive copies of any archaeological reports that have been, or will be, completed for the project. We also request copies of future environmental documents for the proposed project so that we have the opportunity to comment on potential impacts and proposed mitigation measures related to cultural resources. The UAIC would also like the opportunity to have our tribal monitors accompany you during the field survey. The information gathered will provide us with a better understanding of the project and cultural resources on site and is invaluable for consultation purposes.

The UAIC's preservation committee has identified cultural resources within your project area and in close proximity, and would like to request a site visit to confirm their locations and meet with you regarding this project. Thank you again for taking these matters into consideration, and for involving the UAIC early in the planning process. We look forward to reviewing the aforementioned documents as requested. Please contact Marcos Guerrero, Cultural Resources Manager, at (530) 883-2364 or email at mguerrero@auburnrancheria.com if you have any questions.

Sincerely,

Gene Whitehouse,
Chairman

CC: Marcos Guerrero, CRM

Response to SB 18 Consultation Letter from United Auburn Indian Community

Rommel Pabalinas <rommel.pabalinas@edcgov.us> Fri, Mar 1, 2013 at 12:09 PM
To: Marcos Guerrero <mguerrero@auburnrancheria.com>

Hello, Marcos:

Per our discussion this morning, the response letter that I received from Gene Whitehouse appears to respond only to the Central El Dorado Hills Specific Plan (file number SP12-0002). As I indicated in our discussion, I distributed two other SB 18 Consultation letters involving Lime Rock Valley Specific Plan (SP12-0001) and Village of Marble Valley Specific Plan. Please let me know in writing if you would like to extend a similar request to be consulted on these two other projects.

Thank you.

--
==========
Rommel (Mel) Pabalinas, Senior Planner
El Dorado County Development Services Department
Planning Division
2850 Fairlane Court
Placerville, CA 95667
Main Line 530-621-5355
Direct line 530-621-5363
Fax 530-642-0508

Wilton Rancheria

9300 W. Stockton Blvd., Suite 200
Elk Grove, CA 95758
Ph: (916) 683-6000
Fax: (916) 683-6015

March 15, 2013

To: Mel Pabalinas, Senior Planner

Development Services Department

County of El Dorado

2850 Fairlane Court

Placerville, CA 95667

Re: SB 18 Tribal Consultation for Central El Dorado Hills Specific Plan Project

File No. SP12-0002

Dear Mr. Pabalinas:

Thank you for your letter regarding the above named project. Wilton Rancheria is comprised of Miwok people whose ancestral territory spans are within El Dorado and surrounding Counties. Wilton Rancheria is concerned about development within its ancestral territory that has potential to impact the lifeways, traditional cultural properties and landscapes that may be of sacred or ceremonial significance. We appreciate the opportunity to comment on this and other projects in your jurisdiction.

To determine whether or not the project could affect cultural resources that may be of importance to Wilton Rancheria, we would like to receive copies of any completed record searches and or archeological, cultural and environmental surveys that have been, or will be, completed for the project. The information gathered will provide us with a better understanding of the project and cultural resources on site and is invaluable for consultation purposes.

Thank you again for taking these matters into consideration, please contact Steven Hutchason, Director of Cultural Rights Protection, at (916) 683-6000 or email at shutchason@wiltonrancheria-nsn.gov if you have any questions.

Sincerely,

Steven Hutchason, Director Cultural Rights Protection
Cc: Roger Trout

HISTORIC RESOURCE ASSOCIATES
HISTORIC ARCHITECTURE • ARCHAEOLOGY • HISTORICAL & GENEALOGICAL RESEARCH
NATIONAL REGISTER NOMINATIONS • HISTORIC INTERIORS

August 10, 2012

Native American Heritage Commission
915 Capital Mall, Room 364
Sacramento, CA 95814

Re: Lime Rock Valley Development Plan
El Dorado County, California

To Whom it may concern:

Historic Resource Associates (HRA) requests any information from the commission's database regarding cultural resources or sacred sites located within the proposed Lime Rock Valley Development Plan. The project is located in portions of Section 14, 15, 16 and 22 in Township 9 North, Range 9 East on the USGS *Shingle Springs, California* Quadrangle Map, south of Cameron Park and southwest of Shingle Springs, covering approximately 740 acres.

The land use plan, which is in its beginning stages, calls for a variety of uses, including low density residential, high density residential, neighborhood parks, open space, and proposed roads. Two archaeological studies have been conducted within the boundaries of the project area. Please refer to the enclosed G3 Enterprises Project Location Map for specific project locations. If you have any knowledge of cultural resources within the project area, please feel free to contact me.

Respectfully,

Dana E. Supernowicz, Principal

cc: Jared Rowe, G3 Enterprises, Inc.

2001 Sheffield Drive
El Dorado Hills, CA 95762-5905
Tel: 916-941-1864
Fax: 916-941-9466
Email: historic.resource@comcast.net

STATE OF CALIFORNIA Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390

August 27, 2012

Dana E. Supernowicz
Historical Resource Associates
2001 Sheffield Drive
El Dorado Hills, CA 95762-5905

Sent by Fax: 916-941-9466
Number of Pages: 2

Re: Lime Rock Valley Development Plan, El Dorado County.

Dear Ms. Supernowicz:

A record search of the sacred land file has failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the sacred lands file does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Enclosed is a list of Native Americans individuals/organizations who may have knowledge of cultural resources in the project area. The Commission makes no recommendation or preference of a single individual, or group over another. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe or group. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at (916) 653-4038.

Sincerely,

Debbie Pilas-Treadway
Environmental Specialist III

Native American Contacts
El Dorado County
August 27, 2012

April Wallace Moore
19630 Placer Hills Road
Colfax , CA 95713
530-637-4279

Nisenan - So Maidu
Konkow
Washoe

T si-Akim Maidu
Eileen Moon,Vice Chairperson
1239 East Main St.
Grass Valley , CA 95945
(530) 477-0711

Maidu

Colfax-Todds Valley Consolidated Tribe
Judith Marks
1068 Silverton Circle
Lincoln , Cali 95648
916-670-5714
916-434-7876 - home

Miwok
Maidu

T'Si-akim Maidu
Grayson Coney, Cultural Director
P.O. Box 1316
Colfax , CA 95713
akimmaidu@att.net
(530) 383-7234

Maidu

Shingle Springs Band of Miwok Indians
Sam Daniels, Vice Chairperson
P.O. Box 1340
Shingle Springs , CA 95682
(530) 676-8010
(530) 676-8033 Fax

Miwok
Maidu

United Auburn Indian Community of the Auburn Rancheria
David Keyser, Chairperson
10720 Indian Hill Road
Auburn , CA 95603
530-883-2390
530-883-2380 - Fax

Maidu
Miwok

Shingle Springs Band of Miwok Indians
Nicholas Fonseca, Chairperson
P.O. Box 1340
Shingle Springs , CA 95682
nfonseca@ssband.org
(530) 676-8010
(530) 676-8033 Fax

Miwok
Maidu

United Auburn Indian Community of the Auburn Rancheria
Marcos Guerrero, Tribal Preservation Committee
10720 Indian Hill Road
Auburn , CA 95603
mguerrero@auburnrancheria.com
530-883-2364
530-883-2320 - Fax

Maidu
Miwok

Shingle Springs Band of Miwok Indians
Daniel Fonseca
P.O. Box 1340
Shingle Springs , CA 95682
(530) 676-8010
(530) 676-8033 Fax

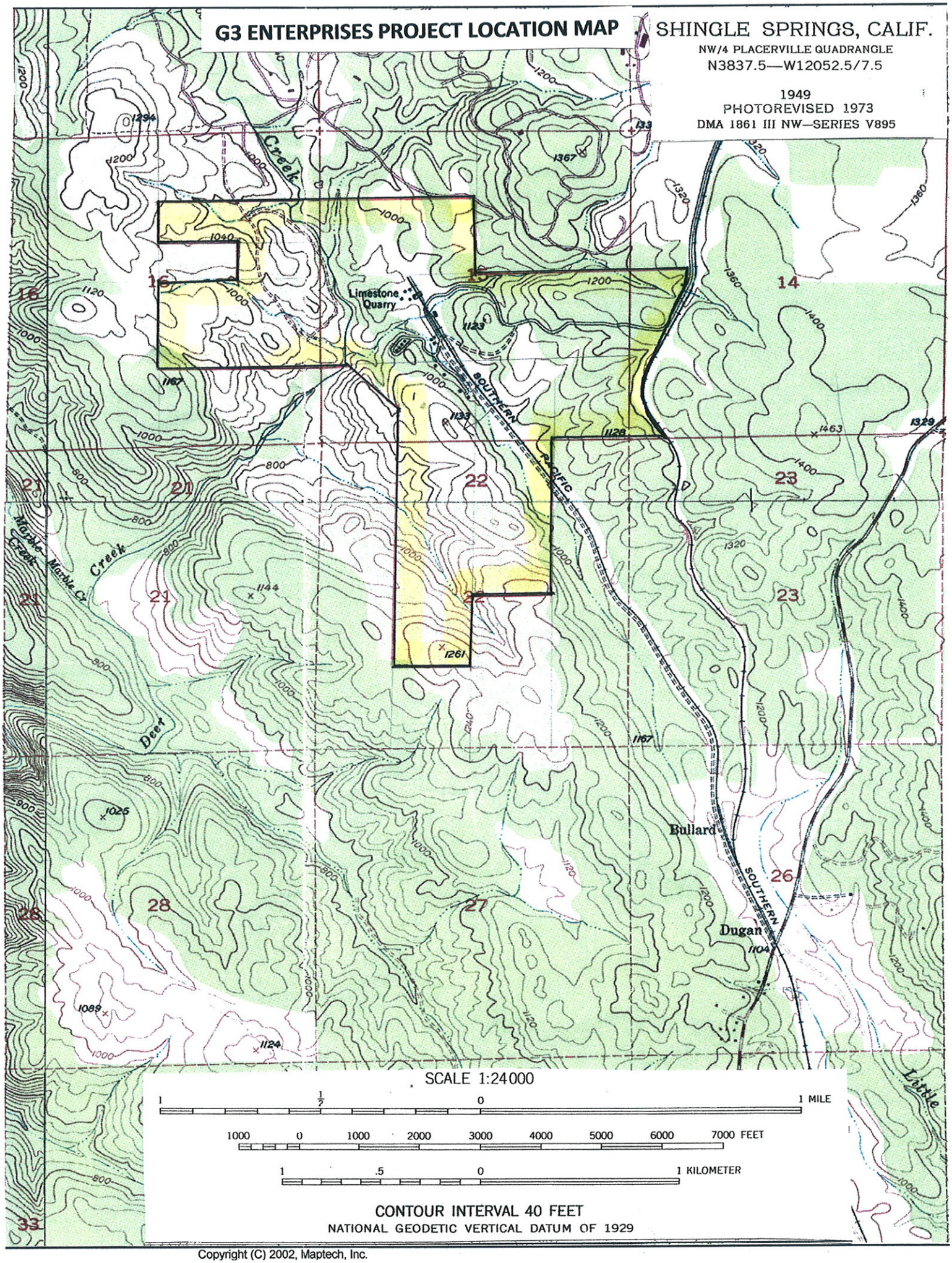
Miwok
Maidu

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Lime Rock Valley Development Plan, El Dorado County

G3 ENTERPRISES PROJECT LOCATION MAP



HISTORIC RESOURCE ASSOCIATES
HISTORIC ARCHITECTURE • ARCHAEOLOGY • HISTORICAL & GENEALOGICAL RESEARCH
NATIONAL REGISTER NOMINATIONS • HISTORIC INTERIORS

August 10, 2012

Gregory S. Baker
United Auburn Indian Community
Of the Auburn Rancheria
10720 Indian Hill Road
Auburn, CA 95603

Re: Lime Rock Valley Development Plan
El Dorado County, California

Dear Mr. Baker:

Historic Resource Associates (HRA) requests any information from your tribe regarding cultural resources or sacred sites located within the proposed Lime Rock Valley Development Plan. The project is located in portions of Section 14, 15, 16 and 22 in Township 9 North, Range 9 East on the USGS *Shingle Springs, California* Quadrangle Map, south of Cameron Park and southwest of Shingle Springs, covering approximately 740 acres.

The land use plan, which is in its beginning stages, calls for a variety of uses, including low density residential, high density residential, neighborhood parks, open space, and proposed roads. Two archaeological studies have been conducted within the boundaries of the project area. Please refer to the enclosed G3 Enterprises Project Location Map for specific project locations. If you have any knowledge of cultural resources within the project area, please feel free to contact me.

Respectfully,

Dana E. Supernowicz, Principal

cc: Jared Rowe, G3 Enterprises, Inc.

2001 Sheffield Drive
El Dorado Hills, CA 95762-5905
Tel: 916-941-1864
Fax: 916-941-9466
Email: historic.resource@comcast.net

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HISTORIC ARCHITECTURE • ARCHAEOLOGY • HISTORICAL & GENEALOGICAL RESEARCH
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August 10, 2012

Daniel Fonseca
Cultural Resource Director
Shingle Springs Rancheria
P.O. Box 1340
Shingle Springs, CA 95682

Re: Lime Rock Valley Development Plan
El Dorado County, California

Dear Mr. Fonseca:

Historic Resource Associates (HRA) requests any information from your tribe regarding cultural resources or sacred sites located within the proposed Lime Rock Valley Development Plan. The project is located in portions of Section 14, 15, 16 and 22 in Township 9 North, Range 9 East on the USGS *Shingle Springs, California* Quadrangle Map, south of Cameron Park and southwest of Shingle Springs, covering approximately 740 acres.

The land use plan, which is in its beginning stages, calls for a variety of uses, including low density residential, high density residential, neighborhood parks, open space, and proposed roads. Two archaeological studies have been conducted within the boundaries of the project area. Please refer to the enclosed G3 Enterprises Project Location Map for specific project locations. If you have any knowledge of cultural resources within the project area, please feel free to contact me.

Respectfully,

Dana E. Supernowicz, Principal

cc: Jared Rowe, G3 Enterprises, Inc.

2001 Sheffield Drive
El Dorado Hills, CA 95762-5905
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August 10, 2012

El Dorado Miwok Tribe
P.O. Box 711
El Dorado, CA

Re: Lime Rock Valley Development Plan
El Dorado County, California

To Whom it may concern:

Historic Resource Associates (HRA) requests any information from your tribe regarding cultural resources or sacred sites located within the proposed Lime Rock Valley Development Plan. The project is located in portions of Section 14, 15, 16 and 22 in Township 9 North, Range 9 East on the USGS *Shingle Springs, California* Quadrangle Map, south of Cameron Park and southwest of Shingle Springs, covering approximately 740 acres.

The land use plan, which is in its beginning stages, calls for a variety of uses, including low density residential, high density residential, neighborhood parks, open space, and proposed roads. Two archaeological studies have been conducted within the boundaries of the project area. Please refer to the enclosed G3 Enterprises Project Location Map for specific project locations. If you have any knowledge of cultural resources within the project area, please feel free to contact me.

Respectfully,

Dana E. Supernowicz, Principal

cc: Jared Rowe, G3 Enterprises, Inc.

2001 Sheffield Drive
El Dorado Hills, CA 95762-5905
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Email: historic.resource@comcast.net

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August 10, 2012

Eileen Moon, Vice Chairperson
T si-Akim Maidu
1239 East Main Street
Grass Valley, CA 95945

Re: Lime Rock Valley Development Plan
El Dorado County, California

Dear Ms. Moon:

Historic Resource Associates (HRA) requests any information from your tribe regarding cultural resources or sacred sites located within the proposed Lime Rock Valley Development Plan. The project is located in portions of Section 14, 15, 16 and 22 in Township 9 North, Range 9 East on the USGS *Shingle Springs, California* Quadrangle Map, south of Cameron Park and southwest of Shingle Springs, covering approximately 740 acres.

The land use plan, which is in its beginning stages, calls for a variety of uses, including low density residential, high density residential, neighborhood parks, open space, and proposed roads. Two archaeological studies have been conducted within the boundaries of the project area. Please refer to the enclosed G3 Enterprises Project Location Map for specific project locations. If you have any knowledge of cultural resources within the project area, please feel free to contact me.

Respectfully,

Dana E. Supernowicz, Principal

cc: Jared Rowe, G3 Enterprises, Inc.

2001 Sheffield Drive
El Dorado Hills, CA 95762-5905
Tel: 916-941-1864
Fax: 916-941-9466
Email: historic.resource@comcast.net

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August 10, 2012

Rhonda Morningstar Pope, Chairperson
Buena Vista Rancheria
P.O. 162283
Sacramento, CA 95816

Re: Lime Rock Valley Development Plan
El Dorado County, California

Dear Ms. Pope:

Historic Resource Associates (HRA) requests any information from your tribe regarding cultural resources or sacred sites located within the proposed Lime Rock Valley Development Plan. The project is located in portions of Section 14, 15, 16 and 22 in Township 9 North, Range 9 East on the USGS *Shingle Springs, California* Quadrangle Map, south of Cameron Park and southwest of Shingle Springs, covering approximately 740 acres.

The land use plan, which is in its beginning stages, calls for a variety of uses, including low density residential, high density residential, neighborhood parks, open space, and proposed roads. Two archaeological studies have been conducted within the boundaries of the project area. Please refer to the enclosed G3 Enterprises Project Location Map for specific project locations. If you have any knowledge of cultural resources within the project area, please feel free to contact me.

Respectfully,

Dana E. Supernowicz, Principal

cc: Jared Rowe, G3 Enterprises, Inc.

2001 Sheffield Drive
El Dorado Hills, CA 95762-5905
Tel: 916-941-1864
Fax: 916-941-9466
Email: historic.resource@comcast.net

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August 10, 2012

April Wallace Moore
19630 Placer Hills Road
Colfax, CA 95713

Re: Lime Rock Valley Development Plan
El Dorado County, California

Dear Ms. Moore:

Historic Resource Associates (HRA) requests any information from you regarding cultural resources or sacred sites located within the proposed Lime Rock Valley Development Plan. The project is located in portions of Section 14, 15, 16 and 22 in Township 9 North, Range 9 East on the USGS *Shingle Springs, California* Quadrangle Map, south of Cameron Park and southwest of Shingle Springs, covering approximately 740 acres.

The land use plan, which is in its beginning stages, calls for a variety of uses, including low density residential, high density residential, neighborhood parks, open space, and proposed roads. Two archaeological studies have been conducted within the boundaries of the project area. Please refer to the enclosed G3 Enterprises Project Location Map for specific project locations. If you have any knowledge of cultural resources within the project area, please feel free to contact me.

Respectfully,

Dana E. Supernowicz, Principal

cc: Jared Rowe, G3 Enterprises, Inc.

2001 Sheffield Drive
El Dorado Hills, CA 95762-5905
Tel: 916-941-1864
Fax: 916-941-9466
Email: historic.resource@comcast.net

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August 10, 2012

Yvonne Miller, Chairperson
P.O. Box 699
Plymouth, CA 95669

Re: Lime Rock Valley Development Plan
El Dorado County, California

Dear Ms. Miller:

Historic Resource Associates (HRA) requests any information from your tribe regarding cultural resources or sacred sites located within the proposed Lime Rock Valley Development Plan. The project is located in portions of Section 14, 15, 16 and 22 in Township 9 North, Range 9 East on the USGS *Shingle Springs, California* Quadrangle Map, south of Cameron Park and southwest of Shingle Springs, covering approximately 740 acres.

The land use plan, which is in its beginning stages, calls for a variety of uses, including low density residential, high density residential, neighborhood parks, open space, and proposed roads. Two archaeological studies have been conducted within the boundaries of the project area. Please refer to the enclosed G3 Enterprises Project Location Map for specific project locations. If you have any knowledge of cultural resources within the project area, please feel free to contact me.

Respectfully,

Dana E. Supernowicz, Principal

cc: Jared Rowe, G3 Enterprises, Inc.

2001 Sheffield Drive
El Dorado Hills, CA 95762-5905
Tel: 916-941-1864
Fax: 916-941-9466
Email: historic.resource@comcast.net

MIWOK
MAIDU

United Auburn Indian Community
of the Auburn Rancheria

David Keyser, Chairman
Kimberly DuBach, Vice Chair
Gene Whitehouse, Secretary
Brenda Adams, Treasurer
Calvin Moman, Council Member

August 20, 2012

Dana Supernowicz
Historic Resource Associates
2001 Sheffield Drive
El Dorado Hills, CA 95762-5905

Subject: Lime Rock Valley Development Plan

Dear Dana Supernowicz,

Thank you for requesting information regarding the above referenced project. The United Auburn Indian Community (UAIC) of the Auburn Rancheria is comprised of Miwok and Southern Maidu (Nisenan) people whose tribal lands are within Placer County and ancestral territory spans into El Dorado, Nevada, Sacramento, Sutter, and Yuba counties. The UAIC is concerned about development within its aboriginal territory that has potential to impact the lifeways, cultural sites, and landscapes that may be of sacred or ceremonial significance. We appreciate the opportunity to comment on this and other projects in your jurisdiction.

In order to ascertain whether or not the project could affect cultural resources that may be of importance to the UAIC, we would like to receive copies of any archaeological reports that have been, or will be, completed for the project. We also request copies of future environmental documents for the proposed project so that we have the opportunity to comment on potential impacts and proposed mitigation measures related to cultural resources. The UAIC would also like the opportunity to have our tribal monitors accompany you during the field survey. The information gathered will provide us with a better understanding of the project and cultural resources on site and is invaluable for consultation purposes.

The UAIC's Preservation Committee has identified cultural resources within your project area and in close proximity, and would like to request a site visit to confirm their locations and meet with you regarding this project. Thank you again for taking these matters into consideration, and for involving the UAIC early in the planning process. We look forward to reviewing the aforementioned documents as requested. Please contact Marcos Guerrero, Tribal Historic Preservation Officer, at (530) 883-2364 or email at mguerrero@auburnrancheria.com if you have any questions.

Sincerely,

David Keyser,
Chairman

CC: Marcos Guerrero, THPO

SHINGLE SPRINGS RANCHERIA

Shingle Springs Band of Miwok Indians,
Shingle Springs Rancheria
(Verona Tract), California
5281 Honpie Road, Placerville, CA 95667
P.O. Box 1340, Shingle Springs, CA 95682
(530) 676-8010 Office (530)676-8033 Fax

August 21, 2012

Historic Resource Associates
2001 Sheffield Drive
El Dorado Hills, CA 95762-5905

RE: Lime Rock Valley Development Plan, El Dorado County, California

Dear Dana E. Supernowicz

The Most likely Descendant, Daniel Fonseca would like to initiate consultation process with Historic Resource Associates for the proposed Lime Rock Valley Development Plan Project that is located in El Dorado County. Among other things, we would like this consultation to address the cultural and historic resource issues, pursuant to the regulations implementing Section 106 of the National Historic Preservation Act.

Prior to meeting we would like to request any and all completed record searches and or surveys that were done in or around the project area up to and including environmental, archaeological and cultural reports.

Please let this letter serve as a formal request for the Shingle Springs Band of Miwok Indians to be added as a consulting party in identifying any Traditional Cultural Properties (TCPs) that may exist within the project's Area of Potential Effects (APE).

Please contact Angela Rivera, Administrative Assistant at (530) 698-1557 to schedule a consultation meeting pursuant to Section 106 of the NHPA.

Sincerely,

Daniel Fonseca
Cultural Resources Director
Tribal Historic Preservation Officer (THPO)
Most Likely Descendent (MLD)

HISTORIC RESOURCE ASSOCIATES
HISTORIC ARCHITECTURE • ARCHAEOLOGY • HISTORICAL & GENEALOGICAL RESEARCH
NATIONAL REGISTER NOMINATIONS • HISTORIC INTERIORS

December 5, 2012

David Keyser, Chairman
United Auburn Indian Community
Of the Auburn Rancheria
10720 Indian Hill Road
Auburn, CA 95603

Re: Lime Rock Valley Development Plan
El Dorado County, California

Dear Mr. Keyser:

As per your letter dated August 20, 2012, Historic Resource Associates (HRA), on behalf of my client G3 Enterprises, Inc., requests your participation on a field visit to the proposed Lime Rock Valley Development in El Dorado County, California. The project is located in portions of Section 14, 15, 16 and 22 in Township 9 North, Range 9 East on the USGS *Shingle Springs, California* Quadrangle Map, south of Cameron Park and southwest of Shingle Springs, covering approximately 740 acres.

As previously noted, the current project involves only a general land use plan. Specific land uses have not been fully detailed. A large area of the project area has undergone extensive disturbance as a result of limestone mining operations since the late nineteenth century. To date two intensive cultural resource studies have been conducted within the project area. The proposed field visit will focus upon the Native American cultural resources previously identified in the project. Please contact me (916-296-4334) at your earliest convenience to schedule a field visit to the project area.

Respectfully,

Dana E. Supernowicz, Principal Cultural Resource Planner

cc: Jared Rowe, G3 Enterprises, Inc.

2001 Sheffield Drive
El Dorado Hills, CA 95762-5905
Office: 916-941-1864
Mobile: 916-296-4334
Fax: 916-941-9466
Email: historic.resource@comcast.net

Table 4. Native American Contact and Communication Log

Name	*Affiliation*	*Group*	*Address*	*City, State, Zip*	*Email / Phone Call*	*HRA Letter Date*	*Response to HRA*	*County Letter Date*
April Wallace Moore	-	Nisenan/Southern Maidu; Konkow; Washoe	19630 Placer Hills Road	Colfax, CA 95713	-	8.10.2012	No	-
Daniel Fonseca, Cultural Resource Director	Shingle Springs Band of Miwok Indians	Miwok; Maidu	PO Box 1340	Shingle Springs, CA 95682	-	8.10.2012	Yes	-
Eileen Moon, Vice Chairperson	T si Akim Maidu	Maidu	1239 East Main Street	Grass Valley, CA 95945	-	8.10.2012	No	1.29.2013
-	El Dorado Miwok Tribe	Miwok	PO Box 711	El Dorado, CA	-	8.10.2012	No	-
Yvonne Miller, Chairperson	Ione Band of Miwok Indians	Miwok	PO Box 699	Plymouth, CA 95669	-	8.10.2012	No	1.29.2013
Rhonda Morningstar Pope, Chairperson	Buena Vista Rancheria	Me-Wuk/Miwok	PO Box 162283	Sacramento, CA 95816	-	8.10.2012	No	1.29.2013
Gregory S. Baker	United Auburn Indian Community of the Auburn Rancheria	Miwok; Maidu	10720 Indian Hill Road	Auburn, CA 95603	-	8.10.2012	Yes	-
Cosme Valdez, Interim Chief Executive Officer	Nashville-El Dorado Miwok	Miwok	PO Box 580986	Elk Grove, CA 95758	-	-	-	1.29.2013
Nicholas Fonseca, Chairperson	Shingle Springs Band of Miwok Indians	Miwok; Maidu	PO Box 1340	Shingle Springs, CA 95682	-	-	-	1.29.2013
David Keyser, Chairperson	United Auburn Indian Community of the Auburn Rancheria	Miwok; Maidu	10720 Indian Hill Road	Auburn, CA 95603	-	-	-	1.29.2013

Name	*Affiliation*	*Group*	*Address*	*City, State, Zip*	*Email / Phone Call*	*HRA Letter Date*	*Response to HRA*	*County Letter Date*
Andrew Franklin, Chairperson	Wilton Rancheria	Miwok	9300 West Stockton, Suite 200	Elk Grove, CA 95758	-	-	-	1.29.2013
Grayson Coney, Cultural Director	T'Si akim Maidu	Maidu	PO Box 1316	Colfax, CA 95713	-	-	-	1.29.2013
Andrew Godsey	Shingle Springs Band of Miwok Indians	Miwok; Maidu	PO Box 1340	Shingle Springs, CA 95682	1.30.2013 (HRA)	-	-	8.22.2013
Marcos Guerrero, THPO	United Auburn Indian Community of the Auburn Rancheria	Miwok; Maidu	10720 Indian Hill Road	Auburn, CA 95603	1.30.2013 (HRA)	-	-	8.22.2013
Steven Hutchason	Wilton Rancheria	Miwok	9300 West Stockton, Suite 200	Elk Grove, CA 95758	-	-	-	8.22.2013

Appendix H

Lime Rock Valley Specific Plan
Water Supply Assessment

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EL DORADO IRRIGATION DISTRICT

SB 610 WATER SUPPLY ASSESSMENT FOR THE LIME ROCK VALLEY SPECIFIC PLAN

SB 610 Water Supply Assessment

Prepared for the
Lime Rock Valley Specific Plan

Final

August 2013

Prepared by:

Tully & Young
Comprehensive Water Planning

Prepared for:

El Dorado Irrigation District

Approved by Eldorado Irrigation District Board of Directors
on August 26, 2013 as action item #8

Contact: Cindy Megerdigian – Water/Hydro Engineering Manager
2890 Mosquito Road, Placerville CA 95667
(530) 642-4056 Fax: (530) 642-4356
cmegerdigian@eid.org

Table of Contents

SECTION 1 – PROJECT INTRODUCTION

1.1 INTRODUCTION

In December 2012, the El Dorado Irrigation District (EID) received a letter from the El Dorado County Planning Department (County) requesting the completion of a Water Supply Assessment (WSA) for the Lime Rock Valley Specific Plan (hereafter referred to as the "Proposed Project"). As the proposed water supply purveyor for the Proposed Project, EID has prepared this WSA to assess the availability and sufficiency of EID's water supplies to meet the Proposed Project's estimated water demands. This document provides the necessary information to comply with the assessment of sufficiency as required by statute.

Statutory Background

Enacted in 2001, Senate Bill 610 added section 21151.9 to the Public Resources Code requiring that any proposed "project," as defined in section 10912 of the Water Code, comply with Water Code section 10910, et seq. Commonly referred to as a "SB 610 Water Supply Assessment," Water Code section 10910 outlines the necessary information and analysis that must be included in an environmental analysis of the project (e.g. CEQA compliance) to ensure that proposed land developments have a sufficient water supply to meet existing and planned water demands over a 20-year projection.

Proposed "projects" requiring the preparation of a SB 610 water supply assessment include, among others, residential developments of more than 500 dwelling units, shopping centers or business establishments employing more than 1,000 persons or having more than 500,000 square feet of floor space, commercial office buildings employing more than 1,000 persons or having more than 250,000 square feet of floor space and projects that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.[1]

The Proposed Project requires a WSA because it contemplates more than 500 new dwelling units as detailed in Section 1.2.

Document Organization

This WSA supports the Proposed Project's environmental review process and analyzes the sufficiency of water supplies to meet projected water demands of the Proposed Project through the required planning horizon. The WSA is organized according to the following sections:

- **Section 1: Project Introduction**. This section provides an overview of WSA requirements, and a detailed description of the Proposed Project, especially the land-use elements that will require water service.

[1] Water Code § 10912, subdivision (a).

- **Section 2: Proposed Project Estimated Water Demands**. This section describes the methodology used to estimate water demands of the Proposed Project and details the estimated water demands at build-out of the Proposed Project.

- **Section 3: Other Estimated Water Demands**. This section details the other water demands currently served by EID and anticipated to be served based on information in the El Dorado County's (County) General Plan as well as known and potential planned modifications since the County's adoption of the General Plan.

- **Section 4: Water Supply Characterization**. This section characterizes the EID water supply portfolio that will serve the Proposed Project along with other current and future water demands. Water rights, along with water service contracts and agreements are characterized for normal, single dry, and multiple dry year conditions.

- **Section 5: Sufficiency Analysis**. This section assesses whether sufficient water will be available to meet the Proposed Project water demands, while recognizing existing and other potential planned water demands within the EID service area. To provide the necessary conclusions required by statute, the analysis integrates the demand detailed in Section 2 and Section 3 with the characterization of EID's water supply portfolio detailed in Section 4.

1.2 PROPOSED PROJECT DESCRIPTION

The Proposed Project is a planned development, south of the Cambridge Road exit on Highway 50, encompassing 740 acres in the unincorporated community of El Dorado Hills (see **Figure 1-1**).

The Proposed Project includes 800 residences of varying size, a large village park, and open space. Proposed residential dwelling units include 93 custom lots on approximately 2 acres each, 106 production lots with a density of about 2 dwelling units per acre, 146 production lots with a density of about 3 dwelling units pre acre, and 455 production lots with a density of about 5 dwelling units pre acre. A large 15-acre park will serve the neighborhood with an estimated net landscaped area of 10 acres. The project dedicates about 314 acres to open space.

Table 1-1 summarizes the proposed land use acreages.

Figure 1-1 – Proposed Project Location and Land Uses

1.2.2 Projected Land Uses

Table 1-1 – Summary of Proposed Build-Out Land Uses and Acreages[2]

Land Use	Section 2.4 Comparison	Acres	Units
Custom Homes	2 Acre Lots	--	93
Production R15	15,000 sf lots	--	106
Production R10	10,000 sf lots	--	146
Production R6	6,000 sf lots	--	455
Village Park	--	10	--
Open Space	--	314	--
ROW and Landscaping	--	5	--
Gate House	--	--	1

1.3 PROPOSED PROJECT PHASING

Table 1-2 describes the Proposed Project's three construction phases. Each phase represents a portion of the development, focusing on particular land-use classifications. Before constructing homes or other parts of the development, the proponents will begin site grading and project-wide infrastructure development. Some infrastructure and site grading will continue throughout all phases of the Proposed Project, as necessary. These activities include installing facilities for potable water, recycled water (as appropriate for the Proposed Project), sewer, electric, telecommunications, gas, stormwater, and roads. During these activities, a small water demand will exist – referred to in this WSA as "construction water." This demand is included in the yearly water demands presented in Section 2.

The initial phase, ending prior to 2020, will construct the infrastructure but will not use significant water. A small amount of construction will be completed by 2020 with less than 15% of water demand being on-line. The subsequent constructions phases will bring more water demand on-line with nearly half of the project demand constructed by 2025. This staggered approach will gradually expand the water demands. All construction will be completed by 2035, within the 20-year planning horizon of this WSA.

Table 1-2 – Proposed Project Schedule

Land Use	Phase 1 2019-2024	Phase 2 2025-2029	Phase 3 2030-2035	Total
Custom Homes	24	10	59	93
Production R15	27	17	62	106
Production R10	94	52	--	146
Production R6	187	268	--	455

[2] Specific Plan Land Use Summary was provided by El Dorado County of Development Services Department.

SECTION 2 – PROPOSED PROJECT ESTIMATED WATER DEMANDS

2.1 INTRODUCTION

This section describes the methodology, provides the supporting evidence, and presents the estimated water demands for the Proposed Project. For the purpose of estimating water demand, the Proposed Project is planned to develop according to the phasing in **Table 1-2**.

2.2 DETERMINING UNIT WATER DEMAND FACTORS

As detailed in Section 1, the Proposed Project has specific residential and non-residential land-uses with defined residential lot-sizes, types of commercial uses and other characteristics. As these attributes vary among the types of proposed land-uses, so too will the water needs. To understand the water needs of the entire Proposed Project, unique demand factors that correspond with each unique land use are necessary. This subsection presents the methodology for determining the baseline unit water use demand factors that become the basis of the Proposed Project water demand estimates. Two distinct groups of demand factors are presented: (1) residential, and (2) non-residential.

2.3 PRIMARY SOURCE OF BASELINE WATER USE DATA

Because the Proposed Project is very similar in nature to particular elements built as part of the Serrano and El Dorado Hills developments over the past few decades, recent water use data for comparable products in these neighborhoods provides a reliable foundation for EID to establish new project-specific water demands. Through comparison of Proposed Project land-use elements to existing land uses, EID determined appropriate existing, established neighborhoods and non-residential facilities that best aligned with each unique residential and non-residential project element. For each comparable neighborhood, EID gathered and assessed total annual water use for the years 2008 through 2012. This selected period of water use best represents 1) the greatest number of homes occupied within each selected area (including established back-yard landscapes), and 2) varied water use over a range of climatic conditions reflecting various rainfall amounts and timing. Average annual uses were derived from the data and are discussed under the respective land-use categories.

2.4 BASELINE RESIDENTIAL WATER USE DEMAND FACTORS

The Proposed Project anticipates specific residential products that fall within general lot-size designations. The size of the lot will have the largest impact on the annual per-lot demand for water. Indoor demands remain relatively consistent regardless of lot size.

For purposes of this WSA, the per-lot demand for residential lots will be described as "the acre-feet of water use annually per dwelling unit" – or simply put, acre-feet/dwelling unit (af/du). This value will reflect indoor and outdoor uses expected for a typical dwelling unit for each of the following classifications:[3]

- 1 to 3-acre custom lots
- 1/2 acre production lots
- 8,000 to 10,000 square-foot production lots
- 5,000 to 7,000 square-foot production home lots

The method and basis for determining the baseline unit water demand factor for each of these classifications is detailed in the following subsections.

1 to 3-Acre Custom Lots

Water demand factors for the proposed large lots are based on recent water use data records for residential lots in the Serrano development – specifically existing residential lots located on Greenview Drive, Errante Drive, and others. The proposed lots in this category average about 2 acres and have a 1-acre minimum. However, not all land on these lots will be landscaped. For instance, a lot may include hillside and/or areas of oak woodland that must be protected, resulting in a diminished area for the home's footprint, outdoor hardscapes and landscaping. Generally, the house itself is large, with extensive outdoor features including pools, hardscapes, water features, and significant landscaping with well-maintained turf areas.

Based on available historic meter data for similar developments served by EID, the baseline unit water demand factor for this land-use category is approximately 1.16 af/du.

1/2-Acre Production Lots

Water demand factors for the proposed large lots are based on recent water use data records for residential lots in the Serrano development – specifically existing residential lots located on Renaissance Way and Renaissance Place. The proposed lots in this category average about 1/2-acre, though have a minimum lots size of 15,000 square feet. Landscaping on the lot may be based on a predetermined landscaping package. Generally, the house itself is large, with extensive outdoor features including pools, hardscapes, water features, and significant landscaping with well-maintained turf areas.

Based on available historic meter data for similar developments served by EID, the baseline unit water demand factor for this land-use category is approximately 0.87 af/du.

[3] These classifications reflect EID's defined water demand factor categories as EID believes they best relate to the Proposed Project's land-use classifications as shown in the Table 1-1.

8,000 to 10,000 Square-foot Production Lots

The proposed project will include a large number of lots reserved for production homes on lots typically described as "large" for a residential community. For these lots, ranging up to 1/3-acre with a 10,000 square-foot minimum, water demands will be based on recent water use data records for similar lots in the Serrano development – specifically Village D2 and portions of Village E, which includes numerous similar-sized lots. In contrast to the smaller lot production homes described in the next classification, these lots will retain adequate area on the lot for well-maintained turf and other landscaping. As much as one-half, but not less than about one-quarter, of the lot may still remain for landscaping, after accounting for the home's footprint and hardscape areas – equating to a few thousand to several thousand square-feet. Though less landscaped area than the custom home lots, the landscaped area will drive water use on these lots.

Based on the available historic meter data for similar developments served by EID, the baseline unit water demand factor for this land-use category is 0.55 af/du.

5,000 to 7,000 Square-foot Production Lots

The Proposed Project includes numerous lots with minimum areas of about 6,000 square feet with average of 5.1 dwelling units per acre. As a result of the limited outdoor area, many of these lots are limited to front-yard landscaping with well-maintained turf, and back yards often only including hardscapes, pools or other amenities, and lower water using landscapes. Unit water demands are based on recent water use data records for similar lots in the Serrano development – specifically Village D1A and Euer Ranch, which include numerous similar-sized lots.

Based on the available historic meter data for similar developments served by EID, the baseline unit water demand factor for this land-use category is 0.50 af/du.

Residential Indoor Water Use

Based on EID meter data for the past several years, indoor water use for typical single-family homes averages about 0.18 af/du.[4] This value can be used to derive separation of residential demands that could be served with non-potable supplies, such as recycled water from the Deer Creek and/or El Dorado Hills wastewater treatment facilities (see Section 2.7.2).

2.5 MODIFYING BASELINE VALUES

All of the above-developed water demand factors for the residential classifications are based on similar existing developments in the El Dorado Hills area. However, since construction of the

[4] This value is a subset of the total usage estimated for a dwelling unit under each land-use category. Data from 2012 Water Resources and Service Reliability Report, EID, August 13, 2012, Appendix Table A, p.42

existing houses, a few changes have occurred that will reduce the Proposed Project's water demands from the baseline unit water demands derived from existing meter data. These include:

- CAL Green Code
- California Model Water Efficient Landscape Ordinance

CAL Green Code

In January 2010, the California Building Standards Commission adopted the statewide mandatory Green Building Standards Code (CAL Green Code) that requires the installation of water-efficient indoor infrastructure for all new projects beginning January 1, 2011. CAL Green Code was incorporated as Part 11 into Title 24 of the California Code of Regulations.[5] The CAL Green Code applies to the planning, design, operation, construction, use and occupancy of every newly constructed building or structure. All proposed land uses must satisfy the indoor water use infrastructure standards necessary to meet the CAL Green Code. The CAL Green Code requires residential and nonresidential water efficiency and conservation measures for new buildings and structures that will reduce the overall potable water use inside the building by 20 percent. The 20 percent water savings can be achieved in one of the following ways: (1) installation of plumbing fixtures and fittings that meet the 20 percent reduced flow rate specified in the CAL Green Code, or (2) by demonstrating a 20 percent reduction in water use from the building "water use baseline."[6] The Proposed Project will satisfy one of these two requirements through the use of appliances and fixtures such as high-efficiency toilets, faucet aerators, on-demand water heaters, as well as Energy Star and California Energy Commission-approved appliances.

California Model Water Efficient Landscape Ordinance

In 2006, the Water Conservation in Landscaping Act was enacted, which required the Department of Water Resources to update the Model Water Efficient Landscape Ordinance (MWELO).[7] In fall of 2009, the Office of Administrative Law (OAL) approved the updated MWELO, which required that a retail water supplier adopt the provisions of the MWELO by January 1, 2010 or enact its own provisions equal to or more restrictive than the MWELO provisions.

The provisions of the MWELO are applicable to new construction with a landscape area greater than 2,500 square feet.[8] The MWELO provides a methodology to calculate total water use based upon a given plant factor and irrigation efficiency. Finally, MWELO requires the landscape design plan to delineate hydrozones (based upon plant factors) and then assign a unique valve for each hydrozone (low, medium, high water use).[9] The design of landscape irrigation systems is

[5] The CAL Green Code is Part 11 in Title 24.
[6] See CAL Green Code.
[7] Gov. Code §§ 65591-65599
[8] CCR Tit. 23, Div. 2, Ch. 27, Sec. 490.1.
[9] CCR Tit. 23, Div. 2, Ch. 27, Secs. 492.3(a)(2)(A) and 492.7(a)(2).

anticipated to better match the needs of grouped plant-types and thus result in more efficient outdoor irrigation.

Applying Conservation to Baseline Demand Factors

Collectively, these and other factors will put downward pressure on the baseline residential unit water demand factors – potentially dropping each unit demand by up to 10 percent for the larger lots. **Table 2-1** provides a summary of the baseline demand factor for each residential land-use category, the anticipated savings from the conservation mandates, and the resulting unit demand factor used to estimate the Proposed Project's water use.

Table 2-1 – Summary of Residential Baseline and Proposed Project Demand Factors

EID Water Demand Category (Relates to Table 1-1 Land Use)	Density	Current Factor (af/du)	Conservation Applied	Factor Used (af/du)
1 to 3 Acre Custom Lots	0.5 DU/Ac	1.16	10%	1.04
1/2 Acre Production Lots	2 DU/Ac	0.87	8%	0.80
8,000-10,000 sf Lots	3 DU/Ac	0.55	5%	0.53
5,000-7,000 sf Lots	5.1 DU/Ac	0.50	5%	0.48

2.6 Baseline Non-Residential Water Use Demand Factors

Similar to the residential water demand factors, non-residential factors are based upon recent water use trends for similar types of land classifications.

For purposes of this WSA, the per-lot demand for non-residential lots is described as "the acre-feet of water use annually per acre of land" – or simply put, acre-feet/acre (af/ac). This value reflects indoor and outdoor water needs expected for a typical non-residential use for each of the following classifications:

- Village Park
- Gate House
- Other miscellaneous, including street medians vineyards, construction water and environmental mitigation

The method and basis for determining the baseline unit water demand factor for each of these classifications is detailed in the following subsections.

Village Park

The Proposed Project includes a large village park that will include expansive turf areas, playfields and other park amenities. Based upon recent water meter data for similar park facilities in the El Dorado Hills area – namely Bella Terra Park, Allan Lindsey Park, and the Village A, C, L3, and L4 parks – a representative water demand factor was identified. A "smart

meter" controls the irrigation system at each existing park. These devices adjust water use to actual climate data, including precipitation events. Thus, the recent meter data is very indicative of expected demands for the new parks, which will also be outfitted with similar technology.

Based on the available historic meter data for similar facilities served by EID, the unit water demand factor is 2.77 af/ac.

Gate House

No usable comparison exists in the EID water use history to represent the demand of a gate house. A gate house consists of a small building with a single bathroom. The average country club employee per shift uses 50 Liters per day, or just over 13.2 gallons.[10] Assuming two employees per shift and 3 shifts per day, the resulting water use comes out to about 0.09 acre-feet per year. To be conservative, the demand used is rounded up to 0.1 acre-feet per year.

Other Miscellaneous Uses

The Proposed Project has additional miscellaneous uses including vineyards on street medians, environmental mitigation requirements, and construction water. These uses have minimal impacts to the overall per-project total water use due to their limited size and water needs, and some are temporary in nature.

Vineyard Street Medians

The Proposed Project will include approximately 5 acres of vineyards spread throughout the project. These vineyards serve as both an aesthetic feature and a business function – actively producing wine grapes. The majority of the planting is located on street medians and entrance areas throughout the community. The use of vineyards in this fashion results in lower water use than fully landscaped medians. The vineyard water use estimates is based on a collection of documents from the University of California – Cooperative Extension combined with input for a local producer and winemaker. Reviewing water use data from *Wine Grape Cost and Return Studies, El Dorado and Amador Counties*, as well as other areas with similar climates and elevations, water demand range from 5 to 12 inches per year for established vines. In the interest of being conservative, the 12-inch annual value is used.[11] To account for any additional water demands while establishing the vines, this WSA assumes that twice the water will be needed in the first few years following planting. As shown in **Table 2-3**, the initial demand upon planning (included for the first 5-year increment for each vineyard planning phase) is 2 acre-feet/acre. This value drops to 1 acre-foot/acre for the remainder of the analysis period for a particular planting phase.

[10] Tchobanoglous, George, and Edward Schroeder. *Water Quality*. Menlo Park: Addison Wesley Longman, 1987

[11] *The water demand is one dimensional and total demand is dependent on area. For the purposes of this WSA, acres are used for the second dimension. Therefore, one acre-foot of water is multiplied by each acre of vineyard. The result is 1 acre-foot/acre which is used in this documents calculations*

Oak Woodlands Management

As of the preparation of this WSA, the mitigation requirements for impacts to oak woodlands resulting from the Proposed Project are as detailed in the County's Policy 7.4.4.4.[12] For purposes of estimating the water demands of this Proposed Project element, the WSA assumes mitigation will include establishing new trees, likely with associated irrigation water to assure seedlings are established. As defined in the County's Oak Woodland Management Plan Monitoring Program:

> *"Replacement of removed tree canopy . . . is subject to intensive to moderate management and 10 to 15 years of monitoring, respectively. The survival rate shall be 90 percent as specified in the approved monitoring plan for the project, prepared by a qualified professional. Acorns may be used instead of saplings or one gallon trees."*
>
> *"Management intensity assumes that 10 years after planting 1 year old saplings that trees that have been nurtured with high management intensity will be on average 2 inches DBH with 90 percent survival; moderate management intensity will result in trees that are on average 1.5 inches DBH with 85 percent survival."*

More precisely, an intensive management program is required to obtain 90 percent survival. The management includes10 years of monitoring for one-gallon/one year old saplings and 15 years of monitoring if acorns are planted. Any trees/acorns that do not survive within the monitoring periods are to be replaced within that time, so that 90 percent survival is achieved at the end of the monitoring period.

Because establishment of new trees is highly dependent on site conditions (soil depth and composition, depth to water table, slope, aspect, existing vegetation), planting conditions (water year, starting from acorns or saplings, weed mats, mulch, density of plantings and other adjacent veg, etc.), establishment and maintenance practices (manual or installed irrigation systems, and irrigation intervals), and the required success criteria (target % survival), the estimated water demands are difficult to predict.[13] However, in order to be reasonably conservative, this WSA assumes that each acre of habitat mitigation will require 1 acre-foot per acre of annual irrigation

[12] The County Board of Supervisors has an Oak Woodland Management Plan (OWMP) codified as Chapter 17.73 of the County Code (Ord. 4771. May 6, 2008.). The primary purpose of this plan is to implement the Option B provisions of Policy 7.4.4.4. On September 24, 2012, the Board of Supervisors directed the Development Services Department to prepare a General Plan amendment to amend Policies 7.4.2.8, 7.4.2.9, 7.4.4.4, 7.4.4.5, 7.4.5.1, and 7.4.5.2 and their related implementation measures to clarify and refine the County's policies regarding oak tree protection and habitat preservation. (This excerpt was copied from the following El Dorado County web site: http://www.edcgov.us/Government/Planning/General_Plan_Oak_Woodlands.aspx on May 4, 2013.)

[13] A qualified professional will likely develop the project specific oak management plan. More detailed water use will be available in this plan. Review of information from oak mitigation projects in the area revealed a range of planting types, irrigation methods, and management time frames. Overall, irrigation demands were all low as would be expected for a native species.

for a period of 15 years.[14] For instance, if the Proposed Project must mitigate with 10 acres of woodland, the demand would be 10 acre-feet annually. All oak woodland will be established prior to build-out and require no on-going irrigation.

Construction Water

As stated in Section 1, early phases of the Proposed Project will include site grading and infrastructure installation. These and other construction elements will require dust suppression and other incidental water uses. These are estimated to be nominal, and do not continue beyond the construction phases of the Proposed Project. For purposes of identifying incremental water demands, construction water is assumed within this WSA to be as high as 2 acre-feet per year (this is well over half a million gallons – or more than 160 fill-ups of a 4,000 gallon water truck annually).

Modifications to Reflect Additional Water Use Reductions

Similar to the residential demand factors, the above-developed water demand factors for the non-residential classifications are based on similar existing developments in the El Dorado Hills area. Considerations to reduce these baseline values for conservation factors, however, are not required, since demand factors for many of the landscaped features, such as parks, will not change from the existing values. The landscape-dominant demand factors are affected primarily by climatic conditions that drive plant evapotranspiration. In other words, an acre of turf at a park will still use the same amount of water in the new parks as the existing parks. **Table 2-2** summarizes the non-residential demand factors used in this WSA.

Table 2-2 – Summary of Non-Residential Demand Factors

Land Use	Factor Used (af/ac)
Gate House	0.10
Parks	2.77
Vineyards	1.00
Open Space	0.00

2.7 Proposed Project Water Demand Projection

Combining the Proposed Project's land-use details and phasing as summarized in **Table 1-1** and **Table 1-2** with the demand factors presented in **Table 2-1** and **Table 2-2**, the water demands for the project from initiation to build-out are estimated. At completion, the Proposed Project is estimated to need 507 acre-feet of water annually (prior to considerations of non-revenue water, described in the next subsection) as shown in **Table 2-3**.

[14] A conservative water demand number and a long management window were assumed to provide the Proposed Project applicants flexibility in meeting the oak woodland mitigation requirements.

2.7.1 Non-Revenue Water Demands

The demand factors presented earlier in this section represent the demand for water at the customer's meter for each category. To fully represent the demand on EID's water resources, non-revenue water also needs to be included. Non-revenue water represents all of the water necessary to deliver to the customer accounts and reflects distribution system leaks, water demands from potentially un-metered uses such as fire protection, hydrant flushing, and unauthorized connections, and inescapable inaccuracies in meter readings.[15] In most instances, the predominant source of non-revenue water is from system leaks – the loss from fittings and connections from EID's water sources through treatment plants, tanks, pumping plants, major delivery system back-bone pipelines, and community distribution systems. Because a significant portion of the delivery system used to bring water to the Proposed Project already exists, the benefits of new piping within the Proposed Project has limited effect on the overall percentage of non-revenue water necessary to operate the system.

Although EID has an established program for identifying and accounting for most unbilled and other system losses, there are still pipeline leaks, unmetered uses, unauthorized connections, meter inaccuracies, and other losses that are difficult to specifically quantify. Consistent with the District's methodology for calculating future water meter availability, as defined in the *2012 Water Resources and Service Reliability Report,* non-revenue water is projected at a fixed rate of 13 percent. Non-revenue demand is estimated to add 66 acre-feet per year at build-out to the Proposed Project's land-use demands, bringing the estimated build-out water demand attributed to the Proposed Project to 573 acre-feet annually (see **Table 2-4**).

2.7.2 Recycled Water Demand

A portion of the Proposed Project's demands (see **Figure 1-1**) could be met with recycled water provided by EID (see Section 4.3). As previously noted, residential potable demands require about 0.18 acre-feet annually per household. The remaining portion of the unit demand factor for each type of residential lot could be met with recycled water (see **Table 2.1** for unit demand factors). Using these unit water demand assumptions, coupled with the number of residential units, the Proposed Project could meet approximately 330 acre-feet of the 475 acre-feet of residential water demand with recycled water – prior to consideration of non-revenue water demands.

Non-residential components of the Proposed Project could also be met with recycled water, especially the parks and vineyards. Removing the small potable demands for parks and the gate house, the Proposed Project could meet all of the non-residential demand with recycled water –

[15] The American Water Works Association and the California Urban Water Conservation Council recognize the inherent non-revenue water that is either lost or mis-accounted in urban treated water distribution systems and suggest purveyors strive for a value of 10% of all delivered water. Obtaining this value is dependent on numerous factors including the age and extent of distribution system infrastructure, meter rehabilitation programs, and how a purveyor accounts for actions such as fire flows and hydrant flushing.

prior to the consideration of non-revenue water demands. Combined, recycled water could serve approximately 363 acre-feet of the Proposed Project's demand (see **Table 2-4**).

Table 2-4 – Estimated Demand Met with Recycled Water

	Demand (af/yr)		
	Residential	Non-Res	Total
Potable	144	0.1	144
Recycled	331	33	363
Total Demand	**475**	**33**	**507**

Table 2-3 – Estimated Proposed Project Water Demands from Start-up to Build-out

	Unit Count or Acreage						Demand Factor (af/du or af/ac)						Demand (af/yr)					
Category	Current	2015	2020	2025	2030	2035	Current	2015	2020	2025	2030	2035	Current	2015	2020	2025	2030	2035
Residential																		
1 to 3 Ac Lots	0	0	4	24	33	93	1.16	1.04	1.04	1.04	1.04	1.04	0	0	4	25	34	97
1/2 Ac Custom Lots	0	0	3	27	44	106	0.87	0.80	0.80	0.80	0.80	0.80	0	0	2	22	35	85
8,000-10,000 sf Lots	0	0	20	94	146	146	0.55	0.53	0.53	0.53	0.53	0.53	0	0	11	50	77	77
5,000-7,000 sf Lots	0	0	38	187	455	455	0.50	0.48	0.48	0.48	0.48	0.48	0	0	18	89	216	216
												Subtotal		0	35	185	363	475
Public																		
Village Park	0	0	5	5	10	10	2.77	2.77	2.77	2.77	2.77	2.77	0	0	14	14	28	28
Gate House	0	0	1	1	1	1	0.10	0.10	0.10	0.10	0.10	0.10	0	0	0.1	0.1	0.1	0.1
Open Space	0	314	314	314	314	314	0	0	0	0	0	0	0	0	0	0	0	0
												Subtotal		0	14	14	28	28
Other																		
Mitigation	0	15	35	35	20	0	1	1	1	1	1	1	0	15	35	35	20	0
ROW & Landscape	0	0	5	5	5	5	0	0	2	1	1	1	0	0	10	5	5	5
Construction Water	0	1	2	2	2	0	1	1	1	1	1	1	0	1	2	2	2	0
												Subtotal		16	47	42	27	5
												Total Water Demand	**0**	**16**	**96**	**241**	**417**	**507**
												Non-Revenue Demand at 13%	0	2	12	31	54	66
												Total Proposed Project Demand	**0**	**18**	**109**	**272**	**472**	**573**

SECTION 3 – OTHER ESTIMATED WATER DEMANDS

3.1 INTRODUCTION

As stated in this excerpt from Water Code Section 10910(b)(3): *"[T]he water supply assessment for the project shall include a discussion with regard to whether the public water system's total projected water supplies available…will meet the projected water demand associated with the proposed project, in addition to the public water system's existing and planned future uses…"* This section details EID's other "existing and planned future uses." For purposes of this WSA, existing and planned future uses are subdivided into the following:

- **Other Currently Proposed Projects** – in addition to the Proposed Project, El Dorado County (County) is the Lead Agency (pursuant to CEQA) for four additional proposed development projects. As Lead Agency, the County has requested separate WSAs from EID for each of these other projects. Because detailed land-use information is available for three of the four projects and separate WSAs are being developed for these three in parallel to this WSA, each of these three projects have unique water demand estimates that are included in this WSA.[16]

- **All Other Existing and Planned Future Uses –** in addition to the Proposed Project and the Other Currently Proposed Projects, existing customers and anticipated growth in the County must be quantified. The subdivisions of this category are:

    - **Current Customers and Uses** – using 2012 as a baseline condition, this category reflects the current range of EID's potable and recycled water customers. Because these customers and uses already exist, keeping them separate from planned future uses allows an analysis to reflect anticipated reductions in use over time as EID continues to implement its urban water conservation programs targeted at many of the existing customers.[17]

    - **Adjusted General Plan Update Land Use Growth** – in addition to the identified development projects currently undergoing County CEQA review, the County's 2004 General Plan Update (GPU) anticipates continued urban growth throughout the EID service area. This growth is accounted for in the EID 2013 *Integrated*

[16] EID understands the fourth project, San Stino, to be undergoing changes to its land-use plans at the time of drafting this WSA. Lacking the details needed to determine water demands similar to the other WSAs currently being completed, the San Stino project is reflected in the next subgroup of demands (see Section 3.3).

[17] New customers added to EID's system will have lower demand factors, as discussed in Section 2, and will be less likely to implement additional conservation or see much reduction when changes are made. For instance, many existing customers may still have 3 gallon per flush toilets or even 1.6 gallon per flush toilets, which when replaced, will likely only use 1.28 gallons. New houses will be constructed, per the CAL Green Code, with 1.28 gallon per flush toilets. EID has had conservation and incentives programs for more than 20 years.

Water Resources Master Plan (2013 IWRMP) and serves as the primary water demand driver into the future. Adjustments to anticipated GPU growth to reflect the "Other Currently Proposed Projects" and other proposed land-use changes, however, must be made. The adjustments discussed under this category include: (1) potential changes in the 2004 General Plan land use designations as identified in Facility Improvement Letters received and analyzed by EID; and (2) the removal of the Proposed Project and other proposed project uses being developed under concurrent WSAs.

- **Other Authorized Uses** – EID does not anticipate increases above 2012 levels in other authorized potable water uses such as fire flows, meter testing, water quality flushing, and ditch system operations. Demands for this category of water use is removed from the general plan growth and included separately.

- **Non-Revenue Water** – As discussed in Section 2.7.1, an additional demand is seen by EID to treat and deliver water to all customers. Referred to as non-revenue water, this water demand represents a 13 percent increase added to estimated customer demands. This value represents a long-term average experienced by EID.

3.2 OTHER CURRENTLY PROPOSED PROJECTS

As mentioned in the previous section, El Dorado County is the Lead CEQA Agency for four additional proposed development projects and has requested EID to prepare WSA's for each development concurrent with this Proposed Project WSA. EID is currently drafting three of these four WSAs.[18] The estimate of water demand for each WSA follows the same methods used in Section 2 of this WSA, with specific unit demand factors applied to each unique land use element. The other projects are:

- Central El Dorado Hills – located along El Dorado Hills Boulevard north of Highway 50, this projects is a planned infill mixed development with primarily residential units and some commercial space.
- The Village of Marble Valley Specific Plan – located southeast of the Proposed Project, this development features many additional water use elements such as vineyards, schools, parks, a large lake, and a diverse range of housing types and lot sizes.
- Dixon Ranch Residential Project – located northeast of the Proposed Project, this development is a planned residential community with a range of lot sizes and housing types, including a number of "age-restricted" units, accompanied by a community club house, parks, ponds, and trails.

[18] EID understands that the San Stino development project is undergoing changes to the land-use plans previously submitted to the County. Therefore, EID has not begun the WSA for that project.

Based on the detailed analysis completed in the other WSAs, these "Other Currently Proposed Projects" represent approximately 2,750 acre-feet per year of new demand by 2035. **Table 3-1**, presented later in this section, summarizes the estimated water demands as determined and detailed in the concurrent WSAs for each unique project. The values shown are the estimated customer and use demands and do not include the additional water associated with non-revenue percentages attributable to the treatment and distribution for each project (see Section 3.5).

3.3 ALL OTHER EXISTING AND PLANNED FUTURE USES

In simple terms, this category of use would typically reflect all the other water demands anticipated by EID that are in addition to the Proposed Project. However, because of the unique circumstance that other WSAs are concurrently being drafted by EID, this category must be adjusted to remove those other well-defined water demands. Furthermore, because other potential changes to the 2004 GPU have been brought to EID's attention, and EID anticipates changes to current customer uses, a more detailed assessment of future demands is warranted. This subsection describes:

- Current Customers and Uses
- Adjusted GPU Land Use Growth
- Other Authorized Uses

3.3.1 Current Customers and Uses

Current customers and uses in the contiguous EID service area provide a baseline from which to assess additional demand from the Proposed Project and other potential planned uses. For purposes of the WSA, the deliveries to current customers in 2012 were used to define this baseline. Based on the 2012 EID *Water Diversion Report*, EID diverted 36,580 acre-feet into its potable water system. In addition to the potable water, EID served 2,404 acre-feet of recycled water to meet customer demands.[19] Combined, the current water demand is represented as 38,984 acre-feet. This value includes the non-revenue water (see Section 2.7.1), including system losses, necessary to deliver these supplies from their respective treatment plants to the customer meter. This value also includes 1,269 acre-feet sold to the City of Placerville.[20]

Since the WSA uses 2012 as a baseline, the "current" demand varies from that used in the recently adopted 2013 IWRMP, which used the year 2008 for its baseline.[21] Given on-going conservation efforts, adoption of new rate structures, and other drivers, EID has seen an overall decrease in the annual customer use since the IWRMP selected its baseline. Therefore the 2012

[19] See EID 2013 Water Resources and Reliability Report (Table 14)
[20] See EID Consumption Report: Reporting Year 2012 (Table on p. 7)
[21] The IWRMP, adopted by the EID Board in March 2013, began several years ago and at the time used 2008 as a baseline. Since that time, EID's annual diversions have dropped from a high in 2008 of about 45,000 acre-feet to 35,678, 33,453, and 36,580 in 2010, 2011, and 2012, respectively. Combined with recycled water deliveries, the 2012 demand is lower than that used for the 2013 IWRMP, but greater than 2010 and 2011.

baseline used for this WSA is more representative of the baseline use expected into the future from these existing customers and uses.

A slight adjustment to this baseline is necessary, however, to project it into the future. Although this demand will remain relatively constant since it does not add any new uses (additional uses are discussed in the next subsections), a slight decrease is assumed that reflects on-going implementation of conservation and installation of new water-using fixtures by existing customers. EID's continued leadership in conservation will enable existing customers to retrofit toilets, receive appliance rebates for new household items such as dishwashers, water heaters and clothes washers, and implement irrigation efficiency improvements through various incentives. Additional reductions in existing customer demands will also occur simply as a result of the natural replacement of old fixtures and appliances with lower water-use devices. For purposes of the WSA, EID estimates the reduction in current customer demand will be approximately 2% by 2020 and an additional 1% by 2035. This is consistent with EID's expectations necessary to meet its per-capita water use targets as detailed in the 2010 Urban Water Management Plan.[22]

3.3.2 Adjusted GPU Land Use Growth

In the 2004 GPU, the County made growth projections using land-use zoning throughout the County. Within the contiguous EID water service area, the GPU land-use zoning correlates to EID defined unit water demand factors. During preparation of the recently adopted 2013 IWRMP, EID used GIS-based land-use designations, combined with the water demand factors, to develop estimated growth in water demand. Absent any changes to the 2004 GPU land-use designations, the 2013 IWRMP demand projections would provide a valid representation of future water needs. However, because several proposed changes to the GPU land-use designations have been submitted – both through the County's formal process, such as is the situation with the Proposed Project and Other Planned Projects, and through an EID process explained below – the 2013 IWRMP demand projections require refinement. The steps to adjust these demands included:

- Removal of Proposed Project and Other Planned Projects water demands
- Modifying land-use zoning based on Facility Improvement Letters
- Determining Growth to Year 2035

Once these steps were completed, the analysis reassessed the water demand using the water demand factors applied in the 2013 IWRMP.

Step 1: Removal of Proposed Project and Other Planned Project Water Demands

The first step in adjusting the water demands was to remove the detailed water demands estimated in this WSA for the Proposed Project and for the Other Planned Projects (see

[22] See Section 3 of the 2010 UWMP available here: http://www.eid.org/modules/showdocument.aspx?documentid=338

Section 2 and Section 3.2). This step involved removing the specific acreage and water demand factors from the 2013 IWRMP analysis. The 2004 GPU included land-use zoning for the lands underlying the Proposed Project as well as the Other Planned Projects. In the 2013 IWRMP, water demands were estimated using the existing zoning. Removing these land uses eliminates the potential to double-count the associated acreage when assessing the remaining GPU expected growth.

Step 2: Modifying Land-use Zoning based on FILs

When investigating water service from EID for development projects (e.g. lot splits, land use changes, and new service to existing parcels), existing landowners submit a Facilities Improvement Letter (FIL). This document allows EID to assess whether infrastructure or supplies are available to serve the proposed project. In some instances, the FILs include proposed land-use zoning changes not previously incorporated into EID water demand projections. By using GIS to map the locations of the FILs requesting a change in land-use zoning, EID was able to identify where changes to the 2013 IWRMP demand estimates would occur. About 25 specific FILs were identified as having land-use designation changes. These identified parcels were removed from the prior analysis to eliminate potential double counting of demands.

In a separate analysis, the water demand for this subset of parcels was recalculated using the appropriate water demand factor for the new proposed land-use classification (e.g. water needs for these parcels may have previously been calculated based on very-low density housing, but is requesting a change to higher density housing). Through the analysis, an increased demand of approximately 3,000 acre-feet over the 2013 IWRMP projections was identified.

Step 3: Determining Growth to 2035

The GPU identifies anticipated build-out conditions for the County and, as a subset, for the EID contiguous water service area. Since this WSA assesses water demands in 5-year increments only to 2035 – well short of the anticipated timing of the County's build-out – the amount of build-out growth occurring by 2035 must be determined. This was done for both the parcels identified with new land-use zoning through the FIL analysis, and for the remaining parcels with original GPU land-use designations.

Because there is little detail about planned development rates for the FIL-related parcels, this WSA assumed that these parcels would have full water demand usage by 2035.[23] This is a conservative estimate, since some of these lands may not develop by 2035 or may never

[23] This assumption also considers that a landowner would likely only submit a FIL to EID if they are seriously contemplating the development activity. Thus, there is a higher likelihood that these parcels will develop at a faster rate than other generally anticipated growth for the remaining parcels in the GPU.

develop. Thus, the estimated increase in demand of approximately 3,000 acre-feet was assumed to occur by 2035 with the 2013 IWRMP growth rate applied.

For the remaining parcels, growth rates used to determine the degree of development were based on EID's 2013 IWRMP. In the 2013 IWRMP, growth rates for the El Dorado Hills, and Western/Eastern water service areas were identified for specific year-ranges.[24] This WSA uses those growth rates for the remaining parcels. Using the 2013 IWRMP growth rates, the analysis determined build-out for the El Dorado and Western/Eastern service areas occurs after 2035.

During this adjustment, special attention was provided to the City of Placerville. The City purchases potable water from EID for distribution to its residents. The 2013 IWRMP projected future water demands for the City based on the City's existing General Plan. This WSA assumes the same rate of growth and build-out demand as the 2013 IWRMP for the City.

Upon completion of these steps, the adjusted demand for the GPU land uses was determined. **Table 3-1** summarizes the anticipated increase in water demand during each 5-year increment as a result of these adjustments to the GPU land-uses.

3.3.3 Other Authorized Uses

In addition to the sale of water to metered customers, EID has a set of water demands it refers to as "Other Authorized Uses." This designation is for the following existing uses:

- Knolls Reservoir Assessment District
- Private Fire Services
- Temporary Water Use Permit
- Bulk Water Stations - Permanent
- Bulk Water Stations - Temporary
- Lift Stations
- Collection System Flushing
- Spills, Overflows, and Flushing
- Clear Creek Aesthetics Flow Maintenance District

Of these, the Clear Creek aesthetic flows comprise over 80 percent of the annual authorized uses. Lift stations and temporary use permits comprise another 10 percent. The current demand of approximately 2,200 acre-feet is already reflected in the "Current Customers and Uses." EID anticipates no growth in these authorized water uses, with the total demand to remain constant at 2,200 acre-feet through 2035.

[24] EID Integrated Water Resources Master Plan, adopted March 2013 (Table 9-2).

3.4 NON-REVENUE WATER DEMANDS

The subtotal values in **Table 3-1** represent the demand for water at the customer's meter for each category. To fully represent the demand placed on EID's water resources, non-revenue water also needs to be included. Non-revenue water represents all of the water necessary to deliver to the meter and reflects distribution system leaks, water demands from potentially un-metered uses of fire protection, fire hydrant flushing, and unauthorized connections, and inescapable inaccuracies in meter readings.[25] In most instances, the predominant source of non-revenue water is from system losses – the loss from fittings and connections from the District's water sources through treatment plants, tanks, pumping plants, major delivery system back-bone pipelines, and community distribution systems.

Although the District has an established program for identifying and accounting for most unbilled and other system losses, there are still pipeline leaks, unmetered uses, unauthorized connections, meter inaccuracies, and other losses that are difficult to specifically quantify. Consistent with the District's methodology for calculating future water meter availability, as defined in the *2012 Water Resources and Service Reliability Report,* non-revenue water is projected at a fixed rate of 13 percent.

As shown in **Table 3-1**, non-revenue demand for Existing and Planned Future Uses is estimated to be about 7,700 acre-feet per year by 2035.

3.5 ESTIMATED EXISTING AND PLANNED FUTURE USES

Combining the estimated water demand for Other Currently Planned Projects (see Section 3.2 with the All Other Existing and Planned Future Uses demand (Current Customers and Uses plus the Adjusted GPU Land Use values), the total estimated demand during each 5-year increment to 2035 is derived (see subtotal water demand in **Table 3-1)**.

[25] See footnote 14

Table 3-1 – All Other Existing and Planned Future Uses

Category	Estimated Demand (af/yr)					
	Current	2015	2020	2025	2030	2035
Other Currently Proposed Projects	0	271	1,238	1,949	2,501	2,752
Current Customers and Uses [1]	38,984	34,154	33,809	33,694	33,579	33,464
Adjusted GPU Land Use [2]	0	514	2,853	7,975	14,718	22,830
Subtotal Water Demand	**38,984**	**34,940**	**37,901**	**43,618**	**50,798**	**59,046**
	Current	2015	2020	2025	2030	2035
Non-Revenue Water at 13%	--	4,542	4,927	5,670	6,604	7,676
Total Water Demand	**38,984**	**39,482**	**42,828**	**49,288**	**57,402**	**66,722**

1. The "Current Customers and Uses" demand value includes the "Other Authorized Uses." The Value is greater under the "Current" condition because "Non-Revenue Water" is included in the current year. All other years will have "non-revenue water" added on a separate line. A 3% conservation decrease occurs by 2035.
2. "Adjusted GPU Land Use" reflects changes to the 2004 GPU as determined by FILs submitted to EID. This value also does NOT include the other proposed projects currently undergoing County CEQA review.

3.6 TOTAL ESTIMATED DEMAND

The other existing and planned future water demands described in this section represent the total demands anticipated *in addition to* the water demands of the Proposed Project. Combining the estimated Proposed Project water demands of 573 acre-feet annually (see **Table 2-3**) with the estimated Existing and Planned Future water demands of approximately 66,780 acre-feet annually (see **Table 3-1**), a total estimated demand for EID water supplies by 2035 is determined. Estimated existing and planned future water demands, inclusive of non-revenue water needs, for each 5-year increment to 2035 are presented in **Table 3-2**. The estimated demand for EID Water supplies is 67,295 acre-feet annually.

Table 3-2 – Total Estimated Water Demands

Category	Estimated Demand (af/yr)					
	Current	2015	2020	2025	2030	2035
Proposed Project	0	18	109	272	472	573
Existing and Planned Future Uses	38,984	39,482	42,828	49,288	57,402	66,722
Total Water Demand	**38,984**	**39,500**	**42,937**	**49,560**	**57,874**	**67,295**

Of note is that the estimated water demand for 2035 presented in **Table 3-2** fits within the range of total demands presented in Table 9-1 of the 2013 IWRMP (estimated to be between 61,262 acre-feet and 77,315 acre-feet). The primary differences is that the 2013 IWRMP used 2008 as a baseline demand, which is substantially higher than EID has seen in the last several years. This WSA uses 2012 as a baseline. The 2008 value was approximately 45,000 acre-feet, while the 2012 value is 38,984 – or about 39,000 acre-feet. This represents a difference of about 6,000

acre-feet. Starting from a different baseline quantity and year, and then applying the 2013 IWRMP growth rates, results in a different estimated total demand when reaching 2035.

SECTION 4 – WATER SUPPLY CHARACTERIZATION

4.1 INTRODUCTION

This section explains the intended water supply that EID will use to serve the Proposed Project.[26] EID will meet the Proposed Project's water demands by utilizing water assets derived from its existing sources as well as through future asset acquisition efforts with El Dorado County Water Agency. This section details the Proposed Project's available water supplies and entitlements as well as its planned water supplies and entitlements in both normal water years and dry water years. The Proposed Project exists completely in El Dorado Irrigation District's contiguous water service area (see **Figure 4-1**) and may be served with both treated water and recycled water.[27]

El Dorado Irrigation District maintains two primary interconnected water systems in its contiguous service area: the El Dorado Hills system and the Western/Eastern system, along with a separate recycled water system. The El Dorado Hills water system obtains its primary supplies under rights and entitlements from Folsom Reservoir. The Western/Eastern system derives its supplies from sources under rights and entitlements emanating from further up the American River watershed and the Cosumnes River watershed. The recycled water system serves treated wastewater from the El Dorado Hills wastewater treatment plant and the Deer Creek wastewater treatment plant.

The water assets can be further categorized by the service area they primarily serve and the treatment plant they flow through. Water derived from Folsom Reservoir is delivered to the El Dorado Hills water treatment plant and serves the El Dorado Hills area. Water derived from upstream American River watershed diversions and storage reservoirs generally use the Reservoir 1 Water Treatment Plant while the Cosumnes River diversions use Reservoir A Water Treatment Plant to serve the Western/Eastern area. Water assets from these upstream diversions can be delivered by gravity feed to the El Dorado Hills area, but assets from Folsom Reservoir are not delivered outside the El Dorado Hills area due to infrastructure limitations. The following subsections describe these water supplies and delivery mechanics in more detail.

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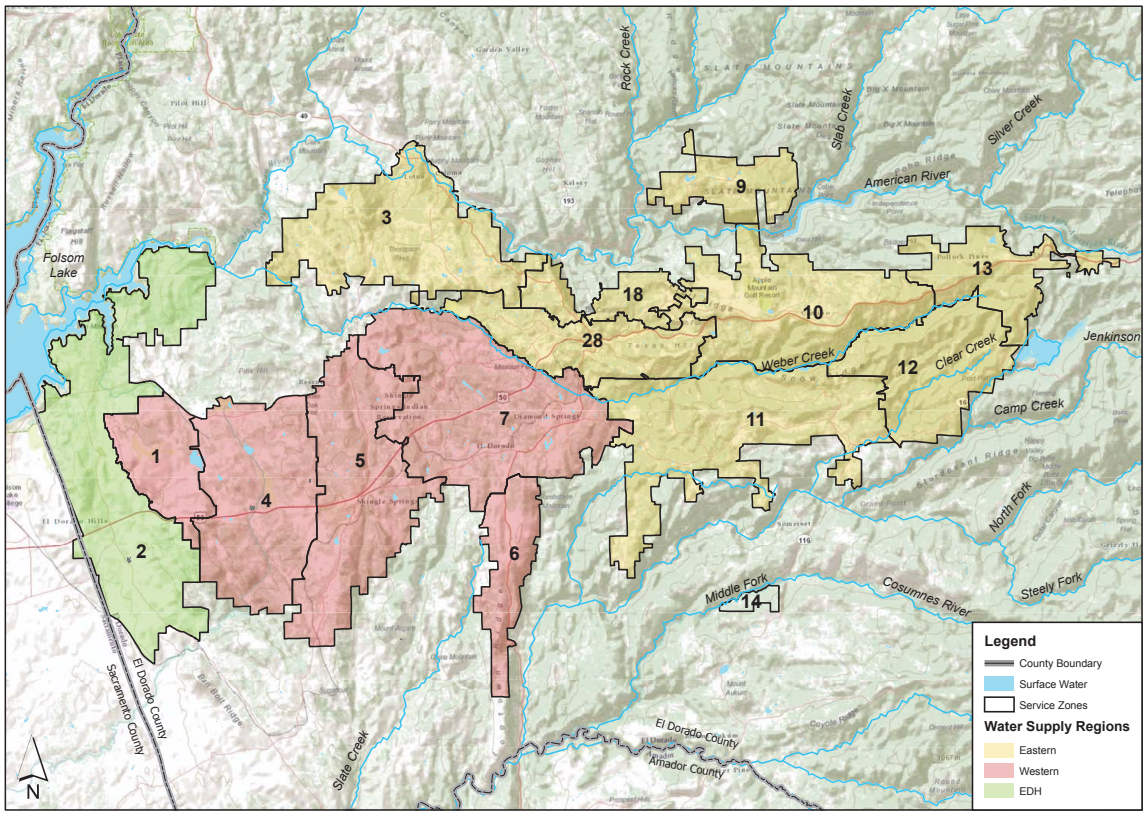
[26] CWC § 10910(d)(1) requires that "The assessment… include an identification of any existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project, and a description of the quantities of water received in prior years by the public water system…under existing water supply entitlements, water rights, or water service contracts. (2) An identification of existing water supply entitlements, water rights, or water service contracts held by the public water system…shall be demonstrated by providing information related to all of the following: (A) Written contracts or other proof of entitlement to an identified water supply. (B) Copies of a capital outlay program for financing the delivery of a water supply that has been adopted by the public water system. (C) Federal, state, and local permits for construction of necessary infrastructure associated with delivering the water supply. (D) Any necessary regulatory approvals that are required in order to be able to convey or deliver the water supply."

[27] EID also has surface water assets that it serves to two non-contiguous areas as well as raw water assets that are used for agricultural purposes. These water assets are irrelevant to the Proposed Project contemplated in this Water Supply Assessment and are, therefore, not analyzed.

Figure 4-1 – El Dorado Irrigation District Service Area
(from Figure 8-7, Integrated Water Resources Master Plan, EID, March 2013)



4.2 TREATED WATER SUPPLIES

EID's treated water supplies identified for the Proposed Project are derived from a number of water rights and entitlements as detailed in **Table 4-1**. The maximum available water assets column in **Table 4-1** does not account for other hydrological, technical, regulatory, and contractual limitations that apply to the water assets for normal year and dry year deliveries. These issues are addressed in the other two columns in the table. EID's water assets available for the Proposed Project include water rights and entitlements that EID currently has in its possession and planned water rights and entitlements that it will control in the future.

4.2.1 Water Rights and Entitlements Description

Generally, EID's water assets are derived from pre-1914 appropriative water rights, licensed and permitted appropriative water rights, Central Valley Project (CVP) contracts, Warren Act contracts (that allow non-federal water assets to be wheeled through the federal storage and conveyance facilities), and recycled water generated from the effluent treated at the District's two wastewater treatment plants. The District's counsel has recently confirmed all of these water rights and entitlements. Pertinent information regarding these water assets is included in **Appendix A** of this document as required by Water Code section 10910(d).

Water for the Proposed Project will be derived from both Folsom Reservoir and upstream American River and Cosumnes River diversions. As shown in **Table 4-1**, the primary water assets for diversion at Folsom Reservoir are: CVP Contract 14-06-200-1375A-LTR1, and License 2184 and several pre-1914 water rights incorporated into Warren Act contract 06-WC-20-3315. EID is seeking to finalize its Warren Act contract for diversions of Permit 21112 at Folsom Reservoir. EID also has additional water assets under the El Dorado – SMUD Cooperation Agreement and a Central Valley Project water entitlement derived from El Dorado County Water Agency's Fazio water supply. These water assets will be described in **Section 4.2.2**.

Table 4-1 – Water Rights, Entitlements, and Supply Availability

Water Right or Entitlement	Maximum Water Assets Available (Ac-ft)	Normal Year Planned Supply Availability (Ac-ft)	Dry-Year Planned Supply Availability (Ac-ft)
License 2184 and pre-1914 ditch rights including Warren Act Contract 06-WC-20-3315	4,560	4,560	3,000
Licenses 11835 and 11836	33,400	23,000	20,920[A]
CVP Contract 14-06-200-1375A-LTR1	7,550	7,550	5,660
Pre-1914 American River diversion and storage rights	15,080	15,080	15,080
Permit 21112	17,000	17,000	17,000
Subtotal Existing	**77,590**	**67,190**	**61,660**
Central Valley Project Fazio water entitlement (PL 101-514 (1990) Fazio) [D]	7,500	7,500	5,625
Applications 5645X12, 5644X02 and partial assignment of Applications 5645, 5644 with El Dorado-SMUD Cooperation Agreement [E]	40,000[B]	30,000	5,000[C]
Subtotal Planned	**47,500**	**37,500**	**10,625**
Recycled Water	5,600	5,600	5,600
Total	**130,690**	**110,290**	**77,885**

[A] This is the modeled safe-yield of this water right during a single dry-year. For planning purposes, the second and third dry years of a three-year dry period are assumed to be 17,000 acre-feet, and 15,500 acre-feet, respectfully
[B] Section 5.1.1 of the El-Dorado SMUD Cooperation Agreement indicates that 40,000 acre-feet of SMUD water will be available after 2025. For conservative Normal Year planning purposes, the District uses 30,000 acre-feet of available supply.
[C] Available supply is 15,000 acre-feet in a single dry year but in preparing for multiple dry years EID anticipates using only 5,000 acre-feet per year for a three year period.
[D] Available starting in 2015
[E] Available starting in 2025

License 2184 and Pre-1914 Water Rights

Water rights associated with Weber Dam, Weber Creek (Farmer's Free Ditch), Slab Creek (Summerfield Ditch), and Hangtown Creek (Gold Hill Ditch) are available to be diverted at Folsom Reservoir under a long-term Warren Act Contract, with approximately 4,560 acre-feet available each year from these sources. A Warren Act Contract allows the use of federal facilities to take non-CVP water such as these supplies. The 40-year contract commenced on March 1, 2011 and has a maximum net contract amount of 4,560 acre-feet per year. The contract total also assumes a 15% conveyance loss between the former points of diversion and Folsom

Reservoir, which can be adjusted at a later date by mutual agreement without amending the contract. The annual water diversion season is limited to April through November 15 and the water must be used for municipal and industrial purposes in the El Dorado Hills and Cameron Park areas.

Licenses 11835 and 11836

Licenses 11835 and 11836 allow for 33,400 acre-feet of diversion in EID's upstream system in the Cosumnes River watershed. These diversions are stored in Jenkinson Lake, the largest storage reservoir in EID, formed by two earth and rock dams across Sly Park Creek near Pollock Pines with a maximum capacity of 41,033 acre-feet. The dam was constructed as a portion of the United States Bureau of Reclamation (USBR) CVP in 1955. With the transfer of ownership from the USBR of the Sly Park dam and associated lands and facilities in 2003, EID not only operates and maintains the Jenkinson Lake and Sly Park Dam facilities, including recreational aspects, but also holds the water rights. The average annual use from this facility is approximately 23,000 acre-feet, though EID's annual water right is for 33,400 acre-feet of total beneficial use. This water supply is used entirely within EID's contiguous service area. Under average flow conditions, Jenkinson Lake is operated to maintain 14,000 to 18,000 acre-feet of carryover storage each year. The outlet works at Sly Park Dam have a maximum capacity of 125 cfs. Water is released to the Reservoir A Water Treatment Plant for subsequent treatment, transmission, and distribution.

Jenkinson Lake contributes approximately 20,920 acre-feet per year to EID's system firm yield. Over the past five years, EID's annual diversions from Jenkinson Lake have averaged approximately 22,600 acre-feet per year. EID's maximum and minimum diversions from this particular water source during this five-year period were 25,745 and 20,800 acre-feet per year, respectively.

USBR CVP Contract 14-06-200-1375A-LTR1

Surface water from Folsom Reservoir is provided to the El Dorado Hills area. By contract with the USBR for Folsom Reservoir water, EID is entitled to 7,550 acre-feet per year. The contract includes provisions for use in a particular area that generally encompasses the El Dorado Hills and Cameron Park areas. Folsom Reservoir is operated by the USBR as part of the CVP, a multipurpose project that provides flood control, hydroelectricity, drinking water, and water for irrigation.

The El Dorado Hills County Water District entered into a USBR Contract in 1964 for water supply from Folsom Reservoir. The contract had a not-to-exceed limit of 37,600 acre-feet per year. When EID annexed the El Dorado Hills County Water District in 1973, the contract was assigned to EID, and subsequently, in 1979, an amendatory contract replaced the original 1964 contract and reduced the maximum annual supply quantity of Folsom Reservoir water to 6,500 acre-feet per year. In 1983, the USBR increased the maximum annual supply quantity from

6,500 to 7,500 acre-feet per year. EID also annexed and succeeded to a USBR Contract for 50 acre-feet per year to supply the Lakehills area in El Dorado Hills. In 2006, these two contracts were consolidated into a single 40-year USBR Contract with a maximum quantity of 7,550 acre-feet per year.

Pre-1914 South Fork American River and Project 184

EID acquired Project 184 from Pacific Gas and Electric (PG&E) in 1999. Project 184 includes reservoirs and associated dams, 22 miles of canals, a 21 Mw powerhouse, and other ancillary facilities. Prior to the transfer of ownership and water rights, EID held a contract to purchase water from PG&E and its predecessor, Western States Gas and Electric Co. The original water rights claims date back to 1856, with additional claims being filed in the 1860s and 1870s. The water rights for diversions from Echo Lake were established in 1880 in a California Supreme Court decision. Then, in 1918, the California Railroad Commission (predecessor to the California Public Utilities Commission) recognized the use of water from the El Dorado Canal for irrigation and domestic purposes.

The sources of this water supply include natural flows in the South Fork American River and its tributaries, and stored water in Silver, Aloha, Echo, and Caples Lakes. The supply is diverted from the South Fork American River at Kyburz and is conveyed via the El Dorado Canal to the El Dorado Forebay. Some additional water is obtained by diversions into the El Dorado Canal from streams tributary to the South Fork American River. EID takes consumptive use of the water supply at the Main Ditch Intake, located at the El Dorado Forebay. This particular supply contributes 15,080 acre-feet per year to EID's system firm yield.

Water diversions of up to 156 cfs can be made from the South Fork American River at the diversion dam. In addition to these direct diversion rights, EID also has pre-1914 diversion and storage rights associated with portions of the waters stored in Silver Lake, Caples Lake, and Lake Aloha and all of the waters stored in Echo Lake.

El Dorado Forebay is filled by the surface water supply from the Project 184 facilities upstream in the South Fork American River basin and at Echo Lake. EID has a consumptive water entitlement of 15,080 acre-feet per year delivery at the Forebay. The entitlement is a pre-1914 water right, and diversions are made in compliance with the 40-year Federal Energy Regulatory Commission Project 184 operating license issued to EID in October 2006. Because the full entitlement can be provided in all years including the most severe historic single dry year of 1977, this source of water is considered assured, and not subject to shortage from hydrologic droughts.

Permit 21112 and Warren Act Contract

The State Water Resources Control Board (SWRCB) issued EID a water right permit in 2001 for an additional 17,000 acre-feet per year of water supply associated with Project 184 facilities and power operations to be taken at Folsom Reservoir. This water supply was authorized under

Permit 21112 for diversion and consumptive use anywhere within EID's contiguous service area. There are no cutback provisions on this supply.

The El Dorado County Water Agency (EDCWA) and EID applied to the SWRCB to obtain water rights for consumptive use of waters previously stored and released for power generation from Caples, Silver, and Aloha Lakes, as well as certain direct diversions from the South Fork American River, all of which have been used by Project 184 for hydroelectric power generation or instream flows. The EDCWA later assigned all of its rights under this application to EID. The SWRCB granted the right to appropriate 17,000 acre-feet per year of water. Permit 21112 allows EID to make direct diversions from the South Fork American River at Folsom Reservoir; to store in Caples, Silver, and Aloha Lakes; and to redivert the water released from storage. The sole approved point of take for consumptive purposes is Folsom Reservoir.

A diversion from Folsom Reservoir requires acquiescence from the USBR and issuance of a Warren Act Contract. EID has diverted water under this right under a temporary urgency basis and the Warren Act Contract is pending.

Recycled Water Supplies

EID produces recycled water at both the El Dorado Hills and Deer Creek wastewater treatment plants which is then used by EID's customers for irrigation of residential landscape and commercial landscape. The availability of recycled water is currently limited to the El Dorado Hills and Cameron Park areas. EID anticipates a 2035 recycled water supply totaling 5,600 acre-feet per year (see Section 4.3 for further details).

4.2.2 Planned Water Supplies

EID has plans to acquire and use two additional water supplies from EDCWA for use within its service area to make available for the Proposed Project – water under the El Dorado-SMUD Cooperation Agreement and water under EDCWA's Fazio CVP supply. This section describes these supplies.

El Dorado-SMUD Cooperation Agreement

As shown in **Table 4-1**, the additional supplies include a grouping of water right applications and assignment of existing water right applications totaling approximately 40,000 acre-feet of water. This supply is being developed by the El Dorado Water and Power Authority (EDWPA). EDWPA is a Joint Powers Authority consisting of El Dorado County, El Dorado County Water Agency and El Dorado Irrigation District (collectively, El Dorado Parties). EDWPA was formed to pursue additional water supplies for the western slope of El Dorado County as determined by the El Dorado County General Plan. This need is identified in the El Dorado County Water Agency Water Resources Development and Management Plan (Water Plan).[28] The Water Plan is designed to coordinate water resource planning activities within El Dorado County and identifies

[28] http://www.edcgov.us/water/final_water_resources_plan.html

water supply needs for the western slope of El Dorado County of approximately 34,000 acre-feet per year (AFA) at the 2025 demand level.

In 2005, the El Dorado Parties signed the "El Dorado – SMUD Cooperation Agreement" (included with **Appendix A**), which would help meet the Water Plan's identified water supply needs. This Agreement requires SMUD to make annual deliveries of up to 30,000 acre-feet of water through 2025 and 40,000 acre-feet thereafter from SMUD's Upper American River Project (UARP) to the El Dorado Parties. In 2008, EDWPA petitioned the SWRCB for partial assignment of two applications for diversion and storage to obtain water supplies necessary to trigger SMUD's obligations. A Draft Environmental Impact Report has been prepared in support of the water rights application and was circulated in July 2010. EDWPA is currently in the protest settlement phase and the CEQA process is anticipated to be completed in 2014 with award of water rights shortly thereafter.

The El Dorado-SMUD Cooperation Agreement also obliges SMUD to provide carryover storage and delivery to EID of up to 15,000 acre-feet of drought protection water supplies to be obtained by EDWPA. Based on demand projections, EID anticipates that only 30,000 acre-feet of the 40,000 acre-feet identified in the water right applications and the El Dorado – SMUD Cooperative Agreement will be available to EID in normal years. Moreover, EID has planned that a mere 5,000 acre-feet of the water supply will be available for EID's uses in each dry year. This number is derived from Appendix H of the El Dorado – SMUD Cooperation Agreement describing deliveries available from carryover storage. Both of these conservative assumptions are shown in **Table 4-1**. EID has planned this supply to be available starting in 2025.

Fazio CVP Supply

EID is also in the final stages of securing 7,500 acre-feet of CVP water supplies in conjunction with EDCWA. In 1990, Congress directed the Secretary of the Interior, through the USBR, to enter into a new CVP Municipal and Industrial (M&I) water service contract with EDCWA for up to 15,000 acre-feet of water annually (Section 206 of P.L. 101-514). The CVP water service contract requires requisite compliance by EDCWA and the USBR with CEQA, NEPA, and ESA statutes.

In 2009, a draft EIS/EIR was released for public review and comment for the CVP M&I water rights contract. In 2010, USBR advised EDCWA that it would take another 5 years before the CVP-Operations Criteria and Plan (OCAP) related litigation would allow the EIS to move forward. As a result, EDCWA made the decision to detach the EIR from the EIS – essentially separating the CEQA and NEPA processes. EDCWA certified the Final EIR and approved the project in January 2011. EDCWA then prepared and submitted to USBR a draft Biological Assessment (BA) in September 2011 and a draft Final EIS in October 2011. USBR submitted the draft Final EIS to NOAA Fisheries in December 2011. Final EIS completion and contract execution is pending completion of ESA consultation with NOAA Fisheries.

The CVP contract seeks to acquire 15,000 acre-feet of CVP project water, of which at least 7,500 acre-feet would be made available to EID by subcontracts with EDCWA.[29] Diversions by EID would occur at its existing intake in Folsom Reservoir, conveyed to the El Dorado Hills Water Treatment Plant, and delivered to a specific place of use location in El Dorado Hills and Cameron Park areas as shown in Figure ES-2 of EDCWA's EIR.

The contract negotiations and environmental compliance efforts are ongoing. These actions allow EID to use this water supply in this WSA as a planned supply that will be available to EID in the future to serve the Proposed Project. The approval of the contract terms as well as finalization of the environmental documents will allow EID to apply the water supplies under this contract entitlement to municipal and industrial beneficial uses. EID has planned this water supply to be available starting in 2015.

4.2.3 Normal Year Water Supply Availability

As shown in **Table 4-1**, EID's total water entitlements under its existing and planned supplies does not equate to the amount of water available in normal years in the future. The normal year water supplies will be described in this section.

Excluding recycled supplies, EID's secured water rights and entitlements available for the Proposed Project total 67,190 acre-feet. As shown in the sufficiency analysis in Section 5, this amount is insufficient to serve EID's future demand incorporating the Proposed Project and all planned future projects. Accordingly, this section assesses both EID's secured supplies and additional planned supplies. EID's water supplies associated with the entire secured and planned water assets totals 110,290 acre-feet per year.

The 67,190 acre-feet of secured supplies include appropriative water right license 2184 and pre-1914 appropriative water rights associated with Slab Creek, Hangtown Creek and Weber Creek. As described above, these rights are collectively combined for conveyance purposes in a Warren Act Contract, No. 06-WC-20-3315, that allows for storage in and diversion from Folsom Reservoir. The total volume is 4,560, net of a negotiated 15% conveyance loss under the terms of the Warren Act contract. For purposes of serving the Proposed Project, EID assumes full diversion at 4,560 in normal years under these water assets.

Appropriative water right licenses 11835 and 11836 are also secured supplies. These supplies can be diverted from several creeks in the Cosumnes River watershed (Camp, Hazel, and Sly Park) and are typically stored in Jenkinson Lake. The maximum rate of diversion is 500 cfs for a total possible diversion volume of 33,400. However, due to limitations in storage availability in Jenkinson Lake assessed through OASIS hydrologic modeling, the maximum available normal

[29] Central Valley Project Water Supply Contracts Under Public Law 101-514 (Section 206): Proposed Contract Between the U.S. Bureau of Reclamation and the El Dorado County Water Agency, and Proposed Subcontracts Between the El Dorado County Water Agency and the El Dorado Irrigation District, and Between the El Dorado County Water Agency and the Georgetown Divide Public Utility District Final Environmental Impact Report at ES-1, January 2011.

year supply for the Proposed Project is 23,000 acre-feet.[30] Although EID has diverted as much as 25,745 acre-feet from this reservoir, EID does not anticipate using more than 23,000 acre-feet under this right for its normal year diversions in the future.

Central Valley Project Contract 14-06-200-1375A-LTR1 is a secured supply available for immediate use for the Proposed Project. This CVP contract entitlement requires the USBR to deliver up to 7,550 acre-feet of water from its SWRCB water right permits on the American River to EID.

As described in Section 4.2.1, EID also has a number of pre-1914 appropriative water rights on the American River with storage components in Silver Lake, Lake Aloha, Caples Lake, and Echo Lake. For purposes of this document, these are collectively called the pre-1914 American River water rights.[31] The total volume of water available under the pre-1914 American River water rights is 15,080 acre-feet in normal years.

Appropriative water right permit 21112 is a secured supply for purposes of this WSA. Permit 21112 allows EID to divert up to 17,000 acre-feet of water per year from Folsom Reservoir to be used in EID's service area. EID has diverted water under this permit as part of a temporary urgency in 2008. EID must finalize its Warren Act Contract to divert this water at Folsom Reservoir. However, based upon the availability of the supply in Permit 21112, the ability to store the water in Caples, Silver, and Aloha lakes, and the pending conveyance agreement with USBR, the normal-year availability of this supply is 17,000 acre-feet.[32]

As described in Section 4.2.2, EID's planned water supplies include the CVP Fazio supply of 7,500 acre-feet as authorized under federal law. Once secured, EID should receive normal-year deliveries of the full entitlement just as USBR promises to other CVP M&I contract holders on the American River system. There is no reason to believe that this contract entitlement will be different than other CVP contract entitlements on the American River system.

Last, as described in Section 4.2.2, EID's planned water supplies derived from the EDWPA appropriative water right applications filings and assignments, as well as the El Dorado – SMUD Cooperation Agreement, indicate that EID should receive normal-year water deliveries of 30,000 acre-feet per year starting in 2025 and then as much as 40,000 acre-feet of deliveries thereafter. Based on demand projections, the District uses 30,000 acre-feet of normal-year deliveries under these collective applications and the El Dorado-SMUD Cooperation Agreement.

[30] 2013 Water Resources Report

[31] California Water Code section 10910(d)(2)(A) requires "proof of entitlement" of each individual water right that is combined into this pre-1914 American River water rights grouping. These documents are contained in **Appendix A** of this Water Supply Assessment.

[32] EID Urban Water Management Plan 2010 Update, July 2011 at page 4-7 of 22. Follow-up discussion with EID Counsel on water availability on April 23, 2013.

4.2.4 Dry-Year Water Supply Availability

As shown in **Table 4-1**, EID anticipates less water being available in dry years than is otherwise available in normal years as described in Section 4.2.3. Dry-year supplies include supply reductions attributable to hydrologic droughts and regulatory curtailments. The dry-year water supplies are described in this section.

EID's entire normal-year secured and planned water assets total 110,290 acre-feet per year. In dry years, EID's total water assets equal 77,885 acre-feet. Of this total supply, 61,660 acre-feet are secured water assets and 16,225 acre-feet are planned water assets.

As described in Section 4.2.3, the secured water assets include License 2184 and the additional pre-1914 appropriative rights that are included in Warren Act contract 06-WC-20-3315, Licenses 11835 and 11836, CVP Contract 14-06-200-1375A-LTR1, the pre-1914 American River water rights grouping, and Permit 21112. All of these water rights are subject to different regulatory and hydrological restrictions that could result, in some instances, in reduction of the water supplies available under the right or entitlement in dry years.

The water rights contained in the Warren Act Contract 06-WC-20-3315 have some level of regulatory restrictions and hydrological uncertainty. EID's 2010 UWMP indicates that the estimated dry-year yield associated with this water asset is 3,000 acre-feet per year based upon regional hydrologic conditions.[33] Accordingly, based upon the presumed hydrologic conditions, the dry-year reliability for this supply in three consecutive dry years is 3,000 acre-feet per year.

Licenses 11835 and 11836 have a full diversion entitlement of 33,400 acre-feet per year. Of that amount, carryover storage in Jenkinson Lake and diminished inflow reduce that entitlement to a normal-year supply of 23,000 acre-feet per year. In dry years, this amount is further reduced based upon hydrologic conditions as well as carryover storage needs for future years from Jenkinson Lake. Accordingly, based upon the OASIS hydrologic modeling report, EID reduces this supply's availability to 20,920 acre-feet in a single dry year. Thus, 20,920 acre-feet per year is used in this WSA as the dry-year safe yield number for a single dry year. To be conservative, EID plans for this supply to be further reduced during year two and again in year three of and three consecutive dry years. This WSA uses 17,000 acre-feet and 15,500 acre-feet as the available supply in year two and year three of a multi-year drought, respectfully.

CVP Contract 14-06-200-1375A-LTR1 has a normal-year entitlement of 7,500 acre-feet per year. The USBR, however, assesses the dry-year supply availability of its CVP M&I contracts through the CVP M&I Shortage Policy. Based on inflow and storage criteria developed at the joint operations center, USBR can reduce contract water supplies under the CVP M&I Shortage Policy by up to 25% of historic use with various adjustments made for population, use of non-

[33] EID Urban Water Management Plan 2010 Update, July 2011 at page 4-6 of 22. Follow-up discussion with EID Counsel on water availability on April 23, 2013.

CVP water and extraordinary conservation actions.[34] With these adjustments in mind, USBR calculates the reduced CVP M&I delivery essentially based upon the average of the three previous normal years of use under the CVP contract. Under the strictest interpretation of this policy, if the water under the CVP contract was not used, then the dry year water is not available. But, USBR has considered that use of non-CVP supplies in lieu of CVP water use may be used to calculate use under this shortage policy. For purposes of this analysis, however, we have determined that based upon normal growth in demand in EID's service area, EID's customers would utilize the entire contract entitlement in normal years in the future. As such, EID calculates its dry-year reduction for this Proposed Project based upon three years of full use of its contract allocation. Accordingly, the dry year supply under this water contract entitlement is 5,660 acre-feet per year.

EID's pre-1914 American River water rights-grouping has a normal-year reliability of 15,080 acre-feet per year. Based upon the early priority date of these water assets and the storage capability within EID's system associated with these water assets, they are not reduced at all in a single dry year or three consecutive dry years.

Permit 21112 is another secure dry-year water asset. EID's 2010 UWMP states "there are no cutback provisions on this supply."[35] As such, the dry year reliability of Permit 21112 is 17,000 acre-feet per year.

As described in Section 4.2.2, EID's planned supplies include the CVP Fazio supply, and the several rights and contract that make up the UARP SMUD water. All of these assets combined have a three consecutive dry year supply reliability of 10,625 acre-feet per year.

The CVP Fazio supply is another CVP M&I contract supply that is subject to the same Municipal and Industrial shortage provisions described above for EID's other CVP contract entitlement. EID's expected portion of the Fazio supply has a normal-year contract allocation of 7,500 acre-feet per year. Assuming under the rules described above that EID is able to use its entire contract entitlement in the future, a 25% reduction from the contract entitlement reduces the delivery by 1,875 acre-feet per year. As such, the single dry year reliability and three consecutive dry year reliability under this contract is 5,625 acre-feet per year.

Last, the UARP SMUD water that is derived from the numerous water right applications and assignments as well as the El Dorado-SMUD Cooperative Agreement indicates that the water available under these components in dry years could be severely curtailed. Appendix H of the Agreement states that annual deliveries can be superseded and deliveries from carryover drought

[34] Reclamation has the authority to reduce the supply volumes even further under extreme conditions – Health and Safety criteria – but this sort of supply reduction would only occur in extreme drought and would be offset by reductions in demand in EID's service area, as needed, to maintain basic Health and Safety conditions. The District's drought contingency plans address these situations.

[35] This assertion was confirmed in a telephone conversation with the District's Counsel on April 23, 2013.

storage can be reduced to as little as 5,000 acre-feet in a declared Critically Dry year if SMUD reservoir storage drops below 100,000 acre-feet (approximately 25%). Out of an abundance of caution, EID anticipates only 5,000 acre-feet of carryover drought-supply water would be available each year over the course of a three-year drought.

4.3 RECYCLED WATER SUPPLIES

EID uses recycled water to meet some current non-potable demands within its service area. EID may expand its development and use of recycled water in the future to meet a portion of the non-potable demands associated with the Proposed Project and other anticipated new demands. EID's current recycled water use is about 2,200 acre-feet per year. This use will expand incrementally over time. By 2035, EID anticipates a supply of 5,600 acre-feet of recycled water per year within its service area.[36]

EID's recycled water system consists of supply from the El Dorado Hills wastewater treatment plant and the Deer Creek wastewater treatment plant. These treatment plants have an interconnected network of transmission and distribution pipelines, pump stations, storage tanks, pressure reducing stations, and appurtenant facilities located within the communities of El Dorado Hills and Cameron Park.[37] EID mandates the use of recycled water through Board Policy 7010, wherever economically and physically feasible as determined by the Board, for non-domestic purposes.[38] At this time, non-domestic use includes commercial landscape irrigation, residential or multi-family dual-plumbed landscape irrigation, construction water, and recreational impoundments.

Recycled water availability is an outcome of increased municipal and domestic demand and wastewater production as a byproduct of this demand. In other words, annual recycled water production capabilities are based on the total wastewater flows to the treatment plants. With the population and industrial demands growing in this region, as described in Section 3, the availability of recycled water will increase. EID is taking a conservative view of the growth in recycled water based upon its current production levels, estimated regional population growth, facility expansion identified in its 2013 IWRMP and WWFMP, treated water discharge requirements, and its ability to capture and store recycled water supplies in the future. The total recycled water available for use in 2035 is estimated to be 5,600 acre-feet per year.[39] Accordingly, Table 4-2 shows the incremental recycled water assets that would be available over time for the District's non-potable water uses.

[36] EID Integrated Water Resources Master Plan, March 31, 2013
[37] EID Urban Water Management Plan 2010 Update, July 2011 at page 4-10 of 22.
[38] EID Urban Water Management Plan 2010 Update, July 2011 at page 4-6 of 22.
[39] EID Integrated Water Resources Master Plan, March 31, 2013 at page 221.

Table 4-2 – Timing of Recycled Water and Quantities

Year	Recycled Water Supply (acre-feet)
Current	2,200
2015	2,400
2020	2,600
2025	3,100
2030	4,200
2035	5,600

4.4 Facility Costs and Financing

EID's recently completed 2013 IWRMP and WWFMP identify and allocate the future costs of capital expansion and replacement needs, and addresses financing mechanisms for EID's water assets. These costs and financing mechanisms are hereby incorporated by reference.

The District establishes and periodically updates its Facility Capacity Charges (FCCs) to recover the cost of those portions of existing District facilities that will be used by future customers and to fund needed expansion, or additional capacity, of District facilities to serve new users. The District periodically reviews its FCCs to ensure they accurately reflect the costs of providing service to new customers. Currently the District is updating the FCCs to incorporate projects identified in the adopted 2013 IWRMP. The FCC update is currently under review by the Board and a developer committee, and the District anticipates adoption of the updated FCCs in August 2013.

4.5 Regulatory Approvals and Permits

As described in Section 4.2.2, EID has water assets that require further regulatory approvals, permit compliance, and contract approvals. Each water asset has its own set of regulatory requirements that are assessed in this section.

Appropriative water right Permit 21112 issued by the SWRCB has not been perfected. In order to perfect an appropriative water right, EID must put all of the water assets under that permit to beneficial use. Upon putting the water to beneficial uses and meeting all of the other conditions in the water right permit, EID will be eligible to obtain a water right license for this appropriative water right. Attaining a water right license further fortifies the legitimacy of the water right for EID's continual use in the future. There is no indication that EID will have difficulty in obtaining a water right license for Permit 21112.

Permit 21112 also requires a Warren Act Contract to be negotiated and approved by the USBR. The Warren Act Contract will allow EID to divert water from Folsom Reservoir for delivery to the El Dorado Hills Water Treatment Plant. Although the District may choose to divert some of

the water upstream of Folsom Reservoir through other SWRCB regulatory processes, a Warren Act Contract is essential for any diversions emanating from Folsom Reservoir. EID is currently in negotiations with USBR to obtain a long-term contract. While those negotiations continue, short-term Warren Act Contracts are also obtainable, if needed. There are no foreseeable reasons that these negotiations will not succeed. Both EID's Board of Directors and USBR officials will need to execute the contract once the terms have been drafted, and EID will need to obtain judgment in a judicial action to validate the contract.

The Fazio water supply also has additional regulatory approvals and permits pending. This CVP contract entitlement is authorized by Public Law 101-514. The 15,000 acre-feet of water supply is contemplated to be split equally between Georgetown Divide Public Utilities District and EID. As described in Section 4.2.2, EDCWA is negotiating with USBR on behalf of EID to secure the CVP contract entitlement authorized by this federal statute and finalize the EIS. Accordingly, EID will continue to work with EDCWA and USBR to finalize acquisition of this water supply. Upon completion of the EIS, the EDCWA's designee and USBR officials will need to execute the CVP water supply contract, and EDCWA may need to obtain judgment in a judicial action validating the contract.

The pending water right applications and application assignments before the SWRCB as well as the El Dorado – SMUD Cooperation Agreement constitute the last water supply that is pending further regulatory approvals. As described in Section 4.2.2, EDWPA is awaiting approvals from SWRCB for these water assets. Upon SWRCB approval, EID will obtain 30,000 acre-feet of water under the El Dorado – SMUD Cooperation Agreement.

The SWRCB water right process requires the SWRCB to conduct an internal project review of the applicable technical and hydrological information as well as consider the broader effects on other legal users of water throughout the watershed before issuing a permit. This regulatory process may eventually necessitate a SWRCB hearing where testimony from proponents and opponents of the water right permit is heard and weighed by the SWRCB Board Members before issuing the conditioned permits. Once permits have been issued, then the District must comply with the permit terms and perfect application of the water supplies to beneficial use in order to acquire water right licenses associated with the appropriative water rights.

The El Dorado – SMUD Cooperation Agreement is an agreement among the various parties to cooperate in facilitating the storage and delivery of these water assets to the identified purveyors. As such, through the processing of the water right applications and the furtherance of compliance with the terms of those agreements, the water assets considered there are likely to be available to EID. The regulatory approvals and permits needed to finalize EID's control over these water assets are moving forward.

4.6 SUPPLY SUMMARY

EID has two broad categories of water assets that are available for the Proposed Project – the secured water assets and planned water assets. Collectively, these supplies total 110,290 acre-feet in normal water years and 77,885 acre-feet in a single dry water year. In year two and year three of a multi-year drought, supplies are further reduced to 73,965 acre-feet and 72,465 acre-feet, respectfully.

As described above, the secured water assets include appropriative water right License 2184 and the accompanying pre-1914 appropriative water rights held under Warren Act Contract 06-WC-20-3315, appropriative water right Licenses 11835 and 11836, CVP Contract 14-060200-1375A-LTR1, the pre-1914 American River storage and diversion appropriative water rights, and Permit 21112. The normal year water supplies available to EID under the secured assets total 67,190 acre-feet per year. In dry years, the water supplies available to EID under the secured assets totals 61,660 acre-feet per year.

The planned water assets, although partially secured, are not yet fully available for EID's use to serve the Proposed Project contemplated in this WSA. As described above, these assets are sufficiently secure to be considered planned supplies for the Proposed Project in 2035. In normal years, the water supplies under these assets total 37,500 acre-feet. In dry years, the water supplies under these assets total 10,625 acre-feet.

Finally, the recycled water assets in both normal and dry years, derived from planned growth and continual indoor water usage regardless of year type, total 5,600 acre-feet in 2035.

SECTION 5 – SUFFICIENCY ANALYSIS

5.1 INTRODUCTION

The analysis detailed in this section provides a basis for determining whether sufficient water supplies exist to meet the estimated water demand of the Proposed Project.[40]

This section includes:

- Analysis of sufficiency, considering variations in supply and demand characteristics under normal, single-dry and multi-dry hydrologic conditions,
- Analysis conclusions

5.2 SUFFICIENCY ANALYSIS

The sufficiency analysis integrates the water demands detailed in Section 2 and Section 3 with the water supplies characterized in Section 4. The results are presented in **Table 5-1** beginning with "current" conditions (recognized as 2012) and continuing with 5-year increments from 2015 through 2035. While the analysis at various intervals before build-out is important, the most critical projection for the sufficiency analysis occurs in 2035. This analysis assumes that the Proposed Project, along with the other projects simultaneously undergoing a WSA analysis (see Section 3.3), are fully constructed by 2035, and other anticipated growth continues as described in Section 3.4.

Table 5-1 incorporates the Proposed Project water demand projection in **Table 2-3**, assuming the Proposed Project develops as detailed in Section 1, and the estimated water demands for all other existing and planned future uses through 2035 as detailed in **Table 3-2**. **Table 5-1** also presents the available water supplies for the contiguous EID service area during normal, single-dry and multiple-dry years, as detailed in Section 4. The water demands and available supplies in a single dry-year and multiple dry-year condition are discussed in the following subsections.

[40] CWC § 10910 (c)(4) provides that "If the city or county is required to comply with this part pursuant to subdivision (b), the water supply assessment for the project shall include a discussion with regard to whether the total projected water supplies, determined to be available by the city or county for the project during normal, single dry, and multiple dry water years during a 20-year projection, will meet the projected water demand associated with the proposed project, in addition to existing and planned future uses, including agricultural and manufacturing uses."

Table 5-1 – Comparable Analysis of Supply and Demand

Year	Project Water Demand (af/yr)	All Other EID Water Demands (af/yr)	Total Water Demands (af/yr)	Non-Revenue Water @ 13%	Demands with Loss	EID Water Supplies						
						Surface Water				Recycled Water (af/yr)	Total Available Water Supply (af/yr)	Projected Surplus/ (Shortfall) (af/yr)
						Hydrologic Year Type		EDH Service Area (af/yr)	West/East Service Area (af/yr)	Total (af/yr)		
Current	0	38,984	38,984	N/A	38,984	Normal		29,110	38,080	67,190	2,200	69,390	30,406
	0	40,933	40,933	N/A	40,933	Single Dry		25,660	36,000	61,660		63,860	22,927
	0	40,933	40,933	N/A	40,933	Multiple Dry	Year 1	25,660	36,000	61,660		63,860	22,927
	0	38,068	38,068	N/A	38,068		Year 2	25,660	32,080	57,740		59,940	21,872
	0	34,793	34,793	N/A	34,793		Year 3	25,660	30,580	56,240		58,440	23,647
2015	16	34,940	34,956	4,544	39,500	Normal		36,610	38,080	74,690	2,400	77,090	37,590
	17	36,687	36,704	4,771	41,475	Single Dry		31,285	36,000	67,285		69,685	28,210
	17	36,687	36,704	4,771	41,475	Multiple Dry	Year 1	31,285	36,000	67,285		69,685	28,210
	16	34,119	34,134	4,437	38,572		Year 2	31,285	32,080	63,365		65,765	27,193
	14	31,184	31,198	4,056	35,254		Year 3	31,285	30,580	61,865		64,265	29,011
2020	96	37,901	37,997	4,940	42,937	Normal		36,610	38,080	74,690	2,600	77,290	34,353
	101	39,796	39,897	5,187	45,084	Single Dry		31,285	36,000	67,285		69,885	24,801
	101	39,796	39,897	5,187	45,084	Multiple Dry	Year 1	31,285	36,000	67,285		69,885	24,801
	94	37,010	37,104	4,824	41,928		Year 2	31,285	32,080	63,365		65,965	24,037
	86	33,827	33,912	4,409	38,321		Year 3	31,285	30,580	61,865		64,465	26,144
2025	241	43,618	43,859	5,702	49,561	Normal		19,610	85,080	104,690	3,200	107,890	58,329
	253	45,799	46,052	5,987	52,039	Single Dry		14,285	58,000	72,285		75,485	23,446
	253	45,799	46,052	5,987	52,039	Multiple Dry	Year 1	14,285	58,000	72,285		75,485	23,446
	235	42,593	42,828	5,568	48,396		Year 2	14,285	54,080	68,365		71,565	23,169
	215	38,929	39,144	5,089	44,233		Year 3	14,285	52,580	66,865		70,065	25,832
2030	417	50,798	51,216	6,658	57,874	Normal		19,610	85,080	104,690	4,100	108,790	50,916
	438	53,338	53,777	6,991	60,768	Single Dry		14,285	58,000	72,285		76,385	15,617
	438	53,338	53,777	6,991	60,768	Multiple Dry	Year 1	14,285	58,000	72,285		76,385	15,617
	408	49,605	50,012	6,502	56,514		Year 2	14,285	54,080	68,365		72,465	15,951
	373	45,338	45,710	5,942	51,652		Year 3	14,285	52,580	66,865		70,965	19,313
2035	507	59,046	59,553	7,742	67,295	Normal		19,610	85,080	104,690	5,600	110,290	42,995
	533	61,998	62,531	8,129	70,660	Single Dry		14,285	58,000	72,285		77,885	7,225
	533	61,998	62,531	8,129	70,660	Multiple Dry	Year 1	14,285	58,000	72,285		77,885	7,225
	496	57,658	58,154	7,560	65,714		Year 2	14,285	54,080	68,365		73,965	8,251
	453	52,699	53,151	6,910	60,061		Year 3	14,285	52,580	66,865		72,465	12,404

5.2.1 Single Dry Year Supply and Demand Conditions

Under this condition, EID would anticipate a variance from the normal-year analysis, including: (1) shortage in full availability of supplies as detailed in **Section 4**, and (2) an increase in water demand. The increase in demand is based on the following:

- Landscape irrigation demands will increase to reflect the generalized earlier start of the landscape irrigation season due to limited rainfall in the single driest year. Since this increase only applies to the outdoor portion of a customer's demand, an adjustment factor of 5 percent is applied to the total normal-year water demand values.
- Historically, during single dry year circumstances, EID does not implement its shortage contingency plan,[41] since the extent of the dry conditions into future years is unknown. EID follows adopted policies and its 2008 *Drought Preparedness Plan* when implementing any voluntary or mandatory demand reduction measures.

As a result of these factors, the Proposed Project water demand and those of the other existing and planned uses is expected to increase in a single dry year above the demand expected under normal hydrologic circumstances. Additionally, as detailed in Section 4, EID anticipates a decrease in available water supplies. These changes are shown in **Table 5-1**.

5.2.2 Multi-Dry Year Supply and Demand Conditions

When a single dry year expands into a series of dry years, water supply and demand conditions will continue to evolve. Under such a multi-dry year, EID would anticipate many similar conditions that were assumed for the single-dry year, including: (1) shortage in full availability of supplies as detailed in Section 4, and (2) increases in projected demands. However, when entering the second and third year of a sequence of dry-years, EID would implement necessary policies to manage limited water supplies.[42] Demands over a series of three dry years are adjusted as follows:

- Year 1 – the first year mimics a "single-dry year" condition, where demands increase approximately 5 percent and EID shortage policies are not yet invoked (see Section 5.2.1).
- Year 2 – The demands again mimic a "single-dry year" and would be expected to increase by 5 percent above normal year conditions. However, when recognizing a second dry-year, EID would invoke the first stage of the Drought Preparedness Plan. This stage states: "*The objective of Stage 1 is to initiate public awareness of predicted water shortage conditions, and encourage voluntary water conservation to decrease*

[41] See EID Board Policy AR 5011-Water Supply Management Conditions (available at http://www.eid.org/modules/showdocument.aspx?documentid=2687).
[42] See EID Board Policy AR 5011-Water Supply Management Conditions (available at http://www.eid.org/modules/showdocument.aspx?documentid=2687).

normal demand up to 15%."[43] As part of this stage, EID implements drought water rates among other specified activities to encourage conservation. For purposes of this WSA, the demand reduction achieved under Stage 1 is estimated to be 7 percent of the already higher single dry-year demand.

- Year 3 – Upon entering the third dry year, EID would invoke the second stage of the Drought Preparedness Plan. This stage states: "*The objective of Stage 2 is to increase public understanding of worsening water supply conditions, encourage voluntary water conservation measures, and then if necessary, enforce mandatory conservation measures in order to decrease normal demand up to 30%.*"[44] Under this Stage, EID increases efforts to reduce demand. For purposes of this WSA, the savings achieved under Stage 2 is estimated to be 15 percent of the already higher single dry-year demand.

As a result of these factors, the Proposed Project water demand and those of the Other Existing and Planned Uses is expected to increase in the first year of a multi dry-year condition above that estimated during normal hydrologic circumstances. In subsequent years, the demand will drop as elements of EID's Drought Preparedness Plan are implemented. These changes are shown in **Table 5-1**.

5.2.3 Analysis

As shown in **Table 5-1**, the demand and supply are compared under each hydrologic condition for each 5-year increment out to 2035. The resulting "supply surplus" or "supply shortfall" is shown in the final column. Based on the analyses, EID anticipates it will have sufficient water under all hydrologic conditions in each of the 5-year increments through 2035. Notably, the "surplus" supply is lowest during the second year of a multi-dry year condition, since this is the circumstance where demand is only slightly constrained, while supplies are the most constrained. Yet, even under such circumstances, sufficient water should be available.

5.3 SUFFICIENCY ANALYSIS CONCLUSIONS

As detailed in **Section 2**, this WSA estimates water demands for the Proposed Project of 573 acre-feet per year at build-out (including non-revenue water demands). The annual water demand estimate for all existing and planned projects in the contiguous EID service area, as detailed in **Section 3**, is approximately 67,300 acre-feet per year by 2035. After accounting for these demand projections for the next twenty years, EID should have sufficient water to meet the demands of the Proposed Project and its other service area demands for at least the next 20 years.

[43] See EID Board Policy AR 5011.2-Water supply slightly restricted Drought Stage 1 – Voluntary reductions in use (available at http://www.eid.org/modules/showdocument.aspx?documentid=2687).
[44] See EID Board Policy AR 5011.3-Water supply slightly restricted Drought Stage 2 – Voluntary and mandatory reductions (available at http://www.eid.org/modules/showdocument.aspx?documentid=2687).

The conclusion that EID should have sufficient water available to meet the needs of the Proposed Project, in addition to the other demands in its service area through 2035, rests on the following set of assumptions:

- EID, EDCWA, and EDWPA successfully execute the contracts and obtain the water right permit approvals for currently unsecured water supplies discussed in Section 4. Absent these steps, the water supplies currently held by EID and recognized to be diverted under existing contracts and agreements would be insufficient in 2035 to meet the Proposed Project demands along with all other existing and planned future uses.
- EID will commit to implement Facility Capacity Charges in an amount sufficient to assure the financing is available as appropriate to construct the necessary infrastructure as detailed in the March 2013 EID *Integrated Water Resources Master Plan*.
- Demand in single-dry years includes an additional 5 percent of demand over the normal year demand during the same time period. This conservative assumption accounts for the likelihood that EID customers will irrigate earlier in the season to account for dry spring conditions. This hypothetical demand augmentation may or may not manifest in dry years, but this conservative assumption further tests the sufficiency of water supplies during dry conditions.
- The estimated demands include 13 percent to account for non-revenue water losses (e.g. distribution system losses).

The finding of this WSA is that EID should have sufficient water to meet the demands of Proposed Project and its other service area demands for the next 20 years.